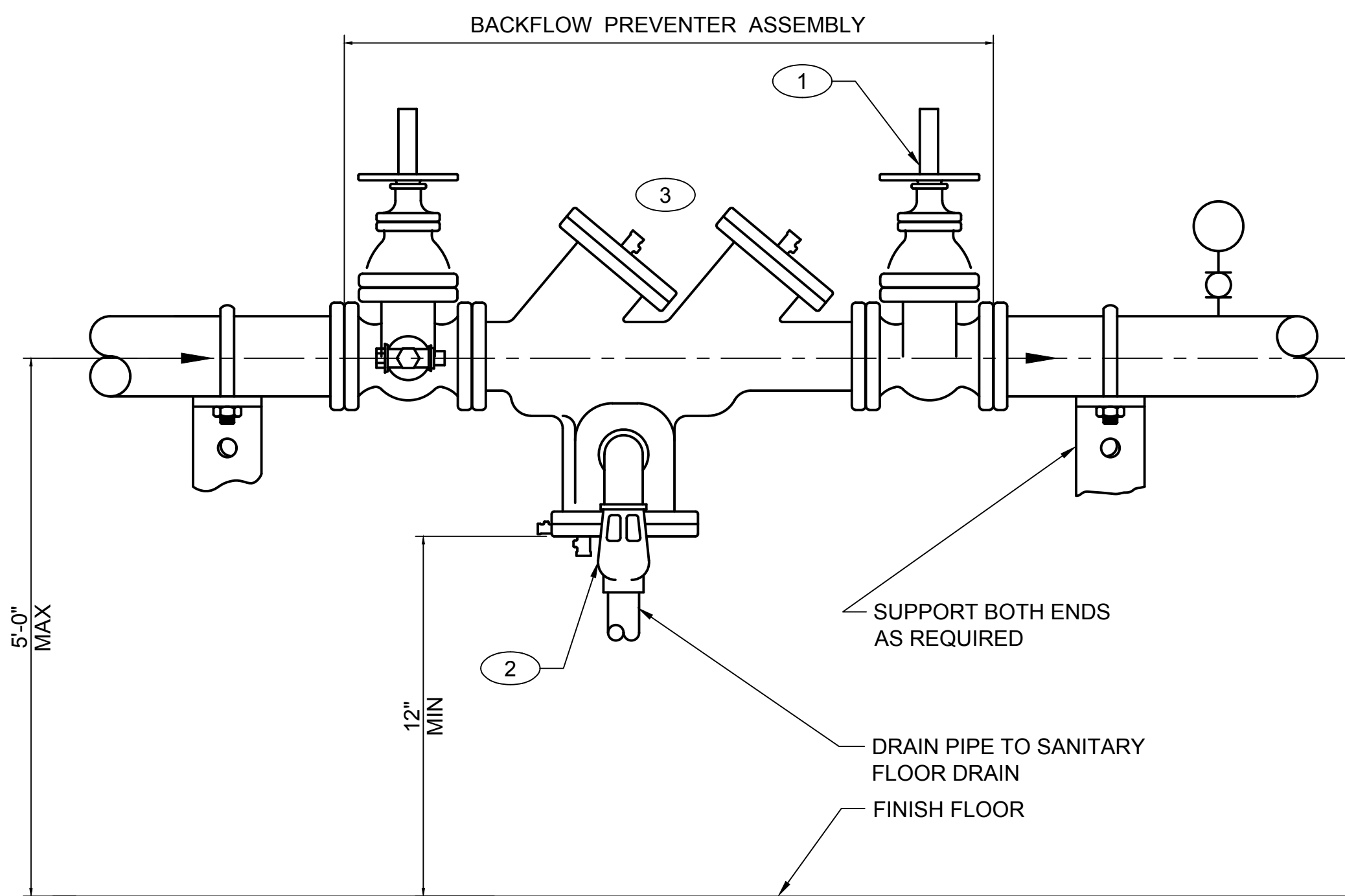
