

**Practice: 600 - Terrace**

**Scenario: #1 - Broadbase, with Topsoiling**

**Scenario Description:**

An earthen embankment with channel constructed across the field slope as part of a system to shorten slope lengths and reduce sheet, rill, and gully erosion in a cropped field. Scenario is for the installation of a system of broadbase terraces where channel and berm are farmed. Topsoil is stripped and stockpiled during construction. A stable outlet is provided in the form of a Grassed Waterway, other open outlet or Underground Outlet through associated practices. Payment include all equipment and labor necessary to excavate, shape, and compact terraces, and stripping and stockpiling topsoil. This practice addresses Concentrated Flow Erosion and Excessive Sediment in surface waters.

**Before Situation:**

Long slope lengths contribute to excessive sedimentation and soil erosion in cropped fields as a result of gully, rill, and sheet erosion. The excessive erosion may lead to deterioration of receiving waters due to excessive sedimentation and nutrient transport.

**After Situation:**

A system of broadbased terraces measuring 2,500 feet in length, 2.5 height, and 5:1 front and back slopes is installed with spacing designed to intercept flow of water and shorten slope length to reduce erosion to acceptable levels. Work is done with dozer, scraper, or road grader. The installed terrace is typically farmed.

Associated practices are Underground Outlet (620), Critical Area Planting (342) and Grassed Waterway (412).

**Scenario Feature Measure:** Length of Terrace

**Scenario Unit:** Feet

**Scenario Typical Size:** 2,500

**Scenario Cost:** \$10,732.35

**Scenario Cost/Unit:** \$4.29

**Cost Details (by category):**

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
<b>Equipment/Installation</b>						
Stripping and stockpiling, topsoil	1199	Stripping and stockpiling of topsoil adjacent to stripping area. Includes equipment and labor.	Cubic Yard	\$0.90	4500	\$4,050.00
Excavation, common earth, large equipment, 50 ft	1222	Bulk excavation of common earth including sand and gravel with dozer >100 HP with average push distance of 50 feet. Includes equipment and labor.	Cubic Yard	\$1.60	3750	\$6,000.00
<b>Labor</b>						
Skilled Labor	230	Labor requiring a high level skill set: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc.	Hour	\$33.95	5	\$169.75
<b>Mobilization</b>						
Mobilization, large equipment	1140	Equipment >150HP or typical weights greater than 30,000 pounds or loads requiring over width or over length permits.	Each	\$512.60	1	\$512.60

**Practice: 600 - Terrace**

**Scenario: #2 - Broadbase, no Topsoiling**

**Scenario Description:**

An earthen embankment with channel constructed across the field slope as part of a system to shorten slope lengths and reduce sheet, rill, and gully erosion in a cropped field. Scenario is for the installation of a system of broadbase terraces where channel and berm are farmed. A stable outlet is provided in the form of a Grassed Waterway, other open outlet or Underground Outlet through associated practices. Payment includes all equipment and labor necessary to excavate, shape, and compact terraces. This practice addresses Concentrated Flow Erosion and Excessive Sediment in surface waters.

**Before Situation:**

Long slope lengths contribute to excessive sedimentation and soil erosion in cropped fields as a result of gully, rill, and sheet erosion. The excessive erosion may lead to deterioration of receiving waters due to excessive sedimentation and nutrient transport.

**After Situation:**

A system of broadbased terraces measuring 2,500 feet in length, 2.5 height, and 5:1 front and back slopes is installed with spacing designed to intercept flow of water and shorten slope length to reduce erosion to acceptable levels. Work is done with dozer, scraper, or road grader. The installed terrace is typically farmed.

Associated practices are Underground Outlet (620), Critical Area Planting (342) and Grassed Waterway (412).

