

**JEFFERSON COUNTY  
BOARD OF COUNTY COMMISSIONERS  
AGENDA REQUEST**

**TO: Board of County Commissioners**  
**FROM: Janet Silvus, Director of JeffCom 9-1-1**  
**DATE: December 6, 2010**  
**RE: JEFFCOM 9-1-1 Radio System Improvements Change Order Request No. 16**

**STATEMENT OF ISSUE:** Approval and execution of Change Order Request (COR) No. 16 in the amount of \$377,796.00 for Buchanan General Contracting Company (Contractor).

**ANALYSIS:** On January 25, 2010, the Board of County Commissioners approved and executed a contract with Buchanan General Contracting Company, P.O. Box 40069, Bellevue, WA 98015 for the construction of the JeffCom 9-1-1 Radio System Improvement Project. The original contract work at Green Mountain, South (Coyle) and Maynard Peak sites has been completed.

We have been keeping the contract open for construction of the Port Townsend Water Tank Site, an entire new radio tower site. We are currently in the conditional use process and anticipate building permits in late December or January. Change Order Request No. 16 is for construction of that site and is attached for your approval and execution. The Board of Commissioners has already approved the purchase of an equipment building and emergency generator for the City site and we will soon be bringing a request for purchase of the tower itself. These will all be installed by the Contractor under COR No. 16.

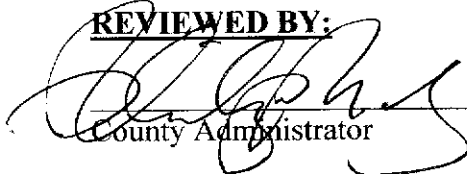
We did include the intention to construct the City site within the original Invitation to Bid and contract documents so the JeffCom Administrative Board and Board of County Commissioners would have the ability to approve the additional construction by change order without having to go back out to bid. And it states, "In the event JEFFCOM 9-1-1 and the contractor are unable to reach agreement on the additional cost associated with this additional site, JEFFCOM 9-1-1 reserves the right to seek bids from other companies for this work."

Change Order No. 16 was approved by the JeffCom Administrative Board on November 4, 2010.

**FISCAL IMPACT:** Funds will be provided by the JeffCom Enhancement Fund 121 which was funded by a 2007 bond issue. The total amount of the original contract with sales tax is \$364,728.08. Change Order Requests No. 1 through 15 increased the current approved cost to \$461,909.08. The addition of COR No. 16 in the amount of \$377,796.00 brings the new total to \$839,705.08. The total of CORs 1 through 16 is \$474,977.00 or 130.29% of the original contract. The total projected costs of this project have exceeded the original 2007 bond issue and will require an additional bond issue to cover the costs. A bond issue is being prepared separately by the County Treasurer for this project.

**RECOMMENDATION:** Move to approve and execute Change Order Request No. 16 to the JeffCom 911 Radio System Improvement Contract with Buchanan General Contracting Company.

**REVIEWED BY:**

  
\_\_\_\_\_  
County Administrator

11/29/10  
\_\_\_\_\_  
Date

JEFFCOM 9-1-1 Radio System Improvements  
CHANGE ORDER REQUEST No. 16

On January 25, 2010, Jefferson County executed a Contract with Buchanan General Contracting Company (Contractor) for the public works construction of JeffCom 911 Radio System Improvements in the amount of \$364,728.08 including local and state sales tax. Previously approved Change Order Requests (COR) No. 1 through 15 bring the approved project total to \$461,909.08 to date. Proposed COR No. 16 in the amount of \$377,796.00 would bring that total to \$839,705.08 (a total of 130.23% increase).

The intention to construct the City site was included within the original Invitation to Bid and contract documents so the JeffCom Administrative Board and Board of County Commissioners would have the ability to approve the additional construction by change order without having to go back out to bid. And it states, "In the event JEFFCOM 9-1-1 and the contractor are unable to reach agreement on the additional cost associated with this additional site, JEFFCOM 9-1-1 reserves the right to seek bids from other companies for this work."

The scope of work for the project is described in the Contract, Amendments to Standard Specifications and on the Plans that are included in the original Contract. That scope of work is hereby amended as follows:

Provide labor, equipment, materials and supervision to construct the Port Townsend Water Tank Site including clearing & grading; rock retaining walls; foundations for 180' tower, equipment shelter and emergency generator; erection of 180' tower; installation of equipment shelter and emergency generator; all related electrical and grounding; fencing; landscaping and related site work, all per the provided plans and specifications.

The Contract amount is hereby amended as follows:

On November 19, 2010, the Contractor provided a price quote of \$377,796.00 for COR No. 16 (copy attached) for the extra costs related to the construction of the Port Townsend Water Tank Site as described above. The total Contract amount is hereby amended to \$839,705.08.

The Contract is also hereby amended to add 65 working days for this work bring the total to 155 working days. There are no changes to any other provisions of the Contract than stated herein.

Executed by the Contractor November 18, 2010

BUCHANAN GENERAL CONT. Co.

Contractor

By: Tony Buchanan  
PROJECT MANAGER

SEAL:

*Handwritten notes and signatures:*  
11/30/10  
David W. Sullivan

COUNTY OF JEFFERSON  
BOARD OF COMMISSIONERS

\_\_\_\_\_  
David W. Sullivan, Chair

\_\_\_\_\_  
Phil Johnson, Member

\_\_\_\_\_  
John Austin, Member

ATTEST:

Erin Lundgren,  
Deputy Clerk of the Board



November 19, 2010

Little Little Construction  
2009 4th Street  
Port Townsend, WA 98368

Attention: Alex Little

Reference: JEFFCOM 911 Communications  
CE16 - Port Townsend Water Tank

We are pleased to submit a lump sum quotation of \$377,796.00 to provide all of the labor, material, equipment, subcontract work and supervision necessary to complete the Port Townsend Water Tank project per the drawings provided, CD REVIEW SET - 10/4/10.

Also, this additional work will require an extension of the current contract by 65 working days (three months).

