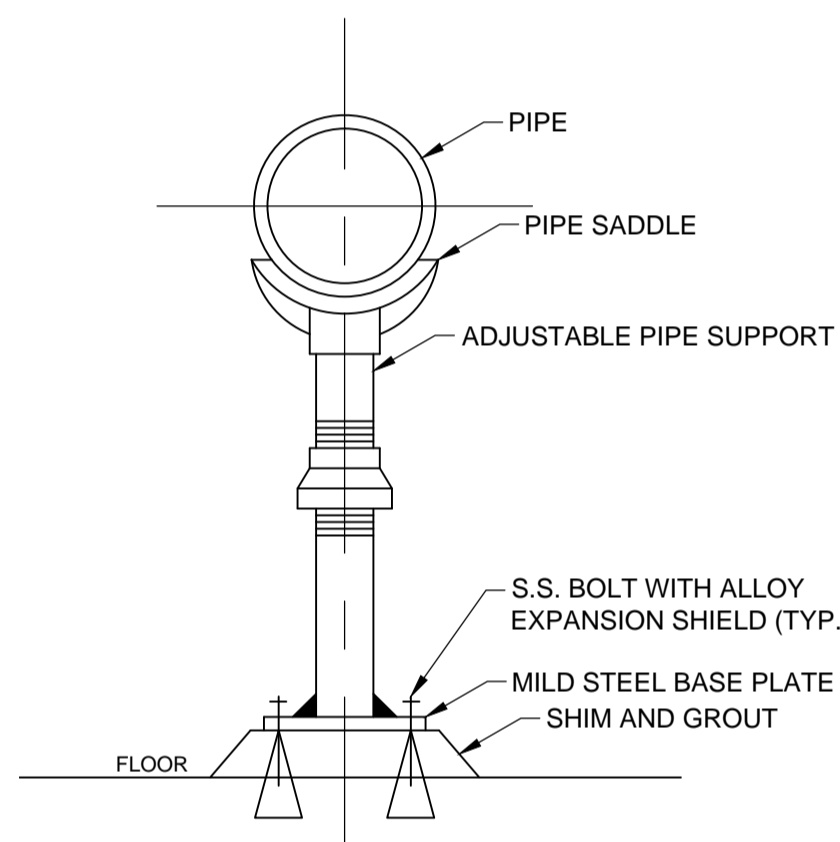
