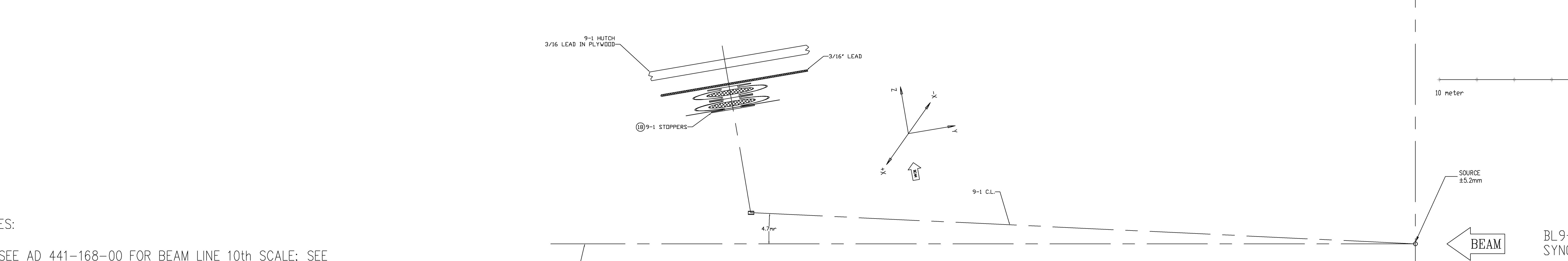
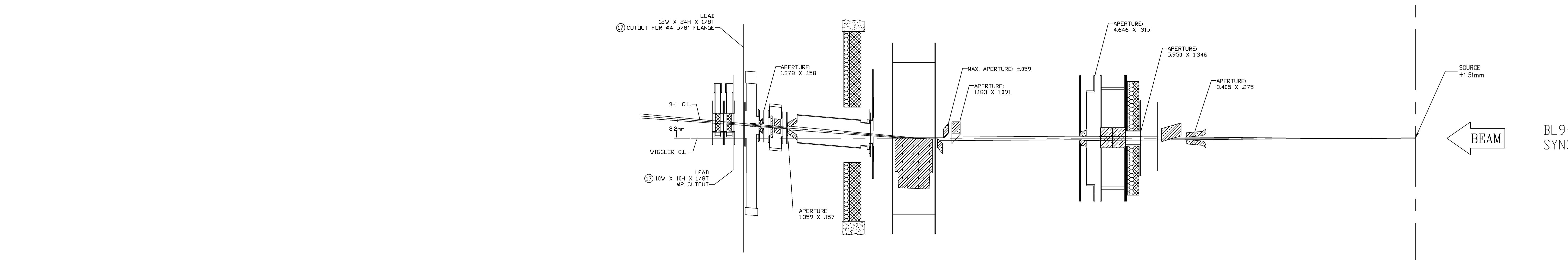
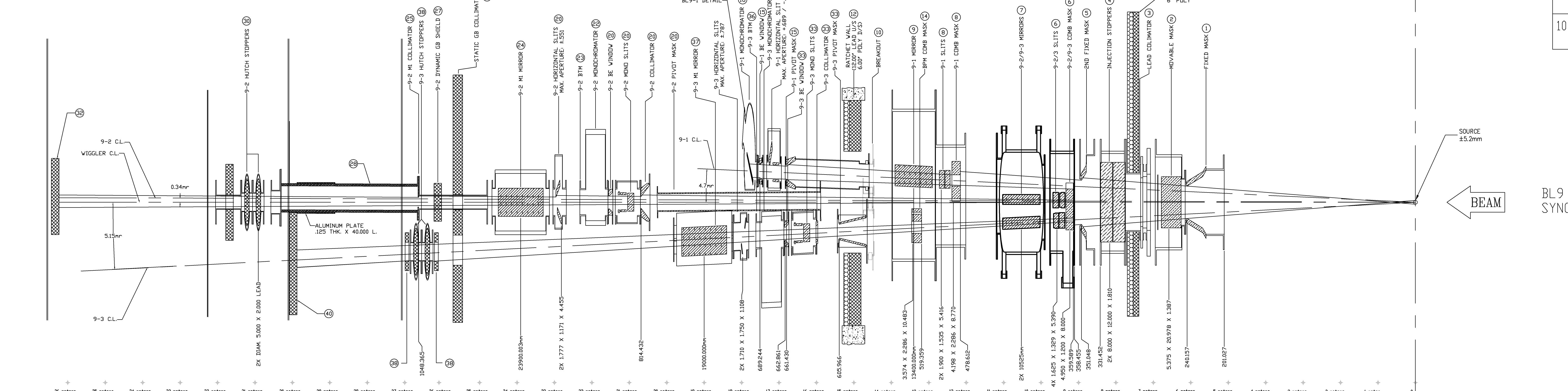
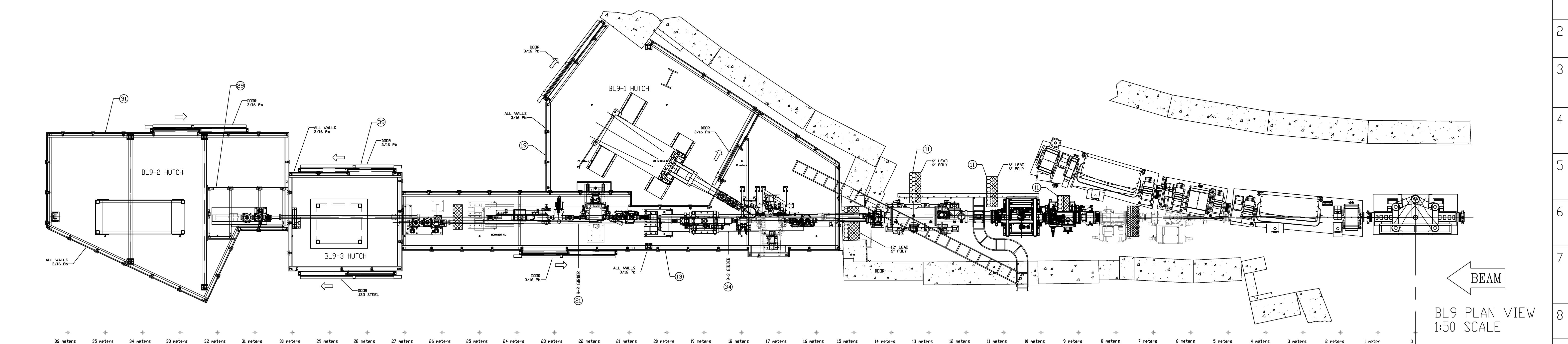
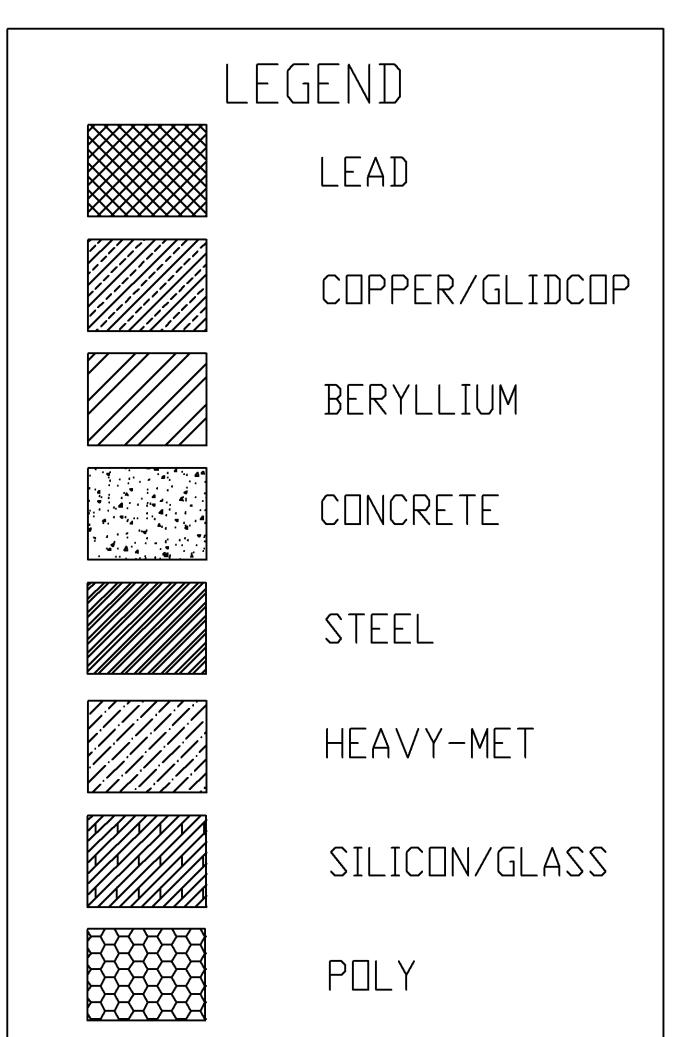