**Clarifications and Assumptions:**

1. We have included pricing for tower foundation based on three (3) 5' diameter by 24' deep caissons;
2. We have included vinyl slats in the existing fence from the NE to SE corners of the new compound;
3. We have included a credit for th work not required in CE-13 - Access for Geteoch at Pt. Townsend Site;
4. We have included a Payment and Performance Bonds;
5. We have included Washington State Sales Taxes.

**Items specifically excluded from Proposal:**

1. Purchase and shipping of generator, shelter and lattice tower;
2. Cable and antenna install;
3. Power company fees and equipment;
4. Architectural or Structural design fees;
5. Building Permit and Plan-Check fees;
6. All other permits that may be required;
7. Removal of hazardous materials;
8. Special Inspections.

Please issue a change order with this additional work. Thank you.

Very Truly Yours,

A handwritten signature in black ink that reads "Terry Buchanan".

Terry Buchanan  
Project Manager

PO Box 40069 Bellevue, WA 98015  
phone 425 462-1326 fax 425 462-9468 www.buchanangc.com  
BUCHAGC 159CF

| BGC Code                           | Description                        | Quantity | Labor  |        | Material |       | Subcontractor |       | Total Cost | Notes         |  |
|------------------------------------|------------------------------------|----------|--------|--------|----------|-------|---------------|-------|------------|---------------|--|
|                                    |                                    |          | Unit   | Total  | Unit     | Total | Unit          | Total |            |               |  |
| <b>General Conditions</b>          |                                    |          |        |        |          |       |               |       |            |               |  |
| <b>SUPERINTENDENT</b>              |                                    |          |        |        |          |       |               |       |            |               |  |
|                                    | Superintendent                     | 306 hr   | 49.60  | 15,178 | 0.00     | 0     | 0.00          | 0     | 15,178     |               |  |
|                                    | Meetings & Reporting               | 20 hr    | 49.60  | 992    | 0.00     | 0     | 0.00          | 0     | 992        |               |  |
|                                    | Site Walks                         | 4 hr     | 0.00   | 0      | 0.00     | 0     | 0.00          | 0     | 0          |               |  |
| <b>PROJECT MANAGEMENT</b>          |                                    |          |        |        |          |       |               |       |            |               |  |
|                                    | Building permit and license        | 1 ls     | 0.00   | 0      | 0.00     | 0     | 125.00        | 125   | 125        |               |  |
|                                    | As built drawings                  | 1 ls     | 0.00   | 0      | 0.00     | 0     | 475.00        | 475   | 475        |               |  |
|                                    | Additional blueprints              | 1 ls     | 0.00   | 0      | 200.00   | 200   | 0.00          | 0     | 200        |               |  |
|                                    | Project manager travel             | 1 ls     | 0.00   | 0      | 0.00     | 0     | 0.00          | 0     | 0          |               |  |
|                                    | Estimating Prevailing wages        | 1 ls     | 0.00   | 0      | 225.00   | 225   | 0.00          | 0     | 225        |               |  |
|                                    | Project Managing                   | 1 ls     | 0.00   | 0      | 0.00     | 0     | 0.00          | 0     | 0          |               |  |
| <b>TELEPHONE</b>                   |                                    |          |        |        |          |       |               |       |            |               |  |
|                                    | Telephone                          | 2.25 mo  | 0.00   | 0      | 225.00   | 506   | 0.00          | 0     | 506        |               |  |
|                                    | FAX equipment                      | 2.25 mo  | 0.00   | 0      | 125.00   | 281   | 0.00          | 0     | 281        | misc          |  |
| <b>TEMPORARY CONSTRUCTION</b>      |                                    |          |        |        |          |       |               |       |            |               |  |
|                                    | Substance Superintendent           | 50 da    | 0.00   | 0      | 45.00    | 2,250 | 0.00          | 0     | 2,250      |               |  |
|                                    | Substance Craft                    | 162 da   | 0.00   | 0      | 35.00    | 5,670 | 0.00          | 0     | 5,670      |               |  |
|                                    | Substance Craft Duncan             | 25 da    | 0.00   | 0      | 45.00    | 1,125 | 0.00          | 0     | 1,125      |               |  |
|                                    | Toles, Fuel & Ferry                | 60 da    | 0.00   | 0      | 65.00    | 3,900 | 0.00          | 0     | 3,900      |               |  |
|                                    | Travel trucks                      | 8 ea     | 0.00   | 0      | 125.00   | 1,000 | 0.00          | 0     | 1,000      |               |  |
|                                    | Job office                         | 2.25 mo  | 0.00   | 0      | 325.00   | 731   | 0.00          | 0     | 731        |               |  |
|                                    | Sanitary convenience               | 2.25 mo  | 0.00   | 0      | 135.00   | 304   | 0.00          | 0     | 304        |               |  |
|                                    | Temp power hook up                 | 2.25 mo  | 0.00   | 0      | 425.00   | 956   | 0.00          | 0     | 956        |               |  |
|                                    | Temp power                         | 2.25 mo  | 0.00   | 0      | 275.00   | 619   | 0.00          | 0     | 619        |               |  |
