

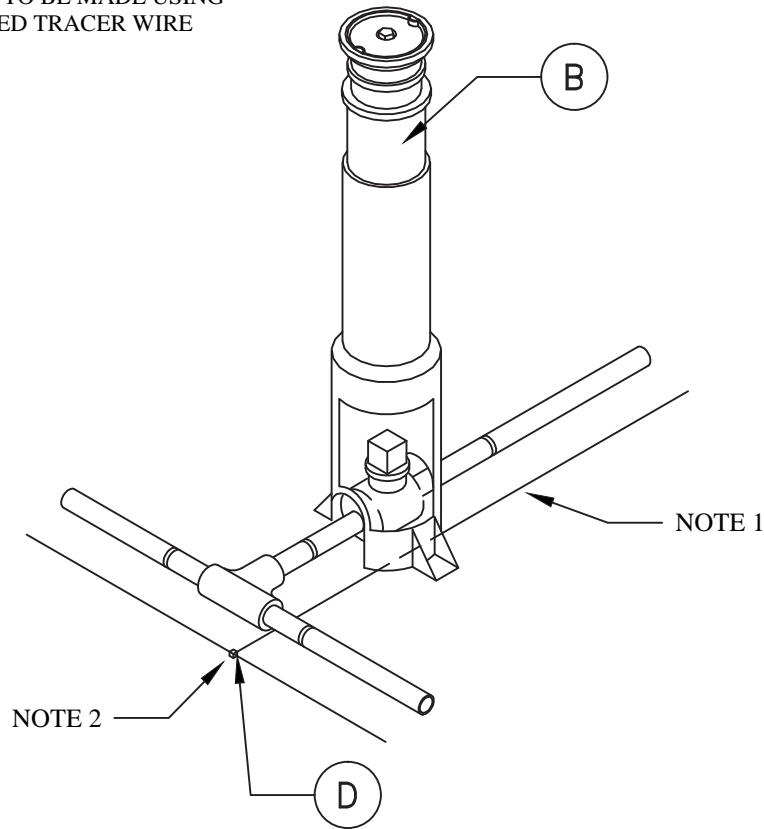
DISTRIBUTION BRANCH INSTALLATION

	<u>CU LISTING</u>	<u>PAGE NUMBER</u>
<u>2" PE RUN</u>		
2" PE BRANCH (DBI01)	GDBI-AA	PAGE 2
<u>4" PE RUN</u>		
2" PE BRANCH (DBI02)	GDBI-CA	PAGE 3
4" PE BRANCH (DBI03)	GDBI-CC	PAGE 4
<u>6" PE RUN</u>		
2" PE BRANCH (DBI04)	GDBI-EA	PAGE 5
4" PE BRANCH (DBI05)	GDBI-EC	PAGE 6
6" PE BRANCH (DBI06)	GDBI-EE	PAGE 7
<u>8" STEEL RUN</u>		
2" PE BRANCH (DBI07)	GDBI-GA	PAGE 8
4" PE BRANCH (DBI08)	GDBI-GC	PAGE 9
6" PE BRANCH (DBI09)	GDBI-GE	PAGE 10
8" STEEL BRANCH (DBI10)	GDBI-GG	PAGE 11
<u>12" STEEL RUN</u>		
2" PE BRANCH (DBI11)	GDBI-IA	PAGE 12
4" PE BRANCH (DBI12)	GDBI-IC	PAGE 13
6" PE BRANCH (DBI13)	GDBI-IE	PAGE 14
8" STEEL BRANCH (DBI14)	GDBI-IG	PAGE 15
12" STEEL BRANCH (DBI15)	GDBI-II	PAGE 16


	VOLUME 15 – ENGINEERING & CONSTRUCTION STANDARD	GDBI-XX								
	DISTRIBUTION BRANCH INSTALLATION INDEX									
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Drawn:</td> <td style="width: 25%;">Eng:</td> <td style="width: 25%;">Appr:</td> <td style="width: 25%;">Date:</td> </tr> <tr> <td>CM</td> <td>CLD</td> <td></td> <td>06/2017</td> </tr> </table>	Drawn:	Eng:	Appr:	Date:	CM	CLD		06/2017		Revision: 1 Page 1 of 16
Drawn:	Eng:	Appr:	Date:							
CM	CLD		06/2017							

NOTES:

- 1) TRACER WIRE TO BE INSTALLED ON PE PIPE PER GAS CONSTRUCTION SPECIFICATIONS.
- 2) ALL WIRE SPLICES TO BE MADE USING CURRENT APPROVED TRACER WIRE CONNECTOR.

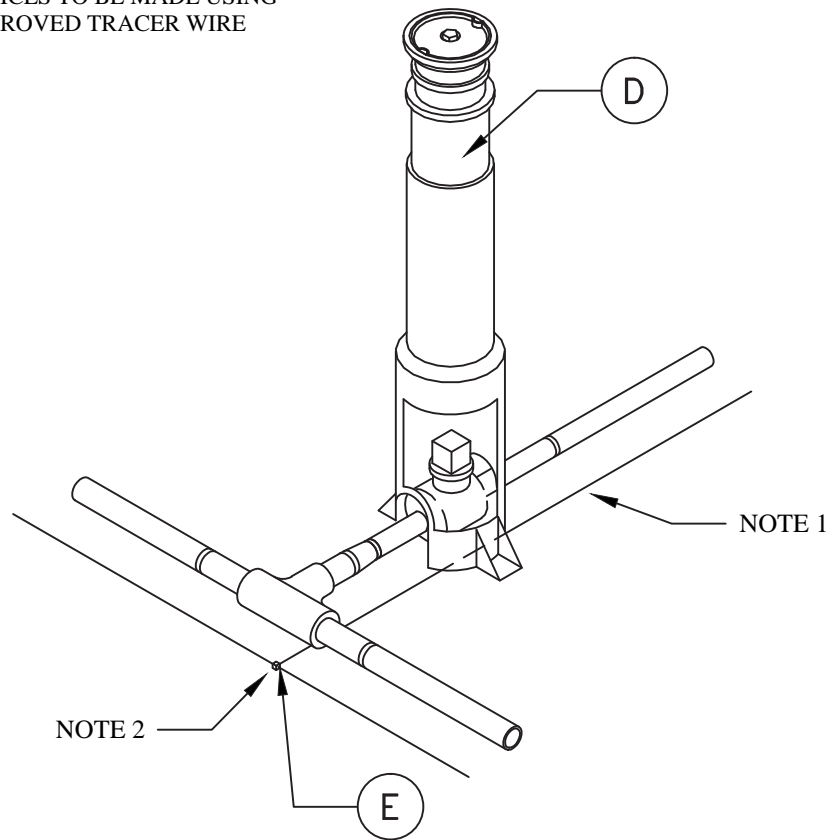


MATERIAL LIST - DBI01G			
ITEM	STOCK #	QTY.	DESCRIPTION
A	45-2224	1.0	TEE 2" IPS BUTT FUSION PE3408
B	43-2030	1.0	VALVE 2" PE3408
C	43-0018	1.0	BOX 1-1/4" AND 2" PE VALVES TRAFFIC RATED H-20
D	45-7000	1.0	TRACER WIRE CONNECTOR
E	45-7500	10.0	WIRE, TRACER YELLOW #14


	VOLUME 15 - ENGINEERING & CONSTRUCTION STANDARD		GDBI-AA
	DISTRIBUTION BRANCH INSTALLATIONS 2" PE RUN X 2" PE BRANCH		
Drawn: CM Eng: CLD Appr: XX Date: 5/2017			Revision: X Page 2 of 16

NOTES:

- 1) TRACER WIRE TO BE INSTALLED ON PE PIPE PER GAS CONSTRUCTION SPECIFICATIONS.
- 2) ALL WIRE SPLICES TO BE MADE USING CURRENT APPROVED TRACER WIRE CONNECTOR.