| REVISIONS |   | DRAWN                              | CHECKED | APPROVED               | DATE |
|-----------|---|------------------------------------|---------|------------------------|------|
| 1         | ADDED BL9-1 AND BL9-3 PLAN VIEWS, REVISED RAY TRACE   | LAL                                |         |                        |      |
| 2         | ADDED SPEAR, BL9-3 HUTCH TABLE AND ITEM NUMBERS   | LAL                                |         | STAR & DODING S-96     |      |
| 3         | ADDED HUTCH BLISTERS, COMB MASK, SLITS AND BEAM STOP TO PLAN VIEW   | LAL                                |         | STAR & DODING S-96     |      |
| 4         | UPDATE BL9 PLAN VIEW ADDED SHEET 2 ADDED ITEM LIST  | W LI<br>6-10-97                    |         | STAR & DODING S-96     |      |
| 5         | UPDATE BL9 RAY TRACE FOR SPEAR 3  | N.S.<br>11-3-03                    |         | A.B.<br>1-22-04        |      |
| 6         | ADDED BL9-2 DETAIL VIEWS FOR SPEAR 3 REVISED/REDRAWN  | N.S.<br>2-5-04                     |         | T.R.<br>2-17-04        |      |
| 7         | ADDED BTM DETAIL,PIVOT MASKS 9-1 MONO SCATTER SHIELD, COMPONENT IDENTIFIERS, REVISED NOTES, 9-1 PLAN VIEW | N.S.<br>10-5-04                    |         | T.R.<br>10-11-04       |      |
| 8         | UPDATED DWG FOR SPEAR 3   | N.S.<br>11-23-05                   |         | T.R.<br>11/23/05       |      |
| 9         | REVISED 9-2 & 9-3 COMB MASK SLIT AND MIRROR SYSTEMS   | SRW<br>TR<br>11-7-2011             |         | SRW<br>TR<br>11-7-2011 |      |
| 10        | RESIZED SOURCES TO REFLECT LATEST PARAMETERS  | SRW<br>DODING<br>DCR<br>10-24-2015 |         |                        |      |



NOTES:

1. SEE AD 441-168-00 FOR BEAM LINE 10th SCALE; SEE GP-451-028-39 FOR IN-ALCOVE SHIELDING. COMPONENT NUMBERS REFER TO BL 9 SHIELDING IMPLEMENTATION ENGINEERING NOTE M527.

