


**CITY OF MARYSVILLE AGENDA BILL**

**EXECUTIVE SUMMARY FOR ACTION**

**CITY COUNCIL MEETING DATE: November 13, 2017**

|                                                                                                                                 |                                                                                                                  |
|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>AGENDA ITEM:</b><br>First Street Bypass Project<br>Supplement No. 1 to Professional Services Agreement with BergerABAM, Inc. |                                                                                                                  |
| <b>PREPARED BY:</b><br>Steve Miller, Project Manager                                                                            | <b>DIRECTOR APPROVAL:</b><br> |
| <b>DEPARTMENT:</b><br>Public Works / Engineering                                                                                |                                                                                                                  |
| <b>ATTACHMENTS:</b><br>PSA Supplement No. 1                                                                                     |                                                                                                                  |
| <b>BUDGET CODE:</b><br>30500030.563000, R0901                                                                                   | <b>AMOUNT:</b><br>\$62,766.00                                                                                    |
| <b>SUMMARY:</b>                                                                                                                 |                                                                                                                  |

On February 13, 2017, Council authorized the Mayor to execute a contract with BergerABAM, Inc. to provide professional engineering design services for the First Street Bypass project. The scope under this contract included development of plans, specifications and cost estimate for roadway replacement and improvement between State Avenue and Alder Avenue along the existing First Street alignment, and for a new roadway link extending First Street from Alder to 47<sup>th</sup> Avenue NE.

Additional engineering services are requested for the design of a new water line as part of the roadway improvements. The existing line between State and Alder is over 50 years old and near the end of its service life. In addition, the roadway improvements include bioinfiltration facilities to handle and infiltrate stormwater, and excavation and installation of these is expected to disturb and destabilize the existing water line. Adding the design scope will allow replacement of the line during construction of the roadway at an economical cost, while roadway work is being done, and while the Contractor is onsite and can efficiently perform the work at reduced impact to the traveling public.

Additional engineering services are also requested to develop an irrigation and planting plan necessary to support low impact development (LID) biofiltration facilities between State and Alder, and to support the planting strip incorporated as part of the shared use path, between Alder and 47<sup>th</sup> Avenue. Use of both LID facilities and the shared use path were not included in the original scope, but were identified as part of the effort to develop the preferred alignment during the 30% design phase. Development of a planting plan and use of drip irrigation will provide a basis to develop a suitable and interesting mix of ornamental plants that will be attractive and enhance user experience and will minimize use of City staff time needed for maintenance.

**RECOMMENDED ACTION:**

Staff recommends that Council authorize the Mayor to sign and execute the attached Supplement No. 1 to the City's agreement with BergerABAM, Inc. to provide additional professional services required for the First Street Bypass project.

**SUPPLEMENTAL AGREEMENT NO. 1  
TO  
PROFESSIONAL SERVICES AGREEMENT  
FOR  
CITY OF MARYSVILLE  
AND BERGERABAM, INC.**

This Supplemental Agreement No. 1 is made and entered into on the \_\_\_\_ day of November, 2017, between the City of Marysville, hereinafter called the "City" and BergerABAM, Inc., hereinafter called the "Consultant."

WITNESSETH THAT:

WHEREAS, the parties hereto have previously entered into an Agreement for consulting services to prepare and deliver 100% plans, specifications and a final cost estimate for the First Street Bypass project and to provide related engineering, permitting, and right-of-way acquisition services, hereinafter called the "Project," said Agreement being dated February 13<sup>th</sup>, 2017; and

WHEREAS, both parties desire to supplement said Agreement, by expanding the Scope of Services to provide for the replacement of the existing water main, and to provide an irrigation and planting plan, and to amend the total amount payable for this Agreement,

NOW THEREFORE, in consideration of the terms, conditions, covenants and performance contained herein or attached and incorporated, and made a part hereof, the parties hereto agree as follows:

Each and every provision of the Original Agreement for Professional Services dated February 13<sup>th</sup>, 2017, shall remain in full force and effect, except as modified in the following sections:

1. Section 1 of the Original Agreement, "SCOPE OF SERVICES", shall be supplemented to include the Scope of Services as described in Exhibit A1, attached hereto and by this reference made part of this Supplemental Agreement No. 1.

2. Section 3 of the Original Agreement, "COMPENSATION", is amended to include the additional Consultant fee of \$62,766.00 as described in Exhibit A1. The second sentence shall be amended and shall read as follows: "...shall the compensation paid to the Consultant under this Agreement exceed One Million Six Hundred Fifty Eight Thousand One Hundred Eighty Seven Dollars and Zero Cents (**\$1,658,187.00**) within the term of the Agreement, including extensions, without the written agreement of the Consultant and the City."

The Total Amount payable to the Consultant is summarized as follows:

|                             |                |
|-----------------------------|----------------|
| Original Agreement          | \$1,595,421.00 |
| Supplemental Agreement No.1 | \$62,766.00    |
| Supplemental Agreement No.2 | \$ _____       |
| Supplemental Agreement No.3 | \$ _____       |
| Grand Total                 | \$1,658,187.00 |

IN WITNESS WHEREOF, the parties hereto have executed this SUPPLEMENTAL AGREEMENT NO. 1 as of the day and year first above written.

CITY OF MARYSVILLE

\_\_\_\_\_

By: \_\_\_\_\_  
Jon Nehring, Mayor

By: \_\_\_\_\_  
Its \_\_\_\_\_

ATTEST/AUTHENTICATED:

\_\_\_\_\_  
April O'Brien, Deputy City Clerk

APPROVED AS TO FORM:

\_\_\_\_\_  
Jon Walker, City Attorney

EXHIBIT A1

SCOPE OF WORK FEE  
DETERMINATION

SUPPLEMENTAL AGREEMENT NO. 1  
FIRST STREET BYPASS PROJECT

**EXHIBIT A1 - SCOPE OF WORK FOR PLANS, SPECIFICATIONS, AND ESTIMATE  
MODIFICATIONS CITY OF MARYSVILLE FIRST STREET BYPASS  
PROJECT NO. R0901**

**PROJECT BACKGROUND AND OBJECTIVES**

No changes to this section.

**EXHIBIT A1  
SCOPE OF WORK FOR ENGINEERING SERVICES  
FIRST STREET BYPASS**

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## **INTRODUCTION**

### **GENERAL PROJECT ASSUMPTIONS**

The following additional list of assumptions is included to confirm the understanding between the CITY and the CONSULTANT and will be used to guide the work.

