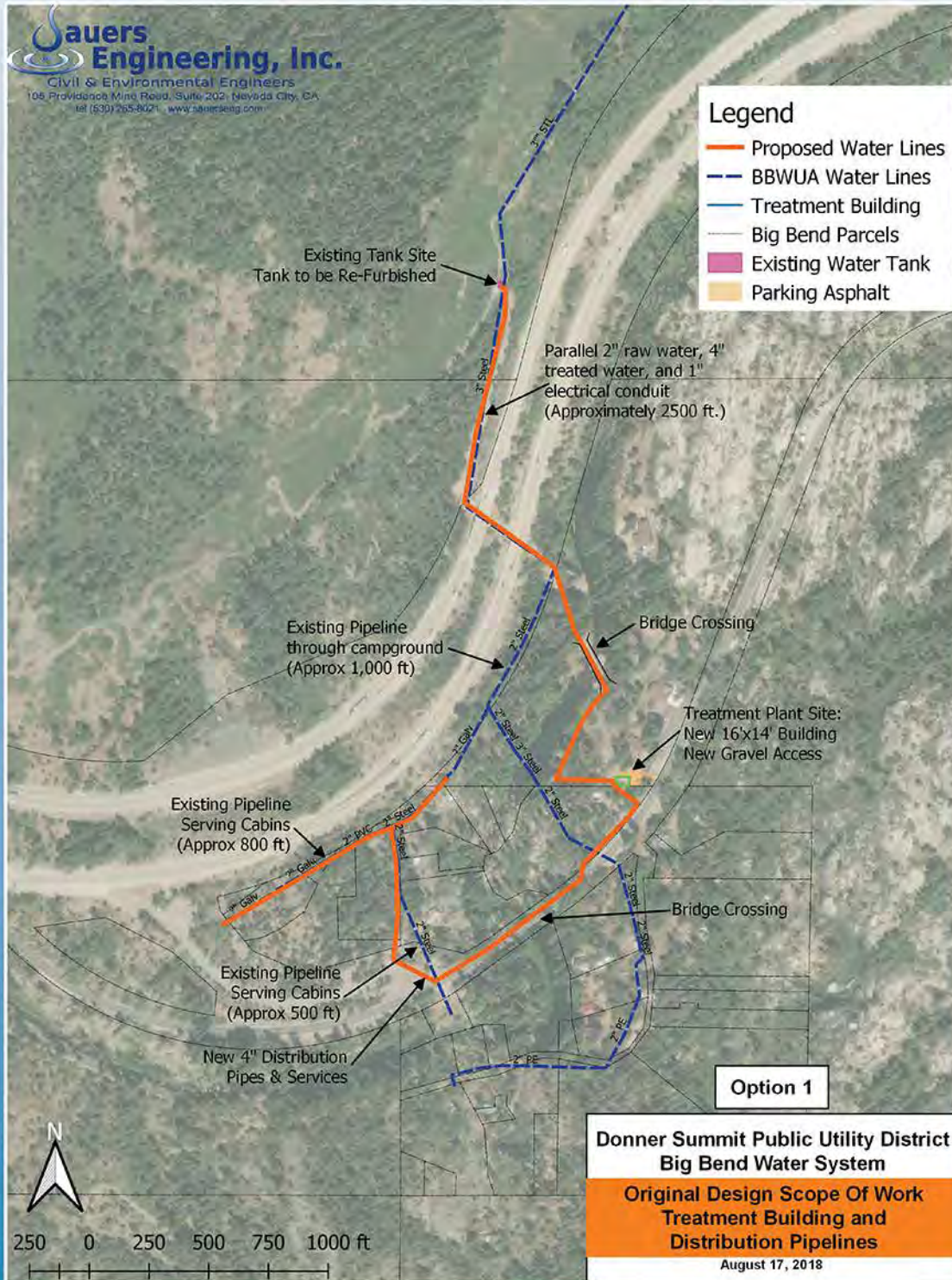


# Big Bend Water System Improvements



| Option 1<br>Surface Water Treatment &<br>Replacement of Distribution System<br>DSPUD Big Bend Water System Improvements<br>Preliminary Construction Estimate |             |       |           |           |   |                |
|--|-------------|-------|-----------|-----------|---|----------------|
| August 17, 2018  |             |       |           |           |   |                |
| Item   | Quantity    | Units | Materials | Labor     | Extension   | Category       |
| Mobilization   | 11.s.       |       | \$120,000 |           |   | \$120,000      |
| SWPPP Implementation   | 1 ea        |       | \$10,000  | \$10,000  |   | \$20,000       |
| Clearing & Grubbing  | 11.s.       |       | \$0       | \$10,000  |   | \$10,000       |
| <b>Treatment Building and Site Work</b>  |             |       |           |           |   |                |
| Site Grading   | 11.s.       |       | \$0       | \$10,000  | \$10,000  |                |
| Slab/Foundation  | 250 sq ft   |       | \$20      | \$20      |   | \$10,000       |
| Wood frame building  | 250 sq ft   |       | \$80      | \$80      |   | \$40,000       |
| Gravel Parking and Access  | 3000 sq ft  |       | \$1       | \$2       |   | \$9,000        |
| Electrical Service   | 11.s.       |       | \$12,000  |           |   | \$12,000       |
| Building Electrical  | 11.s.       |       | \$15,000  | \$15,000  | \$30,000  |                |
| <b>Treatment System (with filtration)</b>  |             |       |           |           |   |                |
| Filter Vessels and Cartridges  | 2 ea.       |       | \$4,000   | \$2,000   | \$12,000  |                |
| Chemical Feed System   | 1 ea.       |       | \$2,500   | \$1,000   |   | \$3,500        |
| Contact Pipeline   | 200 l.f.    |       | \$30      | \$50      |   | \$16,000       |
| Booster Pump System  | 11.s.       |       | \$4,000   | \$5,000   |   | \$9,000        |
| Break Tank   | 1 ea.       |       | \$1,000   | \$2,000   |   | \$3,000        |
| <b>Monitoring &amp; Control</b>  |             |       |           |           |   |                |
| Plant Flow Meter   | 1 ea        |       | \$1,500   | \$1,000   |   | \$2,500        |
| Turbidimeters  | 2 ea        |       | \$6,000   | \$1,000   |   | \$14,000       |
| Chlorine Residual Analyzer   | 1 ea        |       | \$6,000   | \$3,000   |   | \$9,000        |
| Plant PLC  | 1 ea        |       | \$10,000  | \$10,000  |   | \$20,000       |
| Modulating Valve   | 1 ea        |       | \$1,500   | \$1,500   |   | \$3,000        |
| Pump Control Panel   | 1 ea        |       | \$2,500   | \$2,500   |   | \$5,000        |
| Tank Level Transmitters  | 3 ea        |       | \$1,500   | \$1,500   |   | \$9,000        |
| Communication Conduit/Conductor  | 2500 l.f.   |       | \$5       | \$30      |   | \$87,500       |
| SCADA  | 11.s.       |       | \$10,000  | \$10,000  |   | \$20,000       |