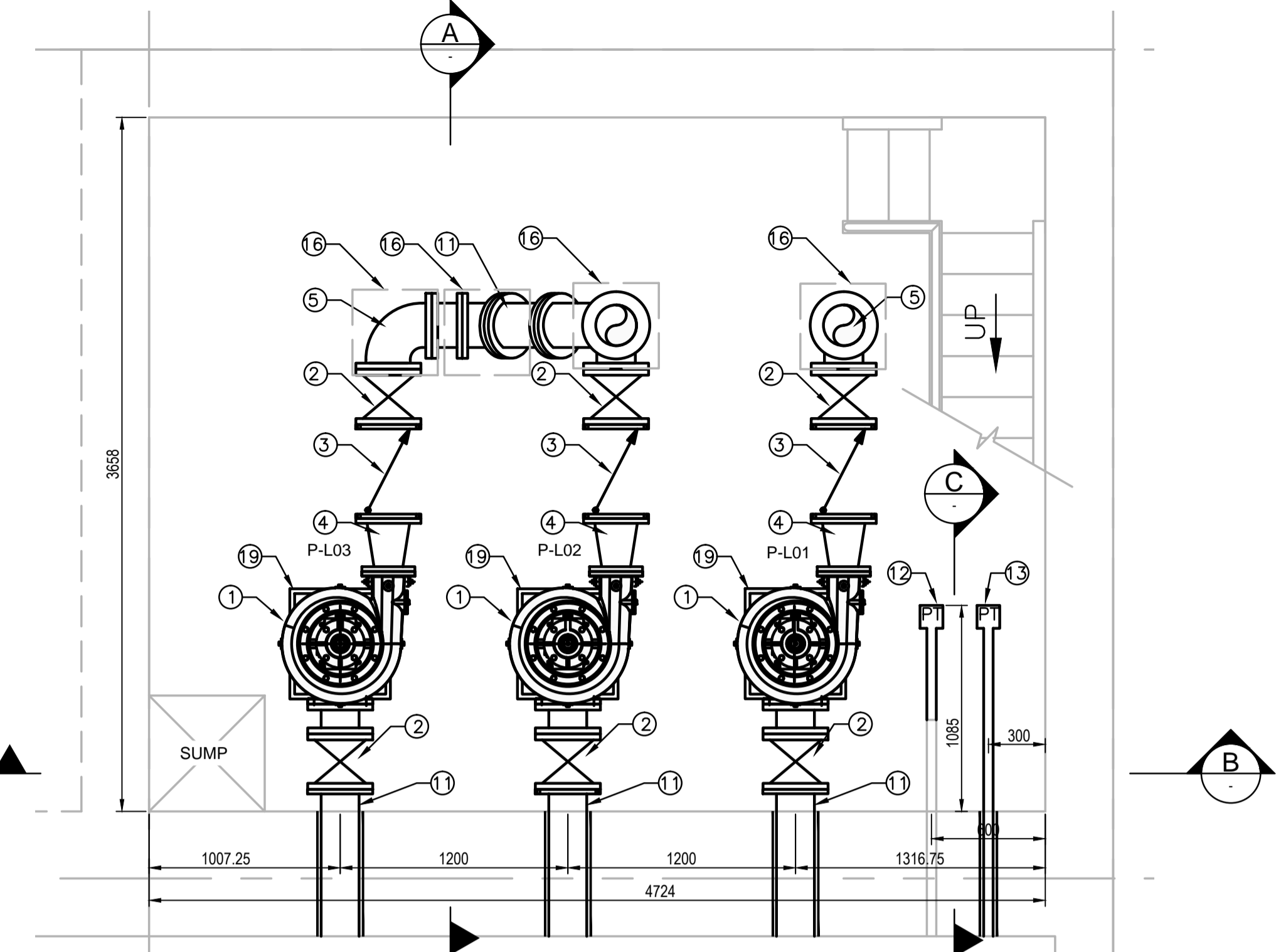
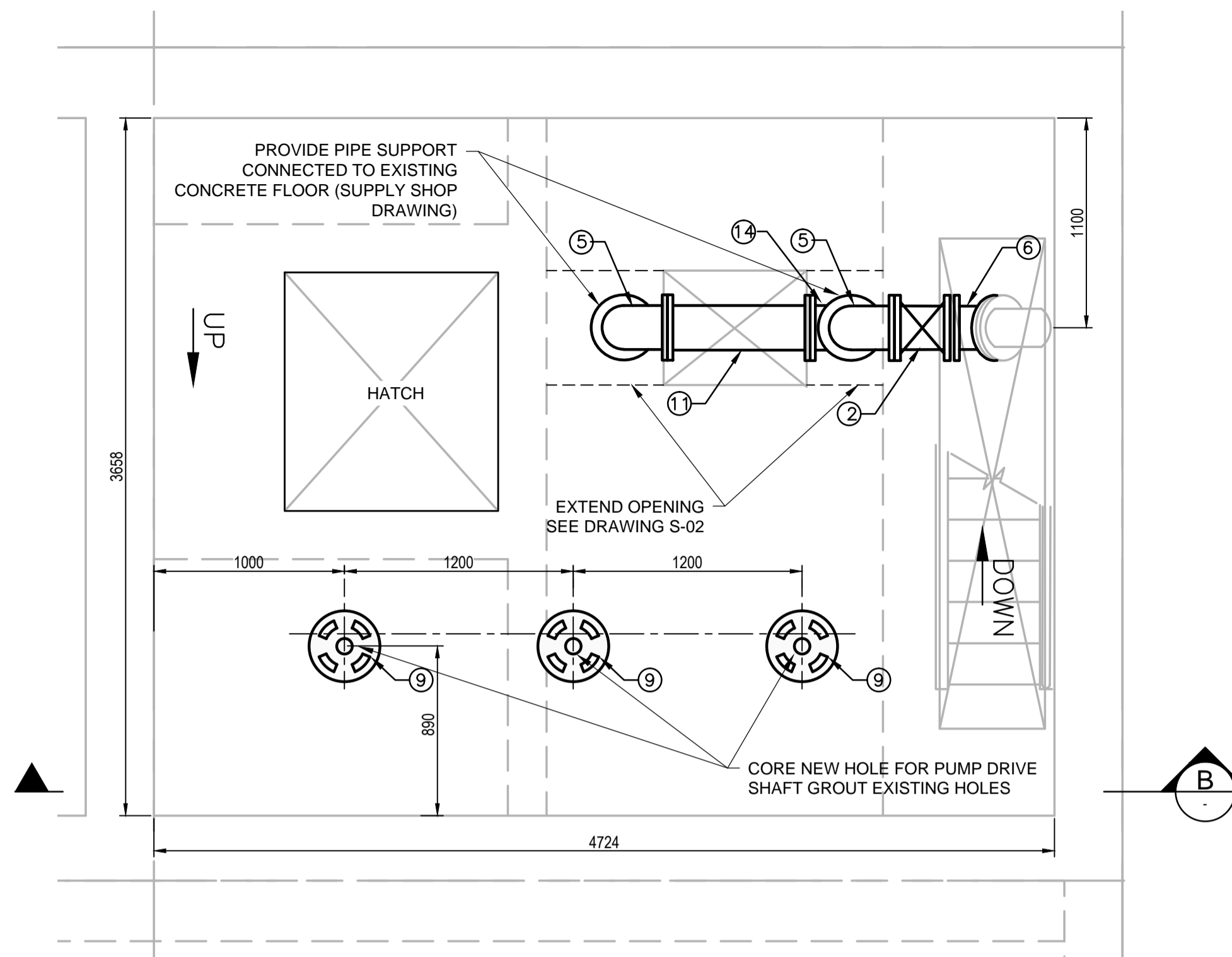
