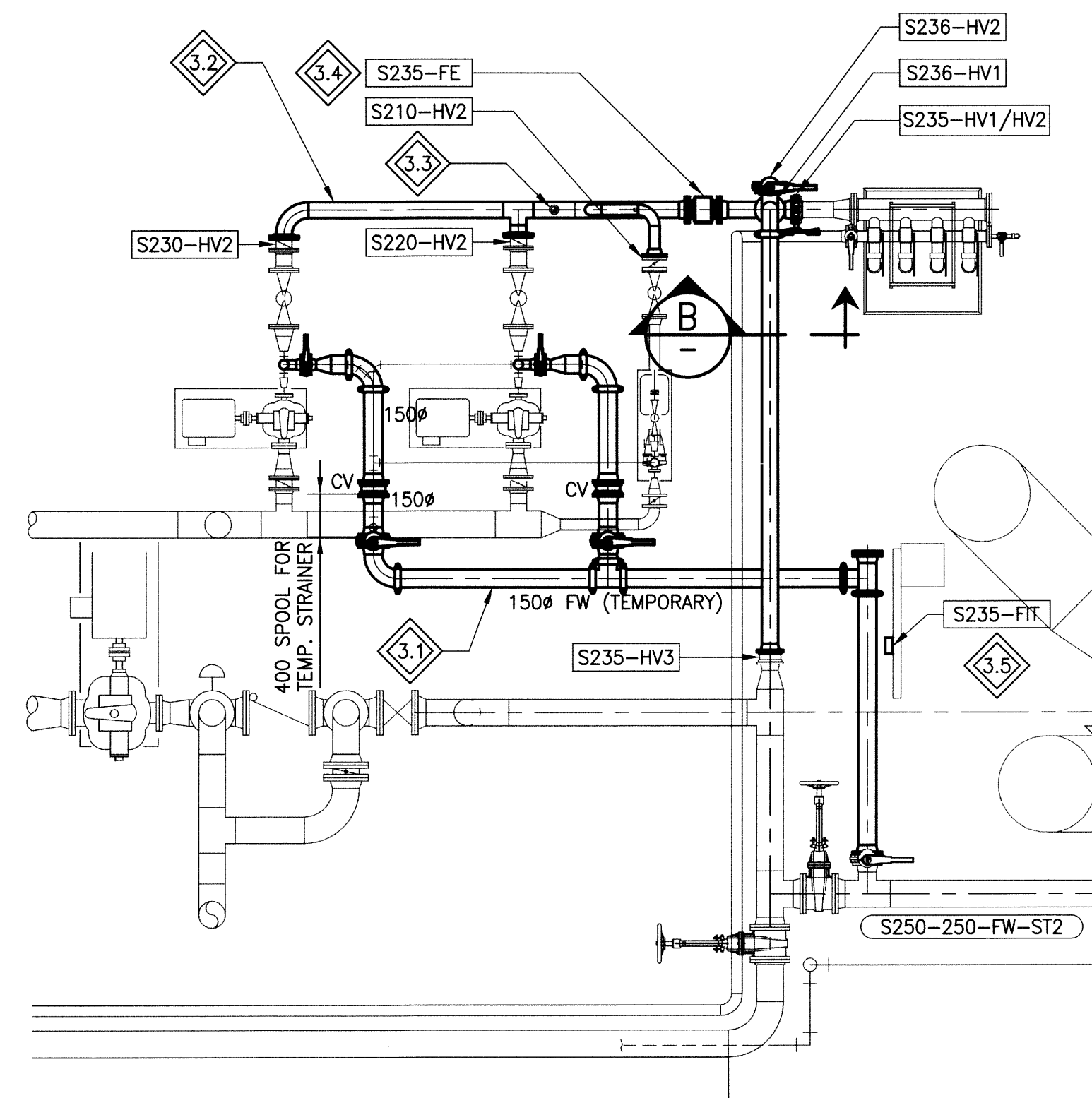
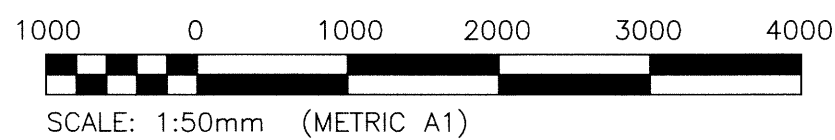
