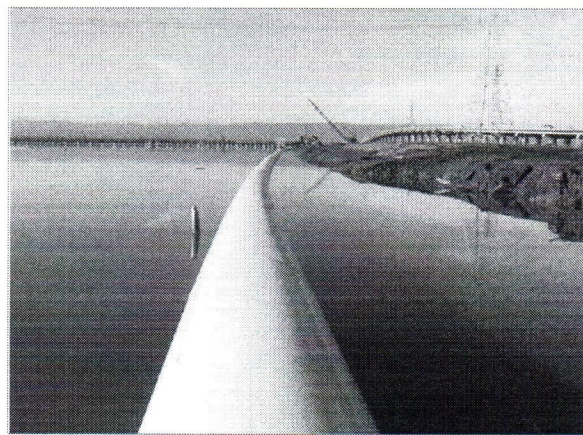


**Firm Proposal**  
**Fusible C-900®**  
**2015 Pipeburst Water Rehab**  
**Billings, MT**

Proposal Number: P15-0537  
Date Prepared: 5/5/2015



**Sales Contact:**  
Pat Laidlaw  
Phone Number: (801) 699-2804  
Email: [PLaidlaw@undergroundsolutions.com](mailto:PLaidlaw@undergroundsolutions.com)  
**Proposal Created by: HM**



Date Prepared: 5/5/2015

Mr. Scott Emerick  
City of Billings  
2251 Belknap Ave.P.O. Box 30958  
Billings, MT 59111

**Ref: 2015 Pipeburst Water Rehab - Billings, MT**  
**Proposal No. P15-0537**

Dear Mr. Emerick,

Underground Solutions, Inc. (UGSI) is pleased to provide the following Firm Proposal for Fusible PVC<sup>®</sup> pipe for the 2015 Pipeburst Water Rehab project. Pricing for pipe (including freight) is detailed in the following section on a Unit Cost (\$/ft) and Total Cost (\$) basis.

Fusible C-900<sup>®</sup> and Fusible C-905<sup>®</sup> pipe meet all applicable industry standards: AWWA C900/C905, NSF-61 Certification for Drinking Water Components, ASTM cell classification 12454, and formulation requirements of Plastics Pipe Institute TR-2. FPVC<sup>®</sup> pressure pipe is tested in accordance with AWWA C900/C905 requirements, meets the same ASTM cell classification and PPI formulation requirements, and is NSF-61 certified when used for potable water.

In evaluating Fusible PVC<sup>®</sup> pipe for this project, we would like to call your attention to the following total installed cost advantages associated with using Fusible PVC<sup>®</sup> pipe:

- Maximum Flow Area:** Fusible PVC<sup>®</sup> pipe generally offers the largest internal diameter in a pipe bursting material. This leads to a smaller OD for a given ID, which means a smaller bursting head and less expensive bursting equipment are needed.
- Material Properties:** Fusible PVC<sup>®</sup> pipe has excellent scratch and abrasion resistance.
- Standard Fittings:** Fusible PVC<sup>®</sup> pipe utilizes standard mechanical joint fittings. No special fittings or equipment are required for connections. As a result, Fusible PVC<sup>®</sup> pipe is easy to connect to and maintain.
- Safe Pulling Allowance:** Fusible PVC<sup>®</sup> pipe has a safe pulling allowance that is significantly greater than that of most other pipe systems, and does not depend on pull-in duration.

Thank you for considering UGSI. Please do not hesitate to contact us for any additional information or with any questions or clarifications.

Sincerely,

*Pat Laidlaw*



## Order Summary

Date Prepared: 5/5/2015  
 Prepared For: City of Billings  
 Prepared By: Pat Laidlaw

Project Reference: 2015 Pipeburst Water Rehab  
 Proposal No.: P15-0537  
 Project Site: Billings, MT

### PRODUCTS AND SERVICES:

| No.                     | Pipe Description        | Pipe Size | DR | Type | Color | Qty., ft | Unit Cost, \$/ft | Total Cost, \$  |
|-------------------------|-------------------------|-----------|----|------|-------|----------|------------------|-----------------|
| 1                       | 8" DR 14 Fusible C-900® | 8"        | 14 | DIPS | Blue  | 4,050    | \$15.25          | \$61,763        |
| Freight to Project Site |                         |           |    |      |       |          |                  | Included        |
| <b>Purchase Price</b>   |                         |           |    |      |       |          |                  | <b>\$61,763</b> |

### SCOPE OF WORK:

Equipment/Services Provided by Underground Solutions, Inc., d/b/a UGSI, Inc. in California ("UGSI" or "Seller"):

- Our scope is limited to pipe supply and freight to project site.

### PULL-HEAD TERMS:

A pull-head is available for rental from UGSI, subject to prior execution of a Pull-Head Rental Agreement (available on the UGSI website at: <http://www.undergroundolutions.com/PDFs/PH-Rental.pdf>). Freight costs will be added to the final pull-head rental invoice following return of the pull-head to UGSI. Refer to the Pull-Head Rental Agreement for specific terms and conditions of rental and purchase option.

|              | Initial Rental Fee | Weekly Rental Rate (After 1st Week) | Estimated Freight (each way) | Purchase Price |
|--------------|--------------------|-------------------------------------|------------------------------|----------------|
| 8" Pull-head | \$259              | \$43                                | \$200                        | \$2,163        |

### PAYMENT TERMS:

100% of purchase price on pipe delivery, net 30 days.

### SHIPPING TERMS:

F.O.B. Shipping Point with full freight allowed to the job site.