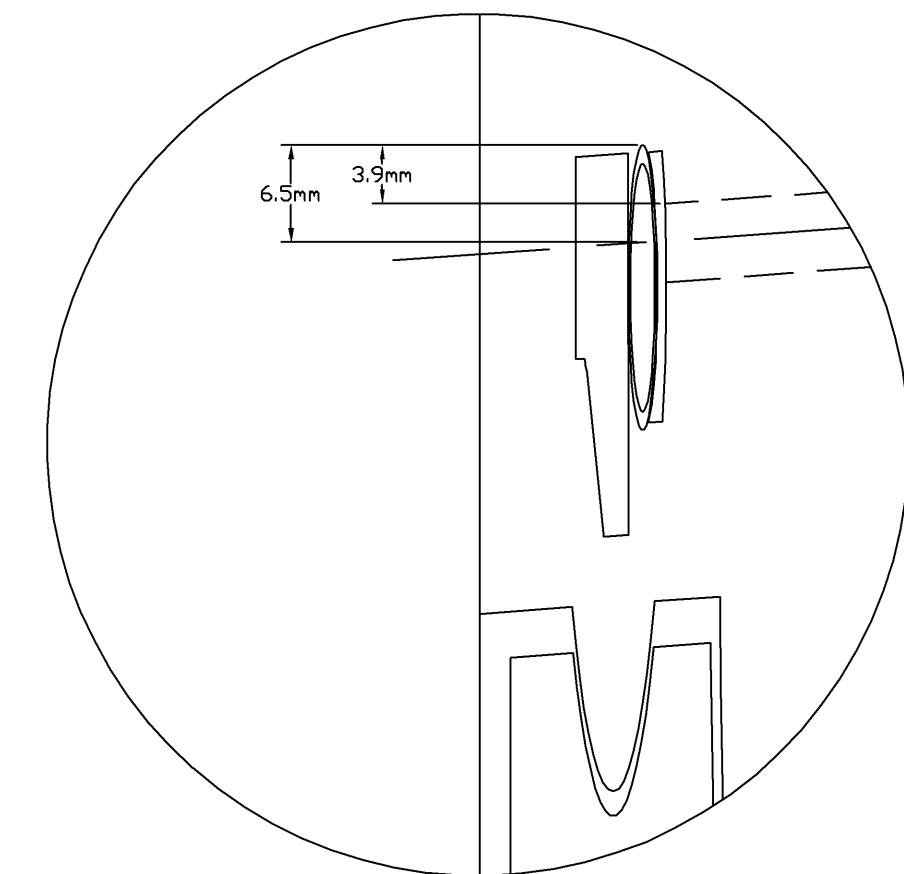
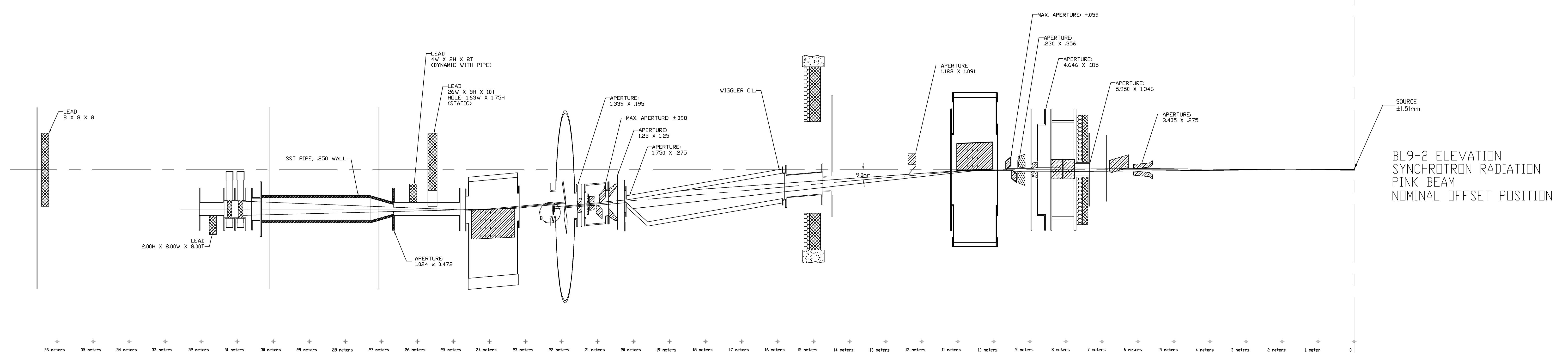
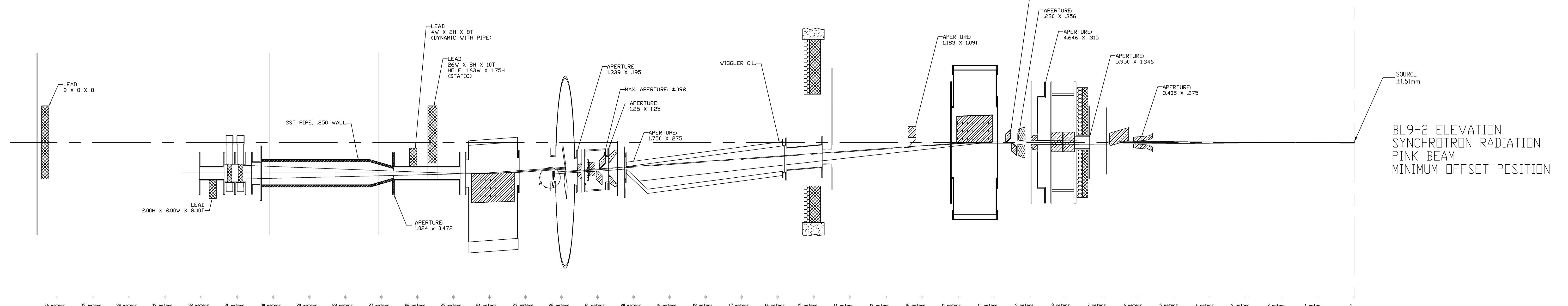
2. APERTURE DIMENSIONS ARE IN X, Y, Z ORDER PER BEAMLINE COORDINATE SYSTEM.

