# Mechanical Standard Details

University of Saskatchewan

Prepared by: Campus Engineering and Sustainability

Release Date: December 08, 2025

UNIVERSITY OF SASKATCHEWAN
Planning, Design & Construction
Campus Engineering & Sustainability
USASK.CA

**USask Mechanical Standard Detail Directions:** The standard details contained herein are intended to be incorporated into the Consultant's final, project specific drawing package. The project specific details are expected to include any and all details that are required to adequately inform contractors on required installation processes. Details not included in the in this document may still be required for a complete, well-designed project. **It is the consultant's responsibility to ensure all details match USask requirements. Any deviations or revisions to any detail included in this document requires written consent from the USask Engineering department. The consultant is liable for any omissions, errors, or incorrect equipment or components supplied to site, or rework required to suit USask's requirements.**

These details shall be used in conjunction with USask's Design Guidelines and Master Specifications. Any conflicts shall be brought to the attention of USask Engineering staff for clarification prior to design completion.

CAD versions of the details contained herein can be provided to consultants upon request. Please request required details from the USask Mechanical Engineering staff assigned to your specific project.

| STEAM DETAILS | | |
|---|---|---|
| **DWG NUMBER** | **DWG. NAME** | **REV.** |
| M-S-01 | STEAM SERVICE DRIP STATION | 0 |
| M-S-02 | FOR FUTURE USE | - |
| M-S-03 | HPS PRESSURE REDUCING STATION | 0 |
| M-S-04 | HPS FLOW METER | 0 |
| M-S-05 | STEAM CONDENSATE FLOW METER, ULTRASONIC | 0 |
| M-S-06 | STEAM CONDENSATE RECEIVER | 0 |
| **PLUMBING DETAILS** | | |
| **DWG. NUMBER** | **DWG. NAME** | **REV.** |
| M-P-01 | EMERGENCY FIXTURE MIXING VALVE EXERCISE VALVE | 0 |
| M-P-02 | SUMP PUMPS | 0 |
| M-P-03 | SANITARY TRAP PRIMERS | 0 |
| M-P-04 | PLENUM DRAIN P-TRAP | 0 |
| M-P-05 | VERTICAL WATER SERVICE ENTRY | 0 |
| M-P-06 | DCW SERVICE METER PIPING | 0 |
| M-P-07 | DHW SYSTEM (INDIRECT TYPE) STORAGE TANK | 0 |
| **HVAC DETAILS** | | |
| **DWG. NUMBER** | **DWG. NAME** | **REV.** |
| M-H-01 | INLINE PUMP CONNECTION FOR 1/2HP & SMALLER | 0 |
| M-H-02 | VERTICAL INLINE PUMP | 0 |
| M-H-03 | BASE MOUNTED PUMP | 0 |
| M-H-04 | CHILLED WATER BUILDING ENTRY | 0 |
| M-H-05 | TYP. TERMINAL EQP. PIPING CONNECTIONS (SINGLE) | 0 |
| M-H-06 | MULTIPLE TERMINAL EQP. PIPING CONNECTS | 0 |
| M-H-07 | HEATING & COOLING COIL BANK PIPING CONNECTIONS | 0 |
| M-H-08 | EXPANSION TANK (REPLACEMENT ONLY) | 0 |
| M-H-09 | PIPING ROOF PENETRATIONS | 0 |
| M-H-10 | AIR VALVE w/ REHEAT COIL | 0 |
| M-H-11 | SIDE STREAM FILTER PIPING | 0 |
| M-H-12 | FAN FLEXIBLE DUCT CONNECTIONS | 0 |

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| REV. | DATE | DESCRIPTION | APP. |
|---|---|---|---|
| 0 | 13/11/25 | ISSUED FOR INFORMATION | |

**PROJECT NAME**
**MECHANICAL STANDARD DETAILS**

**DRAWING NAME**
**DRAWING INDEX**

| | |
|---|---|
| **PROJ. FILE NO.** | **DRAWING NO.** **M-01** |
| **DRAWN BY** DLB | |
| **APPROVED BY** DSS | **SCALE** AS NOTED |
| **DATE** 05-MAY-2025 | **SHEET** 1 OF 1 |

- BALL VALVE
- GATE VALVE
- BUTTERFLY VALVE
- GLOBE VALVE
- CHECK VALVE
- STRAINER
- PRESSURE REDUCING VALVE
- SOLENOID VALVE
- CONTROL VALVE
- CIRCUIT BALANCING VALVE
- PIPING CAPPED
- PIPING UNION/FLANGE
- RELIEF VALVE
- PIPING TURNED DOWN
- PIPING TURNED UP
- PIPING OPEN END
- PIPING 90° ELBOW
- PIPING TEE FITTING
- PIPING CONTINUOUS BREAK
- PIPING REDUCER
- STEAM TRAP
- CIRCULATOR
- PRESSURE GUAGE
- THERMOMETER

- DOMESTIC COLD WATER (DCW)
- DOMESTIC HOT WATER (DHW)
- DOMESTIC HOT RECIRC. WATER (DHRW)
- LPS — LOW PRESSURE STEAM (LPS)
- MPS — HIGH PRESSURE STEAM (MPS)
- HPS — HIGH PRESSURE STEAM (HPS)
- LPC — LOW PRESSURE CONDENSATE (LPC)
- MPC — MEDIUM PRESSURE CONDENSATE (MPC)
- HPC — HIGH PRESSURE CONDENSATE (HPC)
- CENTERLINE LINETYPE
- HIDDEN LINETYPE

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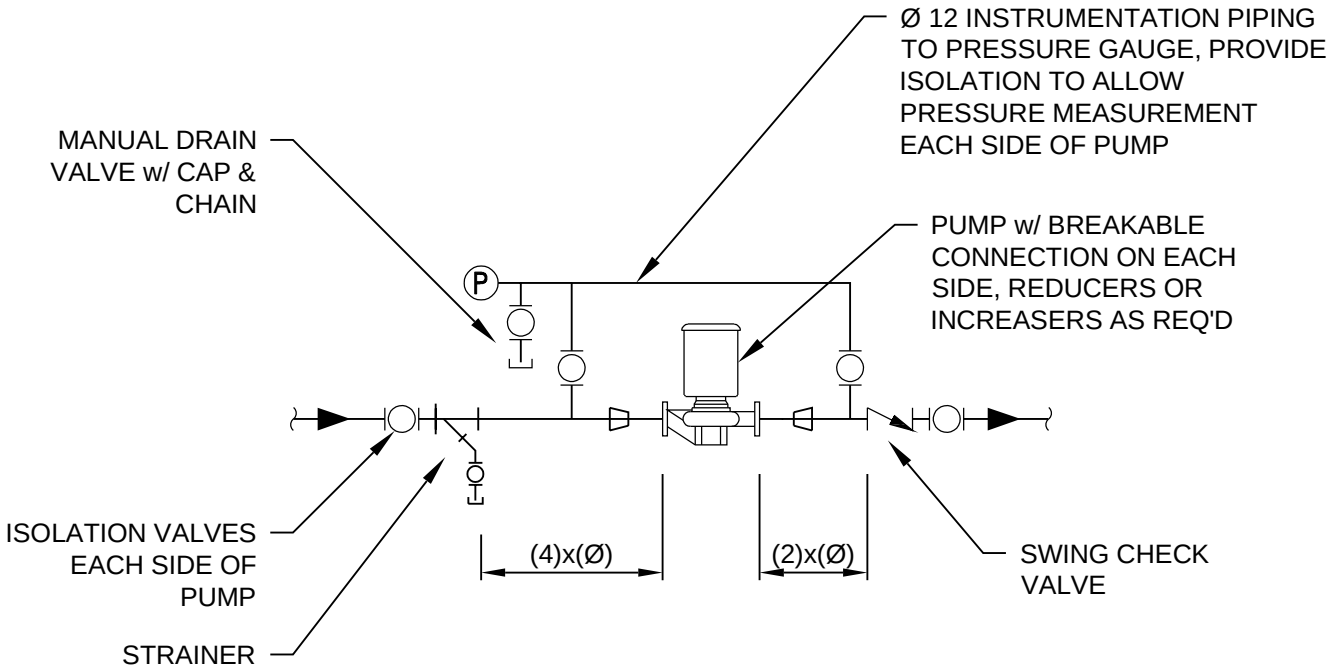
**PROJECT NAME**
# MECHANICAL STANDARD DETAILS

**DRAWING NAME**
# VERTICAL INLINE PUMP c/w SUCTION DIFFUSER & TRIPLE DUTY VALVE

| | |
|---|---|
| PROJ. FILE NO. | DRAWING NO. M-02 |
| DRAWN BY DLB | |
| APPROVED BY DSS | SCALE AS NOTED |
| DATE 05-MAY-2025 | SHEET 1 OF 1 |




NOTE: THIS DETAIL IS FOR ½ HP AND SMALLER INLINE PUMPS. FOR ¾ HP AND LARGER PUMPS PUMPS SEE DETAIL ON DWG. H-02

1 / - DETAIL

NTS - INLINE PUMP CONNECTION FOR 1/2 HP AND SMALLER

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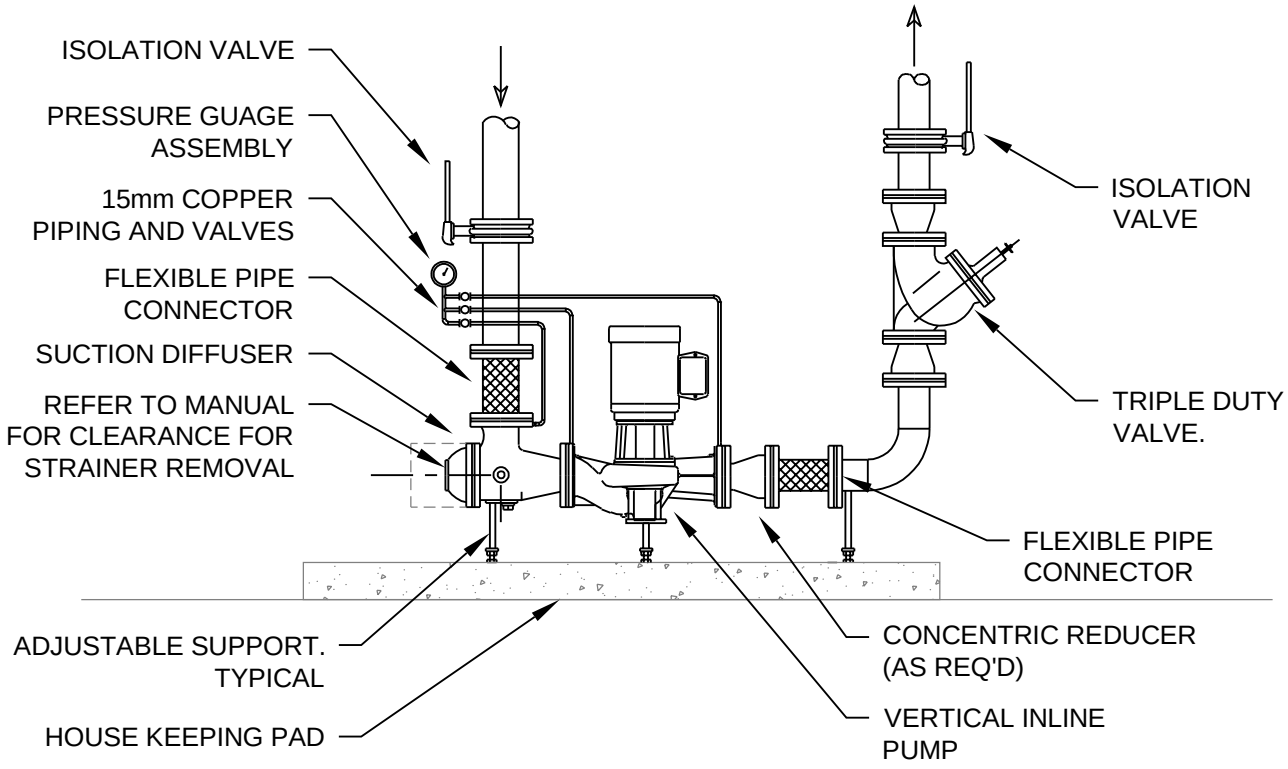
|---|---|---|---|
| 0 | 13/11/25 | ISSUED FOR INFORMATION | |

**PROJECT NAME**
**MECHANICAL STANDARD DETAILS**

**DRAWING NAME**
**INLINE PUMP CONNECTION FOR 1/2 HP AND SMALLER**

| | |
|---|---|
| **PROJ. FILE NO.** | **DRAWING NO.** M-H-01 |
| **DRAWN BY** DLB | |
| **APPROVED BY** DSS | **SCALE** AS NOTED |
| **DATE** 05-MAY-2025 | **SHEET** 1 OF 1 |




NOTE: FLEXIBLE VICTAULIC COUPLINGS MAY BE USED IN PLACE OF DEDICATED FLEXIBLE CONNECTORS. QUANTITY AND PLACEMENT PER MANUFACTURER'S RECOMMENDATIONS FOR VIBRATION CONTROL AND ALIGNMENT FLEXIBILITY