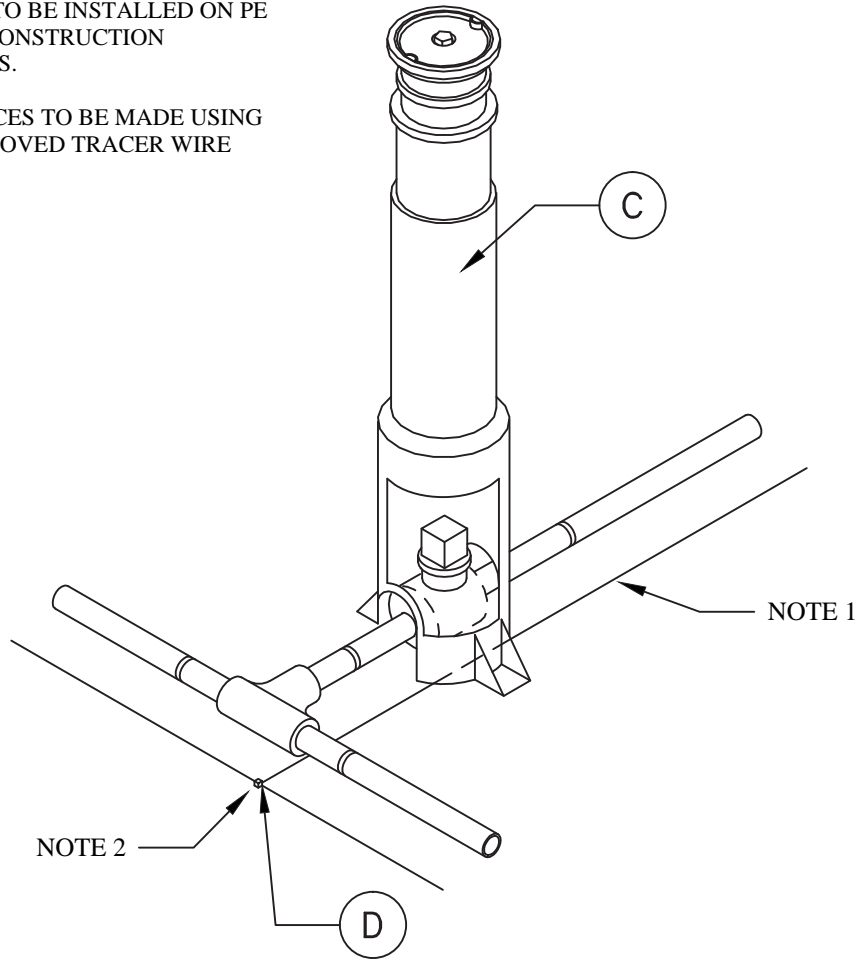


MATERIAL LIST - DBI02G			
ITEM	STOCK #	QTY.	DESCRIPTION
A	45-2230	1.0	TEE 4" IPS BUTT FUSION PE3408
B	45-1757	1.0	REDUCER 4" X 2" IPS BUTT FUSION PE3408
C	43-2030	1.0	VALVE 2" PE3408
D	43-0018	1.0	BOX 1-1/4" AND 2" PE VALVES TRAFFIC RATED H-20
E	45-7000	1.0	TRACER WIRE CONNECTOR
F	45-7500	10.0	WIRE, TRACER YELLOW #14

	VOLUME 15 - ENGINEERING & CONSTRUCTION STANDARD	GDBI-CA								
	DISTRIBUTION BRANCH INSTALLATIONS 4" PE RUN X 2" PE BRANCH									
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Drawn:</td> <td style="width: 25%;">Eng:</td> <td style="width: 25%;">Appr:</td> <td style="width: 25%;">Date:</td> </tr> <tr> <td>CM</td> <td>CLD</td> <td>XX</td> <td>5/2017</td> </tr> </table>	Drawn:	Eng:	Appr:	Date:	CM	CLD	XX	5/2017	Revision: X Page 3 of 16	
Drawn:	Eng:	Appr:	Date:							
CM	CLD	XX	5/2017							

NOTES:

- 1) TRACER WIRE TO BE INSTALLED ON PE PIPE PER GAS CONSTRUCTION SPECIFICATIONS.
- 2) ALL WIRE SPLICES TO BE MADE USING CURRENT APPROVED TRACER WIRE CONNECTOR.

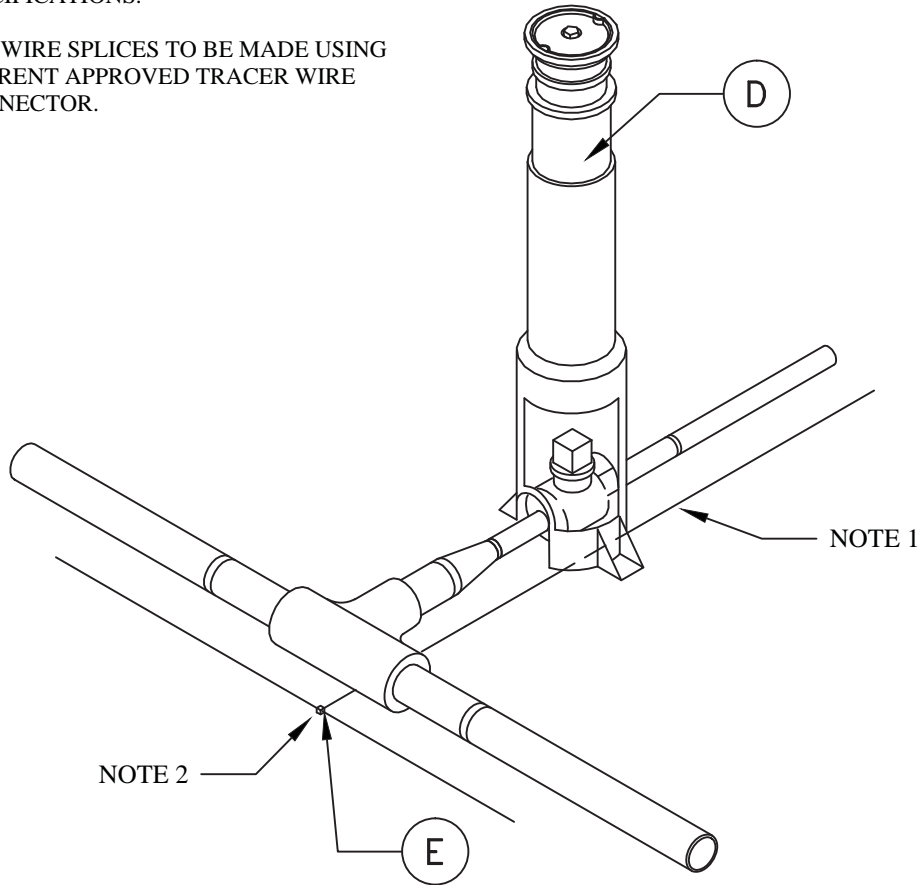


MATERIAL LIST - DBI03G			
ITEM	STOCK #	QTY.	DESCRIPTION
A	45-2230	1.0	TEE 4" IPS BUTT FUSION PE3408
B	43-2040	1.0	VALVE 4" PE3408
C	43-0020	1.0	BOX 3" AND 4" PE VALVES TRAFFIC RATED H-20
D	45-7000	1.0	TRACER WIRE CONNECTOR
E	45-7500	10.0	WIRE, TRACER YELLOW #14


	VOLUME 15 - ENGINEERING & CONSTRUCTION STANDARD			GDBI-CC
	DISTRIBUTION BRANCH INSTALLATIONS 4" PE RUN X 4" PE BRANCH			
Drawn: CM Eng: CLD Appr: XX Date: 5/2017				Revision: X Page 4 of 16

NOTES:

- 1) TRACER WIRE TO BE INSTALLED ON PE PIPE PER GAS CONSTRUCTION SPECIFICATIONS.
- 2) ALL WIRE SPLICES TO BE MADE USING CURRENT APPROVED TRACER WIRE CONNECTOR.

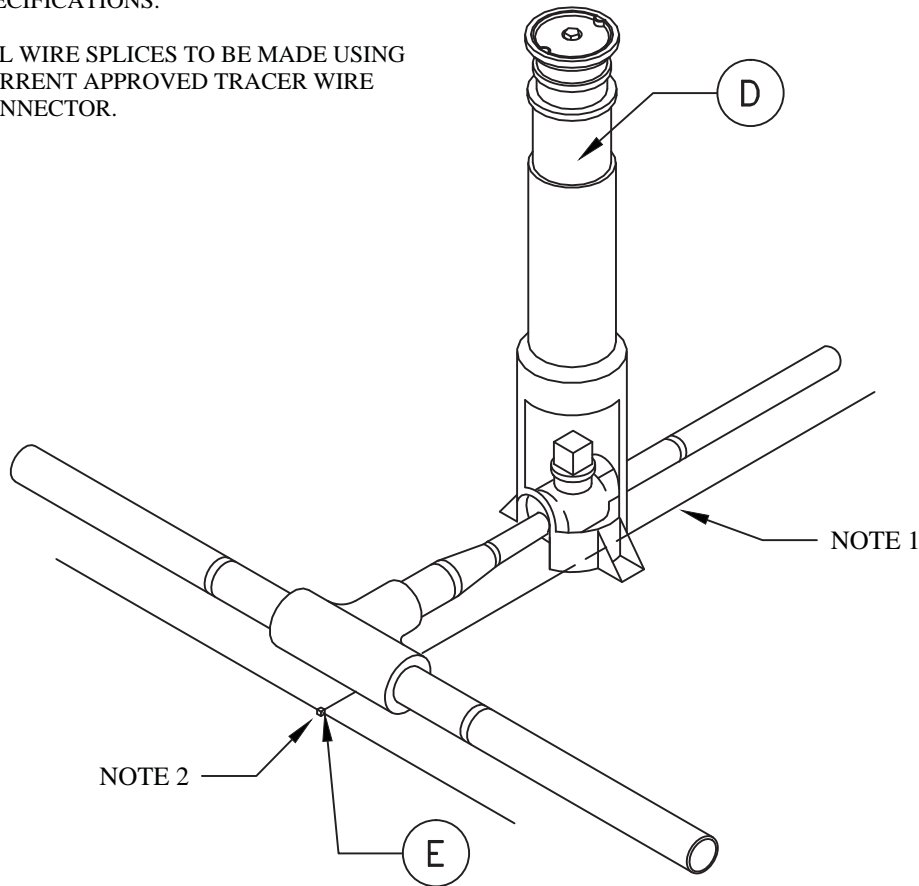


MATERIAL LIST - DBI04G			
ITEM	STOCK #	QTY.	DESCRIPTION
A	45-2231	1.0	TEE 6" IPS BUTT FUSION PE3408
B	45-1762	1.0	REDUCER 6" X 2" IPS BUTT FUSION PE3408
C	43-2030	1.0	VALVE 2" PE3408
D	43-0018	1.0	BOX 1-1/4" AND 2" PE VALVES TRAFFIC RATED H-20
E	45-7000	1.0	TRACER WIRE CONNECTOR
F	45-7500	10.0	WIRE, TRACER YELLOW #14


	VOLUME 15 - ENGINEERING & CONSTRUCTION STANDARD		GDBI-EA
	DISTRIBUTION BRANCH INSTALLATIONS 6" PE RUN X 2" PE BRANCH		
Drawn: CM Eng: CLD Appr: XX Date: 5/2017			Revision: X Page 5 of 16

NOTES:

- 1) TRACER WIRE TO BE INSTALLED ON PE PIPE PER GAS CONSTRUCTION SPECIFICATIONS.
- 2) ALL WIRE SPLICES TO BE MADE USING CURRENT APPROVED TRACER WIRE CONNECTOR.