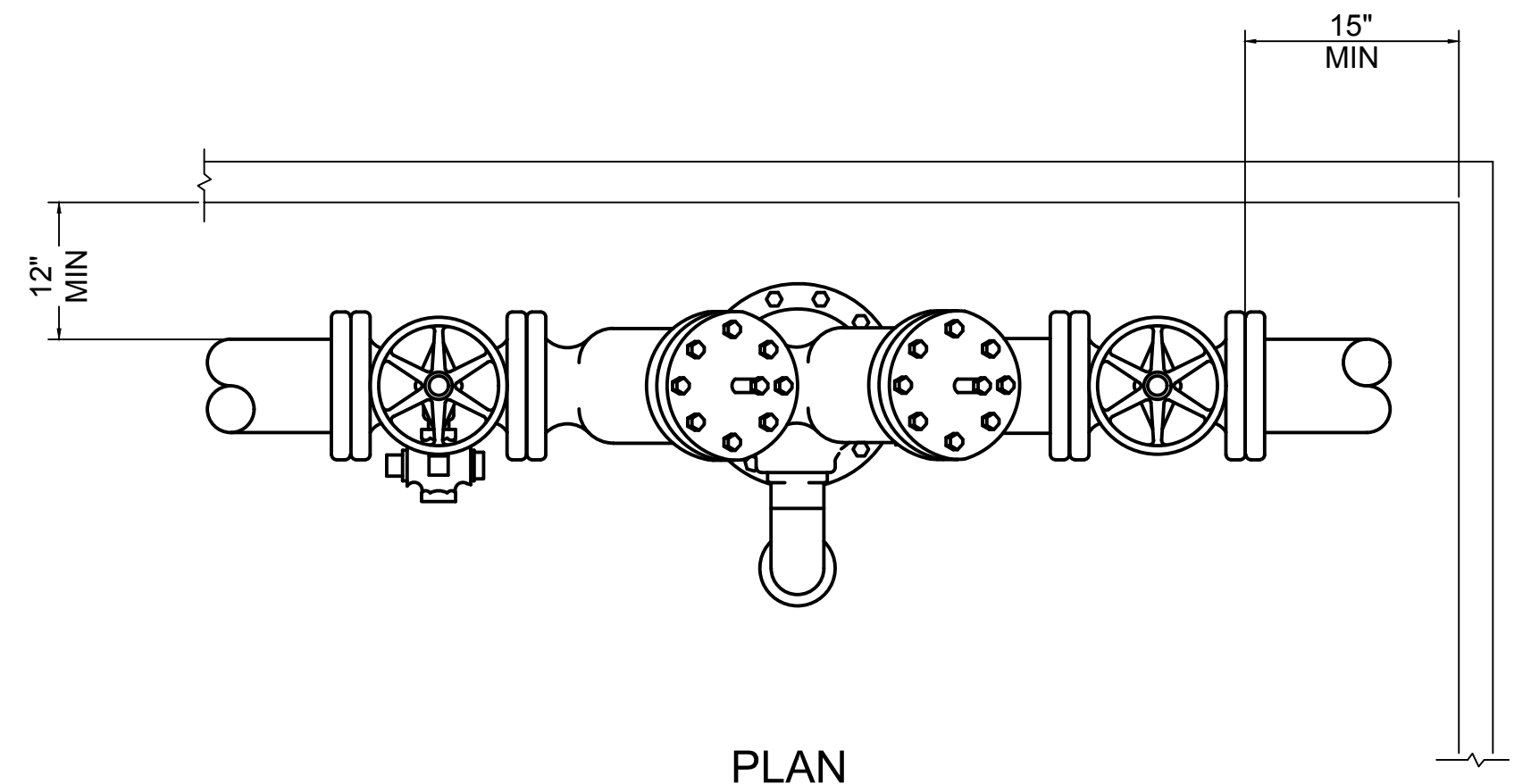