| <b>Pipelines</b>   |             |       |           |           |   |                |
| 2" Raw Water Transmission  | 2500 l.f.   |       | \$10      | \$50      |   | \$150,000      |
| 4" Treated Water Transmission  | 2500 l.f.   |       | \$20      | \$50      |   | \$175,000      |
| 4" Distribution  | 3400 l.f.   |       | \$20      | \$75      |   | \$323,000      |
| Water Meters   | 29 ea       |       | \$1,000   | \$1,300   |   | \$66,700       |
| Hwy 40 Bridge Crossing   | 11.s.       |       | \$15,000  | \$25,000  |   | \$40,000       |
| USFS Bridge Crossing   | 11.s.       |       | \$10,000  | \$15,000  |   | \$25,000       |
| <b>Raw Water Tank</b>  |             |       |           |           |   |                |
| 5000 Gallon Concrete Tank  | 11.s.       |       | \$4,500   | \$5,000   |   | \$9,500.00     |
| Gravel Pad/UnderDrain  | 11.s.       |       | \$1,500   | \$2,500   |   | \$4,000.00     |
| Overflow   | 11.s.       |       | \$1,000   | \$1,000   |   | \$2,000.00     |
| Valves & Appurtenances   | 11.s.       |       | \$600     | \$1,000   |   | \$1,600.00     |
| <b>Miscellaneous</b>   |             |       |           |           |   |                |
| Remove vault under I-80  | 11.s.       |       | \$1,500   | \$3,500   |   | \$5,000.00     |
| AC Surface Restoration- Pipe   | 25000 sq ft |       | \$3       | \$4       |   | \$175,000.00   |
| Rock Excavation  | 11.s.       |       | \$0       | \$100,000 |   | \$100,000.00   |
| <b>Treated Water Tank Rehab</b>  |             |       |           |           |   |                |
| Grading & Site Development   | 11.s.       |       |           | \$5,000   |   | \$5,000.00     |
| Subsurface Drainage  | 11.s.       |       | \$1,500   | \$2,500   |   | \$4,000.00     |
| Interior Coating System  | 11.s.       |       | \$5,000   | \$15,000  |   | \$20,000.00    |
| Exterior Coating System  | 11.s.       |       | \$2,000   | \$5,000   |   | \$7,000.00     |
| Valves Piping & Accessories  | 11.s.       |       | \$1,000   | \$1,500   |   | \$2,500.00     |
| <b>Subtotal</b>  |             |       |           |           |   |                |
|  |             |       |           |           | Construction Subtotal=  | \$1,589,800.00 |
|  |             |       |           |           | 15% Contingency=  | \$238,470.00   |
|  |             |       |           |           | Construction Total=   | \$1,828,270.00 |
| <b>Other Costs</b>   |             |       |           |           |   |                |
|  |             |       |           |           | Planning/Design/Environmental Permitting to Date (80% funded by grant)= | \$111,223.00   |
|  |             |       |           |           | Inspection/Construction Management=                                     | \$40,000.00    |
|  |             |       |           |           | HEC Loan/Grant Coordination=  | \$10,000.00    |
|  |             |       |           |           | Total Project Cost Estimate=  | \$1,989,493.00 |

