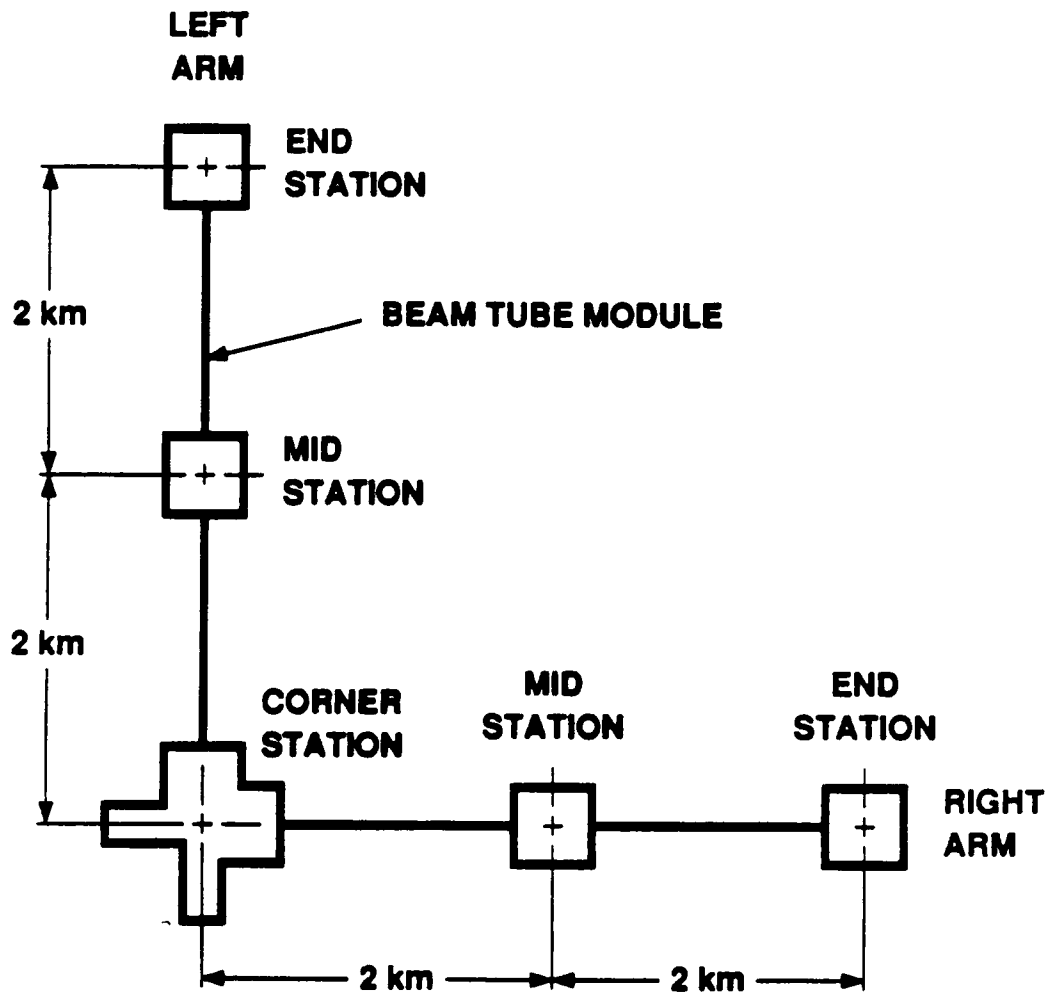


LIGO FACILITIES

W. E. Althouse

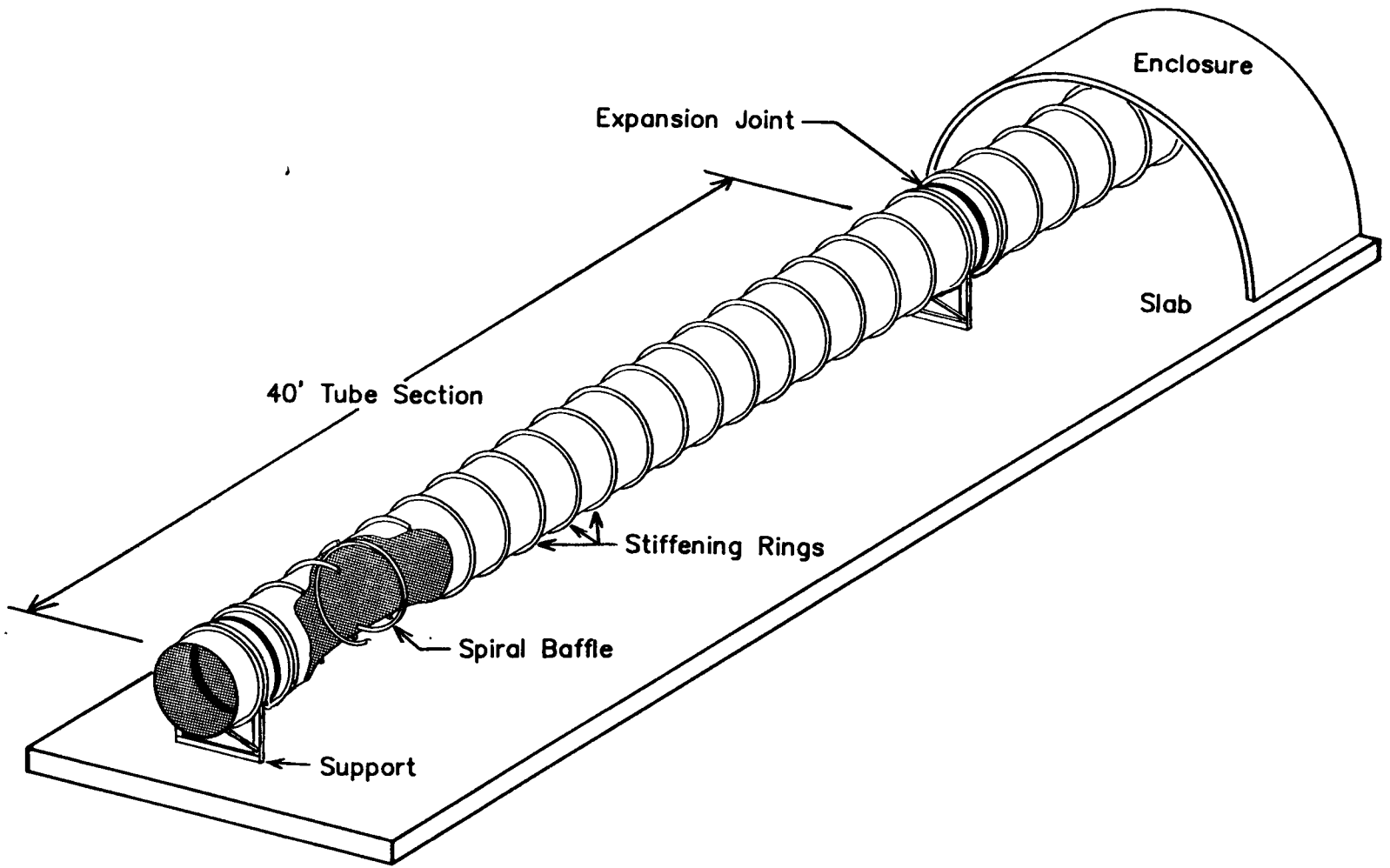
November 18, 1992



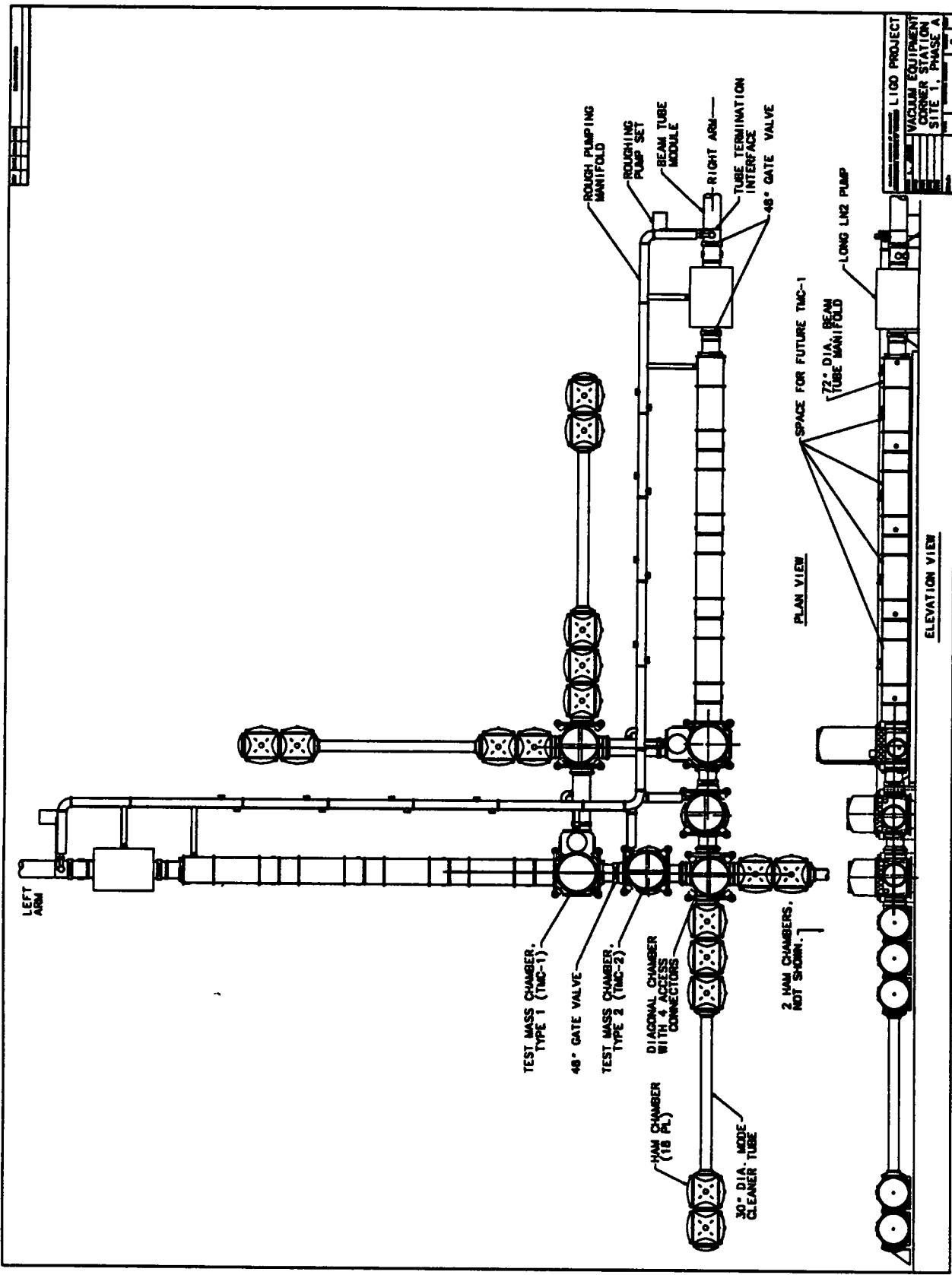
VACUUM SYSTEM

KEY OBJECTIVES

- **L-SHAPED VACUUM SYSTEM: 2 BEAM TUBES CONNECTING CHAMBERS**
- **4 km TUBES WITH 1 m CLEAR APERTURE**
- **6 FABRY-PEROT BEAMS (BACKUP: 1 DELAY LINE)**
- **NON-INTERFERING ACCESS**
- **LOW VIBRATION ENVIRONMENT**
- **CONTROL OF SCATTERED LIGHT PROPAGATION**
- **BEAM TUBE VACUUM: SINGLE PUMPDOWN**
- **CLEAN ENVIRONMENT FOR OPTICAL COMPONENTS**
- **MODULAR DESIGN: FLEXIBLE VACUUM ENVELOPE**