- Because of the adjacent soil conditions, it is anticipated that low-impact design (LID) will be possible along First Street between State and Alder avenues.

The following detailed task descriptions define the scope of work (and associated engineering fee estimate) for the authorized tasks addressing the final design phase of the project.

#### **1.0 GENERAL ACTIVITIES**

No change to this task.

#### **2.0 SURVEY AND BASE MAPPING**

No change to this task.

#### **3.0 TRAFFIC ANALYSIS**

No change to this task.

#### **4.0 GEOTECHNICAL ENGINEERING**

No change to this task. See subtask changes below.

##### **4.1 Geotechnical Investigation and Reports**

No change to this subtask.

###### **4.1.1 Data Collection and Review**

No change to this subtask.

###### **4.1.2 Field Investigation**

This subtask is supplemented with the following.

The SUBCONSULTANT will use results from soils testing on adjacent projects (First Street LID and Third Street improvements) to establish baseline infiltration rates. The CITY will also core existing pavement sections as needed for SUBCONSULTANT use in pavement design.

##### **Assumptions**

- The CITY will provide infiltration testing results from adjacent projects. This is currently assumed to be 2 inches per hour.
- CITY crews will core existing pavement as needed by the SUBCONSULTANT for their pavement design efforts. The SUBCONSULTANT expects to require three cores.

##### **Deliverables**

- Infiltration results will be included in the geotechnical data and engineering report.

#### **4.1.3 Laboratory Testing**

No change to this subtask.

#### **4.1.4 Geotechnical Analysis**

No change to this subtask.

#### **4.1.5 Geotechnical Data and Engineering Report**

No change to this subtask.

### **5.0 SCHEMATIC DESIGN**

#### **5.1 Preliminary Concepts**

Based on meetings and discussions with the CITY, the CONSULTANT shall provide a single (rather than up to three) preliminary concept for the First Street corridor. The concept will identify critical design elements for the First Street Bypass corridor and will address First Street intersections; roadway alignment; cross section; all roadway features within the ROW, including illumination; and any improvements to adjacent roadways. No screening will be required.

##### **Assumptions**

- The concept will provide a 12-foot shared use path on the south side of First Street, with a bicycle lane but no sidewalk on the north side between Alder Avenue and 47th Avenue.
- Bioretention facilities of 6 feet 6 inches will be provided on the north and south side of First Street between State Avenue and Alder Avenue.

A boulevard strip will be provided on the south side of First Street between Alder Avenue and 47th Avenue.

##### **Deliverables**

- Draft summary design memorandum
- Final summary design memorandum

### **6.0 PERMITTING PS&E**

No change to this task.

#### **6.7 Waterline (NEW SUBTASK)**

The CONSULTANT shall propose a waterline to be installed in the First Street roadway from State Avenue to 47th Avenue to the CITY for review and comment at the completion of the preliminary design phase of the project. The CONSULTANT shall provide a preliminary water system schematic for CITY review. The CONSULTANT shall incorporate the CITY's comments for final PS&E submittal.

##### **Assumptions**



- Water facilities will be located approximately four feet from the face of curb on the north side of First Street.
- Hydrants will be included in the layout.
- Water service stub locations will be coordinated with the CITY.
- CONSULTANT will make waterline connections at Quinn Avenue and 47th Avenue NE to create loops and eliminate dead ends.
- Waterline shall be located to avoid impacts and/or relocation due to future widening of First Street to the north in the future.

## **7.0 STORM DRAINAGE DESIGN**

### **7.1 Storm Drain Design**

The CONSULTANT shall perform the following.

- Design project stormwater facilities, including pipes, inlets, catch basins, associated structures, and biofiltration facilities.

#### **Assumptions**

- Stormwater runoff from the project will be conveyed to bioretention facilities between State Avenue and Alder Avenue on both sides of First Street.
- Stormwater runoff will infiltrate between State and Alder avenues. The infiltration rate will be tested during geotechnical investigations.
- Flow increases to the downstream onsite system from First Street shall be quantified and provided to the CITY for review and consideration. The CITY is prepared to manage flow increases with ongoing stormwater management practices.

### **7.2 Stormwater Treatment Pond and/or LID Facilities**

This subtask is supplemented with the following.

The CONSULTANT shall also perform an analysis of areas adjacent to the roadway corridor and within the project footprint to determine their appropriateness and feasibility to install LID facilities, such as biofiltration facilities. It is expected the analysis will indicate that the available area for LID facilities is adequate for treating runoff, and the CONSULTANT shall develop contract documents to include these facilities.

#### **Assumptions**

- Stormwater runoff from the project will be collected and conveyed to biofiltration facilities located between State Avenue and Alder Avenue, on both sides of First Street.

**Deliverables**

- Draft drainage report (one electronic and two hard copy)
- Final drainage report (one electronic and two hard copy)

**7.3 Stormwater Hydroperiod Analysis (NEW SUBTASK)**

The CONSULTANT shall perform a hydroperiod analysis of stormwater runoff flowing into existing wetland areas to determine the impact on the wetland hydrology.

**Assumption(s)**

- All necessary stormwater runoff information is currently available to the CONSULTANT through the city.

**Deliverable(s)**

- Draft hydroperiod analysis (one electronic and two hard copy)
- Final hydroperiod analysis (one electronic and two hard copies)

**8.0 RIGHT-OF-WAY AND PLAN PREPARATION**

No change to this task.

**9.0 90 PERCENT AND FINAL ROADWAY DESIGN PS&E**

The CONSULTANT shall propose plantings to be installed in the bioretention facilities and street trees and plantings for the boulevard and wetland seeding to the CITY for review and comment at the completion of the preliminary design phase of the project. The CONSULTANT shall provide a preliminary irrigation system schematic for CITY review. The CONSULTANT shall incorporate the CITY's comments for final plans, specifications, and cost estimates (PS&E) submittal.

**Assumptions**

- Bioretention facilities between State and Alder Avenues will be planted to match the character shown between State Avenue and Cedar Avenue for the First Street Low Impact Development and Road Improvement Project.
- Ornamental plantings will be provided in the boulevard on the south side of First Street between Alder Avenue and 47th Avenue. An irrigation system will be designed for this area.
- Underground drip irrigation will be provided for temporary irrigation of the planted bioretention facilities and boulevard along First Street.
- Only seeding will be required in the temporarily impacted wetland areas.
- No temporary irrigation will be required to establish wetland plants.

