

SUBMITTAL



Submittal number	5.0	Date	06/24/2018
Project	TRAILS AT CROWFOOT #1&9	6954 N. CROWFOOT VALLEY RD. PARKER, CO 80138	
Project number	201810		
Spec section			
Subsection		Status	Open
Current action	Submitted	Ball in court	
Topic	Storm Sewer (RCP)		

Submitter	
Reviewer	
Cc	

Date submitted	06/24/2018	Submission due date	06/24/2018
Released for review	06/24/2018	Review due date	06/29/2018
Date returned		Required on site date	
Date closed			

Notes



LETTER OF TRANSMITTAL

PIPELINE CONTRACTORS

8600 Verbena St.
Commerce City, CO 80022
Office 303-289-4355
Fax 303-289-4353

ISSUED TO:

Owner ATTN: Con Cockrun, Kelley Trucking

DATE:

6/19/18

REGARDING:

TRANSMITTAL NO.:

A-005

Project JBS Job No 0150

We are issuing you under separate cover the following (via):

Email

- Blue Prints
- Submittals
- Change Order
- Request for Information
- Copy of a letter
- Shop Drawings

#	Copies	Item Dated	Item #	Description
	1-Electronic		A-005	Reinforced Concrete Pipe for Storm Sewer
				Various Sizes and includes appurtenances

- For your bid
- Returned for Correction
- For Approval
- For Review and Comment
- As Requested
- For Pricing

Prints are loaned to you and are to be returned to us by:

Date: _____

Bids are due on or before:

Date: _____

COMMENTS

CC:

Amie Parent

Amie Parent

JBS Pipeline Contractors



Concrete Pipe Division

8311 W. Carder Court
 Littleton, CO 80125
 303.791.1600
 Facsimile 303.791.1710
 www.rinker.com

LETTER OF SUBMITTAL

Date:	5/25/18
Job No:	
Re:	Trails at Crowfoot Filing 1 & 9
	Parker, Colorado

To: JBS Pipeline, Inc.
 8600 Verbena St.
 Commerce City, CO 80022

Attn: Amie Parent

We are sending you: Attached Under separate cover via: the following items:
 Shop Drawings Prints Plans Certifications
 Copy of Letter Change Order Samples Other

Copies	Date	Number	Revision	Description
1	5/25/18			RCP Specification Certificate
1	5/25/18			Certificate of Compliance
1	5/25/18			RCP Data Sheet
1	5/25/18			RCP Flared End Data Sheet
1	5/25/18			Joint Fasteners Detail Sheet
1	5/25/18			RCP Plug Drawings -18", 24", 30", 36" (6 sheets)
1	5/25/18			Rubber Gasket Details (2 sheets)
1	5/25/18			Pipe Lubricant Details (2 sheets)

These are transmitted as checked below...

- | | | | |
|--|---|---|-------------------------|
| <input checked="" type="checkbox"/> For Approval | <input type="checkbox"/> Approved As Submitted | <input type="checkbox"/> Resubmit | Copies For Approval |
| <input type="checkbox"/> For Your Use | <input type="checkbox"/> Approved As Noted | <input type="checkbox"/> Submit | Copies For Distribution |
| <input type="checkbox"/> As Requested | <input type="checkbox"/> Returned For Corrections | <input type="checkbox"/> Return | Corrected Prints |
| <input type="checkbox"/> For Review and Comment | | <input type="checkbox"/> Other | |
| <input type="checkbox"/> For Bids Due ,20 | | <input type="checkbox"/> Prints Returned After Loan To Us | |

Remarks.

Copy to: _____ Signed: **Todd Kyle**
 Copy to Project File.



Specification Certificate



Rinker Materials hereby certifies that the

18", 24", 30", 36", 42", 48" CLASS 3 GASKETED RCP

furnished to

JBS Pipeline, Inc.

for their job at

Trails at Crowfoot Filing 1 & 9 – Parker, Colorado

**will fully comply with ASTM specifications No. C-76 & C-443
except for the length tolerances of ASTM C-76, paragraph 12.4 for
REINFORCED CONCRETE PIPE**

RCP, elliptical RCP, flared end sections, and box culvert to be supplied with concrete meeting CDOT Class 0 sulfate resistance. The engineer shall confirm that this level of sulfate resistance is adequate to meet project requirements and notify Rinker Materials if a higher level of sulfate resistance is needed.