| DO NOT SCALE DRAWING  | CAD NAME: GP-441-169-04-C10-S1.DWG | NEXT ASSY: | CODE 2000 |
|---|------------------------------------|------------|-----------|
| STANFORD SYNCHROTRON RADIATION LABORATORY   |                                    |            |           |
| STANFORD UNIVERSITY   |                                    |            |           |
| UNLESS OTHERWISE NOTED<br>DW IS IN INCHES   |                                    |            |           |
| TOLERANCES:<br>XXX +-.005 ANGLES<br>XX +-.01 +-.01<br>X +-.005 +-.005<br>ALL SURFACES ✓ |                                    |            |           |
| ENGR. J. CERINO<br>DRFTS. VILLA<br>APPRV. STONEY J. CERINO<br>CHKD. J. CERINO           |                                    |            |           |
| DCR   |                                    |            |           |
| GP 441-169-04 C10   |                                    |            |           |
| SCALE: 1/50   |                                    |            |           |
| SHEET 1 OF 6  |                                    |            |           |

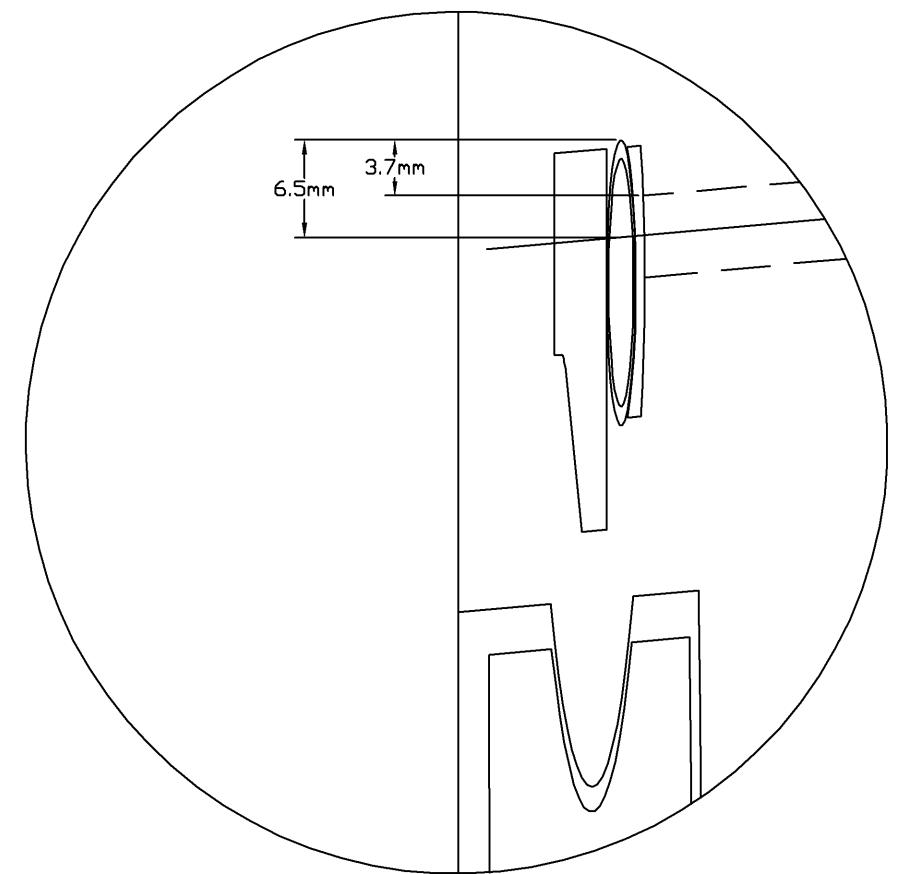
| REV                              | DESCRIPTION | DRAWN | CHECKED | APPROVED | DATE |
|----------------------------------|-------------|-------|---------|----------|------|
| SEE SHEET 1 FOR REVISION HISTORY |             |       |         |          |      |