New utility plans, including relocation of the waterline from State Avenue to 47th Avenue, will also be included.

**10.0 STRUCTURAL ENGINEERING**

No change to this task.

**11.0 ENVIRONMENTAL PERMITTING AND SUPPORT**

No change to this task.

**12.0 UTILITY COORDINATION**

No change to this task.

**13.0 SIGNAL AND ILLUMINATION DESIGN**

No change to this task.

**14.0 DIRECTED SERVICES**

No change to this task.

**15.0 AD, BID, AND AWARD**

No change to this task.

**DESIGN CRITERIA TO BE USED FOR THE PROJECT**

No change to the design criteria.

**ITEMS TO BE FURNISHED TO THE CONSULTANT BY THE CITY**

No change to this list.

**SCHEDULE**

No change to the schedule.

EXHIBIT A1  
**EXHIBIT E-1: CONSULTANT FEE DETERMINATION**  
**FIRST STREET BYPASS**

SUPPLEMENTAL AGREEMENT NO. 1

FIRST STREET BYPASS PROJECT  
**BergerABAM Costs**

**DIRECT SALARY COSTS (DSC) for BergerABAM, Inc.**

| <u>Personnel</u>                               | <u>Hours</u> |   | <u>Hourly Rate</u> |      | <u>Direct Salary Cost</u> |
|------------------------------------------------|--------------|---|--------------------|------|---------------------------|
| 1 Principal                                    | 0            | X | \$90.63            | = \$ | -                         |
| 2 Project Manager                              | 64           | X | \$59.86            | = \$ | 3,831.04                  |
| 3 Project Engineer                             | 180          | X | \$41.35            | = \$ | 7,443.00                  |
| 4 Civil Designer                               | 0            | X | \$40.10            | = \$ | -                         |
| 5 Natural Resources                            | 4            | X | \$49.60            | = \$ | 198.40                    |
| 6 Landscape Architect                          | 55           | X | \$48.50            | = \$ | 2,667.50                  |
| 7 CADD/Graphics                                | 160          | X | \$38.14            | = \$ | 6,102.40                  |
| 8 Proj Coord/Admin                             | 0            | X | \$34.72            | = \$ | -                         |
|                                                | 463          |   |                    |      |                           |
| <b>TOTAL DIRECT SALARY COSTS (DSC) = \$</b>    |              |   |                    |      | <b>20,242</b>             |
| Escalation = 7.50%                             |              |   |                    |      | \$ 21,761                 |
| Overhead (OH) 168.00% of (DSC ) = \$           |              |   |                    |      | 36,558                    |
| Profit 10.00% of (DSC + OH) = \$               |              |   |                    |      | 5,832                     |
| <b>TOTAL SALARY COSTS (DSC + OH + FF) = \$</b> |              |   |                    |      | <b>62,632</b>             |

**DIRECT NONSALARY COSTS (DNSC)**

|                                                |     |                  |    |            |
|------------------------------------------------|-----|------------------|----|------------|
| Mileage for Site Visits & Meetings             | 250 | miles @ \$ 0.535 | \$ | 134        |
| <b>TOTAL REIMBURSABLE EXPENSES (DNSC) = \$</b> |     |                  |    | <b>134</b> |

|                                   |               |
|-----------------------------------|---------------|
| <b>TOTAL BERGER/ABAM FEE = \$</b> | <b>62,766</b> |
|-----------------------------------|---------------|

**SUBCONSULTANTS**

|                          |  |    |   |
|--------------------------|--|----|---|
| DKS Associates           |  |    |   |
| Shannon and Wilson       |  | \$ | - |
| Beyler Consulting        |  | \$ | - |
| Universal Field Services |  |    |   |
| Drayton Archaeology      |  |    |   |
| Louis Berger Group       |  |    |   |

|                                      |          |
|--------------------------------------|----------|
| <b>TOTAL SUBCONSULTANT FEES = \$</b> | <b>-</b> |
|--------------------------------------|----------|

|                                     |               |
|-------------------------------------|---------------|
| <b>TOTAL AUTHORIZED AMOUNT = \$</b> | <b>62,766</b> |
|-------------------------------------|---------------|

|                                   |               |
|-----------------------------------|---------------|
| <b>TOTAL CONTRACT AMOUNT = \$</b> | <b>62,766</b> |
|-----------------------------------|---------------|

**EXHIBIT E - PROJECT FEE DETERMINATION****BERGERABAM INC - BLENDED HOURLY RATES BY JOB CLASSIFICATION**

| Classification            | Name              | Base Wage Rate | % Participation | Blended Hourly Rate |
|---------------------------|-------------------|----------------|-----------------|---------------------|
| Officer                   | Bob Fernandes     | \$90.63        | 100%            | \$90.63             |
|                           |                   |                | 100%            |                     |
| Project Manager           | Ross French       | \$59.86        | 100%            | \$59.86             |
|                           |                   |                | 100%            |                     |
| Project Engineer          | Jessica Aquilar   | \$52.93        | 20%             | \$41.35             |
|                           | Susann Babaei     | \$38.46        | 80%             |                     |
|                           |                   |                | 100%            |                     |
| Civil Designer            | John Reyes        | \$39.81        | 80%             | \$40.10             |
|                           | Lee Childress     | \$41.20        | 20%             |                     |
|                           |                   |                | 100%            |                     |
| Environmental Scientist   | Dan Roscoe        | \$45.34        | 80%             | \$49.60             |
|                           | Brian Carrico     | \$66.82        | 20%             |                     |
|                           |                   |                | 100%            |                     |
| Landscape Architecture    | Sam Jones         | \$32.36        | 20%             | \$48.50             |
|                           | Dan Wojtala       | \$46.83        | 60%             |                     |
|                           | David Sacamano    | \$69.57        | 20%             |                     |
|                           |                   |                | 100%            |                     |
| CADD Operators/Graphics   | Jef Blake         | \$53.32        | 20%             | \$38.14             |
|                           | Mark Enos         | \$33.70        | 70%             |                     |
|                           | Aaron Savage      | \$38.85        | 10%             |                     |
|                           |                   |                | 100%            |                     |
| Project Coordinator/Admin | Nora Bretana      | \$33.70        | 10%             | \$34.72             |
|                           | Kelly Robinson    | \$34.23        | 70%             |                     |
|                           | Madeleine Dulemba | \$49.00        | 10%             |                     |
|                           | Laura Townsend    | \$24.90        | 10%             |                     |
|                           |                   |                | 100%            |                     |