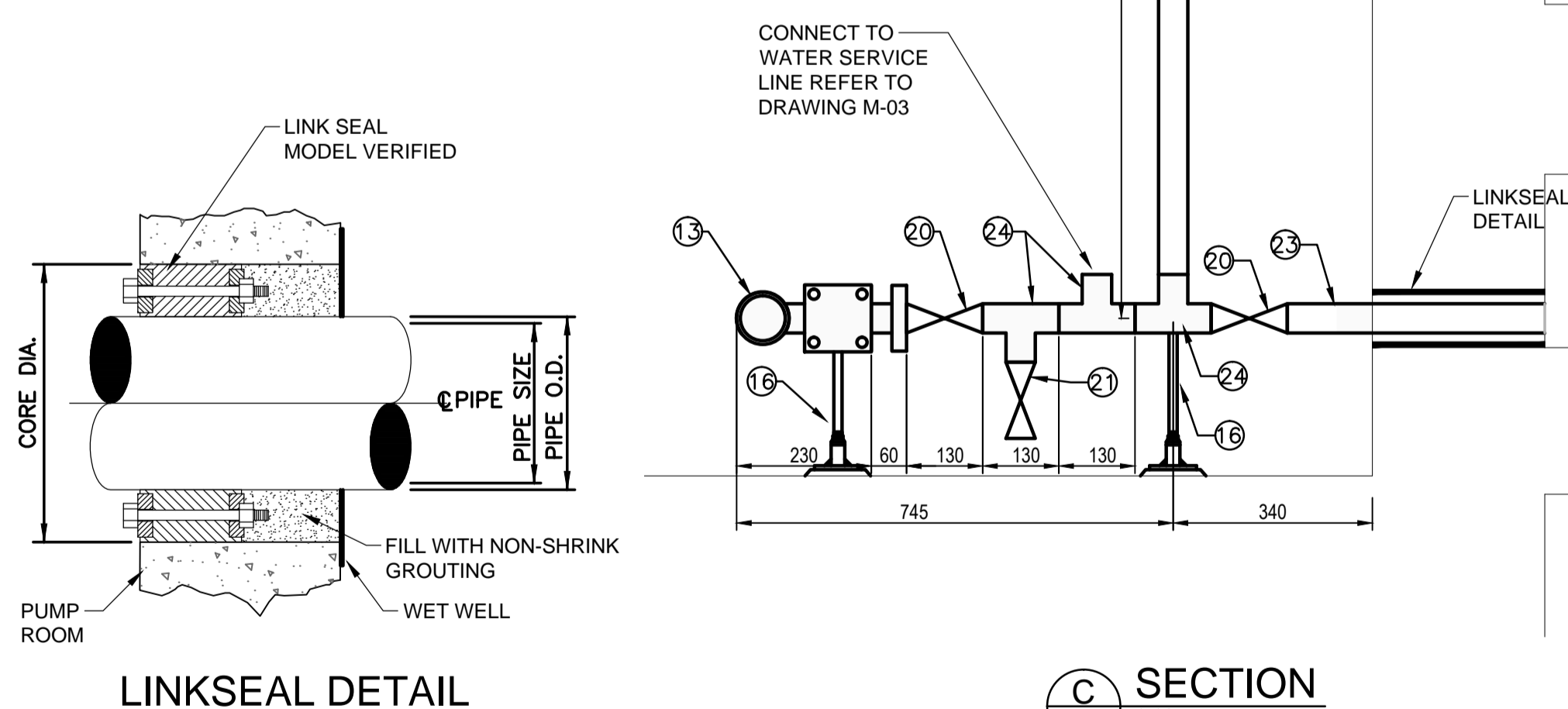