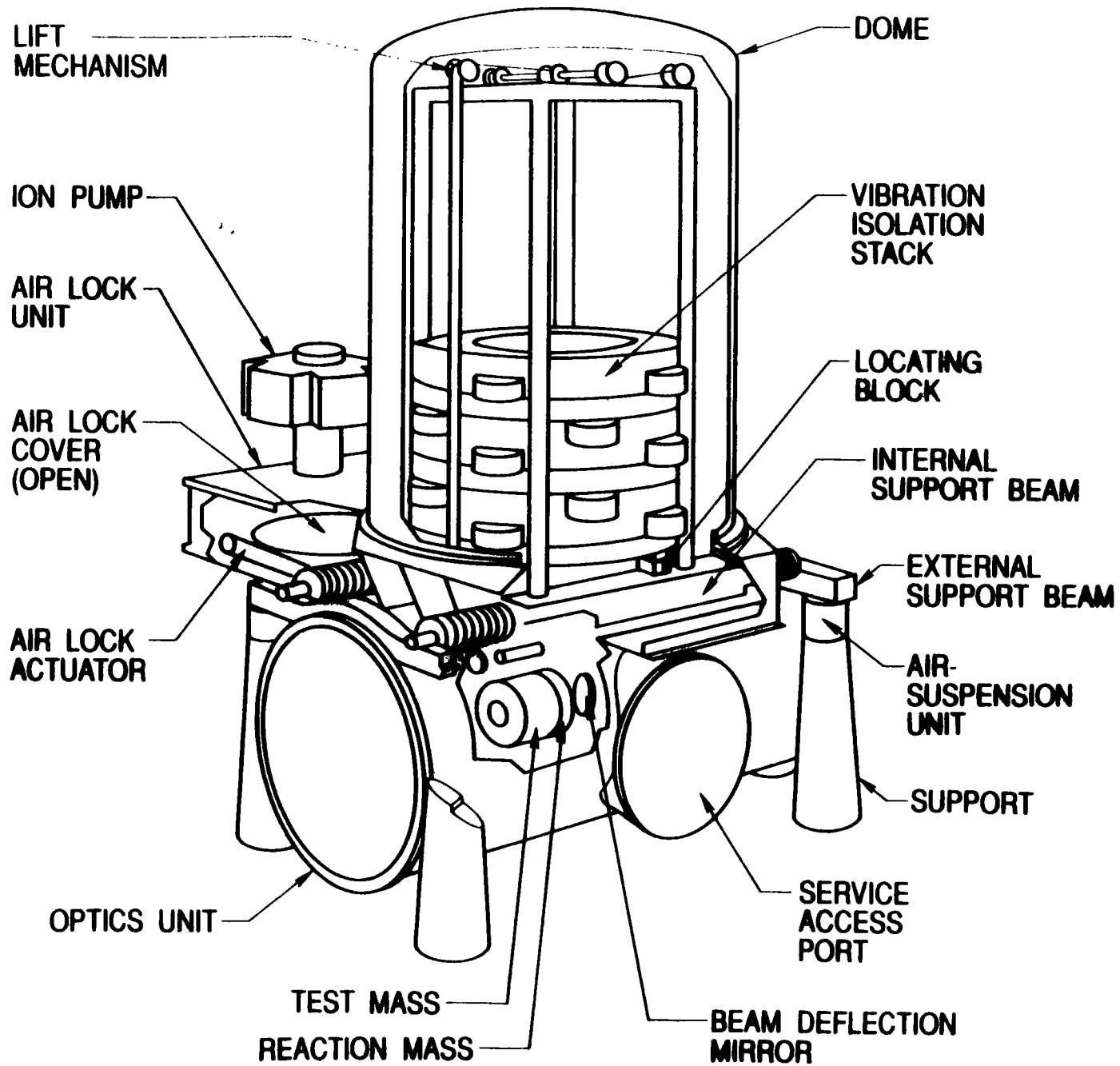
6



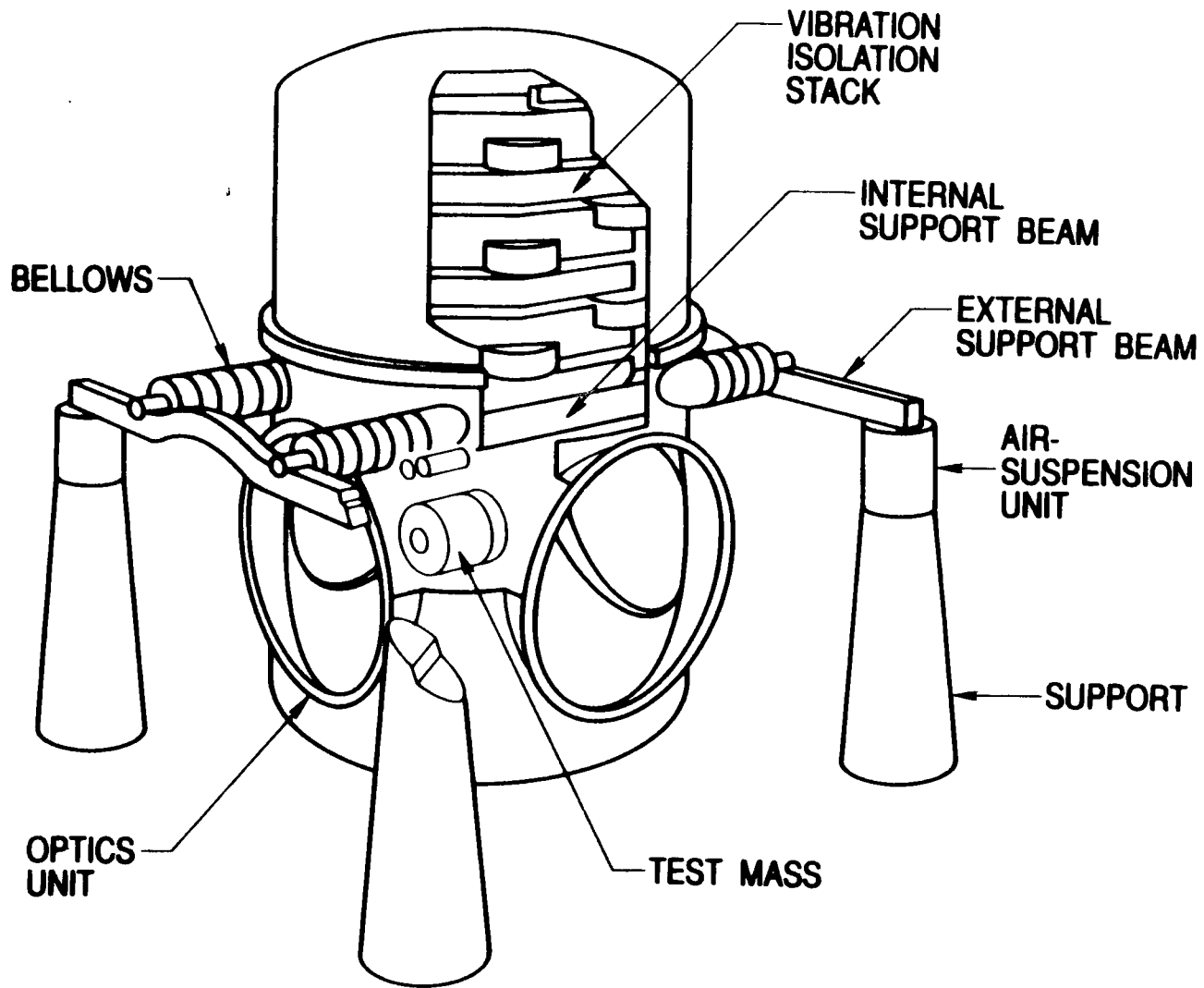
L100 PROJECT
 VACUUM EQUIPMENT
