**CPF2 2017 IN** 

## REQUEST FOR INFORMATION - INDUSTRY PROFIT SURVEY

#### under the

## Special Import Measures Act

concerning Canada's dumping and subsidy investigations of

# CERTAIN COPPER PIPE FITTINGS ORGINATING IN OR EXPORTED FROM THE SOCIALIST REPUBLIC OF VIETNAM

**DUE DATE FOR** 

Your complete response to this Request for Information (RFI) should be

RESPONSE

received in the CBSA's office in Ottawa, Ontario, no later than

November 17, 2017.

RETURN YOUR RESPONSE TO:

SIMA Registry and Disclosure Unit Canada Border Services Agency

100 Metcalfe Street, 11th Floor

Ottawa, Ontario

K1A 0L8

Tel. (for courier reference only): 613-948-4605

Fax: 613-948-4844

E-mail at: simaregistry-depotlmsi@cbsa-asfc.gc.ca

FOR FURTHER INFORMATION

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IMPORTANT NOTE: All information provided to the CBSA is deemed to be public information and will be made available to interested parties unless the information is clearly marked as confidential. All confidential information must be accompanied with a non-confidential (public) version and a Non-Confidential Statement. Please refer to the covering letter for specific details.



## **Product Definition**

## **Definition of Goods Subject to the Investigations**

The subject goods referred to as "certain copper pipe fittings" are defined as:

Pressure pipe fittings and drainage, waste and vent pipe fittings, made of cast copper alloy, wrought (or "wrot") copper alloy or wrought copper for use in heating, plumbing, air conditioning and refrigeration applications originating in or exported from the Socialist Republic of Vietnam, restricted to the products enumerated below.

## **Products Covered by the Investigations:**

The following information is to be taken into consideration in identifying copper pipe fittings (subject goods) being investigated by the Canada Border Services Agency (CBSA):

- 1. The subject goods are identified in terms of imperial measurement, i.e. inches. The CBSA is also investigating subject goods that encompass the metric equivalents of the imperial measurement. The term metric equivalent refers to those fittings that are soft converted equivalents of the imperial sized fittings and does not include fittings made specifically in metric dimensions.
- The subject goods are identified either as a wrought product or as a cast product. Where a subject good contains an asterisk.
   ("\*") the CBSA is investigating both the wrought product and the cast product.
- 3. The subject goods are identified in terms of nominal size. Plumbing and heating fittings are marked according to nominal sizes that correspond to the inside diameters, while fittings for air conditioning and refrigeration are based on actual outer diameter sizes. The CBSA is also investigating subject goods that are described in terms of their outside diameter size. To determine the nominal size of a fitting that is measured in terms of its outside diameter size, always subtract from the outside diameter size.
- 4. The subject goods are identified using abbreviated terms provided by the complainant (Cello Products Inc.). The following is a list of the terms:

|     | Abbreviation Chart                  |     |                       |  |  |  |
|-----|-------------------------------------|-----|-----------------------|--|--|--|
| С   | Copper Tube Cupped End or Sweat End | LT  | Long Turn             |  |  |  |
| M   | Male NPT Thread                     | MJ  | Mechanical Joint      |  |  |  |
| FE  | Female NPT Thread                   | DWV | Drainage, Waste, Vent |  |  |  |
| SJ  | Slip Joint End                      | TY  | 90° Drainage Tee      |  |  |  |
| FTG | Fitting End (Street End)            | Y   | 45° Drainage Tee      |  |  |  |

| Subject Copper Pipe Fittings   | Cast &<br>Wrot | Subject Copper Pipe Fittings   | Cast &<br>Wrot |
|--------------------------------|----------------|--------------------------------|----------------|
| 3 X 4 CLOSET FLANGE            | *              | 1 X 5/8 CXC WROT COUPLING      | *              |
| 4 X 4 CLOSET FLANGE            | *              | 1 X 3/4 CXC WROT COUPLING      | *              |
| 3 X 1-1/2 FITXC CAST DWV BUSH  | *              | 1-1/4 CXC WROT P COUPLING      | *              |
| ,                              |                | 1-1/4 X 1/2 CXC WROT           |                |
| 4 X 1-1/2 CXC CAST DWV CPLGS   | *              | COUPLINGS                      | *              |
| 4 X 3 CXC CAST DWV COUPLING    | *              | 1-1/4 X 3/4 CXC WROT COUPLING  | *              |
| 1-1/4 CXCXC 45 Y'S             | *              | 1-1/4 X 1 CXC WROT COUPLING    | *              |
| 1-1/2 CXCXC 45 DWV Y'S         | *              | 3/8 X 1/8 FTGXC WROT BUSHING   | *              |
| 1-1/2CX 1-1/4CX 1-1/4C 45 Y'S  | *              | 3/8 X 1/4 FITXC WROT BUSHING   | *              |
| 1-1/2CX 1-1/4CX 1-1/2C 45 Y'S  | *              | 1/2 X 1/4 FITXC WROT BUSHING   | *              |
| 1-1/2CX 1-1/2CX 1-1/4C 45 Y'S  | *              | 1/2 X 3/8 FITXC WROT BUSHING   | *              |
| 2 CXCXC 45 DWV Y'S             | *              | 5/8 X 1/4 WROT P BUSHING       | *              |
| 2CX 1-1/4CX 1-1/4C 45 Y'S      | *              | 5/8 X 3/8 FITXC WROT BUSHING   | *              |
| 2CX 1-1/4CX 1-1/2C 45 Y'S      | *              | 5/8 X 1/2 FITXC WROT BUSHING   | *              |
| 2CX 1-1/4CX 2C 45 Y'S          | *              | 3/4 X 1/4 FITXC WROT BUSHING   | *              |
| 2CX 1-1/2CX 1-1/4C 45 Y'S      | *              | 3/4 X 3/8 FITXC WROT BUSHING   | *              |
| 2CX 1-1/2CX 1-1/2C 45 Y'S      | *              | 3/4 X 1/2 FITXC WROT BUSHING   | *              |
| 2CX 1-1/2CX 2C 45 Y'S          | *              | 3/4 X 5/8 FITXC WROT BUSHING   | *              |
| 2CX 2CX 1-1/4C 45 Y'S          | *              | 1 X 3/8 FITXC WROT BUSHING     | *              |
| 2CX 2CX 1-1/2C 45 Y'S          | *              | 1 X 1/2 FITXC WROT BUSHING     | *              |
| 3 CXCXC 45 DWV Y'S             | *              | 1 X 5/8 FITXC WROT BUSHING     | *              |
| 3C X 2C X 2C DWV 45 Y'S        | *              | 1 X 3/4 FITXC WROT BUSHING     | *              |
| 3CX 3CX 1-1/4C 45 Y'S          | *              | 1-1/4 X 1/2 FITXC WROT BUSHING | *              |
| 3CX 3CX 1-1/2C 45 Y'S          | *              | 1-1/4 X 3/4 FITXC WROT BUSHING | *              |
| 3CX 3CX 2C 45 Y'S              | *              | 1-1/4 X 1 FITXC WROT BUSHING   | *              |
| 4 CXCXC 45 Y'S                 | *              | 1-1/2 X 1/2 FITXC WROT BUSHING | *              |
| 4CX 4CX 2C 45 Y'S              | *              | 1-1/2 X 3/4 FITXC WROT BUSHING | *              |
| 4CX 4CX 3C 45 Y'S              | *              | 1-1/2 X 1 FITXC WROT BUSHING   | *              |
| 1-1/4 DWV TY'S                 | *              | 1-1/2 X1-1/4 FITXC WROT P BUSH | *              |
| 1-1/2 DWV TY'S                 | *              | 2 X 1/2 FITXC WROT BUSHING     | *              |
| 1-1/2 X 1-1/4 X 1-1/4 DWV TY'S | *              | 2 X 3/4 FITXC WROT BUSHING     | *              |
| 1-1/2 X 1-1/4 X 1-1/2 DWV TY'S | *              | 2 X 1 FITXC WROT BUSHING       | *              |
|                                |                | 2 X 1-1/4 FITXC WROT P         |                |
| 1-1/2 X 1-1/2 X 1-1/4 DWV TY'S | *              | BUSHING                        | *              |
|                                |                | 2 X 1-1/2 FITXC WROT P         |                |
| 3 FTG X C X C DWV TY'S         | *              | BUSHING                        | *              |
| 3 X 3 X 1-1/4 FITXCXC DWV TY'S | *              | 1-1/2 CXC WROT P COUPLING      | *              |
| 3 X 3 X 1-1/2 FITXCXC DWV TY   | *              | 2-1/2 X 1 FITXC WROT BUSHING   | *              |
| 3 X 3 X 2 FITXCXC DWV TYS      | *              | 2-1/2 X 1-1/4 FITXC WROT BUSH  | *              |
| 2 DWV TY'S                     | *              | 2-1/2 X 1-1/2 FITXC WROT BUSH  | *              |
| 2 X 1-1/4 X 1-1/4 DWV TY'S     | *              | 2-1/2 X 2 FITXC WROT BUSHING   | *              |
| 2 X 1-1/4 X 1-1/2 DWV TY'S     | *              | 1-1/2 X 1/2 CXC WROT COUPLING  | *              |
| 2 X 1-1/4 X 2 DWV TY'S         | *              | 1-1/2 X 3/4 CXC WROT COUPLING  | *              |
| 2 X 1-1/2 X 1-1/4 DWV TY'S     | *              | 1-1/2 X 1 CXC WROT COUPLING    | *              |
| 2 X 1-1/2 X 1-1/2 DWV TY'S     | *              | 1-1/2 X 1-1/4 CXC WROT P CPLG  | *              |
| 2 X 1-1/2 X 2 DWV TY'S         | *              | 3 X 1/2 FITXC WROT P BUSHING   | *              |