|                                                                | Project<br>Exec | Proj<br>Mgr | Project<br>Engr | Civil<br>Designer | Environ<br>Scientist | Landscape<br>Architect | Graphics/<br>CADD | Project<br>Coord/<br>Admin | Berger<br>ABAM<br>Hours |
|----------------------------------------------------------------|-----------------|-------------|-----------------|-------------------|----------------------|------------------------|-------------------|----------------------------|-------------------------|
| <b>1.0 GENERAL ACTIVITIES</b>                                  |                 |             |                 |                   |                      |                        |                   |                            |                         |
| <b>1.1 Project Management and Invoicing</b>                    |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Assume 24 months duration @ 4 hours each month                 |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Subtotal: Subtask 1.1                                          | ---             | ---         | ---             | ---               | ---                  | ---                    | ---               | ---                        | ---                     |
| <b>1.2 Consultant Team Meetings and Coordination</b>           |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Assume 2 meetings per month for 2 months @ 1 hrs each          |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Subtotal: Subtask 1.2                                          | ---             | ---         | ---             | ---               | ---                  | ---                    | ---               | ---                        | ---                     |
| <b>1.3 Meetings and Coordination with City of Marysville</b>   |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Assume 1 meeting per month for 2 months @ 4 hours each         |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Subtotal: Subtask 1.3                                          | ---             | ---         | ---             | ---               | ---                  | ---                    | ---               | ---                        | ---                     |
| <b>1.4 Quality Assurance</b>                                   |                 |             |                 |                   |                      |                        |                   |                            |                         |
|                                                                |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Subtotal: Subtask 1.4                                          | ---             | ---         | ---             | ---               | ---                  | ---                    | ---               | ---                        | ---                     |
| Subtotal: Task 1.0 General Activities                          | ---             | ---         | ---             | ---               | ---                  | ---                    | ---               | ---                        | ---                     |
| <b>2.0 SURVEY AND BASE MAPPING</b>                             |                 |             |                 |                   |                      |                        |                   |                            |                         |
|                                                                |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Coordination with Surveyor and Review of Data                  |                 | 0           |                 |                   |                      |                        |                   |                            |                         |
| Subtotal: Task 2.0 Survey And Base Mapping                     | ---             | ---         | ---             | ---               | ---                  | ---                    | ---               | ---                        | ---                     |
| <b>3.0 TRAFFIC ANALYSIS</b>                                    |                 |             |                 |                   |                      |                        |                   |                            |                         |
|                                                                |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Coordination with Traffic Engineer and Review of Data          |                 | 0           |                 |                   |                      |                        |                   |                            |                         |
| Subtotal: Task 3.0 Traffic Analysis                            | ---             | ---         | ---             | ---               | ---                  | ---                    | ---               | ---                        | ---                     |
| <b>4.0 GEOTECHNICAL ENGINEERING</b>                            |                 |             |                 |                   |                      |                        |                   |                            |                         |
|                                                                |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Coordination with Geotechnical Engineer and Review of Data     |                 | 0           |                 |                   |                      |                        |                   |                            |                         |
| Subtotal: Task 4.0 Geotechnical Engineering                    | ---             | ---         | ---             | ---               | ---                  | ---                    | ---               | ---                        | ---                     |
| <b>5.0 SCHEMATIC DESIGN</b>                                    |                 |             |                 |                   |                      |                        |                   |                            |                         |
|                                                                |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Draft Alternatives Analysis Meetings (3), includes preparation |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Draft Summary Memo                                             |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Comment Resolution & Final Memo                                |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Subtotal: Task 5.0 Schematic Design                            | ---             | ---         | ---             | ---               | ---                  | ---                    | ---               | ---                        | ---                     |
| <b>6.0 PERMITTING PLANS (30% PS&amp;E)</b>                     |                 |             |                 |                   |                      |                        |                   |                            |                         |
| <b>6.1 Preliminary Roadway Plan (7 sheets)</b>                 |                 |             |                 |                   |                      |                        |                   |                            |                         |
|                                                                |                 |             |                 |                   |                      |                        |                   |                            |                         |

|                                                                    | Project<br>Exec | Proj<br>Mgr | Project<br>Engr | Civil<br>Designer | Environ<br>Scientist | Landscape<br>Architect | Graphics/<br>CADD | Project<br>Coord/<br>Admin | Berger<br>ABAM<br>Hours |
|--------------------------------------------------------------------|-----------------|-------------|-----------------|-------------------|----------------------|------------------------|-------------------|----------------------------|-------------------------|
| Subtotal: Subtask 6.1 Preliminary Roadway Plan (7 Sheets)          | ---             | ---         | ---             | ---               | ---                  | ---                    | ---               | ---                        | ---                     |
| <b>6.2 Preliminary Roadway Profile (7 sheets)</b>                  |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Subtotal: Subtask 6.2 Preliminary Roadway Profile (7 Sheets)       | ---             | ---         | ---             | ---               | ---                  | ---                    | ---               | ---                        | ---                     |
| <b>6.3 Cross Sections (2 sheets)</b>                               |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Subtotal: Subtask 6.3 Cross Sections (2 Sheets)                    | ---             | ---         | ---             | ---               | ---                  | ---                    | ---               | ---                        | ---                     |
| <b>6.4 Channelization Plans (7 sheets)</b>                         |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Subtotal: Subtask 6.4 Channelization Plans (7 Sheets)              | ---             | ---         | ---             | ---               | ---                  | ---                    | ---               | ---                        | ---                     |
| <b>6.5 Drainage Plans and Profiles (10 sheets)</b>                 |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Subtotal: Subtask 6.5 Drainage Plans And Profiles (10 Sheets)      | ---             | ---         | ---             | ---               | ---                  | ---                    | ---               | ---                        | ---                     |
| <b>6.6 Reviews and Draft Summary of Design Criteria</b>            |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Subtotal: Subtask 6.6 Reviews And Draft Summary Of Design Criteria | ---             | ---         | ---             | ---               | ---                  | ---                    | ---               | ---                        | ---                     |
| <b>6.7 Irrigation and Landscape (New Subtask)</b>                  |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Subtotal: Subtask 6.7 Irrigation And Landscape (New Subtask)       | ---             | ---         | ---             | ---               | ---                  | ---                    | ---               | ---                        | ---                     |
| <b>6.8 Waterline (New Subtask)</b>                                 |                 |             | 4               | 20                |                      |                        | 20                |                            |                         |
| Subtotal: Subtask 6.8 Waterline (New Subtask)                      | ---             | 4           | 20              | ---               | ---                  | ---                    | 20                | ---                        | 44                      |
| Subtotal: Task 6.0 Permitting Plans (30% Ps&E)                     | ---             | 4           | 20              | ---               | ---                  | ---                    | 20                | ---                        | 44                      |
| <b>7.0 STORM DRAINAGE DESIGN</b>                                   |                 |             |                 |                   |                      |                        |                   |                            |                         |
| <b>7.1 Storm Drainage Design</b>                                   |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Collect Existing Information                                       |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Draft Drainage Report                                              |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Address Comments                                                   |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Final Drainage Report                                              |                 |             |                 |                   |                      |                        |                   |                            |                         |
| <b>7.2 Stormwater Treatment Pond and/or LID Facilities</b>         |                 |             |                 |                   |                      |                        |                   |                            |                         |
| <b>7.3 Hydroperiod Analysis</b>                                    |                 |             | 4               | 16                |                      | 4                      |                   |                            |                         |
| Subtotal: Task 7.0 Storm Drainage Design                           | ---             | 4           | 16              | ---               | 4                    | ---                    | ---               | ---                        | 24                      |

