**Gilead Slough HREP**
**TSP Quantities**

Computed by: Silvia Esteves
Date: 11/21/25

| | Summary of Civil Quantities | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Measure** | **Cut (CY)** | **Fill from On-site (CY)** | **Fill from Off-site (CY)** | **Aggregate Base Course, Type A (TN)** | **Aggregate Surface Course, Type A (TN)** | **Aggregate Surface Course, Type B (TN)** | **Graded A-Stone (TN)** | **Graded C-Stone (TN)** | **Clearing and Grubbing (AC)** | **Stripping (AC)** | **Seeding (AC)** |
| Bank Protection | - | - | - | - | - | - | 2,268.51 | - | - | - | - |
| Scour Structures | - | - | - | - | - | - | 1,961.23 | - | - | - | - |
| Hard Points | - | - | - | - | - | - | 15,851.50 | - | - | - | - |
| Barbs | - | - | - | - | - | - | 321.13 | - | - | - | - |
| Dredge | 280,372.75 | - | - | - | - | - | - | - | - | - | - |
| GSR | - | - | - | - | - | - | - | 36,878.94 | - | - | - |
| MSU | 2,036.87 | - | 14,726.99 | - | - | 861.58 | - | - | 21.81 | 21.81 | 5.17 |
| Island Creation | | 280,372.75 | - | - | - | - | 39,182.98 | - | - | - | - |
| Access | - | - | - | 246.91 | 1,640.32 | 1,971.57 | - | - | 0.22 | 0.22 | - |
| Staging | - | - | - | - | - | - | - | - | 12.00 | 12.00 | 12.00 |
| **Total** | **282,410** | **280,373** | **14,727** | **247** | **1,641** | **2,834** | **59,586** | **36,879** | **35** | **35** | **18** |

| | Summary of Structural Quantities | | | | |
|---|---|---|---|---|---|
| **Measure** | **Cast In Place Reinforced Concrete (CY)** | **20" Aluminum Pipe (FT)** | **Geotextile (SF)** | **DU Class IV Riprap (TN)** | **Stoplogs (UNIT)** |
| WCS | 3.56 | 450.00 | 504.00 | 49.20 | 72.00 |
| **Total** | **4** | **450** | **504** | **50** | **72** |

**Gilead Slough HREP**

**TSP Assumptions for Quantities**

Computed by: Silvia Esteves
Date: 11/21/25

| Measure | Assumption | Value | Unit | Notes | Reference | Link |
|---|---|---|---|---|---|---|
| Materials | Unit Weight of Aggregate Base Course, Type A | 2.0 | TN/CY | IDOT standard unit weight between 1.9 to 2.1 TN/CY | IDOT Standard Specifications for Road and Bridge Construction, Article 1004.04 | https://idot.illinois.gov/doing-business/procurements/engineering-architectural-professional-services/consultant-resources/standard-specifications.html |
| | Unit Weight of Aggregate Surface Course, Type A | 2.0 | TN/CY | IDOT standard unit weight between 1.9 to 2.1 TN/CY | IDOT Standard Specifications for Road and Bridge Construction, Article 1004.04 | https://idot.illinois.gov/doing-business/procurements/engineering-architectural-professional-services/consultant-resources/standard-specifications.html |
| | Unit Weight of Aggregate Surface Course, Type B | 2.0 | TN/CY | IDOT standard unit weight between 1.9 to 2.1 TN/CY | IDOT Standard Specifications for Road and Bridge Construction, Article 1004.04 | https://idot.illinois.gov/doing-business/procurements/engineering-architectural-professional-services/consultant-resources/standard-specifications.html |
| | Unit Weight of Graded A-Stone | 1.7 | TN/CY | MVS standard unit weight | MVS Civil Design Section Standard Riprap Design Criteria | Y:\District Collaboration\Process Documents - SOPs |
| | Unit Weight of Graded C-Stone | 1.7 | TN/CY | MVS standard unit weight | MVS Civil Design Section Standard Riprap Design Criteria | Y:\District Collaboration\Process Documents - SOPs |