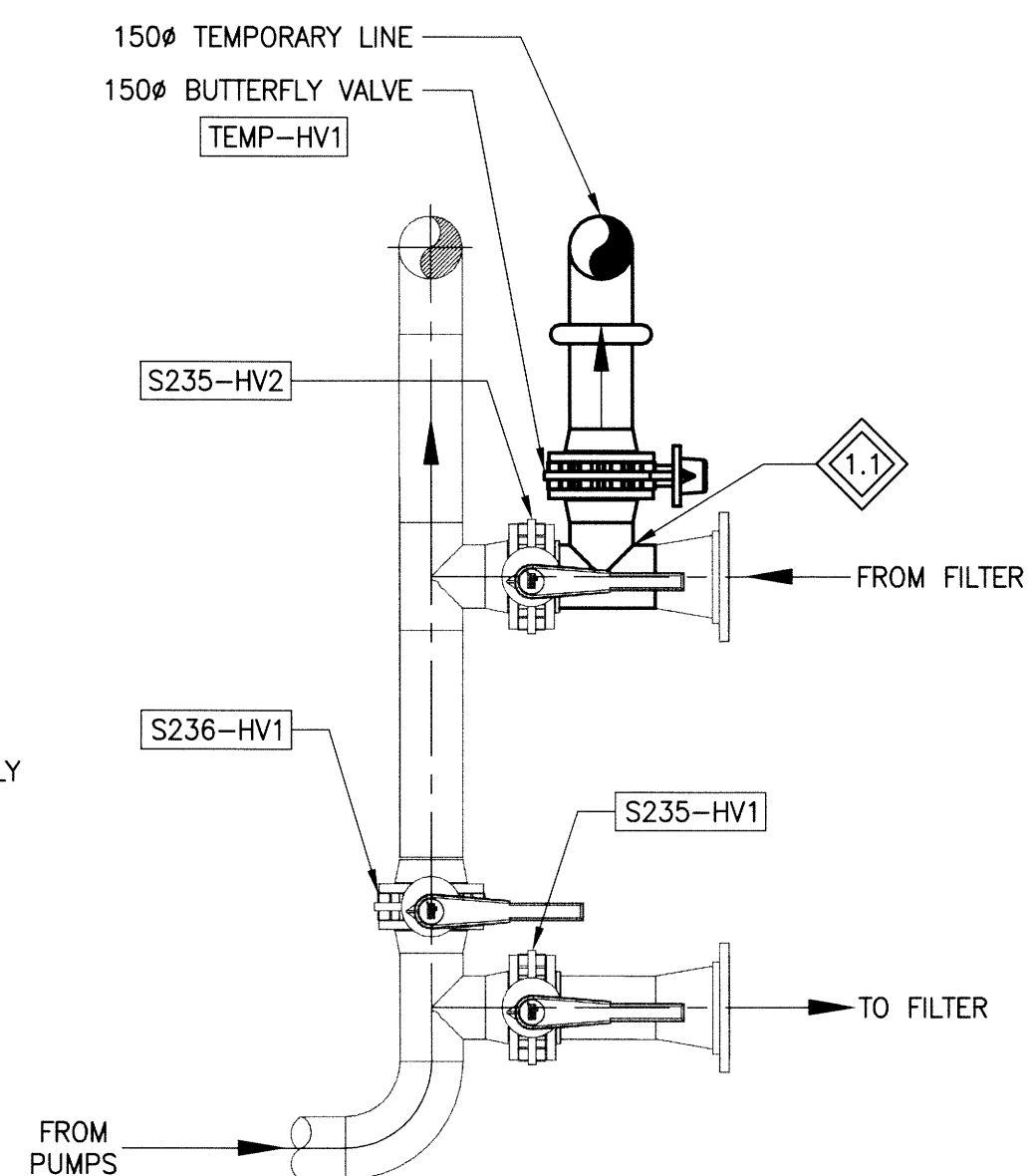
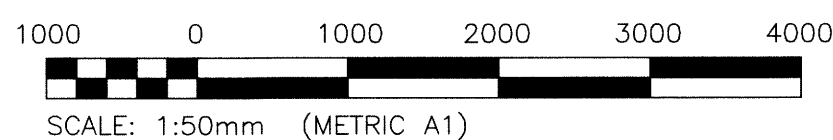