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|  | Project<br>Exec | Proj<br>Mgr | Project<br>Engr | Civil<br>Designer | Environ<br>Scientist | Landscape<br>Architect | Graphics/<br>CADD | Project<br>Coord/<br>Admin | Berger<br>ABAM<br>Hours |
|--|-----------------|-------------|-----------------|-------------------|----------------------|------------------------|-------------------|----------------------------|-------------------------|
|--|-----------------|-------------|-----------------|-------------------|----------------------|------------------------|-------------------|----------------------------|-------------------------|

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**8.0 RIGHT OF WAY AND PLAN PREPARATION**

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**8.1 Research**

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|                                                                   | Project<br>Exec | Proj<br>Mgr | Project<br>Engr | Civil<br>Designer | Environ<br>Scientist | Landscape<br>Architect | Graphics/<br>CADD | Project<br>Coord/<br>Admin | Berger<br>ABAM<br>Hours |
|-------------------------------------------------------------------|-----------------|-------------|-----------------|-------------------|----------------------|------------------------|-------------------|----------------------------|-------------------------|
| Subtotal: Subtask 8.1 Research                                    |                 |             |                 |                   |                      |                        |                   |                            |                         |
| <b>8.2 Right of Way Plans</b>                                     |                 |             |                 |                   |                      |                        |                   |                            |                         |
| <i>See Sheet Count Below</i>                                      |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Subtotal: Subtask 8.2 Right Of Way Plans                          |                 |             |                 |                   |                      |                        |                   |                            |                         |
| <b>8.3 Right of Way Acquisition Services</b>                      |                 |             |                 |                   |                      |                        |                   |                            |                         |
| <i>To be performed by Universal Field Services</i>                |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Coordination with Universal Field Services                        |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Subtotal: Subtask 8.3 Right Of Way Acquisition Services           |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Subtotal: Task 8.0 Right Of Way And Plan Preparation              |                 |             |                 |                   |                      |                        |                   |                            |                         |
| <b>9.0 90 PERCENT, AND FINAL P,S&amp;E</b>                        |                 |             |                 |                   |                      |                        |                   |                            |                         |
| <b>9.0 90 Percent, and Final P,S&amp;E</b>                        |                 |             |                 |                   |                      |                        |                   |                            |                         |
| <i>Prepare Construction Drawings - See Sheet Count Below</i>      |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Special Provisions                                                |                 |             | 56              | 140               |                      |                        | 35                | 140                        |                         |
| Engineers' Estimate                                               |                 |             |                 | 4                 |                      |                        | 12                |                            |                         |
|                                                                   |                 |             |                 |                   |                      |                        | 8                 |                            |                         |
| Subtotal: Subtask 9.0 90 Percent, And Final P,S&E                 |                 |             |                 |                   |                      |                        |                   |                            |                         |
| <b>10.0 STRUCTURAL ENGINEERING</b>                                |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Design and PS&E for Structural Earth Walls Supporting the Roadway |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Subtotal: Task                                                    |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Subtotal: Task 10.0 Structural Engineering                        |                 |             |                 |                   |                      |                        |                   |                            |                         |
| <b>11.0 ENVIRONMENTAL DOCUMENTATION AND COMMITMENTS</b>           |                 |             |                 |                   |                      |                        |                   |                            |                         |
| <b>11.1 Geotechnical Investigation Permits</b>                    |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Subtotal: Subtask 11.1 Geotechnical Investigation Permits         |                 |             |                 |                   |                      |                        |                   |                            |                         |
| <b>11.2 State Environmental Policy Act</b>                        |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Subtotal: Subtask 11.2 State Environmental Policy Act             |                 |             |                 |                   |                      |                        |                   |                            |                         |
| <b>11.3 USACE Section 404 Permit (Wetland Fill)</b>               |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Subtotal: Subtask 11.3 Usace Section 404 Permit (Wetland Fill)    |                 |             |                 |                   |                      |                        |                   |                            |                         |
| <b>11.4 WDFW Hydraulic Project Approval</b>                       |                 |             |                 |                   |                      |                        |                   |                            |                         |

|                                                                 | Project<br>Exec | Proj<br>Mgr | Project<br>Engr | Civil<br>Designer | Environ<br>Scientist | Landscape<br>Architect | Graphics/<br>CADD | Project<br>Coord/<br>Admin | Berger<br>ABAM<br>Hours |
|-----------------------------------------------------------------|-----------------|-------------|-----------------|-------------------|----------------------|------------------------|-------------------|----------------------------|-------------------------|
| Subtotal: Subtask 11.4 Wdfw Hydraulic Project Approval          | ---             | ---         | ---             | ---               | ---                  | ---                    | ---               | ---                        | ---                     |
| <b>11.5 City of Marysville Permits</b>                          |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Subtotal: Subtask 11.5 City Of Marysville Permits               | ---             | ---         | ---             | ---               | ---                  | ---                    | ---               | ---                        | ---                     |
| Subtotal: Task 11.0 Environmental Documentation And Commitments | ---             | ---         | ---             | ---               | ---                  | ---                    | ---               | ---                        | ---                     |
| <b>12.0 UTILITY COORDINATION</b>                                |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Subtotal: Task 12.0 Utility Coordination                        | ---             | ---         | ---             | ---               | ---                  | ---                    | ---               | ---                        | ---                     |
| <b>13.0 SIGNAL AND ILLUMINATION DESIGN</b>                      |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Coordination with Traffic Engineer                              |                 |             |                 |                   |                      |                        |                   |                            |                         |
|                                                                 |                 |             |                 |                   |                      |                        |                   |                            |                         |

