

# **APPENDIX B**

**Oak Creek Trunk Sewer (Tier I + 1,500 acres to East and West) OPPC**

**SUMMARY OF PROJECT COSTS**

|  |     |                     |
|--|-----|---------------------|
| <b>Phase 1 (Existing-3)</b>                              |     |                     |
| Construction Cost Total                                  |     | \$1,088,000         |
| Right-of-Way Costs                                       |     | \$0                 |
| <b>Phase 1 (Add Siphon Barrel)</b>                       |     |                     |
| Construction Cost Total                                  |     | \$255,000           |
| Right-of-Way Costs                                       |     | \$0                 |
| <b>Phase 2 (Red-1 and Red-2)</b>                         |     |                     |
| Construction Cost Total                                  |     | \$2,301,000         |
| Right-of-Way Costs                                       |     | \$0                 |
| <b>Phase 2 (Siphon and Pink-1)</b>                       |     |                     |
| Construction Cost Total                                  |     | \$1,067,000         |
| Right-of-Way Costs                                       |     | \$0                 |
| <b>Phase 3 (E-6D)</b>                                    |     |                     |
| Construction Cost Total                                  |     | \$428,000           |
| Right-of-Way Costs                                       |     | \$86,000            |
| <b>Phase 4 (Yellow-2 and Orange-1)</b>                   |     |                     |
| Construction Cost Total                                  |     | \$1,724,000         |
| Right-of-Way Costs                                       |     | \$0                 |
| <b>Phases 5 &amp; 6 (Pink-2, Pink-3, and Pink-4)</b>     |     |                     |
| Construction Cost Total                                  |     | \$1,699,000         |
| Right-of-Way Costs                                       |     | \$0                 |
| <b>Phase 7 (Orange-2)</b>                                |     |                     |
| Construction Cost Total                                  |     | \$1,189,000         |
| Right-of-Way Costs                                       |     | \$99,000            |
| <b>Construction Cost Subtotal (w/out Right-of-Way)</b>   |     |                     |
|  |     | \$9,751,000         |
| <b>Construction Cost Subtotal (w/Right-of-Way Costs)</b> |     |                     |
|  |     | \$9,936,000         |
| <b>Total Construction Cost</b>                           |     |                     |
|  |     | \$9,936,000         |
| <b>Engineering, Legal, and Administrative Costs</b>      |     |                     |
|  | 20% | \$1,987,000         |
| <b>TOTAL PROJECT COST</b>                                |     | <b>\$11,923,000</b> |

\*OPPC is based on preliminary design drawings using West 'O' Street Trunk Sewer Extension - Phases 1 and 2 and Upper Southeast Salt Creek Subbasin Sewer - Segment 1 Bid Tab average line item costs.

|   |     |                     |
|---|-----|---------------------|
| <b>West Side Cost</b>                               |     |                     |
| Construction Cost Total                             |     | \$3,021,000         |
| Right-of-Way Costs                                  |     | \$0                 |
| <b>East Side Cost</b>                               |     |                     |
| Construction Cost Total                             |     | \$4,429,000         |
| Right-of-Way Costs                                  |     | \$185,000           |
| <b>Red-1 and Red-2</b>                              |     |                     |
| Construction Cost Total                             |     | \$2,301,000         |
| Right-of-Way Costs                                  |     | \$0                 |
| <b>Total Construction Cost</b>                      |     |                     |
|   |     | \$9,936,000         |
| <b>Engineering, Legal, and Administrative Costs</b> |     |                     |
|   | 20% | \$1,987,000         |
| <b>TOTAL PROJECT COST</b>                           |     | <b>\$11,923,000</b> |

**Oak Creek Trunk Sewer (E-3)**

| <u>Item Description</u>                                       | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u> | <u>Total Cost</u>  |
|---|-----------------|-------------|------------------|--------------------|
|   |                 |             | \$               | \$                 |
| <b>GENERAL REQUIREMENTS</b>                                   |                 |             |                  |                    |
| Mobilization  | 1               | LS          | \$15,000         | \$15,000           |
| Supervision   | 1               | LS          | \$30,000         | \$30,000           |
| Equipment Rental & Misc.                                      | 1               | LS          | \$4,000          | \$4,000            |
| <b>Total - General Requirements</b>                           |                 |             |                  | <b>\$49,000</b>    |
| <b>DESCRIPTION</b>  |                 |             |                  |                    |
|   | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u> | <u>Total Cost</u>  |
| <b>Sewer Pipe in Place Excluding Manholes</b>                 |                 |             |                  |                    |
| 42" Sewer Pipe  | 2,843           | LF          | \$200            | \$567,000          |
| 30" Sewer Pipe  | 150             | LF          | \$143            | \$21,000           |
| <b>Subtotal</b>   |                 |             |                  | <b>\$588,000</b>   |
| <b>Tunnel</b>   |                 |             |                  |                    |
| West Mathis Street  | 80              | LF          | \$810            | \$65,000           |
| Air Park Road   | 80              | LF          | \$810            | \$65,000           |
| <b>Subtotal</b>   |                 |             |                  | <b>\$130,000</b>   |
| <b>Manholes</b>   |                 |             |                  |                    |
| Standard Manhole, Type "G"                                    | 95              | VF          | \$750            | \$71,000           |
| <b>Subtotal</b>   |                 |             |                  | <b>\$71,000</b>    |
| <b>Miscellaneous</b>  |                 |             |                  |                    |
| BOL Connection  | 1               | LS          | \$5,000          | \$5,000            |
| EOL Connection  | 1               | LS          | \$5,000          | \$5,000            |
| Seeding   | 17,000          | SY          | \$0.60           | \$10,000           |
| Misc. Tree Removal & Replacement                              | 1               | LS          | \$2,000          | \$2,000            |
| Abandon Existing Sewer In-Place (Flow Fill Existing Sewer)    | 419             | CY          | \$50             | \$21,000           |
| Abandon Existing Manholes In-Place                            | 8               | EA          | \$2,500          | \$20,000           |
| Traffic Control   | 1               | LS          | \$5,000          | \$5,000            |
| LES Power Pole Relocation                                     | 1               | LS          | \$30,000         | \$30,000           |
| Over Excavation and Trench Stabilization/Foundation Material  | 0               | Tons        | \$30             | \$0                |
| Electric or Telephone Utilities Not Shown                     | 200             | LF          | \$20             | \$4,000            |
| Water Utilities Less Than or Equal to 4" Dia. Not Shown       | 100             | LF          | \$25             | \$3,000            |
| Storm or Sanitary Sewer Utilities Less Than 8" Dia. Not Shown | 100             | LF          | \$25             | \$3,000            |
| <b>Subtotal</b>   |                 |             |                  | <b>\$108,000</b>   |
| <b>Construction Cost Subtotal</b>                             |                 |             |                  | <b>\$946,000</b>   |
| <b>Contingencies</b>  |                 |             | <b>15%</b>       | <b>\$142,000</b>   |
| <b>TOTAL CONSTRUCTION COST</b>                                |                 |             |                  | <b>\$1,088,000</b> |
| <b>ADDITIONAL PROJECT COSTS</b>                               |                 |             |                  |                    |
| <b>Right-of-Way Costs</b>                                     |                 |             |                  |                    |
| Permanent Easement  | 113,720         | SF          | \$0.00           | \$0                |
| Temporary Construction Easement                               | 170,580         | SF          | \$0.00           | \$0                |
| <b>Subtotal</b>   |                 |             |                  | <b>\$0</b>         |
| <b>Engineering, Legal, and Administrative Costs</b>           |                 |             | <b>20%</b>       | <b>\$218,000</b>   |
| <b>TOTAL PROJECT COST</b>                                     |                 |             |                  | <b>\$1,306,000</b> |