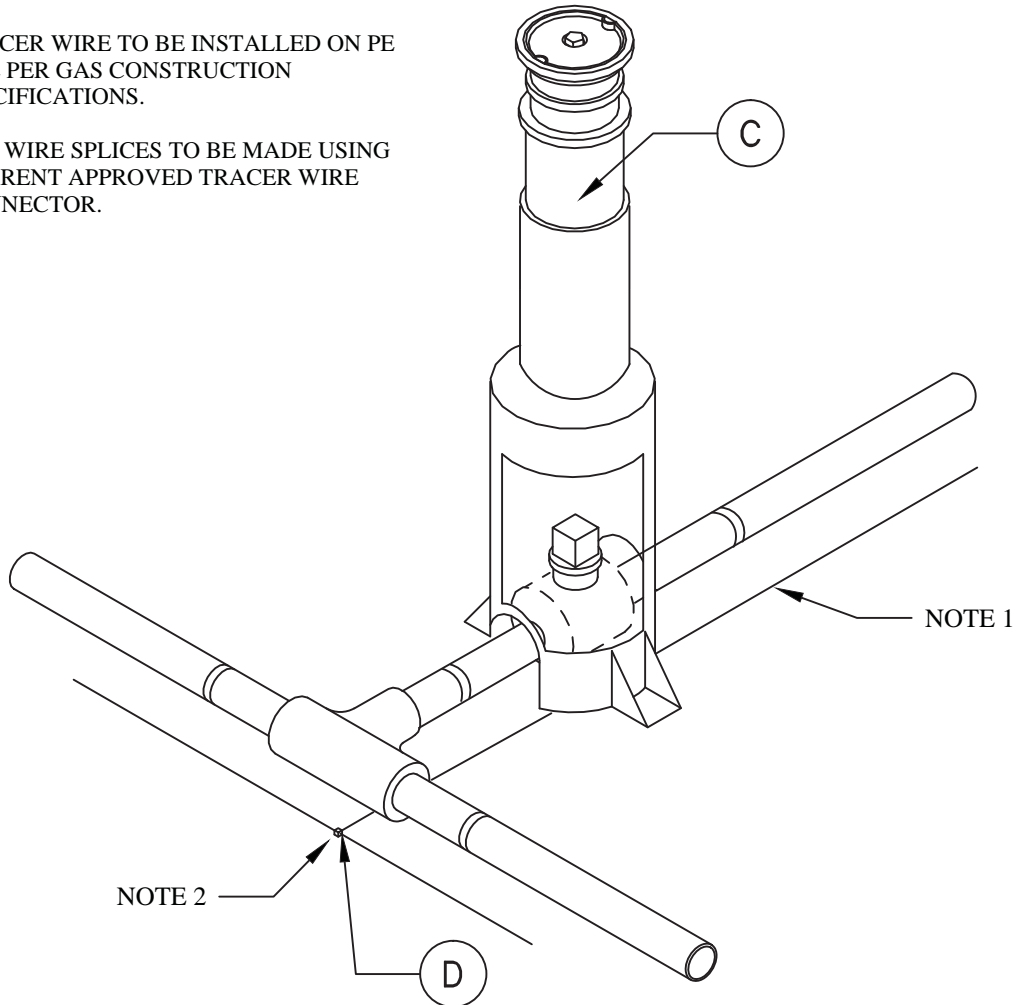


MATERIAL LIST - DBI05G			
ITEM	STOCK #	QTY.	DESCRIPTION
A	45-2231	1.0	TEE 6" IPS BUTT FUSION PE3408
B	45-1764	1.0	REDUCER 6" X 4" IPS BUTT FUSION PE3408
C	43-2040	1.0	VALVE 4" PE3408
D	43-0020	1.0	BOX 3" AND 4" PE VALVES TRAFFIC RATED H-20
E	45-7000	1.0	TRACER WIRE CONNECTOR
F	45-7500	10.0	WIRE, TRACER YELLOW #14


	VOLUME 15 - ENGINEERING & CONSTRUCTION STANDARD			GDBI-EC
	DISTRIBUTION BRANCH INSTALLATIONS 6" PE RUN X 4" PE BRANCH			
Drawn: CM Eng: CLD Appr: XX Date: 5/2017				Revision: X Page 6 of 16

NOTES:

- 1) TRACER WIRE TO BE INSTALLED ON PE PIPE PER GAS CONSTRUCTION SPECIFICATIONS.
- 2) ALL WIRE SPLICES TO BE MADE USING CURRENT APPROVED TRACER WIRE CONNECTOR.

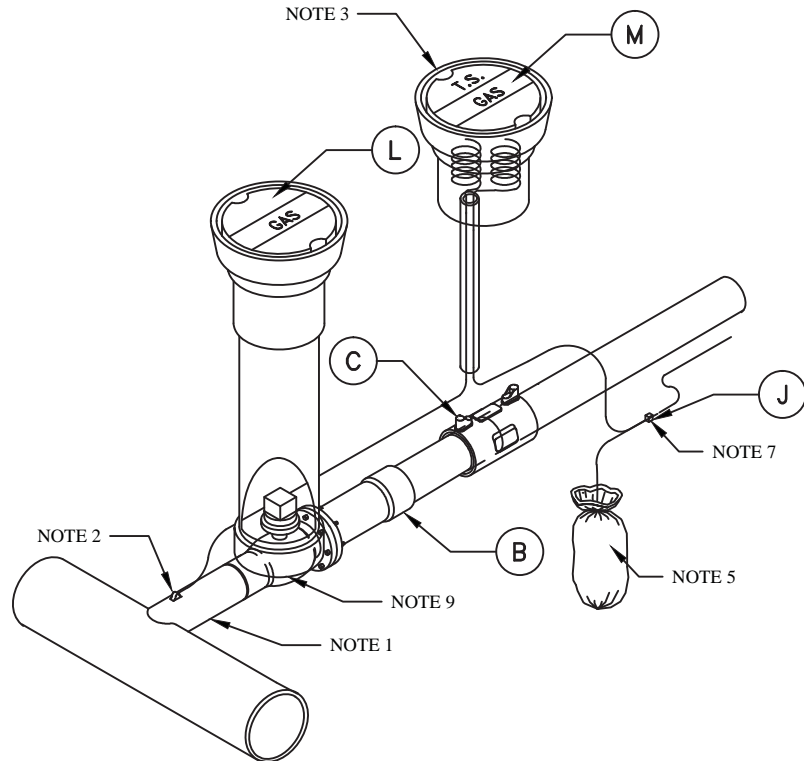


MATERIAL LIST - DBI06G			
ITEM	STOCK #	QTY.	DESCRIPTION
A	45-2231	1.0	TEE 6" IPS BUTT FUSION PE3408
B	43-2042	1.0	VALVE 6" PE3408
C	43-0025	1.0	BOX 6" PE VALVES TRAFFIC RATED H-20
D	45-7000	1.0	TRACER WIRE CONNECTOR
E	45-7500	10.0	WIRE, TRACER YELLOW #14

	VOLUME 15 - ENGINEERING & CONSTRUCTION STANDARD		GDBI-EE
	DISTRIBUTION BRANCH INSTALLATIONS 6" PE RUN X 6" PE BRANCH		
Drawn: CM Eng: CLD Appr: XX Date: 5/2017			Revision: X Page 7 of 16

NOTES:

- 1) LENGTH OF PUP TO BE THREE INCHES. SADDLE PUP TO FIT STEEL MAIN. DO NOT SADDLE VALVE END.
- 2) ALL WIRE CONNECTIONS TO STEEL PIPE TO BE CADWELDED AND COATED WITH CURRENT APPROVED COATING.
- 3) TEST LEAD WIRE TO BE LONG ENOUGH TO EXTEND ONE FOOT ABOVE GROUND LEVEL AND SHALL TERMINATE IN VALVE BOX.
- 4) USE 3/4" PVC OR PE AS A LEAD WIRE CONDUCTOR PIPE PLACED APPROXIMATELY 6" ABOVE CARRIER PIPE AND INTO TEST STATION BOX.
- 5) ANODE CAN BE INSTALLED VERTICALLY OR HORIZONTALLY BUT MUST HAVE A MINIMAL RADIAL CLEARANCE OF TWO FEET FROM THE STEEL PIPE AND BE POSITIONED AT AN ELEVATION NO HIGHER THAN THE STEEL PIPE.
- 6) TRACER WIRE TO BE INSTALLED ON STEEL PIPE AND ON PE PIPE PER GAS CONSTRUCTION SPECIFICATIONS.
- 7) ALL WIRE SPLICES TO BE MADE USING CURRENT APPROVED TRACER WIRE CONNECTOR.
- 8) COAT ALL STEEL PIPE AND VALVES WITH CURRENT APPROVED COATING.
- 9) INSTALL VALVE BOX STABILIZER.