1 / - DETAIL

NTS - VERTICAL INLINE PUMP c/w SUCTION DIFFUSER AND TRIPLE DUTY VALVE

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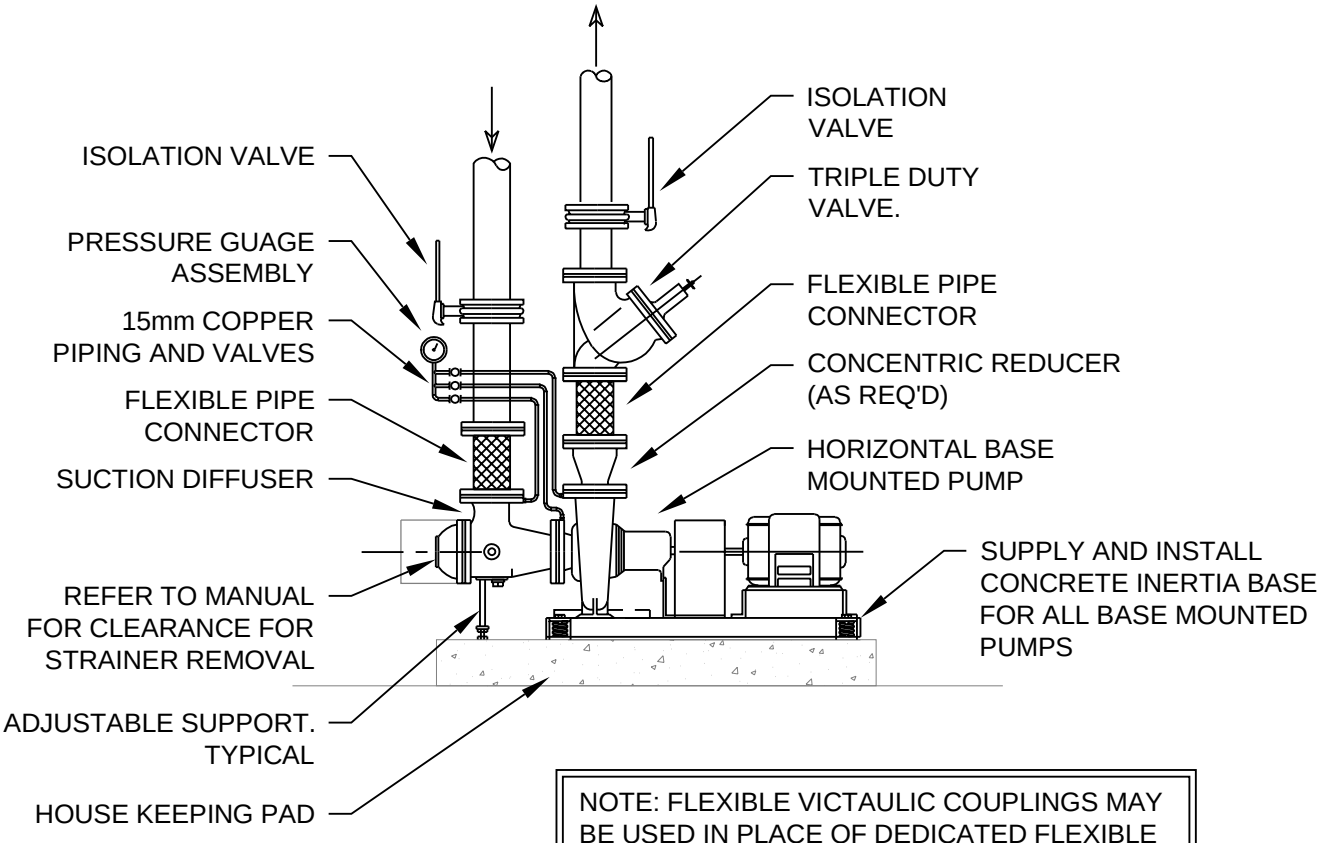
|---|---|---|---|
| 0 | 13/11/25 | ISSUED FOR INFORMATION | |

**PROJECT NAME**
**MECHANICAL STANDARD DETAILS**

**DRAWING NAME**
**VERTICAL INLINE PUMP c/w SUCTION DIFFUSER & TRIPLE DUTY VALVE**

| | |
|---|---|
| **PROJ. FILE NO.** | **DRAWING NO.** M-H-02 |
| **DRAWN BY** DLB | |
| **APPROVED BY** DSS | **SCALE** AS NOTED |
| **DATE** 05-MAY-2025 | **SHEET** 1 OF 1 |




NOTE: FLEXIBLE VICTAULIC COUPLINGS MAY BE USED IN PLACE OF DEDICATED FLEXIBLE CONNECTORS. QUANTITY AND PLACEMENT PER MANUFACTURER'S RECOMMENDATIONS FOR VIBRATION CONTROL AND ALIGNMENT FLEXIBILITY

1 / - DETAIL

NTS - BASE MOUNTED PUMP c/w SUCTION DIFFUSER AND TRIPLE DUTY VALVE

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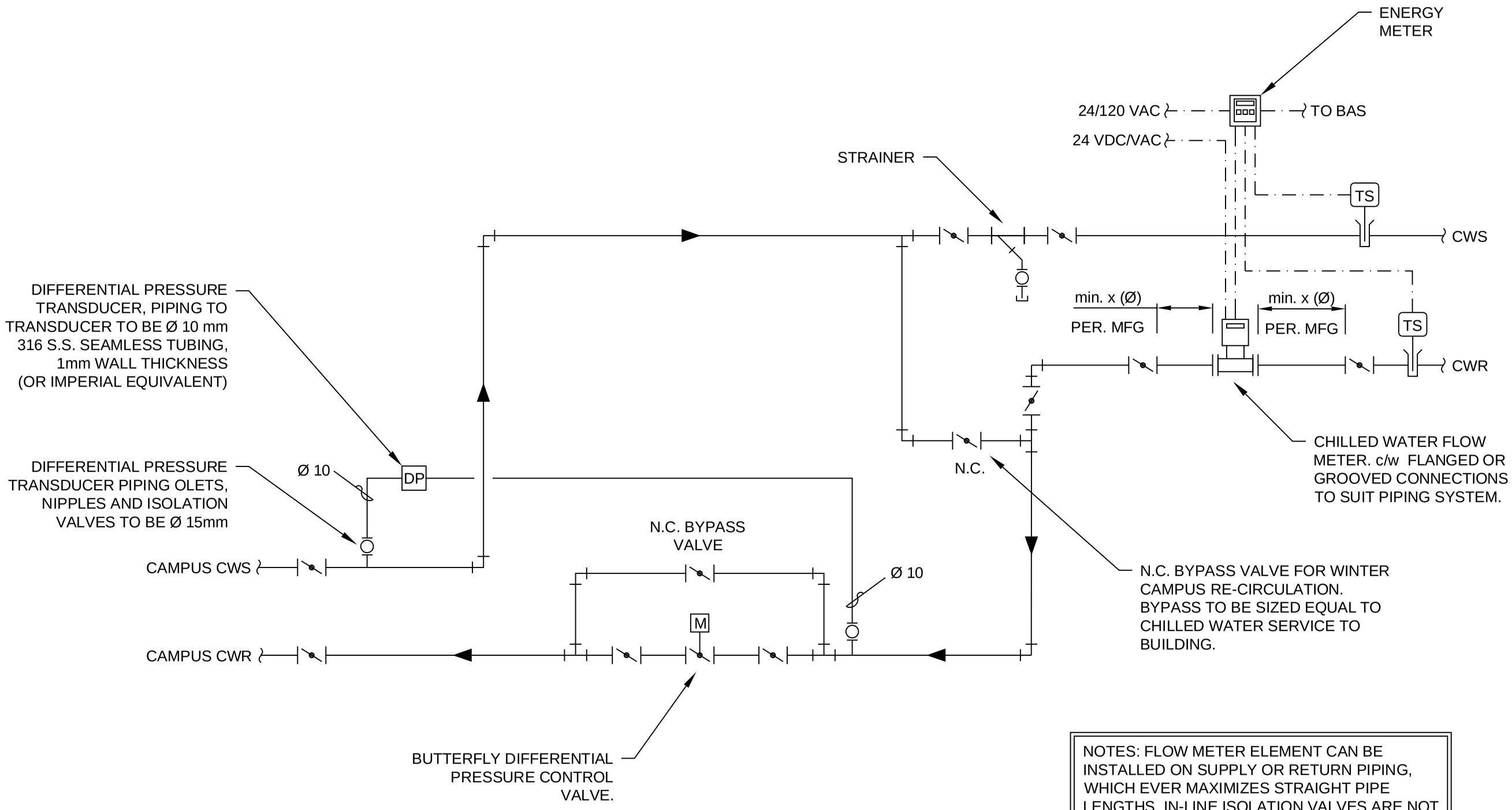
**PROJECT NAME**
**MECHANICAL STANDARD DETAILS**

**DRAWING NAME**
**BASE MOUNTED PUMP c/w SUCTION DIFFUSER & TRIPLE DUTY VALVE**

| | |
|---|---|
| **PROJ. FILE NO.** | **DRAWING NO.** M-H-03 |
| **DRAWN BY** DLB | |
| **APPROVED BY** DSS | **SCALE** AS NOTED |
| **DATE** 05-MAY-2025 | **SHEET** 1 OF 1 |




1 / - DETAIL

NTS - CHILLED WATER BLDG ENTRY

NOTES: FLOW METER ELEMENT CAN BE INSTALLED ON SUPPLY OR RETURN PIPING, WHICH EVER MAXIMIZES STRAIGHT PIPE LENGTHS. IN-LINE ISOLATION VALVES ARE NOT REQUIRED FOR HOT-TAP/INSERTION STYLE FLOW METER ELEMENTS.

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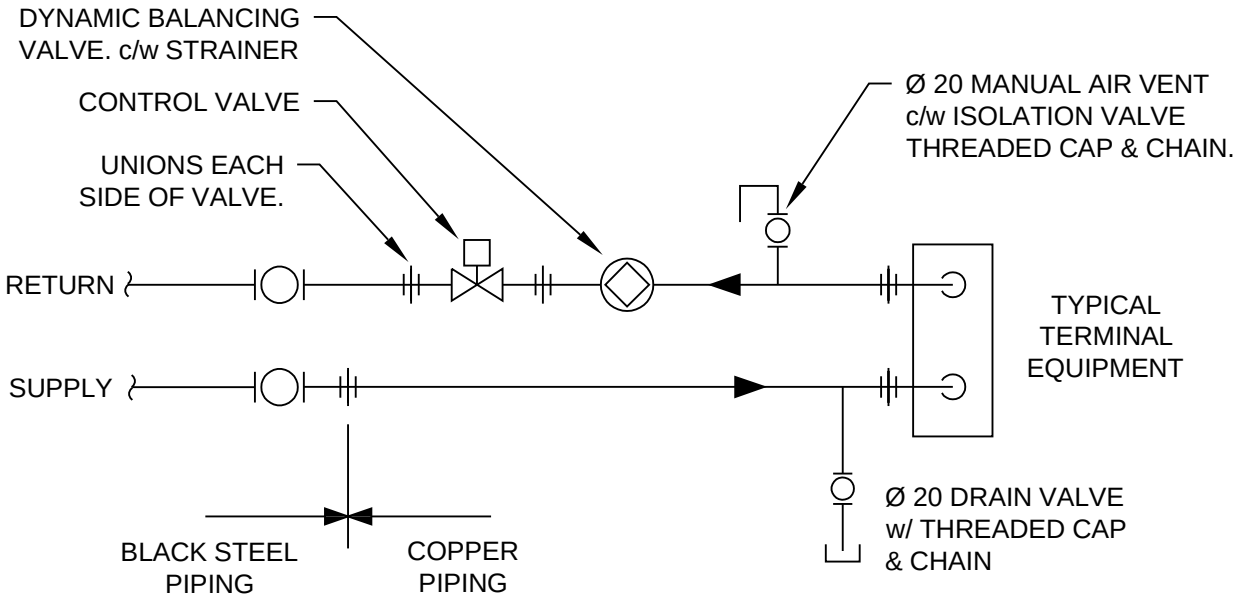
PROJECT NAME
**MECHANICAL STANDARD DETAILS**

DRAWING NAME
**CHILLED WATER BUILDING ENTRY**

| | |
|---|---|
| PROJ. FILE NO. | DRAWING NO. M-H-04 |
| DRAWN BY DLB | |
| APPROVED BY DSS | SCALE AS NOTED |
| DATE 05-MAY-2025 | SHEET 1 OF 1 |




NOTE: PIPING TO BE BLACK IRON TO WITHIN 900mm OF EACH PIECE OF EQUIPMENT. COPPER PIPING MAY BE RAN THE REMAINING 900mm TO THE DEVICE. THE FLOW CONTROL VALVES AND ISOLATION VALVES TO BE INSTALLED WITHIN THE 900mm COPPER PIPING.