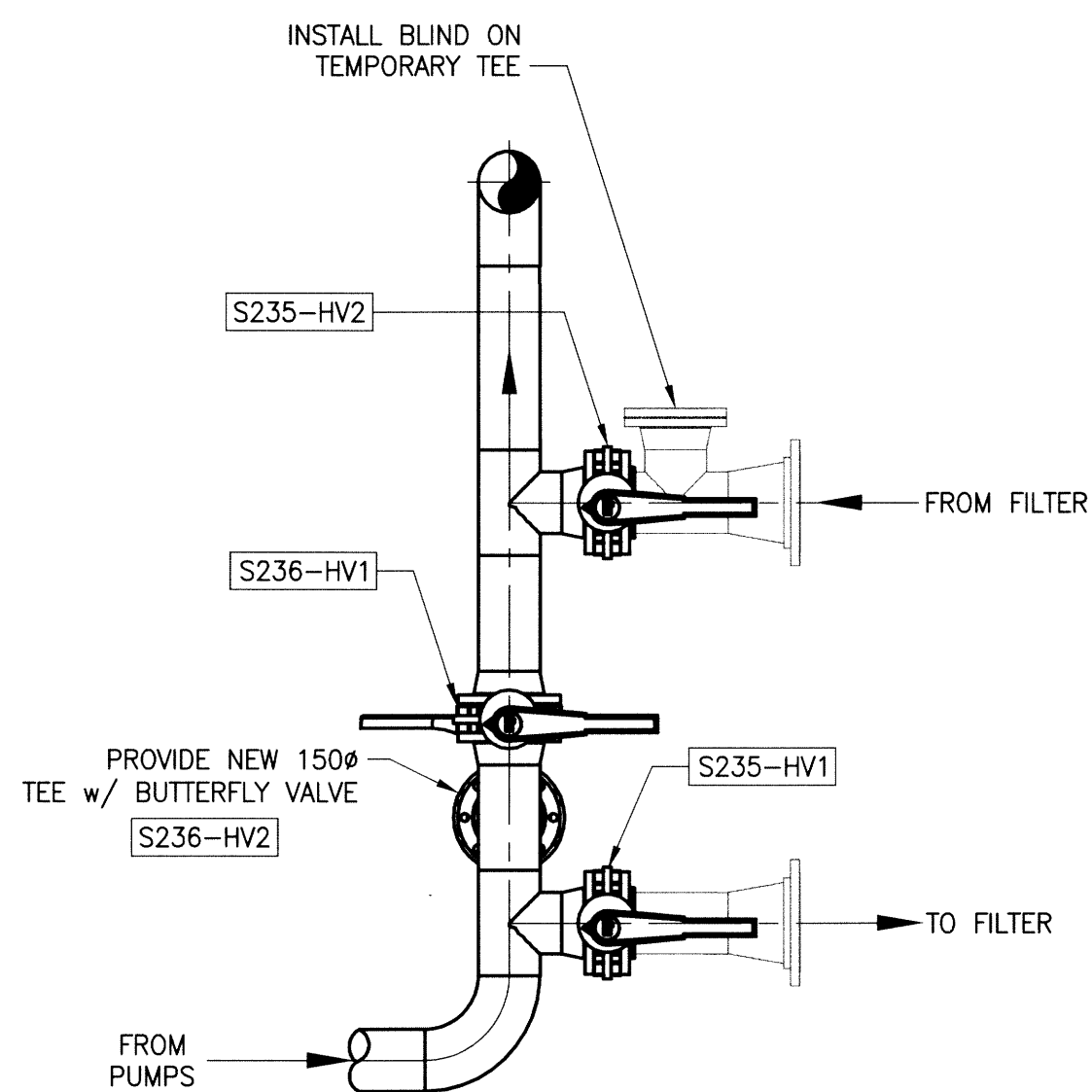
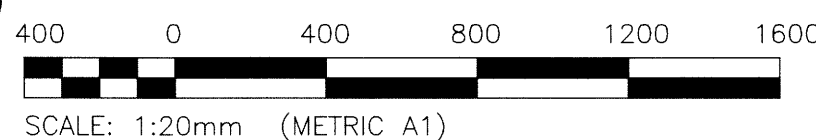
PHASE 1