**Gilead Slough HREP**
**ORD Model Sequence**

Computed by: Silvia Esteves
Date: 11/20/25

| Number | File | Description | Active Terrain | ORD Tool |
|---|---|---|---|---|
| 1 | GS-HREP_V-SV0001.dgn | Existing terrain (Pool25_RedsGil) | | |
| 2 | GS-HREP_C-SP2001.dgn | Degrade Upper MSU Berm to EL 438.5 | GS-HREP_V-SV0001.dgn | Create Complex Element |
| 3 | GS-HREP_V-SV2001.dgn | Terrain - Degrade Upper MSU Berm | | Create terrain with From Elements |
| 4 | GS-HREP_V-SV2002.dgn | Terrain - Proposed Terrain with Degrade Upper MSU Berm | | Create proposed terrain with Create Complex Terrain Model |
| 5 | GS-HREP_C-SP2002.dgn | Raise Upper MSU Berm along River | GS-HREP_V-SV0002.dgn | Create Corridor |
| 6 | GS-HREP_V-SV2003.dgn | Terrain - Raise Upper MSU Berm along River | | Create terrain with From Elements |
| 7 | GS-HREP_V-SV2004.dgn | Terrain - Proposed Terrain with Raise Upper MSU Berm along River | | Create proposed terrain with Create Complex Terrain Model |
| 8 | GS-HREP_C-SP2003.dgn | Raise Upper MSU Berm along Channel | GS-HREP_V-SV0004.dgn | Create Corridor |
| 9 | GS-HREP_V-SV2005.dgn | Terrain - Raise Upper MSU Berm along Channel | | Create terrain with From Elements |
| 10 | GS-HREP_V-SV2006.dgn | Terrain - Proposed Terrain with Raise Upper MSU Berm along Channel | | Create proposed terrain with Create Complex Terrain Model |
| 11 | GS-HREP_C-SP2004.dgn | Grade Upper MSU | GS-HREP_V-SV0006.dgn | Create Corridor |
| 12 | GS-HREP_V-SV2007.dgn | Terrain - Grade Upper MSU | | Create terrain with From Elements |
| 13 | GS-HREP_V-SV2008.dgn | Terrain - Proposed Terrain with Grade Upper MSU | | Create proposed terrain with Create Complex Terrain Model |
| 14 | GS-HREP_C-SP2005.dgn | Dredge Primary and Tertiary | GS-HREP_V-SV0008.dgn | Create Corridor |
| 15 | GS-HREP_V-SV2009.dgn | Terrain - Dredge Primary and Tertiary | | Create terrain with From Elements |
| 16 | GS-HREP_V-SV2010.dgn | Terrain - Proposed Terrain with Dredge Primary and Tertiary | | Create proposed terrain with Create Complex Terrain Model |
| 17 | GS-HREP_C-SP2006.dgn | Dredge Secondary and EPM | GS-HREP_V-SV0010.dgn | Create Corridor |
| 18 | GS-HREP_V-SV2011.dgn | Terrain - Dredge Secondary and EPM | | Create terrain with From Elements |
| 19 | GS-HREP_V-SV2012.dgn | Terrain - Proposed Terrain with Dredge Secondary and EPM | | Create proposed terrain with Create Complex Terrain Model |
| 20 | GS-HREP_C-SP2007.dgn | GSR, Lower MSU, Upper MSU Bumbout | GS-HREP_V-SV0012.dgn | Create Corridor |
| 21 | GS-HREP_V-SV2013.dgn | Terrain - GSR, Lower MSU, Upper MSU Bumbout | | Create terrain with From Elements |
| 22 | GS-HREP_V-SV2014.dgn | Terrain - Proposed Terrain with GSR, Lower MSU, Upper MSU Bumbout | | Create proposed terrain with Create Complex Terrain Model |
| 23 | GS-HREP_C-SP2008.dgn | Access Road, Island Protection, Barbs, Hard Points, and Scour Structures | GS-HREP_V-SV0014.dgn | Create Corridor |
| 24 | GS-HREP_V-SV2015.dgn | Terrain - Access Road, Island Protection, Barbs, Hard Points, and Scour Structures | | Create terrain with From Elements |
| 25 | GS-HREP_V-SV2016.dgn | Terrain - Proposed Terrain with Access Road, Island Protection, Barbs, Hard Points, and Scour Structures | | Create proposed terrain with Create Complex Terrain Model |
| 26 | GS-HREP_V-SV2017.dgn | Terrain - Proposed Terrain (Final) | | Create proposed terrain with Create Complex Terrain Model |

| | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 1 | **Gilead Slough HREP** | | | | | | | |
| 2 | **TSP Quantities** | | | | | | | |
| 3 | | | | | | | | |
| 4 | Computed by: Silvia Esteves | | | | | | | |
| 5 | Date: 11/21/25 | | | | | | | |
| 6 | | | | | | | | |
| 7 | Taken from ORD | | | | | | | |
| 8 | Total | | | | | | | |
| 9 | Update | | | | | | | |
| 10 | | | | | | | | |
| 11 | **Bank Protection** | **Top Width (FT)** | **Side Slope (H:1V)** | **Length (FT)** | **Type** | **Volume (CY)** | **Unit Weight (TN/CY)** | **Revetment (TN)** |
| 12 | BP_1-1 | 2 | 2 | 683.05 | A-Stone | 674.35 | 1.7 | 1,146.40 |
| 13 | BP_1-2 | 2 | 2 | 934.55 | A-Stone | 660.06 | 1.7 | 1,122.10 |
| 14 | **Total** | **-** | **-** | **1,617.60** | **-** | **1,334.42** | **-** | **2,268.51** |

Cell: D11
Note: Esteves, Silvia T CIV USARMY CEMVS (USA): See GS-HREP_C-SP2008.dgn.

