



# **Building Officials' Association of British Columbia**



## **Level 1 Study Session**

**Based on 2024 BCBC**

**Book II (Plumbing Systems)**

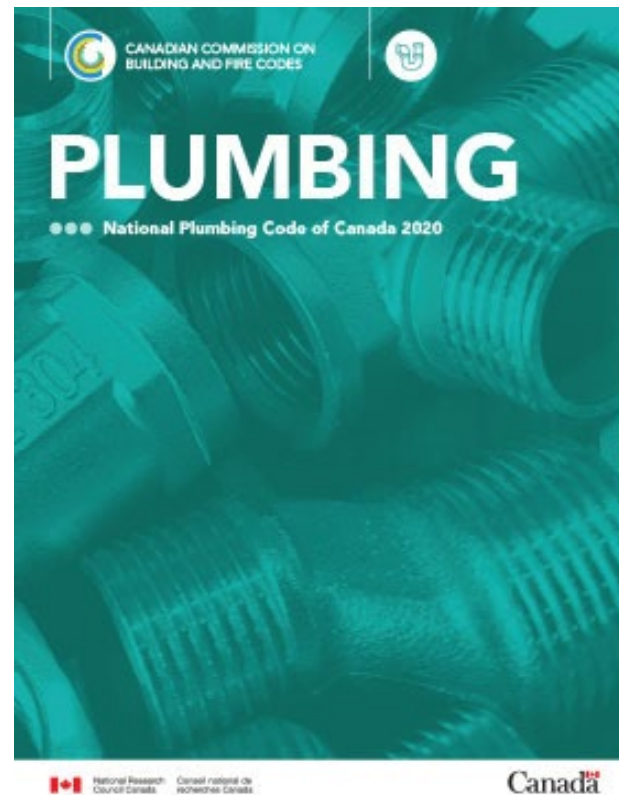
May 2025



# Introduction to Plumbing Inspections



This workshop is intended to familiarize participants with the basic components of water pipe and DWV systems commonly installed in Single Family Dwellings and small Part 9 buildings.





# Introduction to Plumbing Inspections



**Information Bulletin**  
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No. P24-01  
 April 25, 2024

## British Columbia Building Code 2024 Book II (Plumbing Systems)

This bulletin provides information about the British Columbia Building Code 2024 Book II (Plumbing Systems) and new requirements for plumbing systems. "British Columbia Building Code Book II (Plumbing Systems)" is the name given within the British Columbia Building Code Book I (General) and is to be used when referenced on drawings and related documents described in Division C within. The British Columbia Building Code Book II (Plumbing Systems) is commonly referred to as the British Columbia Plumbing Code 2024 (Plumbing Code). This edition applies to projects for which a building permit is applied for on or after March 8, 2024.

### Updates to the BC Codes

Plumbing Code users should be aware of the changes in the Building Code 2024 from the 2018 edition that relate to plumbing systems. These changes are discussed in Bulletin B24-05. For example, the term 'owner' is now defined which helps establish who can perform plumbing work on a single detached dwelling.

### Getting the Plumbing Code

The British Columbia Building Code 2024 Book I (General) (Building Code) adopts the British Columbia Building Code Book II (Plumbing Systems) by reference in Part 7 of Division B, it also effectively states that the **British Columbia Building Code 2024 Book II (Plumbing Systems)** is the **National Plumbing Code of Canada 2020 (NPC 2020)**.

British Columbia will not be producing a consolidated Plumbing Code 2024 document. Plumbing Code users will follow the provisions relevant to plumbing systems in the Building Code 2024<sup>1</sup>, such as Part 1 of Division A and Part 7 of Division B, and obtain a copy of the NPC 2020 from the [nrc-publications.canada.ca](http://nrc-publications.canada.ca) website to use together as the Plumbing Code 2024.

### Using the Plumbing Code

The NPC 2020 is a national model document, and there are unique-to-B.C. provisions that are required to coordinate with B.C.'s regulatory framework and to clarify rules and establish who can perform what work.

<sup>1</sup> The Building Code 2024 is available on the [Building and Safety Standards Branch website](http://Building and Safety Standards Branch website).

*The contents of this Bulletin are not intended to be provided as legal advice and should not be relied upon as legal advice. The Building and Safety Standards Branch does not enforce compliance with the British Columbia Building Code. Local authorities are authorized to enforce the British Columbia Building Code through the Local Government Act and the Community Charter.*

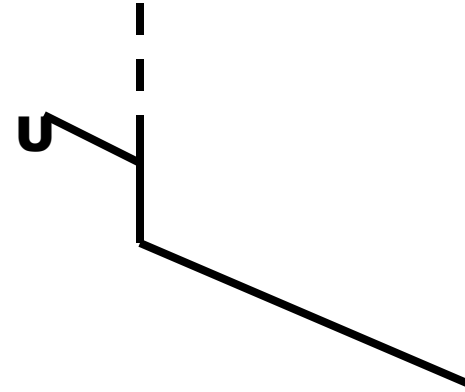
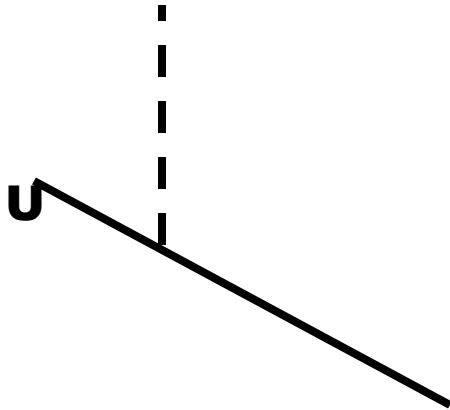


# Drainage & Venting

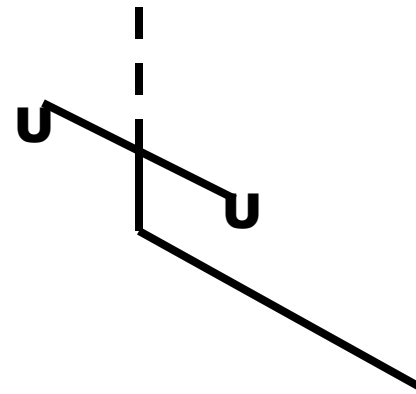
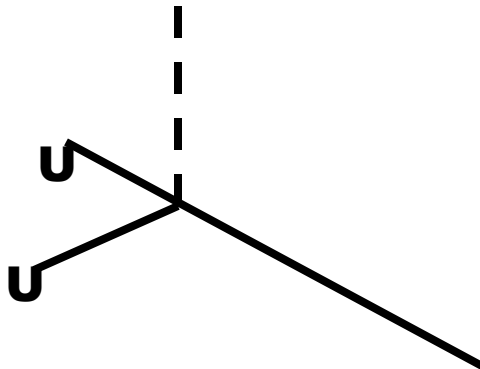
1. Always name piping sections first!
2. Determine F.U. Load and length (if applicable)
3. Remember exceptions for specific tasks  
(i.e., largest trap served, minimum size, etc..)