Rinker Materials Concrete Pipe Division

By ***Todd Kyle – Account Manager***

Certificate of Compliance

Awarded

Combined Storm Sewer and Box Culvert & Three-Sided Structures

By



American **Concrete Pipe** Association

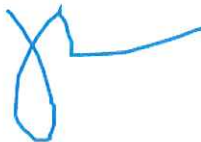
This Certificate represents that at the time of the audit,

Rinker Materials-Concrete Pipe Division Littleton, Colorado

was manufacturing precast concrete pipe in accordance with ACPA published guidelines and that sufficient and appropriate procedures and documentation of the manufacturing process were in place as evidence of continued manufacturing practice in accordance with those guidelines.

This Certificate of Compliance is awarded annually on the basis of successful completion of a compliance audit performed by Wiss, Janney, Elstner Associates, Inc. This Certificate is valid until:

April 1, 2019



J. Russell Tripp, P.E.
President
American Concrete Pipe Association



Jake Jyrkama
Chairman
Quality/Safety Committee

Circular Reinforced Concrete Pipe

Standard Specifications (Manufacture)

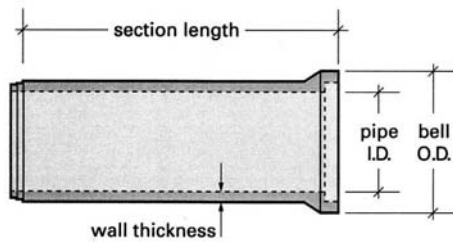
- ASTM C76
- AASHTO M170

Joint Specifications (Rubber Gasket)

- ASTM C443
- AASHTO M315

Joint Specifications (Flexible Sealant)

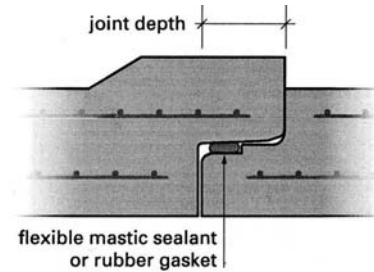
- ASTM C990
- AASHTO M198



SIDE VIEW



END VIEW



JOINT VIEW

Pipe I. D. (inches)	Bell O.D. (inches)	Wall Thickness (inches)	Section Length (feet)	Section Weight (tons)	Waterway Area (square feet)
12	20.0	2.00	8.0	0.4	0.8
15	23.8	2.25	8.0	0.5	1.2
18	27.6	2.50	8.0	0.7	1.8
24	35.6	3.00	8.0	1.1	3.1
30	42.5	3.50	8.0	1.6	4.9
36	50.3	4.00	8.0	2.2	7.1
42	58.0	4.50	8.0	3.1	9.6
48	64.0	5.00	8.0	3.6	12.6
54	70.0	5.50	8.0	4.5	15.9
60	76.0	6.00	8.0	5.4	19.6
66	82.0	6.50	8.0	6.3	23.8
72	88.0	7.00	8.0	7.4	28.3

- RCP strength classification requirements to be determined by a qualified engineer
- Additional information available upon request
- Product data subject to change without notice

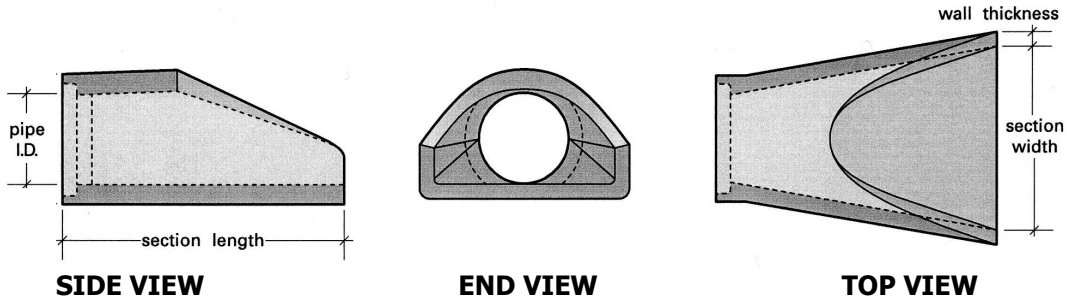


Concrete Pipe Division

8311 West Carder Court
 Littleton, Colorado 80125
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Circular Reinforced Concrete Pipe

Flared End Sections



Pipe I.D. (inches)	Wall Thickness (inches)	Section Length (feet)	Section Width (inches)	CDOT A dimension (inches)	CDOT C dimension (inches)
12	3	6	24	4	53
15	3	6	30	6	46
18	2.5	6.5	36	10	52
24	3	6.5	48	10	38
30	3.5	6.5	60	12	26
36	4	8	72	15	37
42	4.5	8	78	21	30
48	5	8	84	24	22
54	6.25	8	90	27	31
60	6.75	8	96	30	40
66	6.5	8	102	30	19
72	7.75	8	108	34	21