**Oak Creek Trunk Sewer (Add Siphon Barrel)**

| <u>Item Description</u>                             | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u><br>\$ | <u>Total Cost</u><br>\$ |
|---|-----------------|-------------|------------------------|-------------------------|
| <b>GENERAL REQUIREMENTS</b>                         |                 |             |                        |                         |
| Mobilization  | 1               | LS          | \$4,000                | \$4,000                 |
| Supervision   | 1               | LS          | \$7,000                | \$7,000                 |
| Equipment Rental & Misc.                            | 1               | LS          | \$1,000                | \$1,000                 |
| <b>Total - General Requirements</b>                 |                 |             |                        | <b>\$12,000</b>         |
| <br>  |                 |             |                        |                         |
| <u>DESCRIPTION</u>                                  | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u>       | <u>Total Cost</u>       |
| <b>Siphon</b>                                       |                 |             |                        |                         |
| Structures  | 1               | LS          | \$50,000               | \$50,000                |
| Piping  | 1               | LS          | \$150,000              | \$150,000               |
| <b>Subtotal</b>                                     |                 |             |                        | <b>\$200,000</b>        |
| <br>  |                 |             |                        |                         |
| <b>Connections to Existing Facilities</b>           |                 |             |                        |                         |
| Connection at BOL                                   | 1               | LS          | \$5,000                | \$5,000                 |
| Connection at EOL                                   | 1               | LS          | \$5,000                | \$5,000                 |
| <b>Subtotal</b>                                     |                 |             |                        | <b>\$10,000</b>         |
| <b>Construction Cost Subtotal</b>                   |                 |             |                        | <b>\$222,000</b>        |
| <b>Contingencies</b>                                |                 |             | <b>15%</b>             | <b>\$33,000</b>         |
| <b>TOTAL CONSTRUCTION COST</b>                      |                 |             |                        | <b>\$255,000</b>        |
| <br>  |                 |             |                        |                         |
| <b>ADDITIONAL PROJECT COSTS</b>                     |                 |             |                        |                         |
| <b>Right-of-Way Costs</b>                           |                 |             |                        |                         |
| Permanent Easement                                  | 57,000          | SF          | \$0.00                 | \$0                     |
| Temporary Construction Easement                     | 133,000         | SF          | \$0.00                 | \$0                     |
| <b>Subtotal</b>                                     |                 |             |                        | <b>\$0</b>              |
| <b>Engineering, Legal, and Administrative Costs</b> |                 |             | <b>20%</b>             | <b>\$51,000</b>         |
| <b>TOTAL PROJECT COST</b>                           |                 |             |                        | <b>\$306,000</b>        |

**Oak Creek Trunk Sewer (Red-1 and Red-2)**

| <u>Item Description</u>             | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u><br>\$ | <u>Total Cost</u><br>\$ |
|-------------------------------------|-----------------|-------------|------------------------|-------------------------|
| <b>GENERAL REQUIREMENTS</b>         |                 |             |                        |                         |
| Mobilization                        | 1               | LS          | \$32,000               | \$32,000                |
| Supervision                         | 1               | LS          | \$63,000               | \$63,000                |
| Equipment Rental & Misc.            | 1               | LS          | \$8,000                | \$8,000                 |
| <b>Total - General Requirements</b> |                 |             |                        | <b>\$103,000</b>        |

| <u>DESCRIPTION</u>  | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u> | <u>Total Cost</u>  |
|---|-----------------|-------------|------------------|--------------------|
| <b>Sewer Pipe in Place Excluding Manholes</b>                 |                 |             |                  |                    |
| 48" Sewer Pipe  | 5,802           | LF          | \$228            | \$1,323,000        |
| <b>Subtotal</b>   |                 |             |                  | <b>\$1,323,000</b> |
| <b>Tunnel</b>   |                 |             |                  |                    |
| Taxiway   | 400             | LF          | \$750            | \$300,000          |
| <b>Subtotal</b>   |                 |             |                  | <b>\$300,000</b>   |
| <b>Connections to Existing Facilities</b>                     |                 |             |                  |                    |
| Connection at BOL   | 1               | LS          | \$5,000          | \$5,000            |
| Connection at EOL   | 1               | LS          | \$5,000          | \$5,000            |
| <b>Subtotal</b>   |                 |             |                  | <b>\$10,000</b>    |
| <b>Manholes</b>   |                 |             |                  |                    |
| Tee-Based Manhole   | 195             | VF          | \$700            | \$136,000          |
| <b>Subtotal</b>   |                 |             |                  | <b>\$136,000</b>   |
| <b>Miscellaneous</b>  |                 |             |                  |                    |
| 84" Storm Sewer Modifications                                 | 1               | LS          | \$75,000         | \$75,000           |
| 36" Storm Sewer Modifications                                 | 1               | LS          | \$10,000         | \$10,000           |
| Gravel Surfacing (In-Place)                                   | 25              | Tons        | \$30             | \$1,000            |
| Seeding   | 30,011          | SY          | \$0.60           | \$18,000           |
| Misc. Tree Removal & Replacement                              | 1               | LS          | \$15,000         | \$15,000           |
| Over Excavation and Trench Stabilization/Foundation Material  | 0               | Tons        | \$30             | \$0                |
| Electric or Telephone Utilities Not Shown                     | 200             | LF          | \$20             | \$4,000            |
| Water Utilities Less Than or Equal to 4" Dia. Not Shown       | 100             | LF          | \$25             | \$3,000            |
| Storm or Sanitary Sewer Utilities Less Than 8" Dia. Not Shown | 100             | LF          | \$25             | \$3,000            |
| <b>Subtotal</b>   |                 |             |                  | <b>\$129,000</b>   |
| <b>Construction Cost Subtotal</b>                             |                 |             |                  | <b>\$2,001,000</b> |
| <b>Contingencies</b>  |                 |             | <b>15%</b>       | <b>\$300,000</b>   |
| <b>TOTAL CONSTRUCTION COST</b>                                |                 |             |                  | <b>\$2,301,000</b> |

**ADDITIONAL PROJECT COSTS**

|   |         |    |            |                    |
|---|---------|----|------------|--------------------|
| <b>Right-of-Way Costs</b>                           |         |    |            |                    |
| Permanent Easement                                  | 57,000  | SF | \$0.00     | \$0                |
| Temporary Construction Easement                     | 133,000 | SF | \$0.00     | \$0                |
| <b>Subtotal</b>                                     |         |    |            | <b>\$0</b>         |
| <b>Engineering, Legal, and Administrative Costs</b> |         |    | <b>20%</b> | <b>\$460,000</b>   |
| <b>TOTAL PROJECT COST</b>                           |         |    |            | <b>\$2,761,000</b> |

**Oak Creek Trunk Sewer (Pink-1 and New Siphon Crossing)**

| <u>Item Description</u>             | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u><br>\$ | <u>Total Cost</u><br>\$ |
|-------------------------------------|-----------------|-------------|------------------------|-------------------------|
| <b>GENERAL REQUIREMENTS</b>         |                 |             |                        |                         |
| Mobilization                        | 1               | LS          | \$15,000               | \$15,000                |
| Supervision                         | 1               | LS          | \$29,000               | \$29,000                |
| Equipment Rental & Misc.            | 1               | LS          | \$4,000                | \$4,000                 |
| <b>Total - General Requirements</b> |                 |             |                        | <b>\$48,000</b>         |