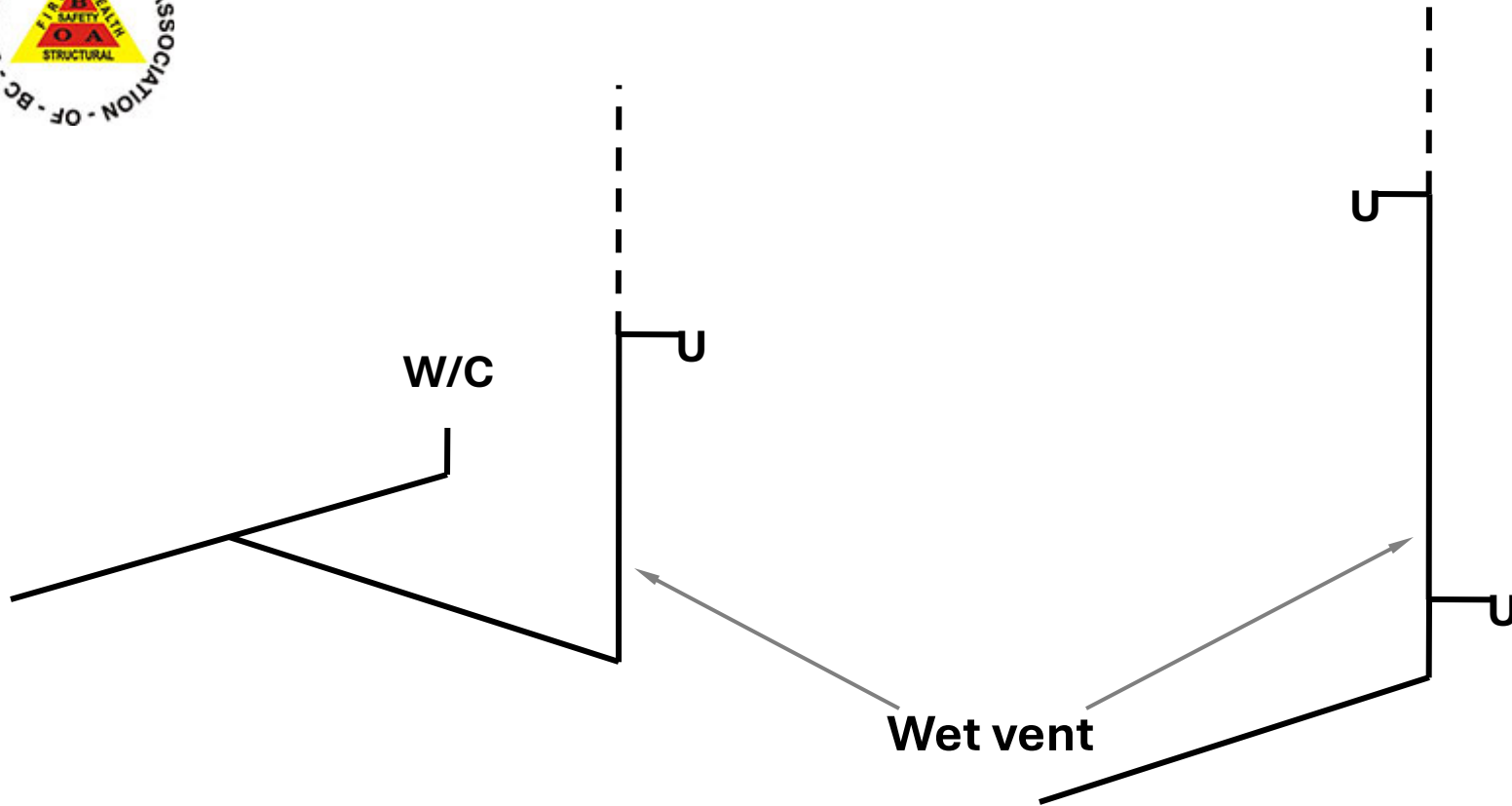
## Vent Definitions - Refer to 1.4.1.2.(1)



*Individual vent means a vent pipe that serves one fixture.*



*Dual vent means a vent pipe that serves 2 fixtures and connects at the junction of the trap arms.*



***Wet vent*** means a *sanitary drainage pipe* that also serves as a *vent pipe* and extends from the most downstream wet-vented *fixture* connection to the most upstream *fixture* connection.