Cell: F11
Note: Esteves, Silvia T CIV USARMY CEMVS (USA): See GS-HREP_C-SP2008.dgn. Use Component Quantities.

| | A | B | C | D | E | F | G | H | I | J |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **Gilead Slough HREP** | | | | | | | | | |
| 2 | **TSP Quantities** | | | | | | | | | |
| 3 | | | | | | | | | | |
| 4 | Computed by: Silvia Esteves | | | | | | | | | |
| 5 | Date: 12/30/25 | | | | | | | | | |
| 6 | | | | | | | | | | |
| 7 | Taken from ORD | | | | | | | | | |
| 8 | Total | | | | | | | | | |
| 9 | Update | | | | | | | | | |
| 10 | | | | | | | | | | |
| 11 | **Scour Structures** | **Start Elevation** | **End Elevation** | **Top Width (FT)** | **Side Slopes (H:1V)** | **Length (FT)** | **Type** | **Volume (CY)** | **Unit Weight (TN/CY)** | **Revetment (TN)** |
| 12 | Chevron1 | 437 | 437 | 5 | 2 | 100 | A-Stone | 401.61 | 1.7 | 682.74 |
| 13 | Chevron2 | 435 | 435 | 5 | 2 | 100 | A-Stone | 752.05 | 1.7 | 1,278.49 |
| 14 | **Total** | **-** | **-** | **-** | **-** | **200** | **-** | **1,153.66** | **-** | **1,961.23** |

Cell: H11
Note: Esteves, Silvia T CIV USARMY CEMVS (USA): See GS-HREP_C-SP2008.dgn. Use Component Quantities.

| | A | B | C | D | E | F | G | H | I | J |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **Gilead Slough HREP** | | | | | | | | | |
| 2 | **TSP Quantities** | | | | | | | | | |
| 3 | | | | | | | | | | |
| 4 | Computed by: Silvia Esteves | | | | | | | | | |
| 5 | Date: 12/30/25 | | | | | | | | | |
| 6 | | | | | | | | | | |
| 7 | Taken from ORD | | | | | | | | | |
| 8 | Total | | | | | | | | | |
| 9 | Update | | | | | | | | | |
| 10 | | | | | | | | | | |
| 11 | **Hard Points** | **Start Elevation** | **End Elevation** | **Top Width (FT)** | **Side Slopes (H:1V)** | **Length (FT)** | **Type** | **Volume (CY)** | **Unit Weight (TN/CY)** | **Revetment (TN)** |
| 12 | HP_1 | 437 | 437 | 5 | 2 | 50 | A-Stone | 713.07 | 1.7 | 1,212.22 |
| 13 | HP_2 | 437 | 437 | 5 | 2 | 50 | A-Stone | 929.53 | 1.7 | 1,580.21 |
| 14 | HP_3 | 437 | 437 | 5 | 2 | 50 | A-Stone | 702.77 | 1.7 | 1,194.70 |
| 15 | HP_4 | 437 | 437 | 5 | 2 | 50 | A-Stone | 1,035.06 | 1.7 | 1,759.59 |
| 16 | HP_6 | 437 | 437 | 5 | 2 | 50 | A-Stone | 1,706.71 | 1.7 | 2,901.40 |
| 17 | HP_7 | 437 | 437 | 5 | 2 | 50 | A-Stone | 644.34 | 1.7 | 1,095.38 |
| 18 | HP_8 | 437 | 437 | 5 | 2 | 50 | A-Stone | 1,280.04 | 1.7 | 2,176.07 |
| 19 | HP_9 | 437 | 437 | 5 | 2 | 50 | A-Stone | 526.34 | 1.7 | 894.78 |
| 20 | HP_10 | 437 | 437 | 5 | 2 | 50 | A-Stone | 318.43 | 1.7 | 541.33 |
| 21 | HP_12 | 437 | 437 | 5 | 2 | 50 | A-Stone | 569.93 | 1.7 | 968.88 |
| 22 | HP_5 | 437 | 437 | 5 | 2 | 50 | A-Stone | 717.85 | 1.7 | 1,220.34 |
| 23 | HP_11 | 437 | 437 | 5 | 2 | 50 | A-Stone | 180.35 | 1.7 | 306.60 |
| 24 | **Total** | - | - | - | - | **600** | - | **9,324.41** | - | **15,851.50** |

Cell: H11
Note: Esteves, Silvia T CIV USARMY CEMVS (USA): See GS-HREP_C-SP2008.dgn. Use Component Quantities.