| Subject Copper Pipe Fittings     | Cast &<br>Wrot | Subject Copper Pipe Fittings  | Cast &<br>Wrot |
|----------------------------------|----------------|-------------------------------|----------------|
| 2 X 2 X 1-1/4 DWV TY'S           | *              | 3 X 3/4 FITXC WROT P BUSHING  | *              |
| 2 X 2 X 1-1/2 DWV TY'S           | *              | 3 X 1 FITXC WROT P BUSHING    | *              |
|                                  |                | 3 X 1-1/4 FITXC WROT P        |                |
| 1-1/2 CXCXFE CAST DWV TY         | *              | BUSHING                       | *              |
|                                  |                | 3 X 1-1/2 FITXC WROT P        |                |
| 2 CXCXFE CAST DWV TY             |                | BUSHING                       | *              |
| 2 X 1-1/2 X 1-1/2 CCF DWV TYS    |                | 3 X 2 FITXC WROT P BUSHING    | *              |
| 3 DWV TY'S                       | *              | 3 X 2-1/2 FITXC WROT BUSHING  | *              |
|                                  |                | 3-1/2 X 2 FITXC WROT P        |                |
| 3 X 1-1/2 X 1-1/4 DWV TY'S       | *              | BUSHING                       | *              |
| 3 X 2 X 1-1/2 CXCXC DWV TY'S     | *              | 3-1/2 X 2-1/2 FITXC WROT BUSH | *              |
| 3 X 3 X 1-1/4 DWV TY'S           | *              | 3-1/2 X 3 FITXC WROT BUSHING  | *              |
| 3 X 3 X 1-1/2 DWV TY'S           | *              | 4 X 1-1/4 FITXC WROT BUSHING  | *              |
| 3 X 3 X 2 DWV TY'S               | *              | 4 X 1-1/2 FITXC WROT BUSHING  | *              |
| 4 DWV TY'S                       | *              | 4 X 2 FITXC WROT P BUSHING    | *              |
| 4 X 4 X 1-1/2 DWV TY'S           | *              | 4 X 2-1/2 FITXC WROT BUSHING  | *              |
| 4 X 4 X 2 DWV TY'S               | *              | 4 X 3 FITXC WROT P BUSHING    | *              |
| 4 X 4 X 3 DWV TY'S               | *              | 4 X 3-1/2 FITXC WROT BUSHING  | *              |
| 1-1/4 CXFE CAST DWV ADAPTER      | *              | 2 CXC WROT P COUPLING         | *              |
| 1-1/2 FITXFE CAST DWV<br>ADAPTER | *              | 2 X 1/2 CXC WROT COUPLING     | *              |
| 1-1/2 CXFE CAST DWV ADAPTER      | *              | 2 X 3/4 CXC WROT COUPLING     | *              |
| 1-1/2 X 1-1/4 CXFE CAST ADAPT    | *              | 2 X 1 CXC WROT COUPLING       | *              |
| 3 FITXFE CAST DWV ADAPTER        | *              | 2 X 1-1/4 CXC WROT P COUPLING | *              |
| 2 CXFE CAST DWV ADAPTER          | *              | 2 X 1-1/2 CXC WROT P COUPLING | *              |
| 3 CXFE CAST DWV ADAPTER          | *              | 2-1/2 CXC WROT P COUPLING     | *              |
| 4 CXFE CAST DWV ADAPTER          | *              | 2-1/2 X 3/4 CXC WROT COUPLING | *              |
| 1-1/4 CXM CAST DWV ADAPTER       | *              | 2-1/2 X 1 CXC WROT P CPLGS    | *              |
| 1-1/4X1-1/2 CXM CAST DWV         |                |                               |                |
| ADAPT                            | *              | 2-1/2 X 1-1/4 CXC WROT CPLG   | *              |
| 1-1/2 FTGXM CAST DWV             |                |                               |                |
| ADAPTER                          | *              | 2-1/2 X 1-1/2 CXC WROT CPLG   | *              |
| 1-1/2 CXM CAST DWV ADAPTER       | *              | 2-1/2 X 2 CXC WROT COUPLING   | *              |
| 1-1/2X1-1/4 CXM CAST DWV         |                |                               |                |
| ADAPT                            | *              | 3 CXC WROT P COUPLING         | *              |
| 2 CXM CAST DWV ADAPTER           | *              | 3 X 3/4 CXC WROT P COUPLING   | *              |
| 2 X 1-1/2 CXM CAST DWV ADAPT     | *              | 3 X 1 CXC WROT P COUPLING     | *              |
| 3 CXM CAST DWV ADAPTER           | *              | 3 X 1-1/4 CXC WROT P COUPLING | *              |
| 4 CXM CAST DWV ADAPTER           | *              | 3 X 1-1/2 CXC WROT P COUPLING | *              |
| 1-1/4 X 2 CXSP CAST FERRULES     | *              | 3 X 2 CXC WROT P COUPLING     | *              |
| 1-1/2 X 2 CXSP CAST FERRULES     | *              | 3 X 2-1/2 CXC WROT P COUPLING | *              |
| 1-1/2 X 3 CXSP CAST FERRULE      | *              | 3-1/2 CXC WROT P COUPLING     | *              |
| 2 CXSP CAST FERRULES             | *              | 3-1/2 X 3 CXC WROT COUPLING   | *              |
| 2 X 3 CXSP CAST FERRULE          | *              | 4 CXC WROT P COUPLING         | *              |
| 2 X 4 CXSP CAST FERRULES         | *              | 4 X 1-1/2 CXC WROT P COUPLING | *              |
| 3 CXSP CAST FERRULES             | *              | 4 X 2 CXC WROT P COUPLING     | *              |
| 3 X 4 CXSP CAST FERRULES         | *              | 4 X 2-1/2 CXC WROT COUPLING   | *              |

| Subject Copper Pipe Fittings   | Cast &<br>Wrot | Subject Copper Pipe Fittings  | Cast &<br>Wrot |
|--------------------------------|----------------|-------------------------------|----------------|
| 4 CXSP CAST FERRULES           | *              | 4 X 3 CXC WROT P COUPLING     | *              |
| 3 X 4 CXSP CAST ECC FERRULES   | *              | 4 X 3-1/2 CXC WROT COUPLING   | *              |
| 1-1/4 X 2 CXMJ CAST ADAPTER    | *              | 5 CXC WROT PRESS COUPLING     | *              |
| 1-1/4 X 3 CXMJ DWV ADAPTER     | *              | 6 CXC WROT PRESS COUPLING     | *              |
| 1-1/2 X 2 CXMJ CAST ADAPTER    | *              | 6 X 2-1/2 WROT COUPLINGS      | *              |
| 1-1/2 X 3 CXMJ CAST ADAPTER    | *              | 1-1/4 X 3/4 CXC WROT ECC CPLG | *              |
| 1-1/2 X 4 CXMJ CAST ADAPTER    | *              | 1-1/4 X 1 CXC WROT ECC CPLG   | *              |
| 2 X 3 CXMJ CAST ADAPTER        | *              | 1/8 CXC WROT CPLGS NO STOP    | *              |
| 2 X 4 CXMJ CAST ADAPTER        | *              | 1/4 CXC NSTOP WROT CPLGS      | *              |
| 3 CXMJ CAST ADAPTER            | *              | 3/8 CXC WROT CPLGS NO STOP    | *              |
| 3 X 4 CXMJ CAST ADAPTER        | *              | 1/2 CXC WROT CPLGS NO STOP    | *              |
| 4 CXMJ CAST ADAPTER            | *              | 5/8 CXC WROT CPLGS NO STOP    | *              |
| 6 C X M J CAST DWV ADAPTER     | *              | 3/4 CXC WROT CPLGS NO STOP    | *              |
| 1-1/4 CXC 11-1/4 CAST ELBOW    | *              | 1 CXC WROT CPLGS NO STOP      | *              |
| 1-1/2 CXC 11-1/4 CAST ELBOW    | *              | 1-1/4 CXC WROT CPLGS NO STOP  | *              |
| 2 CXC 11-1/4 CAST ELBOW        | *              | 1-1/2 CXC WROT CPLGS NO STOP  | *              |
| 3 CXC 11-1/4 CAST ELBOW        | *              | 2 CXC WROT CPLGS NO STOP      | *              |
| 4 C X C 11-1/4 CAST ELBOW      | *              | 2-1/2 CXC WROT CPLG NO STOP   | *              |
| 1-1/4 CXC 22-1/2 CAST ELBOW    | *              | 3 CXC WROT CPLGS NO STOP      | *              |
| 1-1/2 CXC 22-1/2 CAST ELBOW    | *              | 4 CXC WROT CPLGS NO STOP      | *              |
| 2 CXC 22-1/2 CAST ELBOW        | *              | 5 CXC WROT CPLGS NO STOP      | *              |
| 3 CXC 22-1/2 CAST ELBOW        | *              | 6 CXC WROT CPLGS NO STOP      | *              |
| 4 CXC 22-1/2 CAST ELBOW        | *              | 1/2 X 3 CXC REPAIR COUPLING   |                |
| 3 FITXC 45 CAST DWV ELBOW      | *              | 1/2 X 6 C X C REPAIR COUPLING |                |
| 4 FITXC 45 CAST DWV ELBOW      | *              | 3/4 X 3 C X C REPAIR COUPLING |                |
| 2 CXM CAST DWV 45 ELBOW        | *              | 1/8 CXC P RING COUPLING       | *              |
| 1-1/4 CXC 45 CAST DWV ELBOW    | *              | 1/4 CXC RING COUPLINGS        | *              |
| 1-1/2 CXC 45 CAST DWV ELBOW    | *              | 3/8 CXC P RING COUPLING       | *              |
| 2 CXC 45 CAST DWV ELBOW        | *              | 1/2 CXC RING COUPLINGS        | *              |
| 3 CXC 45 CAST DWV ELBOW        | *              | 5/8 CXC P RING COUPLING       | *              |
| 4 CXC 45 CAST DWV ELBOW        | *              | 3/4 CXC RING COUPLINGS        | *              |
| 1-1/4 CXC 60 CAST ELBOW        | *              | 1 CXC P RING COUPLING         | *              |
| 1-1/2 CXC 60 CAST ELBOW        | *              | 1-1/4 CXC P RING COUPLING     | *              |
| 2 CXC 60 CAST ELBOW            | *              | 1-1/2 CXC P RING COUPLING     | *              |
| 3 CXC 60 CAST ELBOW            | *              | 2 CXC P RING COUPLING         | *              |
| 1-1/4 CXC 90 CAST DWV ELBOW    | *              | 2-1/2 CXC RING COUPLINGS      | *              |
| 1-1/4 FITXC 90 CAST DWV        |                |                               |                |
| ELBOW                          | *              | 3 CXC P RING COUPLING         | *              |
| 1-1/2 FITXC 90 CAST DWV        |                |                               |                |
| ELBOW                          | *              | 4 CXC P RING COUPLING         | *              |
| 2 FITXC 90 CAST DWV ELBOW      | *              | 1/2 X 3-1/4 FTGXC SLIDE CPLG  |                |
| 1-1/2 CXC 90 CAST DWV ELBOW    | *              | 3/4 X 5 FTGXC SLIDE COUPLING  |                |
| 1-1/2 X 1-1/4 CXC DWV 90 ELBOW | *              | 1/4 C X FE WROT ADAPTERS      | *              |
| 3 CAST DWV FTGXC 90 ELBOW      | *              | 3/8 C X FE WROT ADAPTERS      | *              |
| 4 FITXC 90 CAST DWV ELBOW      | *              | 3/8 X 1/4 CXFE WROT ADAPTERS  | *              |
| 2 CXC 90 CAST DWV ELBOW        | *              | 3/8 X 1/2 CXFE WROT ADAPTERS  | *              |

