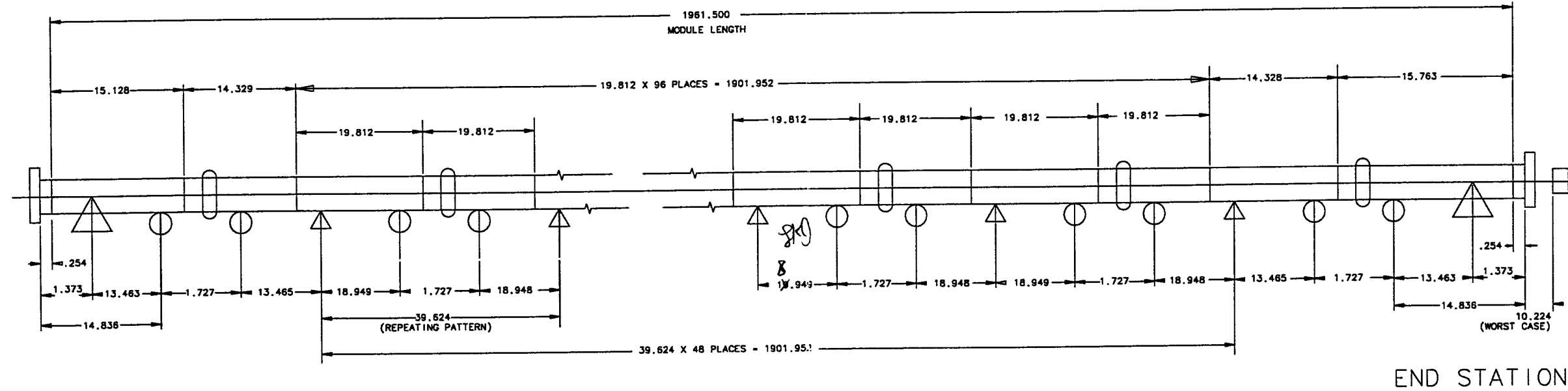
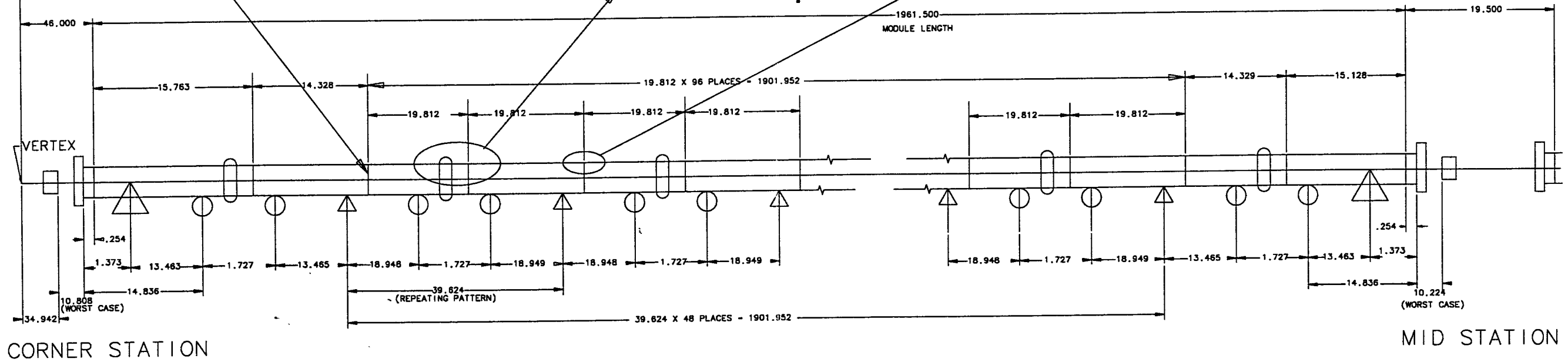
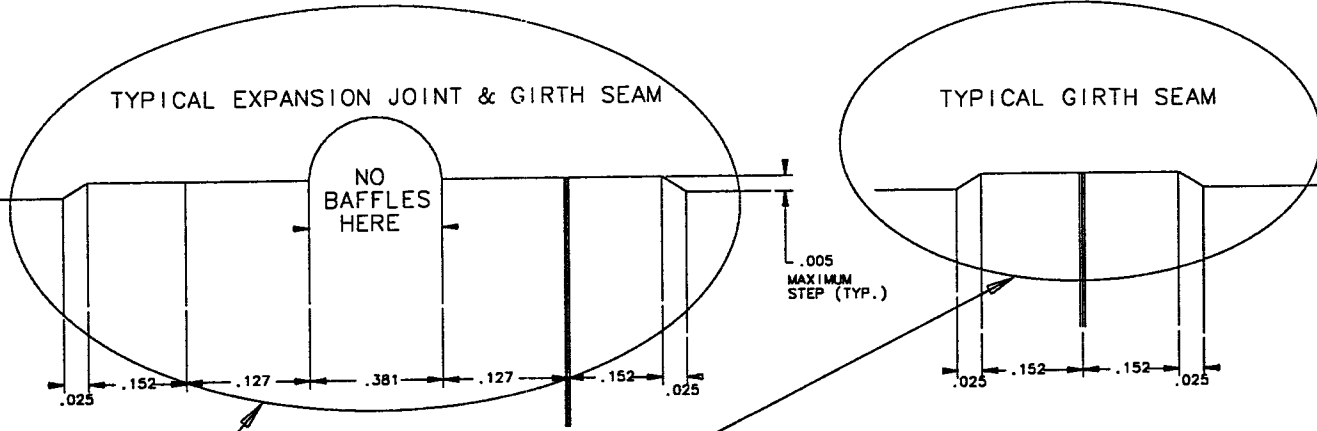