| ITEM SUMMARY FOR ALL EQUIPMENT | | | |
|--------------------------------|----------|--|--------|
| ITEM | QUANTITY | DESCRIPTION | FINISH |
| 1 | 3 | 75 L/S NON-CLOG PUMP CORNELL 20HP MODEL 68HTA-VF16 | C.I. |
| 2 | 7 | 200mm METAL SEATED GATE VALVE | D.I. |
| 3 | 3 | 200mm RUBBER FLAPPER CHECK VALVE | D.I. |
| 4 | 3 | 150mm x 200mm ECCENTRIC REDUCER | D.I. |
| 5 | 4 | 200mm 90° ELBOW | D.I. |
| 6 | 2 | 200mm 45° ELBOW | D.I. |
| 7 | 1 | 200mm 45° LATERAL WYE | D.I. |
| 8 | 3 | PUMP DRIVE SHAFT | C.S. |
| 9 | 3 | VERTICAL MOUNTED MOTOR | |
| 10 | 2 | 200mm FLOW METER | |
| 11 | 1 | 200mm STANDARD PIPE | D.I. |
| 12 | 1 | MODIFIED DISPLACED PRESSURE TRANSMITTER | |
| 13 | 1 | NEW DISPLACED PRESSURE TRANSMITTER | |
| 14 | 1 | 200mm TEE | D.I. |
| 15 | 3 | 200mm SUCTION PIPE | D.I. |
| 16 | 8 | PIPE SUPPORT | C.I. |
| 17 | 3 | PUMP BASE | C.I. |
| 18 | 3 | SHAFT BEARING ASSEMBLY | C.I. |
| 19 | 3 | NEW CONCRETE PAD | |
| 20 | 6 | 50mm BALL VALVE | PVC |
| 21 | 1 | 50mm FLUSH OUT VALVE | PVC |
| 22 | 1 | 50mm CLEAR SIGHT GLASS PIPE | PVC |
| 23 | 1 | 50mm STANDARD PVC PIPE | PVC |
| 24 | 6 | 50mm PVC TEE | PVC |
| 25 | 2 | 50mm CHECK VALVE | PVC |
| 26 | 1 | PRESSURE GAUGE | |
| 27 | 4 | CEILING MOUNTED PIPE SUPPORT | |