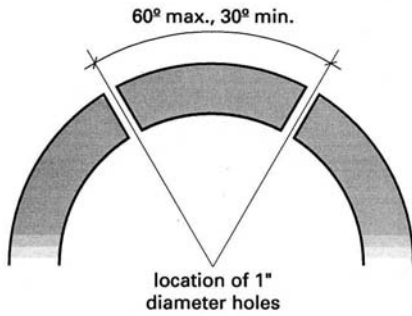
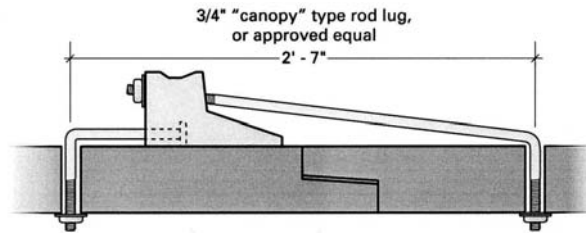
- Additional information available upon request, product data subject to change without notice
- Flared End Sections to be produced with concrete meeting CDOT Class 0 sulfate resistance. The engineer shall confirm that this level of sulfate resistance is adequate to meet project requirements and notify Rinker Materials if a higher level of sulfate resistance is needed.
- CDOT A dimension and CDOT C dimension, please refer to CDOT M603-10



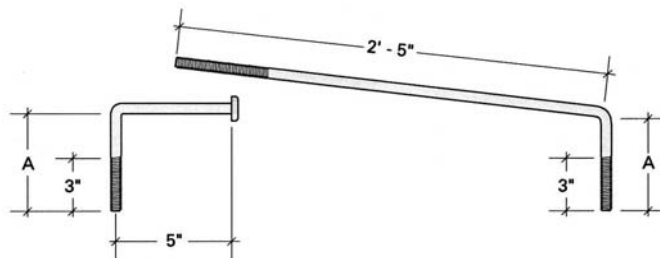
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Reinforced Concrete Pipe

Joint Fasteners



**FASTENER SPACING,
END VIEW**



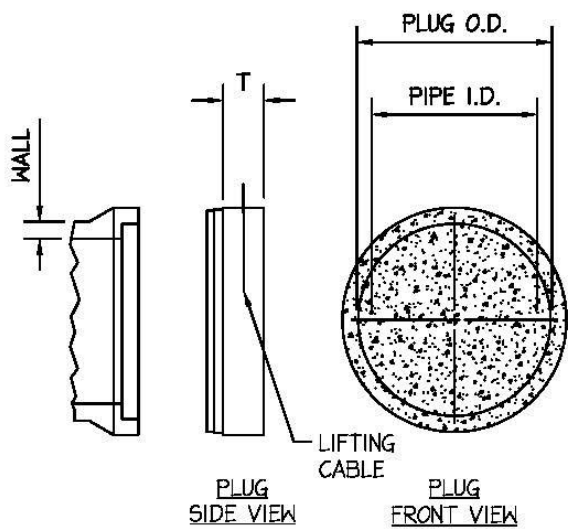
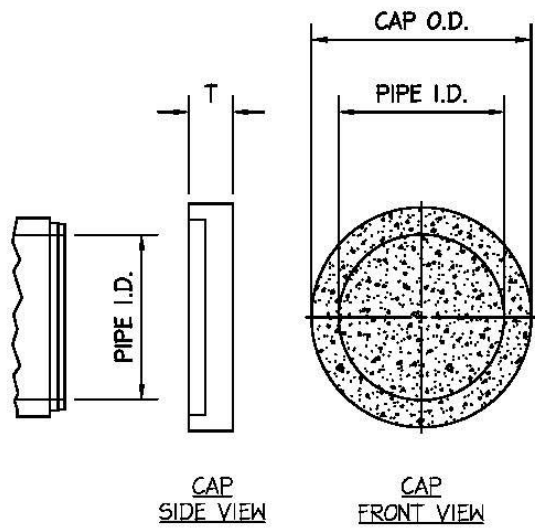
**FASTENER
DIMENSIONS**

Pipe I.D. (inches)	A (inches)
12-96	11

- Canopy to be installed on inside of pipe when bell is present.