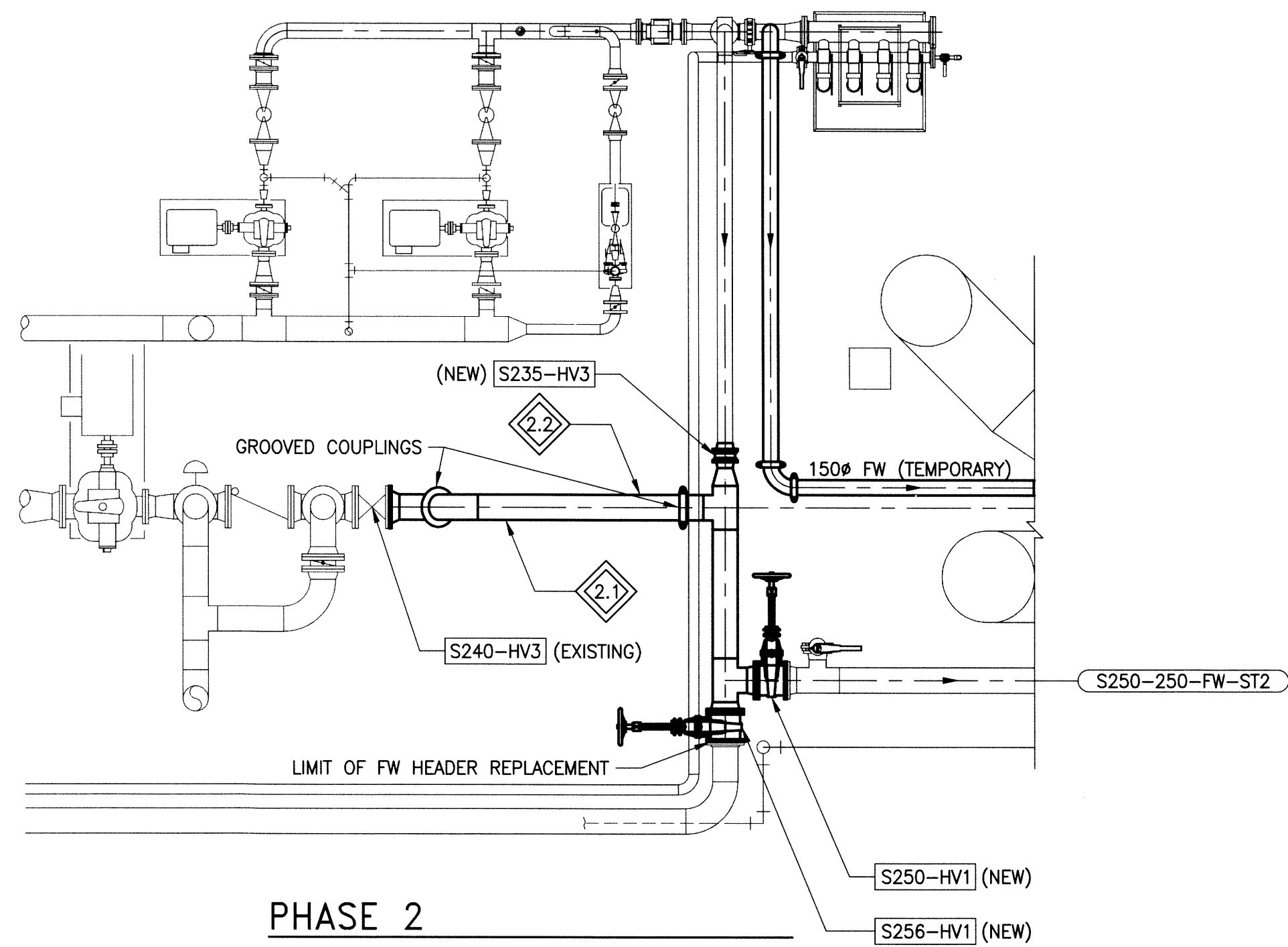
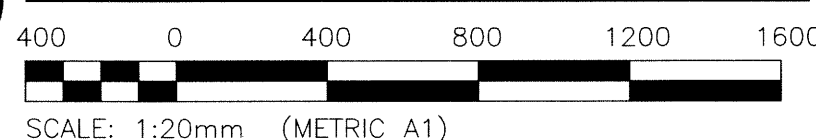
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