|                                    | Temp weather protection            | 1 ls     | 0.00   | 0      | 0.00     | 0     | 0.00          | 0     | 0          |               |  |
|                                    | Winter Protection & Impacts        | 1 ls     | 0.00   | 0      | 800.00   | 800   | 0.00          | 0     | 800        |               |  |
|                                    | Temp water hook up                 | 2.25 mo  | 0.00   | 0      | 125.00   | 281   | 0.00          | 0     | 281        |               |  |
|                                    | Temp water                         | 2.25 mo  | 0.00   | 0      | 90.00    | 203   | 0.00          | 0     | 203        |               |  |
|                                    | Local yard (composite rate)        | 20 hr    | 40.03  | 801    | 35.00    | 700   | 0.00          | 0     | 1,501      |               |  |
|                                    | Disposal                           | 3 ea     | 120.09 | 360    | 70.00    | 210   | 115.00        | 345   | 915        |               |  |
|                                    | Mobilize & Demobilize              | 20 hr    | 40.03  | 801    | 35.00    | 700   | 0.00          | 0     | 1,501      |               |  |
|                                    | Final cleanup                      | 1 ls     | 0.00   | 0      | 325.00   | 325   | 0.00          | 0     | 325        |               |  |
|                                    | Temp fence                         | 1 ls     | 0.00   | 0      | 0.00     | 0     | 0.00          | 0     | 0          |               |  |
| <b>CONCRETE PLACING EQUIP.</b>     |                                    |          |        |        |          |       |               |       |            |               |  |
|                                    | Safety                             | 10 hr    | 49.60  | 496    | 37.50    | 375   | 0.00          | 0     | 871        |               |  |
|                                    | Construction equipment             | 2.25 mo  | 0.00   | 0      | 460.00   | 1,035 | 0.00          | 0     | 1,035      |               |  |
|                                    | Pick up truck                      | 2.25 mo  | 0.00   | 0      | 675.00   | 1,519 | 0.00          | 0     | 1,519      |               |  |
|                                    | Tool sharpening                    | 1 ls     | 0.00   | 0      | 80.00    | 80    | 0.00          | 0     | 80         |               |  |
|                                    | Job photos                         | 1 ls     | 0.00   | 0      | 200.00   | 200   | 0.00          | 0     | 200        |               |  |
|                                    | Small tools                        | 2.25 mo  | 0.00   | 0      | 460.00   | 1,035 | 0.00          | 0     | 1,035      |               |  |
| <b>FUEL, OIL &amp; GREASE</b>      |                                    |          |        |        |          |       |               |       |            |               |  |
|                                    | Fuel and maintenance               | 2.25 mo  | 0.00   | 0      | 1050.00  | 2,363 | 0.00          | 0     | 2,363      |               |  |
|                                    | Fuel adjustment                    | 2.25 mo  | 0.00   | 0      | 375.00   | 844   | 0.00          | 0     | 844        | none          |  |
| <b>BUILDING LAYOUT / SURVEY</b>    |                                    |          |        |        |          |       |               |       |            |               |  |
|                                    | Locates                            | 8 hr     | 0.00   | 0      | 0.00     | 0     | 125.00        | 1,000 | 1,000      |               |  |
|                                    | Foreman (carpenter)                | 48 hr    | 48.63  | 2,334  | 20.00    | 960   | 0.00          | 0     | 3,294      |               |  |
|                                    | Survey and Engineer Site           | 2.25 mo  | 0.00   | 0      | 375.00   | 844   | 0.00          | 0     | 844        |               |  |
| <b>STRUCTURAL CONSULTANT</b>       |                                    |          |        |        |          |       |               |       |            |               |  |
|                                    | Testing and inspection             | 1 ls     | 0.00   | 0      | 0.00     | 0     | 600.00        | 600   | 600        |               |  |
| <b>SUBTOTAL GENERAL CONDITIONS</b> |                                    |          |        |        | 20961    |       | 30240         |       | 2545       | 53746         |  |
| <b>EQUIPMENT</b>                   |                                    |          |        |        |          |       |               |       |            |               |  |
|                                    | Mob/demob equipment                | 1 ls     | 0.00   | 0      | 0.00     | 0     | 1070.00       | 1070  | 1,070      |               |  |
| <b>SITWORK EXTRA OVER</b>          |                                    |          |        |        |          |       |               |       |            |               |  |
|                                    | WinterAccess & Work Pad- 3100sf    | 1 s/c    | 0.00   | 0      | 0.00     | 0     | 0.00          | 0     | 0          | winter access |  |
|                                    | 580 Backhoe /excavator             | 24 hr    | 0.00   | 0      | 0.00     | 0     | 130.00        | 3120  | 3,120      |               |  |
|                                    | 10cy Dump                          | 0 hr     | 0.00   | 0      | 0.00     | 0     | 105.00        | 0     | 0          |               |  |
|                                    | filter fabric                      | 3419 sf  | 0.09   | 291    | 0.15     | 513   | 0.00          | 0     | 803        |               |  |
|                                    | import & place quarry spalls @ 12" | 154 cy   | 1.10   | 169    | 32.00    | 4928  | 0.00          | 0     | 5,097      |               |  |
|                                    | rough grade                        | 344 sy   | 0.49   | 168    | 0.00     | 0     | 0.00          | 0     | 168        |               |  |