# Big Bend Water System Improvements

# OPTION 2

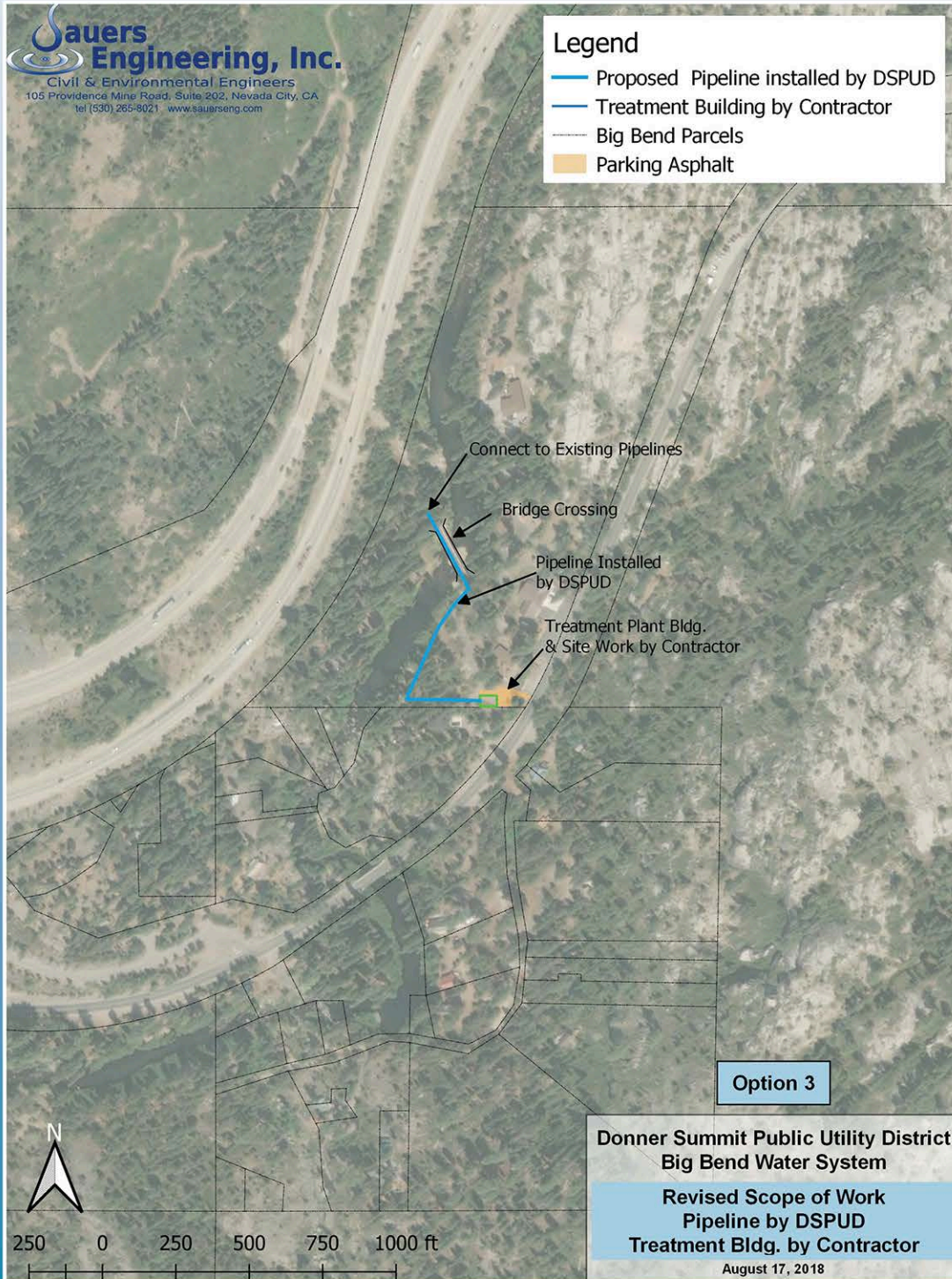


| Option 2<br>Disinfection Only, New Building & Minimal Pipeline<br>(No District Participation) |            |       |           |          |           |  |
|---|------------|-------|-----------|----------|-----------|--|
| DSPUD Big Bend Water System Improvements<br>Preliminary Construction Estimate                 |            |       |           |          |           |  |
| August 17, 2018   |            |       |           |          |           |  |
| Item  | Quantity   | Units | Materials | Labor    | Extension | Category   |
| Mobilization  | 1 l.s.     |       | \$40,000  |          | \$40,000  |  |
| Clearing & Grubbing   | 1 l.s.     |       | \$0       | \$5,000  | \$5,000   |  |
|   |            |       |           |          |           | → \$45,000.00  |
| <b>Treatment Building and Site Work</b>   |            |       |           |          |           |  |
| Site Grading  | 1 l.s.     |       | \$0       | \$8,000  | \$8,000   |  |
| Slab/Foundation   | 250 sq ft  |       | \$20      | \$20     | \$10,000  |  |
| Wood frame building   | 250 sq ft  |       | \$80      | \$80     | \$40,000  |  |
| Gravel Parking and Access   | 3000 sq ft |       | \$1       | \$2      | \$9,000   |  |
| Electrical Service  | 1 l.s.     |       | \$12,000  |          | \$12,000  |  |
| Building Electrical   | 1 l.s.     |       | \$15,000  | \$15,000 | \$30,000  |  |
|   |            |       |           |          |           | → \$109,000.00   |
| <b>Treatment System (No Filtration)</b>   |            |       |           |          |           |  |
| Chemical Feed System  | 1 ea.      |       | \$2,500   | \$1,000  | \$3,500   |  |
| Flow Meter/Misc. Plumbing   | 1 ea.      |       | \$2,500   | \$1,000  | \$3,500   |  |
| Contact Pipeline  | 200 l.f.   |       | \$30      | \$50     | \$16,000  |  |