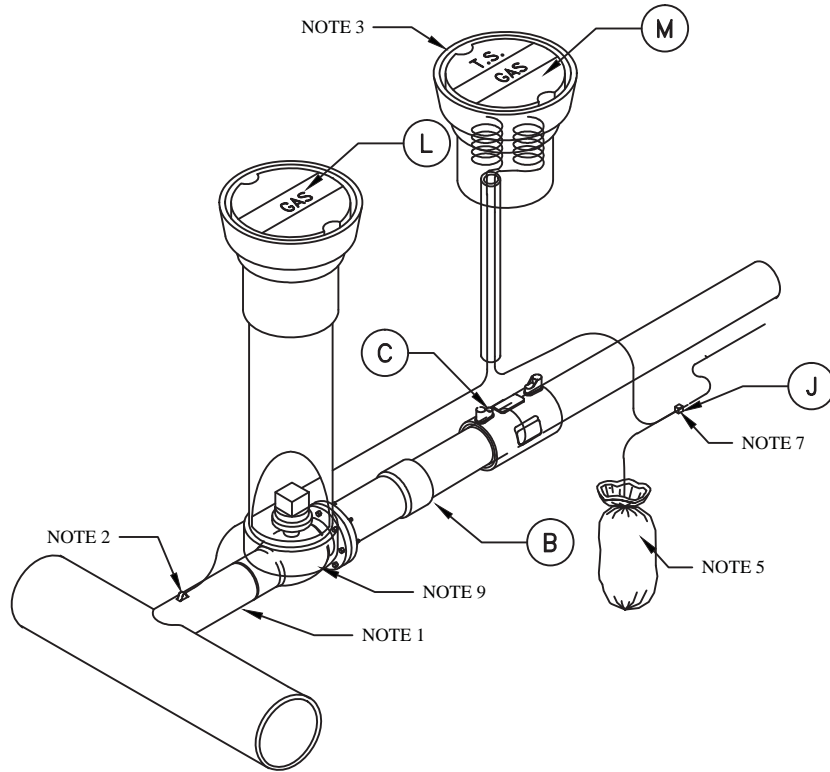
MATERIAL LIST - DBI07G			
ITEM	STOCK #	QTY.	DESCRIPTION
A	43-0227	1.0	VALVE 2" WELD X FLANGE
B	45-6030	1.0	TRANSITION FITTING FLANGED 2" IPS PE3408/4710
C	45-0642	1.0	COUPLING ELECTROFUSION 2" IPS
D	41-0200	1.0	PIPE 2" STEEL FBE API5L GRADE B
E	47-0040	1.0	GASKET COMPRESSED FIBER 2"
F	47-0340	4.0	BOLT MACHINE BLK HEX HEAD W/HEX NUT 5/8" X 2-1/2"
G	47-0020	1.0	ANODE MAGNESIUM 3 LB. WITH COVERING
H	45-7600	10.0	WIRE, TRACER BLACK #14
I	45-7500	10.0	WIRE, TRACER YELLOW #14
J	45-7000	1.0	TRACER WIRE CONNECTOR
K	43-0010	2.0	BOX 6" VALVE CAST IRON
L	43-0095	1.0	COVER BOX VALVE GAS 6"
M	43-0090	1.0	TS BOX COVER
N	41-3000	3.0	PIPE PVC 6" SEWER 6.275 O.D. SDR 35 FOR VALVES
O	43-0034	1.0	VALVE BOX STABILIZER
P	47-0038	1.0	CADWELD CHARGE
Q	47-0037	1.0	CADWELD SLEEVE

COATING MATERIALS LIST		
STOCK #	QTY	DESCRIPTION
47-0280	0.5	VALVE PRIMER
47-0276	1.0	VALVE FILLER
47-0272	5.0	2" WIDE WAX WRAP TAPE
47-0278	5.0	PLASTIC OUTER WRAP
47-0600	1.0	CADWELD "HANDY CAP"

	VOLUME 15 - ENGINEERING & CONSTRUCTION STANDARD	GDBI-GA							
	DISTRIBUTION BRANCH INSTALLATION 8" STEEL RUN X 2" PE BRANCH								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Drawn:</td> <td style="width: 25%;">Eng:</td> <td style="width: 25%;">Appr:</td> <td style="width: 25%;">Date:</td> </tr> <tr> <td>CM</td> <td>CLD</td> <td>XX</td> <td>5/2017</td> </tr> </table>	Drawn:	Eng:	Appr:	Date:	CM	CLD	XX	5/2017	Revision: X Page 8 of 16
Drawn:	Eng:	Appr:	Date:						
CM	CLD	XX	5/2017						

NOTES:

- 1) LENGTH OF PUP TO BE THREE INCHES. SADDLE PUP TO FIT STEEL MAIN. DO NOT SADDLE VALVE END.
- 2) ALL WIRE CONNECTIONS TO STEEL PIPE TO BE CADWELDED AND COATED WITH CURRENT APPROVED COATING.
- 3) TEST LEAD WIRE TO BE LONG ENOUGH TO EXTEND ONE FOOT ABOVE GROUND LEVEL AND SHALL TERMINATE IN VALVE BOX.
- 4) USE 3/4" PVC OR PE AS A LEAD WIRE CONDUCTOR PIPE PLACED APPROXIMATELY 6" ABOVE CARRIER PIPE AND INTO TEST STATION BOX.
- 5) ANODE CAN BE INSTALLED VERTICALLY OR HORIZONTALLY BUT MUST HAVE A MINIMAL RADIAL CLEARANCE OF TWO FEET FROM THE STEEL PIPE AND BE POSITIONED AT AN ELEVATION NO HIGHER THAN THE STEEL PIPE.
- 6) TRACER WIRE TO BE INSTALLED ON STEEL PIPE AND ON PE PIPE PER GAS CONSTRUCTION SPECIFICATIONS.
- 7) ALL WIRE SPLICES TO BE MADE USING CURRENT APPROVED TRACER WIRE CONNECTOR.
- 8) COAT ALL STEEL PIPE AND VALVES WITH CURRENT APPROVED COATING.
- 9) INSTALL VALVE BOX STABILIZER.



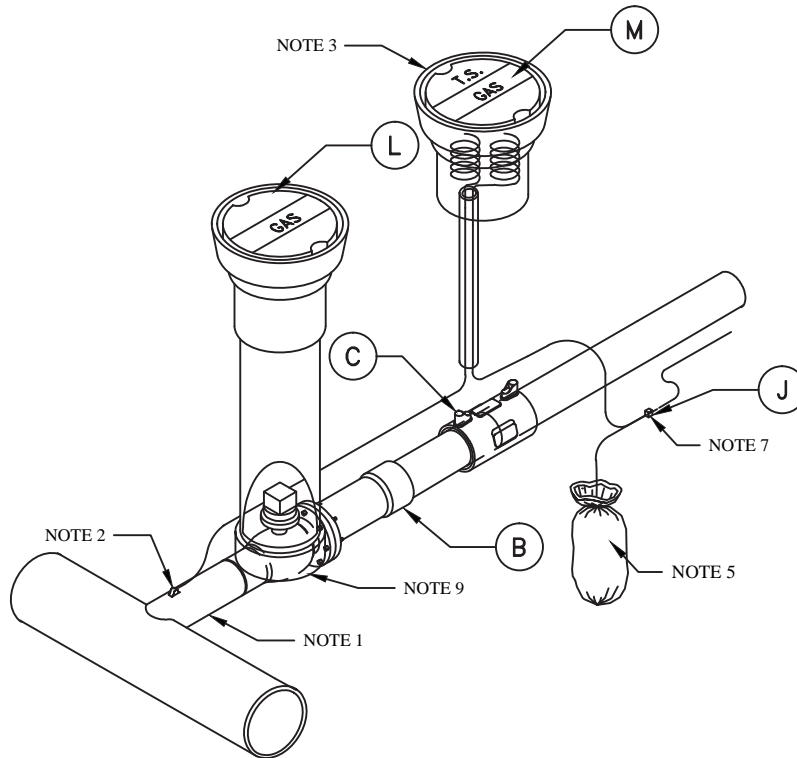
MATERIAL LIST - DBI08G			
ITEM	STOCK #	QTY.	DESCRIPTION
A	43-0237	1.0	VALVE 4" WELD X FLANGE
B	45-6040	1.0	TRANSITION FITTING FLANGED 4" IPS PE3408/4710
C	45-0644	1.0	COUPLING ELECTROFUSION 4" IPS
D	41-0210	1.0	PIPE 4" STEEL FBE APISL GRADE B
E	47-0050	1.0	GASKET COMPRESSED FIBER 4"
F	47-0360	8.0	BOLT MACHINE BLK HEX HEAD W/HEX NUT 5/8" X 3"
G	47-0020	1.0	ANODE MAGNESIUM 3 LB. WITH COVERING
H	45-7600	10.0	WIRE, TRACER BLACK #14
I	45-7500	10.0	WIRE, TRACER YELLOW #14
J	45-7000	1.0	TRACER WIRE CONNECTOR
K	43-0010	2.0	BOX 6" VALVE CAST IRON
L	43-0095	1.0	COVER BOX VALVE GAS 6"
M	43-0090	1.0	TS BOX COVER
N	41-3000	3.0	PIPE PVC 6" SEWER 6.275 O.D. SDR 35 FOR VALVES
O	43-0034	1.0	VALVE BOX STABILIZER
P	47-0038	1.0	CADWELD OUTER CHARGE
Q	47-0037	1.0	CADWELD SLEEVE