12/0  
12/0

| BGC Code | Description                            | Quantity | Labor |       | Material |       | Subcontractor |       | Total Cost | Notes        |
|----------|--|----------|-------|-------|----------|-------|---------------|-------|------------|--------------|
|          |  |          | Unit  | Total | Unit     | Total | Unit          | Total |            |              |
|          | plate compactor - clean-up             | 1 da     | 30.00 | 30    | 115.00   | 115   | 0.00          | 0     | 145        |              |
|          | miscellaneous eroision control         | 1 ls     | 0.00  | 0     | 0.00     | 0     | 1200.00       | 1200  | 1,200      |              |
|          | <b>SITWORK</b>                         | 1 s/c    | 0.00  | 0     | 0.00     | 0     | 0.00          | 0     | 0          |              |
|          | <b>Access Road - irregular 4150sf</b>  | 1 s/c    | 0.00  | 0     | 0.00     | 0     | 0.00          | 0     | 0          |              |
|          | 580 Backhoe                            | 46 hr    | 0.00  | 0     | 0.00     | 0     | 130.00        | 5980  | 5,980      |              |
|          | 10cy Dump                              | 12 hr    | 0.00  | 0     | 0.00     | 0     | 105.00        | 1260  | 1,260      |              |
| 16/0     | clear & grub                           | 462 sy   | 0.52  | 240   | 0.00     | 0     | 0.00          | 0     | 240        |              |
| 5/12     | load, haul & dispose                   | 100 cy   | 0.75  | 75    | 2.00     | 200   | 0.00          | 0     | 275        |              |
| 6/0      | cut to fill                            | 60 cy    | 1.80  | 108   | 0.00     | 0     | 0.00          | 0     | 108        |              |
| 6/0      | rough grade & compact                  | 462 sy   | 0.45  | 208   | 0.00     | 0     | 0.00          | 0     | 208        |              |
|          | compactor                              | 2 da     | 15.00 | 30    | 115.00   | 230   | 0.00          | 0     | 260        |              |
|          | filter fabric                          | 4565 sf  | 0.09  | 388   | 0.13     | 593   | 0.00          | 0     | 981        |              |
| 13/0     | import & place gravel @ 6"             | 100 cy   | 1.95  | 195   | 29.50    | 2950  | 0.00          | 0     | 3,145      |              |
|          | finish grade                           | 462 sy   | 0.45  | 208   | 0.00     | 0     | 0.00          | 0     | 208        |              |
|          | plate compactor - clean-up             | 1 da     | 30.00 | 30    | 115.00   | 115   | 0.00          | 0     | 145        |              |
|          | <b>Compound - 58'x58'</b>              | 1 s/c    | 0.00  | 0     | 0.00     | 0     | 0.00          | 0     | 0          |              |
|          | 580 Backhoe                            | 106 hr   | 0.00  | 0     | 0.00     | 0     | 130.00        | 13780 | 13,780     |              |
|          | 10cy Dump                              | 70 hr    | 0.00  | 0     | 0.00     | 0     | 105.00        | 7350  | 7,350      |              |
|          | install silt fence                     | 240 lf   | 3.00  | 720   | 2.00     | 480   | 0.00          | 0     | 1,200      |              |
| 4/0      | gravel @ silt fence                    | 18 cy    | 3.45  | 62    | 36.50    | 657   | 0.00          | 0     | 719        |              |
| 12/0     | tree removal - 4" or bigger            | 34 ea    | 7.06  | 240   | 0.00     | 0     | 0.00          | 0     | 240        |              |
| 6/12     | load & dispose trees & stumps          | 60 cy    | 1.50  | 90    | 14.00    | 840   | 0.00          | 0     | 930        |              |
| 34/0     | excavate dirt                          | 390 cy   | 1.31  | 511   | 0.00     | 0     | 0.00          | 0     | 511        |              |
| 20/48    | load, haul & dirt                      | 390 cy   | 0.77  | 300   | 2.00     | 780   | 0.00          | 0     | 1,080      |              |
| 12/0     | clear & grub                           | 374 sy   | 0.48  | 180   | 0.00     | 0     | 0.00          | 0     | 180        |              |
| 4/10     | load & dispose                         | 81 cy    | 0.74  | 60    | 0.00     | 0     | 0.00          | 0     | 60         |              |
| 4/0      | rough grade & compact                  | 374 sy   | 0.45  | 168   | 0.00     | 0     | 0.00          | 0     | 168        |              |
|          | compactor                              | 2 da     | 15.00 | 30    | 115.00   | 230   | 0.00          | 0     | 260        |              |
|          | filter fabric                          | 3703 sf  | 0.09  | 333   | 0.13     | 481   | 0.00          | 0     | 815        |              |
| 11/0     | buy & place rock - 6"                  | 81 cy    | 2.04  | 165   | 29.50    | 2390  | 0.00          | 0     | 2,555      |              |
|          | finish grade                           | 374 sy   | 0.45  | 168   | 0.00     | 0     | 0.00          | 0     | 168        |              |
|          | compactor                              | 2 da     | 15.00 | 30    | 115.00   | 230   | 0.00          | 0     | 260        |              |
|          | <b>Keystone Retaining Walls</b>        | 1 s/c    | 0.00  | 0     | 0.00     | 0     | 0.00          | 0     | 0          |              |
|          | <b>4.69'x 168'</b>                     |          |       |       |          |       |               |       |            |              |
|          | 580 Backhoe                            | 20 hr    | 0.00  | 0     | 0.00     | 0     | 130.00        | 2600  | 2,600      |              |
|          | 10cy Dump                              | 3 hr     | 0.00  | 0     | 0.00     | 0     | 105.00        | 315   | 315        |              |
| 6/0      | excavate toe of wall - 168'x2'x2'      | 25 cy    | 3.65  | 91    | 0.00     | 0     | 0.00          | 0     | 91         |              |
| 1/3      | load & dispose                         | 13 cy    | 1.13  | 15    | 6.00     | 78    | 0.00          | 0     | 93         |              |
| 4/0      | import & place gravel foundation       | 13 cy    | 9.25  | 120   | 29.50    | 384   | 0.00          | 0     | 504        |              |
|          | deliver keystone                       | 1 ls     | 0.00  | 0     | 500.00   | 500   | 0.00          | 0     | 500        | jacob @ mm   |
|          | buy & place keystone wall 168x4.69'    | 788 sf   | 1.65  | 1300  | 5.09     | 4011  | 0.00          | 0     | 5,311      | 425-452-2311 |
|          | 4" perforated footing drain w/sox      | 180 lf   | 0.75  | 135   | 1.50     | 270   | 0.00          | 0     | 405        |              |
|          | filter fabric behind wall              | 867 sf   | 0.12  | 104   | 0.12     | 104   | 0.00          | 0     | 208        |              |
| 6/0      | buy & place drain rock 168'x4.69'x1.5' | 49 cy    | 3.67  | 180   | 36.50    | 1789  | 0.00          | 0     | 1,968      |              |
| 3/0      | finish grade                           | 112 sy   | 0.43  | 48    | 0.00     | 0     | 0.00          | 0     | 48         |              |
|          | <b>EXCAV. &amp; B/F FOR UTILITIES</b>  | 1 s/c    | 0.00  | 0     | 0.00     | 0     | 0.00          | 0     | 0          |              |
|          | <b>Grounding - 332'</b>                | 1 s/c    | 0.00  | 0     | 0.00     | 0     | 0.00          | 0     | 0          |              |
|          | 580 Backhoe                            | 17 hr    | 0.00  | 0     | 0.00     | 0     | 130.00        | 2210  | 2,210      |              |
| 8.5      | grounding machine excavavation         | 55 cy    | 2.32  | 128   | 0.00     | 0     | 0.00          | 0     | 128        |              |
| 8.5      | backfill & compact native material     | 55 cy    | 2.32  | 128   | 0.00     | 0     | 0.00          | 0     | 128        |              |
|          | compactor                              | 1 da     | 15.00 | 15    | 115.00   | 115   | 0.00          | 0     | 130        |              |
|          | <b>Power Telco on/off site - 200'</b>  |          |       |       |          |       |               |       |            |              |
|          | 580 Backhoe                            | 15 hr    | 0.00  | 0     | 0.00     | 0     | 130.00        | 1950  | 1,950      |              |
|          | 10cy Dump                              | 3 hr     | 0.00  | 0     | 0.00     | 0     | 105.00        | 315   | 315        |              |
| 5        | grounding machine excavavation         | 35 cy    | 2.20  | 77    | 0.00     | 0     | 0.00          | 0     | 77         |              |
| 2/3      | load & dispose                         | 15 cy    | 1.13  | 17    | 6.00     | 90    | 0.00          | 0     | 107        |              |
| 5        | backfill & compact native material     | 35 cy    | 2.20  | 77    | 0.00     | 0     | 0.00          | 0     | 77         |              |
| 2/0      | import & place bedding sand            | 16 cy    | 3.80  | 61    | 17.50    | 280   | 0.00          | 0     | 341        |              |