*To be performed by DKS*

|                                                    | Project<br>Exec | Proj<br>Mgr | Project<br>Engr | Civil<br>Designer | Environ<br>Scientist | Landscape<br>Architect | Graphics/<br>CADD | Project<br>Coord/<br>Admin | Berger<br>ABAM<br>Hours |
|----------------------------------------------------|-----------------|-------------|-----------------|-------------------|----------------------|------------------------|-------------------|----------------------------|-------------------------|
| Subtotal: Task 13.0 Signal And Illumination Design | ---             | ---         | ---             | ---               | ---                  | ---                    | ---               | ---                        | ---                     |
| <b>14.0 DIRECTED SERVICES</b>                      |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Subtotal: Task 14.0 Directed Services              | ---             | ---         | ---             | ---               | ---                  | ---                    | ---               | ---                        | ---                     |
| <b>15.0 AD, BID, AND AWARD</b>                     |                 |             |                 |                   |                      |                        |                   |                            |                         |
| Subtotal: Task 15.0 Ad, Bid, And Award             | ---             | ---         | ---             | ---               | ---                  | ---                    | ---               | ---                        | ---                     |
| <b>PROJECT TOTAL</b>                               | ---             | 64          | 180             | ---               | 4                    | 55                     | 160               | ---                        | 463                     |

| <b>90% PS&amp;E</b>                                    |  |   |
|--------------------------------------------------------|--|---|
| <b>General Sheets</b>                                  |  |   |
| COVER SHEET AND VICINITY MAP - SHEET 1                 |  | - |
| DRAWING INDEX AND GENERAL NOTES - SHEET 1              |  | - |
| LEGEND AND ABBREVIATIONS - SHEET 1                     |  | - |
| <b>Civil Sheets</b>                                    |  |   |
| SURVEY CONTROL AND ALIGNMENT - SHEET 1                 |  | - |
| SURVEY CONTROL AND ALIGNMENT - SHEET 2                 |  | - |
| SURVEY CONTROL AND ALIGNMENT - SHEET 3                 |  | - |
| SURVEY CONTROL AND ALIGNMENT - SHEET 4                 |  | - |
| ROADWAY SECTIONS - SHEET 1                             |  | - |
| ROADWAY SECTIONS - SHEET 2                             |  | - |
| ROADWAY SECTIONS - SHEET 3                             |  | - |
| SITE PREPARATION AND EROSION CONTROL PLAN - SHEET 1    |  | - |
| SITE PREPARATION AND EROSION CONTROL PLAN - SHEET 2    |  | - |
| SITE PREPARATION AND EROSION CONTROL PLAN - SHEET 3    |  | - |
| SITE PREPARATION AND EROSION CONTROL PLAN - SHEET 4    |  | - |
| SITE PREPARATION AND EROSION CONTROL PLAN - SHEET 5    |  | - |
| SITE PREPARATION AND EROSION CONTROL PLAN - SHEET 6    |  | - |
| SITE PREPARATION AND EROSION CONTROL PLAN - SHEET 7    |  | - |
| SITE PREPARATION AND EROSION CONTROL DETAILS - SHEET 1 |  | - |
| ROADWAY PLAN AND PROFILE - SHEET 1                     |  | - |
| ROADWAY PLAN AND PROFILE - SHEET 2                     |  | - |
| ROADWAY PLAN AND PROFILE - SHEET 3                     |  | - |
| ROADWAY PLAN AND PROFILE - SHEET 4                     |  | - |
| ROADWAY PLAN AND PROFILE - SHEET 5                     |  | - |
| ROADWAY PLAN AND PROFILE - SHEET 6                     |  | - |
| ROADWAY PLAN AND PROFILE - SHEET 7                     |  | - |