| <u>DESCRIPTION</u>  | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u> | <u>Total Cost</u>  |
|---|-----------------|-------------|------------------|--------------------|
| <b>Sewer Pipe in Place Excluding Manholes</b>                 |                 |             |                  |                    |
| 36" Sewer Pipe  | 1,294           | LF          | \$171            | \$221,000          |
| <b>Subtotal</b>   |                 |             |                  | <b>\$221,000</b>   |
| <b>Siphon</b>   |                 |             |                  |                    |
| Structures  | 1               | LS          | \$200,000        | \$200,000          |
| Piping  | 1               | LS          | \$300,000        | \$300,000          |
| <b>Subtotal</b>   |                 |             |                  | <b>\$500,000</b>   |
| <b>Tunnel</b>   |                 |             |                  |                    |
| W. Mathis Street  | 80              | LF          | \$720            | \$58,000           |
| <b>Subtotal</b>   |                 |             |                  | <b>\$58,000</b>    |
| <b>Connections to Existing Facilities</b>                     |                 |             |                  |                    |
| Connection at BOL   | 1               | LS          | \$5,000          | \$5,000            |
| Connection at EOL   | 1               | LS          | \$5,000          | \$5,000            |
| <b>Subtotal</b>   |                 |             |                  | <b>\$10,000</b>    |
| <b>Manholes</b>   |                 |             |                  |                    |
| Standard Manhole, Type "G"                                    | 83              | VF          | \$750            | \$62,000           |
| <b>Subtotal</b>   |                 |             |                  | <b>\$62,000</b>    |
| <b>Miscellaneous</b>  |                 |             |                  |                    |
| Seeding   | 6,744           | SY          | \$0.60           | \$4,000            |
| Misc. Tree Removal & Replacement                              | 1               | LS          | \$15,000         | \$15,000           |
| Over Excavation and Trench Stabilization/Foundation Material  | 0               | Tons        | \$30             | \$0                |
| Electric or Telephone Utilities Not Shown                     | 200             | LF          | \$20             | \$4,000            |
| Water Utilities Less Than or Equal to 4" Dia. Not Shown       | 100             | LF          | \$25             | \$3,000            |
| Storm or Sanitary Sewer Utilities Less Than 8" Dia. Not Shown | 100             | LF          | \$25             | \$3,000            |
| <b>Subtotal</b>   |                 |             |                  | <b>\$29,000</b>    |
| <b>Construction Cost Subtotal</b>                             |                 |             |                  | <b>\$928,000</b>   |
| <b>Contingencies</b>  |                 |             | 15%              | <b>\$139,000</b>   |
| <b>TOTAL CONSTRUCTION COST</b>                                |                 |             |                  | <b>\$1,067,000</b> |

**ADDITIONAL PROJECT COSTS**

|   |         |    |        |                    |
|---|---------|----|--------|--------------------|
| <b>Right-of-Way Costs</b>                           |         |    |        |                    |
| Permanent Easement                                  | 57,000  | SF | \$0.00 | \$0                |
| Temporary Construction Easement                     | 133,000 | SF | \$0.00 | \$0                |
| <b>Subtotal</b>                                     |         |    |        | <b>\$0</b>         |
| <b>Engineering, Legal, and Administrative Costs</b> |         |    | 20%    | <b>\$213,000</b>   |
| <b>TOTAL PROJECT COST</b>                           |         |    |        | <b>\$1,280,000</b> |

**Oak Creek Trunk Sewer (E-6d)**

| <u>Item Description</u>                                       | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u><br>\$ | <u>Total Cost</u><br>\$ |
|---|-----------------|-------------|------------------------|-------------------------|
| <b>GENERAL REQUIREMENTS</b>                                   |                 |             |                        |                         |
| Mobilization  | 1               | LS          | \$6,000                | \$6,000                 |
| Supervision   | 1               | LS          | \$12,000               | \$12,000                |
| Equipment Rental & Misc.                                      | 1               | LS          | \$1,000                | \$1,000                 |
| <b>Total - General Requirements</b>                           |                 |             |                        | <b>\$19,000</b>         |
| <b>DESCRIPTION</b>  |                 |             |                        |                         |
| <b>Sewer Pipe in Place Excluding Manholes</b>                 | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u>       | <u>Total Cost</u>       |
| 18" Sewer Pipe  | 2,250           | LF          | \$86                   | \$192,000               |
| <b>Subtotal</b>   |                 |             |                        | <b>\$192,000</b>        |
| <b>Tunnel</b>   |                 |             |                        |                         |
| Highway 34  | 200             | LF          | \$450                  | \$90,000                |
| <b>Subtotal</b>   |                 |             |                        | <b>\$90,000</b>         |
| <b>Manholes</b>   |                 |             |                        |                         |
| Standard Manhole, Type "P"                                    | 60              | VF          | \$685                  | \$41,000                |
| <b>Subtotal</b>   |                 |             |                        | <b>\$41,000</b>         |
| <b>Miscellaneous</b>  |                 |             |                        |                         |
| BOL Connection  | 1               | LS          | \$5,000                | \$5,000                 |
| Seeding   | 13,000          | SY          | \$0.60                 | \$8,000                 |
| Misc. Tree Removal & Replacement                              | 1               | LS          | \$2,000                | \$2,000                 |
| Traffic Control   | 1               | LS          | \$5,000                | \$5,000                 |
| Over Excavation and Trench Stabilization/Foundation Material  | 0               | Tons        | \$30                   | \$0                     |
| Electric or Telephone Utilities Not Shown                     | 200             | LF          | \$20                   | \$4,000                 |
| Water Utilities Less Than or Equal to 4" Dia. Not Shown       | 100             | LF          | \$25                   | \$3,000                 |
| Storm or Sanitary Sewer Utilities Less Than 8" Dia. Not Shown | 100             | LF          | \$25                   | \$3,000                 |
| <b>Subtotal</b>   |                 |             |                        | <b>\$30,000</b>         |
| <b>Construction Cost Subtotal</b>                             |                 |             |                        | <b>\$372,000</b>        |
| <b>Contingencies</b>  |                 |             | 15%                    | <b>\$56,000</b>         |
| <b>TOTAL CONSTRUCTION COST</b>                                |                 |             |                        | <b>\$428,000</b>        |
| <b>ADDITIONAL PROJECT COSTS</b>                               |                 |             |                        |                         |
| <b>Right-of-Way Costs</b>                                     |                 |             |                        |                         |
| Permanent Easement  | 90,000          | SF          | \$0.80                 | \$72,000                |
| Temporary Construction Easement                               | 135,000         | SF          | \$0.10                 | \$14,000                |
| <b>Subtotal</b>   |                 |             |                        | <b>\$86,000</b>         |
| <b>Engineering, Legal, and Administrative Costs</b>           |                 |             | 20%                    | <b>\$103,000</b>        |
| <b>TOTAL PROJECT COST</b>                                     |                 |             |                        | <b>\$617,000</b>        |