 CORNER STATION
 SITE 1, PHASE A

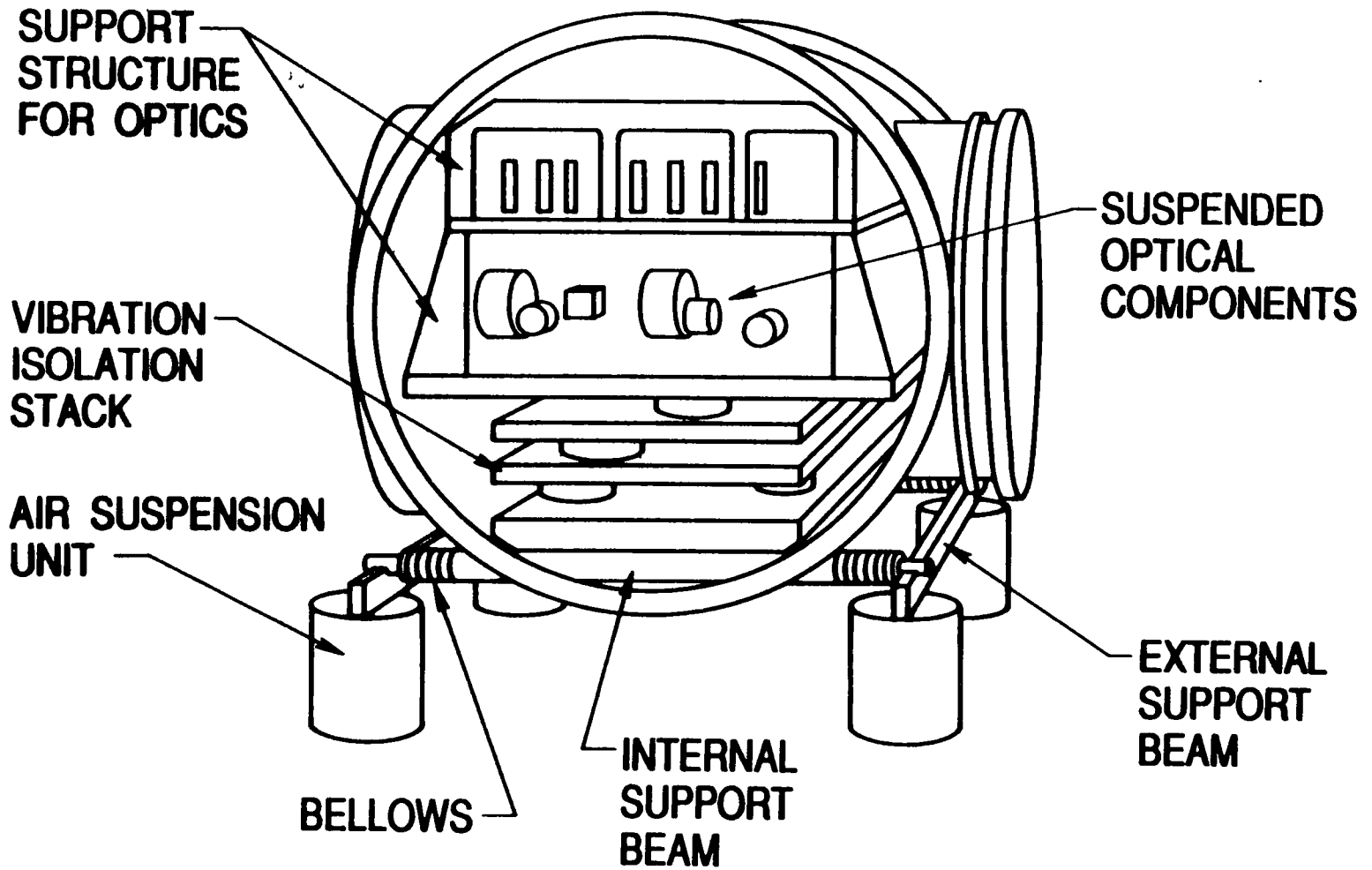
EDITION 11-5-82