| | A | B | C | D | E | F | G | H | I | J |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **Gilead Slough HREP** | | | | | | | | | |
| 2 | **TSP Quantities** | | | | | | | | | |
| 3 | | | | | | | | | | |
| 4 | Computed by: Silvia Esteves | | | | | | | | | |
| 5 | Date: 12/30/25 | | | | | | | | | |
| 6 | | | | | | | | | | |
| 7 | Taken from ORD | | | | | | | | | |
| 8 | Total | | | | | | | | | |
| 9 | Update | | | | | | | | | |
| 10 | | | | | | | | | | |
| 11 | **Barbs** | **Start Elevation** | **End Elevation** | **Top Width (FT)** | **Side Slopes (H:1V)** | **Length (FT)** | **Type** | **Volume (CY)** | **Unit Weight (TN/CY)** | **Revetment (TN)** |
| 12 | Barb_5 | 433 | 433 | 5 | 2 | 50 | A-Stone | 28.59 | 1.7 | 48.60 |
| 13 | Barb_7 | 433 | 433 | 5 | 2 | 50 | A-Stone | 9.38 | 1.7 | 15.95 |
| 14 | Barb_3 | 433 | 433 | 5 | 2 | 50 | A-Stone | 19.84 | 1.7 | 33.73 |
| 15 | Barb_2 | 433 | 433 | 5 | 2 | 50 | A-Stone | 29.07 | 1.7 | 49.43 |
| 16 | Barb_4 | 433 | 433 | 5 | 2 | 50 | A-Stone | 28.59 | 1.7 | 48.60 |
| 17 | Barb_6 | 433 | 433 | 5 | 2 | 50 | A-Stone | 37.10 | 1.7 | 63.08 |
| 18 | Barb_8 | 433 | 433 | 5 | 2 | 50 | A-Stone | 36.32 | 1.7 | 61.74 |
| 19 | **Total** | **-** | **-** | **-** | **-** | **350** | **-** | **188.90** | **-** | **321.13** |

Cell: H11
Note: Esteves, Silvia T CIV USARMY CEMVS (USA): See GS-HREP_C-SP2008.dgn. Use Component Quantities.

| | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 1 | **Gilead Slough HREP** | | | | | | | |
| 2 | **TSP Quantities** | | | | | | | |
| 3 | | | | | | | | |
| 4 | Computed by: Silvia Esteves | | | | | | | |
| 5 | Date: 12/30/25 | | | | | | | |
| 6 | | | | | | | | |
| 7 | Taken from ORD | | | | | | | |
| 8 | Total | | | | | | | |
| 9 | Update | | | | | | | |
| 10 | | | | | | | | |
| 11 | **Dredge** | **Start Elevation** | **End Elevation** | **Bottom Width (FT)** | **Slope (H:1V)** | **Length (FT)** | **Area (SF)** | **Cut (CY)** |
| 12 | EPM_1 | 427 | 427 | 20 | 2 | 3,402.82 | 137,169.27 | 13,635.59 |
| 13 | EPM_2 | 427 | 427 | 20 | 2 | 1,972.07 | 92,594.29 | 8,820.06 |
| 14 | EPM_1.1 | 427 | 427 | 20 | 2 | 122.61 | 5,066.27 | 565.47 |
| 15 | EPM_3 | 427 | 427 | 20 | 2 | 1,542.34 | 54,258.26 | 4,933.09 |
| 16 | DredgePrimary_Gil_2 | 428 | 428 | 100 | 5 | 1,662.86 | 208,873.82 | 14,598.45 |
| 17 | DredgePrimary_Gil_3 | 424 | 423 | 100 | 5 | 1,683.43 | 277,704.54 | 49,228.68 |
| 18 | DredgePrimary_Gil_4 | 426 | 426 | 100 | 5 | 3,230.37 | 513,673.88 | 47,984.05 |
| 19 | DredgePrimary_Gil_5 | 420 | 420 | 100 | 5 | 2,285.57 | 318,433.22 | 41,469.00 |
| 20 | DredgePrimary_Gil_1 | 425 | 428 | 100 | 5 | 5,885.38 | 683,480.14 | 30,850.90 |
| 21 | DredgeSecondary_Gil_1.3 | 427 | 426 | 30 | 5 | 3,060.24 | 237,236.94 | 28,095.00 |
| 22 | DredgeSecondary_Gil_1.1 | 428 | 425 | 30 | 5 | 623.25 | 46,307.90 | 5,004.77 |
| 23 | DredgeSecondary_Gil_1.2 | 429 | 427 | 30 | 5 | 1,123.08 | 39,210.55 | 745.53 |
| 24 | DredgeSecondary_Gil_2.1 | 428 | 428 | 30 | 5 | 2,537.47 | 167,718.65 | 14,448.20 |
| 25 | DredgeSecondary_Gil_2.2 | 429 | 428 | 30 | 5 | 2,118.79 | 131,998.82 | 11,081.56 |
| 26 | DredgeTertiary_Gil_2.2.1 | 428 | 428 | 15 | 5 | 403.10 | 35,159.96 | 2,771.55 |
| 27 | DredgeTertiary_Gil_2.2.2 | 420 | 428 | 15 | 5 | 103.34 | 6,459.65 | 858.57 |
| 28 | DredgeTertiary_Reds_WCS-berm | 429 | 428 | 15 | 2 | 168.38 | 6,421.07 | 830.28 |
| 29 | DredgeTertiary_Gil_1.3.1 | 433 | 427 | 15 | 5 | 850.50 | 33,289.52 | 2,298.82 |
| 30 | DredgeTertiary_Gil_1.2.1 | 428 | 430 | 15 | 5 | 1,270.93 | 35,111.73 | 1,207.68 |
| 31 | DredgeTertiary_Gil_2.1.4 | 431 | 428 | 15 | 5 | 409.81 | 17,420.76 | 945.52 |
| 33 | **Total** | **-** | **-** | **-** | **-** | **34,456.34** | **3,047,589.25** | **280,372.75** |