LEGEND

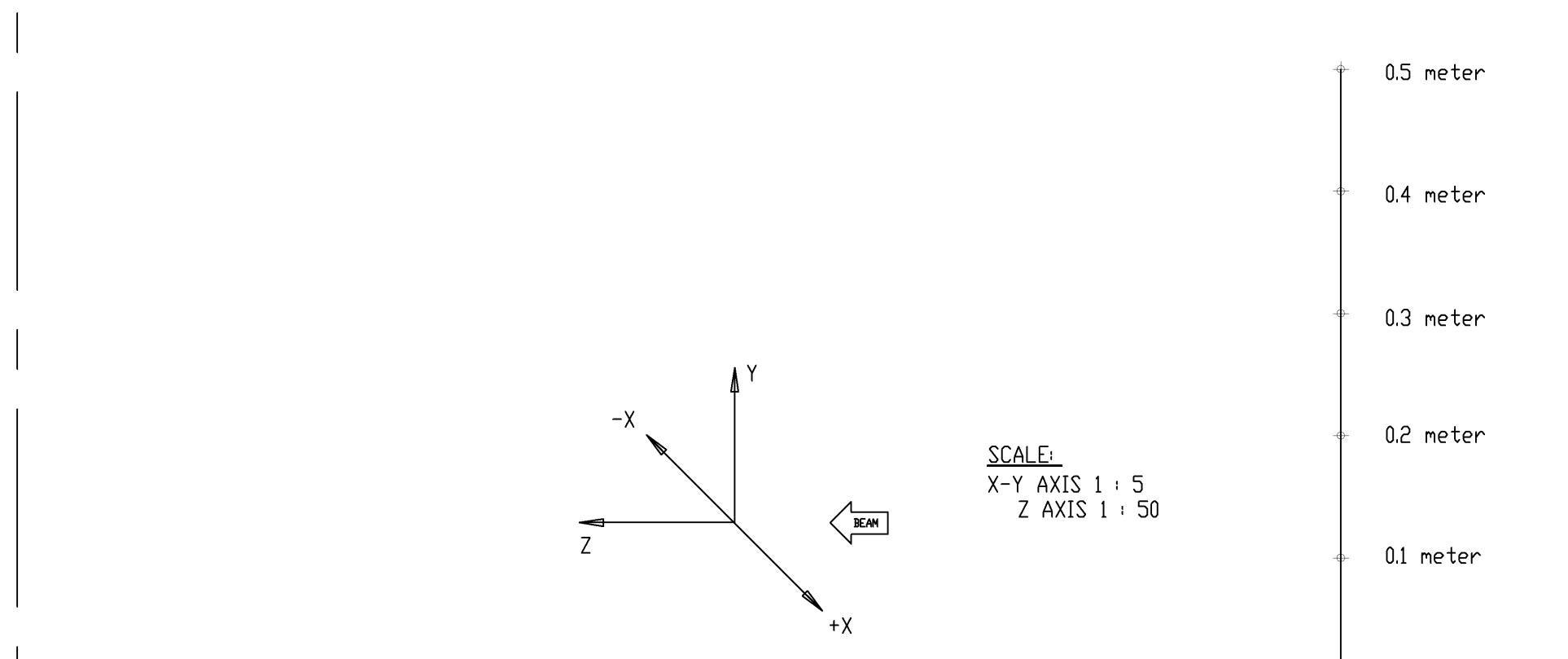
|                       |                |
|-----------------------|----------------|
| [Hatched]             | LEAD           |
| [Solid]               | COPPER/GLIDCOP |
| [Cross-hatched]       | BERYLLIUM      |
| [Dotted]              | CONCRETE       |
| [Vertical hatching]   | STEEL          |
| [Horizontal hatching] | HEAVY-MET      |
| [Diagonal hatching]   | SILICON/Glass  |
| [No hatching]         | POLY           |



DETAIL A  
SCALE: 2/1  
9-2 MINIMUM OFFSET POSITION



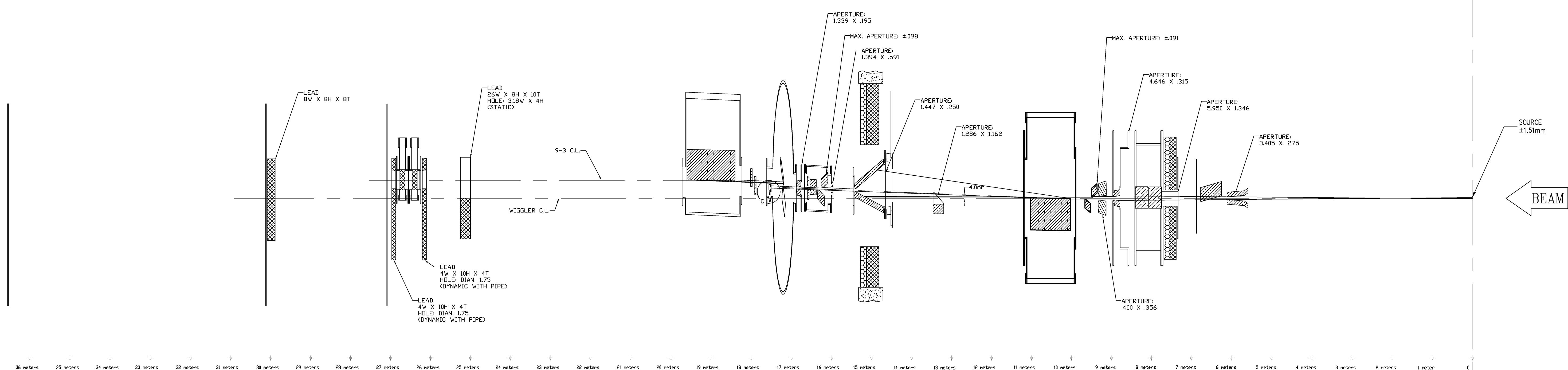
DETAIL B  
SCALE: 2/1  
9-2 NOMINAL OFFSET POSITION