| Subject Copper Pipe Fittings   | Cast &<br>Wrot | Subject Copper Pipe Fittings  | Cast &<br>Wrot |
|--------------------------------|----------------|-------------------------------|----------------|
| 2X 1-1/4 CXC 90 CAST DWV       |                |                               |                |
| ELBOW                          | *              | 1/2 C X FE WROT ADAPTERS      | *              |
| 2 X 1-1/2 CXC 90 CAST DWV ELB  | *              | 1/2 X 1/4 CXFE WROT ADAPTER   | *              |
| 1-1/2 CXFE 90 CAST DWV ELBOW   | *              | 1/2 X 3/8 CXFE WROT ADAPTER   | *              |
| 2 CXFE 90 CAST DWV ELBOW       | *              | 1/2 X 3/4 CXFE WROT ADAPTER   | *              |
| 1-1/2 CXM 90 CAST DWV ELBOW    |                | 1/2 X 1 CXFE WROT ADAPTER     | *              |
| 2 CXM 90 CAST DWV ELBOW        |                | 5/8 X 1/2 CXFE WROT ADAPTER   | *              |
| 3 CXC 90 CAST DWV ELBOW        |                | 5/8 X 3/4 CXFE WROT ADAPTER   | *              |
| 4 CXC 90 CAST DWV ELBOW        |                | 3/4 C X FE WROT ADAPTERS      | *              |
| 1-1/2 TUBE END CLEANOUTS       | *              | 3/4 X 1/2 CXFE WROT ADAPTER   | *              |
| 3 TUBE END CLEANOUTS           | *              | 3/4 X 1 CXFE WROT ADAPTER     | *              |
| 3 FTG CLEANOUT - FLUSH TYPE    | *              | 3/4 X 1-1/4 CXFE WROT ADAPTER | *              |
| 4 FTG CLEANOUT - FLUSH TYPE    | *              | 3/4 X 1-1/2 CXFE WROT ADAPTER | *              |
| 1-1/4 FTG CLEANOUT - FULL      |                |                               |                |
| PLUG                           | *              | 1 C X FE WROT ADAPTER         | *              |
| 1-1/2 FTG CLEANOUT - FULL      |                |                               |                |
| PLUG                           | *              | 1 X 1/2 CXFE WROT ADAPTER     | *              |
| 2 FTG CLEANOUT - FULL PLUG     | *              | 1 X 3/4 CXFE WROT ADAPTER     | *              |
| 3 FTG CLEANOUT - FULL PLUG     | *              | 1 X 1-1/4 CXFE WROT ADAPTER   | *              |
| 4 FTG CLEANOUT - FULL PLUG     | *              | 1 X 1-1/2 CXFE WROT ADAPTER   | *              |
| 1-1/4 FITXSJ CAST ADAPTER      | *              | 1-1/4 C X FE WROT ADAPTER     | *              |
| 4 ACT(3S)X1-1/2C-30 ROOF       |                | 1-1/4 C X 3/4 FEMALE WROT     |                |
| ADAPT                          | *              | ADAP                          | *              |
| 4 ACT(3S) X 2C-30 ROOF         |                |                               |                |
| ADAPTER                        | *              | 1-1/4 X 1 CXFE WROT ADAPTERS  | *              |
|                                |                | 1-1/4 X 1-1/2 CXFE WROT       | F              |
| 4 SOIL(5A)X 1-1/2 C ROOF ADAPT | *              | ADAPTR                        | *              |
|                                |                | 1-1/4 X 2 CXFE WROT PRESS     |                |
| 2 C X SJ DWV COUPLING          | *              | ADAP                          | *              |
| 3/4 CXC CAST COUPLINGS         | *              | 1/4 FITXFE WROT ADAPTER       | *              |
| 1-1/4 CXC CAST P COUPLINGS     | *              | 3/8 FITXFE WROT ADAPTER       | *              |
| 1/2 CXCXFE CAST TEE            |                | 3/8 X 1/4 FTG X FE WROT ADAPT | *              |
| 1/2 X 1/2 X 1/4 CXCXFE C TEE   |                | 1/2 FITXFE WROT ADAPTER       | *              |
|                                |                | 1/2 X 1/4 FTGXFE WROT         |                |
| 1/2C X 1/2C X 3/8FE CAST TEE   |                | ADAPTER                       | *              |
| 1/2 X 1/2 X 3/4 CXCXF CAST TEE |                | 1/2 X 3/8 FITT X FE ADAPTER   | *              |
| 3/4 CXCXFE CAST TEE            |                | 1/2 FTG X 3/4 FE WROT ADAPTER | *              |
| 3/4C X 1/2C X 1/2FE CAST TEE   |                | 3/4 FITXFE WROT ADAPTER       | *              |
|                                |                | 3/4 FTG X 1/2 FEMALE WROT     |                |
| 3/4 X 1/2 X 3/4 CXCXF CAST TEE |                | ADAP                          | *              |
| 3/4 X 3/4 X 3/8 CCFE CAST TEE  |                | 1 FITXFE WROT ADAPTER         | *              |
|                                |                | 1 FTG X 3/4 FEMALE WROT       |                |
| 3/4C X 3/4C X 1/2FE CAST TEE   |                | ADAPTE                        | *              |
| 3/4 X 3/4 X 1 CXCXFE CAST TEE  |                | 1-1/4 FITXFE WROT ADAPTER     | *              |
| 1 CXCXFE CAST TEE              |                | 1-1/2 FITXFE WROT ADAPTER     | *              |
| 1 X 1 X 1/2 CXCXFE CAST TEE    |                | 2 FITXFE WROT ADAPTERS        | *              |
| 1 X 1 X 3/4 CXCXFE CAST TEE    |                | 1-1/2 C X FE WROT ADAPTER     | *              |

| Subject Copper Pipe Fittings                                 | Cast &<br>Wrot | Subject Copper Pipe Fittings                            | Cast &<br>Wrot |
|--|----------------|---|----------------|
| 1-1/4 CXCXFE CAST TEE  |                | 2-1/2 FITXFE WROT ADAPTER                               | *              |
| 1-1/4 X 1-1/4 X 1/2 CCFE TEE                                 |                | 1-1/2 C X 1 FEMALE ADAPTER                              | *              |
| 1-1/4 X 1-1/4 X 3/4 CCFE TEE                                 |                | 1-1/2 X 1-1/4 CXFE WROT ADAPT                           | *              |
| 1-1/4X1-1/4X1 CCFE TEE                                       |                | 1-1/2 X 2 CXFE WROT ADAPTER                             | *              |
| 1-1/2 CXCXFE CAST TEE  |                | 3 FITXFE WROT ADAPTER                                   | *              |
| 1-1/2X1-1/2X1/2 CCFE TEE                                     |                | 3/4 CXC WROT UNION                                      | *              |
| 1-1/2 X 1-1/2 X 3/4 CCFE TEE                                 |                | 1 CXC WROT UNION  | *              |
| 1-1/2 X 1-1/2 X 1 CCFE TEE                                   |                | 2 C X FE WROT ADAPTER                                   | *              |
| 1/2 CXFEXFE CAST TEE   |                | 1-1/4 CXC WROT UNION                                    | *              |
| 1/2C X 3/4F X 1/2F CAST TEE                                  |                | 2 X 1 C X FE WROT ADAPTER                               | *              |
| 3/4 C X FE X FE CAST TEE                                     |                | 2 X 1-1/4 CXFE WROT ADAPTER                             | *              |
| 3/4 C X 3/4 FE X 1/2 FE TEE                                  |                | 2 X 1-1/2 CXFE WROT ADAPTER                             | *              |
| 2 CXCXFE CAST TEE  |                | 1-1/2 C X C WROT UNION                                  | *              |
| 2 X 2 X 1/2 CXCXFE CAST TEE                                  |                | 1/2 C X FE WROT UNION                                   | *              |
| 2 X 2 X 3/4 CXCXFE CAST TEE                                  |                | 3/4 C X FE WROT UNION                                   | *              |
| 2 X 2 X 1 CXCXFE CAST TEE                                    |                | 1 C X FE WROT UNION                                     | *              |
| 5 X 4 FITXC CAST BUSHING                                     | *              | 2 CXC WROT UNIONS                                       | *              |
| 6 X 2 FITXC CAST BUSHING                                     | *              | 1-1/4 C X FE WROT UNION                                 | *              |
| 6 X 3 FITXC CAST BUSHING                                     | *              | 1-1/2 C X FE WROT UNION                                 | *              |
| 6 X 4 FITXC CAST BUSHING                                     | *              | 2 C X FE WROT UNION                                     | *              |
| 6 X 5 FTGXC CAST P BUSHING                                   | *              | 1/2 C X M WROT UNION                                    | *              |
| 3/8 C X FE X C CAST TEE                                      |                | 3/4 C X M WROT UNIONS                                   | *              |
| 1/2 CXFEXC CAST TEE  | 1              | 1 C X M WROT UNION                                      | *              |
| 1/2C X 1/2FE X 3/4C CAST TEE                                 |                | 1-1/4 C X M WROT UNION                                  | *              |
| 1/2C X 3/4FE X 1/2C CAST TEE                                 |                | 1-1/2 C X M WROT UNION                                  | *              |
| 3/4 CXFEXC CAST TEE  |                | 2 C X M WROT UNION                                      | *              |
| 3/4 X 1/2 X 1/2 CXFEXC TEE                                   |                | 2-1/2 C X FE WROT ADAPTER                               | *              |
| 3/4C X 1/2FE X 3/4C CAST TEE                                 |                | 3 C X FE WROT ADAPTERS                                  | *              |
| 5/4C X 1/2FE X 5/4C CAST TEE                                 |                | 1/2 CXC WROT CROSSOVER                                  |                |
| 3/4C X 3/4FE X 1/2C CAST TEE                                 |                | CPLG  | *              |
| SHE A SHILL A HZC CAST TEE                                   |                | 3/4 CXC WROT CROSSOVER                                  |                |
| 1 CXFEXC CAST TEE  |                | CPLG  | *              |
| 1C X 1/2F X 1C CAST TEE                                      |                | 1/4 CXM WROT ADAPTER                                    | *              |
| 1 X 3/4 X 1 CXFXC CAST TEE                                   |                | 1/4 X 3/8 CXM WROT ADAPT                                | *              |
| 1-1/4 CXFEXC CAST TEE  |                | 1/4 X 1/2 CXM WROT ADAPTER                              | *              |
| 1-1/4 X 1/2 X 1-1/4 CXFEXC TEE                               |                | 3/8 CXM WROT ADAPTER                                    | *              |
| 1-1/4 X 3/4 X 1-1/4 CXFEXC TEE                               |                | 3/8 X 1/4 CXM WROT ADAPTER                              | *              |
| 1-1/2 C X FE X C CAST TEE                                    |                | 3/8 X 1/4 CAM WROT ADAI TER  3/8 X 1/2 CXM WROT ADAPTER | *              |
| 1-1/2X1/2X1-1/2 CXFXC CAST TEE                               |                | 1/2 CXM WROT ADAPTER                                    | *              |
| 1-1/2X1/2X1-1/2 CXFAC CAST TEE<br>1-1/2X3/4X1-1/2 CXFEXC TEE |                | 1/2 X 1/4 CXM WROT ADAPTER                              | *              |
| 1/2 FEXFEXC CAST TEE   |                | 1/2 X 3/8 CXM WROT ADAPTER                              | *              |
| 3/4 FEXFEXC CAST TEE   |                | 1/2 X 3/8 CAM WROT ADAPTER                              | *              |
| 3/4FE X 1/2FE X 1/2C CAST TEE                                |                | 1/2 X 1 CXM WROT ADAPTER                                | *              |
| 3/4FE X 1/2FE X 3/4C CAST TEE                                |                | 5/8 X 1/2 CXM WROT ADAPTER                              | *              |
| 3/4FE X 3/4FE X 1/2C CAST TEE                                | 1              | 5/8 X 3/4 CXM WROT ADAPTER                              | *              |
| 2 C X FE X C CAST TEE  |                | 3/4 CXM WROT ADAPTER                                    | *              |
| 2 CAFEA C CAST TEE   |                | 5/4 CAM WROT ADAPTER                                    | 187            |