D  
C  
B  
A



**BACKFLOW PREVENTER DETAIL**  
SCALE: NONE

**KEYED NOTES:**

- 1 PROVIDE ADEQUATE CLEARANCE ABOVE UNIT FOR OPERATION OF VALVES OR UNIT REPAIR.
- 2 AIR GAP FITTING FURNISHED WITH BACKFLOW PREVENTER.
- 3 BYPASS PIPING AROUND BFP IS PROHIBITED.

**NOTES FOR DESIGNER:** (DO NOT INCLUDE ON CONSTRUCTION DRAWINGS)

1. WHEN EDITING DETAIL TO SUIT PROJECT, ADD JOB SPECIFIC REQUIREMENTS AND DELETE ONLY THOSE PORTIONS THAT DO NOT APPLY. TO SEEK A VARIANCE FROM APPLICABLE REQUIREMENTS, CONTACT THE ESM MECHANICAL POC.
2. REFER TO THE FOLLOWING LANL STANDARDS FOR ADDITIONAL REQUIREMENTS:
  - A. ENGINEERING MANUAL, MECHANICAL CHAPTER.
  - B. MASTER SPECIFICATION 01 3545, WATER DISCHARGE REQUIREMENTS.
  - C. MASTER SPECIFICATION 22 1100, FACILITY WATER DISTRIBUTION.
  - D. MECHANICAL DRAWING ST-D2020-1, SITE/BUILDING WATER COMPONENT DIAGRAM.
3. BACKFLOW PREVENTERS (BFP) MAY BE STACKED OR INSTALLED SIDE-BY-SIDE PROVIDED THAT THE MINIMUM AND MAXIMUM CLEARANCE DIMENSIONS ARE MAINTAINED.
  - A. USE VERTICAL INSTALLATION (STACKED) WHERE POSSIBLE.
  - B. 12" MINIMUM CLEARANCE IS REQUIRED WHEN BACKFLOW PREVENTERS ARE INSTALLED SIDE-BY-SIDE.
4. PROVIDE FLOOR DRAIN TO SANITARY SEWER NEAR BFP. ROUTE BFP DRAIN PIPING TO MINIMIZE A TRIPPING HAZARD.
5. FOR ONE BFP, THE MINIMUM DRAIN PIPING SIZE IS THE SAME SIZE AS THE AIR GAP BFP PORT SIZE. FOR 2 OR MORE BFP'S ON THE SAME DRAIN PIPING, THE MINIMUM COLLECTING DRAIN PIPING SIZE IS THE SUM OF THE INDIVIDUAL DRAIN PIPING AREAS.
6. BFP INSTALLED MORE THAN 5 FEET ABOVE FLOOR SHALL BE PROVIDED WITH A PLATFORM CAPABLE OF SUPPORTING A TESTER OR MAINTENANCE PERSON (UPC REQUIREMENT).

DRAWING DEVELOPED FOR ML-3/ ML-4 PROJECTS. FOR ML-1/ ML-2, ADDITIONAL REQUIREMENTS AND QA REVIEWS ARE REQUIRED. (REMOVE THIS NOTE WHEN INSERTED INTO A DRAWING PACKAGE).

NO	DATE	CLASS REV	DC	DESCRIPTION	DWN	DSGN	CHKD	SUB	APP
4	06-23-2017	UNCLASS	TO	ADMIN. CHANGES TO CAD STD. REV#5 FORMAT & SHEET NUMBER WAS 2 OF 3.	JB	AJ	ML	ML	TO
3	07-28-2004	U	LB	ADDED KEY NOTE 3. DWG NO. WAS ST-D10-30GEN-1	RP	RF	JM	CD	TO
2	08-13-2003	U	LB	EDITORIAL CHANGES & DWG NO. WAS ST6100	RP	AW	RR	GG	TO
1	09-06-2002	U	LB	REVISED TO COMPLY WITH DRAFTING MANUAL. DELETED "DIM AND WEIGHT" TABLE. REVISED CLEARANCE DIMENSIONS AND ADDED KEYED NOTES.	RP	AY	GG	GG	TO

**ENGINEERING STANDARDS**

<b>MECHANICAL</b>		DRAWN	R. PEARSON
<b>BACKFLOW PREVENTER DETAIL FLANGED ENDS</b>		DESIGN	R. FROST
		CHECKED	G. GREWAL
		DATE	06-28-99
TA- XX	BLDG- XX		
SUBMITTED DISCIPLINE POC: GURINDER GREWAL		APPROVED FOR RELEASE STANDARDS MANAGER: TOBIN ORUCH	
		PO Box 1663 Los Alamos, New Mexico 87545	
D.C.: U		REVIEWER: LARRY BAYS	DATE: 06-28-99
PROJECT ID	DRAWING NO	REV	
<b>CHAPTER 6</b>	<b>ST-D20GEN-1</b>	<b>4</b>	

00% REVIEW  
NOT FOR CONSTRUCTION