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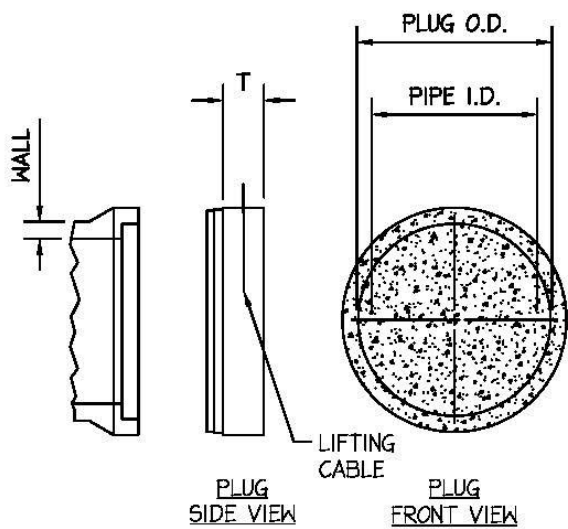
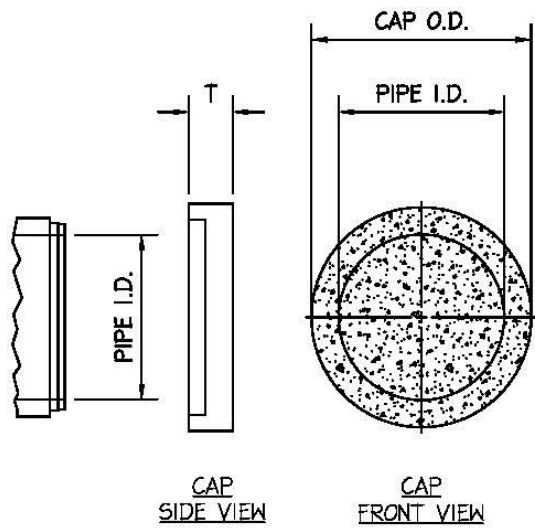
CONTRACTOR LIABLE FOR ALL SPECIALS APPROVED AND BUILT FOR THIS PROJECT.

DATE REQ.	QTY/ EA	PIPE DIA.	"T"	DESCRIPTION
	2	18"	12"	18" Concrete Spigot Plug

CONTRACTOR: JBS Pipeline, Inc.		DATE PREPARED: 5/25/18	PROJECT: Trails at Crowfoot Filing 1 & 9
CONTRACTOR APPROVAL:		PREPARED BY: TJK	LOCATION: Parker, CO
ENGINEER:		SPECIFICATION:	18" Concrete Spigot Plug
ORDER #: 9451802	SHEET OF 1 6	REVISED DATE:	

Rinker
 MATERIALS™
Concrete Pipe
Division

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 LITTLETON, CO 80126
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 (303) 791-1710 FAX



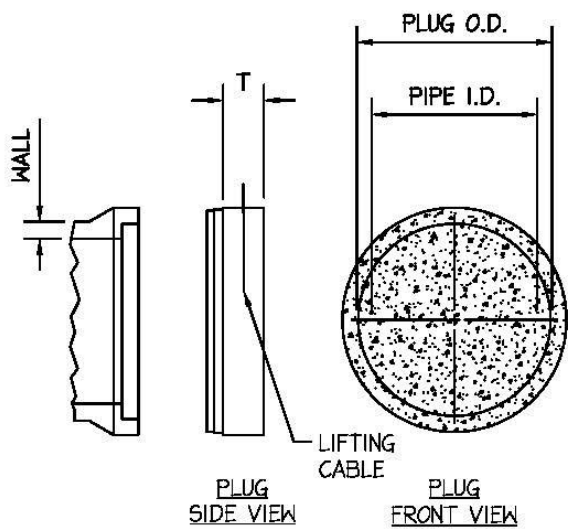
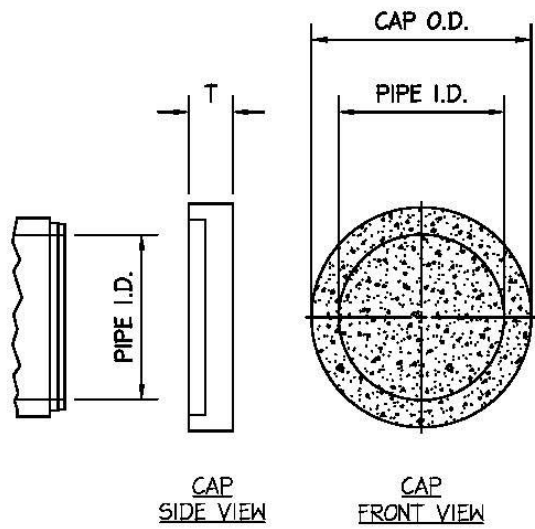
CONTRACTOR LIABLE FOR ALL SPECIALS APPROVED AND BUILT FOR THIS PROJECT.