| Subject Copper Pipe Fittings                           | Cast &<br>Wrot | Subject Copper Pipe Fittings                        | Cast &<br>Wrot |
|--|----------------|---|----------------|
|  |                | 3/4 C X 3/8 WROT MALE                               |                |
| 2 X 1/2 X 2 CXFEXC TEE                                 |                | ADAPTER   | *              |
| 2 X 3/4 X 2 CXFXC CAST TEE                             |                | 3/4 X 1/2 CXM WROT ADAPTER                          | *              |
| 4 CXC CAST P COUPLINGS                                 | *              | 3/4 X 1 CXM WROT ADAPTER                            | *              |
| 5 X 3 CXC CAST COUPLING                                | *              | 3/4 X 1-1/4 CXM WROT ADAPTER                        | *              |
| 5 X 4 CXC CAST COUPLING                                | *              | 3/4 X 1-1/2 CXM WROT ADAPTER                        | *              |
| 6 X 2 CXC CAST PRESS                                   |                |   |                |
| COUPLING   | *              | 1 CXM WROT ADAPTER                                  | *              |
| 6 X 3 CXC CAST P COUPLINGS                             | *              | 1 X 1/2 CXM WROT ADAPTER                            | *              |
| 6 X 4 CXC CAST P COUPLINGS                             | *              | 1 X 3/4 CXM WROT ADAPTER                            | *              |
| 6 X 5 CXC CAST COUPLING                                | *              | 1 X 1-1/4 CXM WROT ADAPTER                          | *              |
| 3/4 X 1/2 CXC CAST ECC COUPL                           | *              | 1 X 1-1/2 CXM WROT ADAPTER                          | *              |
|  |                | 1 X 2 CXMALE PRESSURE                               |                |
| 1 X 1/2 CAST ECC COUPLING                              | *              | ADAPTER   | *              |
| 1 X 3/4 CXC CAST ECC COUPLING                          | *              | 1-1/4 CXM WROT ADAPTER                              | *              |
| 1-1/4 X 1/2 CAST ECC COUPLING                          | *              | 1-1/4 X 3/4 CXM WROT ADAPTER                        | *              |
| 1-1/2 X 1 CXC CAST ECC COUPLIN                         | *              | 1-1/4 X 1 CXM WROT ADAPTER                          | *              |
| 1-1/2 X 1-1/4 CXC ECC CPLGS                            | *              | 1-1/4 X 1-1/2 CXM WROT ADAPT                        | *              |
|  |                | 1-1/4 X 2 CXMALE PRESSURE                           |                |
| 2 X 1-1/4 CXC CAST ECC CPLGS                           | *              | ADAP  | *              |
| 2 X 1-1/2 CXC CAST ECC CPLGS                           | *              | 1/4 FITXM WROT ADAPTER                              | *              |
| 3 X 2 CXC CAST ECC COUPLING                            | *              | 3/8 FITXM WROT ADAPTERS                             | *              |
| 1/2 CXFE CAST ADAPTER                                  | *              | 1/2 FITXM WROT ADAPTER                              | *              |
| 1/2 X 3/8 CXFE CAST ADAPTER                            | *              | 1/2 X 3/8 FITXM WROT ADAPTER                        | *              |
| 1/2 X 3/4 CXFE CAST ADAPTER                            | *              | 1/2 X 3/4 FITXM WROT ADAPTER                        | *              |
| 3/4 CXFE CAST ADAPTER                                  | *              | 3/4 FITXM WROT ADAPTER                              | *              |
|  |                | 3/4 X 1/2 FITTXM WROT                               |                |
| 3/4 X 1/2 CXFE CAST ADAPTER                            | *              | ADAPTER   | *              |
| 3/4 X 1 CXFE CAST ADAPTER                              | *              | 1 FITXM WROT ADAPTER                                | *              |
| 3/4 X 1-1/4 CXFE CAST ADAPTER                          | *              | 1 X 3/4 FITTXM WROT ADAPTER                         | *              |
| 3/4 X 1-1/2 CXFE CAST ADAPTER                          | *              | 1-1/4 FITXM WROT ADAPTER                            | *              |
| 1 C X FE CAST ADAPTER                                  | *              | 1-1/2 FITXM WROT ADAPTER                            | *              |
| 1 X 1/2 CXFE CAST ADAPTER                              | *              | 2 FITXM WROT ADAPTER                                | *              |
| 1 X 3/4 C X FE CAST ADAPTER                            | *              | 1-1/2 CXM WROT ADAPTER                              | *              |
| 1 X 1-1/4 CXFE CAST ADAPTER                            | *              | 2-1/2 FITXM WROT ADAPTER                            | *              |
| 1-1/4 CXFE CAST P ADAPTER                              | *              | 1-1/2 X 1 CXM WROT ADAPTER                          | *              |
| 1-1/4 X 1/2 CXFE CAST ADAPTERS                         | *              | 1-1/2 X 1-1/4 CXM WROT ADAPT                        | *              |
| 1-1/4 X 3/4 CXFE CAST ADAPTER                          | *              | 1-1/2 X 2 CXM WROT ADAPTER                          | *              |
| 1-1/4 X 1 CXFE CAST P ADAPTER                          | *              | 3 FTG X M WROT ADAPTER                              | *              |
| 3/4 X 1/2 FITXFE CAST ADAPTER                          | *              | 2 CXM WROT ADAPTER                                  | *              |
| 1 FTGXFE CAST ADAPTER                                  | *              | 2 X 1-1/4 CXM WROT ADAPTER                          | *              |
| 1-1/2 CXFE CAST P ADAPTER                              | *              | 2 X 1-1/2 CXM WROT ADAPTER                          | *              |
| 1-1/2 CAPE CAST F ADAPT  1-1/2 X 3/4 CXFE CAST P ADAPT | *              | 2 X 2-1/2 C X M WROT ADAPTER                        | *              |
| 1-1/2 X 1 CXFE CAST ADAPTER                            | *              | 2-1/2 CXM WROT ADAPTER                              | *              |
| 1-1/2 X 2 CXFE CAST ADAPTER                            | *              | 2-1/2 CAM WROT ADAI TER  2-1/2 X 2 CXM WROT ADAPTER | *              |
| 1-1/2 A 2 CAPE CAST ADAPTER                            | ((0)           |   | *              |
| 2 CXFE CAST P ADAPTER                                  | *              | 3 CXM WROT ADAPTER                                  |                |

| Subject Copper Pipe Fittings  | Cast &<br>Wrot | Subject Copper Pipe Fittings | Cast &<br>Wrot |
|-------------------------------|----------------|------------------------------|----------------|
| 2-1/2 CXC CAST UNION          | *              | 1/2 X 3/4 C X HOSE ADAPTER   | *              |
| 2 CXM CAST UNION              | *              | 1/4 CXC WROT 45 ELBOW        | *              |
| 2-1/2 C X M CAST UNION        | *              | 3/8 CXC WROT 45 ELBOW        | *              |
| 3 CXC CAST UNION              | *              | 1/2 CXC WROT 45 ELBOW        | *              |
| 2-1/2 C X FE CAST ADAPTER     | *              | 5/8 CXC WROT P 45 ELBOW      | *              |
| 3 CXFE CAST P ADAPTER         | *              | 3/4 CXC WROT 45 ELBOW        | *              |
| 1/2 CXCXCXC CAST CROSSES      | *              | 1 CXC WROT 45 ELBOW          | *              |
| 3/4 CXCXCXC CAST CROSSES      | *              | 1-1/4 CXC WROT P 45 ELBOW    | *              |
| 1 CXCXCXC CAST CROSSES        | *              | 1/4 FTG X C WROT 45 ELBOW    | *              |
| 1-1/2 CXCXCXC CAST CROSSES    | *              | 3/8 FITXC WROT 45 ELBOW      | *              |
| 2 CXCXCXC CAST CROSS          | *              | 1/2 FITXC WROT 45 ELBOW      | *              |
| 3/4 CXC CAST CROSSOVER CPLG   | *              | 5/8 FITXC WROT 45 ELBOW      | *              |
| 1/2 CXM CAST ADAPTER          | *              | 3/4 FITXC WROT 45 ELBOW      | *              |
| 1/2 X 3/4 CXM CAST ADAPTER    | *              | 1 FITXC WROT 45 ELBOW        | *              |
| 1/2 CAST COMP FLANGE - 125#   |                | 1-1/4 FITXC WROT P 45 ELBOW  | *              |
| 3/4 CAST COMP FLANGE - 125#   |                | 1-1/2 FITXC WROT P 45 ELBOW  | *              |
| 1 CAST COMP FLANGE - 125#     |                | 2 FITXC WROT P 45 ELBOW      | *              |
| 1-1/4 CAST COMP FLANGE - 125# |                | 1-1/2 CXC WROT P 45 ELBOW    | *              |
| 1-1/2 CAST COMP FLANGE - 125# |                | 2-1/2 FITXC WROT 45 ELBOW    | *              |
| 2 CAST COMP FLANGE - 125#     |                | 2 CXC WROT P 45 ELBOW        | *              |
| 2-1/2 CAST COMP FLANGE - 125# |                | 2-1/2 CXC WROT P 45 ELBOW    | *              |
| 3 CAST COMP FLANGE - 125#     |                | 3 CXC WROT P 45 ELBOW        | *              |
| 3-1/2 COMP FLANGE #125        |                | 4 CXC WROT P 45 ELBOW        | *              |
| 4 CAST COMP FLANGE - 125#     |                | 1/4 CXC WROT 90 ELBOW        | *              |
| 5 CAST COMP FLANGE - 125#     |                | 3/8 CXC WROT 90 ELBOW        | *              |
| 6 CAST COMP FLANGE - 125#     |                | 1/2 CXC WROT 90 ELBOW        | *              |
| 8 CAST COMP FLANGE - 125#     |                | 5/8 CXC WROT 90 ELBOWS       | *              |
| 1/2 CAST COMP FLANGE - 150#   |                | 3/4 CXC WROT 90 ELBOW        | *              |
| 3/4 CAST COMP FLANGE - 150#   |                | 3/4 X 1/2 CXC WROT 90 ELBOW  | *              |
| 1 CAST COMP FLANGE - 150#     |                | 1 CXC WROT 90 ELBOW          | *              |
| 1-1/4 CAST COMP FLANGE - 150# |                | 1 X 1/2 CXC WROT 90 ELBOW    | *              |
| 1-1/2 CAST COMP FLANGE - 150# |                | 1 X 3/4 CXC WROT 90 ELBOW    | *              |
| 2 CAST COMP FLANGE - 150#     |                | 1-1/4 CXC WROT P 90 ELBOW    | *              |
| 2-1/2 CAST COMP FLANGE - 150# |                | 1-1/4 X 1 CXC WROT 90 ELBOW  | *              |
| 3 CAST COMP FLANGE - 150#     |                | 1/4 FITXC WROT 90 ELBOW      | *              |
| 3-1/2 CAST COMP FLANGE #150   |                | 3/8 FITXC WROT 90 ELBOW      | *              |
| 4 X 9 CAST COMP FLANGE - 150# |                | 1/2 FITXC WROT 90 ELBOW      | *              |
| 5 CAST COMP FLANGE - 150#     |                | 5/8 FITXC WROT 90 ELBOW      | *              |
| 6 CAST COMP FLANGE -150#      |                | 3/4 FITXC WROT 90 ELBOW      | *              |
| 8 CAST COMP FLANGE - 150#     |                | 1 FITXC WROT 90 ELBOW        | *              |
| 3/4 CXM CAST ADAPTER          | *              | 1-1/4 FITXC WROT 90 ELBOW    | *              |
| 3/4 X 1/2 CXM CAST ADAPTER    | *              | 1/2 FTGXFTG WROT 90 ELBOW    | *              |
| 3/4 X 1-1/4 CXM CAST ADAPTER  | *              | 3/4 FTG X FTG WROT 90 ELBOWS | *              |
| 1/2 COMP FLANGES - 300#       |                | 1-1/2 FITXC WROT 90 ELBOW    | *              |
| 1 X 5 COMP FLANGES - 300#     |                | 2 FITXC WROT 90 ELBOW        | *              |
| 1-1/4 COMP FLANGES - 300#     |                | 1-1/2 CXC WROT P 90 ELBOW    | *              |