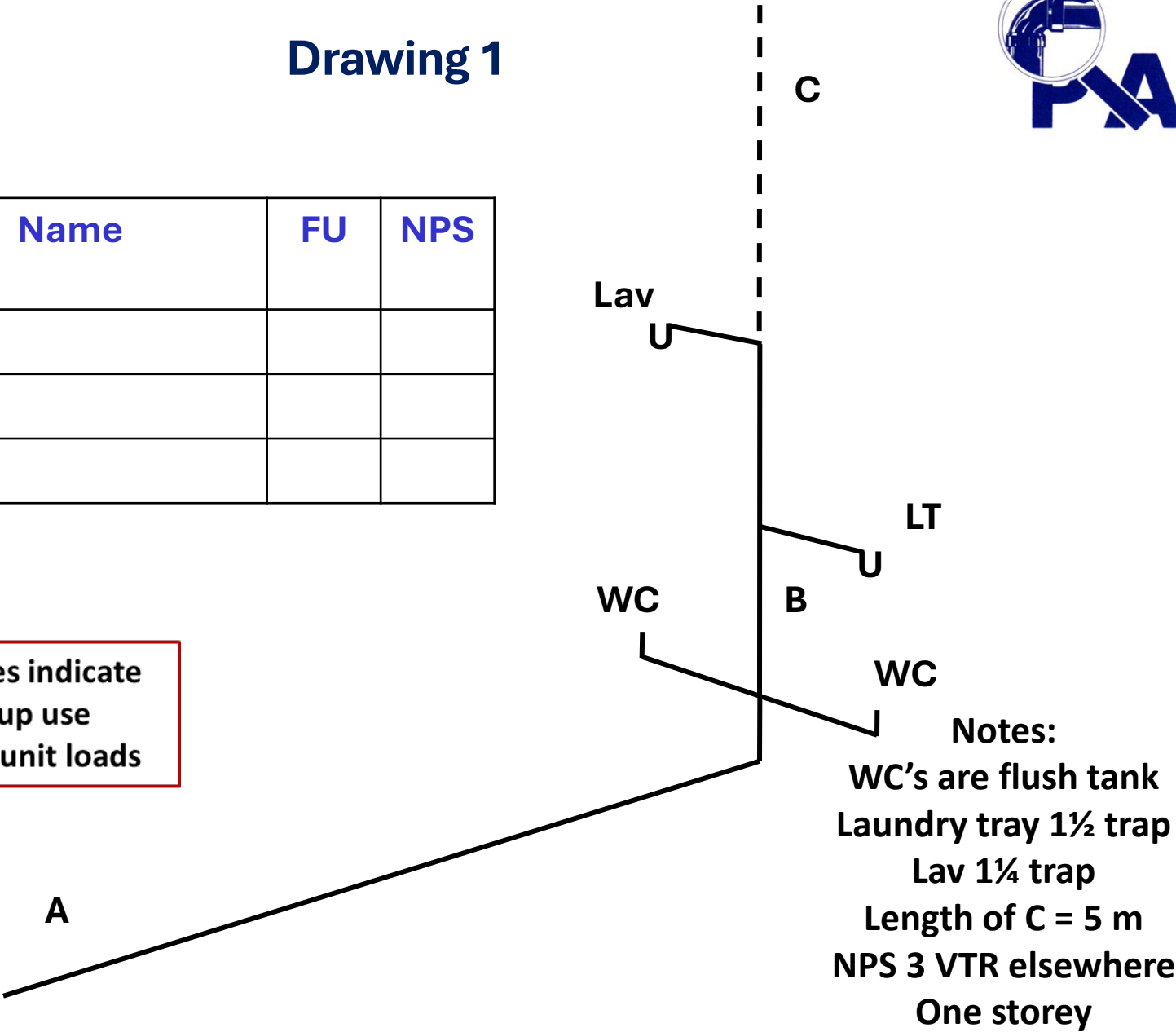


Drawing 1



Pipe	Name	FU	NPS
A			
B			
C			

Note: unless notes indicate bathroom group use individual fixture unit loads

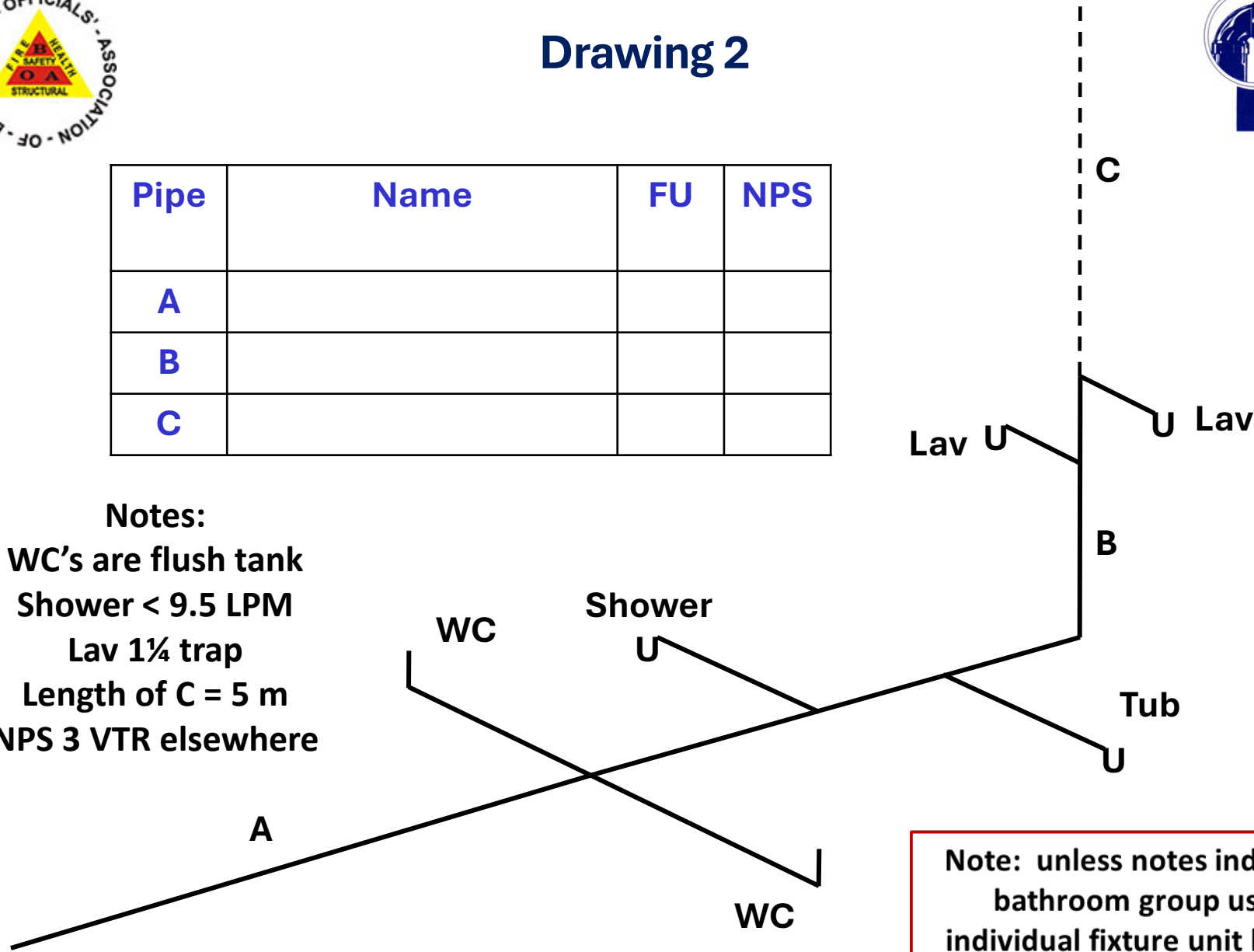




Drawing 2

Pipe	Name	FU	NPS
A			
B			
C			

Notes:  
WC's are flush tank  
Shower < 9.5 LPM  
Lav 1¼ trap  
Length of C = 5 m  
NPS 3 VTR elsewhere