1 / - DETAIL

NTS - TYPICAL TERMINAL EQUIPMENT PIPING CONNECTION

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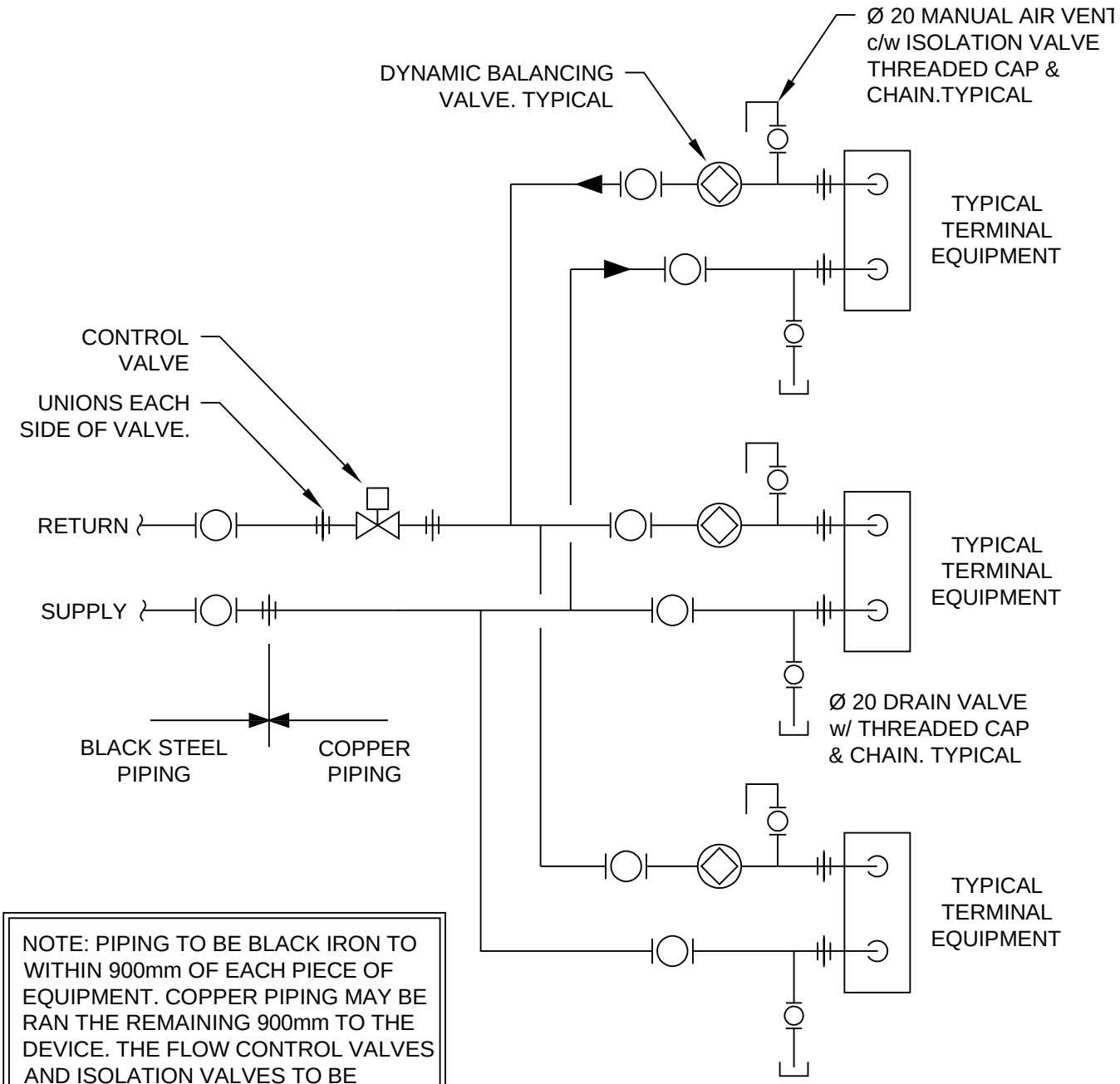
**PROJECT NAME**
**MECHANICAL STANDARD DETAILS**

**DRAWING NAME**
**TYPICAL TERMINAL EQUIPMENT PIPING CONNECTIONS (SINGLE)**

| | |
|---|---|
| **PROJ. FILE NO.** | **DRAWING NO.** M-H-05 |
| **DRAWN BY** DLB | |
| **APPROVED BY** DSS | **SCALE** AS NOTED |
| **DATE** 05-MAY-2025 | **SHEET** 1 OF 1 |




NOTE: PIPING TO BE BLACK IRON TO WITHIN 900mm OF EACH PIECE OF EQUIPMENT. COPPER PIPING MAY BE RAN THE REMAINING 900mm TO THE DEVICE. THE FLOW CONTROL VALVES AND ISOLATION VALVES TO BE INSTALLED WITHIN THE 900mm COPPER PIPING.

1 / - DETAIL

NTS - MULTIPLE TERMINAL EQUIPMENT PIPING CONNECTION

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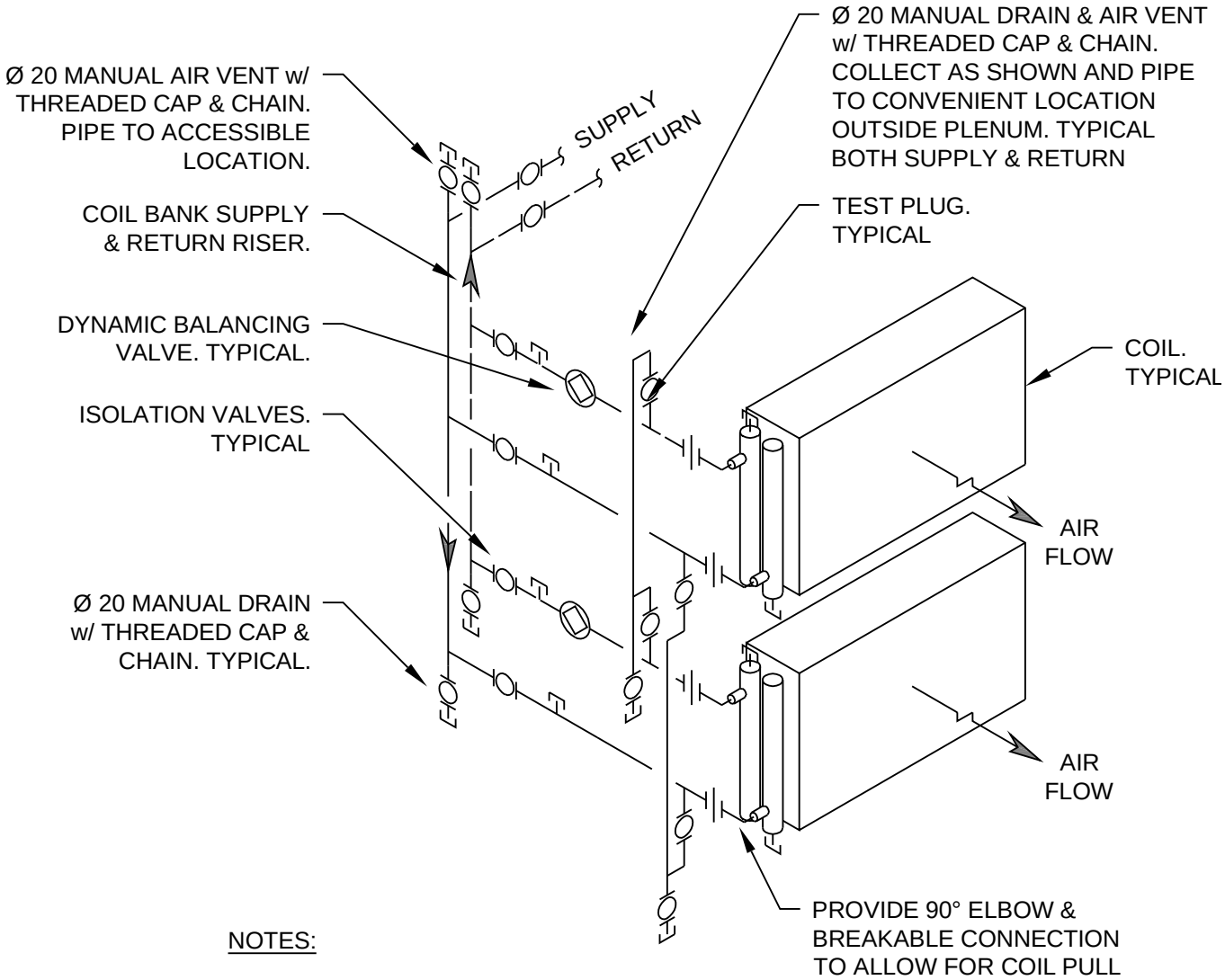
**PROJECT NAME**
**MECHANICAL STANDARD DETAILS**

**DRAWING NAME**
**MULTIPLE TERMINAL EQUIPMENT PIPING CONNECTIONS**

| | |
|---|---|
| **PROJ. FILE NO.** | **DRAWING NO.** M-H-06 |
| **DRAWN BY** DLB | |
| **APPROVED BY** DSS | **SCALE** AS NOTED |
| **DATE** 05-MAY-2025 | **SHEET** 1 OF 1 |




NOTES:

PIPE ALL COILS FOR COUNTER FLOW:
- HEATING: WARMEST LIQUID AT WARMEST AIR SIDE CONNECTION
- COOLING: COOLEST LIQUID AT COOLEST AIR SIDE CONNECTION

COIL HEADER, WHERE FACTORY VENT & DRAIN ARE LOCATED INSIDE AIR HANDLER, CAP & PROVIDE ON SUPPLY AND RETURN PIPING AS SHOWN.

1 / - DETAIL

NTS - COIL BANK CONNECTIONS

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**PROJECT NAME**
**MECHANICAL STANDARD DETAILS**

**DRAWING NAME**
**HEATING & COOLING COIL BANK PIPING CONNECTIONS**

| | |
|---|---|
| **PROJ. FILE NO.** | **DRAWING NO.** M-H-07 |
| **DRAWN BY** DLB | |
| **APPROVED BY** DSS | **SCALE** AS NOTED |
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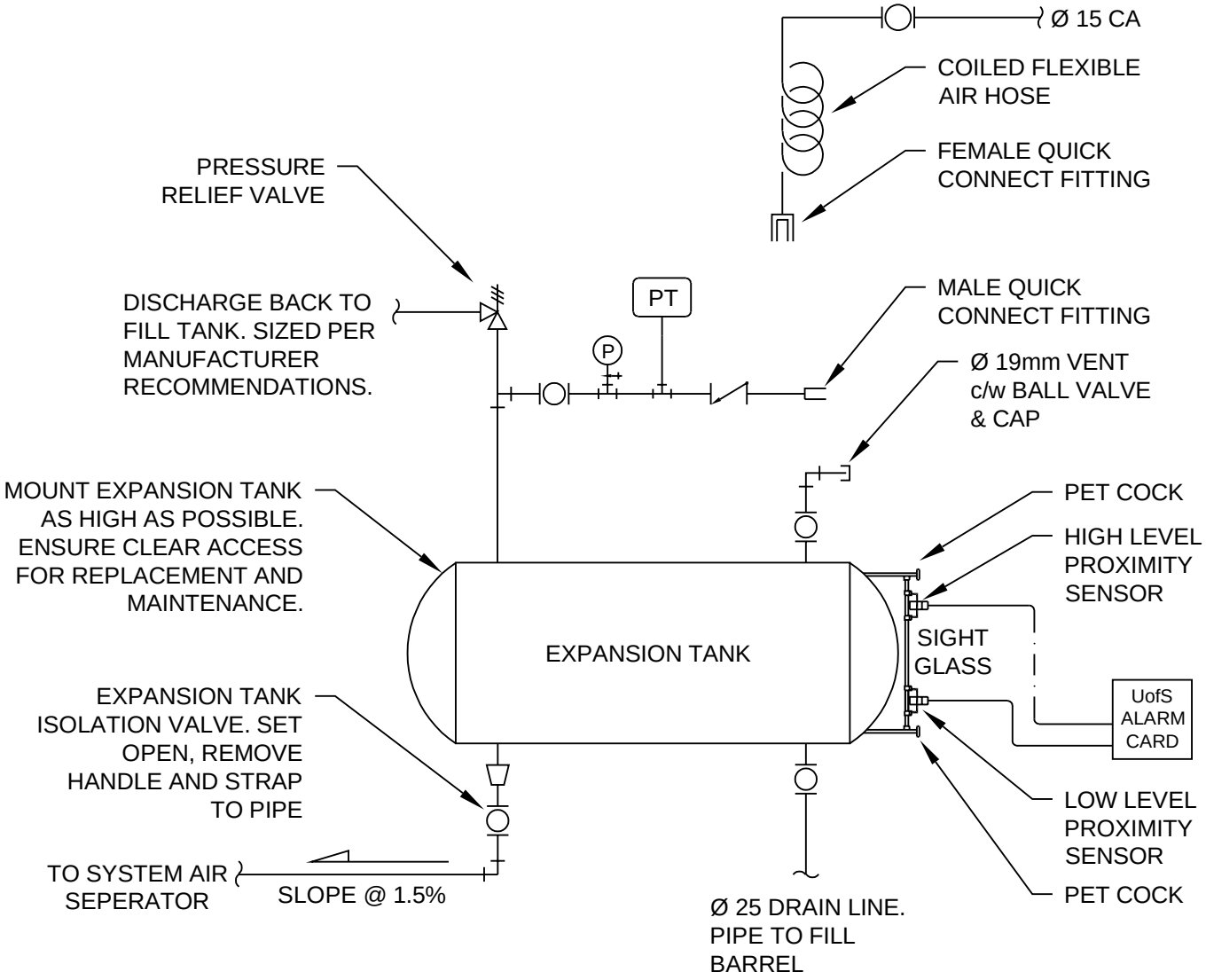
SUPPLY AND LOCATE COMPRESSED AIR FILL LINE NEAR EACH EXPANSION TANK OR GROUP OF EXPANSION TANKS.