Cell: F11
Note: Esteves, Silvia T CIV USARMY CEMVS (USA): See GS-HREP_C-SP2005.dgn and GS-HREP_C-SP2006.dgn.

Cell: G11
Note: Esteves, Silvia T CIV USARMY CEMVS (USA): See GS-HREP_C-SP2005.dgn and GS-HREP_C-SP2006.dgn.

Cell: H11
Note: Esteves, Silvia T CIV USARMY CEMVS (USA): See GS-HREP_C-SP2005.dgn and GS-HREP_C-SP2006.dgn.

| | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 1 | **Gilead Slough HREP** | | | | | | | |
| 2 | **TSP Quantities** | | | | | | | |
| 3 | | | | | | | | |
| 4 | Computed by: Silvia Esteves | | | | | | | |
| 5 | Date: 11/21/25 | | | | | | | |
| 6 | | | | | | | | |
| 7 | Taken from ORD | | | | | | | |
| 8 | Total | | | | | | | |
| 9 | Update | | | | | | | |
| 10 | | | | | | | | |
| 11 | **GSR** | **Length (FT)** | **Width (FT)** | **Thickness (IN)** | **Type** | **Revetment (CY)** | **Unit Weight (TN/CY)** | **Revetment (TN)** |
| 12 | GSR_1 | 4,071.03 | 50 | 24 | C-Stone | 15,077.90 | 1.7 | 25,632.44 |
| 13 | GSR_2 | 1,786.21 | 50 | 24 | C-Stone | 6,615.59 | 1.7 | 11,246.50 |
| 14 | **Total** | **5,857.24** | **-** | **-** | **-** | **21,693.49** | **-** | **36,878.94** |

Cell: B11
Note: Esteves, Silvia T CIV USARMY CEMVS (USA):
Length along the bank toe.

Cell: C11
Note: Esteves, Silvia T CIV USARMY CEMVS (USA):
Provided by Environmental.

Cell: B12
Note: Esteves, Silvia T CIV USARMY CEMVS (USA):
See GS-HREP_C-SP2007.dgn.

Cell: B13
Note: Esteves, Silvia T CIV USARMY CEMVS (USA):
See GS-HREP_C-SP2007.dgn.

| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **Gilead Slough HREP** | | | | | | | | | | | | | | | | | | | |
| 2 | **TSP Quantities** | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | |
| 4 | Computed by: Silvia Esteves | | | | | | | | | | | | | | | | | | | |
| 5 | Date: 11/21/25 | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | |
| 7 | Taken from ORD | | | | | | | | | | | | | | | | | | | |
| 8 | Total | | | | | | | | | | | | | | | | | | | |
| 9 | Update | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | **Aggregate Surface Course** | | | | | | | | | | | | | |
| 11 | **Moist Soil Unit** | **Cut (CF)** | **Fill (CF)** | **Cut (CY)** | **Fill (CY)** | **Balance (CY)** | **Type** | **Width (FT)** | **Length (FT)** | **Thickness (IN)** | **Volume (CY)** | **Unit Weight (TN/CY)** | **Aggregate Surface Course (TN)** | **Clearing and Grubbing (SF)** | **Stripping (SF)** | **Seeding (SF)** | **Clearing and Grubbing (AC)** | **Stripping (AC)** | **Seeding (AC)** | **Notes** |
| 12 | Upper MSU Berm Degrade | 52,006.13 | 18.33 | 1,926.15 | 0.68 | -1,925.47 | - | - | - | - | - | - | - | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | Degrade a portion of the existing berm to increase MSU interior storage |
| 13 | Upper MSU Berm along River | - | - | 23.32 | 8,452.03 | 8,428.72 | Type B | 20 | 581.57 | 12 | 430.79 | 2.0 | 861.58 | 120,460.24 | 120,460.24 | 108,828.86 | 2.77 | 2.77 | 2.50 | Assume 20' crown, 4H:1V side slopes, gravel road only on access berm |
| 14 | Upper MSU Berm along Channel | - | - | 0.32 | 1,845.45 | 1,845.13 | - | - | - | - | - | - | - | 22,527.07 | 22,527.07 | 22,527.07 | 0.52 | 0.52 | 0.52 | Assume 20' crown, 4H:1V side slopes |
| 15 | Upper MSU Grading | - | - | 0.00 | 0.00 | 0.00 | - | - | - | - | - | - | - | 523,178.02 | 523,178.02 | 0.00 | 12.01 | 12.01 | 0.00 | Upper MSU graded to EL 436 at SW corner, no cut and fill anticipated |
| 16 | Middle MSU | - | - | 87.08 | 0.00 | -87.08 | - | - | - | - | - | - | - | 73,929.98 | 73,929.98 | 0.00 | 1.70 | 1.70 | 0.00 | |
| 17 | Lower MSU | - | - | 0.00 | 0.00 | 0.00 | - | - | - | - | - | - | - | 116,041.74 | 116,041.74 | 0.00 | 2.66 | 2.66 | 0.00 | |
| 18 | Lower MSU Berm | - | - | 0.00 | 6,465.70 | 6,465.70 | - | - | - | - | - | - | - | 93,963.04 | 93,963.04 | 93,963.04 | 2.16 | 2.16 | 2.16 | Assume 20' crown, 4H:1V side slopes |
| 19 | **Total** | **-** | **-** | **2,036.87** | **16,763.86** | **14,726.99** | **-** | **-** | **581.57** | **-** | **430.79** | **-** | **861.58** | **950,100.08** | **950,100.08** | **225,318.97** | **21.81** | **21.81** | **5.17** | |

Cell: F11
Note: Esteves, Silvia T CIV USARMY CEMVS (USA): Positive values means fill and negative values means cut.

Cell: L11
Note: Esteves, Silvia T CIV USARMY CEMVS (USA): IDOT typical unit weight between 1.9 to 2.1 TN/CY. See IDOT Standard Specifications for Road and Bridge Construction, Article 1004.04.

Cell: B12
Note: Esteves, Silvia T CIV USARMY CEMVS (USA): See GS-HREP_V-SV2002.dgn. Use Analyze Volume from Terrain Pool25_RedsGil to Terrain Pool25_RedsGil_DegradeBerm_438.5.

Cell: C12
Note: Esteves, Silvia T CIV USARMY CEMVS (USA): See GS-HREP_V-SV2002.dgn. Use Analyze Volume from Terrain Pool25_RedsGil to Terrain Pool25_RedsGil_DegradeBerm_438.5.

Cell: D13
Note: Esteves, Silvia T CIV USARMY CEMVS (USA):
See GS-HREP_C-SP2002.dgn. Use Component Quantities.

Cell: E13
Note: Esteves, Silvia T CIV USARMY CEMVS (USA):
See GS-HREP_C-SP2002.dgn. Use Component Quantities.

Cell: I13
Note: Esteves, Silvia T CIV USARMY CEMVS (USA): See GS-HREP_C-SP2002.dgn. See alignment profile.

Cell: N13
Note: Esteves, Silvia T CIV USARMY CEMVS (USA):
See GS-HREP_C-SP2002.dgn. Use Component Quantities

Cell: D14
Note: Esteves, Silvia T CIV USARMY CEMVS (USA):
See GS-HREP_C-SP2003.dgn. Use Component Quantities.

Cell: E14
Note: Esteves, Silvia T CIV USARMY CEMVS (USA):
See GS-HREP_C-SP2003.dgn. Use Component Quantities.

Cell: N14
Note: Esteves, Silvia T CIV USARMY CEMVS (USA):
See GS-HREP_C-SP2003.dgn. Use Component Quantities.

Cell: N15
Note: Esteves, Silvia T CIV USARMY CEMVS (USA):
See GS-HREP_C-SP2003.dgn. Turn on GS-HREP_V-PB0001.dgn and GS-HREP_C-SP2002.dgn. Use Measure Area. Includes berm degrade and bumpout area.

Cell: D16
Note: Esteves, Silvia T CIV USARMY CEMVS (USA):
See GS-HREP_C-SP3007.dgn. Use Component Quantities.

Cell: N16
Note: Esteves, Silvia T CIV USARMY CEMVS (USA):
See GS-HREP_C-SP3007.dgn.

Cell: N17
Note: Esteves, Silvia T CIV USARMY CEMVS (USA):
See GS-HREP_C-SP2007.dgn.