Note: unless notes indicate bathroom group use individual fixture unit loads

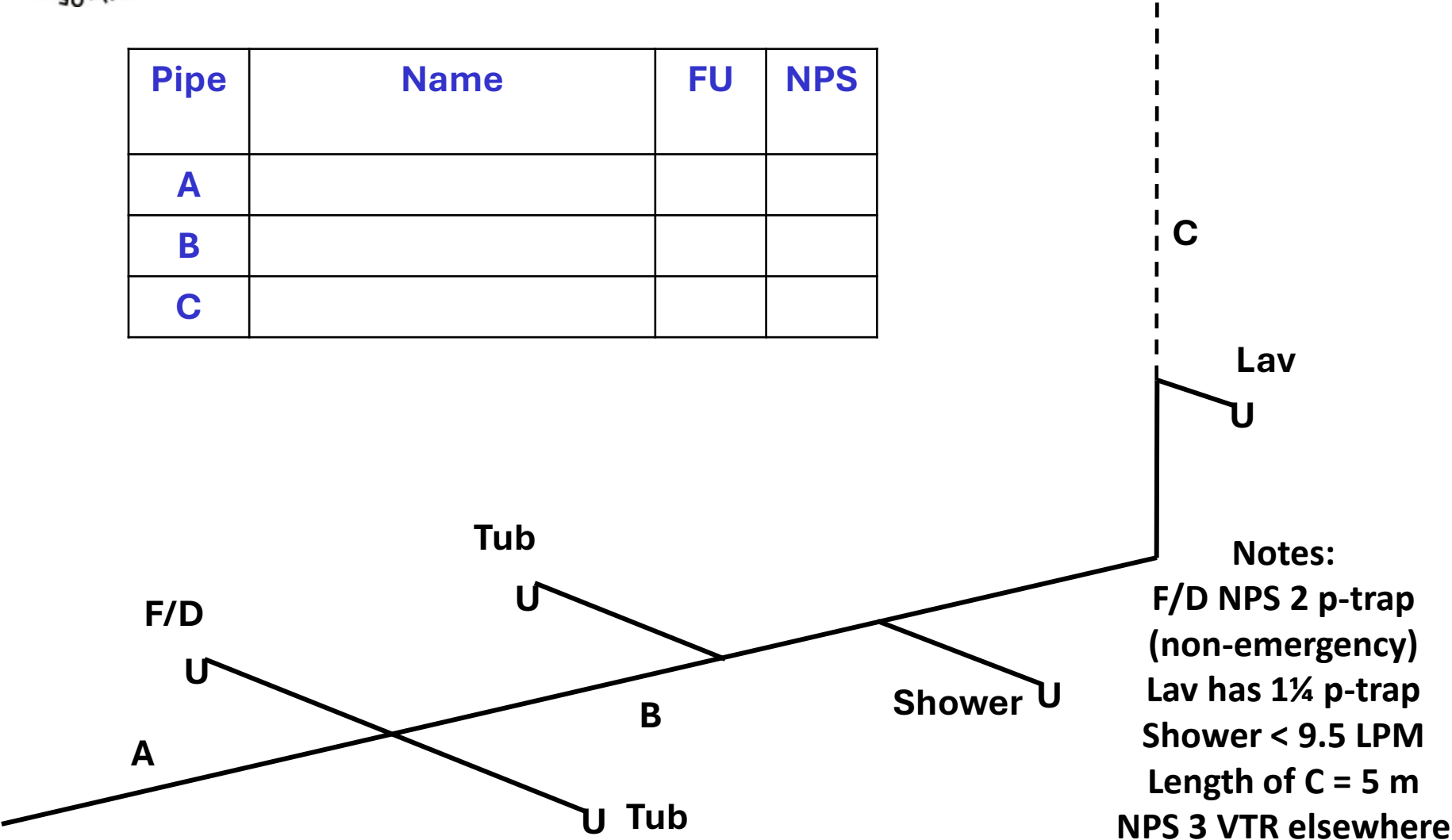




Drawing 3



Pipe	Name	FU	NPS
A			
B			
C			



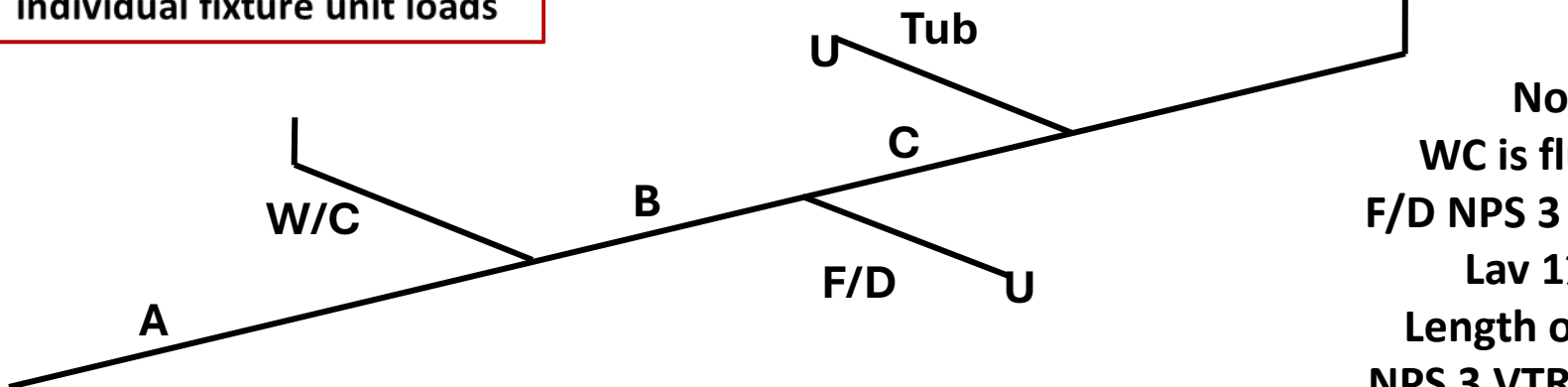


## Drawing 4



Pipe	Name	FU	NPS
A			
B			
C			
D			

Note: unless notes indicate  
bathroom group use  
individual fixture unit loads

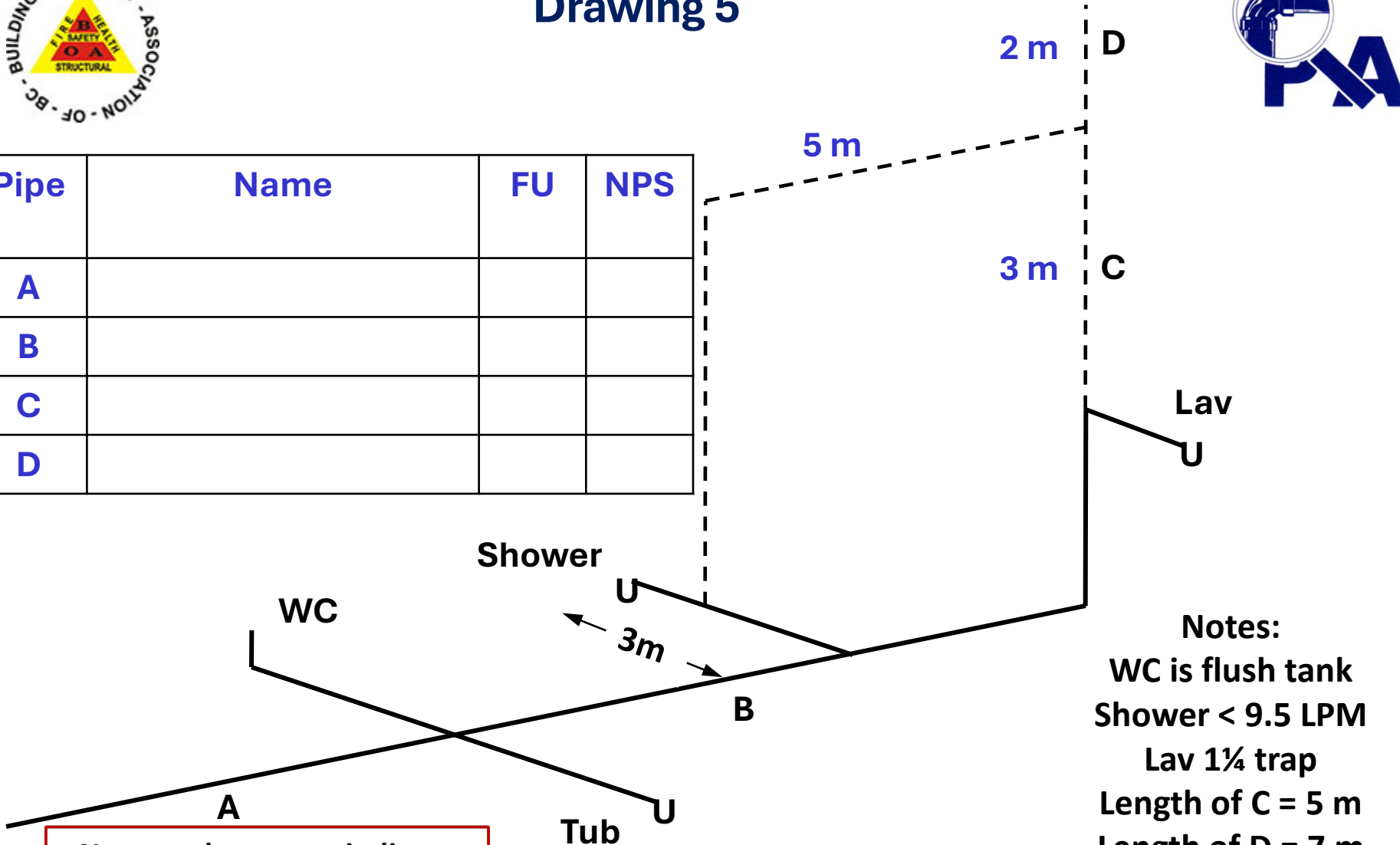


Notes:  
WC is flush tank  
F/D NPS 3 Emergency  
Lav 1¼ trap  
Length of D = 7 m  
NPS 3 VTR elsewhere



Drawing 5

Pipe	Name	FU	NPS
A			
B			
C			
D			



Note: unless notes indicate bathroom group use individual fixture unit loads

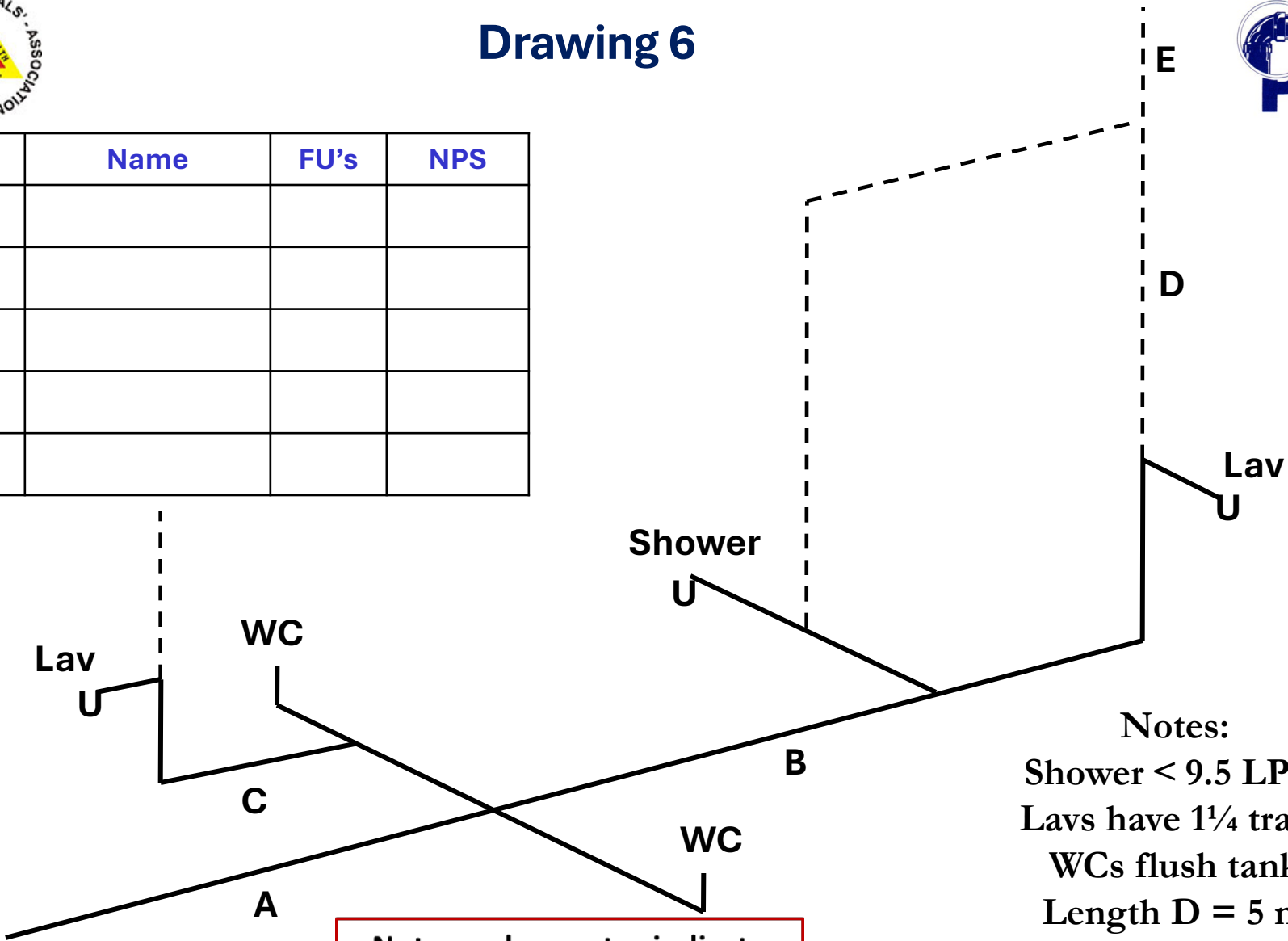
Notes:  
WC is flush tank  
Shower < 9.5 LPM  
Lav 1¼ trap  
Length of C = 5 m  
Length of D = 7 m  
Not a bathroom group  
NPS 3 VTR elsewhere



Drawing 6



Pipe	Name	FU's	NPS
A			
B			
C			
D			
E			



Notes:  
Shower < 9.5 LPM  
Lavs have 1¼ traps  
WCs flush tank  
Length D = 5 m  
Length E = 7 m  
NPS 3 VTR elsewhere