## 1 / - DETAIL

NTS - EXPANSION TANK

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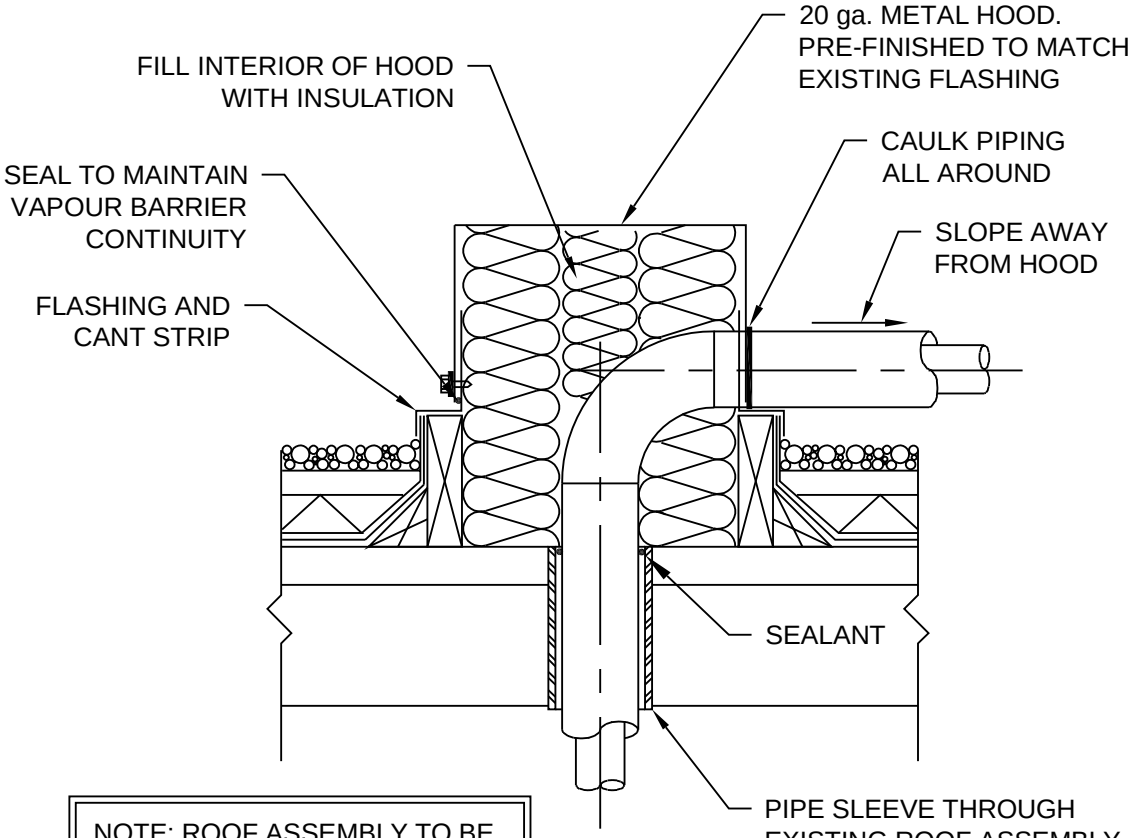
**PROJECT NAME**
**MECHANICAL STANDARD DETAILS**

**DRAWING NAME**
**EXPANSION TANK (REPLACEMENT ONLY)**

| | |
|---|---|
| **PROJ. FILE NO.** | **DRAWING NO.** M-H-08 |
| **DRAWN BY** DLB | |
| **APPROVED BY** DSS | **SCALE** AS NOTED |
| **DATE** 05-MAY-2025 | **SHEET** 1 OF 1 |




NOTE: ROOF ASSEMBLY TO BE DETERMINED ON SITE. COORDINATE HOOD ASSEMBLY WITH ACTUAL STRUCTURE. ALL WORK TO BE COORDINATED w/ ROOFING CONTRACTOR

1 / - DETAIL

NTS - PIPING ROOF PENETRATIONS

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|---|---|---|---|
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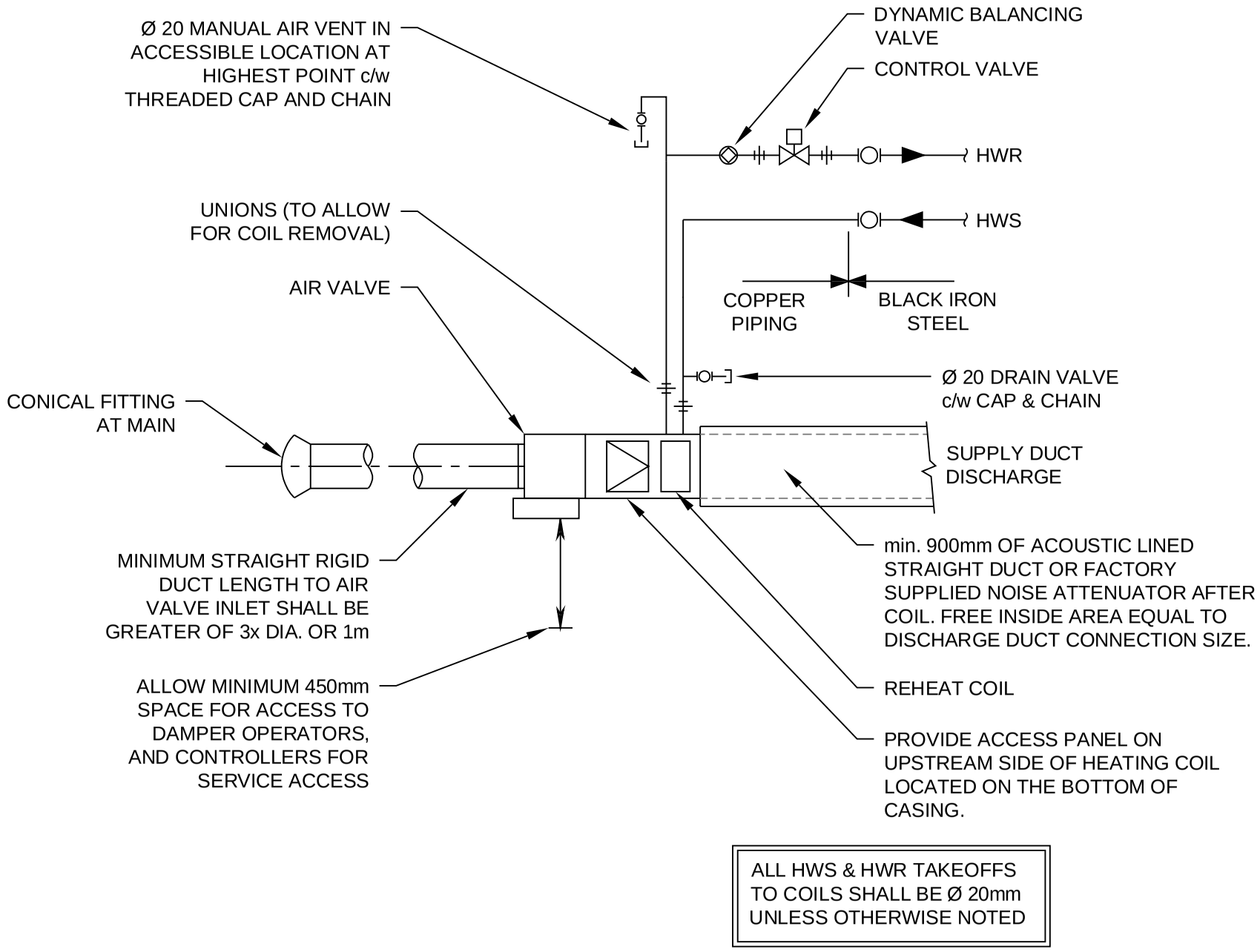
**PROJECT NAME**
**MECHANICAL STANDARD DETAILS**

**DRAWING NAME**
**PIPING ROOF PENETRATIONS**

| | |
|---|---|
| **PROJ. FILE NO.** | **DRAWING NO.** M-H-09 |
| **DRAWN BY** DLB | |
| **APPROVED BY** DSS | **SCALE** AS NOTED |
| **DATE** 05-MAY-2025 | **SHEET** 1 OF 1 |




ALL HWS & HWR TAKEOFFS TO COILS SHALL BE Ø 20mm UNLESS OTHERWISE NOTED

1 / - DETAIL

NTS - AIR VALVE w/ REHEAT COIL

| REV. | DATE | DESCRIPTION | APP. |
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**PROJECT NAME**
**MECHANICAL STANDARD DETAILS**

**DRAWING NAME**
**AIR VALVE w/ REHEAT COIL**

**PROJ. FILE NO.**

**DRAWN BY** DLB

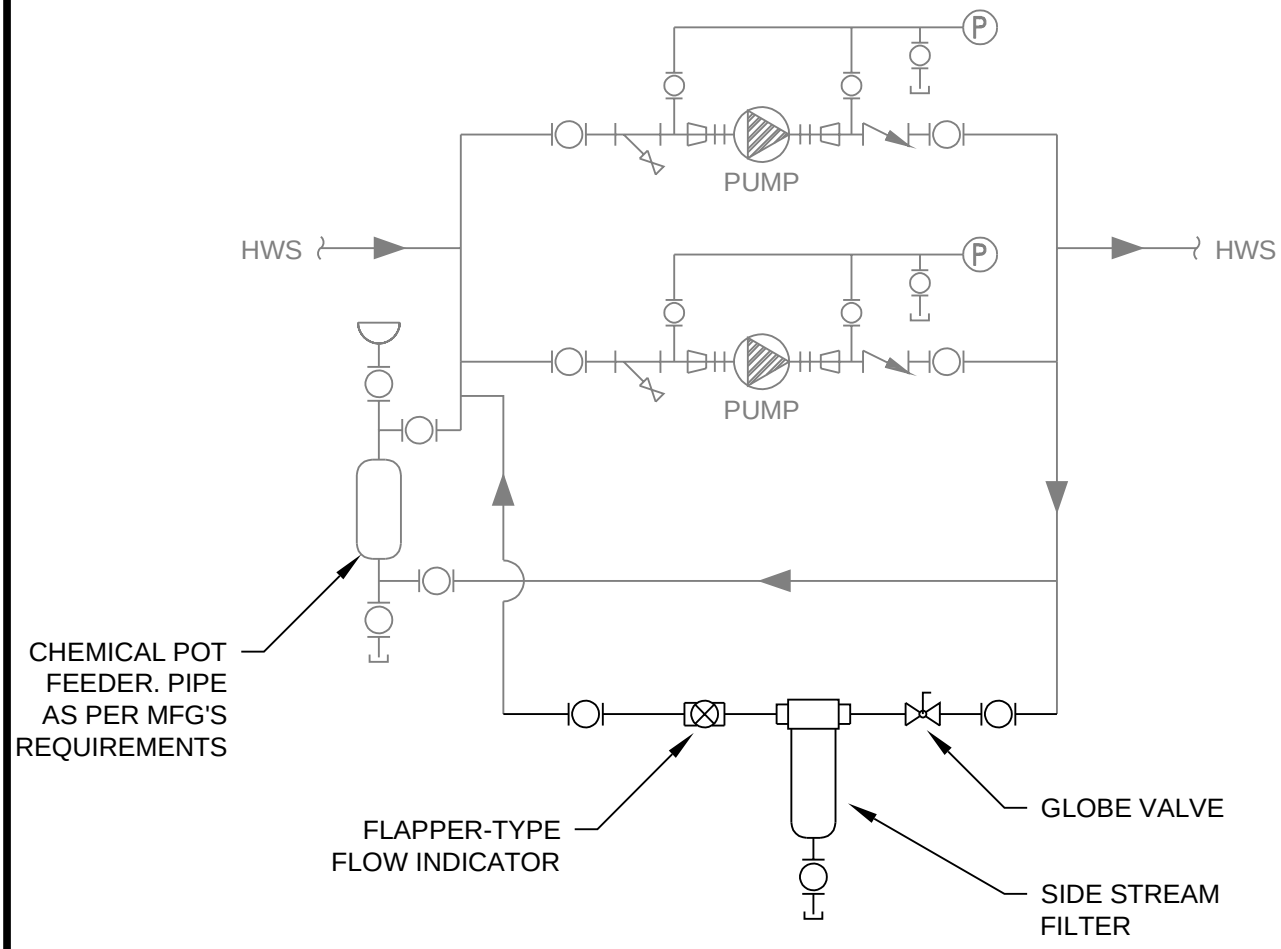
**APPROVED BY** DSS

**DATE** 05 MAY 2025

**DRAWING NO.**
**M-H-10**

**SCALE** AS NOTED

**SHEET** 1 OF 1




NOTE: ASSEMBLY TO BE ACCESSIBLE FROM FLOOR

1 / - DETAIL

NTS - SIDE STREAM FILTER PIPING

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|---|---|---|---|
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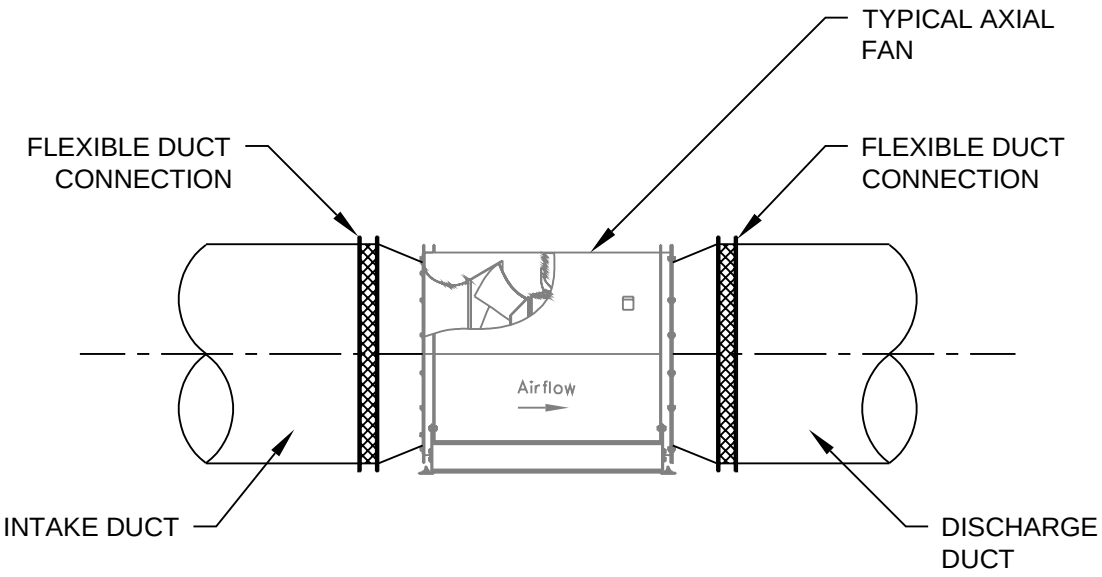
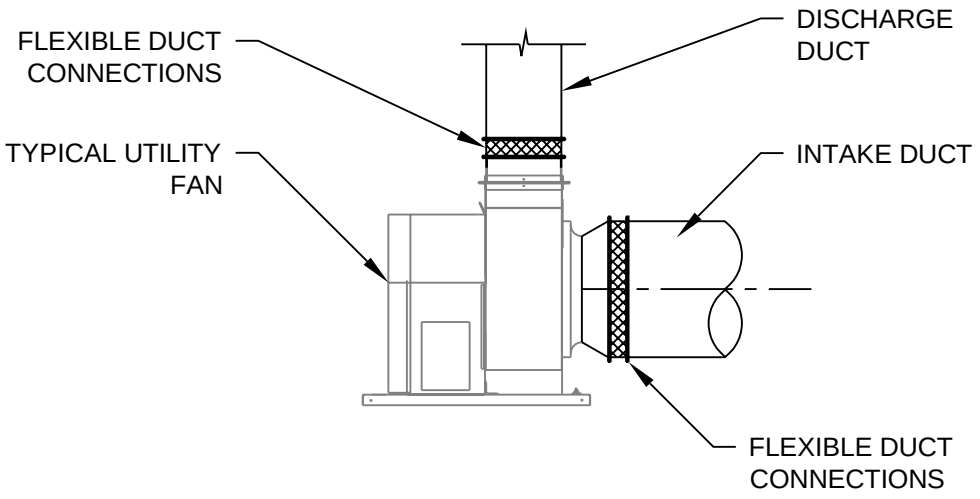
**PROJECT NAME**
**MECHANICAL STANDARD DETAILS**

**DRAWING NAME**
**SIDE STREAM FILTER PIPING**

| | |
|---|---|
| **PROJ. FILE NO.** | **DRAWING NO.** M-H-11 |
| **DRAWN BY** DLB | |
| **APPROVED BY** DSS | **SCALE** AS NOTED |
| **DATE** 05/MAY-2025 | **SHEET** 1 OF 1 |




NOTE: FLEXIBLE DUCT CONNECTIONS AT FANS SHALL BE INSTALLED IN DUCTWORK MAIN AFTER ANY TRANSITION FITTINGS SO AS FLEXIBLE CONNECTION IS SAME SIZE AS DUCTWORK MAIN.