**Scenario Feature Measure:** Length of Terrace

**Scenario Unit:** Feet

**Scenario Typical Size:** 2,500

**Scenario Cost:** \$6,682.35

**Scenario Cost/Unit:** \$2.67

**Cost Details (by category):**

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
<b>Equipment/Installation</b>						
Excavation, common earth, large equipment, 50 ft	1222	Bulk excavation of common earth including sand and gravel with dozer >100 HP with average push distance of 50 feet. Includes equipment and labor.	Cubic Yard	\$1.60	3750	\$6,000.00
<b>Labor</b>						
Skilled Labor	230	Labor requiring a high level skill set: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc.	Hour	\$33.95	5	\$169.75
<b>Mobilization</b>						
Mobilization, large equipment	1140	Equipment >150HP or typical weights greater than 30,000 pounds or loads requiring over width or over length permits.	Each	\$512.60	1	\$512.60

**Practice: 600 - Terrace**

**Scenario: #4 - Narrowbase ≤9% Slopes, with Topsoiling**

**Scenario Description:**

An earthen embankment with channel constructed across the field slope as part of a system to shorten slope lengths and reduce sheet, rill, and gully erosion in a cropped field. Scenario is for the installation is a system of narrowbase terraces with 2:1 slopes constructed in a field with slopes ≤9%. Topsoil is stripped from the borrow area and replaced upon completion of the terrace. A stable outlet is provided in the form of a Grassed Waterway, other open outlet or Underground Outlet through associated practices. Payment includes all equipment and labor necessary to excavate, shape, and compact terraces. For the establishment of permanent vegetation on the terraces use associated practice Critical Area Planting (342). This practice addresses Concentrated Flow Erosion and Excessive Sediment in surface waters.

**Before Situation:**

Long slope lengths contribute to excessive sedimentation and soil erosion in cropped fields as a result of gully, rill, and sheet erosion. The excessive erosion may lead to deterioration of receiving waters due to excessive sedimentation and nutrient transport.

**After Situation:**

A system of narrow base terraces with approximately 2:1 front and back slopes measuring 2,500 feet in length and 4.0' height is constructed with spacing designed to intercept flow of water and shorten slope length to reduce erosion to acceptable levels. Work is done with dozer, scraper, or road grader.

Associated practices are Critical Area Planting (342), Grassed Waterway (412), and Underground Outlet (620).

**Scenario Feature Measure:** Length of Terrace

**Scenario Unit:** Feet

**Scenario Typical Size:** 2,500

**Scenario Cost:** \$9,532.35

**Scenario Cost/Unit:** \$3.81

**Cost Details (by category):**

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
<b>Equipment/Installation</b>						
Stripping and stockpiling, topsoil	1199	Stripping and stockpiling of topsoil adjacent to stripping area. Includes equipment and labor.	Cubic Yard	\$0.90	4500	\$4,050.00
Excavation, common earth, large equipment, 50 ft	1222	Bulk excavation of common earth including sand and gravel with dozer >100 HP with average push distance of 50 feet. Includes equipment and labor.	Cubic Yard	\$1.60	3000	\$4,800.00
<b>Labor</b>						
Skilled Labor	230	Labor requiring a high level skill set: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc.	Hour	\$33.95	5	\$169.75
<b>Mobilization</b>						
Mobilization, large equipment	1140	Equipment >150HP or typical weights greater than 30,000 pounds or loads requiring over width or over length permits.	Each	\$512.60	1	\$512.60

**Practice: 600 - Terrace**

**Scenario: #6 - Narrowbase ≤9% Slopes, no Topsoiling**

**Scenario Description:**

An earthen embankment with channel constructed across the field slope as part of a system to shorten slope lengths and reduce sheet, rill, and gully erosion in a cropped field. Scenario is for the installation is a system of narrowbase terraces with 2:1 slopes constructed in a field with slopes ≤9%. A stable outlet is provided in the form of a Grassed Waterway, other open outlet or Underground Outlet through associated practices. Payment includes all equipment and labor necessary to excavate, shape, and compact terraces. For the establishment of permanent vegetation on the terraces use associated practice Critical Area Planting (342). This practice addresses Concentrated Flow Erosion and Excessive Sediment in surface waters.