| Chlorine Residual Analyzer  | 1 ea.      |       | \$6,000   | \$3,000  | \$9,000   |  |
| Data Logger/Controller  | 1 ea.      |       | \$4,000   | \$4,000  | \$8,000   |  |
| Autodialer  | 1 ea.      |       | \$4,000   | \$2,500  | \$6,500   |  |
| Misc. Instrumentation/Control Wiring  | 1 ea.      |       | \$10,000  | \$10,000 | \$20,000  |  |
|   |            |       |           |          |           | → \$66,500.00  |
| <b>Pipelines</b>  |            |       |           |          |           |  |
| 2" Raw Water Transmission   | 700 l.f.   |       | \$10      | \$50     | \$42,000  |  |
| 4" Treated Water Transmission   | 700 l.f.   |       | \$20      | \$50     | \$49,000  |  |
| Communication Conduit   | 700 l.f.   |       | \$5       | \$25     | \$21,000  |  |
| USFS Bridge Crossing  | 1 l.s.     |       | \$10,000  | \$15,000 | \$25,000  |  |
|   |            |       |           |          |           | → \$137,000.00   |
| <b>Miscellaneous</b>  |            |       |           |          |           |  |
| Rock Excavation   | 1 l.s.     |       |           | \$20,000 | \$20,000  |  |
|   |            |       |           |          |           | → \$20,000.00  |
|   |            |       |           |          |           | Construction Subtotal= \$377,500.00  |
|   |            |       |           |          |           | 15% Contingency= \$56,625.00   |
|   |            |       |           |          |           | Construction Total= \$434,125.00   |
|   |            |       |           |          |           | Planning/Design/Environmental Permitting to Date (80% funded by grant)= \$111,223.00 |
|   |            |       |           |          |           | Inspection/Construction Management= \$20,000.00                                      |
|   |            |       |           |          |           | HEC Loan/Grant Coordination= \$10,000.00   |
|   |            |       |           |          |           | Total Project Cost Estimate= \$575,348.00  |