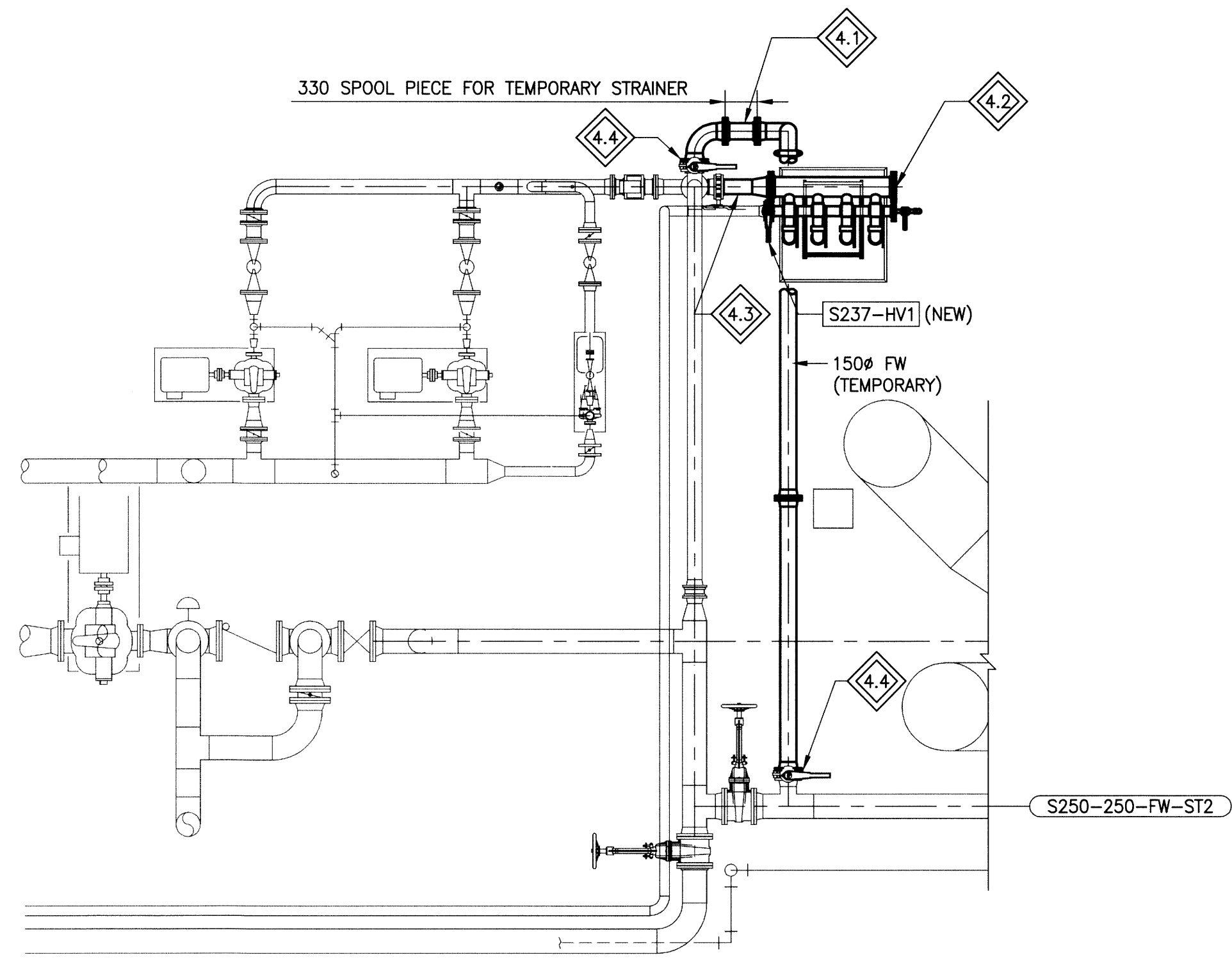
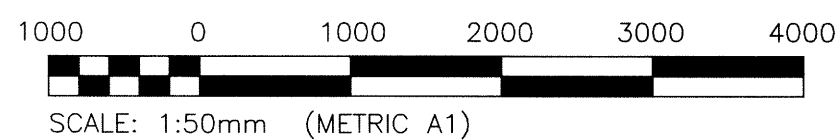
SECTION A