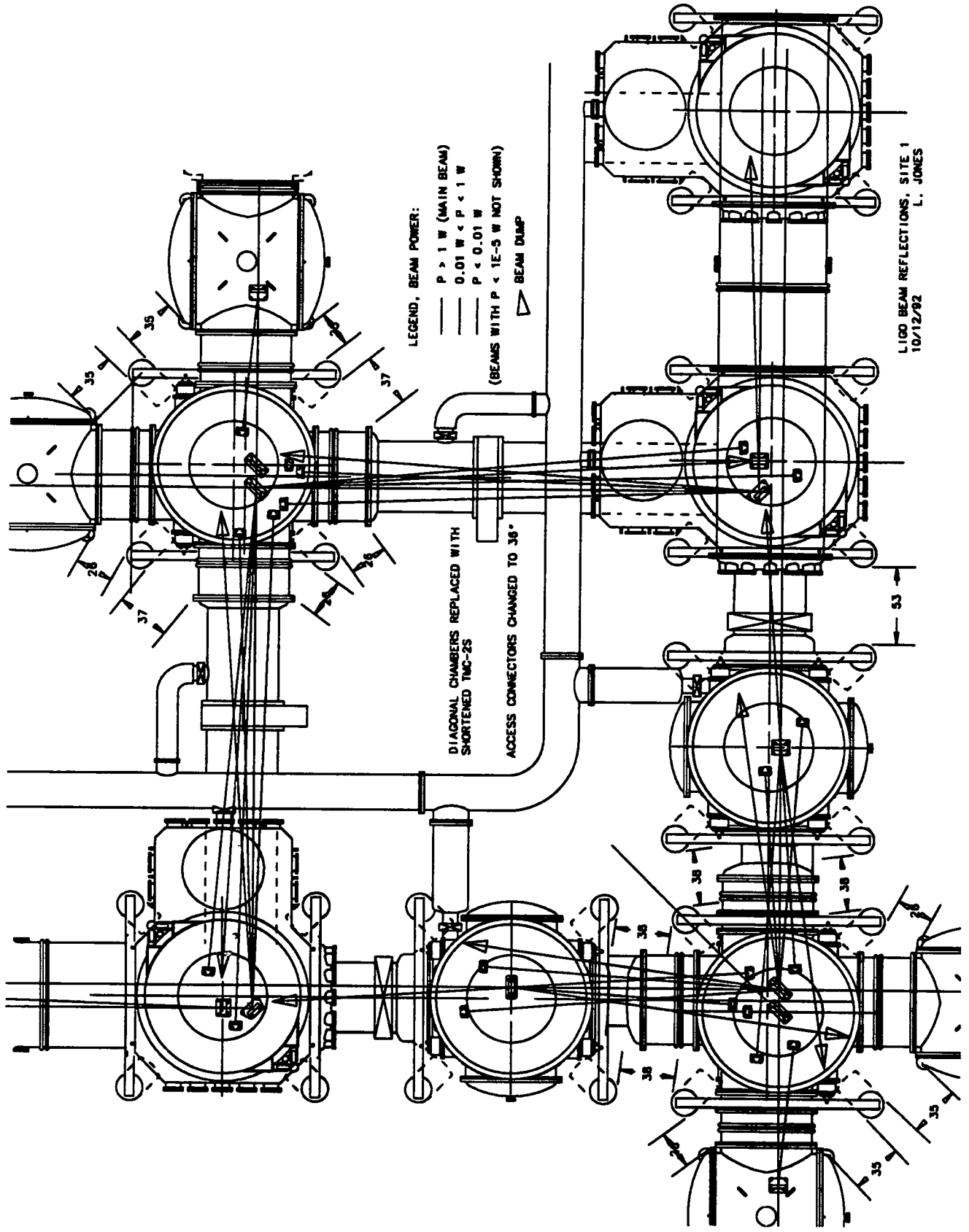
H



61

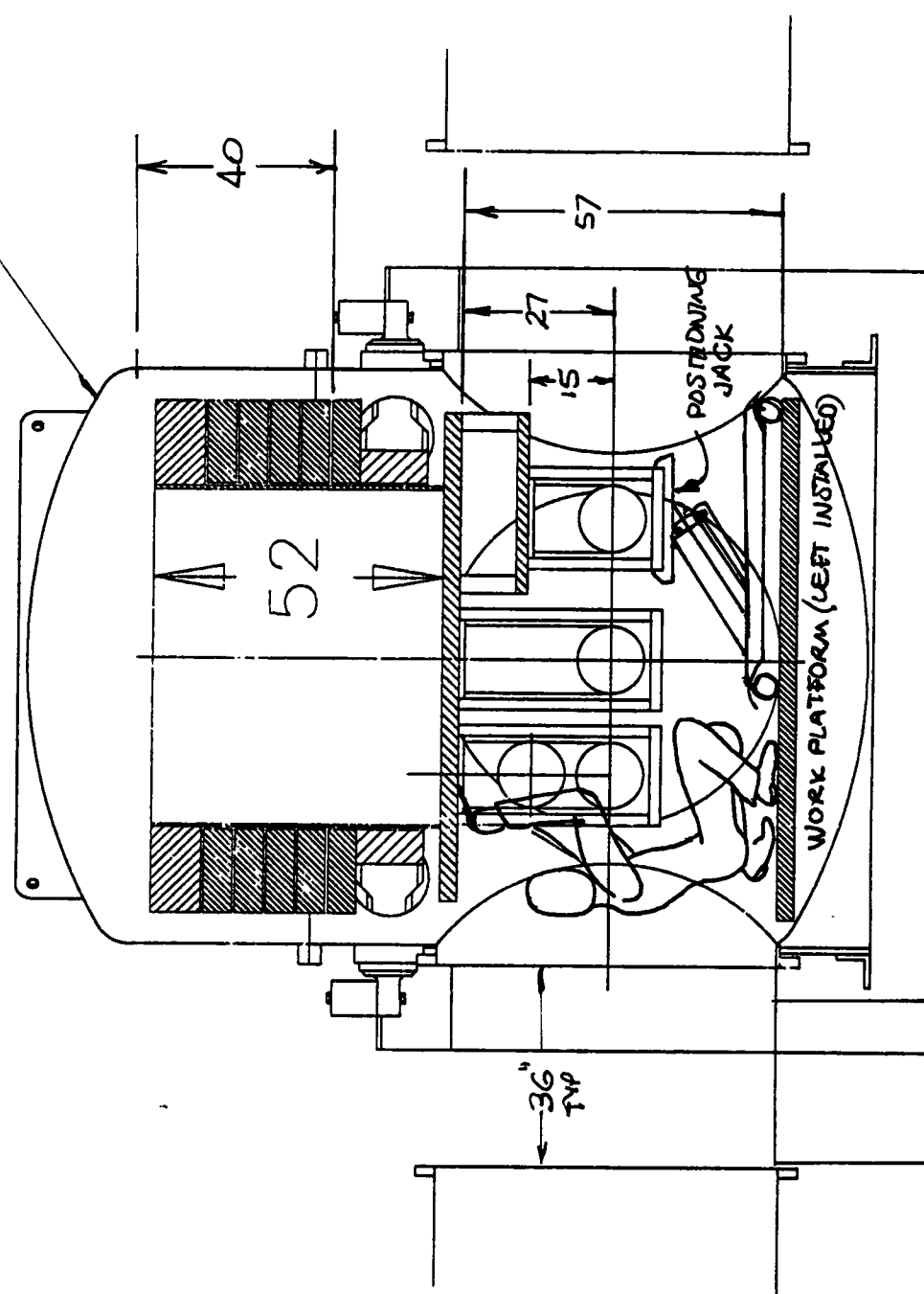






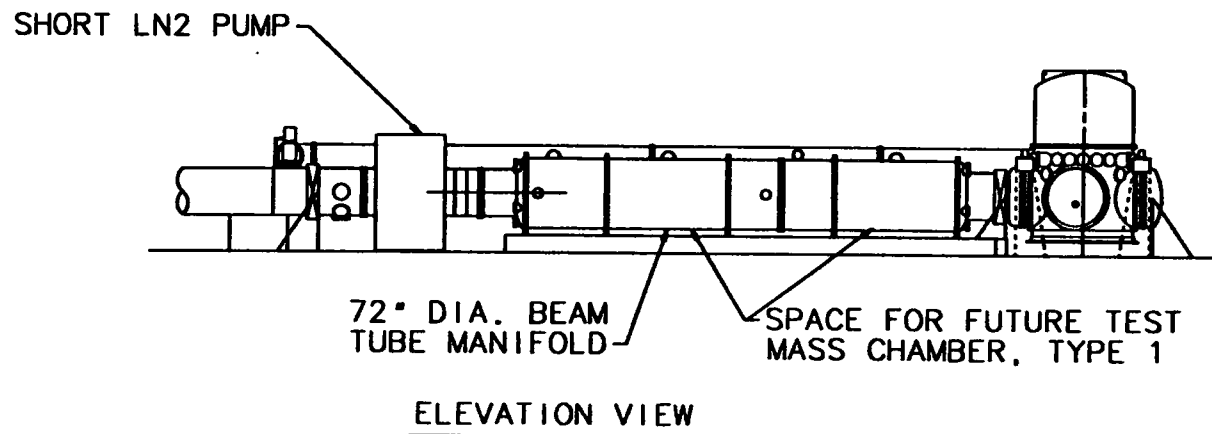