COATING MATERIALS LIST		
STOCK #	QTY	DESCRIPTION
47-0280	1.0	VALVE PRIMER
47-0276	2.0	VALVE FILLER
47-0272	10.0	2" WIDE WAX WRAP TAPE
47-0278	10.0	PLASTIC OUTER WRAP
47-0600	1.0	CADWELD "HANDY CAP"

	VOLUME 15 - ENGINEERING & CONSTRUCTION STANDARD	GDBI-GC							
	DISTRIBUTION BRANCH INSTALLATIONS 8" STEEL RUN X 4" PE BRANCH								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Drawn:</td> <td style="width: 25%;">Eng:</td> <td style="width: 25%;">Appr:</td> <td style="width: 25%;">Date:</td> </tr> <tr> <td>CM</td> <td>CLD</td> <td>XX</td> <td>5/2017</td> </tr> </table>	Drawn:	Eng:	Appr:	Date:	CM	CLD	XX	5/2017	Revision: X Page 9 of 16
Drawn:	Eng:	Appr:	Date:						
CM	CLD	XX	5/2017						


NOTES:

- 1) LENGTH OF PUP TO BE THREE INCHES. SADDLE PUP TO FIT STEEL MAIN. DO NOT SADDLE VALVE END.
- 2) ALL WIRE CONNECTIONS TO STEEL PIPE TO BE CADWELDED AND COATED WITH CURRENT APPROVED COATING.
- 3) TEST LEAD WIRE TO BE LONG ENOUGH TO EXTEND ONE FOOT ABOVE GROUND LEVEL AND SHALL TERMINATE IN VALVE BOX.
- 4) USE 3/4" PVC OR PE AS A LEAD WIRE CONDUCTOR PIPE PLACED APPROXIMATELY 6" ABOVE CARRIER PIPE AND INTO TEST STATION BOX.
- 5) ANODE CAN BE INSTALLED VERTICALLY OR HORIZONTALLY BUT MUST HAVE A MINIMAL RADIAL CLEARANCE OF TWO FEET FROM THE STEEL PIPE AND BE POSITIONED AT AN ELEVATION NO HIGHER THAN THE STEEL PIPE.
- 6) TRACER WIRE TO BE INSTALLED ON STEEL PIPE AND ON PE PIPE PER GAS CONSTRUCTION SPECIFICATIONS.
- 7) ALL WIRE SPLICES TO BE MADE USING CURRENT APPROVED TRACER WIRE CONNECTOR.
- 8) COAT ALL STEEL PIPE AND VALVES WITH CURRENT APPROVED COATING.
- 9) INSTALL VALVE BOX STABILIZER.



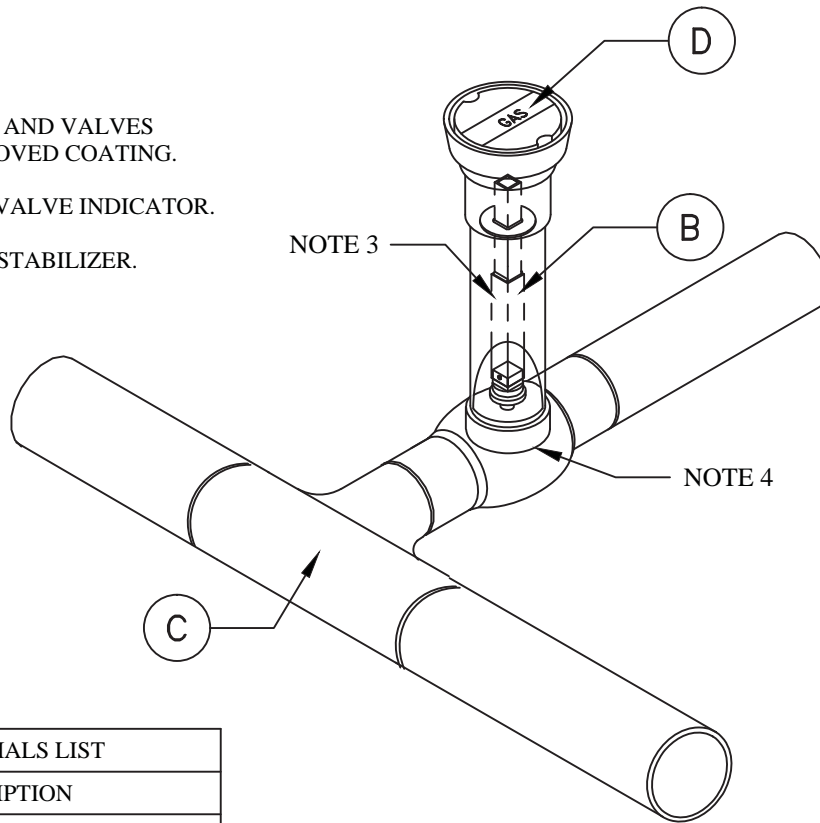
MATERIAL LIST - DBI09G			
ITEM	STOCK #	QTY.	DESCRIPTION
A	43-0239	1.0	VALVE 6" WELD X FLANGE
B	43-0035	1.0	EXTENSION STEEL VALVE INDICATOR
C	45-6050	1.0	TRANSITION FITTING FLANGED 6" IPS PE3408/4710
D	45-0646	1.0	COUPLING ELECTROFUSION 6" IPS
E	41-0215	1.0	PIPE 6" STEEL FBE API5L GRADE B
F	47-0055	1.0	GASKET COMPRESSED FIBER 6"
G	47-0360	8.0	BOLT MACHINE BLK HEX HEAD W/HEX NUT 5/8" X 3"
H	47-0020	1.0	ANODE MAGNESIUM 3 LB. WITH COVERING
I	45-7600	10.0	WIRE, TRACER BLACK #14
J	45-7500	10.0	WIRE, TRACER YELLOW #14
K	45-7000	1.0	TRACER WIRE CONNECTOR
L	43-0010	2.0	BOX 6" VALVE CAST IRON
M	43-0095	1.0	COVER BOX VALVE GAS 6"
N	43-0090	1.0	TS BOX COVER
O	41-3000	3.0	PIPE PVC 6" SEWER 6.275 O.D. SDR 35 FOR VALVES
P	43-0034	1.0	VALVE BOX STABILIZER
Q	47-0038	1.0	CADWELD CHARGE
R	47-0037	1.0	CADWELD SLEEVE

COATING MATERIALS LIST		
STOCK #	QTY	DESCRIPTION
47-0280	1.0	VALVE PRIMER
47-0276	2.0	VALVE FILLER
47-0272	10.0	2" WIDE WAX WRAP TAPE
47-0278	10.0	PLASTIC OUTER WRAP
47-0600	1.0	CADWELD "HANDY CAP"

	<p>VOLUME 15 - ENGINEERING & CONSTRUCTION STANDARD</p>		<p>GDBI-GE</p>
	<p>DISTRIBUTION BRANCH INSTALLATIONS 8" STEEL RUN X 6" PE BRANCH</p>		
<p>Drawn: CM</p>	<p>Eng: CLD</p>	<p>Appr: XX</p>	<p>Date: 5/2017</p>
<p>Revision: X</p>			<p>Page 10 of 16</p>

NOTES:

- 1) WELD VALVE TO TEE.
- 3) COAT ALL STEEL PIPE AND VALVES WITH CURRENT APPROVED COATING.
- 4) INSTALL EXTENSION VALVE INDICATOR.
- 5) INSTALL VALVE BOX STABILIZER.