| BGC Code   | Description                         | Quantity | Labor |        | Material |          | Subcontractor |        | Total Cost | Notes      |
|--|-------------------------------------|----------|-------|--------|----------|----------|---------------|--------|------------|------------|
|  |                                     |          | Unit  | Total  | Unit     | Total    | Unit          | Total  |            |            |
| 1/0  | compactor                           | 1.5 da   | 15.00 | 23     | 115.00   | 173      | 0.00          | 0      | 195        |            |
|  | 2" PVC power/telco conduit          | 200 lf   | 0.00  | 0      | 0.00     | 0        | 0.00          | 0      | 0          | electrical |
|  | 2" PVC sweeps                       | 4 ea     | 0.00  | 0      | 0.00     | 0        | 0.00          | 0      | 0          | electrical |
|  | 17x30 pull box                      | 2 ea     | 0.00  | 0      | 0.00     | 0        | 0.00          | 0      | 0          | electrical |
|  | pickup materials                    | 4 hr     | 0.00  | 0      | 0.00     | 0        | 0.00          | 0      | 0          | electrical |
|  | <b>LANDSCAPING</b>                  | 1 s/c    | 0.00  | 0      | 0.00     | 0        | 5418.00       | 5418   | 5,418      | cathcart   |
|  | small digger                        | 20 hr    | 0.00  | 0      | 0.00     | 0        | 0.00          | 0      | 0          |            |
|  | labor                               | 48 hr    | 0.00  | 0      | 0.00     | 0        | 0.00          | 0      | 0          |            |
|  | doug firs - 10' min height          | 16 ea    | 0.00  | 0      | 0.00     | 0        | 0.00          | 0      | 0          |            |
|  | evergreen huckleberry - 30" min hgt | 18 ea    | 0.00  | 0      | 0.00     | 0        | 0.00          | 0      | 0          |            |
| soil & improvement                                   | 12 cy                               | 0.00     | 0     | 0.00   | 0        | 0.00     | 0             | 0      |            |            |
| <b>TOWER FOUNDATION</b>                              | 1 s/c                               | 0.00     | 0     | 0.00   | 0        | 0.00     | 0             | 0      |            |            |
| <b>CAISSON 60" x 24' in clayey sand w/no water</b>   |                                     |          |       |        |          |          |               |        |            |            |
| 580 Backhoe  | 12 hr                               | 0.00     | 0     | 0.00   | 0        | 130.00   | 1560          | 1,560  |            |            |
| 10cy Dump  | 12 hr                               | 0.00     | 0     | 0.00   | 0        | 105.00   | 1260          | 1,260  |            |            |
| Layout & mobilize                                    | 1 ls                                | 120.00   | 120   | 60.00  | 60       | 0.00     | 0             | 180    |            |            |
| Master Template by Buchanan                          | 1 ls                                | 120.00   | 120   | 650.00 | 650      | 0.00     | 0             | 770    |            |            |
| Weld bolts & assembly                                | 3 ea                                | 45.00    | 135   | 185.00 | 555      | 0.00     | 0             | 690    |            |            |
| Set anchor bolts                                     | 3 ea                                | 60.00    | 180   | 25.00  | 75       | 0.00     | 0             | 255    |            |            |
| Inspection by contractor                             | 12 hrs                              | 0.00     | 0     | 0.00   | 0        | 100.00   | 1,200         | 1,200  |            |            |
| load, haul & dispose                                 | 68 cy                               | 0.00     | 0     | 4.00   | 272      | 0.00     | 0             | 272    |            |            |
| Rebar - furnish                                      | 2.60 t                              | 0.00     | 0     | 0.00   | 0        | 1156.92  | 3,008         | 3,008  | ct sales   |            |
| Rebar - place  | 2.60 t                              | 0.00     | 0     | 0.00   | 0        | 579.00   | 1,505         | 1,505  | cruncher   |            |
| Concrete @ caisson 6000 psi                          | 68 cy                               | 0.00     | 0     | 110.00 | 7,480    | 0.00     | 0             | 7,480  |            |            |
| Driller - 60"x24' caissons 3 each                    | 1 ls                                | 0.00     | 0     | 0.00   | 0        | 21350.00 | 21,350        | 21,350 | versatile  |            |
| vac truck & mud disposal                             | 1 ls                                | 0.00     | 0     | 0.00   | 0        | 1800.00  | 1,800         | 1,800  |            |            |
| Pumping mob  | 1 ls                                | 0.00     | 0     | 75.00  | 75       | 135.00   | 135           | 210    |            |            |
| Pumping hourly                                       | 6 hr                                | 15.00    | 90    | 0.00   | 0        | 135.00   | 810           | 900    |            |            |
| Pumping cy   | 68 cy                               | 0.00     | 0     | 0.75   | 51       | 3.75     | 255           | 306    |            |            |