1 / - DETAIL

NTS - FAN FLEXIBLE DUCT CONNECTIONS

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|---|---|---|---|
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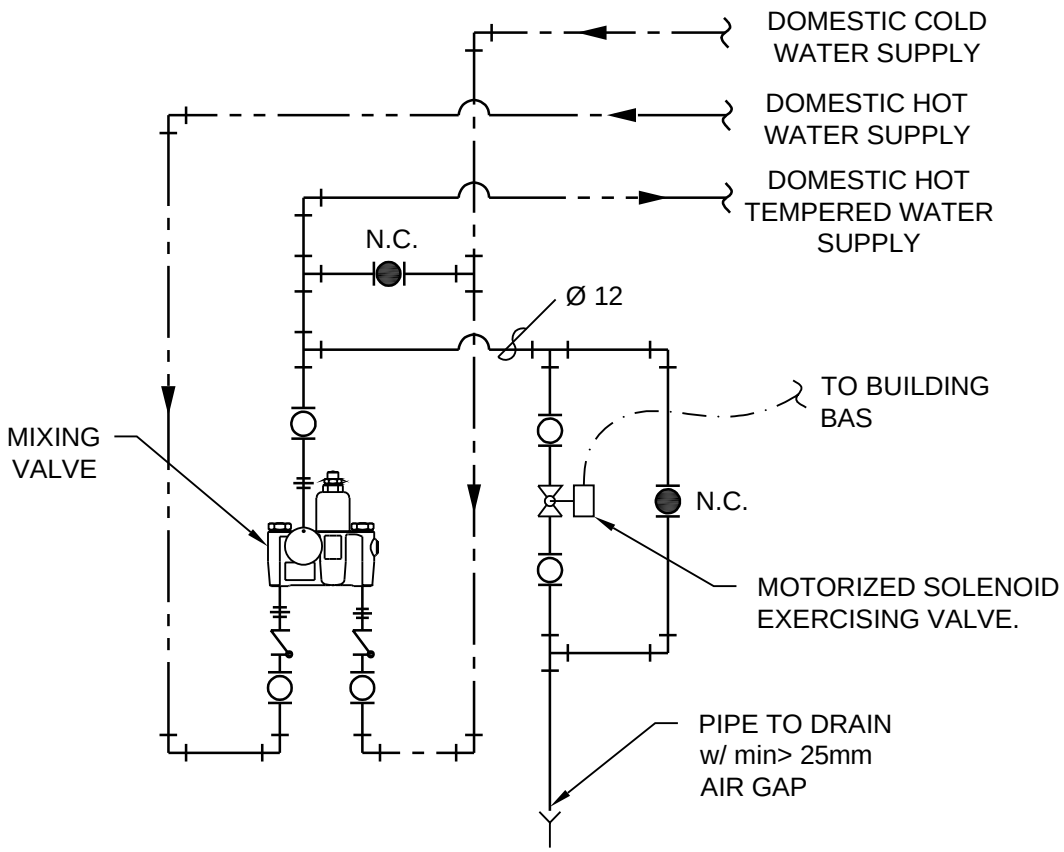
**PROJECT NAME**
**MECHANICAL STANDARD DETAILS**

**DRAWING NAME**
**FAN FLEXIBLE DUCT CONNECTIONS**

| | |
|---|---|
| **PROJ. FILE NO.** | **DRAWING NO.** M-H-12 |
| **DRAWN BY** DLB | |
| **APPROVED BY** DSS | **SCALE** AS NOTED |
| **DATE** 05/MAY-2025 | **SHEET** 1 OF 1 |




NOTE:
1) SOLENOID EXERCISING VALVE TO BE ON BAS CONTROL AND SCHEDULED TO EXERCISE THE SYSTEM.

2) EXERCISE SYSTEM REQUIRED ON MIXING VALVES SERVING EMERGENCY SHOWERS OR MIXING VALVES THAT SERVE MULTIPLE EMERGENCY FIXTURES.

1 / - DETAIL

NTS - MIXING VALVE EXERCISE VALVE

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|---|---|---|---|
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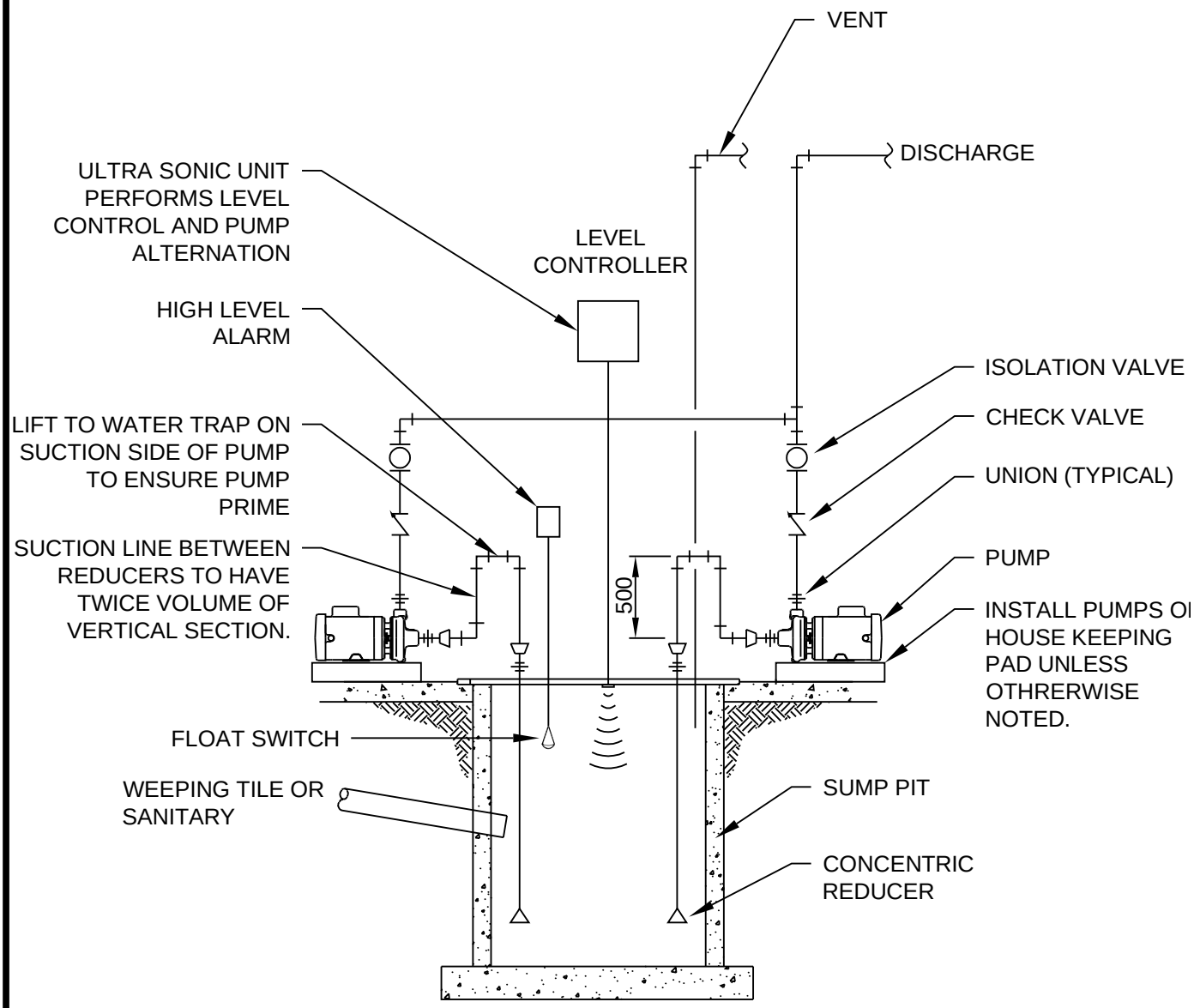
**PROJECT NAME**
**MECHANICAL STANDARD DETAILS**

**DRAWING NAME**
**MIXING VALVE EXERCISE VALVE EMERGENCY FIXTURES**

| | |
|---|---|
| **PROJ. FILE NO.** | **DRAWING NO.** M-P-01 |
| **DRAWN BY** DLB | |
| **APPROVED BY** DSS | **SCALE** AS NOTED |
| **DATE** 05 MAY 2025 | **SHEET** 1 OF 1 |




1 / - DETAIL

NTS - SUMP PUMPS

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| REV. | DATE | DESCRIPTION | APP. |
|---|---|---|---|
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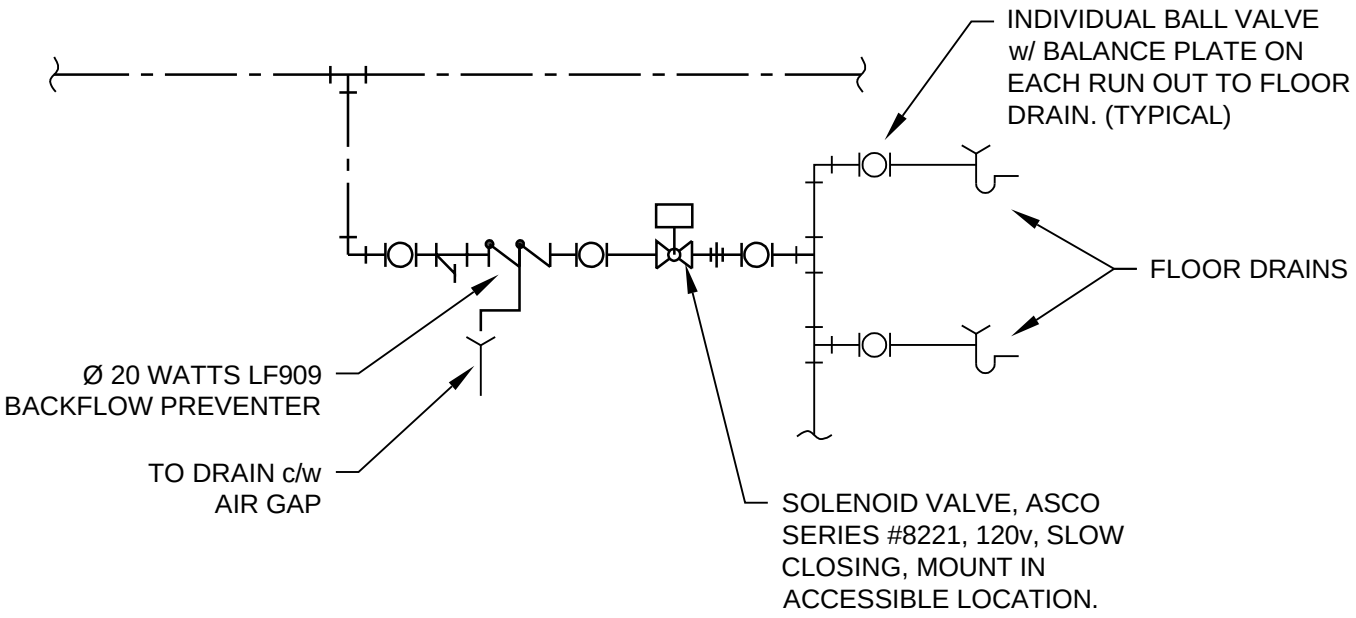
**PROJECT NAME**
**MECHANICAL STANDARD DETAILS**

**DRAWING NAME**
**SUMP PUMPS**

| | |
|---|---|
| **PROJ. FILE NO.** | **DRAWING NO.** M-P-02 |
| **DRAWN BY** DLB | |
| **APPROVED BY** DSS | **SCALE** AS NOTED |
| **DATE** 05 MAY 2025 | **SHEET** 1 OF 1 |




NOTE: PRIMER LINES TO BE RUN IN ACCESSIBLE LOCATIONS. FOR SLAB ON GRADE & OTHER NON-ACCESSIBLE LOCATIONS, LINES TO BE PEX (UPONOR AQUA-PEX OR EQUAL) WITH NO JOINTS UNDERSLAB, SLEEVE PIPING WHERE IT EXITS THE SLAB.