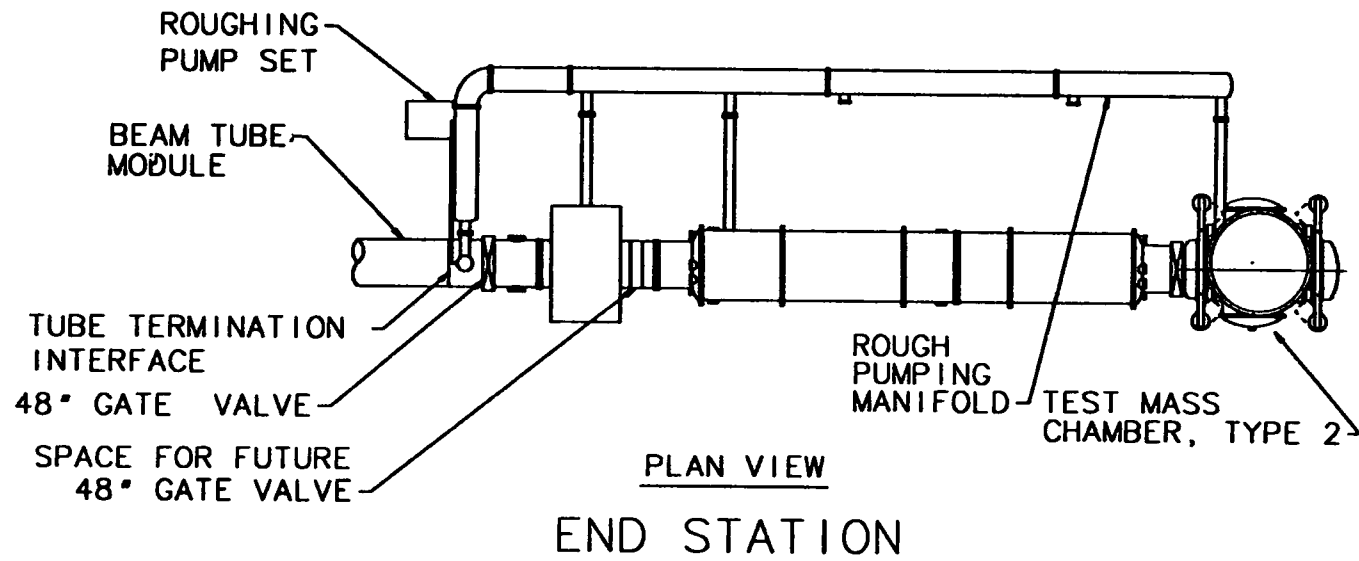
LIGO BEAM REFLECTIONS, SITE 1
 10/12/92
 L. JONES