**Oak Creek Trunk Sewer (Yellow-2 and Orange-1)**

| <u>Item Description</u>                                       | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u><br>\$ | <u>Total Cost</u><br>\$ |
|---|-----------------|-------------|------------------------|-------------------------|
| <b>GENERAL REQUIREMENTS</b>                                   |                 |             |                        |                         |
| Mobilization  | 1               | LS          | \$24,000               | \$24,000                |
| Supervision   | 1               | LS          | \$47,000               | \$47,000                |
| Equipment Rental & Misc.                                      | 1               | LS          | \$6,000                | \$6,000                 |
| <b>Total - General Requirements</b>                           |                 |             |                        | <b>\$77,000</b>         |
| <br>  |                 |             |                        |                         |
| <u>DESCRIPTION</u>  | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u>       | <u>Total Cost</u>       |
| <b>Sewer Pipe in Place Excluding Manholes</b>                 |                 |             |                        |                         |
| 36" Sewer Pipe  | 6,316           | LF          | \$180                  | \$1,137,000             |
| <b>Subtotal</b>   |                 |             |                        | <b>\$1,137,000</b>      |
| <br>  |                 |             |                        |                         |
| <b>Manholes</b>   |                 |             |                        |                         |
| Standard Manhole, Type "G"                                    | 212             | VF          | \$750                  | \$159,000               |
| <b>Subtotal</b>   |                 |             |                        | <b>\$159,000</b>        |
| <br>  |                 |             |                        |                         |
| <b>Miscellaneous</b>  |                 |             |                        |                         |
| BOL Connection  | 1               | LS          | \$5,000                | \$5,000                 |
| EOL Connection  | 1               | LS          | \$5,000                | \$5,000                 |
| Seeding   | 35,000          | SY          | \$0.60                 | \$21,000                |
| Misc. Tree Removal & Replacement                              | 1               | LS          | \$30,000               | \$30,000                |
| Traffic Control   | 1               | LS          | \$10,000               | \$10,000                |
| Removal and Replace Asphalt Pavement                          | 1,500           | SY          | \$30                   | \$45,000                |
| Over Excavation and Trench Stabilization/Foundation Material  | 0               | Tons        | \$30                   | \$0                     |
| Electric or Telephone Utilities Not Shown                     | 200             | LF          | \$20                   | \$4,000                 |
| Water Utilities Less Than or Equal to 4" Dia. Not Shown       | 100             | LF          | \$25                   | \$3,000                 |
| Storm or Sanitary Sewer Utilities Less Than 8" Dia. Not Shown | 100             | LF          | \$25                   | \$3,000                 |
| <b>Subtotal</b>   |                 |             |                        | <b>\$126,000</b>        |
| <b>Construction Cost Subtotal</b>                             |                 |             |                        | <b>\$1,499,000</b>      |
| <b>Contingencies</b>  |                 |             | <b>15%</b>             | <b>\$225,000</b>        |
| <b>TOTAL CONSTRUCTION COST</b>                                |                 |             |                        | <b>\$1,724,000</b>      |
| <br>  |                 |             |                        |                         |
| <b>ADDITIONAL PROJECT COSTS</b>                               |                 |             |                        |                         |
| <b>Right-of-Way Costs</b>                                     |                 |             |                        |                         |
| Permanent Easement  | 252,640         | SF          | \$0.00                 | \$0                     |
| Temporary Construction Easement                               | 378,960         | SF          | \$0.00                 | \$0                     |
| <b>Subtotal</b>   |                 |             |                        | <b>\$0</b>              |
| <b>Engineering, Legal, and Administrative Costs</b>           |                 |             | <b>20%</b>             | <b>\$345,000</b>        |
| <b>TOTAL PROJECT COST</b>                                     |                 |             |                        | <b>\$2,069,000</b>      |

**Oak Creek Trunk Sewer (Pink-2, Pink-3, and Pink-4)**

| <u>Item Description</u>                                       | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u><br>\$ | <u>Total Cost</u><br>\$ |
|---|-----------------|-------------|------------------------|-------------------------|
| <b>GENERAL REQUIREMENTS</b>                                   |                 |             |                        |                         |
| Mobilization  | 1               | LS          | \$24,000               | \$24,000                |
| Supervision   | 1               | LS          | \$46,000               | \$46,000                |
| Equipment Rental & Misc.                                      | 1               | LS          | \$6,000                | \$6,000                 |
| <b>Total - General Requirements</b>                           |                 |             |                        | <b>\$76,000</b>         |
| <br>  |                 |             |                        |                         |
| <u>DESCRIPTION</u>  | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u>       | <u>Total Cost</u>       |
| <b>Sewer Pipe in Place Excluding Manholes</b>                 |                 |             |                        |                         |
| 36" Sewer Pipe  | 2,843           | LF          | \$171                  | \$486,000               |
| 30" Sewer Pipe  | 3,809           | LF          | \$143                  | \$543,000               |
| <b>Subtotal</b>   |                 |             |                        | <b>\$1,029,000</b>      |
| <br>  |                 |             |                        |                         |
| <b>Tunnel</b>   |                 |             |                        |                         |
| Air Park Road   | 50              | LF          | \$720                  | \$36,000                |
| <b>Subtotal</b>   |                 |             |                        | <b>\$36,000</b>         |
| <br>  |                 |             |                        |                         |
| <b>Manholes</b>   |                 |             |                        |                         |
| Standard Manhole, Type "G"                                    | 210             | VF          | \$750                  | \$158,000               |
| <b>Subtotal</b>   |                 |             |                        | <b>\$158,000</b>        |
| <br>  |                 |             |                        |                         |
| <b>Miscellaneous</b>  |                 |             |                        |                         |
| BOL Connection  | 1               | LS          | \$5,000                | \$5,000                 |
| EOL Connection  | 1               | LS          | \$5,000                | \$5,000                 |
| Seeding   | 21,000          | SY          | \$0.60                 | \$13,000                |
| Misc. Tree Removal & Replacement                              | 1               | LS          | \$10,000               | \$10,000                |
| Traffic Control   | 1               | LS          | \$5,000                | \$5,000                 |
| Removal and Replace Asphalt Pavement                          | 3,000           | SY          | \$30                   | \$90,000                |
| Storm Sewer Relocations                                       | 4               | EA          | \$10,000               | \$40,000                |
| Over Excavation and Trench Stabilization/Foundation Material  | 0               | Tons        | \$30                   | \$0                     |
| Electric or Telephone Utilities Not Shown                     | 200             | LF          | \$20                   | \$4,000                 |
| Water Utilities Less Than or Equal to 4" Dia. Not Shown       | 100             | LF          | \$25                   | \$3,000                 |
| Storm or Sanitary Sewer Utilities Less Than 8" Dia. Not Shown | 100             | LF          | \$25                   | \$3,000                 |
| <b>Subtotal</b>   |                 |             |                        | <b>\$178,000</b>        |
| <b>Construction Cost Subtotal</b>                             |                 |             |                        | <b>\$1,477,000</b>      |
| <b>Contingencies</b>  |                 |             | <b>15%</b>             | <b>\$222,000</b>        |
| <b>TOTAL CONSTRUCTION COST</b>                                |                 |             |                        | <b>\$1,699,000</b>      |
| <br>  |                 |             |                        |                         |
| <b>ADDITIONAL PROJECT COSTS</b>                               |                 |             |                        |                         |
| <b>Right-of-Way Costs</b>                                     |                 |             |                        |                         |
| Permanent Easement  | 152,360         | SF          | \$0.00                 | \$0                     |
| Temporary Construction Easement                               | 228,540         | SF          | \$0.00                 | \$0                     |
| <b>Subtotal</b>   |                 |             |                        | <b>\$0</b>              |
| <b>Engineering, Legal, and Administrative Costs</b>           |                 |             | <b>20%</b>             | <b>\$340,000</b>        |
| <b>TOTAL PROJECT COST</b>                                     |                 |             |                        | <b>\$2,039,000</b>      |