GP 441-169-04

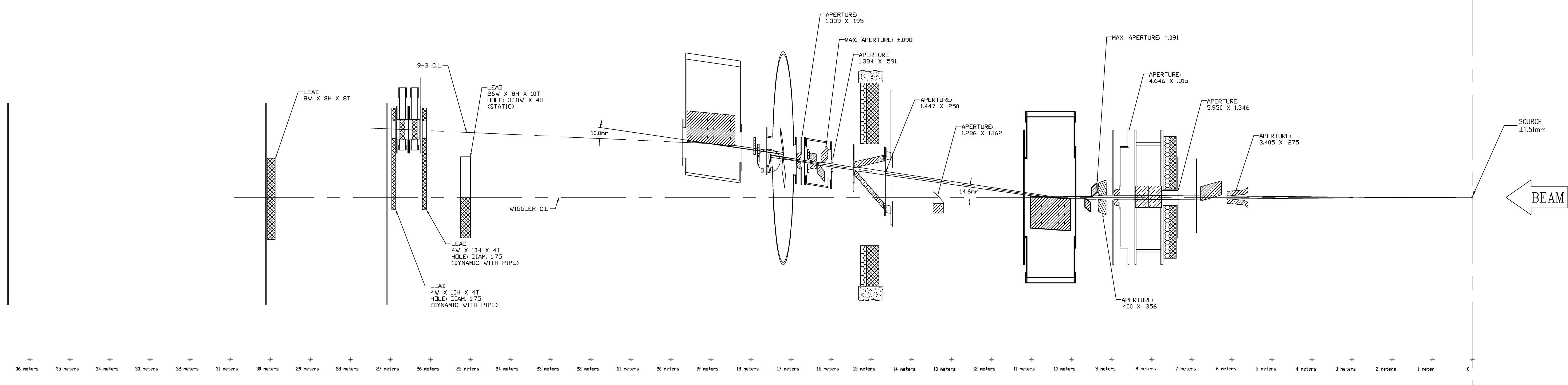
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| DO NOT SCALE DRAWING  | CAD NAME: GP-441-169-04-C10-SLDWG                   | NEXT ASSY:                      | CODE 2000                                     |
| STANFORD SYNCHROTRON RADIATION LABORATORY   |   |                                 |   |
| STANFORD, CALIFORNIA  |   |                                 |   |
| UNLESS OTHERWISE NOTED<br>DIM ARE IN INCHES   | APPROVALS   | REVIEWED BY: J. C. CERINO       | APPROVED BY: D. C. GRIFFITHS                  |
| TOLERANCES:<br>XXX +/- .005 ANGLES<br>XX +/- .01 +/- .01<br>X +/- .005 +/- .005<br>ALL SURFACES ✓ | ENGR: J. C. CERINO<br>DRFTS: VILLA LEE<br>CHKD: DCR | GENERAL<br>BL9<br>BL9 RAY TRACE | GP 441-169-04 C10<br>SCALE: 1/50 SHEET 2 OF 6 |