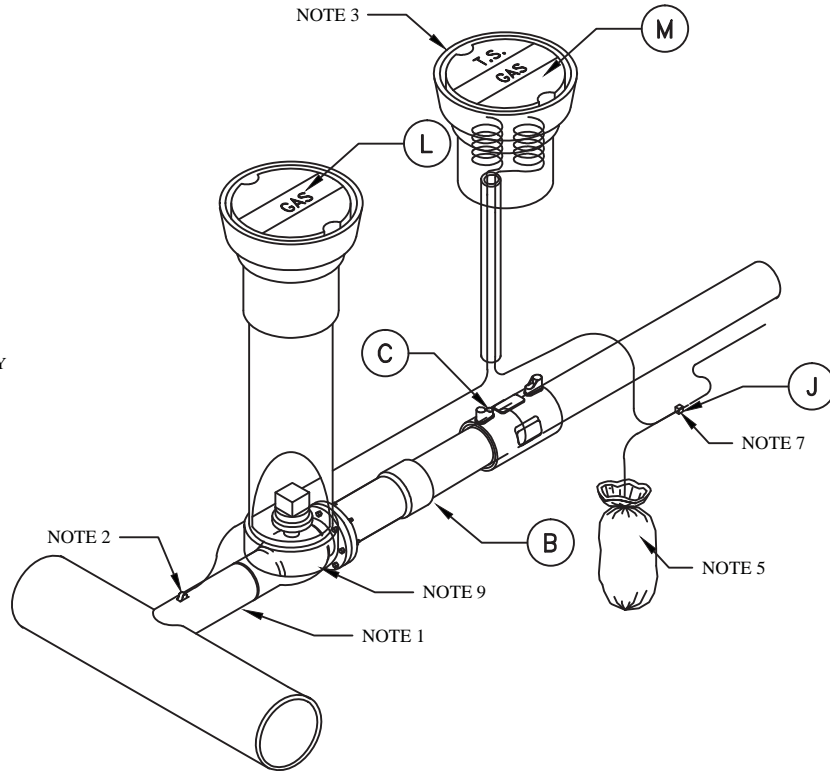
COATING MATERIALS LIST		
STOCK #	QTY	DESCRIPTION
47-0280	1.0	VALVE PRIMER
47-0276	2.0	VALVE FILLER
47-0272	10.0	2" WIDE WAX WRAP TAPE
47-0278	10.0	PLASTIC OUTER WRAP

MATERIAL LIST - DBI10G			
ITEM	STOCK #	QTY.	DESCRIPTION
A	43-0148	1.0	VALVE 8" WELD ENDS
B	43-0035	1.0	EXTENSION STEEL VALVE INDICATOR
C	45-2250	1.0	TEE 8" X 8" WELDING
D	43-0010	1.0	BOX 6" VALVE CAST IRON
E	43-0095	1.0	COVER BOX VALVE GAS 6"
F	41-3000	3.0	PIPE PVC 6" SEWER 6.275 O.D. SDR 35 FOR VALVES
G	43-0034	1.0	VALVE BOX STABILIZER

	VOLUME 15 - ENGINEERING & CONSTRUCTION STANDARD	GDBI-GG							
	DISTRIBUTION BRANCH INSTALLATIONS 8" STEEL RUN X 8" STEEL BRANCH								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Drawn:</td> <td style="width: 25%;">Eng:</td> <td style="width: 25%;">Appr:</td> <td style="width: 25%;">Date:</td> </tr> <tr> <td>CM</td> <td>CLD</td> <td>XX</td> <td>5/2017</td> </tr> </table>	Drawn:	Eng:	Appr:	Date:	CM	CLD	XX	5/2017	Revision: X Page 11 of 16
Drawn:	Eng:	Appr:	Date:						
CM	CLD	XX	5/2017						

NOTES:

- 1) LENGTH OF PUP TO BE THREE INCHES. SADDLE PUP TO FIT STEEL MAIN. DO NOT SADDLE VALVE END.
- 2) ALL WIRE CONNECTIONS TO STEEL PIPE TO BE CADWELDED AND COATED WITH CURRENT APPROVED COATING.
- 3) TEST LEAD WIRE TO BE LONG ENOUGH TO EXTEND ONE FOOT ABOVE GROUND LEVEL AND SHALL TERMINATE IN VALVE BOX.
- 4) USE 3/4" PVC OR PE AS A LEAD WIRE CONDUCTOR PIPE PLACED APPROXIMATELY 6" ABOVE CARRIER PIPE AND INTO TEST STATION BOX.
- 5) ANODE CAN BE INSTALLED VERTICALLY OR HORIZONTALLY BUT MUST HAVE A MINIMAL RADIAL CLEARANCE OF TWO FEET FROM THE STEEL PIPE AND BE POSITIONED AT AN ELEVATION NO HIGHER THAN THE STEEL PIPE.
- 6) TRACER WIRE TO BE INSTALLED ON STEEL PIPE AND ON PE PIPE PER GAS CONSTRUCTION SPECIFICATIONS.
- 7) ALL WIRE SPLICES TO BE MADE USING CURRENT APPROVED TRACER WIRE CONNECTOR.
- 8) COAT ALL STEEL PIPE AND VALVES WITH CURRENT APPROVED COATING.
- 9) INSTALL VALVE BOX STABILIZER.



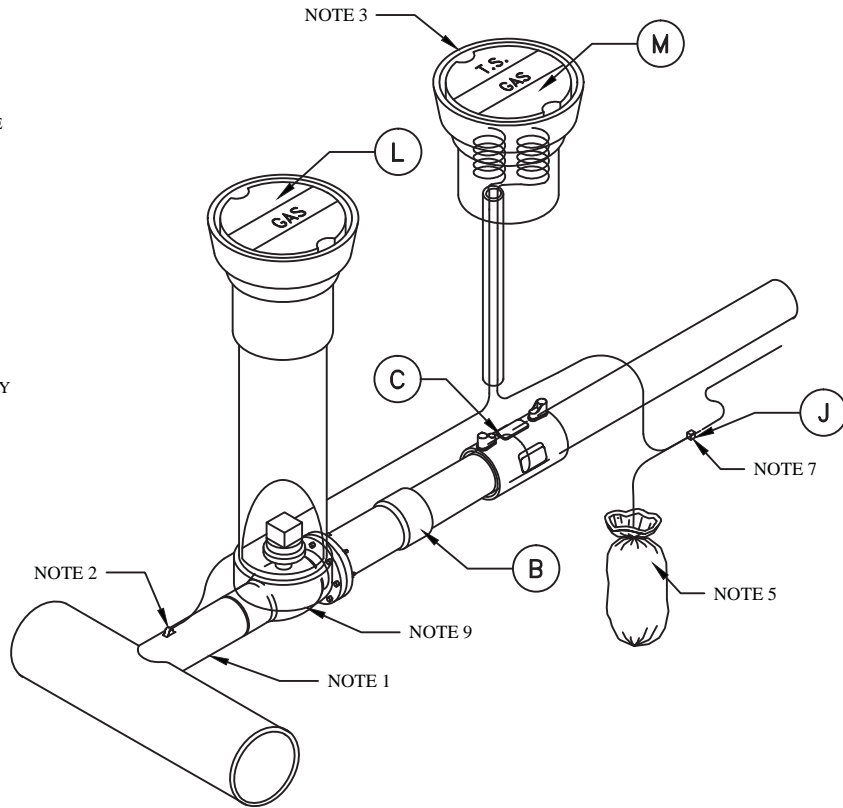
MATERIAL LIST - DBI11G			
ITEM	STOCK #	QTY.	DESCRIPTION
A	43-0227	1.0	VALVE 2" WELD X FLANGE
B	45-6030	1.0	TRANSITION FITTING FLANGED 2" IPS PE3408/4710
C	45-0642	1.0	COUPLING ELECTROFUSION 2" IPS
D	41-0200	1.0	PIPE 2" STEEL FBE APISL GRADE B
E	47-0040	1.0	GASKET COMPRESSED FIBER 2"
F	47-0340	4.0	BOLT MACHINE BLK HEX HEAD W/HEX NUT 5/8" X 2-1/2"
G	47-0020	1.0	ANODE MAGNESIUM 3 LB. WITH COVERING
H	45-7600	10.0	WIRE, TRACER BLACK #14
I	45-7500	10.0	WIRE, TRACER YELLOW #14
J	45-7000	1.0	TRACER WIRE CONNECTOR
K	43-0010	2.0	BOX 6" VALVE CAST IRON
L	43-0095	1.0	COVER BOX VALVE GAS 6"
M	43-0090	1.0	TS BOX COVER
N	41-3000	3.0	PIPE PVC 6" SEWER 6.275 O.D. SDR 35 FOR VALVES
O	43-0034	1.0	VALVE BOX STABILIZER
P	47-0038	1.0	CADWELD CHARGE
Q	47-0037	1.0	CADWELD SLEEVE

COATING MATERIALS LIST		
STOCK #	QTY	DESCRIPTION
47-0280	1.0	VALVE PRIMER
47-0276	2.0	VALVE FILLER
47-0272	10.0	2" WIDE WAX WRAP TAPE
47-0278	10.0	PLASTIC OUTER WRAP
47-0600	1.0	CADWELD "HANDY CAP"

	VOLUME 15 - ENGINEERING & CONSTRUCTION STANDARD	GDBI-IA								
	DISTRIBUTION BRANCH INSTALLATIONS 12" STEEL RUN X 2" PE BRANCH									
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Drawn:</td> <td style="width: 25%;">Eng:</td> <td style="width: 25%;">Appr:</td> <td style="width: 25%;">Date:</td> </tr> <tr> <td>CM</td> <td>CLD</td> <td>XX</td> <td>5/2017</td> </tr> </table>	Drawn:	Eng:	Appr:	Date:	CM	CLD	XX	5/2017	Revision: X Page 12 of 16	
Drawn:	Eng:	Appr:	Date:							
CM	CLD	XX	5/2017							