**Oak Creek Trunk Sewer (Orange-2)**

| <u>Item Description</u>                                       | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u> | <u>Total Cost</u>  |
|---|-----------------|-------------|------------------|--------------------|
|   |                 |             | \$               | \$                 |
| <b>GENERAL REQUIREMENTS</b>                                   |                 |             |                  |                    |
| Mobilization  | 1               | LS          | \$17,000         | \$17,000           |
| Supervision   | 1               | LS          | \$32,000         | \$32,000           |
| Equipment Rental & Misc.                                      | 1               | LS          | \$4,000          | \$4,000            |
| <b>Total - General Requirements</b>                           |                 |             |                  | <b>\$53,000</b>    |
| <br>  |                 |             |                  |                    |
| <u>DESCRIPTION</u>  | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u> | <u>Total Cost</u>  |
| <b>Sewer Pipe in Place Excluding Manholes</b>                 |                 |             |                  |                    |
| 27" Sewer Pipe  | 3,778           | LF          | \$210            | \$793,000          |
| <b>Subtotal</b>   |                 |             |                  | <b>\$793,000</b>   |
| <br>  |                 |             |                  |                    |
| <b>Tunnel</b>   |                 |             |                  |                    |
| Highway 34  | 120             | LF          | \$630            | \$76,000           |
| <b>Subtotal</b>   |                 |             |                  | <b>\$76,000</b>    |
| <br>  |                 |             |                  |                    |
| <b>Manholes</b>   |                 |             |                  |                    |
| Standard Manhole, Type "P"                                    | 116             | VF          | \$685            | \$79,000           |
| <b>Subtotal</b>   |                 |             |                  | <b>\$79,000</b>    |
| <br>  |                 |             |                  |                    |
| <b>Miscellaneous</b>  |                 |             |                  |                    |
| BOL Connection  | 1               | LS          | \$5,000          | \$5,000            |
| Seeding   | 21,000          | SY          | \$0.60           | \$13,000           |
| Traffic Control   | 1               | LS          | \$5,000          | \$5,000            |
| Over Excavation and Trench Stabilization/Foundation Material  | 0               | Tons        | \$30             | \$0                |
| Electric or Telephone Utilities Not Shown                     | 200             | LF          | \$20             | \$4,000            |
| Water Utilities Less Than or Equal to 4" Dia. Not Shown       | 100             | LF          | \$25             | \$3,000            |
| Storm or Sanitary Sewer Utilities Less Than 8" Dia. Not Shown | 100             | LF          | \$25             | \$3,000            |
| <b>Subtotal</b>   |                 |             |                  | <b>\$33,000</b>    |
| <b>Construction Cost Subtotal</b>                             |                 |             |                  | <b>\$1,034,000</b> |
| <b>Contingencies</b>  |                 |             | <b>15%</b>       | <b>\$155,000</b>   |
| <b>TOTAL CONSTRUCTION COST</b>                                |                 |             |                  | <b>\$1,189,000</b> |
| <br>  |                 |             |                  |                    |
| <b>ADDITIONAL PROJECT COSTS</b>                               |                 |             |                  |                    |
| <b>Right-of-Way Costs</b>                                     |                 |             |                  |                    |
| Permanent Easement  | 151,120         | SF          | \$0.50           | \$76,000           |
| Temporary Construction Easement                               | 226,680         | SF          | \$0.10           | \$23,000           |
| <b>Subtotal</b>   |                 |             |                  | <b>\$99,000</b>    |
| <b>Engineering, Legal, and Administrative Costs</b>           |                 |             | <b>20%</b>       | <b>\$258,000</b>   |
| <b>TOTAL PROJECT COST</b>                                     |                 |             |                  | <b>\$1,546,000</b> |

**Oak Creek Trunk Sewer (Existing and Tier I) OPPC**

**SUMMARY OF PROJECT COSTS**

|  |     |                    |
|--|-----|--------------------|
| <b>Phase 1 (E-3)</b>                                 |     |                    |
| Construction Cost Total                              |     | \$1,088,000        |
| Right-of-Way Costs                                   |     | \$0                |
| <b>Phase 1 (Add Siphon Barrel)</b>                   |     |                    |
| Construction Cost Total                              |     | \$255,000          |
| Right-of-Way Costs                                   |     | \$0                |
| <b>Phase 2 (Red-1 and Red-2)</b>                     |     |                    |
| Construction Cost Total                              |     | \$2,248,000        |
| Right-of-Way Costs                                   |     | \$0                |
| <b>Phase 2 (Siphon and Pink-1)</b>                   |     |                    |
| Construction Cost Total                              |     | \$981,000          |
| Right-of-Way Costs                                   |     | \$0                |
| <b>Phase 3 (E-6D)</b>                                |     |                    |
| Construction Cost Total                              |     | \$428,000          |
| Right-of-Way Costs                                   |     | \$86,000           |
| <b>Phase 4 (Yellow-2 and Orange-1)</b>               |     |                    |
| Construction Cost Total                              |     | \$1,232,000        |
| Right-of-Way Costs                                   |     | \$0                |
| <b>Phases 5 &amp; 6 (Pink-2, Pink-3, and Pink-4)</b> |     |                    |
| Construction Cost Total                              |     | \$1,439,000        |
| Right-of-Way Costs                                   |     | \$0                |
| <br>   |     |                    |
| Construction Cost Subtotal (w/out Right-of-Way)      |     | \$7,671,000        |
| Construction Cost Subtotal (w/Right-of-Way Costs)    |     | \$7,757,000        |
| <br>   |     |                    |
| <b>Total Construction Cost</b>                       |     | <b>\$7,757,000</b> |
| <br>   |     |                    |
| Engineering, Legal, and Administrative Costs         | 20% | \$1,551,000        |
| <br>   |     |                    |
| <b>TOTAL PROJECT COST</b>                            |     | <b>\$9,308,000</b> |

\*OPPC is based on preliminary design drawings using West 'O' Street Trunk Sewer Extension - Phases 1 and 2 and Upper Southeast Salt Creek Subbasin Sewer - Segment 1 Bid Tab low and average line item costs.

- Pipe Costs (\$4.75/Dia-In/LF)
- Tee-Based Manhole Costs (\$700/VF)
- Type 'G' Manhole Costs (\$750/VF)
- Type 'P' Manhole Costs (\$685/VF)
- Seeding (\$0.60/SY)
- Tunnels Beneath Roads (\$15/Dia-In/LF)
- Tunnel Beneath Airport Runway (\$750/LF) Quote from Horizontal Boring
- Gravel Surfacing In-Place (\$30/Ton)
- No Overexcavation costs since borings showed no groundwater conditions

**Oak Creek Trunk Sewer (E-3)**

| <u>Item Description</u>                                       | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u><br>\$ | <u>Total Cost</u><br>\$ |
|---|-----------------|-------------|------------------------|-------------------------|
| <b>GENERAL REQUIREMENTS</b>                                   |                 |             |                        |                         |
| Mobilization  | 1               | LS          | \$15,000               | \$15,000                |
| Supervision   | 1               | LS          | \$30,000               | \$30,000                |
| Equipment Rental & Misc.                                      | 1               | LS          | \$4,000                | \$4,000                 |
| <b>Total - General Requirements</b>                           |                 |             |                        | <b>\$49,000</b>         |
| <b>DESCRIPTION</b>  |                 |             |                        |                         |
| <b>Sewer Pipe in Place Excluding Manholes</b>                 | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u>       | <u>Total Cost</u>       |
| 42" Sewer Pipe  | 2,843           | LF          | \$200                  | \$567,000               |
| 30" Sewer Pipe  | 150             | LF          | \$143                  | \$21,000                |
| <b>Subtotal</b>   |                 |             |                        | <b>\$588,000</b>        |
| <b>Tunnel</b>   |                 |             |                        |                         |
| West Mathis Street  | 80              | LF          | \$810                  | \$65,000                |
| Air Park Road   | 80              | LF          | \$810                  | \$65,000                |
| <b>Subtotal</b>   |                 |             |                        | <b>\$130,000</b>        |
| <b>Manholes</b>   |                 |             |                        |                         |
| Standard Manhole, Type "G"                                    | 95              | VF          | \$750                  | \$71,000                |
| <b>Subtotal</b>   |                 |             |                        | <b>\$71,000</b>         |
| <b>Miscellaneous</b>  |                 |             |                        |                         |
| BOL Connection  | 1               | LS          | \$5,000                | \$5,000                 |
| EOL Connection  | 1               | LS          | \$5,000                | \$5,000                 |
| Seeding   | 16,000          | SY          | \$0.60                 | \$10,000                |
| Misc. Tree Removal & Replacement                              | 1               | LS          | \$2,000                | \$2,000                 |
| Abandon Existing Sewer In-Place (Flow Fill Existing Sewer)    | 419             | CY          | \$50                   | \$21,000                |
| Abandon Existing Manholes In-Place                            | 8               | EA          | \$2,500                | \$20,000                |
| Traffic Control   | 1               | LS          | \$5,000                | \$5,000                 |
| LES Power Pole Relocation                                     | 1               | LS          | \$30,000               | \$30,000                |
| Over Excavation and Trench Stabilization/Foundation Material  | 0               | Tons        | \$30                   | \$0                     |
| Electric or Telephone Utilities Not Shown                     | 200             | LF          | \$20                   | \$4,000                 |
| Water Utilities Less Than or Equal to 4" Dia. Not Shown       | 100             | LF          | \$25                   | \$3,000                 |
| Storm or Sanitary Sewer Utilities Less Than 8" Dia. Not Shown | 100             | LF          | \$25                   | \$3,000                 |
| <b>Subtotal</b>   |                 |             |                        | <b>\$108,000</b>        |
| <b>Construction Cost Subtotal</b>                             |                 |             |                        | <b>\$946,000</b>        |
| <b>Contingencies</b>  |                 |             | <b>15%</b>             | <b>\$142,000</b>        |
| <b>TOTAL CONSTRUCTION COST</b>                                |                 |             |                        | <b>\$1,088,000</b>      |
| <b>ADDITIONAL PROJECT COSTS</b>                               |                 |             |                        |                         |
| <b>Right-of-Way Costs</b>                                     |                 |             |                        |                         |
| Permanent Easement  | 113,720         | SF          | \$0.00                 | \$0                     |
| Temporary Construction Easement                               | 170,580         | SF          | \$0.00                 | \$0                     |
| <b>Subtotal</b>   |                 |             |                        | <b>\$0</b>              |
| <b>Engineering, Legal, and Administrative Costs</b>           |                 |             | <b>20%</b>             | <b>\$218,000</b>        |
| <b>TOTAL PROJECT COST</b>                                     |                 |             |                        | <b>\$1,306,000</b>      |