| Subject Copper Pipe Fittings   | Cast &<br>Wrot | Subject Copper Pipe Fittings   | Cast &<br>Wrot |
|--------------------------------|----------------|--------------------------------|----------------|
| 1-1/2 X 6-1/2 COMP FLANGE-300# |                | 2-1/2 FITXC WROT 90 ELBOW      | *              |
| 2 COMP FLANGE - 300#           | }              | 1-1/2CX 1-1/4C WROT P 90 ELBOW | *              |
| 2-1/2 CAST COMP FLANGE - 300#  |                | 2 CXC WROT P 90 ELBOW          | *              |
| 3 X 8-1/4 COMP FLANGE - 300#   |                | 2-1/2 CXC WROT 90 ELBOW        | *              |
| 4 COMP FLANGE - 300#           |                | 3 CXC WROT P 90 ELBOW          | *              |
| 1 CXM CAST ADAPTER             | *              | 4 CXC WROT P 90 ELBOW          | *              |
| 1 X 1/2 CXM CAST ADAPTER       | *              | 1/2 CXC WROT 90 VENT ELBOW     | *              |
| 1 X 1-1/4 CXM CAST ADAPTER     | *              | 3/4 CXC WROT 90 VENT ELBOW     | *              |
| 1 X 1-1/2 CXM CAST ADAPTER     | *              | 1 CXC WROT 90 VENT ELBOW       | *              |
| 1-1/2 BLIND COMPANION          |                |                                |                |
| FLANGE                         |                | 1/4 CXC (LT) WROT 90 ELBOWS    |                |
| 2 X 6 BLIND COMPANION          |                |                                |                |
| FLANGE                         |                | 3/8 CXC (LT) WROT 90 ELBOW     |                |
| 3 X 7-1/2 BLIND COMP FLANGE    |                | 1/2 CXC (LT) WROT 90 ELBOW     |                |
| 13-1/2 X 8 BLIND COMPANION     |                |                                |                |
| FLG                            |                | 5/8 CXC LT 90 ELBOW            |                |
| 8 COMP FLANGE 125# SILVER      |                |                                |                |
| BRZD                           |                | 3/4 CXC (LT) WROT 90 ELBOW     |                |
| 3 COMP FLANGE 150# SILVER      |                |                                |                |
| BRZD                           |                | 1 CXC (LT) WROT 90 ELBOW       |                |
| 8 COMP FLANGE 150# SILVER      |                |                                |                |
| BRZD                           |                | 1-1/4 CXC (LT) WROT 90 ELBOW   |                |
| 1-1/4 CXM CAST P ADAPTER       | *              | 1/4 CXFIT LT 90 ELBOW          |                |
| 1-1/4 X 1/2 CXM CAST ADAPTER   | *              | 3/8 C X FTG LT 90 ELBOWS       |                |
| 1-1/4 X 1 CXM CAST ADAPT       | *              | 1/2 C X FTG LT 90 ELBOWS       |                |
| 1-1/2 CXM CAST P ADAPTER       | *              | 5/8 CXFTG LT 90 ELBOW          |                |
| 1-1/2 X 3/4 CXM CAST ADAPTER   | *              | 3/4 CXFTG LT 90 ELBOW          |                |
| 2 CXM CAST P ADAPTER           | *              | 1 CXFTG LT 90 ELBOW            |                |
| 2 X 1-1/2 C X M CAST P ADAPT   | *              | 1-1/4 CXFTG LT 90 ELBOW        |                |
| 2-1/2 CXM CAST ADAPTER         | *              | 1-1/2 CXFTG LT 90 ELBOW        |                |
| 3 CXM CAST P ADAPTER           | *              | 2 CXFTG LT 90 ELBOW            |                |
| 1/2C X 1M X 1/2 FE BOILER CPLG |                | 1-1/2 CXC (LT) WROT 90 ELBOWS  |                |
| 4 CXM CAST ADAPTER             | *              | 2 CXC (LT) WROT 90 ELBOW       |                |
| 1/2 X 1 X 1/2 CXMXFE CAST BOIL |                | 3/4 X 1/8 FE X 3/4 W BASE TEE  | *              |
| 1/2 C X M CAST 45 ELBOWS       |                | 1/2 X 1/4 FTGXC FL BUSHING     | *              |
| 3/4 C X M CAST 45 ELBOWS       |                | 1/2 X 3/8 FITXC FLUSH BUSHING  | *              |
| 1-1/4 C X M CAST 45 ELBOWS     |                | 5/8 X 3/8 FTGXC FL BUSHING     | *              |
| 4 CXC CAST 45 ELBOW            |                | 3/4 X 1/2 FITXC FLUSH BUSHING  | *              |
| 6 CXC CAST P 45 ELBOW          |                | 1 X 1/2 FITXC FL BUSHING       | *              |
| 1/2 C X C 90 ELBOW CAST        |                | 1 X 3/4 FITXC FLUSH BUSHING    | *              |
| 1-1/4 CXC CAST P 90 ELBOW      |                | 1-1/4X3/4 FTTXC W FL BUSHING   | *              |
| 1-1/4 X 1/2 CXC CAST 90 ELBOW  |                | 1-1/4 X 1 FITXC FLUSH BUSHING  | *              |
| 1-1/4 X 3/4 CAST 90 ELBOWS     |                | 1-1/2 X 1 FTGXC FL BUSHING     | *              |
| 1-1/4 X 1 CAST 90 ELBOWS       |                | 1-1/2 X 1-1/4 FL BUSH FITXC    | *              |
| 1-1/2 X 1/2 CAST 90 ELBOWS     |                | 2 X 1-1/2 FITXC FLUSH BUSHING  | *              |
| 1-1/2 X 3/4 CXC 90 CAST ELBOW  |                | 1 X 1/2 FLUSH FEMALE BUSHING   | *              |
| 1-1/2 X 1 CXC 90 CAST ELBOW    | 7/             | 1-1/4 X 3/4 FLUSH FEMALE BUSHI | *              |

| Subject Copper Pipe Fittings   | Cast &<br>Wrot | Subject Copper Pipe Fittings   | Cast &<br>Wrot |
|--------------------------------|----------------|--------------------------------|----------------|
| 1/2 CXFE CAST 90 ELBOW         |                | 1-1/4 X 1 FITXFE FLUSH FE BUSH | *              |
| 1/2 X 3/4 CXFE CAST 90 ELBOW   |                | 1-1/2 X 1 FTGXFE FLUSH FE BUSH | *              |
|                                |                | 1/2 CXM FLUSH VALVE WROT       |                |
| 1/2 X 1 CXFE CAST 90 ELBOW     |                | ADAPT                          | *              |
|                                |                | 3/4 CXM FLUSH VALVE WROT       |                |
| 3/4 CXFE CAST 90 ELBOW         |                | ADAPT                          | *              |
| 3/4 X 1/2 CXFE CAST 90 ELBOW   |                | 1/8 CXCXC WROT TEE             | *              |
| 3/4 X 1 CXFE CAST 90 ELBOW     |                | 1/4 CXCXC WROT TEE             | *              |
| 1 CXFE CAST 90 ELBOW           |                | 3/8 CXCXC WROT TEE             | *              |
| 1 X 1/2 C X FE 90 ELL CAST     |                | 1/2 CXCXC WROT TEE             | *              |
| 1 X 3/4 CXFE CAST 90 ELBOW     |                | 1/2 X 1/2 X 3/4 CXCXC WROT TEE | *              |
| 1-1/4 CXFE CAST P 90 ELBOW     |                | 3/4 CXCXC WROT TEE             | *              |
| 1-1/4 X 3/4 CXFE CAST 90 ELBOW |                | 3/4 X 1/2 X 1/2 CXCXC WROT TEE | *              |
| 1-1/4 X 1 CXFE CAST 90 ELBOW   |                | 3/4 X 1/2 X 3/4 CXCXC WROT TEE | *              |
| 1-1/2 CXFE CAST P 90 ELBOW     |                | 3/4 X 3/4 X 1/4 WROT P TEE     | *              |
| 1-1/2 X 1 C X FE CP 90 ELBOWS  |                | 3/4C X 3/4C X 3/8C WROT P TEE  | *              |
| 2 CXFE CAST P 90 ELBOW         |                | 3/4 X 3/4 X 1/2 CXCXC WROT TEE | *              |
| 3 C X FE CAST 90 ELBOW         |                | 1 CXCXC WROT TEE               | *              |
| 1/2 CXM CAST 90 ELBOW          |                | 1 X 1/2 X 1/2 CXCXC WROT TEE   | *              |
| 1/2 X 3/8 CXM CAST 90 ELBOW    |                | 1 X 1/2 X 3/4 CXCXC WROT TEE   | *              |
| 1/2 X 3/4 CXM CAST 90 ELBOW    |                | 1 X 1/2 X 1 CXCXC WROT TEE     | *              |
| 3/4 CXM CAST 90 ELBOW          |                | 1 X 3/4 X 1/2 CXCXC WROT TEE   | *              |
| 3/4 X 1/2 CXM CAST 90 ELBOW    |                | 1 X 3/4 X 3/4 CXCXC WROT TEE   | *              |
| 3/4 C X 1 M 90 CAST ELBOWS     |                | 1 X 3/4 X 1 CXCXC WROT TEE     | *              |
| 1 CXM CAST 90 ELBOWS           |                | 1 X 1 X 3/8 CXCXC WROT TEE     | *              |
| 1 X 3/4 CXM CAST 90 ELBOW      |                | 1 X 1 X 1/2 CXCXC WROT TEE     | *              |
| 1-1/4 CXM CAST P 90 ELBOW      |                | 1 X 1 X 3/4 CXCXC WROT TEE     | *              |
| 1-1/4 X 1 CXM CAST 90 ELBOWS   |                | 1-1/4 CXCXC WROT TEE           | *              |
| 1-1/2 CXM CAST P 90 ELBOW      |                | 1-1/4 X 1/2 X 1/2 WROT TEE     | *              |
| 2 CXM CAST 90 ELBOW            |                | 1-1/4 X 1/2 X 3/4 WROT TEE     | *              |
| 6 CXC CAST 90 ELBOW            |                | 1-1/4 X 1/2 X 1 WROT TEE       | *              |
| 1/2C X 1/8FE X 1/2C BASE TEE   | *              | 1-1/4 X 1/2 X 1-1/4 WROT TEE   | *              |
| 1/2C X 1/8FE X 3/4C BASE TEE   | *              | 1-1/4 X 3/4 X 1/2 WROT TEE     | *              |
| 3/4C X 1/8FE X 3/4C BASE TEE   | *              | 1-1/4 X 3/4 X 3/4 WROT TEE     | *              |
| 1C X 1/8FE X 1 C BASE TEE      | *              | 1-1/4 X 3/4 X 1 WROT TEE       | *              |
| 1-1/4C X 1/8FEX1-1/4C BASE TEE | *              | 1-1/4 X 3/4 X 1-1/4 WROT TEE   | *              |
| 1 X 1/2 FITXFE FL BUSHING      | *              | 1-1/4 X 1 X 1/2 WROT TEE       | *              |
| 1-1/4 X 1 FITXFE FLUSH         |                |                                |                |
| ADAPTER                        | *              | 1-1/4 X 1 X 3/4 WROT TEE       | *<br>          |
| 1 1/2 FITT X 1 FE C FLUSH BUSH | *              | 1-1/4 X 1 X 1 WROT TEE         | *              |
| 3/4 CXFTGXC CAST TEE           | *              | 1-1/4 X 1 X 1-1/4 WROT TEE     | *              |
| 2 X 2 X 3 CXCXC CAST TEE       | *              | 1-1/4 X 1-1/4 X 1/2 WROT TEE   | *              |
| 2-1/2 X 1/2 X 2-1/2 CAST TEE   | *              | 1-1/4 X 1-1/4 X 3/4 WROT TEE   | *              |
| 2-1/2 X 1-1/2 X 1-1/2 CAST TEE | *              | 1-1/4C X 1-1/4C X 1C WROT TEE  | *              |
| 5 CXCXC CAST TEE               | *              | 1-1/2 CXCXC WROT TEE           | *              |
| 5 X 5 X 3 CXCXC CAST TEE       | *              | 1-1/2 X 1/2 X 1/2 WROT TEE     | *              |
| 6 CXCXC CAST TEE               | <u>*</u>       | 1-1/2 X 1/2 X 3/4 WROT TEE     | *              |