NOTES:

- 1) LENGTH OF PUP TO BE THREE INCHES. SADDLE PUP TO FIT STEEL MAIN. DO NOT SADDLE VALVE END.
- 2) ALL WIRE CONNECTIONS TO STEEL PIPE TO BE CADWELDED AND COATED WITH CURRENT APPROVED COATING.
- 3) TEST LEAD WIRE TO BE LONG ENOUGH TO EXTEND ONE FOOT ABOVE GROUND LEVEL AND SHALL TERMINATE IN VALVE BOX.
- 4) USE 3/4" PVC OR PE AS A LEAD WIRE CONDUCTOR PIPE PLACED APPROXIMATELY 6" ABOVE CARRIER PIPE AND INTO TEST STATION BOX.
- 5) ANODE CAN BE INSTALLED VERTICALLY OR HORIZONTALLY BUT MUST HAVE A MINIMAL RADIAL CLEARANCE OF TWO FEET FROM THE STEEL PIPE AND BE POSITIONED AT AN ELEVATION NO HIGHER THAN THE STEEL PIPE.
- 6) TRACER WIRE TO BE INSTALLED ON STEEL PIPE AND ON PE PIPE PER GAS CONSTRUCTION SPECIFICATIONS.
- 7) ALL WIRE SPLICES TO BE MADE USING CURRENT APPROVED TRACER WIRE CONNECTOR.
- 8) COAT ALL STEEL PIPE AND VALVES WITH CURRENT APPROVED COATING.
- 9) INSTALL VALVE BOX STABILIZER.



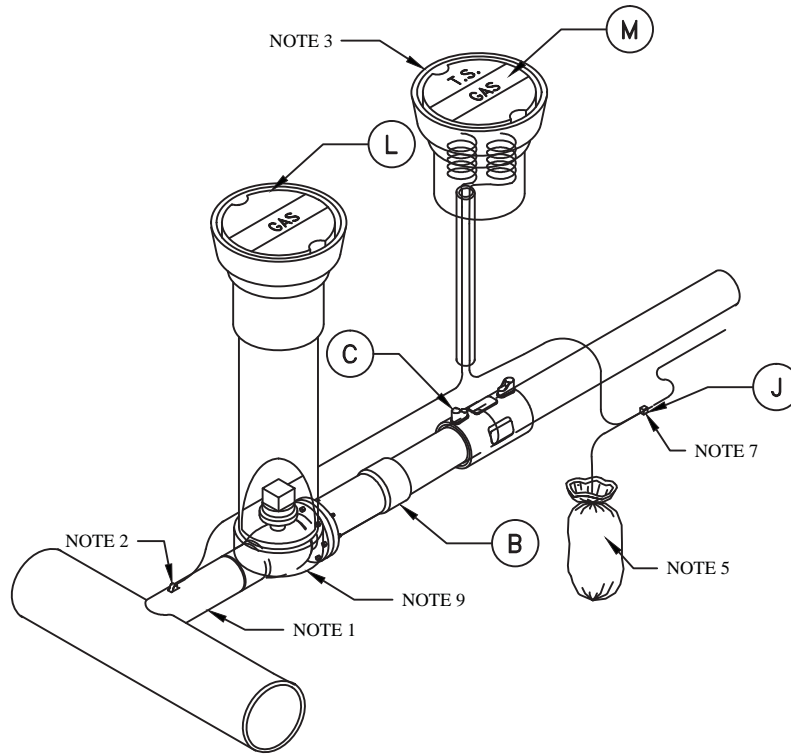
MATERIAL LIST - DBI12G			
ITEM	STOCK #	QTY.	DESCRIPTION
A	43-0237	1.0	VALVE 4" WELD X FLANGE
B	45-6040	1.0	TRANSITION FITTING FLANGED 4" IPS PE3408/4710
C	45-0644	1.0	COUPLING ELECTROFUSION 4" IPS
D	41-0210	1.0	PIPE 4" STEEL FBE API5L GRADE B
E	47-0050	1.0	GASKET COMPRESSED FIBER 4"
F	47-0360	8.0	BOLT MACHINE BLK HEX HEAD W/HEX NUT 5/8" X 3"
G	47-0020	1.0	ANODE MAGNESIUM 3 LB. WITH COVERING
H	45-7600	10.0	WIRE, TRACER BLACK #14
I	45-7500	10.0	WIRE, TRACER YELLOW #14
J	45-7000	1.0	TRACER WIRE CONNECTOR
K	43-0010	2.0	BOX 6" VALVE CAST IRON
L	43-0095	1.0	COVER BOX VALVE GAS 6"
M	43-0090	1.0	TS BOX COVER
N	41-3000	3.0	PIPE PVC 6" SEWER 6.275 O.D. SDR 35 FOR VALVES
O	43-0034	1.0	VALVE BOX STABILIZER
P	47-0038	1.0	CADWELD CHARGE
Q	47-0037	1.0	CADWELD SLEEVE

COATING MATERIALS LIST		
STOCK #	QTY	DESCRIPTION
47-0280	1.0	VALVE PRIMER
47-0276	2.0	VALVE FILLER
47-0272	10.0	2" WIDE WAX WRAP TAPE
47-0278	10.0	PLASTIC OUTER WRAP
47-0600	1.0	CADWELD "HANDY CAP"

	VOLUME 15 - ENGINEERING & CONSTRUCTION STANDARD	GDBI-IC								
	DISTRIBUTION BRANCH INSTALLATIONS 12" STEEL RUN X 4" PE BRANCH									
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Drawn:</td> <td style="width: 25%;">Eng:</td> <td style="width: 25%;">Appr:</td> <td style="width: 25%;">Date:</td> </tr> <tr> <td>CM</td> <td>CLD</td> <td>XX</td> <td>5/2017</td> </tr> </table>	Drawn:	Eng:	Appr:	Date:	CM	CLD	XX	5/2017	Revision: X Page 13 of 16	
Drawn:	Eng:	Appr:	Date:							
CM	CLD	XX	5/2017							

NOTES:

- 1) LENGTH OF PUP TO BE THREE INCHES. SADDLE PUP TO FIT STEEL MAIN. DO NOT SADDLE VALVE END.
- 2) ALL WIRE CONNECTIONS TO STEEL PIPE TO BE CADWELDED AND COATED WITH CURRENT APPROVED COATING.
- 3) TEST LEAD WIRE TO BE LONG ENOUGH TO EXTEND ONE FOOT ABOVE GROUND LEVEL AND SHALL TERMINATE IN VALVE BOX.
- 4) USE 3/4" PVC OR PE AS A LEAD WIRE CONDUCTOR PIPE PLACED APPROXIMATELY 6" ABOVE CARRIER PIPE AND INTO TEST STATION BOX.
- 5) ANODE CAN BE INSTALLED VERTICALLY OR HORIZONTALLY BUT MUST HAVE A MINIMAL RADIAL CLEARANCE OF TWO FEET FROM THE STEEL PIPE AND BE POSITIONED AT AN ELEVATION NO HIGHER THAN THE STEEL PIPE.
- 6) TRACER WIRE TO BE INSTALLED ON STEEL PIPE AND ON PE PIPE PER GAS CONSTRUCTION SPECIFICATIONS.
- 7) ALL WIRE SPLICES TO BE MADE USING CURRENT APPROVED TRACER WIRE CONNECTOR.
- 8) COAT ALL STEEL PIPE AND VALVES WITH CURRENT APPROVED COATING.
- 9) INSTALL VALVE BOX STABILIZER.