SSRL BEAMLINE 9 RAY TRACE

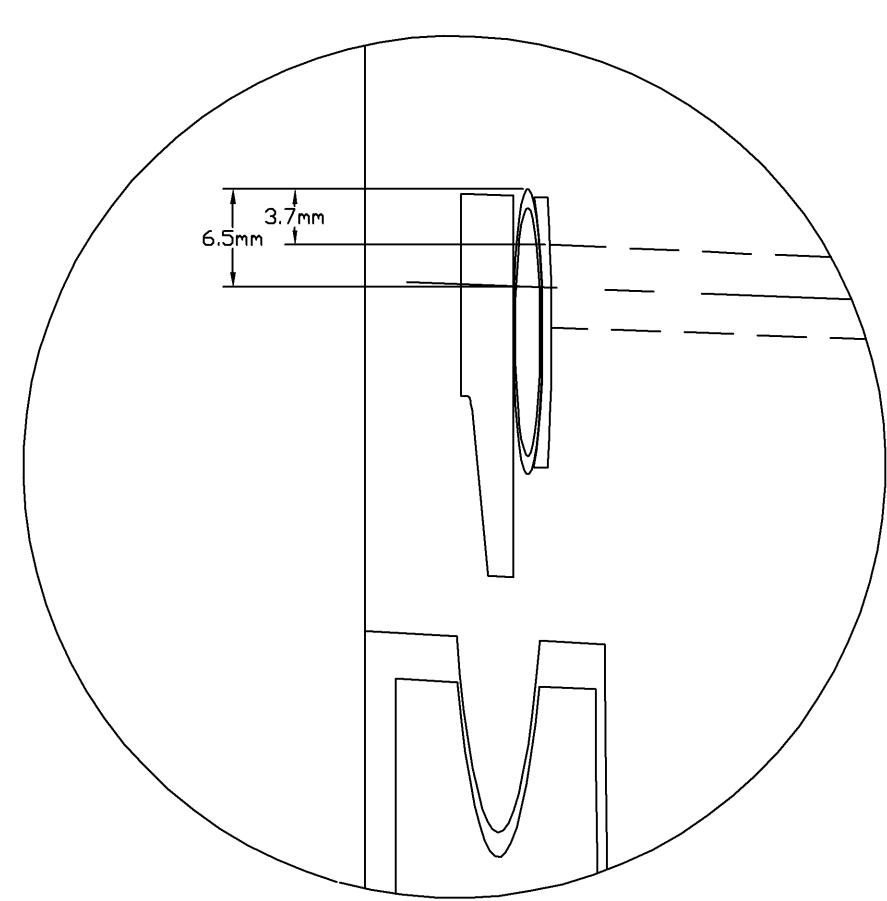


BL9-3 ELEVATION  
SYNCHROTRON RADIATION  
PINK BEAM  
MINIMUM OFFSET POSITION

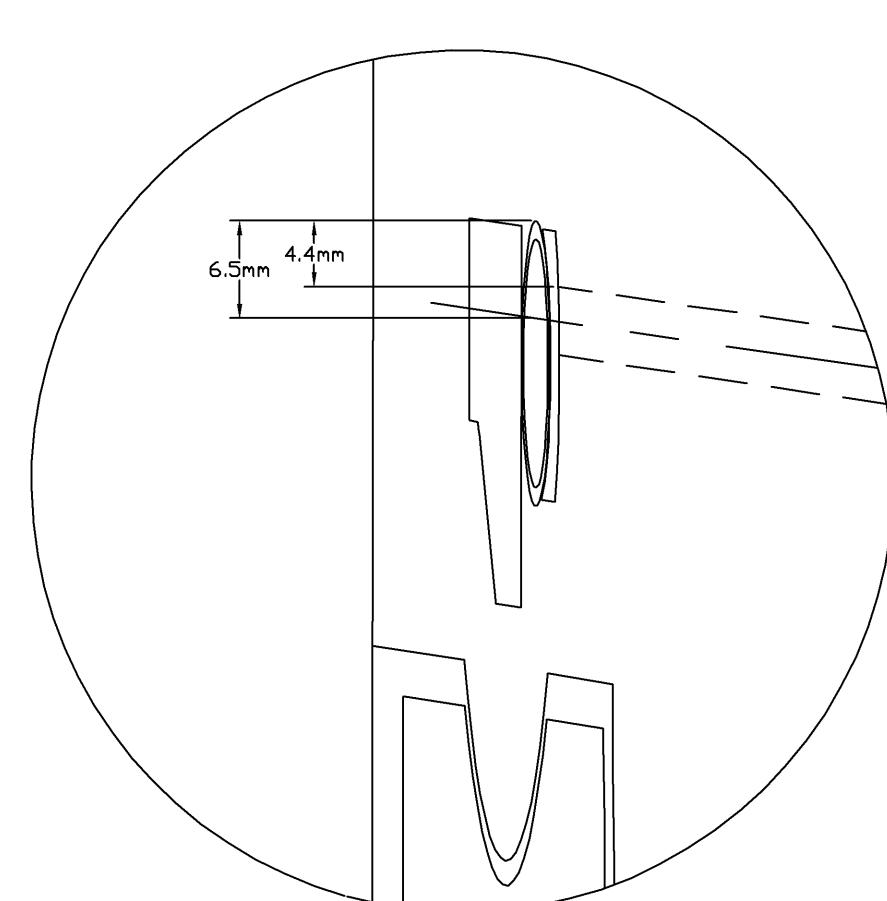
| LEGEND         |  |
|----------------|--|
| LEAD           |  |
| COPPER/GLIDCOP |  |
| BERYLLIUM      |  |
| CONCRETE       |  |
| STEEL          |  |
| HEAVY-MET      |  |
| SILICON/Glass  |  |
| POLY           |  |