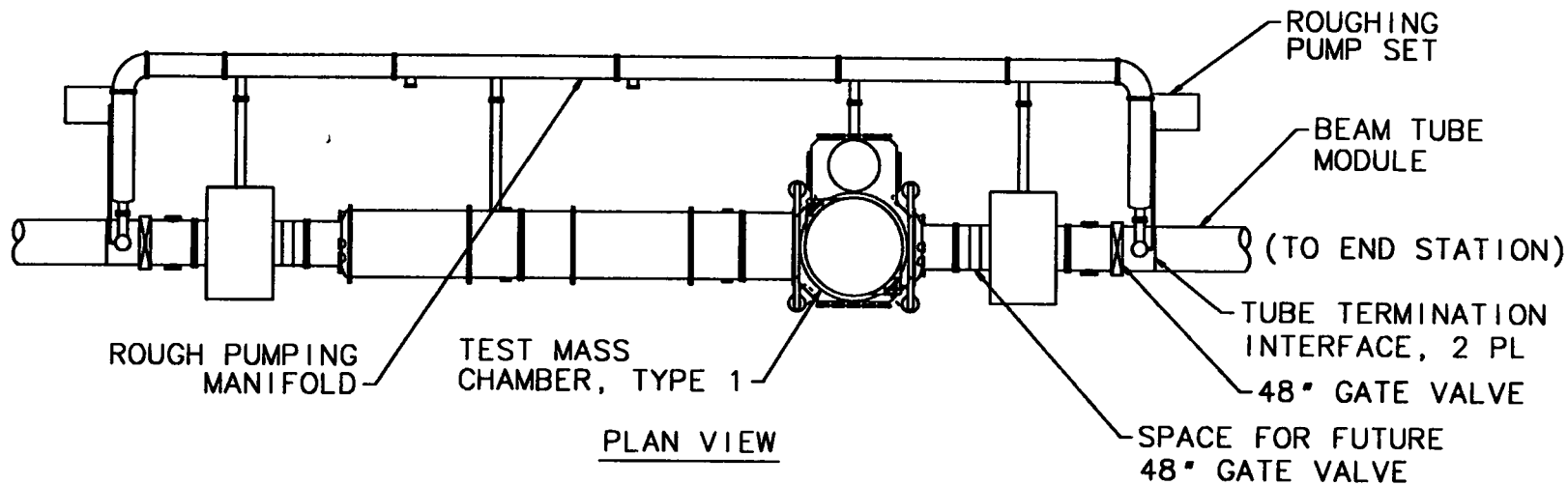
TMC-2, DIAGONAL CHAMBER



SD
9-2-92

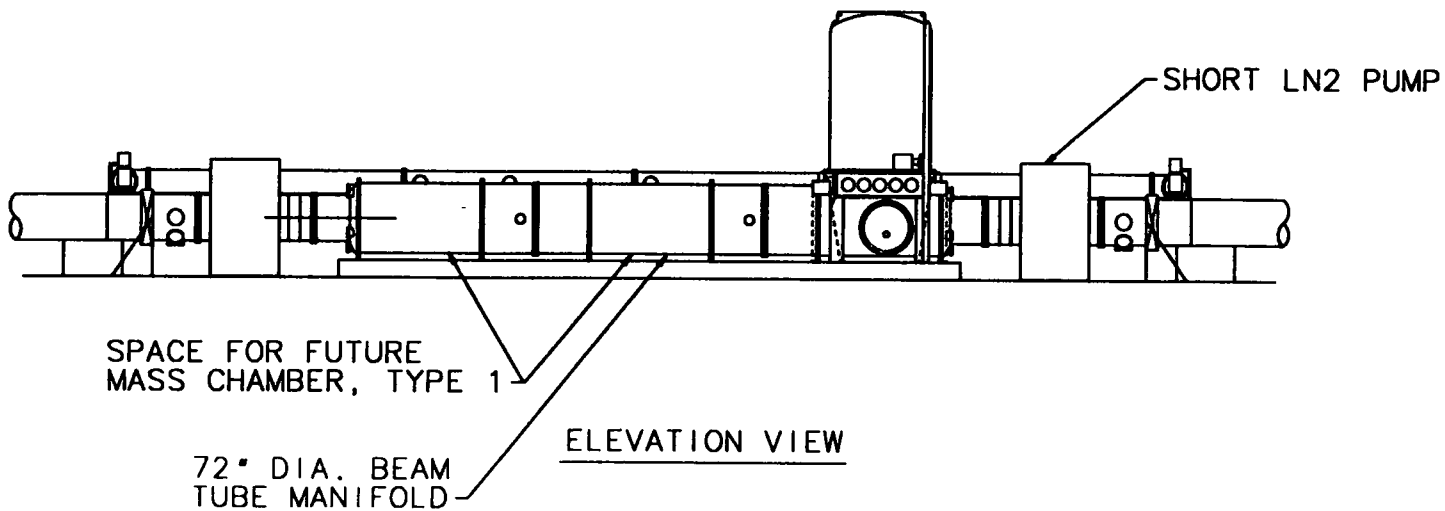
FIG. 3 INTERNAL ACCESS



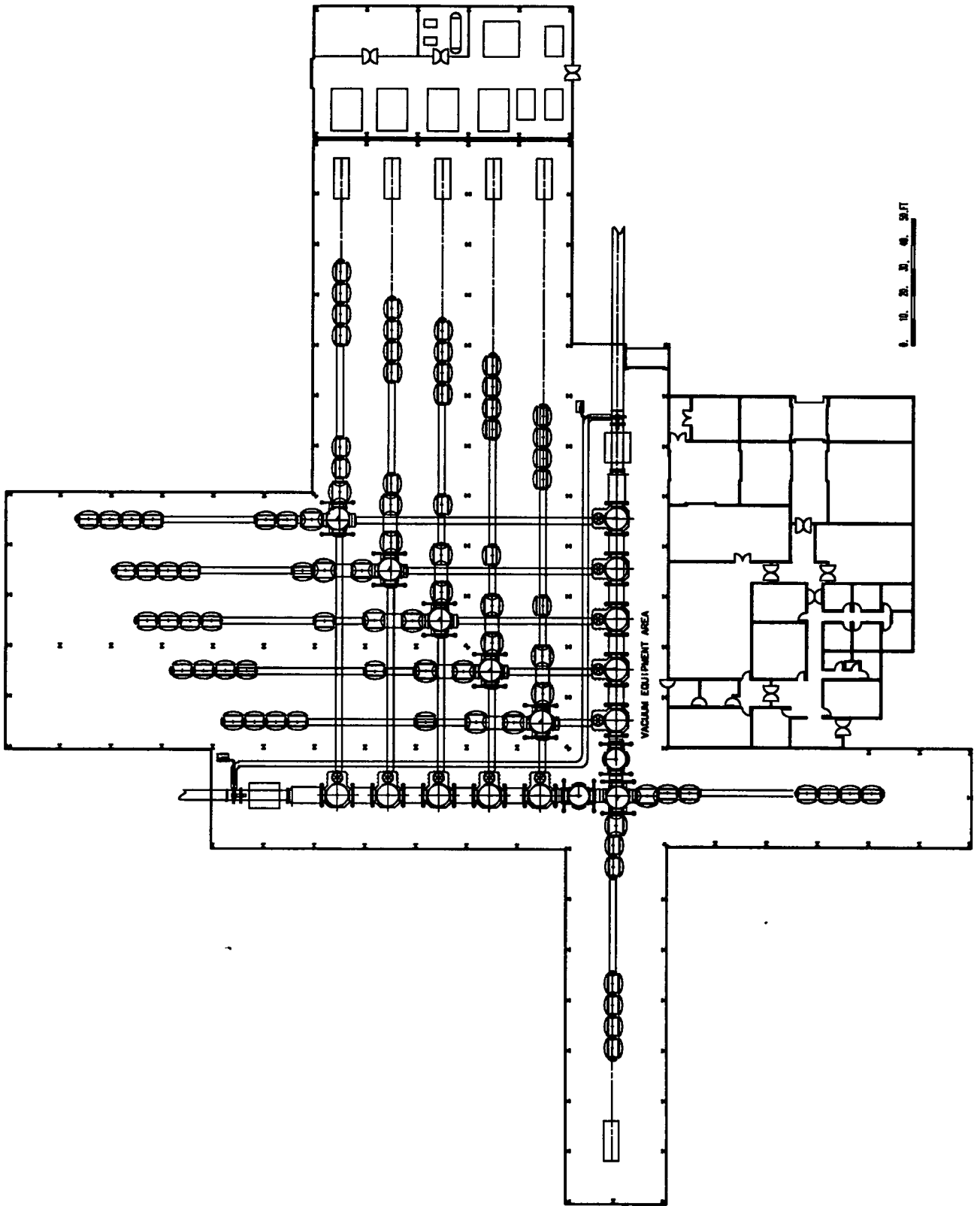