**Before Situation:**

Long slope lengths contribute to excessive sedimentation and soil erosion in cropped fields as a result of gully, rill, and sheet erosion. The excessive erosion may lead to deterioration of receiving waters due to excessive sedimentation and nutrient transport.

**After Situation:**

A system of narrow base terraces with approximately 2:1 front and back slopes measuring 2,500 feet in length and 4.0 feet height is constructed with spacing designed to intercept flow of water and shorten slope length to reduce erosion to acceptable levels. Work is done with dozer, scraper, or road grader.

Associated practices are Critical Area Planting (342), Grassed Waterway (412), and Underground Outlet (620).

**Scenario Feature Measure:** Length of Terrace

**Scenario Unit:** Feet

**Scenario Typical Size:** 2,500

**Scenario Cost:** \$5,482.35

**Scenario Cost/Unit:** \$2.19

**Cost Details (by category):**

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
<b>Equipment/Installation</b>						
Excavation, common earth, large equipment, 50 ft	1222	Bulk excavation of common earth including sand and gravel with dozer >100 HP with average push distance of 50 feet. Includes equipment and labor.	Cubic Yard	\$1.60	3000	\$4,800.00
<b>Labor</b>						
Skilled Labor	230	Labor requiring a high level skill set: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc.	Hour	\$33.95	5	\$169.75
<b>Mobilization</b>						
Mobilization, large equipment	1140	Equipment >150HP or typical weights greater than 30,000 pounds or loads requiring over width or over length permits.	Each	\$512.60	1	\$512.60

**Practice: 600 - Terrace**

**Scenario: #7 - Narrowbase >9% Slopes, with Topsoiling**

**Scenario Description:**

An earthen embankment with channel constructed across the field slope as part of a system to shorten slope lengths and reduce sheet, rill, and gully erosion in a cropped field. Scenario is for the installation is a system of narrowbase terraces with 2:1 slopes constructed in a field with slopes >9%. Topsoil is stripped from the borrow area and replaced upon completion of the terrace. A stable outlet is provided in the form of a Grassed Waterway, other open outlet or Underground Outlet through associated practices. Payment includes all equipment and labor necessary to excavate, shape, and compact terraces. For the establishment of permanent vegetation on the terraces use associated practice Critical Area Planting (342). This practice addresses Concentrated Flow Erosion and Excessive Sediment in surface waters.

**Before Situation:**

Long slope lengths contribute to excessive sedimentation and soil erosion in cropped fields as a result of gully, rill, and sheet erosion. The excessive erosion may lead to deterioration of receiving waters due to excessive sedimentation and nutrient transport.

**After Situation:**

A system of narrow base terraces with approximately 2:1 front and back slopes measuring 2,500 feet in length and 4.4' height is constructed with spacing designed to intercept flow of water and shorten slope length to reduce erosion to acceptable levels. Work is done with dozer, scraper, or road grader.

Associated practices are Critical Area Planting (342), Grassed Waterway (412), and Underground Outlet (620).

**Scenario Feature Measure:** Length of Terrace

**Scenario Unit:** Feet

**Scenario Typical Size:** 2,500

**Scenario Cost:** \$10,332.35

**Scenario Cost/Unit:** \$4.13

**Cost Details (by category):**

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
<b>Equipment/Installation</b>						
Excavation, common earth, large equipment, 50 ft	1222	Bulk excavation of common earth including sand and gravel with dozer >100 HP with average push distance of 50 feet. Includes equipment and labor.	Cubic Yard	\$1.60	3500	\$5,600.00
Stripping and stockpiling, topsoil	1199	Stripping and stockpiling of topsoil adjacent to stripping area. Includes equipment and labor.	Cubic Yard	\$0.90	4500	\$4,050.00
<b>Labor</b>						
Skilled Labor	230	Labor requiring a high level skill set: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc.	Hour	\$33.95	5	\$169.75
<b>Mobilization</b>						
Mobilization, large equipment	1140	Equipment >150HP or typical weights greater than 30,000 pounds or loads requiring over width or over length permits.	Each	\$512.60	1	\$512.60