Cell: E18
Note: Esteves, Silvia T CIV USARMY CEMVS (USA):
See GS-HREP_C-SP2007.dgn. Use Component Quantities.

Cell: N18
Note: Esteves, Silvia T CIV USARMY CEMVS (USA):
See GS-HREP_C-SP2007.dgn.

| | A | B | C | D | E | F | G | H | I | J | K |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **Gilead Slough HREP** | | | | | | | | | | |
| 2 | **TSP Quantities** | | | | | | | | | | |
| 3 | | | | | | | | | | | |
| 4 | Computed by: Silvia Esteves | | | | | | | | | | |
| 5 | Date: 11/21/25 | | | | | | | | | | |
| 6 | | | | | | | | | | | |
| 7 | Taken from ORD | | | | | | | | | | |
| 8 | Total | | | | | | | | | | |
| 9 | Update | | | | | | | | | | |
| 10 | | | | | **Revetment** | | | | | | |
| 11 | **Island Creation** | **Fill (CY)** | **Fill (CF)** | **Fill (AC) per 5 ft depth** | **Type** | **Top Width (FT)** | **Cross Slope (H:1V)** | **Length (FT)** | **Revetment (CY)** | **Unit Weight (TN/CY)** | **Revetment (TN)** |
| 12 | Island | 280,372.75 | 7,570,064.31 | 34.76 | - | - | - | - | - | - | - |
| 13 | Island Protection | - | - | - | A-Stone | 5 | 2 | 5,614.08 | 23,048.81 | 1.7 | 39,182.98 |
| 14 | **Total** | **280,372.75** | **7,570,064.31** | **34.76** | **-** | **-** | **-** | **5,614.08** | **23,048.81** | **-** | **39,182.98** |

Cell: H13
Note: Esteves, Silvia T CIV USARMY CEMVS (USA):
See GS-HREP_C-SP2008.dgn.

Cell: I13
Note: Esteves, Silvia T CIV USARMY CEMVS (USA):
See GS-HREP_C-SP2008.dgn. Use Component Quantities.

| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **Gilead Slough HREP** | | | | | | | | | | | | | | | | | |
| 2 | **TSP Quantities** | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | |
| 4 | Computed by: Silvia Esteves | | | | | | | | | | | | | | | | | |
| 5 | Date: 11/21/25 | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | |
| 7 | Taken from ORD | | | | | | | | | | | | | | | | | |
| 8 | Total | | | | | | | | | | | | | | | | | |
| 9 | Update | | | | | | | | | | | | | | | | | |
| 10 | | | | | | **Aggregate Base Course** | | | | | **Aggregate Surface Course** | | | | | | | |
| 11 | **Access** | **Length (FT)** | **Existing Width (FT)** | **Proposed Width (FT)** | **Area (SF)** | **Type** | **Thickness (IN)** | **Volume (CY)** | **Unit Weight (TN/CY)** | **Aggregate Base Course (TN)** | **Type** | **Thickness (IN)** | **Volume (CY)** | **Unit Weight (TN/CY)** | **Aggregate Surface Course (TN)** | **Clearing and Grubbing (AC)** | **Stripping (AC)** | **Notes** |
| 12 | New Parking at Boat Ramp | 100.00 | 0 | 50 | 5,000.00 | Type A | 8 | 123.46 | 2.0 | 246.91 | Type A | 4 | 61.73 | 2.0 | 123.46 | 0.11 | 0.11 | |
| 13 | Existing Aggregate Parking at Boat Ramp | Varies | Varies | Varies | 6,221.78 | - | 0 | 0.00 | 2.0 | 0.00 | Type A | 4 | 76.81 | 2.0 | 153.62 | 0.00 | 0.00 | |
| 14 | Existing Aggregate Access Road (W Gilead Ln) | 3,943.66 | 14 | 14 | 55,211.30 | - | 0 | 0.00 | 2.0 | 0.00 | Type A | 4 | 681.62 | 2.0 | 1,363.24 | 0.00 | 0.00 | |
| 15 | Temporary Access Road (Access to Lower MSU) | 2,218.02 | 10 | 12 | 26,616.22 | - | 0 | 0.00 | 2.0 | 0.00 | Type B | 12 | 985.79 | 2.0 | 1,971.57 | 0.10 | 0.10 | Aggregate surface to remain in place after project completion |
| 16 | **Total** | - | - | - | **93,049.29** | - | - | **123.46** | - | **246.91** | - | - | **1,805.95** | - | **3,611.89** | **0.22** | **0.22** | |

Cell: F11
Note: Esteves, Silvia T CIV USARMY CEMVS (USA):
Reference IDOT Bureau of Local Roads and Streets Manual, Chapter 44, Section 44-3.

Cell: I11
Note: Esteves, Silvia T CIV USARMY CEMVS (USA): IDOT typical unit weight between 1.9 to 2.1 TN/CY. See IDOT Standard Specifications for Road and Bridge Construction, Article 1004.04.