DATE REQ.	QTY/ EA	PIPE DIA.	"T"	DESCRIPTION
	7	24"	12"	24" Concrete Spigot Plug

CONTRACTOR: JBS Pipeline, Inc.		DATE PREPARED: 5/25/18	PROJECT: Trails at Crowfoot Filing 1 & 9
CONTRACTOR APPROVAL:		PREPARED BY: TJK	LOCATION: Parker, CO
ENGINEER:		SPECIFICATION:	24" Concrete Spigot Plug
ORDER #: 9451802	SHEET OF 2 6	REVISED DATE:	

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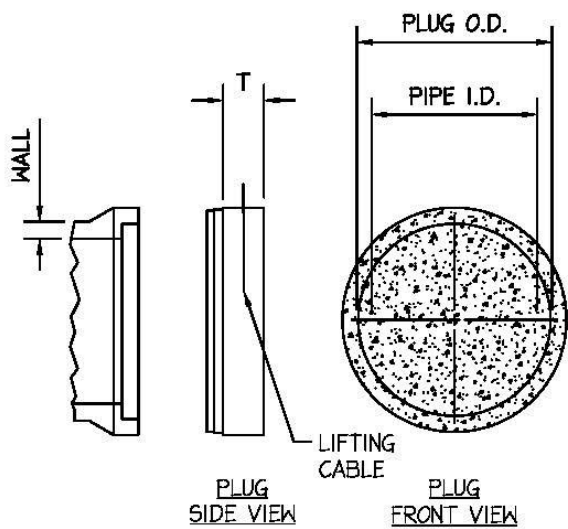
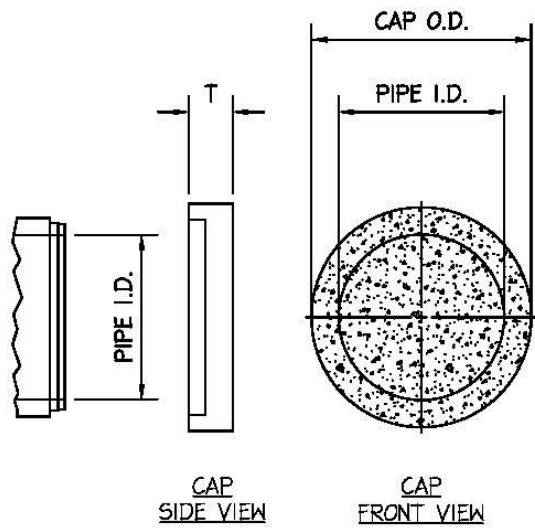
CONTRACTOR LIABLE FOR ALL SPECIALS APPROVED AND BUILT FOR THIS PROJECT.

DATE REQ.	QTY/ EA	PIPE DIA.	"T"	DESCRIPTION
	2	24"	12"	24" Concrete Bell Cap

CONTRACTOR: JBS Pipeline, Inc.		DATE PREPARED: 5/25/18	PROJECT: Trails at Crowfoot Filing 1 & 9
CONTRACTOR APPROVAL:		PREPARED BY: TJK	LOCATION: Parker, CO
ENGINEER:		SPECIFICATION:	24" Concrete Bell Cap
ORDER #: 9451802	SHEET OF 3 OF 6	REVISED DATE:	