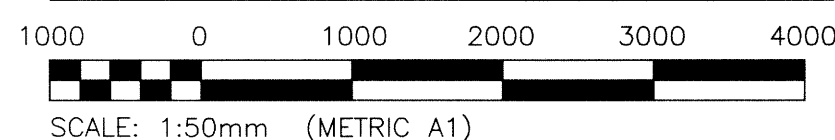
SECTION B



PHASE 2



PHASE 4



GENERAL NOTES:

1. REFER TO DRAWING M14 FOR GENERAL NOTES.

KEYNOTES:

PHASE 1

- 1.1 CONNECT 150mm TEMPORARY LINE BY INSTALLING NEW TEE IN DISCHARGE OF FILTER S235-FIL. DURING CONNECTION, OPEN FILTER BYPASS VALVE S236-HV1 TO MAINTAIN FLOW TO SYSTEM.
- 1.2 REPLACE HEADER S250-250-FW-ST2 DOWNSTREAM OF VALVE S250-HV1.

PHASE 2

- 2.1 REPLACE EXISTING PIPING DOWNSTREAM OF VALVE S240-HV3 UP TO AND INCLUDING NEW VALVES S235-HV3, S250-HV1, AND S256-HV1. PROVIDE SUPERVISORY SWITCH WITH S256-HV1.
- 2.2 PROVIDE 12mm CONNECTION WITH BALL VALVE FOR PRESSURE SWITCH S240-PS. FIELD RUN NEW SS TUBING TO S240-PS.

PHASE 3

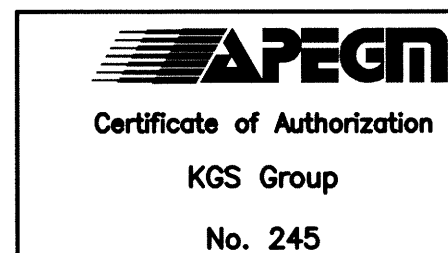
- 3.1 CONNECT TEMPORARY FW LINES TO PUMPS S220-FWP AND S230-FWP, c/w ISOLATION VALVES, CHECK VALVES, AND TEMPORARY STRAINERS AS SHOWN. CONNECT 150mm TEMPORARY LINE TO HEADER S205-250-FW-ST2 AS SHOWN.
- 3.2 REPLACE EXISTING PIPING DOWNSTREAM OF VALVES S210-HV2, S220-HV2, AND S230-HV2, UP TO VALVE S235-HV3. REPLACE FILTER ISOLATION VALVES S235-HV1, S235-HV2, AND FILTER BYPASS VALVE S236-HV1.
- 3.3 CONNECT EXISTING 50mm BRANCH LINE TO NEW HEADER. PROVIDE NEW BALL VALVE AT HEADER CONNECTION.
- 3.4 INSTALL S235-FE WITH MINIMUM STRAIGHT LENGTH OF 5D UPSTREAM AND 3D DOWNSTREAM.
- 3.5 INSTALL NEW FLOWMETER TRANSMITTER S235-FIT IN SAME LOCATION AS EXISTING.

PHASE 4

- 4.1 CONNECT 150mm TEMPORARY LINE c/w TEMPORARY STRAINER AS SHOWN.
- 4.2 REPLACE FILTER S235-FIL AND BACKWASH DRAIN VALVE S237-HV1.
- 4.3 REPLACE PIPING BETWEEN FILTER S235-FIL AND ISOLATION VALVES S235-HV1 AND S235-HV2.
- 4.4 INSTALL BLIND FLANGE ON VALVE FOLLOWING REMOVAL OF TEMPORARY LINE.

METRIC

WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES



FIELD BOOK #			
POSTED TO LBS			
0	ISSUED FOR CONSTRUCTION	16/05/09	
NL	REVISIONS	DATE	BY

KGS GROUP CONSULTING ENGINEERS			
DESIGNED BY	JS	CHECKED BY	MJK
DRAWN BY	JFS	APPROVED BY	JS
HOR. SCALE	AS NOTED	RELEASED FOR CONSTRUCTION	
VERTICAL	AS NOTED		
DATE	2016 02 24	DATE	2016-05-09

ENGINEER'S SEAL	
M19	

THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT	
WEWPC FW PIPE REPLACEMENT	SHEET 1 OF 1
MECHANICAL FW PIPING - SECTIONS	CITY DRAWING NUMBER
	1-0103S-M0041-001