PLAN VIEW

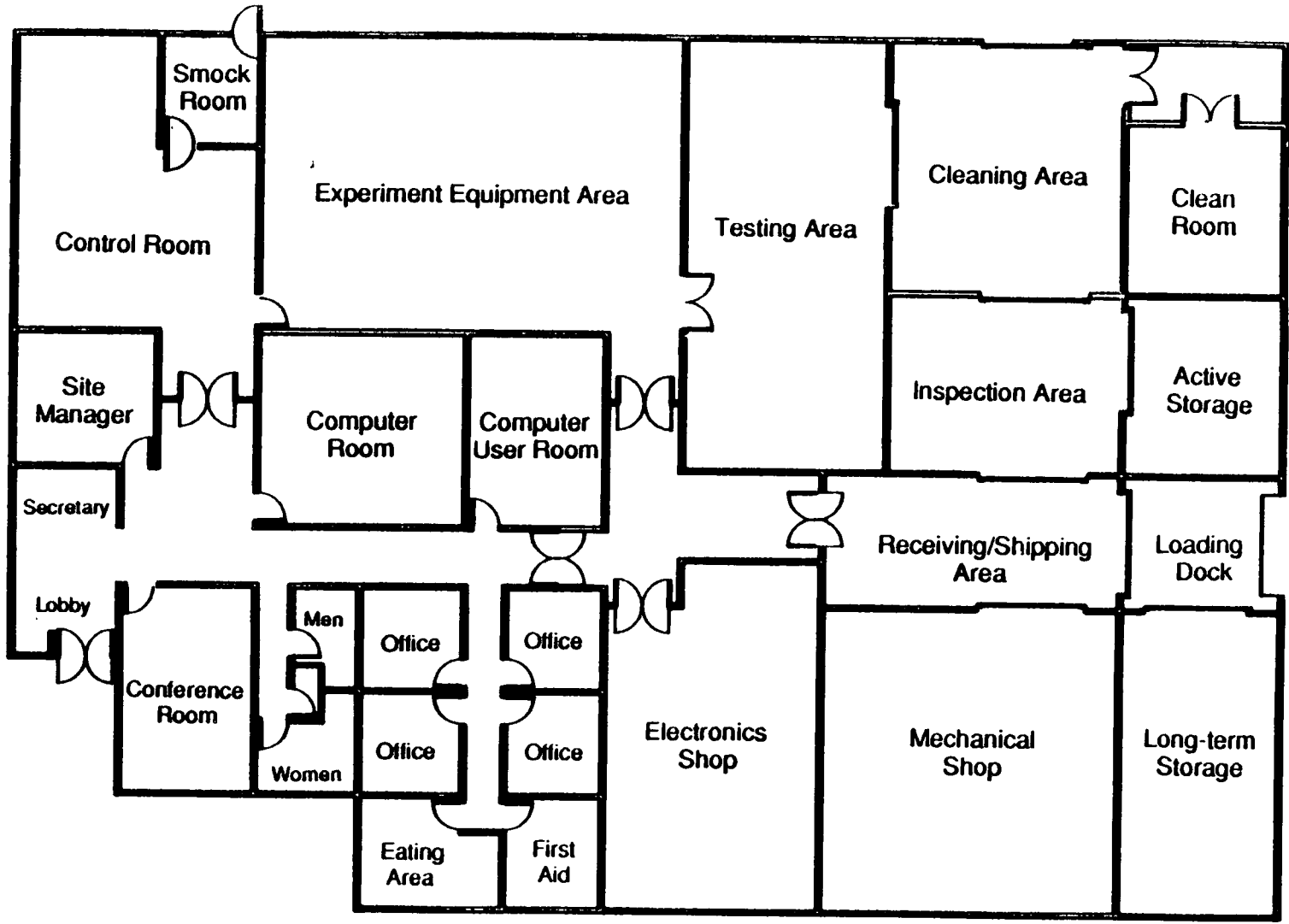
MID STATION

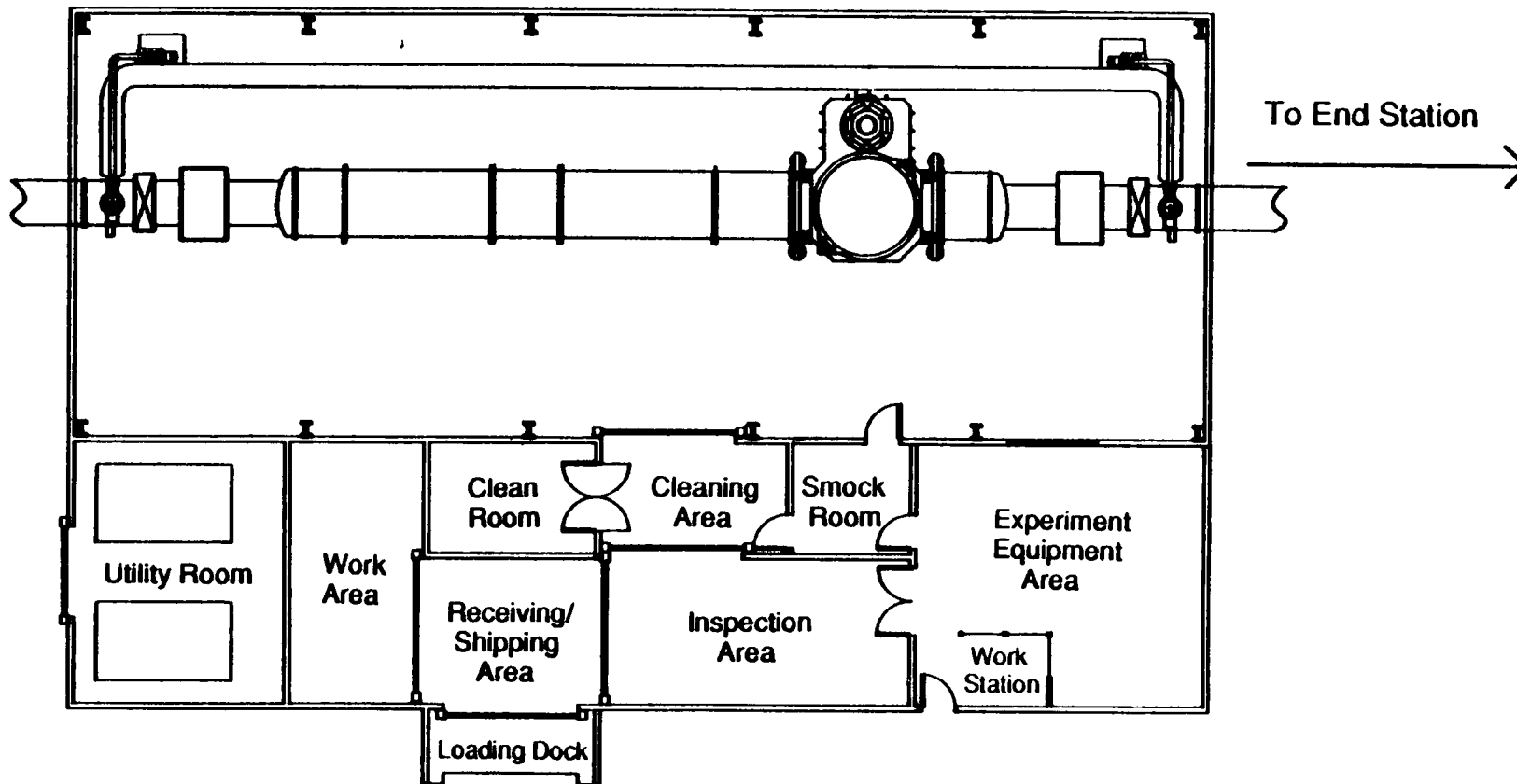


ELEVATION VIEW



0. 10. 20. 30. 40. 50. 60. 70. 80. 90. 100.





1/2