**Oak Creek Trunk Sewer (Add Siphon Barrel)**

| <u>Item Description</u>                             | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u><br>\$ | <u>Total Cost</u><br>\$ |
|---|-----------------|-------------|------------------------|-------------------------|
| <b>GENERAL REQUIREMENTS</b>                         |                 |             |                        |                         |
| Mobilization  | 1               | LS          | \$4,000                | \$4,000                 |
| Supervision   | 1               | LS          | \$7,000                | \$7,000                 |
| Equipment Rental & Misc.                            | 1               | LS          | \$1,000                | \$1,000                 |
| <b>Total - General Requirements</b>                 |                 |             |                        | <b>\$12,000</b>         |
| <br>  |                 |             |                        |                         |
| <u>DESCRIPTION</u>                                  | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u>       | <u>Total Cost</u>       |
| <b>Siphon</b>                                       |                 |             |                        |                         |
| Structures  | 1               | LS          | \$50,000               | \$50,000                |
| Piping  | 1               | LS          | \$150,000              | \$150,000               |
| <b>Subtotal</b>                                     |                 |             |                        | <b>\$200,000</b>        |
| <br>  |                 |             |                        |                         |
| <b>Connections to Existing Facilities</b>           |                 |             |                        |                         |
| Connection at BOL                                   | 1               | LS          | \$5,000                | \$5,000                 |
| Connection at EOL                                   | 1               | LS          | \$5,000                | \$5,000                 |
| <b>Subtotal</b>                                     |                 |             |                        | <b>\$10,000</b>         |
| <b>Construction Cost Subtotal</b>                   |                 |             |                        | <b>\$222,000</b>        |
| <b>Contingencies</b>                                |                 |             | <b>15%</b>             | <b>\$33,000</b>         |
| <b>TOTAL CONSTRUCTION COST</b>                      |                 |             |                        | <b>\$255,000</b>        |
| <br>  |                 |             |                        |                         |
| <b>ADDITIONAL PROJECT COSTS</b>                     |                 |             |                        |                         |
| <b>Right-of-Way Costs</b>                           |                 |             |                        |                         |
| Permanent Easement                                  | 57,000          | SF          | \$0.00                 | \$0                     |
| Temporary Construction Easement                     | 133,000         | SF          | \$0.00                 | \$0                     |
| <b>Subtotal</b>                                     |                 |             |                        | <b>\$0</b>              |
| <b>Engineering, Legal, and Administrative Costs</b> |                 |             | <b>20%</b>             | <b>\$51,000</b>         |
| <b>TOTAL PROJECT COST</b>                           |                 |             |                        | <b>\$306,000</b>        |

**Oak Creek Trunk Sewer (Red-1, Red-2)**

| <u>Item Description</u>             | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u><br>\$ | <u>Total Cost</u><br>\$ |
|-------------------------------------|-----------------|-------------|------------------------|-------------------------|
| <b>GENERAL REQUIREMENTS</b>         |                 |             |                        |                         |
| Mobilization                        | 1               | LS          | \$28,000               | \$28,000                |
| Supervision                         | 1               | LS          | \$56,000               | \$56,000                |
| Equipment Rental & Misc.            | 1               | LS          | \$9,000                | \$9,000                 |
| <b>Total - General Requirements</b> |                 |             |                        | <b>\$93,000</b>         |

| <u>DESCRIPTION</u>  | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u> | <u>Total Cost</u>  |
|---|-----------------|-------------|------------------|--------------------|
| <b>Sewer Pipe in Place Excluding Manholes</b>                 |                 |             |                  |                    |
| 48" Sewer Pipe  | 4,885           | LF          | \$228            | \$1,114,000        |
| 42" Sewer Pipe  | 917             | LF          | \$200            | \$183,000          |
| <b>Subtotal</b>   |                 |             |                  | <b>\$1,297,000</b> |
| <b>Tunnel</b>   |                 |             |                  |                    |
| Taxiway   | 400             | LF          | \$750            | \$300,000          |
| <b>Subtotal</b>   |                 |             |                  | <b>\$300,000</b>   |
| <b>Connections to Existing Facilities</b>                     |                 |             |                  |                    |
| Connection at BOL   | 1               | LS          | \$5,000          | \$5,000            |
| Connection at EOL   | 1               | LS          | \$5,000          | \$5,000            |
| <b>Subtotal</b>   |                 |             |                  | <b>\$10,000</b>    |
| <b>Manholes</b>   |                 |             |                  |                    |
| Tee-Based Manhole   | 180             | VF          | \$700            | \$126,000          |
| <b>Subtotal</b>   |                 |             |                  | <b>\$126,000</b>   |
| <b>Miscellaneous</b>  |                 |             |                  |                    |
| 84" Storm Sewer Modifications                                 | 1               | LS          | \$75,000         | \$75,000           |
| 36" Storm Sewer Modifications                                 | 1               | LS          | \$10,000         | \$10,000           |
| Gravel Surfacing (In-Place)                                   | 25              | Tons        | \$30             | \$1,000            |
| Seeding   | 30,011          | SY          | \$0.60           | \$18,000           |
| Misc. Tree Removal & Replacement                              | 1               | LS          | \$15,000         | \$15,000           |
| Over Excavation and Trench Stabilization/Foundation Material  | 0               | Tons        | \$30             | \$0                |
| Electric or Telephone Utilities Not Shown                     | 200             | LF          | \$20             | \$4,000            |
| Water Utilities Less Than or Equal to 4" Dia. Not Shown       | 100             | LF          | \$25             | \$3,000            |
| Storm or Sanitary Sewer Utilities Less Than 8" Dia. Not Shown | 100             | LF          | \$25             | \$3,000            |
| <b>Subtotal</b>   |                 |             |                  | <b>\$129,000</b>   |
| <b>Construction Cost Subtotal</b>                             |                 |             |                  | <b>\$1,955,000</b> |
| <b>Contingencies</b>  |                 |             | <b>15%</b>       | <b>\$293,000</b>   |
| <b>TOTAL CONSTRUCTION COST</b>                                |                 |             |                  | <b>\$2,248,000</b> |

**ADDITIONAL PROJECT COSTS**

|   |         |    |            |                    |
|---|---------|----|------------|--------------------|
| <b>Right-of-Way Costs</b>                           |         |    |            |                    |
| Permanent Easement                                  | 57,000  | SF | \$0.00     | \$0                |
| Temporary Construction Easement                     | 133,000 | SF | \$0.00     | \$0                |
| <b>Subtotal</b>                                     |         |    |            | <b>\$0</b>         |
| <b>Engineering, Legal, and Administrative Costs</b> |         |    | <b>20%</b> | <b>\$450,000</b>   |
| <b>TOTAL PROJECT COST</b>                           |         |    |            | <b>\$2,698,000</b> |