**Practice: 600 - Terrace**

**Scenario: #9 - Narrowbase >9% Slopes, no Topsoiling**

**Scenario Description:**

An earthen embankment with channel constructed across the field slope as part of a system to shorten slope lengths and reduce sheet, rill, and gully erosion in a cropped field. Scenario is for the installation is a system of narrowbase terraces with 2:1 slopes constructed in a field with slopes >9%. A stable outlet is provided in the form of a Grassed Waterway, other open outlet or Underground Outlet through associated practices. Payment includes all equipment and labor necessary to excavate, shape, and compact terraces. For the establishment of permanent vegetation on the terraces use associated practice Critical Area Planting (342). This practice addresses Concentrated Flow Erosion and Excessive Sediment in surface waters.

**Before Situation:**

Long slope lengths contribute to excessive sedimentation and soil erosion in cropped fields as a result of gully, rill, and sheet erosion. The excessive erosion may lead to deterioration of receiving waters due to excessive sedimentation and nutrient transport.

**After Situation:**

A system of narrow base terraces with approximately 2:1 front and back slopes measuring 2,500 feet in length and 4.4' height is constructed with spacing designed to intercept flow of water and shorten slope length to reduce erosion to acceptable levels. Work is done with dozer, scraper, or road grader.

Associated practices are Critical Area Planting (342), Grassed Waterway (412), and Underground Outlet (620).

**Scenario Feature Measure:** Length of Terrace

**Scenario Unit:** Feet

**Scenario Typical Size:** 2,500

**Scenario Cost:** \$6,282.35

**Scenario Cost/Unit:** \$2.51

**Cost Details (by category):**

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
<b>Equipment/Installation</b>						
Excavation, common earth, large equipment, 50 ft	1222	Bulk excavation of common earth including sand and gravel with dozer >100 HP with average push distance of 50 feet. Includes equipment and labor.	Cubic Yard	\$1.60	3500	\$5,600.00
<b>Labor</b>						
Skilled Labor	230	Labor requiring a high level skill set: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc.	Hour	\$33.95	5	\$169.75
<b>Mobilization</b>						
Mobilization, large equipment	1140	Equipment >150HP or typical weights greater than 30,000 pounds or loads requiring over width or over length permits.	Each	\$512.60	1	\$512.60

**Practice: 600 - Terrace**

**Scenario: #10 - Grassed Front or Steep Backslope, with Topsoiling**

**Scenario Description:**

An earthen embankment with channel constructed across the field slope as part of a system to shorten slope lengths and reduce sheet, rill, and gully erosion in a cropped field. Scenario is for the installation is a system of either grassed front or steep backslope (grassed backed) terraces where each terrace is constructed with one relatively flat (5:1) slope and one steep (2:1) slope constructed in a field. Topsoil is stripped from the borrow area and replaced upon completion of the terrace. The steep slopes are established to permanent vegetation and the flatter slopes are farmed. A stable outlet is provided in the form of a Grassed Waterway, other open outlet or Underground Outlet through associated practices Payment includes all equipment and labor necessary to excavate, shape, and compact terraces, and stripping and stockpiling topsoil. For the establishment of permanent vegetation on the terraces use associated practice Critical Area Planting (342). This practice addresses Concentrated Flow Erosion and Excessive Sediment in surface waters.

**Before Situation:**

Long slope lengths contribute to excessive sedimentation and soil erosion in cropped fields as a result of gully, rill, and sheet erosion. The excessive erosion may lead to deterioration of receiving waters due to excessive sedimentation and nutrient transport.