| Grout & drain  | 3 ea                                | 30.00    | 90    | 60.00  | 180      | 0.00     | 0             | 270    |            |            |
| Form 5'x5' pier at one leg x/o                       | 2 ea                                | 90.00    | 180   | 275.00 | 550      | 0.00     | 0             | 730    |            |            |
| Form 5'x5' caisson cap                               | 3 ea                                | 0.00     | 0     | 65.00  | 195      | 0.00     | 0             | 195    |            |            |
| Drill day labor                                      | 48 hrs                              | 15.00    | 720   | 0.00   | 0        | 0.00     | 0             | 720    |            |            |
| Pick up bolts & template                             | 1 ls                                | 60.00    | 60    | 75.00  | 75       | 0.00     | 0             | 135    |            |            |
| <b>CHAIN LINK FENCE - 6'CLF</b>                      | 1 s/c                               | 0.00     | 0     | 0.00   | 0        | 10953.00 | 10953         | 10,953 | viking     |            |
| 8' chain link fence w/ vinyl slats                   | 297 lf                              | 0.00     | 0     | 0.00   | 0        | 0.00     | 0             | 0      |            |            |
| vinyl slats on existing fence                        | 1,481 sf                            | 0.00     | 0     | 0.00   | 0        | 0.00     | 0             | 0      |            |            |
| 18' dbl gate   | 1 ea                                | 0.00     | 0     | 0.00   | 0        | 0.00     | 0             | 0      | existing   |            |
| <b>6" PIPE BOLLARDS - none</b>                       | 1 s/c                               | 0.00     | 0     | 0.00   | 0        | 0.00     | 0             | 0      |            |            |
| 6' pipe bollard (3' embed)                           | 2 ea                                | 30.00    | 60    | 180.00 | 360      | 0.00     | 0             | 420    |            |            |
| excavate   | 1 cy                                | 40.00    | 40    | 90.00  | 90       | 0.00     | 0             | 130    |            |            |
| concrete   | 1 cy                                | 60.00    | 60    | 90.00  | 90       | 0.00     | 0             | 150    |            |            |
| <b>SHELTER SLAB &amp; STOOP (12'x22')+ 2x(4'x4')</b> |                                     |          |       |        |          |          |               |        |            |            |
| 580 Backhoe  | 4 hr                                | 0.00     | 0     | 0.00   | 0        | 130.00   | 520           | 520    |            |            |
| 10cy Dump  | 2 hr                                | 0.00     | 0     | 0.00   | 0        | 105.00   | 210           | 210    |            |            |
| excavate thickened edge                              | 11 cy                               | 5.45     | 60    | 0.00   | 0        | 0.00     | 0             | 60     |            |            |
| load, haul & dispose of debris                       | 9 cy                                | 3.75     | 34    | 2.00   | 18       | 0.00     | 0             | 52     |            |            |
| fine grade & compact                                 | 296 sf                              | 0.20     | 59    | 0.00   | 0        | 0.00     | 0             | 59     |            |            |
| compactor  | 0.5 da                              | 30.00    | 15    | 115.00 | 58       | 0.00     | 0             | 73     |            |            |
| 24" edge forms                                       | 68 lf                               | 3.50     | 238   | 2.75   | 187      | 0.00     | 0             | 425    |            |            |
| 2x8 edge forms @ stoop                               | 24 lf                               | 2.50     | 60    | 1.75   | 42       | 0.00     | 0             | 102    |            |            |
| extra forming @ stoop                                | 2 ea                                | 60.00    | 120   | 90.00  | 180      | 0.00     | 0             | 300    |            |            |
| buy & place rebar                                    | 950 #                               | 0.25     | 238   | 0.03   | 29       | 0.58     | 551           | 817    |            |            |
| 3/4" champher strip                                  | 92 lf                               | 0.45     | 41    | 0.35   | 32       | 0.00     | 0             | 74     |            |            |
| screeds  | 296 sf                              | 0.12     | 36    | 0.10   | 30       | 0.00     | 0             | 65     |            |            |
| buy & place concrete 9"                              | 15 cy                               | 15.00    | 225   | 96.00  | 1,440    | 0.00     | 0             | 1,665  |            |            |
| finish concrete                                      | 296 sf                              | 0.45     | 133   | 0.00   | 0        | 0.00     | 0             | 133    |            |            |
| cure & protect                                       | 296 sf                              | 0.10     | 30    | 0.08   | 24       | 0.00     | 0             | 53     |            |            |