| Subject Copper Pipe Fittings      | Cast &<br>Wrot | Subject Copper Pipe Fittings   | Cast &<br>Wrot |
|-----------------------------------|----------------|--------------------------------|----------------|
| 1-1/4 CXC WROT DWV COUPLING       | *              | 1-1/2 X 1/2 X 1 CXCXC WROT TEE | *              |
| 1-1/2X1-1/4 FITXC W DWV BUSH      | *              | 1-1/2 X 1/2 X 1-1/4 WROT TEES  | *              |
| 2 X 1-1/4 FITXC WROT DWV BUSH     | *              | 1-1/2 X 1/2 X 1-1/2 WROT TEE   | *              |
| 2 X 1-1/2 FITXC W DWV BUSH        | *              | 1-1/2 X 3/4 X 1/2 WROT TEE     | *              |
| 1-1/2 CXC WROT DWV COUPLING       | *              | 1-1/2 X 3/4 X 3/4 WROT TEE     | *              |
| 1-1/2X 1-1/4 CXC WROT DWV         |                |                                |                |
| CPLG                              | *              | 1-1/2 X 3/4 X 1 WROT TEE       | *              |
| 3 X 1-1/4 FITXC WROT DWV BUSH     | *              | 1-1/2 X 3/4 X 1-1/4 WROT TEE   | *              |
| 3 X 1-1/2 FITXC WROT DWV BUSH     | *              | 1-1/2 X 3/4 X 1-1/2 WROT TEE   | *              |
| 3 X 2 FITXC WROT DWV BUSH         | *              | 1-1/2 X 1 X 1/2 WROT TEE       | *              |
| 4 X 2 FTGXC DWV BUSHINGS          | *              | 1-1/2 X 1 X 3/4 WROT TEE       | *              |
| 4 X 3 FTGXC WROT DWV              |                |                                |                |
| BUSHING                           | *              | 1-1/2 X 1 X 1 WROT TEE         | *              |
| 2 CXC WROT DWV COUPLING           | *              | 1-1/2 X 1 X 1-1/4 WROT TEE     | *              |
| 2 X 1-1/4 CXC WROT DWV CPLG       | *              | 1-1/2 X 1 X 1-1/2 WROT TEE     | *              |
| 2 X 1-1/2 CXC WROT DWV CPLG       | *              | 1-1/2 X 1-1/4 X 1/2 WROT TEE   | *              |
| 3 CXC WROT DWV COUPLING           | *              | 1-1/2 X 1-1/4 X 3/4 WROT TEE   | *              |
| 3 X 1-1/4 CXC WROT DWV CPLG       | *              | 1-1/2 X 1-1/4 X 1 WROT TEE     | *              |
| 3 X 1-1/2 CXC WROT DWV CPLG       | *              | 1-1/2 X 1-1/4 X 1-1/4 WROT TEE | *              |
| 3 X 2 CXC WROT DWV COUPLING       | *              | 1-1/2 X 1-1/4 X 1-1/2 WROT TEE | *              |
| 4 CXC WROT DWV COUPLING           | *              | 1-1/2 X 1-1/2 X 1/2 WROT TEE   | *              |
| 4 X 1-1/2 CXC WROT DWV CPLGS      | *              | 1-1/2 X 1-1/2 X 3/4 WROT TEE   | *              |
| 4 X 2 CXC WROT DWV COUPLING       | *              | 1-1/2 X 1-1/2 X 1 WROT TEE     | *              |
| 4 X 3 CXC WROT DWV COUPLING       | *              | 1-1/2 X 1-1/2 X 1-1/4 WROT TEE | *              |
| 6 CXC WROT DWV COUPLING           | *              | 2 CXCXC WROT TEE               | *              |
| 1-1/4 CXC W DWV CPLGS NO          |                |                                |                |
| STOP                              | *              | 2 X 1/2 X 2 WROT TEE           | *              |
| 1-1/2 CXC W DWV CPLGS NO          |                |                                |                |
| STOP                              | *              | 2 X 3/4 X 2 WROT TEE           | *              |
| 2 CXC WROT DWV CPLGS NO           |                |                                |                |
| STOP                              | *              | 2 X 1 X 3/4 WROT TEE           | *              |
| 3 CXC WROT DWV CPLGS NO           |                |                                |                |
| STOP                              | *              | 2 X 1 X 1 WROT TEE             | *              |
| 4 CXC WROT DWV CPLGS NO           |                |                                |                |
| STOP                              | *              | 2C X 1C X 1-1/4C WROT TEE      | *              |
| 1-1/4 CXM WROT DWV TRAP           |                |                                |                |
| BUSHIN                            | *              | 2 X 1 X 1-1/2 WROT PRESS TEE   | *              |
| 1-1/2 CXM WROT DWV TRAP           |                |                                |                |
| BUSH                              | *              | 2 X 1 X 2 WROT TEE             | *              |
| 2 CXM WROT DWV TRAP               | 127            |                                | .20            |
| BUSHING                           | *              | 2 X 1-1/4 X 1/2 WROT TEE       | *              |
| 1-1/4 CXFE WROT DWV ADAPTER       | *              | 2 X 1-1/4 X 3/4 WROT TEE       | *              |
| 1-1/4 X 1-1/2 CXFE WRT DWV<br>ADA | *              | 2 X 1-1/4 X 1 WROT TEE         | *              |
| 1-1/4 FTGXFEMALE DWV<br>ADAPTER   | *              | 2 X 1-1/4 X 1-1/4 WROT TEE     | *              |

| Subject Copper Pipe Fittings                               | Cast &<br>Wrot | Subject Copper Pipe Fittings                                 | Cast &<br>Wrot |
|--|----------------|--|----------------|
| 1-1/2 FTGXFE WROT DWV                                      |                |  |                |
| ADAPTER  | *              | 2 X 1-1/4 X 1-1/2 WROT TEE                                   | *              |
| 2 FTGXFEMALE DWV ADAPTER                                   | *              | 2 X 1-1/4 X 2 WROT TEE                                       | *              |
| 1-1/2 CXFE WROT DWV ADAPTER                                | *              | 2 X 1-1/2 X 1/2 WROT TEE                                     | *              |
| 1-1/2 X 1-1/4 CXFE WROT ADAPT                              | *              | 2 X 1-1/2 X 3/4 WROT TEE                                     | *              |
| 1-1/2 X 2 CXFE WROT DWV                                    |                |  |                |
| ADAPTE   | *              | 2 X 1-1/2 X 1 WROT TEE                                       | *              |
| 3 FITXFE WROT DWV ADAPTER                                  | *              | 2 X 1-1/2 X 1-1/4 WROT TEE                                   | *              |
| 2 C X FE WROT DWV ADAPTER                                  | *              | 2 X 1-1/2 X 1-1/2 WROT TEE                                   | *              |
| 2 X 1-1/2 CXFE WROT DWV                                    |                |  |                |
| ADAPT  | *              | 2 X 1-1/2 X 2 WROT TEE                                       | *              |
| 3 C X FE DWV ADAPTER                                       | *              | 2 X 2 X 1/2 WROT TEE   | *              |
| 1-1/2 MALE X 1-1/2 OD DWV                                  |                |  |                |
| ADAP   | *              | 2 X 2 X 3/4 WROT TEE   | *              |
| 1-1/4 CXM WROT DWV ADAPTER                                 | *              | 2 X 2 X 1 WROT TEE   | *              |
| 1-1/4X1-1/2 CXM WROT DWV                                   |                | ZHZH WIGHTE  |                |
| ADAPT  | *              | 2 X 2 X 1-1/4 WROT TEE                                       | *              |
| 1-1/2 FTGXM WROT DWV                                       |                | Z N Z N I II I WHO I I LL                                    |                |
| ADAPTER  | *              | 2 X 2 X 1-1/2 WROT TEE                                       | *              |
| 2 FTGXM WROT DWV ADAPTER                                   | *              | 2-1/2 CXCXC WROT TEE   | *              |
| 1-1/2 CXM WROT DWV ADAPTER                                 | *              | 2-1/2 X 1/2 X 2-1/2 WROT TEE                                 | *              |
| 1-1/2 CAM WROT DW V ADAI TER<br>1-1/2 X 1-1/4 CXM DWV WROT |                | 2-1/2 X 1/2 X 2-1/2 WROT TEE                                 |                |
| ADA  | *              | 2-1/2 X 3/4 X 1-1/2 WROT TEE                                 | *              |
| 1-1/2 X 2 CXM WROT DWV                                     |                | 2-1/2 X 3/4 X 1-1/2 WROT TEE                                 |                |
| ADAPTER  | *              | 2-1/2 X 3/4 X 2-1/2 WROT TEE                                 | *              |
| 2 CXM WROT DWV ADAPTER                                     | *              | 2-1/2 X 1 X 1-1/4 WROT TEE                                   | *              |
| 2 X 1-1/2 CXM WROT DWV                                     | -              | Z-1/2 X 1 X 1-1/4 WROT TEE                                   |                |
| ADAPTER  | *              | 2-1/2 X 1 X 1-1/2 WROT TEE                                   | *              |
| 3 CXM WROT DWV ADAPTER                                     | *              | 2-1/2 X 1 X 2 WROT TEE                                       | *              |
| 4 CXM WROT DWV ADAI TER                                    | *              | 2-1/2 X 1 X 2-1/2 WROT TEE                                   | *              |
| 1-1/4 CXM DWV FL TRAP                                      |                | 2-1/2 X 1 X 2-1/2 WRO1 TEE                                   |                |
| ADAPTER  | *              | 2-1/2 X 1-1/4 X 1-1/4CXCXC TEE                               | *              |
| 1-1/2 CXM DWV FL TRAP                                      |                | 2-1/2 X 1-1/4 X 1-1/4CXCXC TEE                               |                |
| ADAPTER  | *              | 2-1/2 X 1-1/4 X 1-1/2 WROT TEE                               | *              |
| 2 CXM DWV FL TRAP ADAPTER                                  | *              | 2-1/2 X 1-1/4 X 2 WROT TEE                                   | *              |
| 1-1/2 CXMALE DWV SCULLY                                    |                | 2-1/2 X 1-1/4 X 2 WRO1 TEE                                   |                |
| BUSHIN   | *              | 2-1/2 X 1-1/4 X 2-1/2 WROT TEE                               | *              |
| 2 CXMALE DWV SCULLY  |                | 2-1/2 X 1-1/4 X 2-1/2 WROT TEE                               |                |
| BUSHING  | *              | 2-1/2 X 1-1/2 X 1 WROT TEE                                   | *              |
| 2 C X MJ WROT DWV ADAPTER                                  | *              | 2-1/2 X 1-1/2 X 1 WROT TEE                                   | *              |
| 1-1/4 WROT DWV CXFTG 45                                    |                | 2-1/2 X 1-1/2 X 1-1/4 WROT TEE                               | -              |
| ELBOW  | *              | 2-1/2 X 1-1/2 X 1-1/2 WROT TEE                               | *              |
| 1-1/2 FTGXC WROT DWV 45                                    |                | 2-1/2 X 1-1/2 X 1-1/2 WROT TEE                               |                |
| ELBOW  | *              | 2-1/2 X 1-1/2 X 2 WROT TEE                                   | *              |
| 2 FTGXC WROT DWV 45 ELBOW                                  | *              | 2-1/2 X 1-1/2 X 2 WROT TEE<br>2-1/2 X 1-1/2 X 2-1/2 WROT TEE | *              |
| 3 C X FTG WROT DWV 45 ELBOW                                | *              | 2-1/2 X 1-1/2 X 2-1/2 WROT TEE                               | *              |
|  | *              | 2-1/2 X 2 X 1/2 WROT TEE                                     | *              |
| 1-1/4 CXC 45 WROT DWV ELBOW                                |                | 2-1/2 A 2 A 3/4 WKUI IEE                                     |                |