**Oak Creek Trunk Sewer (Pink-1 and New Siphon Crossing)**

| <u>Item Description</u>             | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u><br>\$ | <u>Total Cost</u><br>\$ |
|-------------------------------------|-----------------|-------------|------------------------|-------------------------|
| <b>GENERAL REQUIREMENTS</b>         |                 |             |                        |                         |
| Mobilization                        | 1               | LS          | \$14,000               | \$14,000                |
| Supervision                         | 1               | LS          | \$27,000               | \$27,000                |
| Equipment Rental & Misc.            | 1               | LS          | \$3,000                | \$3,000                 |
| <b>Total - General Requirements</b> |                 |             |                        | <b>\$44,000</b>         |

| <u>DESCRIPTION</u>  | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u> | <u>Total Cost</u> |
|---|-----------------|-------------|------------------|-------------------|
| <b>Sewer Pipe in Place Excluding Manholes</b>                 |                 |             |                  |                   |
| 36" Sewer Pipe  | 1,069           | LF          | \$171            | \$183,000         |
| <b>Subtotal</b>   |                 |             |                  | <b>\$183,000</b>  |
| <b>Siphon</b>   |                 |             |                  |                   |
| Structures  | 1               | LS          | \$200,000        | \$200,000         |
| Piping  | 1               | LS          | \$300,000        | \$300,000         |
| <b>Subtotal</b>   |                 |             |                  | <b>\$500,000</b>  |
| <b>Tunnel</b>   |                 |             |                  |                   |
| W. Mathis Street  | 80              | LF          | \$720            | \$58,000          |
| <b>Subtotal</b>   |                 |             |                  | <b>\$58,000</b>   |
| <b>Connections to Existing Facilities</b>                     |                 |             |                  |                   |
| Connection at BOL   | 1               | LS          | \$5,000          | \$5,000           |
| Connection at EOL   | 1               | LS          | \$5,000          | \$5,000           |
| <b>Subtotal</b>   |                 |             |                  | <b>\$10,000</b>   |
| <b>Manholes</b>   |                 |             |                  |                   |
| Standard Manhole, Type "G"                                    | 60              | VF          | \$750            | \$45,000          |
| <b>Subtotal</b>   |                 |             |                  | <b>\$45,000</b>   |
| <b>Miscellaneous</b>  |                 |             |                  |                   |
| Seeding   | 5,494           | SY          | \$0.60           | \$3,000           |
| Over Excavation and Trench Stabilization/Foundation Material  | 0               | Tons        | \$30             | \$0               |
| Electric or Telephone Utilities Not Shown                     | 200             | LF          | \$20             | \$4,000           |
| Water Utilities Less Than or Equal to 4" Dia. Not Shown       | 100             | LF          | \$25             | \$3,000           |
| Storm or Sanitary Sewer Utilities Less Than 8" Dia. Not Shown | 100             | LF          | \$25             | \$3,000           |
| <b>Subtotal</b>   |                 |             |                  | <b>\$13,000</b>   |
| <b>Construction Cost Subtotal</b>                             |                 |             |                  | <b>\$853,000</b>  |
| <b>Contingencies</b>  |                 |             | <b>15%</b>       | <b>\$128,000</b>  |
| <b>TOTAL CONSTRUCTION COST</b>                                |                 |             |                  | <b>\$981,000</b>  |

**ADDITIONAL PROJECT COSTS**

|   |         |    |            |                    |
|---|---------|----|------------|--------------------|
| <b>Right-of-Way Costs</b>                           |         |    |            |                    |
| Permanent Easement                                  | 57,000  | SF | \$0.00     | \$0                |
| Temporary Construction Easement                     | 133,000 | SF | \$0.00     | \$0                |
| <b>Subtotal</b>                                     |         |    |            | <b>\$0</b>         |
| <b>Engineering, Legal, and Administrative Costs</b> |         |    | <b>20%</b> | <b>\$196,000</b>   |
| <b>TOTAL PROJECT COST</b>                           |         |    |            | <b>\$1,177,000</b> |

**Oak Creek Trunk Sewer (E-6d)**

| <u>Item Description</u>                                       | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u> | <u>Total Cost</u> |
|---|-----------------|-------------|------------------|-------------------|
|   |                 |             | \$               | \$                |
| <b>GENERAL REQUIREMENTS</b>                                   |                 |             |                  |                   |
| Mobilization  | 1               | LS          | \$6,000          | \$6,000           |
| Supervision   | 1               | LS          | \$12,000         | \$12,000          |
| Equipment Rental & Misc.                                      | 1               | LS          | \$1,000          | \$1,000           |
| <b>Total - General Requirements</b>                           |                 |             |                  | <b>\$19,000</b>   |
| <b>DESCRIPTION</b>  |                 |             |                  |                   |
| <b>Sewer Pipe in Place Excluding Manholes</b>                 | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u> | <u>Total Cost</u> |
| 18" Sewer Pipe  | 2,250           | LF          | \$86             | \$192,000         |
| <b>Subtotal</b>   |                 |             |                  | <b>\$192,000</b>  |
| <b>Tunnel</b>   |                 |             |                  |                   |
| Highway 34  | 200             | LF          | \$450            | \$90,000          |
| <b>Subtotal</b>   |                 |             |                  | <b>\$90,000</b>   |
| <b>Manholes</b>   |                 |             |                  |                   |
| Standard Manhole, Type "P"                                    | 60              | VF          | \$685            | \$41,000          |
| <b>Subtotal</b>   |                 |             |                  | <b>\$41,000</b>   |
| <b>Miscellaneous</b>  |                 |             |                  |                   |
| BOL Connection  | 1               | LS          | \$5,000          | \$5,000           |
| Seeding   | 13,000          | SY          | \$0.60           | \$8,000           |
| Misc. Tree Removal & Replacement                              | 1               | LS          | \$2,000          | \$2,000           |
| Traffic Control   | 1               | LS          | \$5,000          | \$5,000           |
| Over Excavation and Trench Stabilization/Foundation Material  | 0               | Tons        | \$30             | \$0               |
| Electric or Telephone Utilities Not Shown                     | 200             | LF          | \$20             | \$4,000           |
| Water Utilities Less Than or Equal to 4" Dia. Not Shown       | 100             | LF          | \$25             | \$3,000           |
| Storm or Sanitary Sewer Utilities Less Than 8" Dia. Not Shown | 100             | LF          | \$25             | \$3,000           |
| <b>Subtotal</b>   |                 |             |                  | <b>\$30,000</b>   |
| <b>Construction Cost Subtotal</b>                             |                 |             |                  | <b>\$372,000</b>  |
| <b>Contingencies</b>  |                 |             | <b>15%</b>       | <b>\$56,000</b>   |
| <b>TOTAL CONSTRUCTION COST</b>                                |                 |             |                  | <b>\$428,000</b>  |
| <b>ADDITIONAL PROJECT COSTS</b>                               |                 |             |                  |                   |
| <b>Right-of-Way Costs</b>                                     |                 |             |                  |                   |
| Permanent Easement  | 90,000          | SF          | \$0.80           | \$72,000          |
| Temporary Construction Easement                               | 135,000         | SF          | \$0.10           | \$14,000          |
| <b>Subtotal</b>   |                 |             |                  | <b>\$86,000</b>   |
| <b>Engineering, Legal, and Administrative Costs</b>           |                 |             | <b>20%</b>       | <b>\$103,000</b>  |
| <b>TOTAL PROJECT COST</b>                                     |                 |             |                  | <b>\$617,000</b>  |