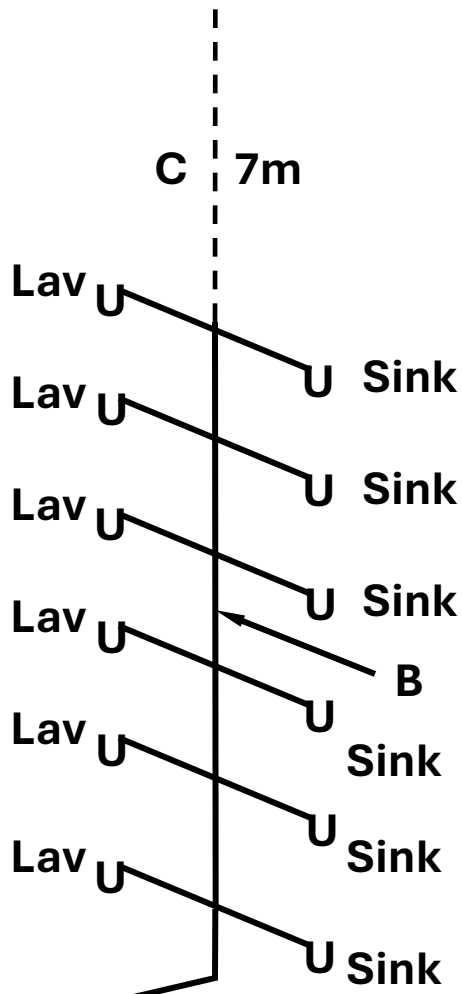
Note: unless notes indicate bathroom group use individual fixture unit loads



Drawing 7



	Name	Fixture Units	NPS
A			
B			
C			

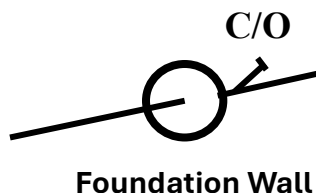
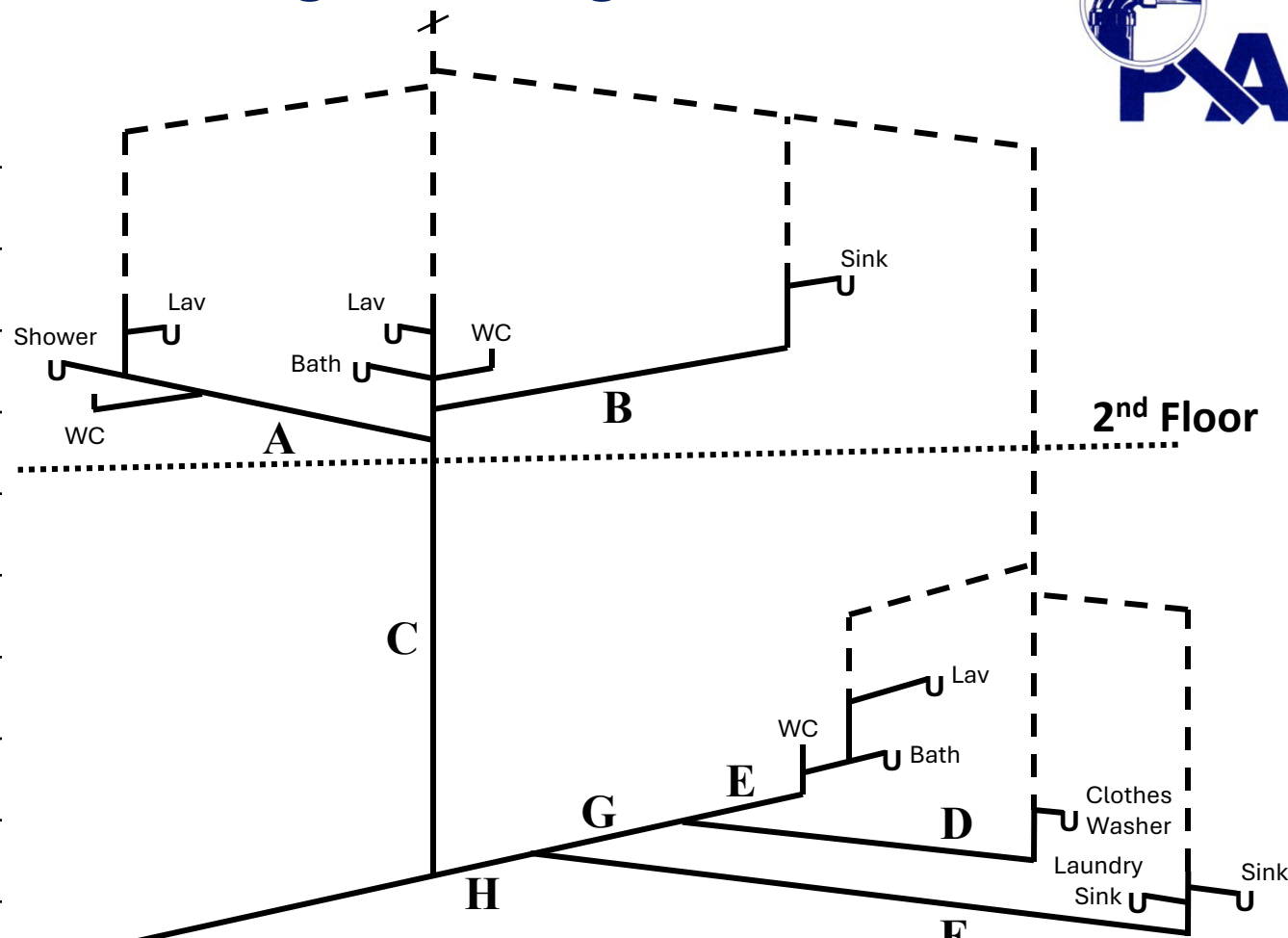


**Note:**  
Lavs have 1¼” p-traps  
Sinks have 1½” p-traps  
6 Plumbing Storeys



## Drawing 8 - Drainage

NAME	F.U.	NPS
A		
B		
C		
D		
E		
F		
G		
H		
I		

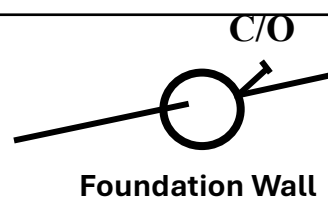
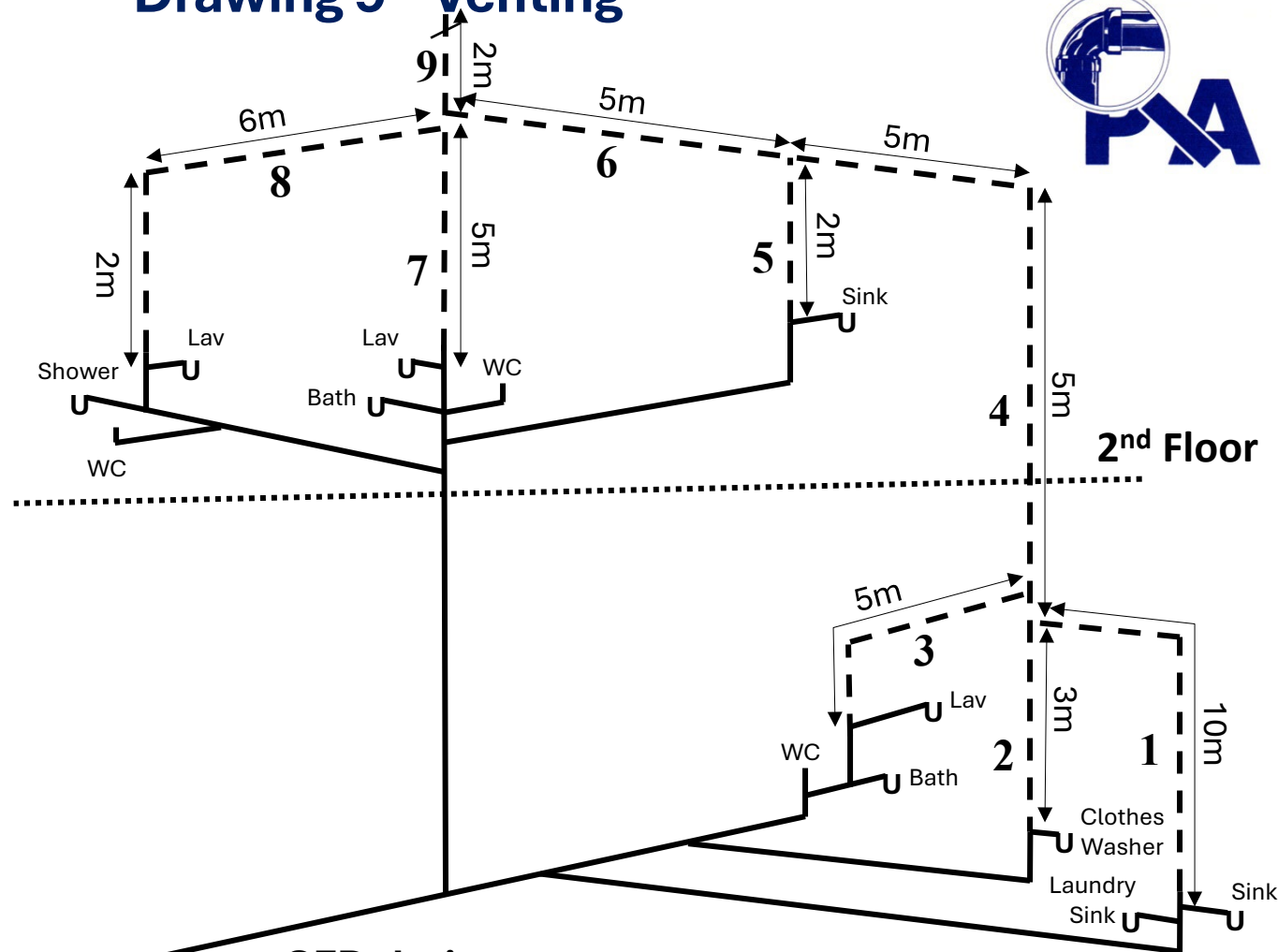