| Subject Copper Pipe Fittings   | Cast &<br>Wrot | Subject Copper Pipe Fittings   | Cast &<br>Wrot |
|--------------------------------|----------------|--------------------------------|----------------|
| 1-1/2 CXC 45 WROT DWV ELBOW    | *              | 2-1/2 X 2 X 1 WROT TEE         | *              |
| 2 CXC 45 WROT DWV ELBOW        | *              | 2-1/2 X 2 X 1-1/4 WROT TEE     | *              |
| 3 CXC 45 WROT DWV ELBOW        | *              | 2-1/2 X 2 X 1-1/2 WROT TEE     | *              |
| 1-1/4 CXC 90 WROT DWV ELBOW    | *              | 2-1/2 X 2 X 2 WROT TEE         | *              |
| 1-1/4 FITXC 90 WROT DWV        |                |                                |                |
| ELBOW                          | *              | 2-1/2 X 2 X 2-1/2 WROT TEE     | *              |
| 1-1/2 FITXC 90 WROT DWV        |                |                                |                |
| ELBOW                          | *              | 2-1/2 X 2-1/2 X 1/2 WROT TEE   | *              |
| 2 FITXC 90 WROT DWV ELBOW      | *              | 2-1/2 X 2-1/2 X 3/4 WROT TEE   | *              |
| 1-1/2 CXC 90 WROT DWV ELBOW    | *              | 2-1/2 X 2-1/2 X 1 WROT TEE     | *              |
| 2 CXC 90 WROT DWV ELBOW        | *              | 2-1/2 X 2-1/2 X 1-1/4 WROT TEE | *              |
| 3 CXC 90 WROT DWV ELBOW        | *              | 2-1/2 X 2-1/2 X 1-1/2 WROT TEE | *              |
| 1-1/2 CXC 90 LT WROT DWV       |                |                                |                |
| ELBOW                          | *              | 2-1/2 X 2-1/2 X 2 WROT TEE     | *              |
| 2 CXC 90 LT WROT DWV ELBOW     | *              | 3 CXCXC WROT TEE               | *              |
| 1-1/4 WROT TUBE END            |                |                                |                |
| CLEANOUTS                      | *              | 3 X 3/4 X 3 WROT TEE           | *              |
| 1-1/2 WROT TUBE END            |                |                                |                |
| CLEANOUTS                      | *              | 3 X 1 X 3 WROT TEE             | *              |
| 2 WROT TUBE END CLEANOUTS      | *              | 3 X 1-1/4 X 3 WROT TEE         | *              |
| 3 WROT TUBE END CLEANOUTS      | *              | 3 X 1-1/2 X 1-1/4 WROT TEE     | *              |
| 1-1/4 FLUSH FTG CLEANOUT       | *              | 3 X 1-1/2 X 1-1/2 WROT TEE     | *              |
| 1-1/2 FTG CLEANOUT-FLUSH       |                |                                |                |
| TYPE                           | *              | 3 X 1-1/2 X 2-1/2 WROT TEE     | *              |
| 1-1/2 X 1 FTG CLEANOUT - FLUSH | *              | 3 X 1-1/2 X 3 WROT TEE         | *              |
| 2 FTG CLEANOUT-FLUSH TYPE      | *              | 3 X 2 X 1/2 CXCXC WROT TEE     | *              |
| 1-1/4 FTG CLEANOUT FULL PLUG   | *              | 3 X 2 X 1 WROT TEE             | *              |
| 1-1/2 FTG CLEANOUT FULL PLUG   | *              | 3 X 2 X 1-1/4 WROT TEE         | *              |
| 2 FTG CLEANOUT FULL PLUG       | *              | 3 X 2 X 1-1/2 WROT TEE         | *              |
| 1-1/4 FE X SJ WROT DWV         |                |                                |                |
| ADAPTER                        | *              | 3 X 2 X 2 WROT TEE             | *              |
| 1-1/2 FE X SJ WROT DWV         |                |                                |                |
| ADAPTER                        | *              | 3 X 2 X 2-1/2 WROT TEE         | *              |
| 1-1/2 X1-1/4 FE X SJ DWV ADAPT | *              | 3 X 2 X 3 WROT TEE             | *              |
| 1-1/4 FTG X SJ WROT ADAPTER    | *              | 3 X 2-1/2 X 3/4 WROT TEE       | *              |
| 1-1/2 FTG X SJ WROT ADAPTER    | *              | 3 X 2-1/2 X 1 WROT TEE         | *              |
| 1-1/2 X 1-1/4 FTG X SJ ADAPTER | *              | 3 X 2-1/2 X 1-1/4 WROT TEE     | *              |
| 1-1/4 M X SJ DWV ADAPTER       | *              | 3 X 2-1/2 X 1-1/2 WROT TEE     | *              |
| 1-1/2 M X SJ DWV WROT          |                |                                |                |
| ADAPTER                        | *              | 3 X 2-1/2 X 2 WROT TEE         | *              |
| 1-1/2 X 1-1/4 M X SJ DWV ADAPT | *              | 3 X 2-1/2 X 2-1/2 WROT TEE     | *              |
| 1-1/4 C X SJ WROT ADAPTER      | *              | 3 X 2-1/2 X 3 WROT TEE         | *              |
| 1-1/4 X 1-1/2 CXSJ WROT CPLG   | *              | 3 X 3 X 1/2 WROT TEE           | *              |
| 1-1/2 C X SJ WROT ADAPTER      | *              | 3 X 3 X 3/4 WROT TEE           | *              |
| 1-1/2 X 1-1/4 CXSJ WROT ADAPTE | *              | 3 X 3 X 1 WROT TEE             | *              |
| 2 C X SJ WROT ADAPTER          | *              | 3 X 3 X 1-1/4 WROT TEE         | *              |

| Subject Copper Pipe Fittings | Cast &<br>Wrot | Subject Copper Pipe Fittings | Cast &<br>Wrot |
|------------------------------|----------------|------------------------------|----------------|
| 1/8 CXC WROT PRESS           |                |                              |                |
| COUPLINGS                    | *              | 3 X 3 X 1-1/2 WROT TEE       | *              |
| 1/4 CXC WROT PRESS           |                |                              |                |
| COUPLINGS                    | *              | 3 X 3 X 2 WROT TEE           | *              |
| 1/4 X 1/8 CXC WROT COUPLING  | *              | 3 X 3 X 2-1/2 WROT TEE       | *              |
| 3/8 CXC WROT PRESS COUPLING  | *              | 4 CXCXC WROT TEE             | *              |
| 3/8 X 1/4 CXC WROT COUPLING  | *              | 4 X 1-1/2 X 3 WROT TEE       | *              |
| 1/2 CXC WROT COUPLING        | *              | 4 X 2 X 2 WROT TEE           | *              |
| 1/2 X 1/8 CXC WROT COUPLING  | *              | 4 X 2 X 3 WROT TEE           | *              |
| 1/2 X 1/4 CXC WROT COUPLING  | *              | 4 X 2-1/2 X 2-1/2 WROT TEE   | *              |
| 1/2 X 3/8 CXC WROT COUPLING  | *              | 4 X 2-1/2 X 3 WROT TEE       | *              |
| 5/8 CXC WROT COUPLING        | *              | 4 X 3 X 2 WROT TEE           | *              |
| 5/8 X 1/4 CXC WROT COUPLING  | *              | 4 X 3 X 2-1/2 WROT TEE       | *              |
| 5/8 X 3/8 CXC WROT CPLGS     | *              | 4 X 3 X 3 WROT TEE           | *              |
| 5/8 X 1/2 CXC WROT COUPLING  | *              | 4 X 4 X 1/2 WROT TEE         | *              |
| 3/4 CXC WROT COUPLING        | *              | 4 X 4 X 3/4 WROT TEE         | *              |
| 3/4 X 1/4 CXC WROT COUPLING  | *              | 4 X 4 X 1 WROT TEE           | *              |
| 3/4 X 3/8 CXC WROT COUPLING  | *              | 4 X 4 X 1-1/4 WROT TEE       | *              |
| 3/4 X 1/2 CXC WROT COUPLING  | *              | 4 X 4 X 1-1/2 WROT TEE       | *              |
| 3/4 X 5/8 CXC WROT COUPLING  | *              | 4 X 4 X 2 WROT TEE           | *              |
| 1 CXC WROT COUPLING          | *              | 4 X 4 X 2-1/2 WROT TEE       | *              |
| 1 X 3/8 CXC WROT COUPLINGS   | *              | 4 X 4 X 3 WROT TEE           | *              |
| 1 X 1/2 CXC WROT COUPLING    | *              | 5 X 5 X 2 CXCXC WROT TEE     | *              |

#### **Additional Product Information**

Copper Fittings sold in Canada are manufactured to a variety of standards including:

- ASME/ANSI Std. B16.22 2013 (Wrought Copper and Copper Alloy Solder Joint Pressure Fittings);
- ASME/ANSI Std. B16.18 2012 (Cast Copper Alloy Solder Joint Pressure Fittings);
- ASME/ANSI Std. B16.29 2012 (Wrought Copper and Wrought Copper Alloy Solder Joint Drainage Fittings DWV)
- ASME/ANSI Std. B16.23 2016 (Cast Copper Alloy Solder Joint Drainage Fittings);
- ASME/ANSI Std. B16.24 2016 (Cast Copper Alloy Pipe Flanges, Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500);
- ASME/ANSI Std. B16.50 2013 (Wrought Copper and Copper Alloy Braze Joint Pressure Fittings);
- MSS SP-104 2012 (Wrought Copper LW Solder Joint Pressure Fittings);
- MSS SP-106 -- 2012 (Cast Copper Alloy Flanges and Flanged Fittings Class 125, 150, 300).