1 / - DETAIL

NTS - SANITARY TRAP PRIMER

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|---|---|---|---|
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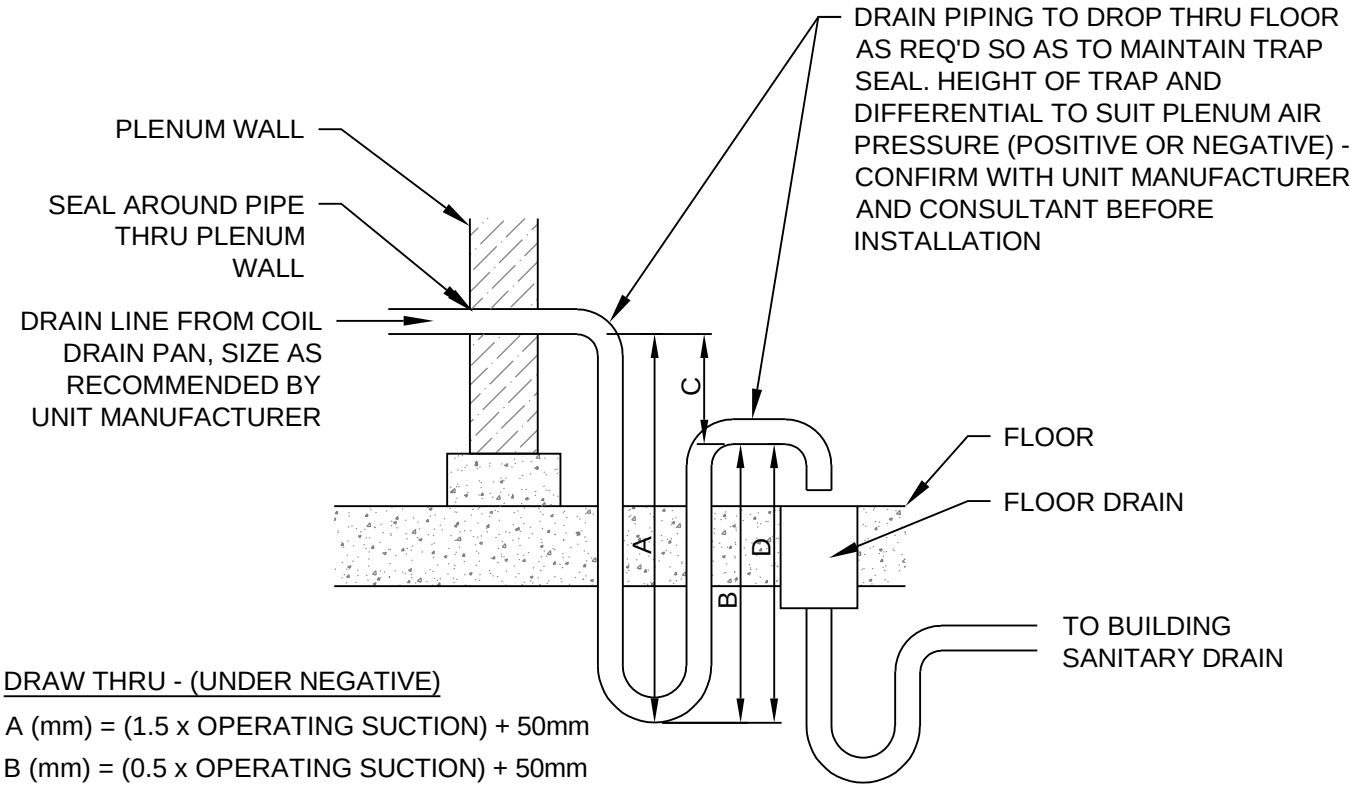
**PROJECT NAME**
**MECHANICAL STANDARD DETAILS**

**DRAWING NAME**
**SANITARY TRAP PRIMERS**

| | |
|---|---|
| **PROJ. FILE NO.** | **DRAWING NO.** **M-P-03** |
| **DRAWN BY** DLB | |
| **APPROVED BY** DSS | **SCALE** AS NOTED |
| **DATE** 05-MAY-2025 | **SHEET** 1 OF 1 |




DRAW THRU - (UNDER NEGATIVE)

A (mm) = (1.5 x OPERATING SUCTION) + 50mm

B (mm) = (0.5 x OPERATING SUCTION) + 50mm

BLOW THRU - (UNDER POSITIVE PRESSURE)

C (mm) = min. 50mm

D (mm) = (1.0 x OPERATING PRESSURE) + 50mm

1 / - DETAIL

NTS - PLENUM DRAIN P-TRAP

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|---|---|---|---|
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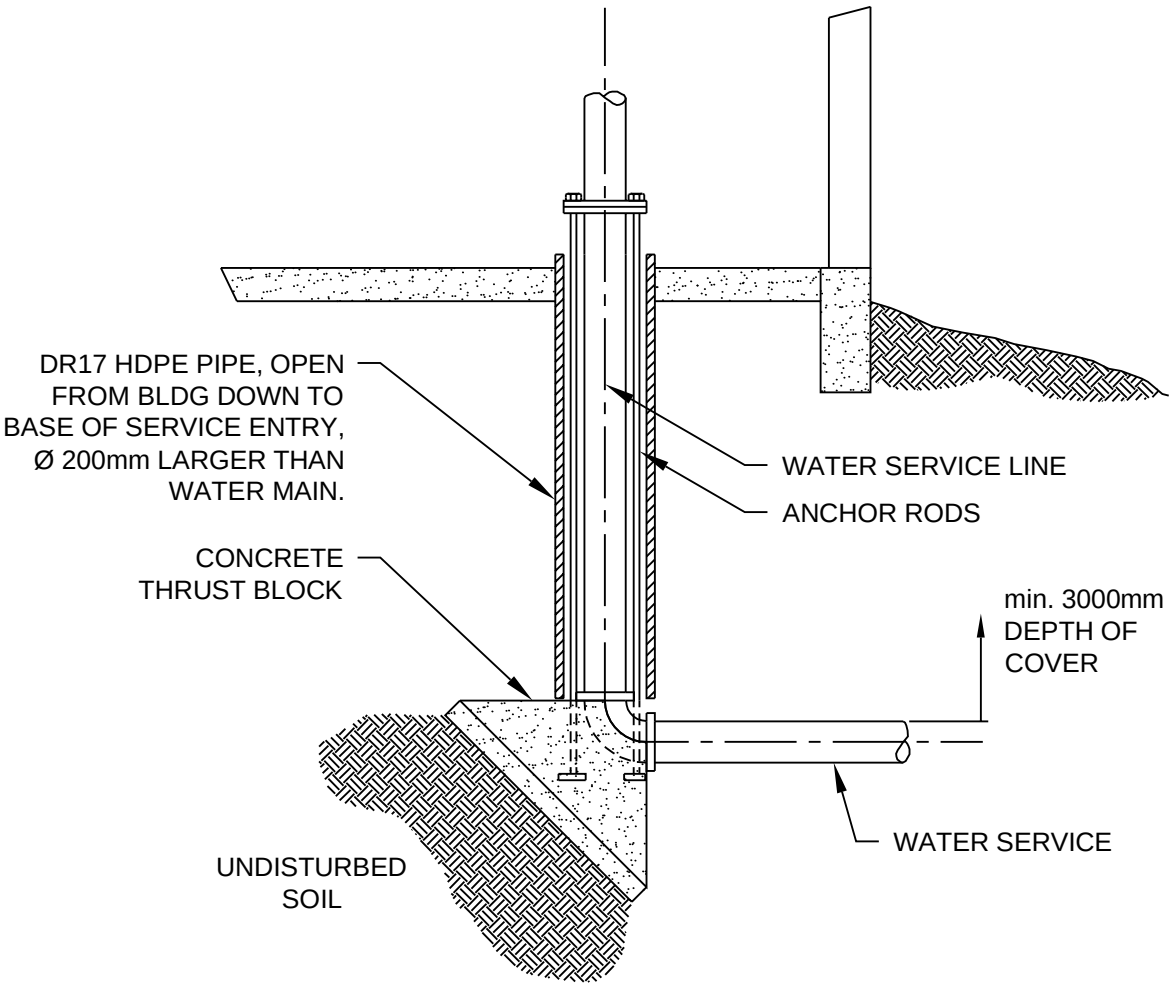
**PROJECT NAME**
**MECHANICAL STANDARD DETAILS**

**DRAWING NAME**
**PLENUM DRAIN P-TRAP**

| | |
|---|---|
| **PROJ. FILE NO.** | **DRAWING NO.** M-P-04 |
| **DRAWN BY** DLB | |
| **APPROVED BY** DSS | **SCALE** AS NOTED |
| **DATE** 05-MAY-2025 | **SHEET** 1 OF 1 |




1 / - DETAIL

NTS - VERTICAL WATER SERVICE ENTRY

UNIVERSITY OF SASKATCHEWAN

| REV. | DATE | DESCRIPTION | APP. |
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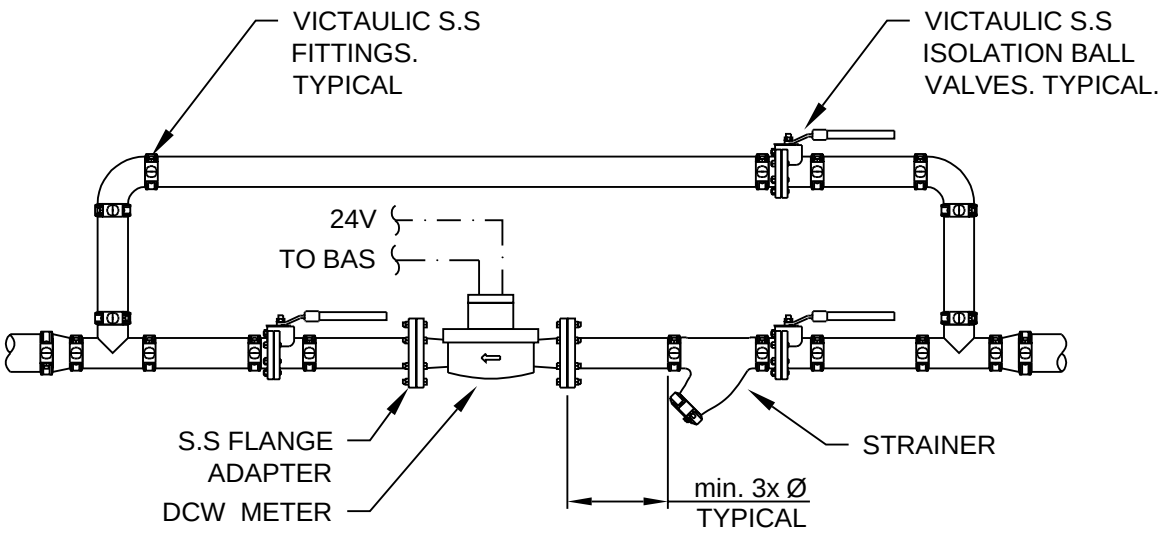
**PROJECT NAME**
**MECHANICAL STANDARD DETAILS**

**DRAWING NAME**
**VERTICAL WATER SERVICE ENTRY**

| | |
|---|---|
| **PROJ. FILE NO.** | **DRAWING NO.** **M-P-05** |
| **DRAWN BY** DLB | |
| **APPROVED BY** DSS | **SCALE** AS NOTED |
| **DATE** 05-MAY-2025 | **SHEET** 1 OF 1 |




NOTE: MINIMUM EQUIVALENT STRAIGHT PIPING UP AND DOWNSTREAM OF METER MAY INCLUDE FULL PORT VALVES, GATE VALVES, BYPASS TEES, AND CONCENTRIC REDUCERS OF NO MORE THAN ONE NOMINAL PIPE SIZE CHANGE, UNLESS NOTED OTHERWISE IN CONSTRUCTION DOCUMENTS OR MANUFACTURES INSTALLATION REQUIREMENTS.