**SFD drainage system**  
**All Bathroom Groups**  
**Sinks have 1½ p-traps**  
**Lavs have 1¼ p-traps**  
**Flush tank WC's**



# Drawing 9 - Venting

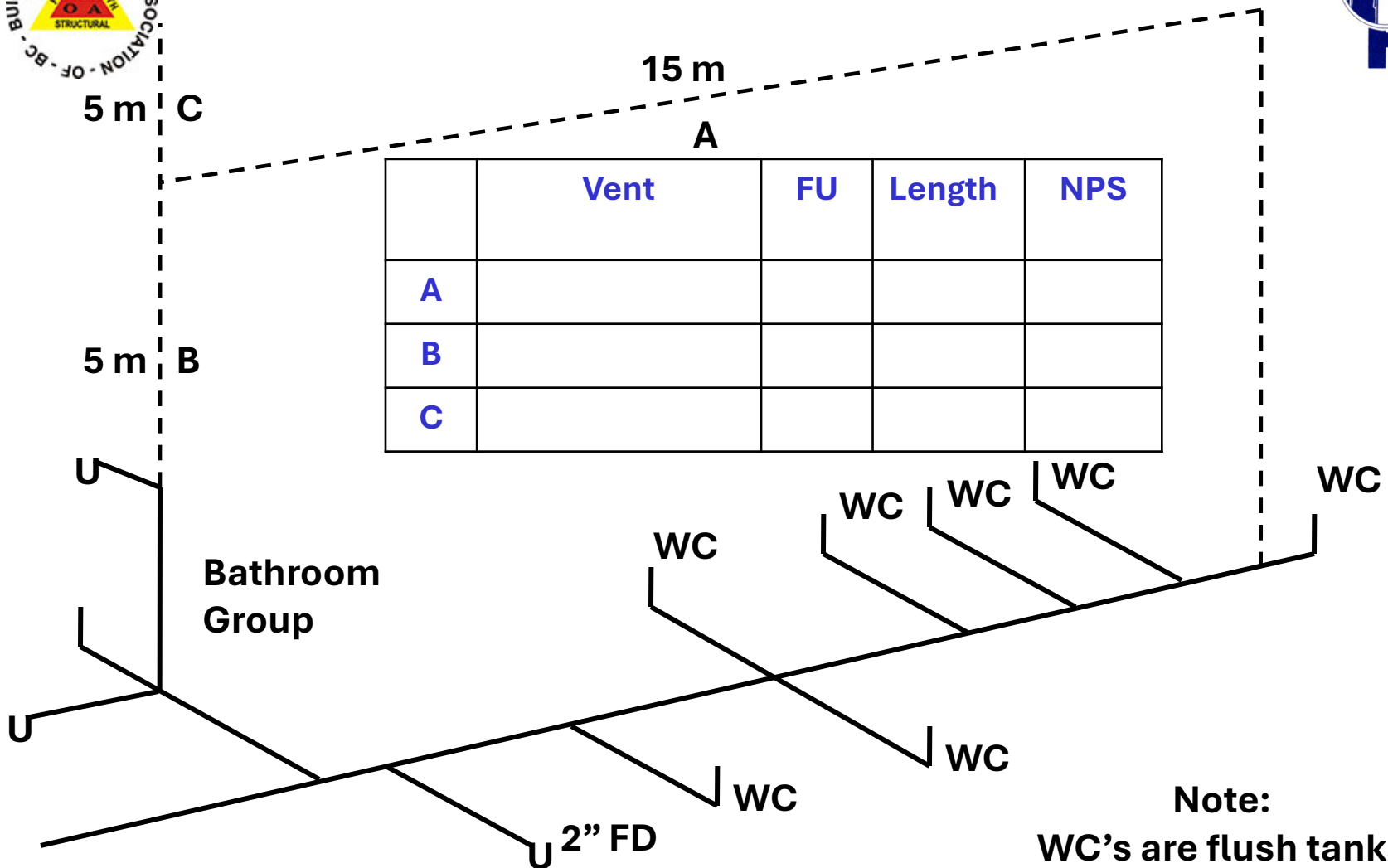
#	NAME	FU	Dev Lgth	NPS
1				
2				
3				
4				
5				
6				
7				
8				
9				



**SFD drainage system**  
**All Bathroom Groups**  
**Sinks have 1½ p-traps**  
**Lavs have 1¼ p-traps**  
**Flush tank WC's**



## Drawing 10 Circuit/Relief Vent Sizing



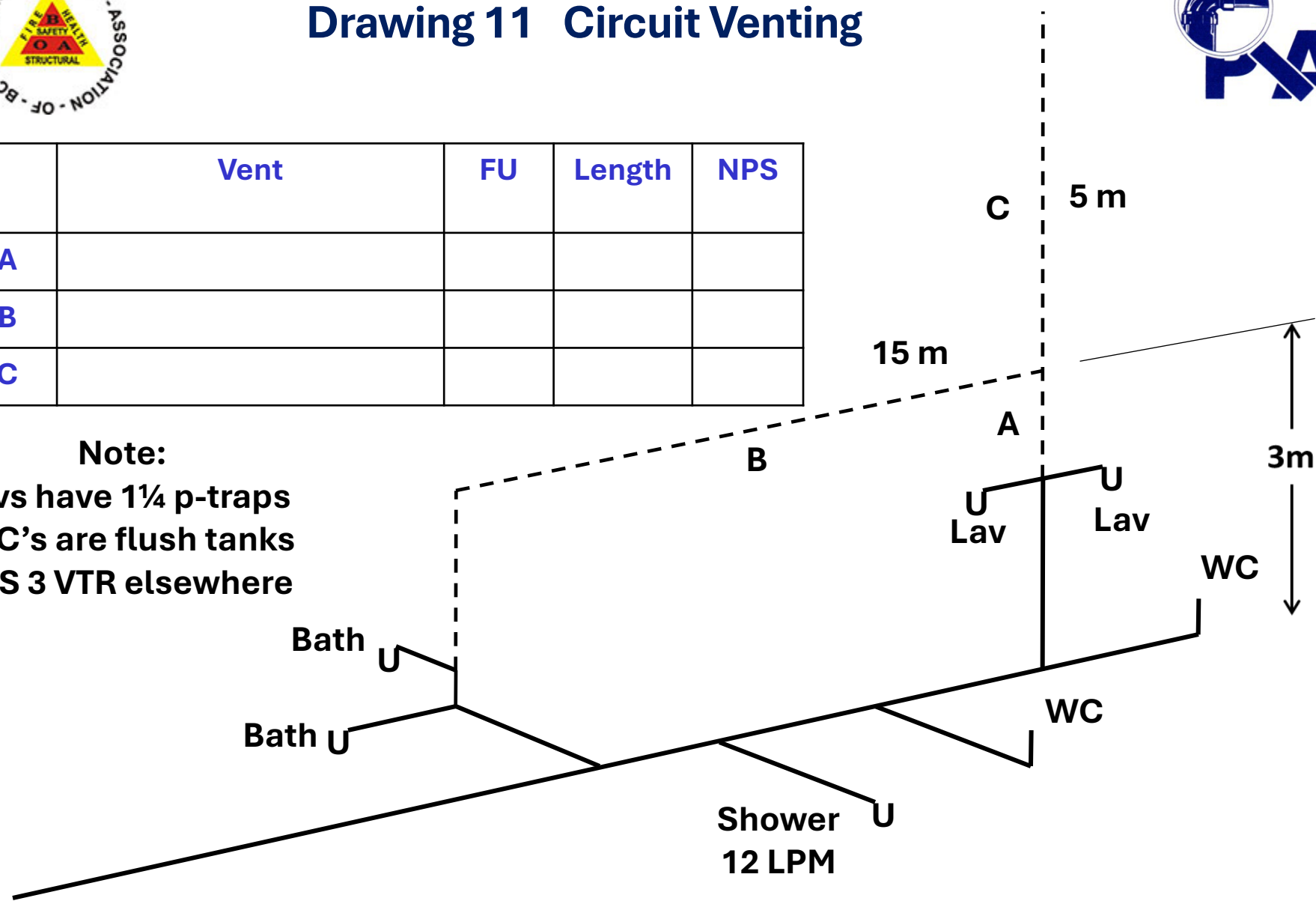
**Note:**  
**WC's are flush tanks**  
**Floor Drain is non-emergency**  
**NPS 3 VTR elsewhere**