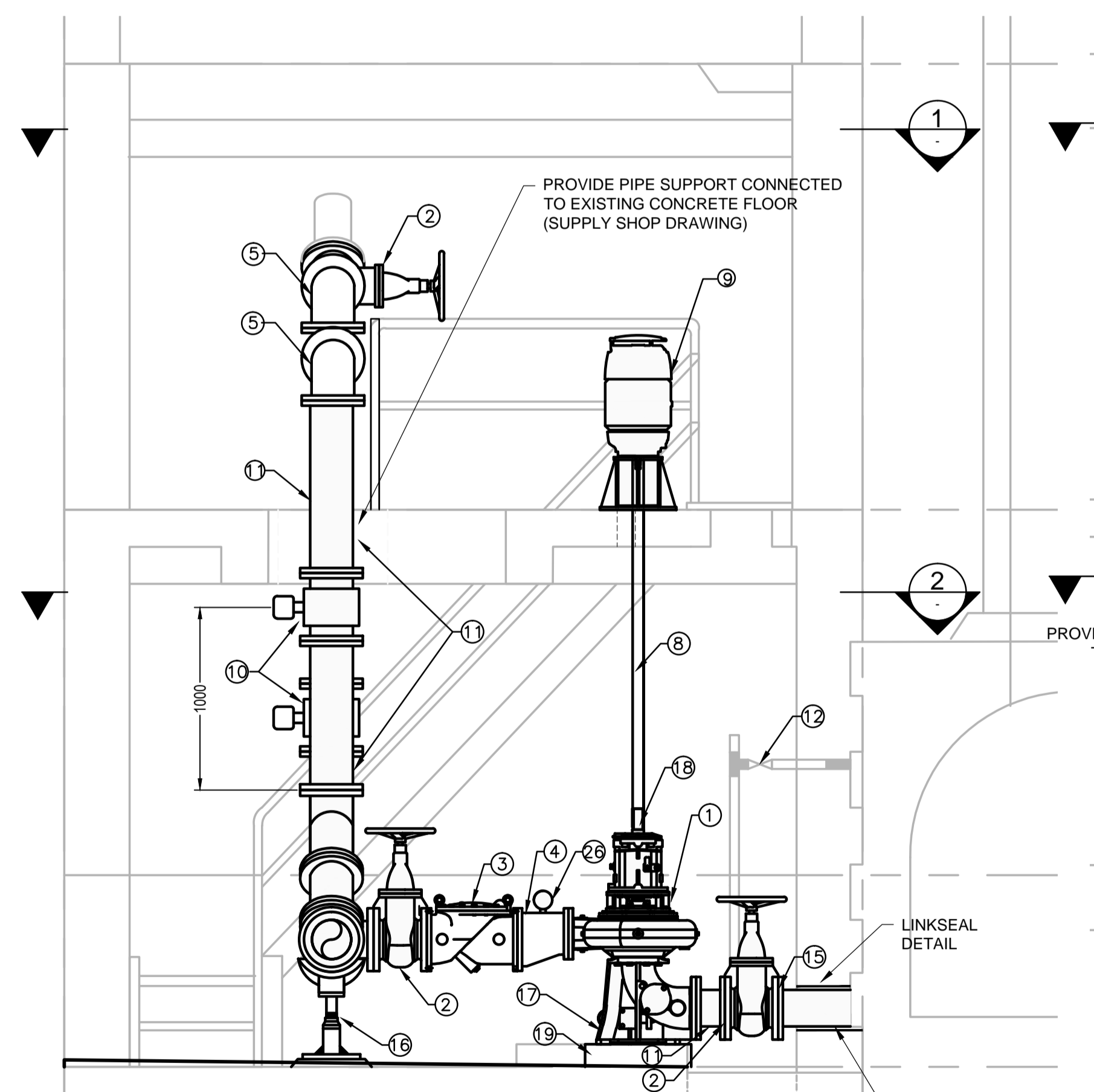


PIPE SUPPORT DETAIL

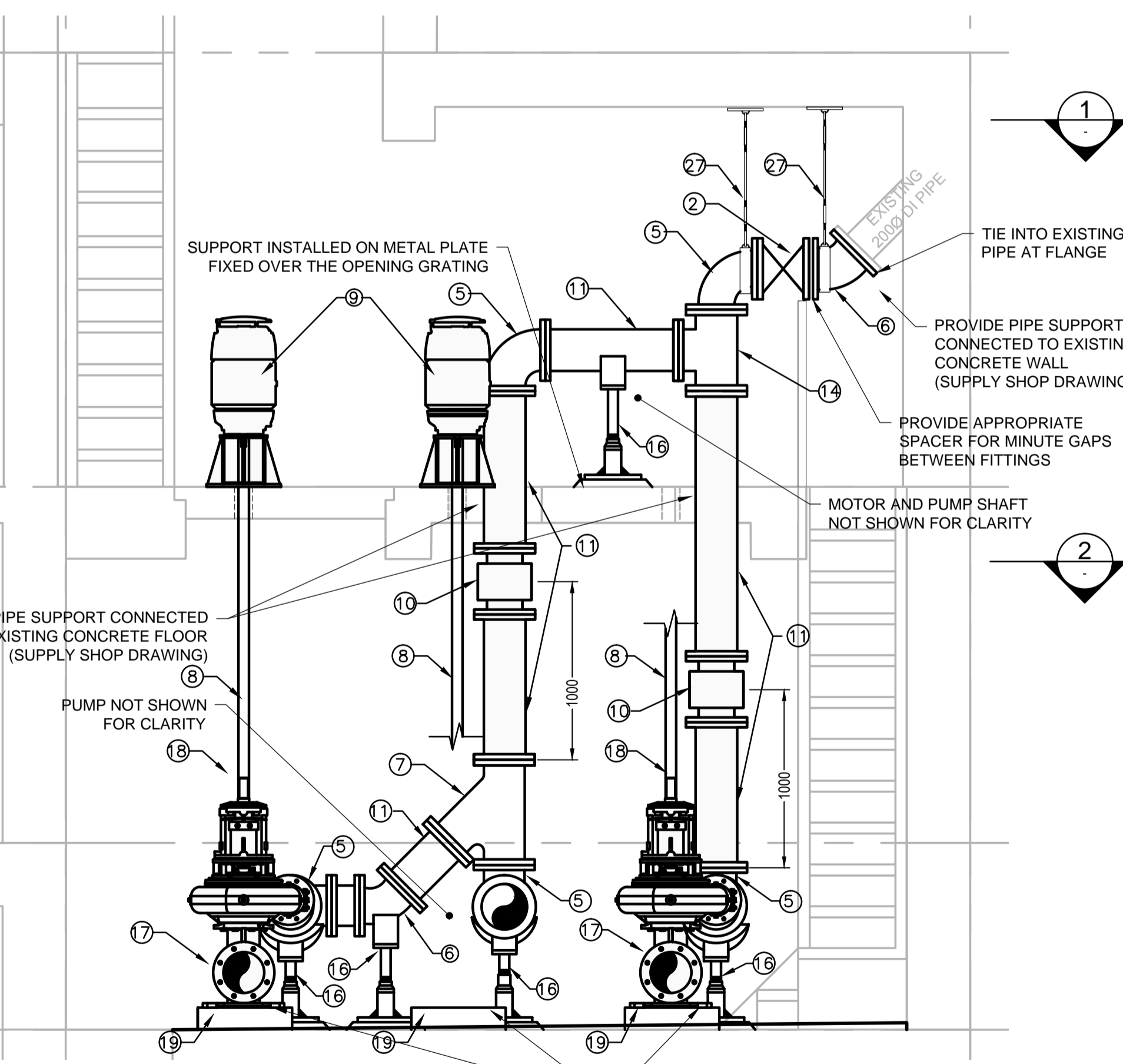


LINKSEAL DETAIL

C SECTION
1:10



A SECTION
1:25



B SECTION
1:25

- NOTE:
- ALL PIPING AND FITTINGS SHALL BE CLASS 52 DUCTILE IRON, ALTERNATIVELY ASTM A53 CARBON STEEL GRADE B SCHEDULE 80 PIPES AND FITTINGS CAN ALSO BE USED.
 - ALL BENDS, TEES AND CHANGES IN FLOW DIRECTION REQUIRE SUPPORTS TO RESTRAIN MOVEMENT
 - CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS AND ELEVATIONS
 - PUMPS AND VALVES TO BE SUPPLIED BY CITY AND INSTALLED BY CONTRACTOR
 - PROVIDE APPROPRIATE SPACER FOR ANY MINUTE GAPS BETWEEN FITTINGS
 - INVERT LEVELS OF THE NEW SUCTION PIPES WILL BE SAME AS THE EXISTING SUCTION PIPES.
 - IN SECTION B, PUMP P-L02, AND MOTOR AND SHAFT FOR PUMP P-L01 ARE IS NOT SHOWN FOR CLARITY.

APEGM
Certificate of Authorization
Dillon Consulting Limited (MB)
No. 1789 Date: _____

| DESIGNED BY | | | | CHECKED BY | | | |
|-------------------------------|--|--|--|----------------|--|--|--|
| CP | | | | MH | | | |
| DRAWN BY | | | | APPROVED BY | | | |
| GLG | | | | MH | | | |
| HOR. SCALE | | | | VERTICAL SCALE | | | |
| AS SHOWN | | | | AS SHOWN | | | |
| NOT RELEASED FOR CONSTRUCTION | | | | | | | |
| DATE June 2018 | | | | DATE | | | |

ENGINEER'S SEAL
CONSULTANT PROJECT NUMBER
18-6936

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

HAWTHORNE WASTEWATER PUMPING STATION UPGRADES

PROCESS - FLOOR PLAN AND SECTIONS

CITY DRAWING NUMBER 1-0145L-P0002-001
SHEET 13 OF 21
CONSULTANT DRAWING NUMBER P-02

NOT FOR CONSTRUCTION