#### **Product Use**

CPF are used to connect copper pipes, tubes or other CPF to one another. The methods of joining CPF include soldering, silver brazing and epoxy or similar gluing techniques. The connection is

made by fitting two pieces together and heating the ends of the tubing and fittings, filling the gap between the two with melted solder or brazing material that solidifies while cooling, resulting in a strong leak-proof intermetallic connection. The fittings can also be used to connect copper tubing to other metal systems by use of threaded fittings. Finally, the connection can also be made using epoxy or similar gluing methods.

CPF that are commonly referred to as "pressure pipe fittings" may be used to convey liquids (e.g. potable water), gases and air under pressure in residential, industrial, commercial and institutional buildings.

CPF that are commonly referred to as "drainage, waste and vent fittings (DWV)" are used primarily to convey waste from buildings to sewers and for venting purposes under low-pressure conditions.

In addition, CPF are also used in a variety of air conditioning and refrigeration ("ACR") applications. CPF used in air conditioning applications are typically identified by reference to their outside diameters, whereas the same CPF used in non-ACR applications such as plumbing and heating are typically identified by reference to their inside or "nominal" diameters. Apart from the reference to diameter, a particular copper fitting for an ACR application is the same as a copper fitting for a non-air conditioning application. It is common practice to label copper fittings by reference to both their inside (nominal) and outside diameters.

## **Classification of Imports**

Subject goods are normally imported under the following classification numbers:

| 7412.10.00.11 | 7412.20.00.11 | 7412.20.00.90 |
|---------------|---------------|---------------|
| 7412.10.00.19 | 7412.20.00.12 |               |
| 7412.10.00.90 | 7412.20.00.19 |               |

The listing of HS classification numbers is for convenience of reference only. The HS classification numbers include non-subject goods. Also, subject goods may fall under HS classification numbers that are not listed. Refer to the product definition for authoritative details regarding the subject goods.

## **Questions**

- 1. Provide the name and position of the officer in your company responsible for your response to this industry profit survey, their telephone number, fax number and e-mail address.
- 2. Which of the following products does your company sell in Canada for domestic consumption?
  - (a) certain copper pipe fittings subject to the investigations;
  - (b) other copper pipe fittings;
  - (c) other goods that are of the group or range of goods that are the next largest to the category of goods under investigation, which may include other fittings, or tubes, etc.; or
  - (d) none of the above goods.
  - If (b) and/or (c) apply to your company, please identify and describe the goods in detail.
- 3. Please indicate the trade level at which your firm operates in Canada with respect to the production and/or sale of the goods referenced in Question 2 (e.g., national distributor, regional distributor, manufacturer and national or regional distributor, etc.). If you import these goods, indicate that you are an importer and provide details of any relationship you may have with any of the exporters. Also indicate the name and address of each exporter and state the country of origin and country of export of the imported goods.
- 4. Please provide the following financial information for calendar year 2016 and for the first eight month period in 2017 (i.e. from January 1 to August 31, 2017):
  - a) an income statement covering all domestic sales to unrelated purchasers in Canada of certain copper pipe fittings subject to the investigations, as referred to in 2(a) above;
  - b) an income statement covering all domestic sales to unrelated purchasers in Canada of all goods that are in the same general category as the goods subject to this investigation, as referred to in 2(b) above, i.e., all copper pipe fittings;
  - c) an income statement covering all domestic sales to unrelated purchasers in Canada of all goods that are of the group or range of goods that are the next largest to the category of goods under investigation, as referred to in 2(c) above; and
  - d) complete the following table:

|  |   | ncome Before Tax<br>to August 31, 2017                              |   |
|--|---|---|---|
|  | Column A  | Column B  | Column C  |
|  | Sales to Unrelated<br>Purchasers in Canada of<br>the Certain Copper Pipe<br>Fittings Subject to the<br>Investigations | Sales to Unrelated Purchasers in Canada of All Copper Pipe Fittings | Sales to Unrelated Purchasers in Canada of All Goods that are of the Group or Range of Goods that are the Next Largest to the Category of Goods under Investigation |
| Total Gross Sales<br>Revenue<br>(Canadian Dollars)                                 | \$  | \$  | \$  |
| Net Income before<br>Income Tax<br>(Canadian Dollars)                              | \$  | \$  | \$  |
| Net Income before<br>Income Tax as a<br>percent of Total<br>Gross Sales<br>Revenue | %   | %   | %   |

If possible, all three columns of this table should be completed. Otherwise, complete the columns that are applicable to your company's situation and provide an explanation as to why the other information cannot be supplied.

Audited income statements are preferred. If audited income statements are not available, the requested income statements must be prepared based on accounting documents and/reports. All supporting documentation must be made available upon request and may be subject to onsite verification.

Please note: <u>If you are a manufacturer of copper pipe fittings</u>, provide adjusted Profit & Loss statements that segregates the profit earned on the manufacturing function versus that earned on the distribution/vendor functions, if possible.

## TREATMENT OF CONFIDENTIAL AND NON-CONFIDENTIAL INFORMATION

## Why Provide Confidential and Non-Confidential Information?

The Special Import Measures Act requires that confidential information submitted to the CBSA be accompanied by a non-confidential (public) version of the information. The following explains how non-confidential and confidential information will be handled and how to prepare both a confidential and non-confidential submission of your information.

#### **Treatment of Your Non-Confidential Information**

Your non-confidential information will be given to any party that asks for this information for the purposes of the proceeding.

#### **Treatment of Your Confidential Information**

There are certain times when the CBSA will release your confidential information: first, to independent counsel for a party to the proceeding; and second, to Canadian courts, tribunals and panels.

1. Confidential information will be provided to independent counsel for a party to the proceeding. Counsel includes any person who represents another party in the proceeding and includes legal counsel. A party is a person, or business, that participates in and has a direct interest in the proceeding.

Counsel must ask for the confidential information in writing and must provide a written guarantee to the CBSA stating that they will:

- only use the information in relation to this proceeding;
- not give out the information;
- protect the information;
- not copy the information without the CBSA's permission;
- destroy the information when they are done;
- provide the CBSA with a written notice that the information is destroyed; and
- report any violations or possible violations to the CBSA.

The CBSA will not give your confidential information to independent counsel if the CBSA believes that it might cause harm to you or your business.

2. Confidential information will be given to the Canadian International Trade Tribunal, any Court in Canada, a Binational or World Trade Organization (WTO) Panel, to act on appeals. These organizations will use your information to fulfill their responsibilities under Canadian law, NAFTA or WTO Agreements. The confidential information is subject to the rules of procedure of the Court or Panel to which it is provided.

## **Providing Only Non-Confidential Information?**

If you decide that your reply to this RFI does not contain confidential information, every page of your reply should be marked "NON-CONFIDENTIAL". You must make a statement, in a covering letter, that you do not consider any information in your submission to be confidential.

## **Providing Confidential Information?**

If your reply to this RFI contains confidential information, this reply, along with all of the attachments and supporting documents, will be your confidential submission. You must:

- 1. Clearly indicate, by enclosing all confidential information contained in this submission within square brackets/brackets (narrative text); and
- 2. Clearly mark "CONFIDENTIAL" on every page of the confidential submission, including all attachments.

If you have a submission with confidential information, for the CBSA to be able to use your information, you must provide a non-confidential version. It is important that your non-confidential version is complete, as it will be provided to other parties involved in the investigations if they request it.

Your non-confidential version may be in the form of:

- a non-confidential edited version; or
- a non-confidential summary version, where the edited version would not contain enough information to convey a reasonable understanding of the information submitted in the confidential version.

#### Non-confidential Edited Version

An edited version has the confidential information removed, to create a non-confidential version. You must leave enough detail to provide an understanding of the confidential information removed. In the **Non-Confidential Statement**, which must be attached with your non-confidential version, you must:

A) explain briefly the nature of the confidential information removed in your non-confidential version; and

B) give the reasons why you request that the information be treated confidential, as explained in this part of the RFI.

In the following example, the text indicates the nature of the bracketed [confidential information] that has been deleted in the non-confidential version.

The confidential response to a request may be: The selling price of model ABC to our Canadian distributor was US\$[25.99] per unit.

The non-confidential edited version of this response may be: The selling price of model ABC to our Canadian distributor was US\$[ ] per unit. In this example, the nature of the information removed in the non-confidential version relates to "selling price information." NOTE: the spacing between the brackets [ ] should reflect the same spacing as in the confidential version.

In regards to the edited version of Appendices A and B, please do not bracket any information provided in the appendices (Excel format). The non-confidential version of this information can be accomplished by simply remitting the column headings used in the confidential version. As a further example, the following sample page would represent an acceptable non-confidential edited version of an import listing.

| 1                | 2          | 3                 | 4                | 5        | 6                     | 7                         |
|------------------|------------|-------------------|------------------|----------|-----------------------|---------------------------|
| Exporter<br>Name |            | Invoice<br>Number | Date of Shipment | Quantity | Unit Selling<br>Price | Extended<br>Selling Price |
| _                | 2010/02/16 | 14064555          | 2010/03/03       |          |                       |                           |
|                  | 2010/03/14 | 14179020          | 2010/03/27       |          |                       |                           |
|                  | 2010/09/14 | 14253018          | 2010/09/29       |          |                       |                           |
|                  | 2011/05/09 | 14474937          | 2011/05/22       |          |                       |                           |

#### NOTE:

Do not use "shading", "highlighting", "font colors" or any other type of masking to hide confidential information in the non-confidential electronic version. You must delete (remove) the confidential information in the non-confidential version.

If you use a black marker to hide confidential information on the paper version of the non-confidential version or in any attachments to the non-confidential version, please ensure that the black shading covers everything and that it is dark enough not to reveal confidential information when we will save electronically your documents in PDF format.

#### **Non-Confidential Summary Version**

Where deleting information for a non-confidential edited version would not leave enough detail to provide an understanding of the confidential information removed, a non-confidential summary of

the deleted information must be included, describing the confidential information that has been removed.

If you intend to provide a non-confidential summary of an attachment, the non-confidential narrative would normally be accompanied by at least one (1) sample page, with the confidential data removed.

#### **Review of Non-Confidential Submission**

The non-confidential version of your submission will be reviewed by the CBSA to ensure that it is in sufficient detail to convey a reasonable understanding of the substance of the information submitted in the confidential version.

If CBSA determines that an <u>adequate</u> non-confidential edited version <u>or</u> a non-confidential summary of information designated as confidential has not been provided by your company, and your company fails to justify why it cannot be provided, does not take corrective action or does not submit a revised version, the CBSA will **NOT** use the confidential information provided by your company in the proceedings. As a result, the CBSA's determination will be based on the best information available. It is imperative that companies delete only the minimum information necessary to protect their interests and only what is confidential.

You will find on the next page the Non-Confidential Statement that needs to be completed and attached with your non-confidential edited version or non-confidential summary.

## **NON-CONFIDENTIAL STATEMENT**

Nature of Information Deleted in the Non-Confidential Version of the Industry Profit Survey and Reasons for Designating Information as Confidential

[Note: This document should be reproduced, completed and signed on your company letterhead.]

| (Print name)         | , (Print Position)        | of of(Print name of company) |
|----------------------|---------------------------|------------------------------|
|                      |                           |                              |
|                      |                           |                              |
|                      |                           |                              |
| Leasons why you requ | est that the information  | be treated confidential.     |
| Pagana wiku yay magu | east that the information | he treated confidential      |
|                      |                           |                              |