	Vent	FU	Length	NPS
A				
B				
C				

**Note:**  
Lavs have 1¼ p-traps  
W/C's are flush tanks  
NPS 3 VTR elsewhere

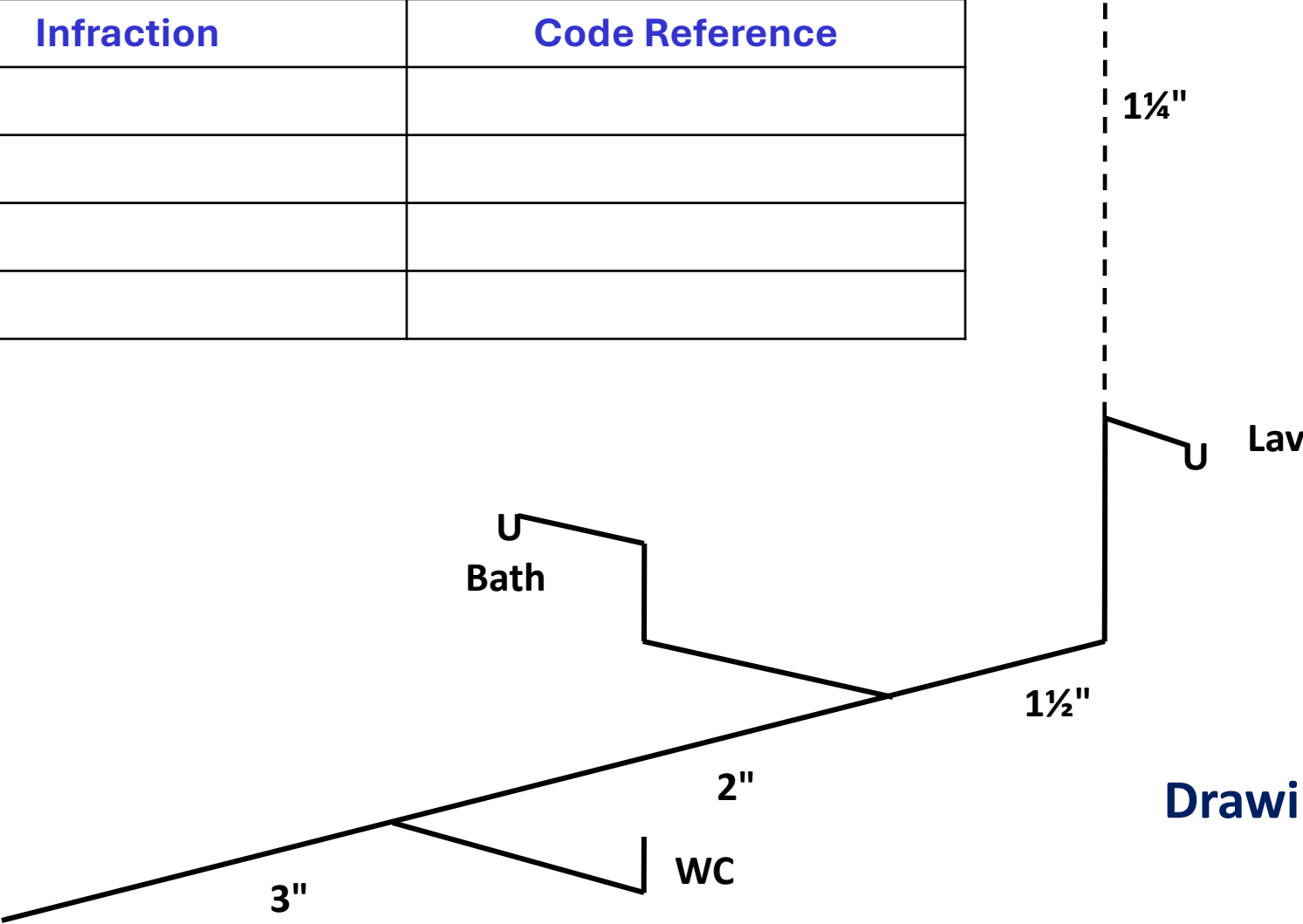




# List BCPC Infractions of This Wet Vent System



Infraction	Code Reference



Drawing 23



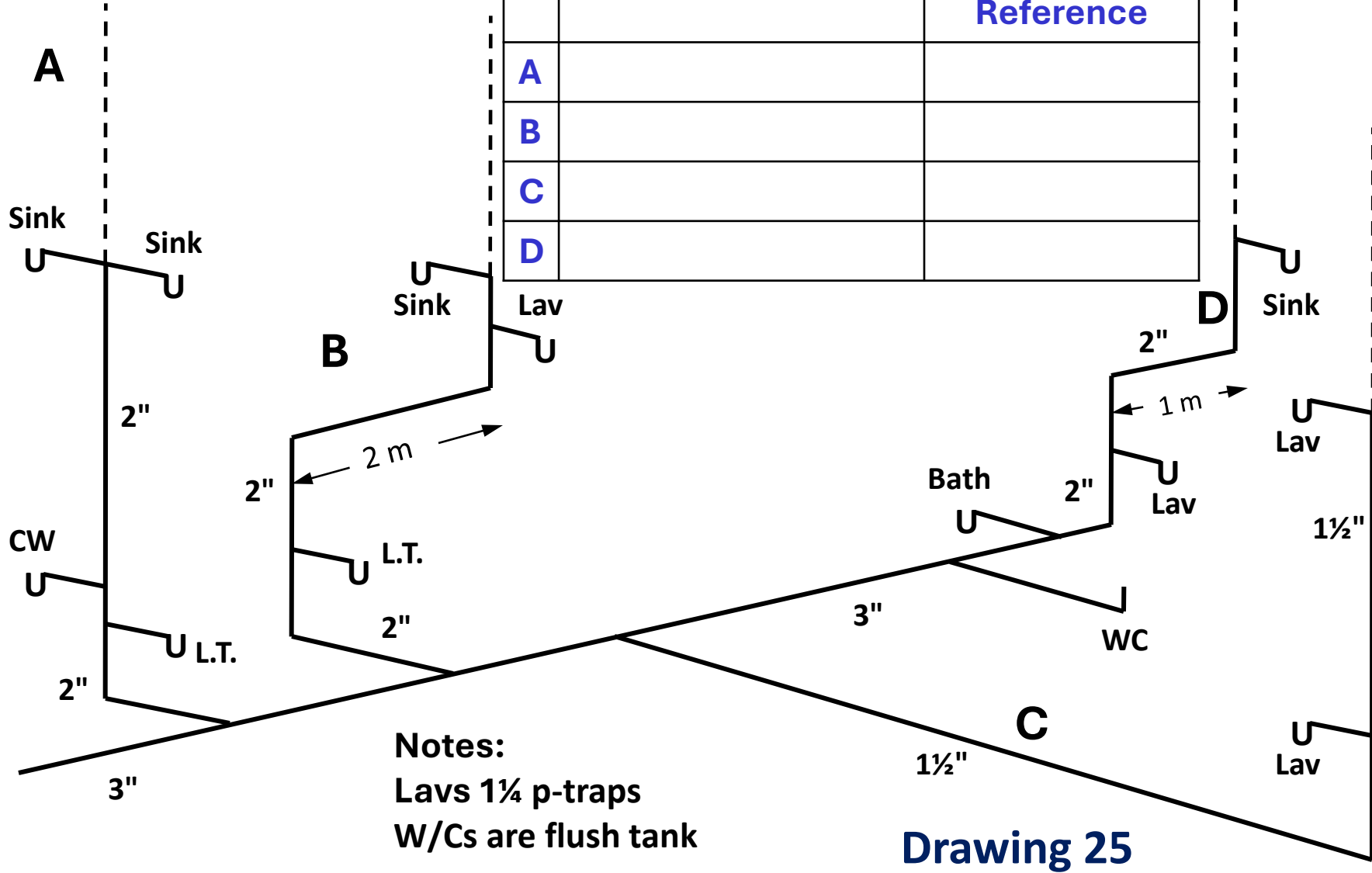
Infraction	Code Reference





# List BCPC Infractions of These Wet Vent Systems

	Infraction	Code Reference