|                                              | Project<br>Exec | Proj<br>Mgr | Project<br>Engr | Civil<br>Designer | Environ<br>Scientist | Landscape<br>Architect | Graphics/<br>CADD | Project<br>Coord/<br>Admin | Berger<br>ABAM<br>Hours |
|----------------------------------------------|-----------------|-------------|-----------------|-------------------|----------------------|------------------------|-------------------|----------------------------|-------------------------|
| DRAINAGE DETAILS - SHEET 1                   |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| DRAINAGE DETAILS - SHEET 2                   |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| DRAINAGE DETAILS - SHEET 3                   |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| DRAINAGE DETAILS - SHEET 4                   |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| CHANNELIZATION AND SIGNING PLANS - SHEET 1   |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| CHANNELIZATION AND SIGNING PLANS - SHEET 2   |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| CHANNELIZATION AND SIGNING PLANS - SHEET 3   |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| CHANNELIZATION AND SIGNING PLANS - SHEET 4   |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| CHANNELIZATION AND SIGNING PLANS - SHEET 5   |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| CHANNELIZATION AND SIGNING PLANS - SHEET 6   |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| CHANNELIZATION AND SIGNING PLANS - SHEET 7   |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| CHANNELIZATION AND SIGNING DETAILS - SHEET 1 |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| INTERSECTION PLAN - SHEET 1                  |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| INTERSECTION PLAN - SHEET 2                  |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| INTERSECTION PLAN - SHEET 3                  |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| GRADING AND PAVING PLAN - SHEET 1            |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| GRADING AND PAVING PLAN - SHEET 2            |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| GRADING AND PAVING PLAN - SHEET 3            |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| GRADING AND PAVING PLAN - SHEET 4            |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| GRADING AND PAVING PLAN - SHEET 5            |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| GRADING AND PAVING PLAN - SHEET 6            |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| GRADING AND PAVING PLAN - SHEET 7            |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| MISCELLANEOUS DETAILS - SHEET 1              |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| MISCELLANEOUS DETAILS - SHEET 2              |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| MISCELLANEOUS DETAILS - SHEET 3              |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| PLANTING PLANS - SHEET 1                     |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| PLANTING PLANS - SHEET 2                     |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| PLANTING PLANS - SHEET 3                     |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| PLANTING PLANS - SHEET 4                     |                 |             |                 |                   |                      |                        | 4                 |                            | 4                       |
| PLANTING PLANS - SHEET 5                     |                 |             |                 |                   |                      |                        | 4                 |                            | 4                       |
| IRRIGATION PLANS - SHEET 1                   |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| IRRIGATION PLANS - SHEET 2                   |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| IRRIGATION PLANS - SHEET 3                   |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| IRRIGATION PLANS - SHEET 4                   |                 |             |                 |                   |                      |                        | 6                 |                            | 6                       |
| IRRIGATION PLANS - SHEET 5                   |                 |             |                 |                   |                      |                        | 6                 |                            | 6                       |
| LANDSCAPE DETAILS - SHEET 1                  |                 |             |                 |                   |                      |                        | 2                 |                            | 2                       |
| IRRIGATION DETAILS - SHEET 2                 |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| IRRIGATION DETAILS - SHEET 3                 |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| UTILITY PLANS - SHEET 1                      |                 |             | 4               | 10                |                      |                        | 10                |                            | 24                      |
| UTILITY PLANS - SHEET 2                      |                 |             | 4               | 10                |                      |                        | 10                |                            | 24                      |
| UTILITY PLANS - SHEET 3                      |                 |             | 4               | 10                |                      |                        | 10                |                            | 24                      |
| UTILITY PLANS - SHEET 4                      |                 |             | 4               | 10                |                      |                        | 10                |                            | 24                      |
| UTILITY PLANS - SHEET 5                      |                 |             | 4               | 10                |                      |                        | 10                |                            | 24                      |

|                                                  | Project<br>Exec | Proj<br>Mgr | Project<br>Engr | Civil<br>Designer | Environ<br>Scientist | Landscape<br>Architect | Graphics/<br>CADD | Project<br>Coord/<br>Admin | Berger<br>ABAM<br>Hours |
|--------------------------------------------------|-----------------|-------------|-----------------|-------------------|----------------------|------------------------|-------------------|----------------------------|-------------------------|
| UTILITY DETAILS - SHEET 1                        |                 | 8           | 20              |                   |                      |                        | 20                | 48                         |                         |
| <b>Structural Sheets</b>                         |                 |             |                 |                   |                      |                        |                   |                            |                         |
| STRUCTURAL EARTH WALL PLAN AND PROFILE - SHEET 1 |                 |             |                 |                   |                      |                        |                   | -                          |                         |
| STRUCTURAL EARTH WALL PLAN AND PROFILE - SHEET 2 |                 |             |                 |                   |                      |                        |                   | -                          |                         |
| STRUCTURAL EARTH WALL PLAN AND PROFILE - SHEET 3 |                 |             |                 |                   |                      |                        |                   | -                          |                         |
| STRUCTURAL EARTH WALL SECTION - SHEET 1          |                 |             |                 |                   |                      |                        |                   | -                          |                         |

|                                                        | Project<br>Exec | Proj<br>Mgr | Project<br>Engr | Civil<br>Designer | Environ<br>Scientist | Landscape<br>Architect | Graphics/<br>CADD | Project<br>Coord/<br>Admin | Berger<br>ABAM<br>Hours |
|--------------------------------------------------------|-----------------|-------------|-----------------|-------------------|----------------------|------------------------|-------------------|----------------------------|-------------------------|
| RAILING DETAILS - SHEET 1                              |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| RAILING DETAILS - SHEET 2                              |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| <b>SUBTOTAL PS&amp;E 90% DRAWINGS</b>                  | -               | 28          | 70              | -                 | -                    | 22                     | 70                | -                          | 190                     |
| <b>100%/FINAL PS&amp;E</b>                             |                 |             |                 |                   |                      |                        |                   |                            |                         |
| <b>General Sheets</b>                                  |                 |             |                 |                   |                      |                        |                   |                            |                         |
| COVER SHEET AND VICINITY MAP - SHEET 1                 |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| DRAWING INDEX AND GENERAL NOTES - SHEET 1              |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| LEGEND AND ABBREVIATIONS - SHEET 1                     |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| <b>Civil Sheets</b>                                    |                 |             |                 |                   |                      |                        |                   |                            |                         |
| SURVEY CONTROL AND ALIGNMENT - SHEET 1                 |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| SURVEY CONTROL AND ALIGNMENT - SHEET 2                 |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| SURVEY CONTROL AND ALIGNMENT - SHEET 3                 |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| SURVEY CONTROL AND ALIGNMENT - SHEET 4                 |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| ROADWAY SECTIONS - SHEET 1                             |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| ROADWAY SECTIONS - SHEET 2                             |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| ROADWAY SECTIONS - SHEET 3                             |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| SITE PREPARATION AND EROSION CONTROL PLAN - SHEET 1    |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| SITE PREPARATION AND EROSION CONTROL PLAN - SHEET 2    |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| SITE PREPARATION AND EROSION CONTROL PLAN - SHEET 3    |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| SITE PREPARATION AND EROSION CONTROL PLAN - SHEET 4    |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| SITE PREPARATION AND EROSION CONTROL PLAN - SHEET 5    |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| SITE PREPARATION AND EROSION CONTROL PLAN - SHEET 6    |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| SITE PREPARATION AND EROSION CONTROL PLAN - SHEET 7    |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| SITE PREPARATION AND EROSION CONTROL DETAILS - SHEET 1 |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| ROADWAY PLAN AND PROFILE - SHEET 1                     |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| ROADWAY PLAN AND PROFILE - SHEET 2                     |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| ROADWAY PLAN AND PROFILE - SHEET 3                     |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| ROADWAY PLAN AND PROFILE - SHEET 4                     |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| ROADWAY PLAN AND PROFILE - SHEET 5                     |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| ROADWAY PLAN AND PROFILE - SHEET 6                     |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| ROADWAY PLAN AND PROFILE - SHEET 7                     |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| DRAINAGE DETAILS - SHEET 1                             |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| DRAINAGE DETAILS - SHEET 2                             |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| DRAINAGE DETAILS - SHEET 3                             |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| DRAINAGE DETAILS - SHEET 4                             |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| CHANNELIZATION AND SIGNING PLANS - SHEET 1             |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| CHANNELIZATION AND SIGNING PLANS - SHEET 2             |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| CHANNELIZATION AND SIGNING PLANS - SHEET 3             |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| CHANNELIZATION AND SIGNING PLANS - SHEET 4             |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| CHANNELIZATION AND SIGNING PLANS - SHEET 5             |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| CHANNELIZATION AND SIGNING PLANS - SHEET 6             |                 |             |                 |                   |                      |                        |                   |                            | -                       |