NOTE: TUBE SECTION ENDS, VALVE WELD STUBS, AND EXPANSION JOINT HAVE OVERSIZED DIAMETERS TO FACILITATE GIRTH SEAM FITUP. BAFFLES SHOULD NOT STRADDLE THE TRANSITION BANDS OR BE PLACED WITHIN THE BELLOW CONVOLUTIONS. SEE DETAILS AT RIGHT FOR DIMENSIONS.

THESE LINES INDICATE GIRTH SEAMS BETWEEN TUBE SECTIONS



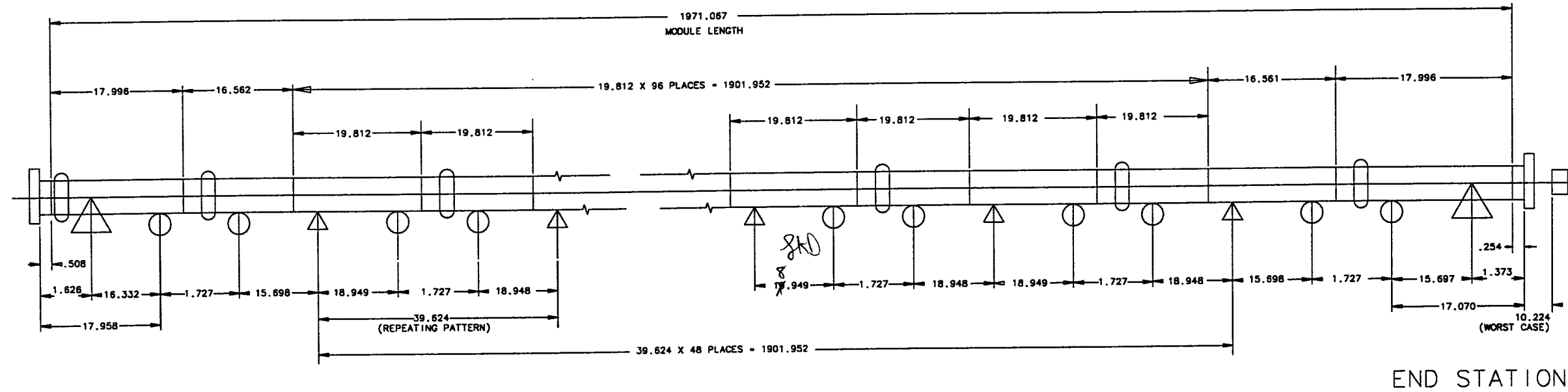
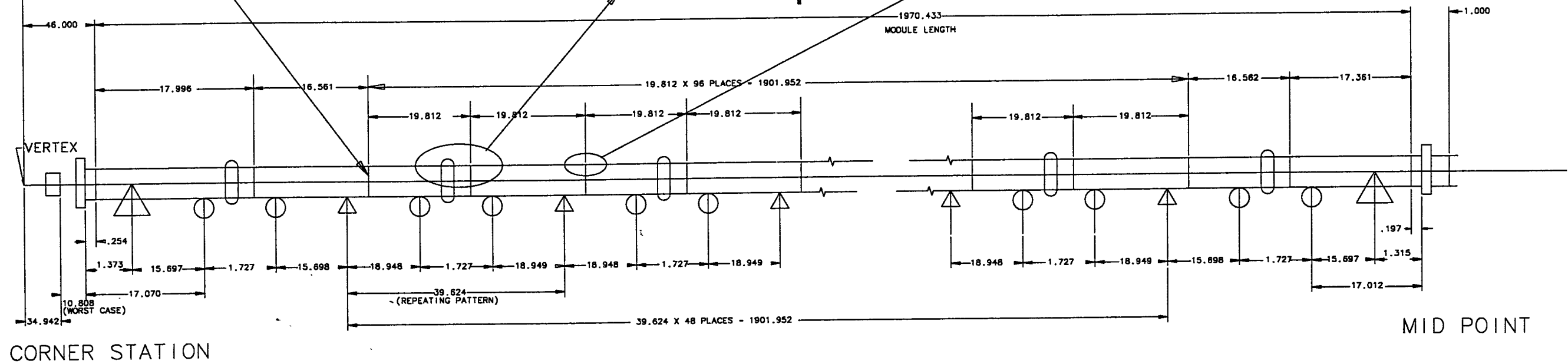
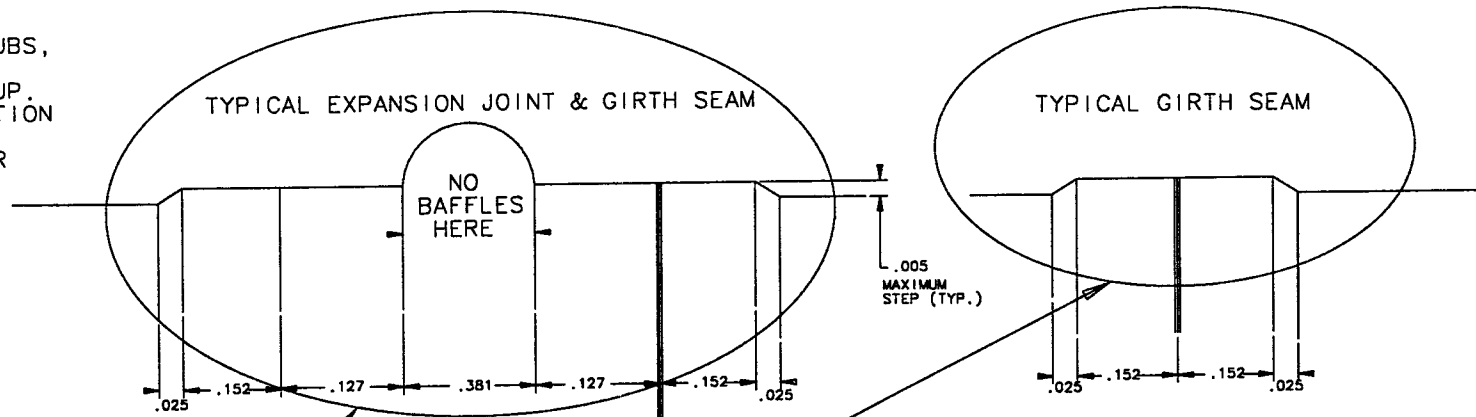
- LEGEND:
- TEST MASS MIRROR
 - TERMINATION GATE VALVE
 - RING ON ONE SIDE OF GUIDED SUPPORT
 - EXPANSION JOINT
 - TERMINATION ANCHOR TRUNNION (FIXED SUPPORT)
 - STANDARD FIXED SUPPORT RING

HANFORD BEAM TUBE DETAILS FOR
 BAFFLE POSITION CALCULATIONS
 LIGO D960047 REV. 0
 L. Jones 3/8/96

ALL DIMENSTIONS ARE IN METERS

NOTE: TUBE SECTION ENDS, VALVE WELD STUBS, AND EXPANSION JOINT HAVE OVERSIZED DIAMETERS TO FACILITATE GIRTH SEAM FITUP. BAFFLES SHOULD NOT STRADDLE THE TRANSITION BANDS OR BE PLACED WITHIN THE BELLWS CONVOLUTIONS. SEE DETAILS AT RIGHT FOR DIMENSIONS.

THESE LINES INDICATE GIRTH SEAMS BETWEEN TUBE SECTIONS



- LEGEND:
- TEST MASS MIRROR
 - TERMINATION GATE VALVE
 - RING ON ONE SIDE OF GUIDED SUPPORT
 - EXPANSION JOINT
 - TERMINATION ANCHOR TRUNNION (FIXED SUPPORT)
 - STANDARD FIXED SUPPORT RING

ALL DIMENSTIONS ARE IN METERS

LIVINGSTON BEAM TUBE DETAILS FOR
 BAFFLE POSITION CALCULATIONS
 LIGO D960048 REV. 0
 L. Jones 3/8/96