**After Situation:**

A system of terraces with one steep (2:1) and one flat (5:1) slope measuring 2,500 feet in length and 3.2' height is installed with spacing designed to intercept flow of water and shorten slope length to reduce erosion to acceptable levels. Work is done with dozer, scraper, or road grader.

Associated practices are Critical Area Planting (342), Grassed Waterway (412), and Underground Outlet (620).

**Scenario Feature Measure:** Length of Terrace

**Scenario Unit:** Feet

**Scenario Typical Size:** 2,500

**Scenario Cost:** \$9,932.35

**Scenario Cost/Unit:** \$3.97

**Cost Details (by category):**

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
<b>Equipment/Installation</b>						
Excavation, common earth, large equipment, 50 ft	1222	Bulk excavation of common earth including sand and gravel with dozer >100 HP with average push distance of 50 feet. Includes equipment and labor.	Cubic Yard	\$1.60	3250	\$5,200.00
Stripping and stockpiling, topsoil	1199	Stripping and stockpiling of topsoil adjacent to stripping area. Includes equipment and labor.	Cubic Yard	\$0.90	4500	\$4,050.00
<b>Labor</b>						
Skilled Labor	230	Labor requiring a high level skill set: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc.	Hour	\$33.95	5	\$169.75
<b>Mobilization</b>						
Mobilization, large equipment	1140	Equipment >150HP or typical weights greater than 30,000 pounds or loads requiring over width or over length permits.	Each	\$512.60	1	\$512.60

**Practice: 600 - Terrace**

**Scenario: #11 - Grassed Front or Steep Backslope, no Topsoiling**

**Scenario Description:**

An earthen embankment with channel constructed across the field slope as part of a system to shorten slope lengths and reduce sheet, rill, and gully erosion in a cropped field. Scenario is for the installation is a system of either grassed front or steep backslope (grassed backed) terraces where each terrace is constructed with one relatively flat (5:1) slope and one steep (2:1) slope constructed in a field. The steep slopes are established to permanent vegetation and the flatter slopes are farmed. A stable outlet is provided in the form of a Grassed Waterway, other open outlet or Underground Outlet through associated practices. Payment includes all equipment and labor necessary to excavate, shape, and compact terraces, and stripping and stockpiling topsoil. For the establishment of permanent vegetation on the terraces use associated practice Critical Area Planting (342). This practice addresses Concentrated Flow Erosion and Excessive Sediment in surface waters.

**Before Situation:**

Long slope lengths contribute to excessive sedimentation and soil erosion in cropped fields as a result of gully, rill, and sheet erosion. The excessive erosion may lead to deterioration of receiving waters due to excessive sedimentation and nutrient transport.

**After Situation:**

A system of terraces with one steep (2:1) and one flat (5:1) slope measuring 2,500 feet in length and 3.2' height is installed with spacing designed to intercept flow of water and shorten slope length to reduce erosion to acceptable levels. Work is done with dozer, scraper, or road grader.

Associated practices are Critical Area Planting (342), Grassed Waterway (412), and Underground Outlet (620).

**Scenario Feature Measure:** Length of Terrace

**Scenario Unit:** Foot

**Scenario Typical Size:** 2,500

**Scenario Cost:** \$5,882.35

**Scenario Cost/Unit:** \$2.35

**Cost Details (by category):**

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
<b>Equipment/Installation</b>						
Excavation, common earth, large equipment, 50 ft	1222	Bulk excavation of common earth including sand and gravel with dozer >100 HP with average push distance of 50 feet. Includes equipment and labor.	Cubic Yard	\$1.60	3250	\$5,200.00
<b>Labor</b>						
Skilled Labor	230	Labor requiring a high level skill set: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc.	Hour	\$33.95	5	\$169.75
<b>Mobilization</b>						
Mobilization, large equipment	1140	Equipment >150HP or typical weights greater than 30,000 pounds or loads requiring over width or over length permits.	Each	\$512.60	1	\$512.60