A		
B		
C		
D		



Notes:  
Lavs 1¼ p-traps  
W/Cs are flush tank

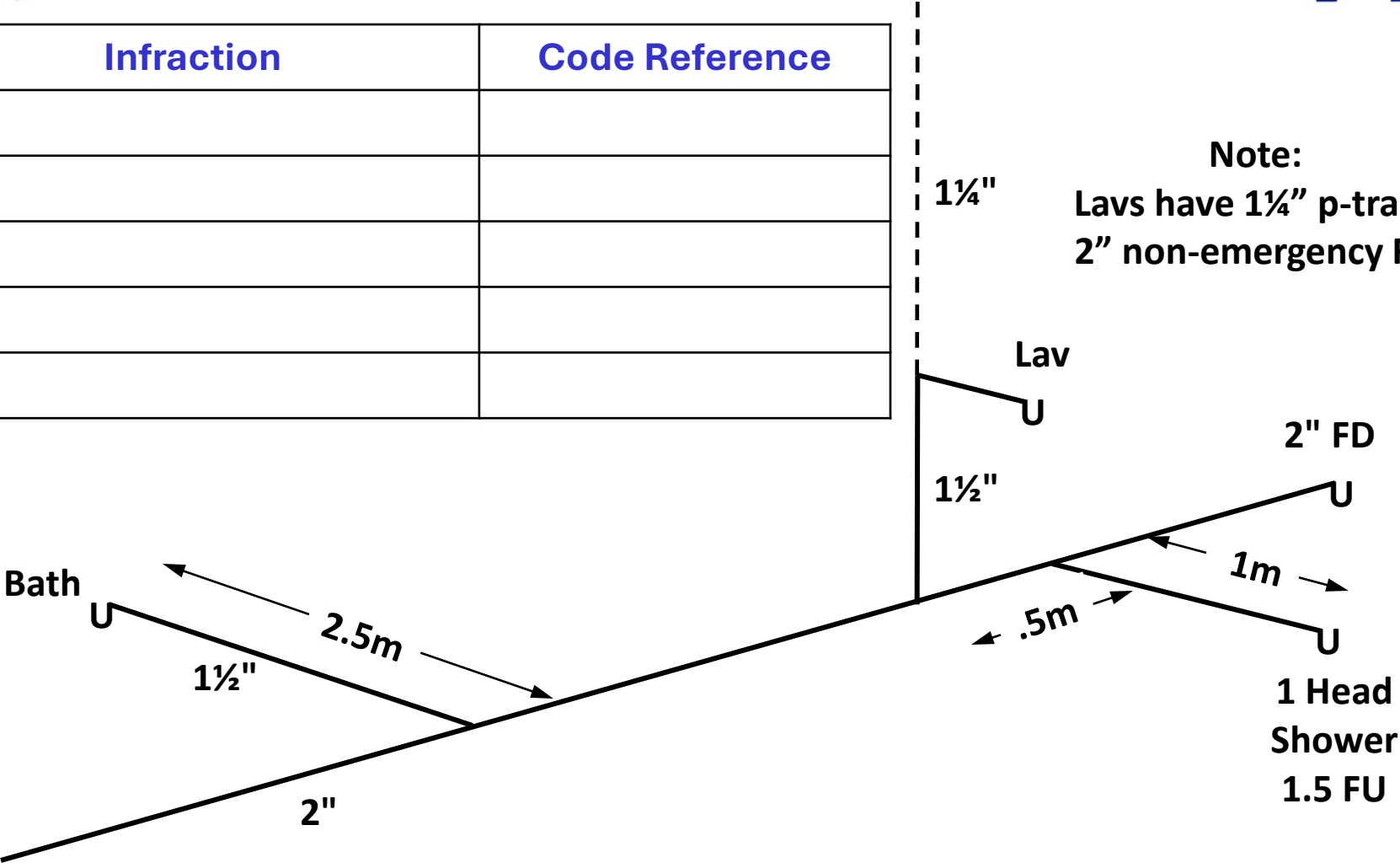
Drawing 25



# List BCPC Infractions of This System

Infraction	Code Reference

Note:  
Lavs have 1¼" p-traps  
2" non-emergency FD

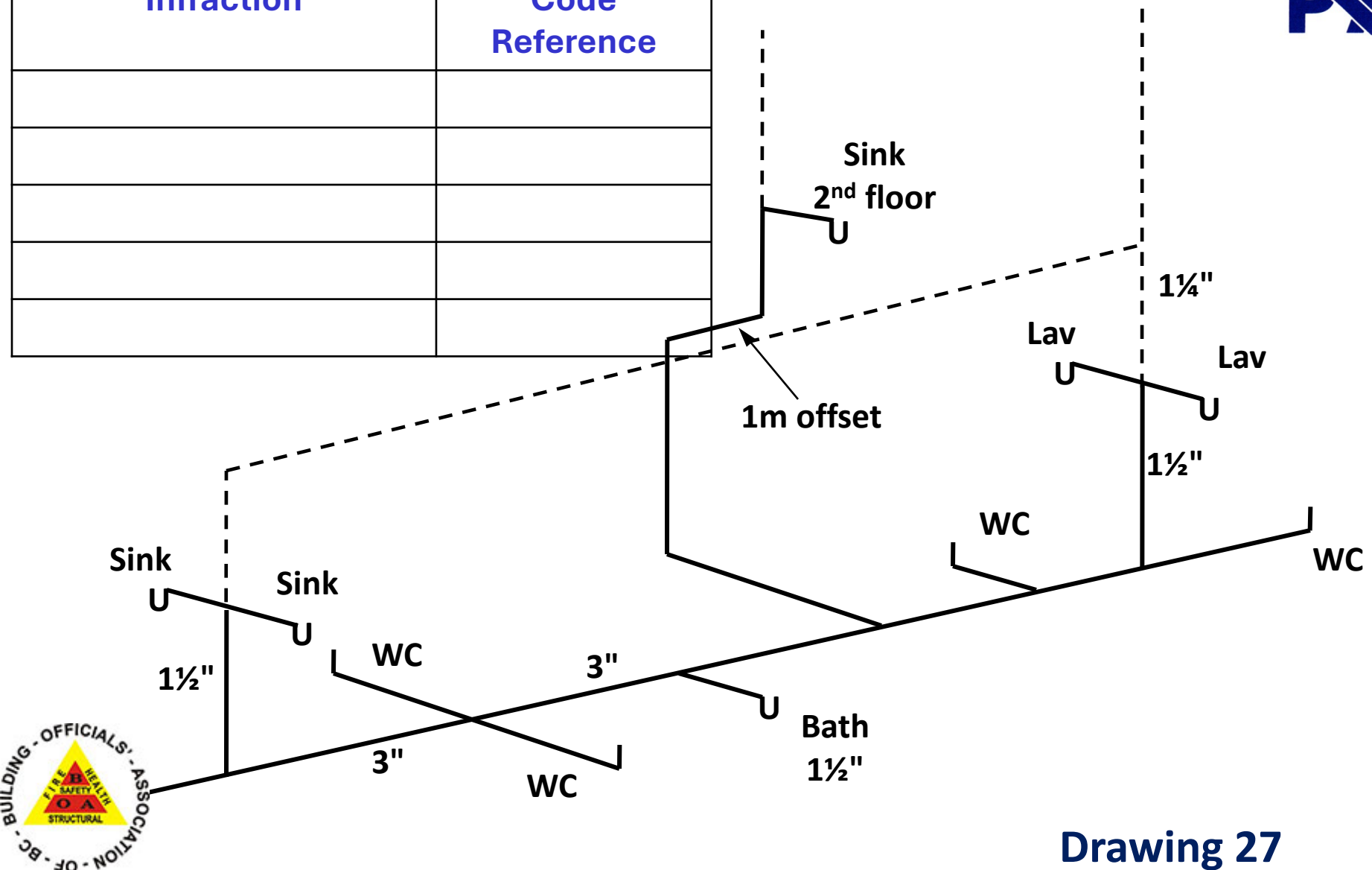


Drawing 26

List BCPC Infractions of This Circuit Vent System



Infraction	Code Reference



Drawing 27