Cell: K11
Note: Esteves, Silvia T CIV USARMY CEMVS (USA):
Reference IDOT Standard Specifications, Section 402 and IDOT Bureau of Local Roads and Streets Manual, Chapter 44, Section 44-3.

Cell: N11
Note: Esteves, Silvia T CIV USARMY CEMVS (USA): IDOT typical unit weight between 1.9 to 2.1 TN/CY. See IDOT Standard Specifications for Road and Bridge Construction, Article 1004.04.

Cell: B12
Note: Esteves, Silvia T CIV USARMY CEMVS (USA):
See GS-HREP_C-SP2007.dgn.

Cell: D12
Note: Esteves, Silvia T CIV USARMY CEMVS (USA):
See GS-HREP_C-SP2007.dgn.

Cell: E13
Note: Esteves, Silvia T CIV USARMY CEMVS (USA):
See GS-HREP_C-SP2008.dgn.

Cell: B14
Note: Esteves, Silvia T CIV USARMY CEMVS (USA):
See GS-HREP_C-SP2008.dgn.

Cell: B15
Note: Esteves, Silvia T CIV USARMY CEMVS (USA):
See GS-HREP_C-SP2008.dgn.

# Gilead Slough HREP

## TSP Quantities

Computed by: Silvia Esteves
Date: 11/21/25

Taken from ORD
Total
Update

| Staging | Staging Area (AC) | Clearing and Grubbing (AC) | Stripping (AC) | Seeding (AC) |
|---|---|---|---|---|
| Staging at Access Road (W Gilead Ln) | 10 | 10 | 10 | 10 |
| Staging at Lower MSU | 2 | 2 | 2 | 2 |
| **Total** | **12** | **12** | **12** | **12** |

## Gilead Slough Quantities

**TSP Quantities**

Computed by: Yadier Acosta
Date: 11/25/25

Insert
Total
Update

Inputs:

| | | |
|---|---|---|
| WCS Concrete Base Thickness | 1 | ft |
| WCS Concrete Base Length | 8 | ft |
| WCS Concrete Base Width | 4 | ft |

| | | |
|---|---|---|
| Pump Concrete Slab Thickness | 1.5 | ft |
| Pump Concrete Slab Length | 15 | ft |
| Pump Concrete Slab Width | 15 | ft |
| Pump Concrete Piles Radius | 1 | ft |
| Pump Concrete Piles Length | 20 | ft |

| | | |
|---|---|---|
| Aluminum Pipe Culvert (WCS) Length | 150 | ft |

| | | |
|---|---|---|
| Geotextile Length | 14 | ft |
| Geotextile Width | 6 | ft |

| | | |
|---|---|---|
| Riprap Thickness | 1.5 | ft |
| Riprap Length | 14 | ft |
| Riprap Width | 6 | ft |

| | | |
|---|---|---|
| Stoplogs Width | 0.5 | ft |

Elements Quantities:

| | | | | |
|---|---|---|---|---|
| Cast In Place Reinforce Concrete (WCS): | 32 | $ft^3$ | 1.185185 | $yd^3$ |
| | | | | |
| Concrete Base | 32 | $ft^3$ | 1.185185 | $yd^3$ |

| | | | | |
|---|---|---|---|---|
| Cast In Place Reinforce Concrete (Pump Slab): | 400.3319 | $ft^3$ | 14.82711 | $yd^3$ |
| Pump Slab | 337.5 | $ft^3$ | 12.5 | $yd^3$ |
| Piles for Pump Slab | 62.83185 | $ft^3$ | 2.327106 | $yd^3$ |

| | | | | |
|---|---|---|---|---|
| Aluminum Pipe Culvert (WCS): | 150.00 | ft | | |

| | | | | |
|---|---|---|---|---|
| Geotextile | 168 | $ft^2$ | | |

| | | | | |
|---|---|---|---|---|
| DU Class IV Riprap (WCS): | 252 | $ft^3$ | 16.4 | tn |

Comment:

| Referece Drawings | Calculated |
|---|---|
| 8.2 tn | 8.6625 tn |

| | | | | |
|---|---|---|---|---|
| Stoplogs (WCS): | 24 | Unit | | |

| Intermediate Option Final Quantities: Three WCS | | | | |
|---|---|---|---|---|
| Cast In Place Reinforce Concrete: | 96 | $ft^3$ | 3.555556 | $yd^3$ |
| Aluminum Pipe 20"(WCS): | 450 | ft | | |
| Geotextile | 504 | $ft^2$ | | |
| DU Class IV Riprap | 756 | $ft^3$ | 49.2 | tn |
| Stoplogs | 72 | Unit | | |

*Quantities reflect the totals for 3 WCS at Gilead (Upper, MIddle, Lower) MSUs