# Big Bend Water System Improvements

## OPTION 3



| Option 3<br>Disinfection Only, New Building & Minimal Pipeline<br>(District Participation in Pipeline) |          |       |           |          |   |                |
|--|----------|-------|-----------|----------|---|----------------|
| DSPUD Big Bend Water System Improvements<br>Preliminary Construction Estimate                          |          |       |           |          |   |                |
| August 17, 2018  |          |       |           |          |   |                |
| Item   | Quantity | Units | Materials | Labor    | Extension   | Category       |
| Mobilization   | 1        | s.    | \$36,000  |          | \$36,000  |                |
| Clearing & Grubbing  | 1        | s.    | \$0       | \$5,000  | \$5,000   |                |
|  |          |       |           |          |   | → \$41,000.00  |
| <b>Treatment Building and Site Work</b>  |          |       |           |          |   |                |
| Site Grading   | 1        | s.    | \$0       | \$8,000  | \$8,000   |                |
| Slab/Foundation  | 250      | sq ft | \$20      | \$20     | \$10,000  |                |
| Wood frame building  | 250      | sq ft | \$80      | \$80     | \$40,000  |                |
| Gravel Parking and Access  | 3000     | sq ft | \$1       | \$2      | \$9,000   |                |
| Electrical Service   | 1        | s.    | \$12,000  |          | \$12,000  |                |
| Building Electrical  | 1        | s.    | \$15,000  | \$15,000 | \$30,000  |                |
|  |          |       |           |          |   | → \$109,000.00 |
| <b>Treatment System (No Filtration)</b>  |          |       |           |          |   |                |
| Chemical Feed System   | 1        | ea.   | \$2,500   | \$1,000  | \$3,500   |                |
| Flow Meter/Misc. Plumbing  | 1        | ea.   | \$2,500   | \$1,000  | \$3,500   |                |
| Contact Pipeline   | 200      | l.f.  | \$30      | \$50     | \$16,000  |                |
| Chlorine Residual Analyzer   | 1        | ea.   | \$6,000   | \$3,000  | \$9,000   |                |
| Data Logger/Controller   | 1        | ea.   | \$4,000   | \$4,000  | \$8,000   |                |
| Autodialer   | 1        | ea.   | \$4,000   | \$2,500  | \$6,500   |                |
| Misc. Instrumentation/Control Wiring   | 1        | ea.   | \$10,000  | \$10,000 | \$20,000  |                |
|  |          |       |           |          |   | → \$66,500.00  |
| <b>Pipelines</b>   |          |       |           |          |   |                |
| 2" Raw Water Transmission  | 700      | l.f.  | \$10      | \$0      | \$7,000   |                |
| 4" Treated Water Transmission  | 700      | l.f.  | \$20      | \$0      | \$14,000  |                |
| Communication Conduit  | 700      | l.f.  | \$5       | \$0      | \$3,500   |                |
| USFS Bridge Crossing   | 1        | s.    | \$10,000  | \$0      | \$10,000  |                |
|  |          |       |           |          |   | → \$34,500.00  |
| <b>Miscellaneous</b>   |          |       |           |          |   |                |
| Rock Excavation  | 1        | s.    |           | \$20,000 | \$20,000  |                |
|  |          |       |           |          |   | → \$20,000.00  |
|  |          |       |           |          | Construction Subtotal=  | \$271,000.00   |
|  |          |       |           |          | 15% Contingency=  | \$40,650.00    |
|  |          |       |           |          | Construction Total=   | \$311,650.00   |
|  |          |       |           |          | Planning/Design/Environmental Permitting to Date (80% funded by grant)= | \$111,223.00   |
|  |          |       |           |          | Inspection/Construction Management=                                     | \$20,000.00    |
|  |          |       |           |          | HEC Loan/Grant Coordination=  | \$10,000.00    |
|  |          |       |           |          | Total Project Cost Estimate=  | \$452,873.00   |