### PROPOSAL VALIDITY:

Price quoted is valid for 10 business days from the date of this Proposal.

### DELIVERY SCHEDULE:

To be negotiated. UGSI will take reasonable action to meet Buyer's installation schedule.

### TAXES:

The Purchase Price does not include any sales or similar taxes, which are the Buyer's responsibility (see Section 3 of Terms and Conditions of Sale).

This Proposal is subject to the Terms and Conditions at <http://www.undergroundolutions.com/Ts&Cs/Pipe-Terms-05.18.11.pdf>, which form an integral part of this Proposal. Such Terms and Conditions will govern any transaction resulting from this Proposal. Any contract resulting from this Proposal is made subject to prior acceptance by UGSI at its offices in Poway, California. All orders are subject to prior credit approval. Buyer undertakes to provide the following notice to each subsequent purchaser of the Products: The test frequency set forth in Section 5.1.12 of AWWA/ANSI C900-07 and C905-10, respectively, has been modified pursuant to Section 5.1.14 of the respective standard.

Buyer's signature indicates acceptance of the UGSI Order Summary and Terms and Conditions.

\_\_\_\_\_  
 Buyer's Authorized Signature

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 Print Name & Title

\_\_\_\_\_  
 Print Company Name

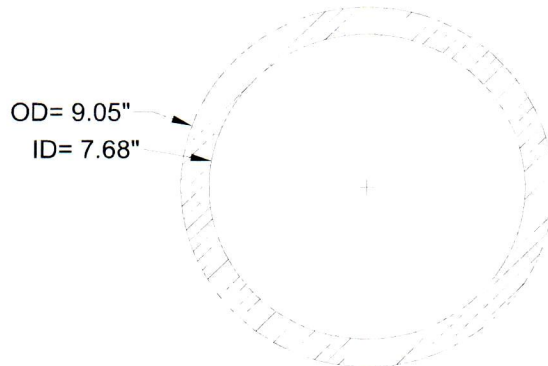
Tax Exempt (must provide Tax Exempt Certificate with order)

Taxable

State Registered Wholesaler

## Pipe Technical Data Sheet

| 8" DR 14 Fusible C-900 <sup>®</sup>               |                            |
|---|----------------------------|
| <b>Pipe Material</b>                              | Fusible C-900 <sup>®</sup> |
| <b>Total Pipe Length (LF)</b>                     | 4,000                      |
| <b>Nominal Diameter (in)</b>                      | 8                          |
| <b>Dimension Ratio</b>                            | DR 14                      |
| <b>Series</b>                                     | DIPS                       |
| <b>Pressure Rating (PSIG)</b>                     | 305                        |
| <b>Safety Factor</b>                              | 2.0                        |
| <b>Outside Diameter (in)</b>                      | 9.05                       |
| <b>Inside Diameter (in)</b>                       | 7.68                       |
| <b>Cross Sectional Flow Area (in<sup>2</sup>)</b> | 46.3                       |
| <b>Bend Radius (LF)</b>                           | 189                        |
| <b>Tensile Strength (PSIG)</b>                    | 7,000                      |
| <b>Safe Pulling Force (lbs)</b>                   | 47,700                     |
| <b>Safe Pulling Stress (PSIG)</b>                 | 2,800                      |
| <b>Relaxation Period (hrs)</b>                    | 0                          |
| <b>Hydrostatic Design Basis (PSIG)</b>            | 4,000                      |
| <b>Critical Buckling Pressure (PSIG)</b>          | 425                        |
| <b>Connection to Host Pipe</b>                    | Standard Mechanical Joint  |
| <b>Material Weight (lbs/ft)</b>                   | 11.0                       |
| <b>Total Pipe Weight (lbs)</b>                    | 44,129                     |
| <b>Water Disinfectant Induced Oxidation</b>       | High Resistance            |
| <b>Hydrocarbon Permeation</b>                     | High Resistance            |



8" DR 14 Fusible C-900<sup>®</sup>

Fusible C-900<sup>®</sup> and Fusible C-905<sup>®</sup> pipe is now manufactured and marked to conform to the latest versions of the AWWA/ANSI C900 and C905 standards. The current version of AWWA/ANSI C900 increases the pressure classes for C900 PVC pipe to conform with pressure classes for C905 PVC pipe. During a transition period, UGSI may supply pipe manufactured and marked in accordance with either the 1997 or current versions of the appropriate standard, depending on pipe availability.

Supporting references for the above data can be found at:  
<http://www.underground solutions.com/technical-data-references.php>



## **Storage, Handling, Installation, Pressure Testing, and Tapping Procedures Applicable to Fusible PVC® Pipe**

The procedures for storing, handling, installing, testing, and tapping Fusible PVC® pipe are similar to those used when working with bell and spigot PVC products. Because of the different stresses to which Fusible PVC® pipe is often subjected, the longer pipe lengths supplied, the monolithic nature of the installed product, and the different installation methods employed when using Fusible PVC® pipe, there are some additional handling requirements associated with Fusible PVC® pipe products.

UGSI has developed an Operations Procedural Documents Handbook to provide guidance covering the following topics:

- Pipe Handling and Storage
- Installation
- Pressure Testing
- Tapping

Proper handling and installation of Fusible PVC® pipe in accordance with the guidelines provided in the Operations Procedural Documents Handbook will preserve your warranty protection.

UGSI will provide a copy of the Operations Procedural Documents Handbook upon the acceptance of your order in accordance with the terms of the Proposal. In the meantime, contact your UGSI representative if you have any questions or concerns regarding the proper handling and use of Fusible PVC® products.