1 / - DETAIL

NTS - DCW SERVICE METER PIPING

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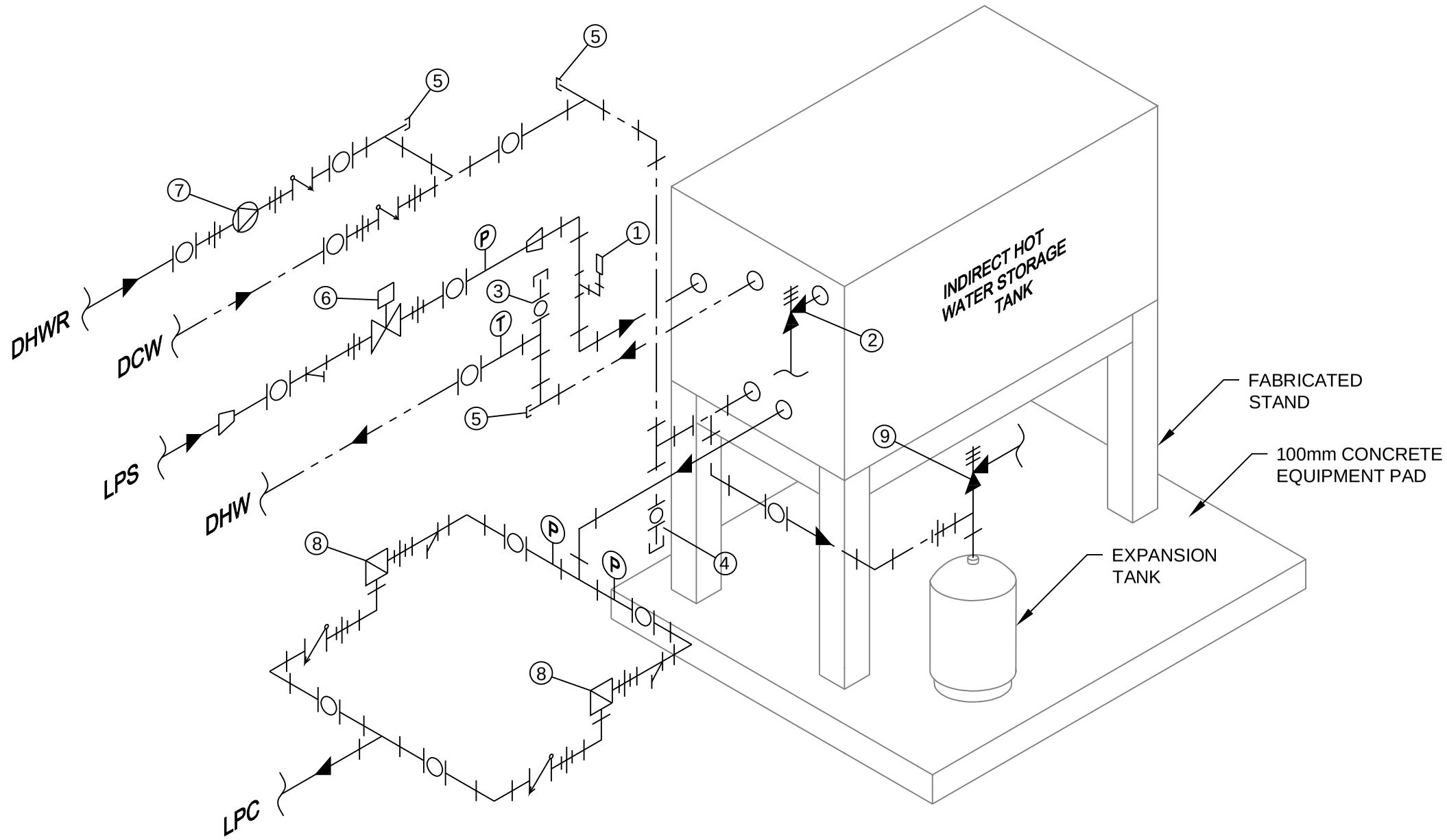
**PROJECT NAME**
**MECHANICAL STANDARD DETAILS**

**DRAWING NAME**
**DOMESTIC COLD WATER SERVICE METER PIPING**

| | |
|---|---|
| **PROJ. FILE NO.** | **DRAWING NO.** M-P-06 |
| **DRAWN BY** DLB | |
| **APPROVED BY** DSS | **SCALE** AS NOTED |
| **DATE** 05-MAY-2025 | **SHEET** 1 OF 1 |

KEY NOTES:

1. SUPPLY AND INSTALL VACUUM BREAKER ON LPS SUPPLY TO TANK.
2. SUPPLY AND INSTALL T & P SAFETY RELIEF VALVE AND PIPE TO DRAIN.
3. SUPPLY AND INSTALL DHW VENT c/w ISOLATION VALVE, THREADED CAP AND CHAIN
4. SUPPLY AND INSTALL DCW DRAIN VALVE c/w THREADED CAP AND CHAIN.
5. SUPPLY AND INSTALL THERMO-WELLS FOR SENSORS FOR BMS ON DCW, DHW AND DHWR. INSTALL AT ELBOWS AS SHOWN.
6. STEAM CONTROL VALVE c/w STRAINER. CONTROL VALVE TO BE MOUNTED AT 45° ANGLE. PROVIDE A MIN. 300mm OF PIPE ON INLET SIDE OF CONTROL VALVE TO FACILITATE FUTURE VALVE SIZE CHANGE IF NEEDED.
7. DHWR RECIRC. PUMP (IF REQUIRED0 CONFIRM ON SITE FOR EXISITNG RECIRC. PUMP
8. CONDENSATE TRAP c/w STRAINER AND CHECK VALVE. TRAPS TO BE MOUNTED AT THE SAME ELEVATION.
9. SUPPLY AND INSTALL PRESSURE RELIEF VALVE AND PIPE TO DRAIN.




1 / - DETAIL
NTS - DOMESTIC HOT WATER SYSTEM

| REV. | DATE | DESCRIPTION | APP. |
|---|---|---|---|
| 0 | 13/11/25 | ISSUED FOR INFORMATION | |

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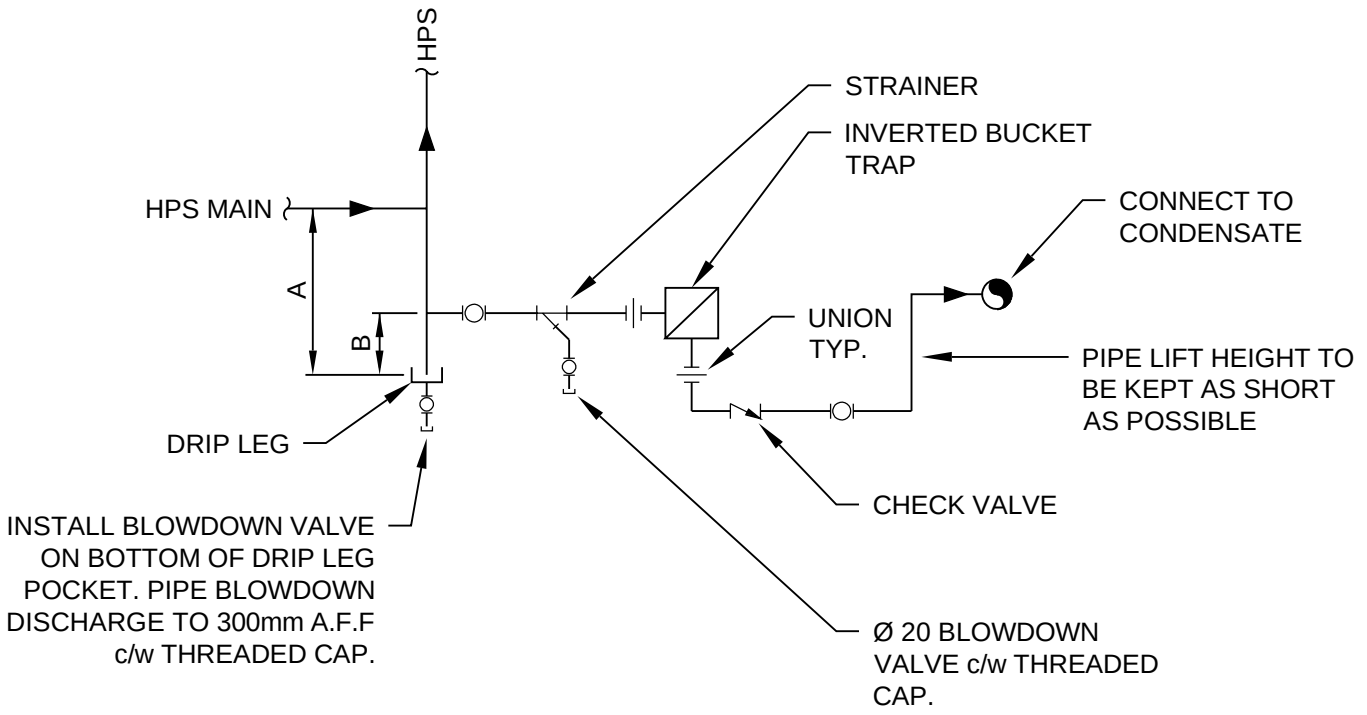
PROJECT NAME
**MECHANICAL STANDARD DETAILS**

DRAWING NAME
**DOMESTIC HOT WATER SYSTEM INDIRECT TYPE STORAGE TANK**

| | |
|---|---|
| PROJ. FILE NO. | DRAWING NO. M-P-07 |
| DRAWN BY DLB | |
| APPROVED BY DSS | SCALE AS NOTED |
| DATE 05-MAY-2025 | SHEET 1 OF 1 |




| DRIP LEG DIMENSIONS (mm) | | | |
|---|---|---|---|
| HPS MAIN Ø | POCKET Ø | DIM. (A) | DIM. (B) |
| ≤ 100 | LINE SIZE | min. 100 | min. 25 |
| 125-200 | Ø 100 min. | min. 150 | min. 50 |
| 250 ≥ | PIPE Ø ÷ 2 | PIPE Ø | min. 50 |

NOTES:
1) INSULATE PIPING AS DESCRIBED IN SPECIFICATION. BALL VALVE BODIES, TRAP, STRAINER AND UNIONS TO BE INSULATED, USE VALVE HANDLE EXTENSIONS AND TRAP JACKETS.

2) PIPE, TRAP, STRAINER, VALVES AND FITTINGS TO BE SIZED AS NOTED ON DWG'S.

3) ENSURE ALL VALVES ARE LOCATED FOR SAFE ACCESS AND OPERATION.

1 / - DETAIL

NTS - STEAM SERVICE DRIP STATION

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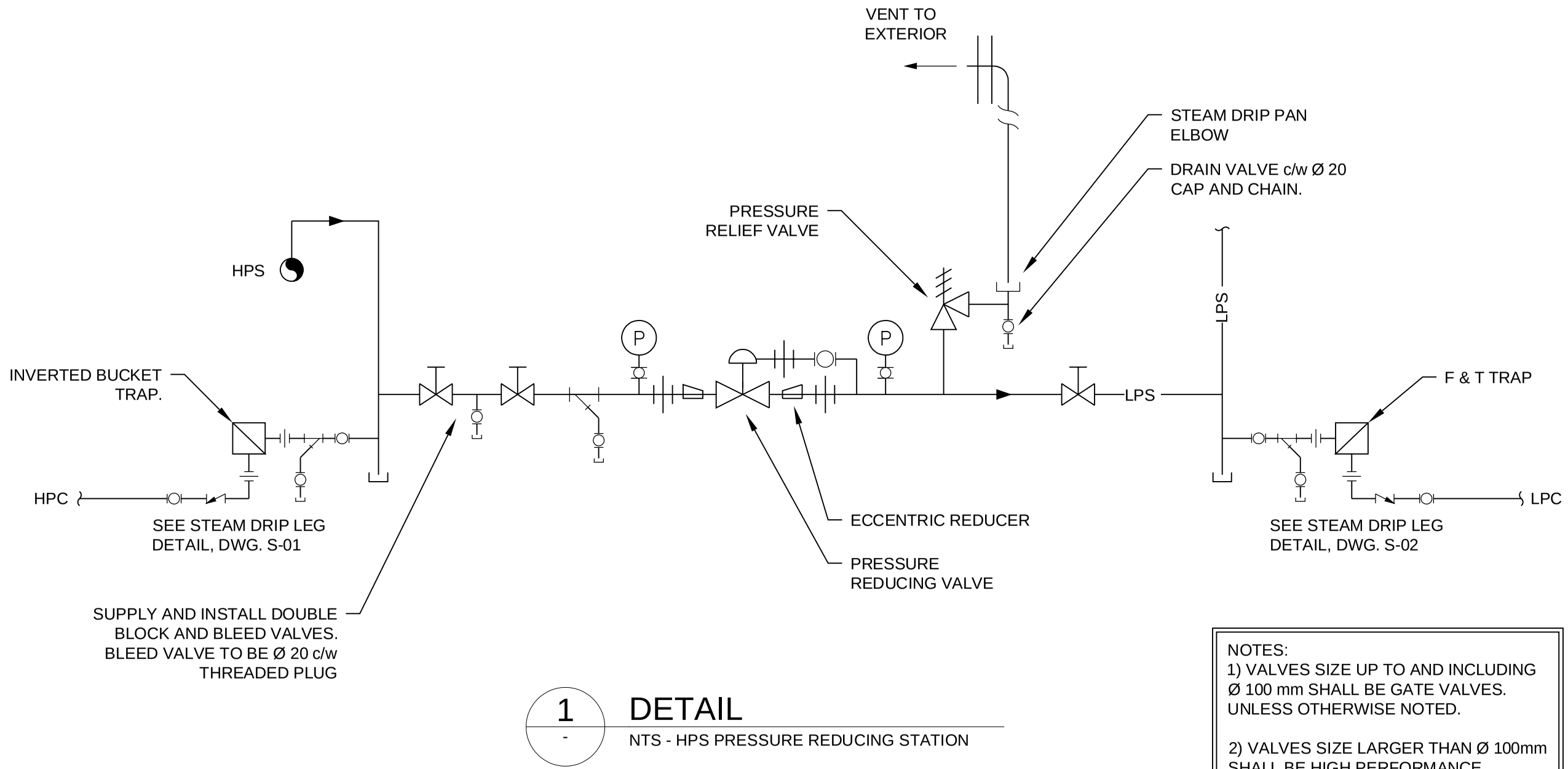
| 0 | 13/11/25 | ISSUED FOR INFORMATION | |

**PROJECT NAME**
**MECHANICAL STANDARD DETAILS**

**DRAWING NAME**
**STEAM SERVICE DRIP STATION**

| | |
|---|---|
| **PROJ. FILE NO.** | **DRAWING NO.** M-S-01 |
| **DRAWN BY** DLB | |
| **APPROVED BY** DSS | **SCALE** AS NOTED |
| **DATE** 05-MAY-2025 | **SHEET** 1 OF 1 |




1 / - DETAIL

NTS - HPS PRESSURE REDUCING STATION

NOTES:
1) VALVES SIZE UP TO AND INCLUDING Ø 100 mm SHALL BE GATE VALVES. UNLESS OTHERWISE NOTED.

2) VALVES SIZE LARGER THAN Ø 100mm SHALL BE HIGH PERFORMANCE BUTTERFLY VALVES. UNLESS OTHERWISE NOTED.