**Oak Creek Trunk Sewer (Yellow-2 and Orange-1)**

| <u>Item Description</u>                                       | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u> | <u>Total Cost</u>  |
|---|-----------------|-------------|------------------|--------------------|
|   |                 |             | \$               | \$                 |
| <b>GENERAL REQUIREMENTS</b>                                   |                 |             |                  |                    |
| Mobilization  | 1               | LS          | \$17,000         | \$17,000           |
| Supervision   | 1               | LS          | \$34,000         | \$34,000           |
| Equipment Rental & Misc.                                      | 1               | LS          | \$4,000          | \$4,000            |
| <b>Total - General Requirements</b>                           |                 |             |                  | <b>\$55,000</b>    |
| <br>  |                 |             |                  |                    |
| <u>DESCRIPTION</u>  | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u> | <u>Total Cost</u>  |
| <b>Sewer Pipe in Place Excluding Manholes</b>                 |                 |             |                  |                    |
| 27" Sewer Pipe  | 2,437           | LF          | \$128            | \$313,000          |
| 24" Sewer Pipe  | 3,519           | LF          | \$114            | \$401,000          |
| 21" Sewer Pipe  | 360             | LF          | \$100            | \$36,000           |
| <b>Subtotal</b>   |                 |             |                  | <b>\$750,000</b>   |
| <br>  |                 |             |                  |                    |
| <b>Manholes</b>   |                 |             |                  |                    |
| Standard Manhole, Type "P"                                    | 204             | VF          | \$685            | \$140,000          |
| <b>Subtotal</b>   |                 |             |                  | <b>\$140,000</b>   |
| <br>  |                 |             |                  |                    |
| <b>Miscellaneous</b>  |                 |             |                  |                    |
| BOL Connection  | 1               | LS          | \$5,000          | \$5,000            |
| EOL Connection  | 1               | LS          | \$5,000          | \$5,000            |
| Seeding   | 35,000          | SY          | \$0.60           | \$21,000           |
| Misc. Tree Removal & Replacement                              | 1               | LS          | \$30,000         | \$30,000           |
| Traffic Control   | 1               | LS          | \$10,000         | \$10,000           |
| Removal and Replace Asphalt Pavement                          | 1,500           | SY          | \$30             | \$45,000           |
| Over Excavation and Trench Stabilization/Foundation Material  | 0               | Tons        | \$30             | \$0                |
| Electric or Telephone Utilities Not Shown                     | 200             | LF          | \$20             | \$4,000            |
| Water Utilities Less Than or Equal to 4" Dia. Not Shown       | 100             | LF          | \$25             | \$3,000            |
| Storm or Sanitary Sewer Utilities Less Than 8" Dia. Not Shown | 100             | LF          | \$25             | \$3,000            |
| <b>Subtotal</b>   |                 |             |                  | <b>\$126,000</b>   |
| <b>Construction Cost Subtotal</b>                             |                 |             |                  | <b>\$1,071,000</b> |
| <b>Contingencies</b>  |                 |             | <b>15%</b>       | <b>\$161,000</b>   |
| <b>TOTAL CONSTRUCTION COST</b>                                |                 |             |                  | <b>\$1,232,000</b> |
| <br>  |                 |             |                  |                    |
| <b>ADDITIONAL PROJECT COSTS</b>                               |                 |             |                  |                    |
| <b>Right-of-Way Costs</b>                                     |                 |             |                  |                    |
| Permanent Easement  | 97,480          | SF          | \$0.00           | \$0                |
| Temporary Construction Easement                               | 146,220         | SF          | \$0.00           | \$0                |
| <b>Subtotal</b>   |                 |             |                  | <b>\$0</b>         |
| <b>Engineering, Legal, and Administrative Costs</b>           |                 |             | <b>20%</b>       | <b>\$246,000</b>   |
| <b>TOTAL PROJECT COST</b>                                     |                 |             |                  | <b>\$1,478,000</b> |

**Oak Creek Trunk Sewer (Pink-2, Pink-3, and Pink-4)**

| <u>Item Description</u>                                       | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u><br>\$ | <u>Total Cost</u><br>\$ |
|---|-----------------|-------------|------------------------|-------------------------|
| <b>GENERAL REQUIREMENTS</b>                                   |                 |             |                        |                         |
| Mobilization  | 1               | LS          | \$20,000               | \$20,000                |
| Supervision   | 1               | LS          | \$39,000               | \$39,000                |
| Equipment Rental & Misc.                                      | 1               | LS          | \$5,000                | \$5,000                 |
| <b>Total - General Requirements</b>                           |                 |             |                        | <b>\$64,000</b>         |
| <br>  |                 |             |                        |                         |
| <u>DESCRIPTION</u>  | <u>Quantity</u> | <u>Unit</u> | <u>Unit Cost</u>       | <u>Total Cost</u>       |
| <b>Sewer Pipe in Place Excluding Manholes</b>                 |                 |             |                        |                         |
| 27" Sewer Pipe  | 3,030           | LF          | \$128                  | \$389,000               |
| 24" Sewer Pipe  | 3,622           | LF          | \$114                  | \$413,000               |
| <b>Subtotal</b>   |                 |             |                        | <b>\$802,000</b>        |
| <br>  |                 |             |                        |                         |
| <b>Tunnel</b>   |                 |             |                        |                         |
| West Mathis Street  | 50              | LF          | \$540                  | \$27,000                |
| Air Park Road   | 50              | LF          | \$540                  | \$27,000                |
| <b>Subtotal</b>   |                 |             |                        | <b>\$54,000</b>         |
| <br>  |                 |             |                        |                         |
| <b>Manholes</b>   |                 |             |                        |                         |
| Standard Manhole, Type "P"                                    | 210             | VF          | \$685                  | \$144,000               |
| <b>Subtotal</b>   |                 |             |                        | <b>\$144,000</b>        |
| <br>  |                 |             |                        |                         |
| <b>Miscellaneous</b>  |                 |             |                        |                         |
| BOL Connection  | 1               | LS          | \$5,000                | \$5,000                 |
| EOL Connection  | 1               | LS          | \$5,000                | \$5,000                 |
| Seeding   | 37,000          | SY          | \$0.60                 | \$22,000                |
| Misc. Tree Removal & Replacement                              | 1               | LS          | \$10,000               | \$10,000                |
| Traffic Control   | 1               | LS          | \$5,000                | \$5,000                 |
| Removal and Replace Asphalt Pavement                          | 3,000           | SY          | \$30                   | \$90,000                |
| Storm Sewer Relocations                                       | 4               | EA          | \$10,000               | \$40,000                |
| Over Excavation and Trench Stabilization/Foundation Material  | 0               | Tons        | \$30                   | \$0                     |
| Electric or Telephone Utilities Not Shown                     | 200             | LF          | \$20                   | \$4,000                 |
| Water Utilities Less Than or Equal to 4" Dia. Not Shown       | 100             | LF          | \$25                   | \$3,000                 |
| Storm or Sanitary Sewer Utilities Less Than 8" Dia. Not Shown | 100             | LF          | \$25                   | \$3,000                 |
| <b>Subtotal</b>   |                 |             |                        | <b>\$187,000</b>        |
| <b>Construction Cost Subtotal</b>                             |                 |             |                        | <b>\$1,251,000</b>      |
| <b>Contingencies</b>  |                 |             | <b>15%</b>             | <b>\$188,000</b>        |
| <b>TOTAL CONSTRUCTION COST</b>                                |                 |             |                        | <b>\$1,439,000</b>      |
| <br>  |                 |             |                        |                         |
| <b>ADDITIONAL PROJECT COSTS</b>                               |                 |             |                        |                         |
| <b>Right-of-Way Costs</b>                                     |                 |             |                        |                         |
| Permanent Easement  | 144,880         | SF          | \$0.00                 | \$0                     |
| Temporary Construction Easement                               | 217,320         | SF          | \$0.00                 | \$0                     |
| <b>Subtotal</b>   |                 |             |                        | <b>\$0</b>              |
| <b>Engineering, Legal, and Administrative Costs</b>           |                 |             | <b>20%</b>             | <b>\$288,000</b>        |
| <b>TOTAL PROJECT COST</b>                                     |                 |             |                        | <b>\$1,727,000</b>      |