

PLUMBING SCOPE SHEET

Division 22 — Plumbing. Use for every plumbing bid; mark each line per bidder.

General

1. Permits, inspection fees and tap fees for all plumbing work.
2. Performance and payment bonds, 100%, included in base bid.
3. Prevailing wage / federal Fair Wage Schedule rates per Schedule D.
4. Bid security or bid bond with tender submission.
5. Attend weekly coordination meetings with GC and other trades.
6. Temporary heat for our own work; permanent systems not to be used for construction heat.
7. Housekeeping pads for all floor-mounted plumbing equipment.
8. Coordination drawings (BIM LOD 300) for underground and overhead piping.
9. Cutting, patching and core drilling, including patching of finished surfaces.
10. Fire-rated sealing of all plumbing penetrations through rated assemblies, ULC-listed fill.

Domestic Water & Drainage

11. Domestic cold, hot and recirculation piping complete with valves and insulation.
12. Sanitary, vent and storm drainage piping complete.
13. Lab waste and acid-resistant drainage piping including neutralization basin.
14. RO water and softened water distribution piping.
15. Plumbing fixtures and trim per schedule, including carriers and final connections.
16. Furnish and install domestic water heater, expansion tank and recirculation pump.
17. Disinfection of new and existing potable piping; bacteriological samples from certified lab.
18. Pressure test all domestic water AND drainage systems; submit test certificates.

Compressed Air & Specialty Piping

19. Compressed air piping, Schedule 80 seamless black steel, ASME B16.11 socket-welded fittings.
20. Three-piece ball valves ASTM A181 Class 70 on compressed air, with couplers and shut-offs.
21. Pressure test compressed air system at 1100 kPa for 4 hours.
22. Bronze valves, CRN-registered, single manufacturer: gate, globe, check, ball and butterfly.
23. Pipe welding by CSA B51 qualified welders to ASME B31.1, procedures registered.
24. Third-party weld inspection and radiography of welded joints.

Fire Protection

25. Wet pipe sprinkler system designed and installed to NFPA 13, hydraulically calculated.
26. Manitoba-stamped PE shop drawings for sprinkler layout.
27. Spare sprinkler heads and wrench cabinet per NFPA 13 minimum.
28. Integrated systems testing of fire protection per CAN/ULC-S1001.
29. Site painting of sprinkler piping: primer, finish coats, 50mm red enamel bands at 6m o.c.

Hangers, Supports & Identification

30. Pipe hangers and supports per MSS SP-58 with spacing per the spec table.
31. PE-stamped shop drawings for anchors, guides and seismic restraints.
32. Galvanized hangers at exterior and unheated locations; insulation protection shields.
33. Structural steel supports for equipment referenced to Section 05 12 23.
34. Mechanical identification per CAN/CGSB-24.3: pipe legends, flow arrows, valve tags.
35. Thermometers and pressure gauges at equipment connections.

Closeout

36. O&M manuals: equipment data, valve schedules, test certificates, subcontractor manuals.
37. As-built drawings: reviewed shop drawings and marked-up construction set.

- 38. Owner training: five (5) Working Days of instruction for the Owner's representative.
- 39. One-year warranty on all labour and materials from Substantial Performance.
- 40. Final cleaning and removal of all debris from work areas.

Mark each line Incl / Excl / Clarify for every bidder. Unmarked lines are assumed included in the base bid.