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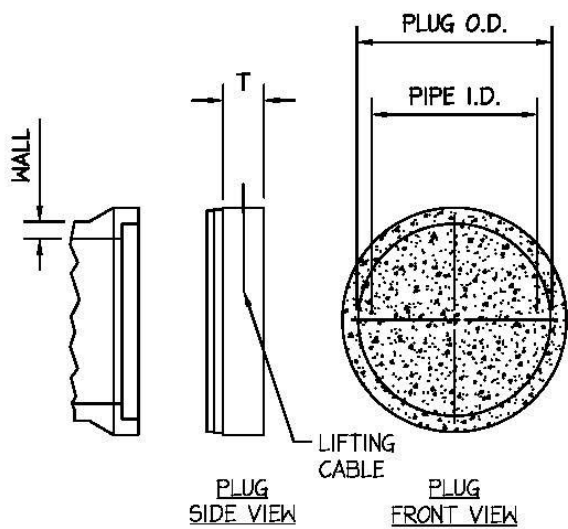
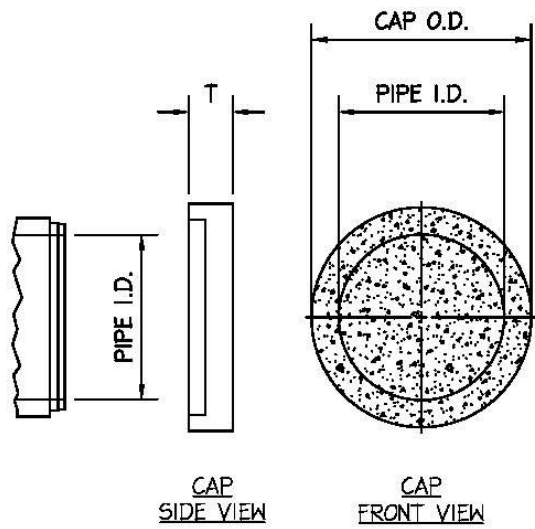
CONTRACTOR LIABLE FOR ALL SPECIALS APPROVED AND BUILT FOR THIS PROJECT.

DATE REQ.	QTY/ EA	PIPE DIA.	"T"	DESCRIPTION
	2	30"	12"	30" Concrete Spigot Plug

CONTRACTOR: JBS Pipeline, Inc.		DATE PREPARED: 5/25/18	PROJECT: Trails at Crowfoot Filing 1 & 9
CONTRACTOR APPROVAL:		PREPARED BY: TJK	LOCATION: Parker, CO
ENGINEER:		SPECIFICATION:	30" Concrete Spigot Plug
ORDER #: 9451802	SHEET OF 4 6	REVISED DATE:	

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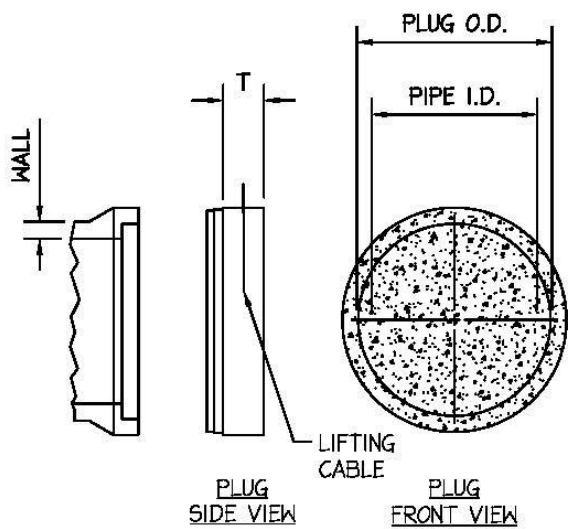
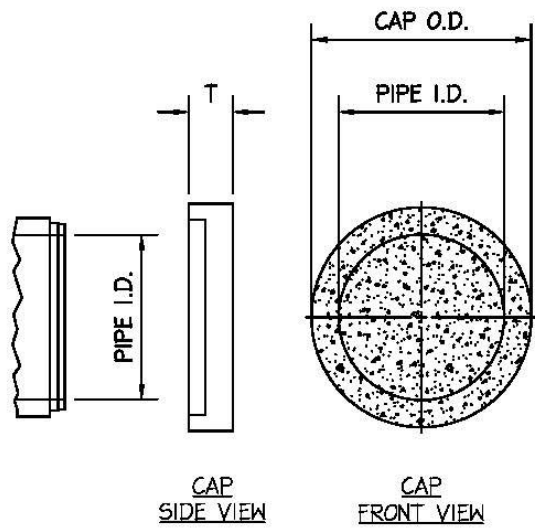


CONTRACTOR LIABLE FOR ALL SPECIALS APPROVED AND BUILT FOR THIS PROJECT.