|                                                  | Project<br>Exec | Proj<br>Mgr | Project<br>Engr | Civil<br>Designer | Environ<br>Scientist | Landscape<br>Architect | Graphics/<br>CADD | Project<br>Coord/<br>Admin | Berger<br>ABAM<br>Hours |
|--------------------------------------------------|-----------------|-------------|-----------------|-------------------|----------------------|------------------------|-------------------|----------------------------|-------------------------|
| CHANNELIZATION AND SIGNING PLANS - SHEET 7       |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| CHANNELIZATION AND SIGNING DETAILS - SHEET 1     |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| INTERSECTION PLAN - SHEET 1                      |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| INTERSECTION PLAN - SHEET 2                      |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| INTERSECTION PLAN - SHEET 3                      |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| GRADING AND PAVING PLAN - SHEET 1                |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| GRADING AND PAVING PLAN - SHEET 2                |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| GRADING AND PAVING PLAN - SHEET 3                |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| GRADING AND PAVING PLAN - SHEET 4                |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| GRADING AND PAVING PLAN - SHEET 5                |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| GRADING AND PAVING PLAN - SHEET 6                |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| GRADING AND PAVING PLAN - SHEET 7                |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| MISCELLANEOUS DETAILS - SHEET 1                  |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| MISCELLANEOUS DETAILS - SHEET 2                  |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| MISCELLANEOUS DETAILS - SHEET 3                  |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| PLANTING PLANS - SHEET 1                         |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| PLANTING PLANS - SHEET 2                         |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| PLANTING PLANS - SHEET 3                         |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| PLANTING PLANS - SHEET 4                         |                 |             |                 |                   |                      |                        | 2                 |                            | 2                       |
| PLANTING PLANS - SHEET 5                         |                 |             |                 |                   |                      |                        | 2                 |                            | 2                       |
| IRRIGATION PLANS - SHEET 1                       |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| IRRIGATION PLANS - SHEET 2                       |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| IRRIGATION PLANS - SHEET 3                       |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| IRRIGATION PLANS - SHEET 4                       |                 |             |                 |                   |                      |                        | 4                 |                            | 4                       |
| IRRIGATION PLANS - SHEET 5                       |                 |             |                 |                   |                      |                        | 4                 |                            | 4                       |
| LANDSCAPE DETAILS - SHEET 1                      |                 |             |                 |                   |                      |                        | 1                 |                            | 1                       |
| IRRIGATION DETAILS - SHEET 2                     |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| IRRIGATION DETAILS - SHEET 3                     |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| UTILITY PLANS - SHEET 1                          |                 |             | 4               | 10                |                      |                        | 10                |                            | 24                      |
| UTILITY PLANS - SHEET 2                          |                 |             | 4               | 10                |                      |                        | 10                |                            | 24                      |
| UTILITY PLANS - SHEET 3                          |                 |             | 4               | 10                |                      |                        | 10                |                            | 24                      |
| UTILITY PLANS - SHEET 4                          |                 |             | 4               | 10                |                      |                        | 10                |                            | 24                      |
| UTILITY PLANS - SHEET 5                          |                 |             | 4               | 10                |                      |                        | 10                |                            | 24                      |
| UTILITY DETAILS - SHEET 1                        |                 |             | 8               | 20                |                      |                        | 20                |                            | 48                      |
| <b>Structural Sheets</b>                         |                 |             |                 |                   |                      |                        |                   |                            |                         |
| STRUCTURAL EARTH WALL PLAN AND PROFILE - SHEET 1 |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| STRUCTURAL EARTH WALL PLAN AND PROFILE - SHEET 2 |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| STRUCTURAL EARTH WALL PLAN AND PROFILE - SHEET 3 |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| STRUCTURAL EARTH WALL SECTION - SHEET 1          |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| RAILING DETAILS - SHEET 1                        |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| RAILING DETAILS - SHEET 2                        |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| <b>SUBTOTAL PS&amp;E 100%/FINAL DRAWINGS</b>     | -               | 28          | 70              | -                 | -                    | 13                     | 70                | -                          | 181                     |

|                                                   | Project<br>Exec | Proj<br>Mgr | Project<br>Engr | Civil<br>Designer | Environ<br>Scientist | Landscape<br>Architect | Graphics/<br>CADD | Project<br>Coord/<br>Admin | Berger<br>ABAM<br>Hours |
|---------------------------------------------------|-----------------|-------------|-----------------|-------------------|----------------------|------------------------|-------------------|----------------------------|-------------------------|
| <b>ROW</b>                                        |                 |             |                 |                   |                      |                        |                   |                            |                         |
| <b>General Sheets</b>                             |                 |             |                 |                   |                      |                        |                   |                            |                         |
| COVER SHEET WITH VICINITY MAP AND INDEX - SHEET 1 |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| GENERAL NOTES AND ABBREVIATIONS - SHEET 1         |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| <b>Civil Sheets</b>                               |                 |             |                 |                   |                      |                        |                   |                            |                         |
| RIGHT OF WAY OVERVIEW - SHEET 1                   |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| RIGHT OF WAY PLAN - SHEET 1                       |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| RIGHT OF WAY PLAN - SHEET 2                       |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| RIGHT OF WAY PLAN - SHEET 3                       |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| RIGHT OF WAY PLAN - SHEET 4                       |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| RIGHT OF WAY PLAN - SHEET 5                       |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| RIGHT OF WAY PLAN - SHEET 6                       |                 |             |                 |                   |                      |                        |                   |                            | -                       |
| <b>SUBTOTAL PS&amp;E CIVIL/ROADWAY DRAWINGS</b>   | -               | -           | -               | -                 | -                    | -                      | -                 | -                          | -                       |