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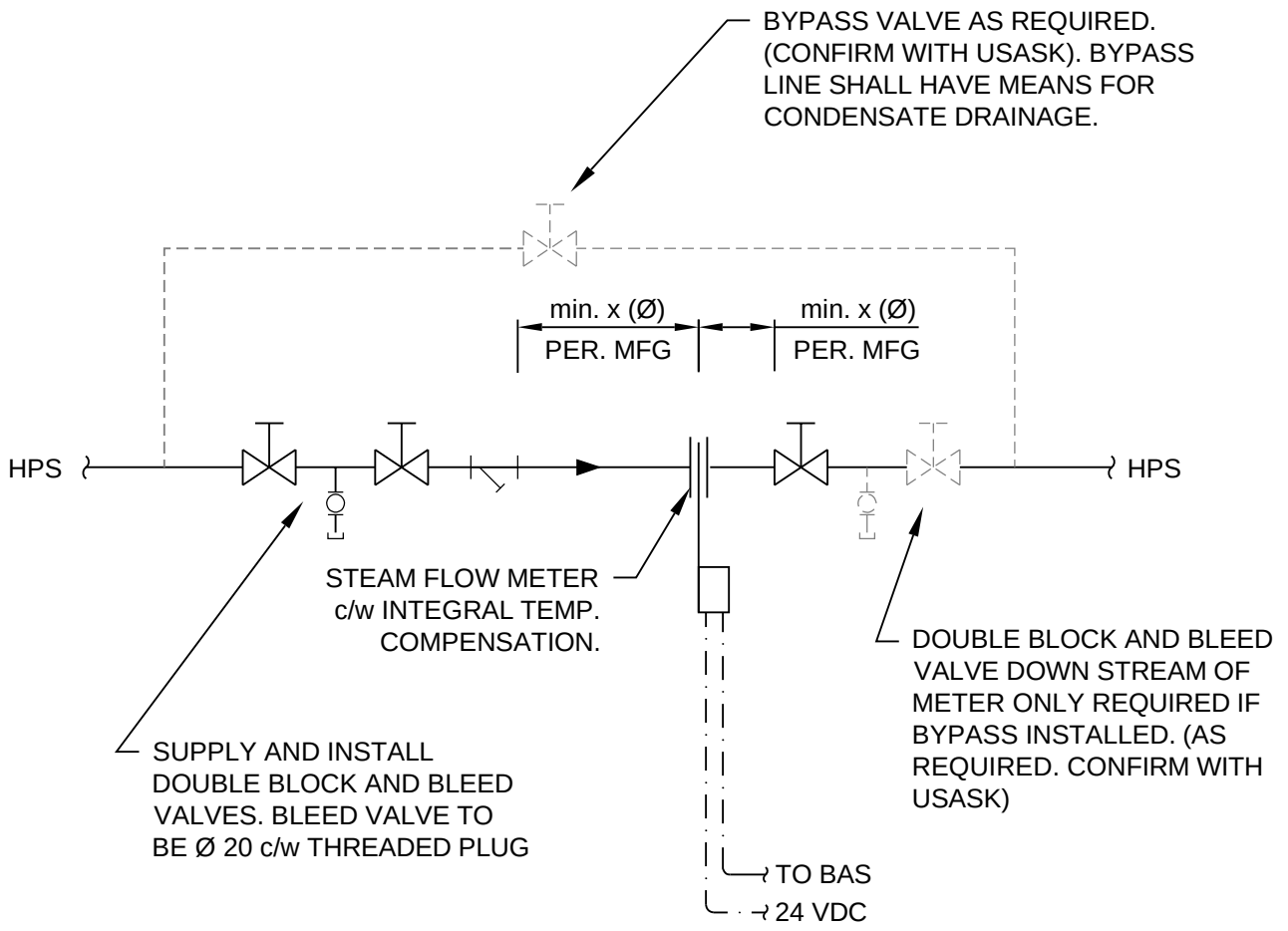
|---|---|---|---|
| 0 | 13/11/25 | ISSUED FOR INFORMATION | |

UNIVERSITY OF SASKATCHEWAN

| | |
|---|---|
| PROJECT NAME **MECHANICAL STANDARD DETAILS** | PROJ. FILE NO. |
| | DRAWN BY DLB |
| DRAWING NAME **HIGH PRESSURE STEAM PRESSURE REDUCING STATION** | APPROVED BY DSS |
| | DATE 05-MAY-2025 |
| | DRAWING NO. **M-S-03** |
| | SCALE AS NOTED |
| | SHEET 1 OF 1 |




NOTES:
1) VALVES SIZE UP TO AND INCLUDING Ø 100 mm SHALL BE GATE VALVES. UNLESS OTHERWISE NOTED.

2) VALVES SIZE LARGER THAN Ø 100mm SHALL BE HIGH PERFORMANCE BUTTERFLY VALVES. UNLESS OTHERWISE NOTED.

1 / - DETAIL

NTS - HPS STEAM METER

UNIVERSITY OF SASKATCHEWAN

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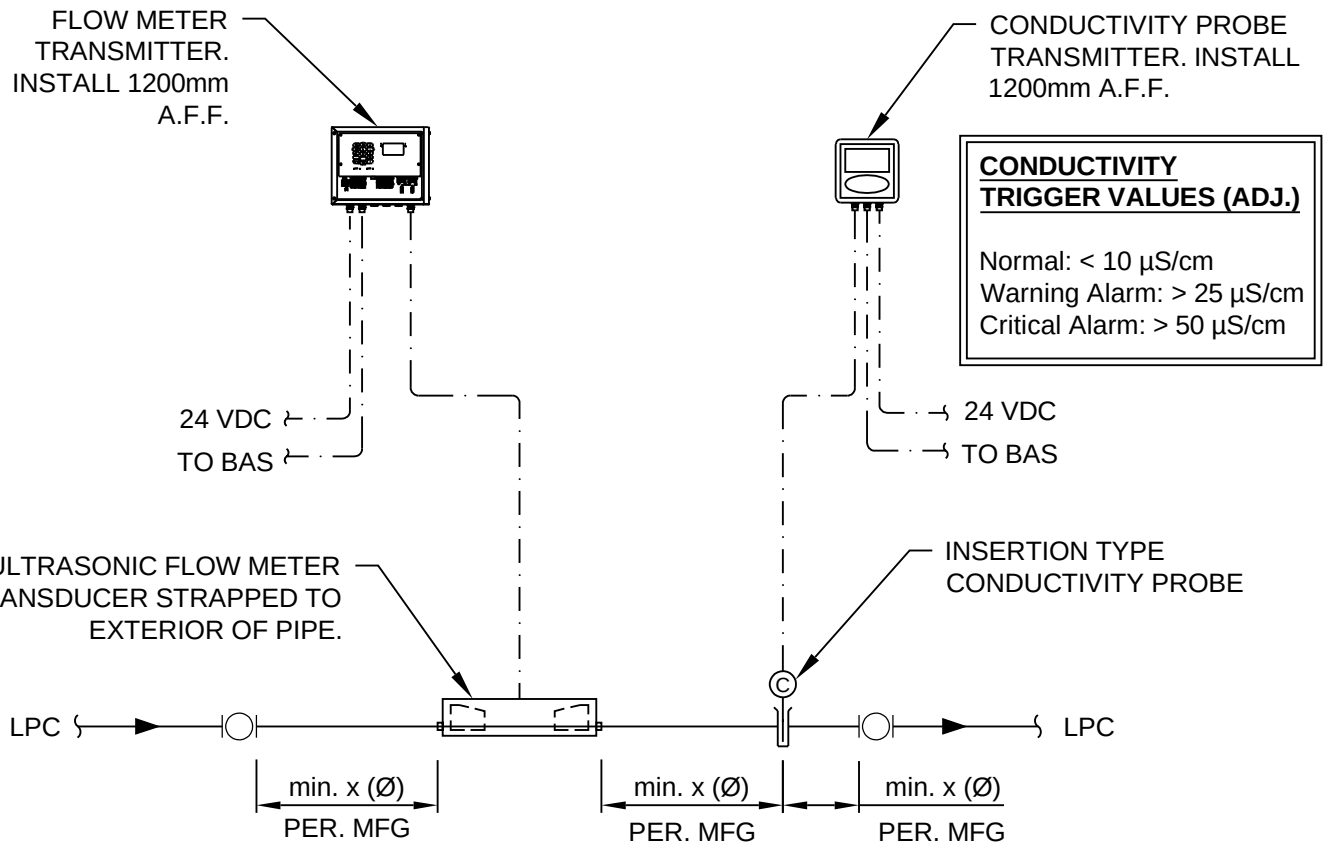
**PROJECT NAME**
**MECHANICAL STANDARD DETAILS**

**DRAWING NAME**
**HIGH PRESSURE STEAM FLOW METER**

| | |
|---|---|
| **PROJ. FILE NO.** | **DRAWING NO.** M-S-04 |
| **DRAWN BY** DLB | |
| **APPROVED BY** DSS | **SCALE** AS NOTED |
| **DATE** 05-MAY-2025 | **SHEET** 1 OF 1 |




NOTES:
1) UNTRASONIC FLOW METER AND CONDUCTIVITY PROBE SHALL BE INSTALLED IN HORIZONTAL PLANE.

2) REFER TO MFG. FOR TRANSDUCER MOUNTING CONFIGURATION AND TO PERFORM INITIAL METER CALIBRATION.

1 / - DETAIL

NTS - STEAM CONDENSATE METER

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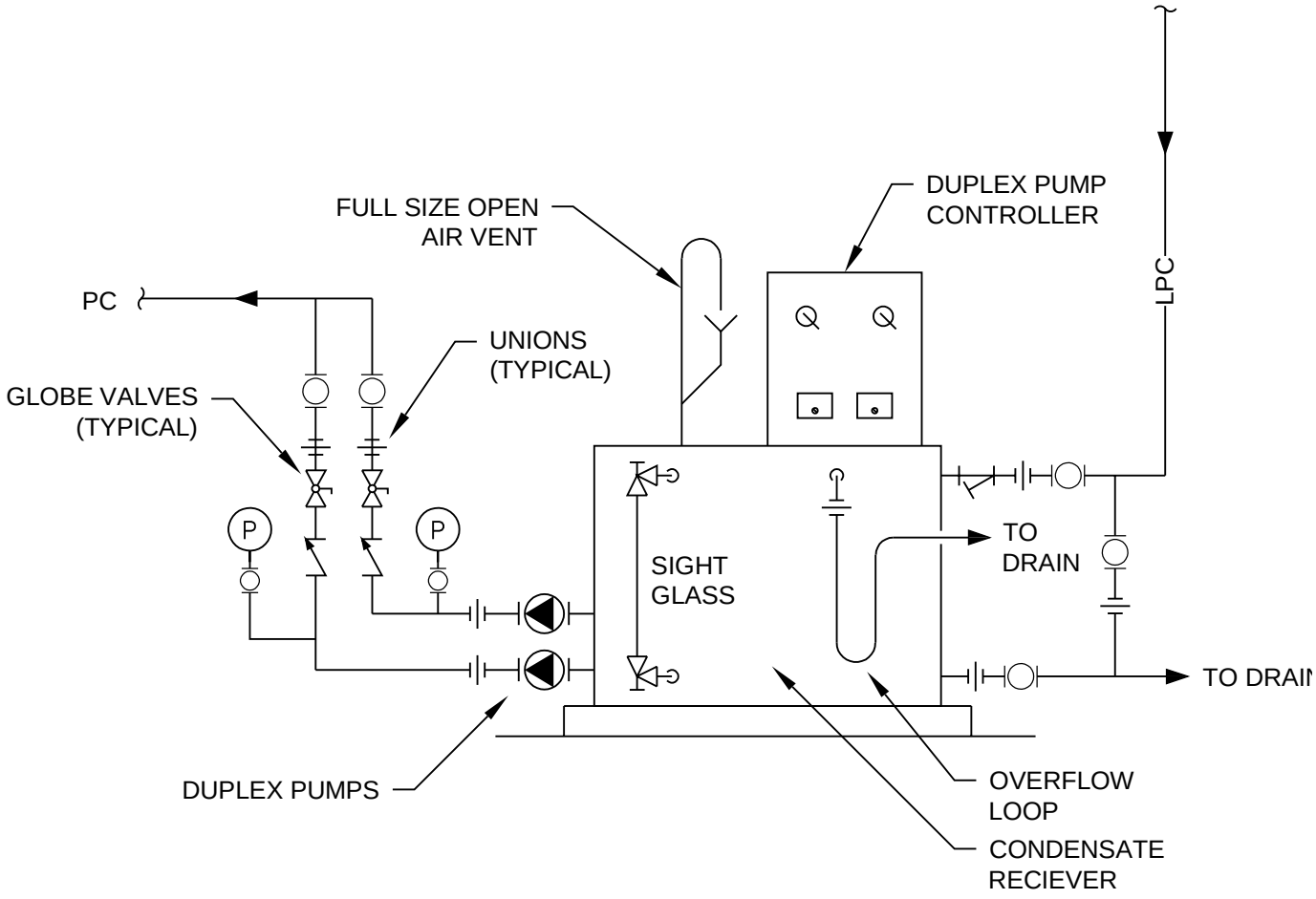
| 0 | 13/11/25 | ISSUED FOR INFORMATION | |

**PROJECT NAME**
**MECHANICAL STANDARD DETAILS**

**DRAWING NAME**
**STEAM CONDENSATE FLOW METER, ULTRASONIC**

| | |
|---|---|
| **PROJ. FILE NO.** | **DRAWING NO.** M-S-05 |
| **DRAWN BY** DLB | |
| **APPROVED BY** DSS | **SCALE** AS NOTED |
| **DATE** 05-MAY-2025 | **SHEET** 1 OF 1 |




1 / - DETAIL

NTS - STEAM CONDENSATE RECIEVER

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|---|---|---|---|
| 0 | 13/11/25 | ISSUED FOR INFORMATION | |

**PROJECT NAME**
**MECHANICAL STANDARD DETAILS**

**DRAWING NAME**
**STEAM CONDENSATE RECIEVER**

| | |
|---|---|
| **PROJ. FILE NO.** | **DRAWING NO.** **M-S-06** |
| **DRAWN BY** DLB | |
| **APPROVED BY** DSS | **SCALE** AS NOTED |
| **DATE** 05-MAY-2025 | **SHEET** 1 OF 1 |