DATE REQ.	QTY/EA	PIPE DIA.	"T"	DESCRIPTION
	1	30"	12"	30" Concrete Bell Cap

CONTRACTOR: JBS Pipeline, Inc.		DATE PREPARED: 5/25/18	PROJECT: Trails at Crowfoot Filing 1 & 9
CONTRACTOR APPROVAL:		PREPARED BY: TJK	LOCATION: Parker, CO
ENGINEER:		SPECIFICATION:	30" Concrete Bell Cap
ORDER #: 9451802	SHEET OF 5 6	REVISED DATE:	

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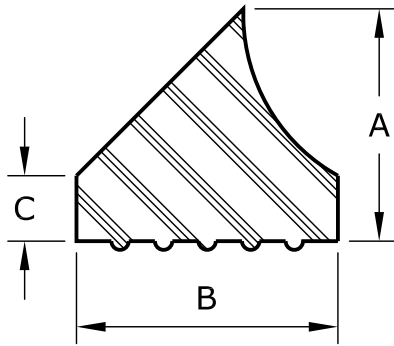
DATE REQ.	QTY/ EA	PIPE DIA.	"T"	DESCRIPTION
	2	36"	12"	36" Concrete Spigot Plug

CONTRACTOR: JBS Pipeline, Inc.		DATE PREPARED: 5/25/18	PROJECT: Trails at Crowfoot Filing 1 & 9
CONTRACTOR APPROVAL:		PREPARED BY: TJK	LOCATION: Parker, CO
ENGINEER:		SPECIFICATION:	36" Concrete Spigot Plug
ORDER #: 9451802	SHEET OF 6 6	REVISED DATE:	

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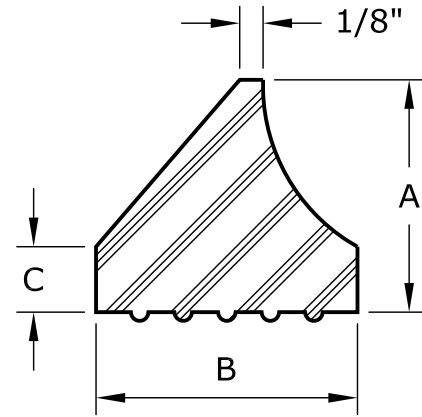
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Delta Seal (DS) Profile Gaskets



Standard DS Profile

Table of Dimensions		
Gasket Height (A) (Inches)	Width (B) (Inches)	(C) (Inches)
11/16	3/4	7/32
3/4	27/32	7/32
13/16	7/8	7/32
7/8	1	1/4
1	1 1/8	1/4
1 1/8	1 1/4	5/16
1 1/4	1 13/32	11/32



**DS Profile
w/ 1/8" Flat Top**

Table of Dimensions		
Gasket Height (A) (Inches)	Width (B) (Inches)	(C) (Inches)
15/16	1 1/16	9/32
1 1/8	1 1/4	5/16
1 1/4	1 13/32	11/32

Material: 40 Duro Isoprene ASTM C-443

Our DS Profile are manufactured from the highest quality rubber compounds. The wedge-shaped design requires less homing force to couple the joint. This design also offers more gasket surface contact area against the pipe's sealing surfaces. These gaskets meet or exceed the requirements of ASTM C 443.

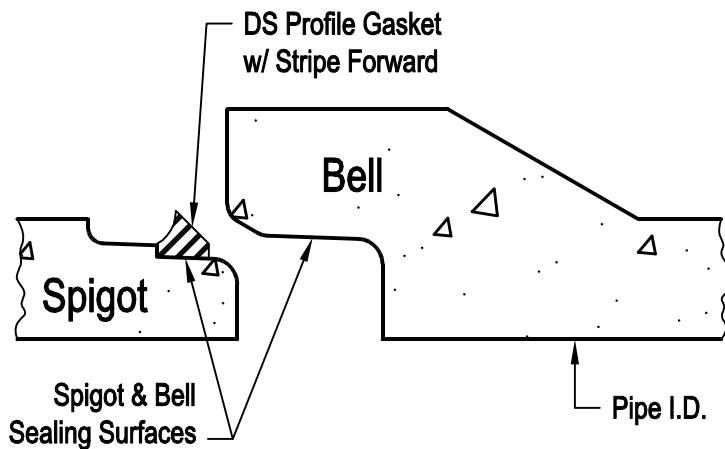
Gainesville Plant
1627 Oakbrook Parkway
Gainesville, Ga. 30507
Phone (770)-718-9403
Fax (770)-718-1851

Fort Worth Plant
4624 Martin Luther King Fwy. Suite 200
Fort Worth, Tx 76119
Phone (817)-536-1214
Fax (817)-536-7003

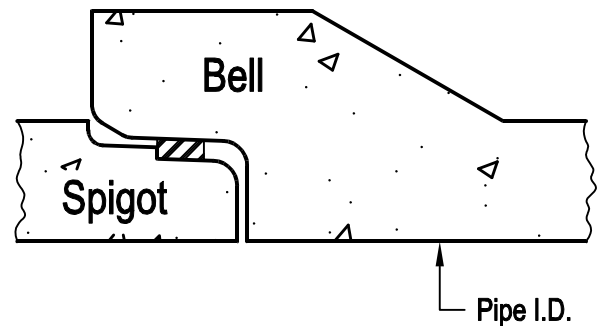
Delta Seal Profile Gasket Installation

Installation:

1. The pipe should be handled with extreme caution to avoid chipping of the spigot or bell sealing surfaces.
2. Clean spigot end including the seating area for the gasket. Place the DS profile on the step of the spigot section, making sure the white stripe is facing toward the end of the spigot.
3. Remove all dirt and other foreign matter from the inside surface of the bell. Apply lubricant to the inner surface of the bell. Carefully align the spigot with the bell. Gasket should touch lead-in taper around the entire circumference before pushing the pipe home.
4. Push the pipe carefully, until the spigot is all the way home.



Properly Positioned



Compressed Joint Completed

Atlanta, Georgia
1627 Oakbrook Parkway
Gainesville, Ga. 30507
Phone (770)-718-9403
Fax (770)-718-1851

Dallas / Fort Worth
4624 Martin Luther King Fwy. Suite 200
Fort Worth, Tx 76119
Phone (817)-536-1214
Fax (817)-536-7003

Rinker Materials

Pipe Joint Lubricant Usage Tables

DS Profile Rubber Gaskets

Approximate Usage per 100 Joints

Only lubricant approved and manufactures expressly for Profile gaskets on concrete pipe or manholes should be used.

Delta Lubricants

#711 General Purpose Lube

#SA-2 Sub Aqueous(Under Water) Lube

#C1-A Economy Lube

#27-A Potable Lube

All types are available in 1 gallon and 3-1/2 gallon pails.

PIPE DIA.	LBS/ 100 JOINTS	PIPE DIA.	LBS/ 100 JOINTS
12"	24	48"	108
15"	32	54"	120
18"	40	60"	136
21"	48	66"	146
24"	56	72"	156
27"	62	78"	174
30"	68	84"	192
33"	74	90"	216
36"	80	96"	240
42"	96	102"	252

*Note: 1 gallon= 8lbs of product; 3-1/2 gallon= 30lbs of product

Profile Gasket Installation Instructions

1. Pipe should be handled with extreme caution to avoid chipping of the spigot or bell sealing surfaces.
2. Carefully clean spigot end including the seating area for the gasket.
3. Place the DS profile gasket on the step of the spigot section, making sure the white stripe is facing forward toward the end of the spigot. Equalize the rubber gasket stretch by running a smooth, round object, inserted between the gasket and spigot, around the circumference several times.
4. Remove all dirt and foreign matter from the inside surface of the bell and apply liberally lubricant to the inner surface of the bell.
5. Align bell and spigot of pipes to be jointed. Before homing the joint check that the gasket is in contact with the entry taper around the entire circumference.
6. Push pipe carefully until the spigot is all the way home.



Gainesville Plant
1627 Oakbrook Parkway
200
Gainesville, Ga. 30507
Phone (770) 718-9403
Fax (770) 718-1851

Fort Worth Plant
4624 Martin Luther King Fwy. Suite
Fort Worth, Tx. 76119
Phone (817) 536-1214
Fax (817) 536-7003

#711 Pipe Joint Lubricant

DATA SHEET

Our #711 pipe joint lubricant effectively lubricates pipe and pipe gaskets for safe and efficient assembly of all types of pipe except potable water lines. Delta #711 is a soft, non-water dispersible paste. It is a stable blend of vegetable oil, soaps, petroleum oils, clays, and water.

Features:

- Non-Water Dispersible
- Consistency: Stable from 10 to 110°F
- Amber/ Tan Stable Paste
- Will not support bacteria growth
- Contains no phosphates
- Bio Degradable
- No objectionable odor

Packaging:

Available in 1 gallon(8lb), 3-1/2 gallon(30lb), and 5 gallon(40lb) Containers

Product Data:

- Form: Paste
- Petroleum Content: ~30%
- Flash Point: >220°F
- Weight: ~10 lbs/ gallon
- Total Base Number: 40-60 mg KOH equivalent/ gram
- % NVM: ~94 by weight
- Petroleum Content: ~30%
- Weight: ~10 lbs/ gallon
- Flash Point: >220°F
- Odor: Bland
- Phosphates: None
- Water Dispersibility: Trace
- Penetration: 320-350 @ 77°F
- Total Base Number: 40-60 mg KOH equivalent/ gram



Gainesville Plant

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