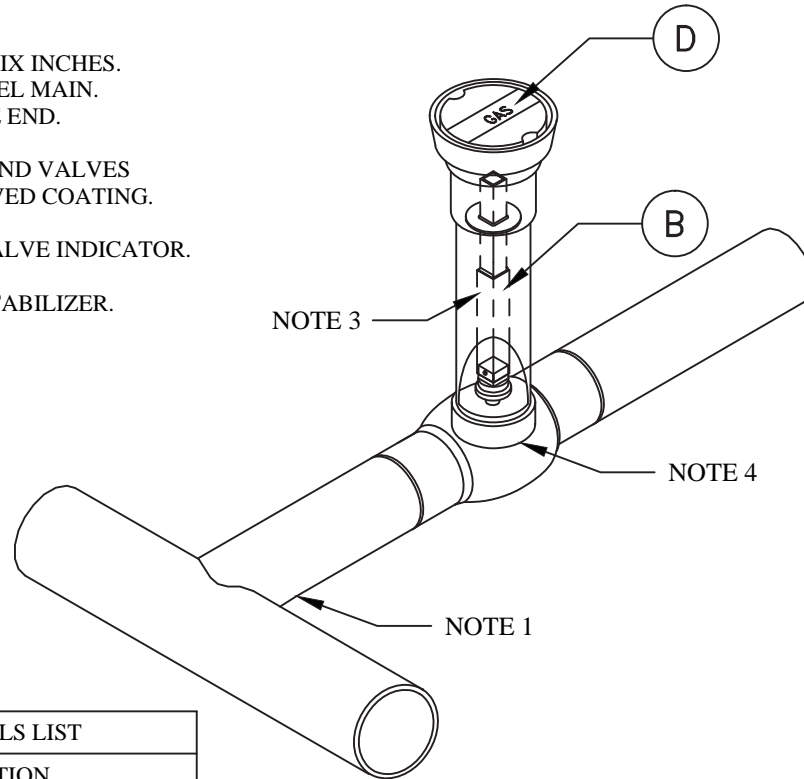
MATERIAL LIST - DBI13G			
ITEM	STOCK #	QTY.	DESCRIPTION
A	43-0239	1.0	VALVE 6" WELD X FLANGE
B	43-0035	1.0	EXTENSION STEEL VALVE INDICATOR
C	45-6050	1.0	TRANSITION FITTING FLANGED 6" IPS PE3408/4710
D	45-0646	1.0	COUPLING ELECTROFUSION 6" IPS
E	51-0095	1.0	PIPE 6" STEEL FBE APISL GRADE B
F	47-0055	1.0	GASKET COMPRESSED FIBER 6"
G	47-0400	8.0	BOLT MACHINE BLK HEX HEAD W/HEX NUT 3/4" X 3 3/4"
H	47-0020	1.0	ANODE MAGNESIUM 3 LB. WITH COVERING
I	45-7600	10.0	WIRE, TRACER BLACK #14
J	45-7500	10.0	WIRE, TRACER YELLOW #14
K	45-7000	1.0	TRACER WIRE CONNECTOR
L	43-0010	2.0	BOX 6" VALVE CAST IRON
M	43-0095	1.0	COVER BOX VALVE GAS 6"
N	43-0090	1.0	TS BOX COVER
O	41-3000	3.0	PIPE PVC 6" SEWER 6.275 O.D. SDR 35 FOR VALVES
P	43-0034	1.0	VALVE BOX STABILIZER
Q	47-0038	1.0	CADWELD CHARGE
R	47-0037	1.0	CADWELD SLEEVE

COATING MATERIALS LIST		
STOCK #	QTY	DESCRIPTION
47-0280	1.0	VALVE PRIMER
47-0276	2.0	VALVE FILLER
47-0272	10.0	2" WIDE WAX WRAP TAPE
47-0278	10.0	PLASTIC OUTER WRAP
47-0600	1.0	CADWELD "HANDY CAP"

	VOLUME 15 - ENGINEERING & CONSTRUCTION STANDARD	GDBI-IE								
	DISTRIBUTION BRANCH INSTALLATIONS 12" STEEL RUN X 6" PE BRANCH									
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Drawn:</td> <td style="width: 25%;">Eng:</td> <td style="width: 25%;">Appr:</td> <td style="width: 25%;">Date:</td> </tr> <tr> <td>CM</td> <td>CLD</td> <td>XX</td> <td>5/2017</td> </tr> </table>	Drawn:	Eng:	Appr:	Date:	CM	CLD	XX	5/2017	Revision: X Page 14 of 16	
Drawn:	Eng:	Appr:	Date:							
CM	CLD	XX	5/2017							

NOTES:

- 1) LENGTH OF PUP TO BE SIX INCHES.
SADDLE PUP TO FIT STEEL MAIN.
DO NOT SADDLE VALVE END.
- 2) COAT ALL STEEL PIPE AND VALVES
WITH CURRENT APPROVED COATING.
- 3) INSTALL EXTENSION VALVE INDICATOR.
- 4) INSTALL VALVE BOX STABILIZER.



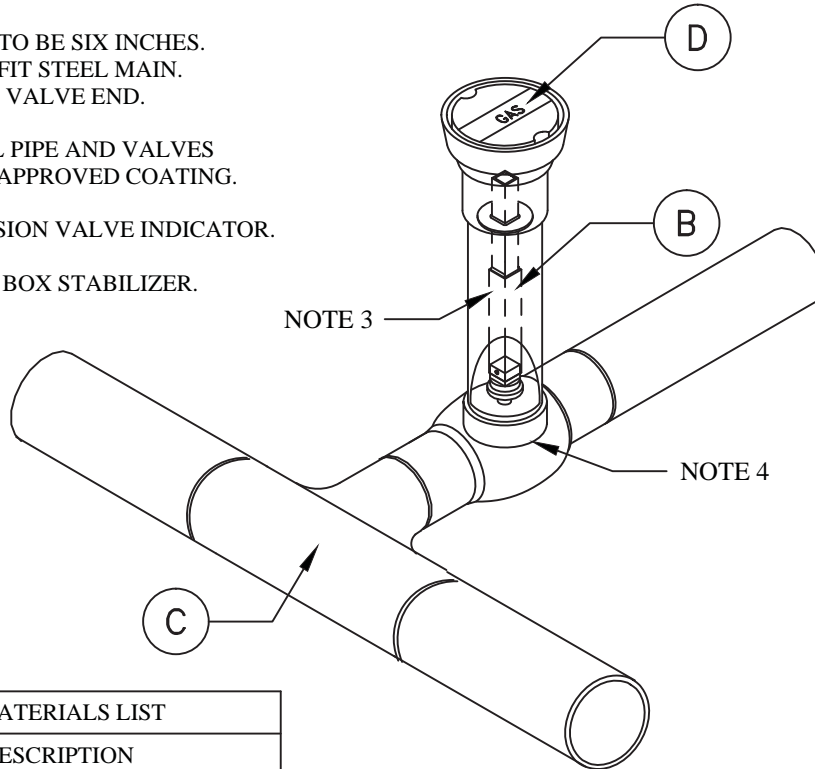
COATING MATERIALS LIST		
STOCK #	QTY	DESCRIPTION
47-0280	1.0	VALVE PRIMER
47-0276	2.0	VALVE FILLER
47-0272	10.0	2" WIDE WAX WRAP TAPE
47-0278	10.0	PLASTIC OUTER WRAP

MATERIAL LIST - DBI14G			
ITEM	STOCK #	QTY.	DESCRIPTION
A	43-0148	1.0	VALVE 8" WELD ENDS
B	43-0035	1.0	EXTENSION STEEL VALVE INDICATOR
C	41-0220	1.0	PIPE 8" STEEL FBE API5L GRADE B/X42/X52
D	43-0010	2.0	BOX 6" VALVE CAST IRON
E	43-0095	1.0	COVER BOX VALVE GAS 6"
F	41-3000	3.0	PIPE PVC 6" SEWER 6.275 O.D. SDR 35 FOR VALVES
G	43-0034	1.0	VALVE BOX STABILIZER

	VOLUME 15 - ENGINEERING & CONSTRUCTION STANDARD	GDBI-IG							
	DISTRIBUTION BRANCH INSTALLATIONS 12" STEEL RUN X 8" STEEL BRANCH								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Drawn:</td> <td style="width: 25%;">Eng:</td> <td style="width: 25%;">Appr:</td> <td style="width: 25%;">Date:</td> </tr> <tr> <td>CM</td> <td>CLD</td> <td>XX</td> <td>5/2017</td> </tr> </table>	Drawn:	Eng:	Appr:	Date:	CM	CLD	XX	5/2017	Revision: X Page 15 of 16
Drawn:	Eng:	Appr:	Date:						
CM	CLD	XX	5/2017						

NOTES:

- 1) LENGTH OF PUP TO BE SIX INCHES.
SADDLE PUP TO FIT STEEL MAIN.
DO NOT SADDLE VALVE END.
- 2) COAT ALL STEEL PIPE AND VALVES
WITH CURRENT APPROVED COATING.
- 3) INSTALL EXTENSION VALVE INDICATOR.
- 4) INSTALL VALVE BOX STABILIZER.



COATING MATERIALS LIST		
STOCK #	QTY	DESCRIPTION
47-0280	1.0	VALVE PRIMER
47-0276	2.0	VALVE FILLER
47-0272	10.0	2" WIDE WAX WRAP TAPE
47-0278	10.0	PLASTIC OUTER WRAP

MATERIAL LIST - DBI15G			
ITEM	STOCK #	QTY.	DESCRIPTION
A	43-0158	1.0	VALVE 12" WELD ENDS
B	43-0035	1.0	EXTENSION STEEL VALVE INDICATOR
C	45-2260	1.0	TEE 12" X 12" WELDING
D	43-0010	2.0	BOX 6" VALVE CAST IRON
E	43-0095	1.0	COVER BOX VALVE GAS 6"
F	41-3000	3.0	PIPE PVC 6" SEWER 6.275 O.D. SDR 35 FOR VALVES
G	43-0034	1.0	VALVE BOX STABILIZER

	VOLUME 15 - ENGINEERING & CONSTRUCTION STANDARD	GDBI-II							
	DISTRIBUTION BRANCH INSTALLATIONS 12" STEEL RUN X 12" STEEL BRANCH								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Drawn:</td> <td style="width: 25%;">Eng:</td> <td style="width: 25%;">Appr:</td> <td style="width: 25%;">Date:</td> </tr> <tr> <td>CM</td> <td>CLD</td> <td>XX</td> <td>5/2017</td> </tr> </table>	Drawn:	Eng:	Appr:	Date:	CM	CLD	XX	5/2017	Revision: X Page 16 of 16
Drawn:	Eng:	Appr:	Date:						
CM	CLD	XX	5/2017						