| BGC Code | Description                           | Quantity | Labor |       | Material |       | Subcontractor |       | Total Cost | Notes        |
|----------|---------------------------------------|----------|-------|-------|----------|-------|---------------|-------|------------|--------------|
|          |                                       |          | Unit  | Total | Unit     | Total | Unit          | Total |            |              |
| 1/0      | backfill                              | 1 hr     | 45.00 | 45    | 25.00    | 25    | 0.00          | 0     | 70         |              |
|          | <b>GENERATOR SLAB - 6' x 10'</b>      |          |       |       |          |       |               |       |            |              |
|          | 580 Backhoe                           | 1 hr     | 0.00  | 0     | 0.00     | 0     | 130.00        | 130   | 130        |              |
|          | 10cy Dump                             | 1 hr     | 0.00  | 0     | 0.00     | 0     | 105.00        | 105   | 105        |              |
| 1/0      | excav thickened edge                  | 4 cy     | 5.00  | 20    | 0.00     | 0     | 0.00          | 0     | 20         |              |
| 0/1      | load, haul & dispose of debris        | 3 cy     | 3.75  | 11    | 2.00     | 6     | 0.00          | 0     | 17         | w/above      |
|          | fine grade & compact                  | 60 sf    | 0.25  | 15    | 0.00     | 0     | 0.00          | 0     | 15         |              |
|          | compactor                             | 0.5 da   | 30.00 | 15    | 115.00   | 58    | 0.00          | 0     | 73         |              |
|          | 24" edge forms 32'                    | 62 sf    | 3.50  | 217   | 2.25     | 140   | 0.00          | 0     | 357        |              |
|          | buy & place rebar 600'x#4             | 330 #    | 0.35  | 116   | 0.03     | 10    | 0.58          | 191   | 317        |              |
|          | 3/4" champher strip                   | 32 lf    | 0.45  | 14    | 0.35     | 11    | 0.00          | 0     | 26         |              |
|          | screeds                               | 60 sf    | 0.12  | 7     | 0.12     | 7     | 0.00          | 0     | 14         |              |
|          | buy & place concrete 6"               | 5 cy     | 15.00 | 75    | 96.00    | 480   | 0.00          | 0     | 555        |              |
|          | finish concrete                       | 60 sf    | 0.65  | 39    | 0.00     | 0     | 0.00          | 0     | 39         |              |
|          | cure & protect                        | 60 sf    | 0.10  | 6     | 0.08     | 5     | 0.00          | 0     | 11         |              |
|          | condenser pad 4'x2'x6"                | 8 sf     | 5.63  | 45    | 5.00     | 40    | 0.00          | 0     | 85         |              |
|          | <b>INSTALL 25 KW GENERATOR</b>        |          |       |       |          |       |               |       |            |              |
|          | mobe forklift                         | 1 ls     | 0.00  | 0     | 0.00     | 0     | 0.00          | 0     | 0          | 1,000#       |
|          | forklift rental                       | 1 ls     | 0.00  | 0     | 380.45   | 380   | 0.00          | 0     | 380        | 350+wsst     |
|          | load & transport generator            | 1 dy     | 30.00 | 30    | 489.15   | 489   | 0.00          | 0     | 519        | 450+wsst     |
|          | set generator                         | 4 hr     | 30.00 | 120   | 0.00     | 0     | 35.00         | 140   | 260        |              |
|          | attach generator to pad               | 2 hr     | 30.00 | 60    | 0.00     | 0     | 35.00         | 70    | 130        |              |
|          | initial fuel fill                     | 4 ea     | 3.75  | 15    | 3.50     | 14    | 0.00          | 0     | 29         |              |
|          |                                       | 200 ga   | 0.00  | 0     | 3.75     | 750   | 0.00          | 0     | 750        |              |
|          | <b>INSTALL OFCI SHELTER</b>           |          |       |       |          |       |               |       |            |              |
|          | mobe/demobe 35 ton crane              | 1 ls     | 0.00  | 0     | 0.00     | 0     | 0.00          | 0     | 0          |              |
|          | rig, hoist & set shelter @ site       | 3 hr     | 0.00  | 0     | 201.10   | 603   | 0.00          | 0     | 603        |              |
|          | transport shelter to site             | 3 hr     | 40.00 | 120   | 201.10   | 603   | 0.00          | 0     | 723        |              |
|          | mobe/demobe 70 ton crane              | 5 hr     | 0.00  | 0     | 145.00   | 725   | 0.00          | 0     | 725        |              |
|          | rig, hoist & set shelter @ site       | 2 hr     | 0.00  | 0     | 330.62   | 661   | 0.00          | 0     | 661        | using mick's |
|          | attach shelter to pad                 | 2 hr     | 60.00 | 120   | 330.62   | 661   | 0.00          | 0     | 781        |              |
|          | layout & cut-in wave guide entry port | 4 ea     | 3.75  | 15    | 3.50     | 14    | 0.00          | 0     | 29         |              |
|          | F&I 3x4 WGEPs                         | 1 ea     | 30.00 | 30    | 20.00    | 20    | 0.00          | 0     | 50         |              |
|          |                                       | 1 ea     | 15.00 | 15    | 225.00   | 225   | 0.00          | 0     | 240        |              |
|          | <b>ICE BRIDGE 20'</b>                 |          |       |       |          |       |               |       |            |              |
|          | labor all ice bridge                  | 1 ls     | 0.00  | 0     | 0.00     | 0     | 0.00          | 0     | 0          |              |
|          | auger bridge posts 54"x18"            | 40 hr    | 15.00 | 600   | 0.00     | 0     | 0.00          | 0     | 600        |              |
|          | buy & set 3 1/2" post & cap           | 5 ea     | 0.00  | 0     | 80.00    | 400   | 0.00          | 0     | 400        |              |
|          | buy, tie & set rebar @ 20# ea         | 5 ea     | 0.00  | 0     | 75.00    | 375   | 0.00          | 0     | 375        |              |
|          | concrete @ posts                      | 100 #    | 0.00  | 0     | 0.03     | 3     | 1.00          | 100   | 103        |              |
|          | arm over brackets                     | 4 cy     | 0.00  | 0     | 96.00    | 384   | 34.00         | 136   | 520        | short load   |
|          | 24" grip strut                        | 5 ea     | 0.00  | 0     | 85.00    | 425   | 0.00          | 0     | 425        |              |
|          | 1/2" all thread                       | 36 lf    | 0.00  | 0     | 28.00    | 1008  | 0.00          | 0     | 1,008      |              |
|          | unistrut                              | 36 lf    | 0.00  | 0     | 2.00     | 72    | 0.00          | 0     | 72         |              |
|          | nuts & washers                        | 36 lf    | 0.00  | 0     | 4.00     | 144   | 0.00          | 0     | 144        |              |
|          | MU, taxes & freight                   | 250 ea   | 0.00  | 0     | 0.75     | 188   | 0.00          | 0     | 188        |              |
|          | delivery                              | 15 %     | 0.00  | 0     | 29.99    | 450   | 0.00          | 0     | 450        | w/discount   |
|          |                                       | 8 hr     | 15.00 | 120   | 35.00    | 280   | 0.00          | 0     | 400        |              |
|          | <b>FURNISHINGS</b>                    |          |       |       |          |       |               |       |            |              |
|          | combination locks                     | 1 s/c    | 0.00  | 0     | 0.00     | 0     | 0.00          | 0     | 0          |              |
|          | signage                               | 2 ea     | 3.75  | 8     | 22.00    | 44    | 0.00          | 0     | 52         |              |
|          |                                       | 5 ea     | 6.00  | 30    | 70.00    | 350   | 0.00          | 0     | 380        |              |
|          | <b>FURNISH 180' TOWER ( nic)</b>      |          |       |       |          |       |               |       |            |              |
|          | Purchase 180' tower                   | 1 s/c    | 0.00  | 0     | 0.00     | 0     | 0.00          | 0     | 0          | Valmont      |
|          | WA State engineers stamp              | 1 ls     | 0.00  | 0     | 0.00     | 0     | 0.00          | 0     | 0          | 72748.00     |
|          | foundation design                     | 1 ls     | 0.00  | 0     | 0.00     | 0     | 0.00          | 0     | 0          | 1250.00      |
|          | delivery from Salem, OR               | 1 ls     | 0.00  | 0     | 0.00     | 0     | 0.00          | 0     | 0          | 600.00       |
|          | ship anchor bolts separately          | 1 ls     | 0.00  | 0     | 0.00     | 0     | 0.00          | 0     | 0          | 1200.00      |
|          | <b>INSTALL 180' SST</b>               |          |       |       |          |       |               |       |            |              |
|          |                                       | 1 s/c    | 0.00  | 0     | 0.00     | 0     | 32030.00      | 32030 | 32,030     | Mick         |

| BGC Code | Description                          | Quantity | Labor   |        | Material |        | Subcontractor |         | Total Cost | Notes    |
|----------|--------------------------------------|----------|---------|--------|----------|--------|---------------|---------|------------|----------|
|          |                                      |          | Unit    | Total  | Unit     | Total  | Unit          | Total   |            |          |
|          | mobilize forklift for assembly       | 1 ls     | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          |          |
|          | forklift rental to assemble tower    | 2 wk     | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          |          |
|          | assemble tower sections              |          |         |        |          |        |               |         |            |          |
|          | 4 men x 10 hrs x 85/hr               | 9 ea     | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          |          |
|          | mobe 70 ton crane for tower set      | 2 hr     | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          |          |
|          | 70 ton crane on site for tower set   | 10 hr    | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          |          |
|          | stack tower                          | 40 hr    | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          |          |
|          | <b>CABLE &amp; ANTENNA INSTALL</b>   | 1 s/c    | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          |          |
|          | none                                 | 1 ls     | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          |          |
|          | <b>UPGRADE PSE TRANSFORMER</b>       | 1 s/c    | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          |          |
|          | upgrade PSE transformer              | 1 ls     | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          | nic      |
|          | <b>MISC. ELECTRICAL</b>              | 1 s/c    | 0.00    | 0      | 0.00     | 0      | 21576.00      | 21576   | 21,576     | seahurst |
|          | mobilize electrical                  | 8 hr     | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          |          |
|          | F&I H Frame                          | 1 ea     | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          |          |
|          | temp power to temp shelter           | 4 hr     | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          |          |
|          | furnish & install meter socket       | 4 hr     | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          |          |
|          | UG conductors all                    | 220 lf   | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          |          |
|          | furnish & install disconnect         | 1 ea     | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          |          |
|          | Install OFCI ATS                     | 1 ea     | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          |          |
|          | Install OFCI generator               | 1 ea     | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          |          |
|          | tie into shelter panel               | 1 ea     | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          |          |
|          | demo existing misc electrical        | 8 hr     | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          |          |
|          | <b>Grounding</b>                     | 1 s/c    | 0.00    | 0      | 0.00     | 0      | 8451.00       | 8451    | 8,451      | seahurst |
| 0.00     | grounding labor complete             | 48 hr    | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          | 110.00   |
| 18.00    | ground rods                          | 23 ea    | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          | 18.00    |
| 1.00     | ground wire                          | 400 lf   | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          | 1.00     |
| 7.50     | cadwelds                             | 36 ea    | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          | 7.50     |
| 15.00    | mechanical connections               | 18 ea    | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          | 15.00    |
| 350.00   | test wells                           | 2 ea     | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          | 350.00   |
| 0.00     | misc grounding @ interior            | hr       | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          | 0.00     |
| 300.00   | install OFCI RF entry port grounding | 1 ls     | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          | 300.00   |
| 0.00     | electrician MU on materials          | 30 %     | 0.00    | 0      | 0.00     | 0      | 0.00          | 0       | 0          | 0.00     |
|          |                                      |          |         | 33,727 |          | 76,611 |               | 157,160 | 267,498    |          |
|          | Labor Adjustment                     |          | 194.62% | 24,844 |          | 0      |               | 0       | 24,844     |          |
|          | Labor Taxes                          |          | 32.71%  | 19,159 |          | 0      |               | 0       | 19,159     |          |
|          | Total Labor, Material, & Sub         |          |         | 77,730 |          | 76,611 |               | 157,160 | 311,501    |          |
|          | Overhead & Fee                       |          |         |        |          |        | 13.50%        |         | 42,053     |          |
|          | Sub Total                            |          |         |        |          |        |               |         | 353,554    |          |
|          | B&O, & Insurance                     |          |         |        |          |        | 2.59%         |         | 9,157      |          |
|          | Sub Total                            |          |         |        |          |        |               |         | 362,711    |          |
|          | Credit for Work Not Required in CE13 |          |         |        |          |        |               |         | -14,190    |          |
|          | Change Estimate                      |          |         |        |          |        |               |         | 348,521    |          |
|          | WSST                                 |          |         |        |          |        | 8.40%         |         | 29,276     |          |
|          | Total With WSST                      |          |         |        |          |        |               |         | \$377,796  |          |