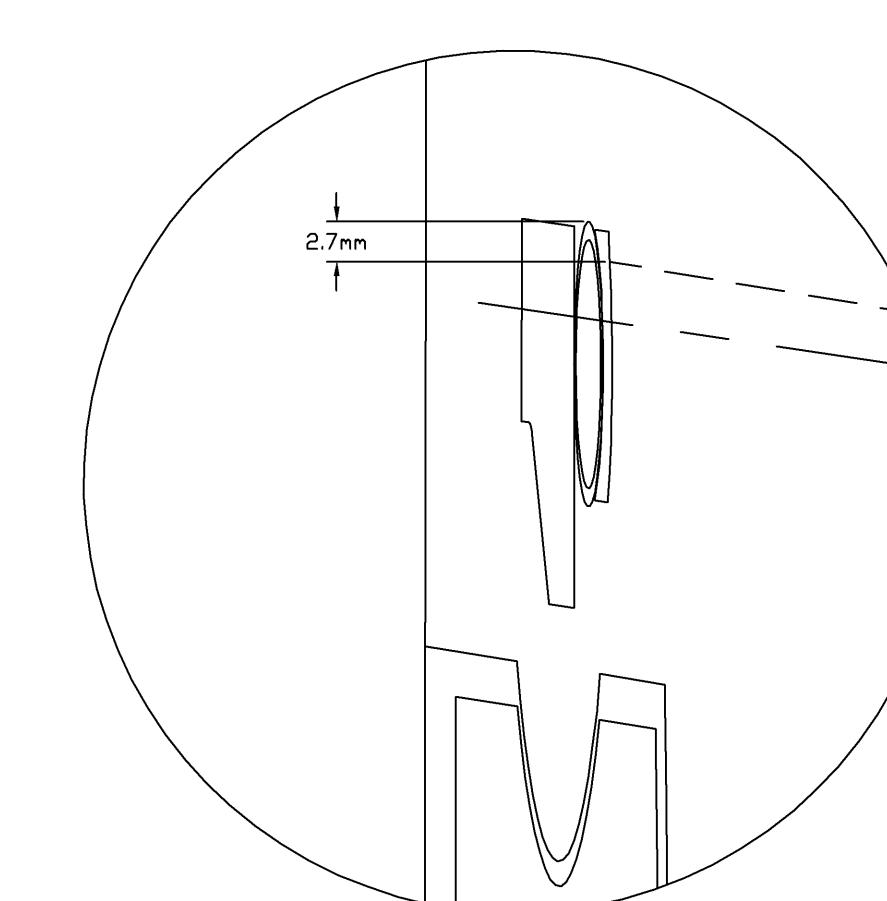
BL9-3 ELEVATION  
SYNCHROTRON RADIATION  
PINK BEAM  
MAXIMUM OFFSET POSITION



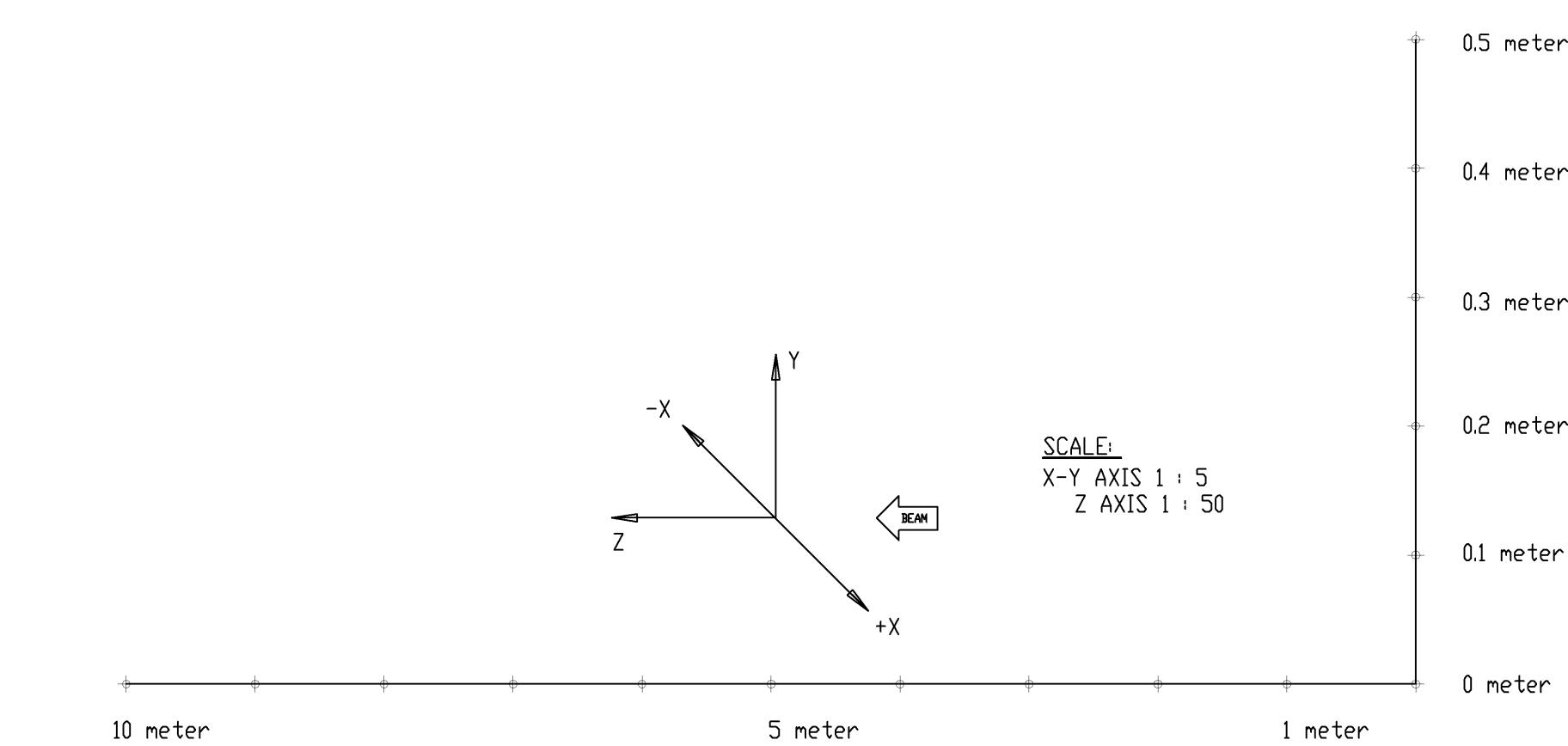
DETAIL C  
SCALE: 2/1  
9-3 MINIMUM OFFSET POSITION



DETAIL D  
SCALE: 2/1  
9-3 MAXIMUM OFFSET POSITION

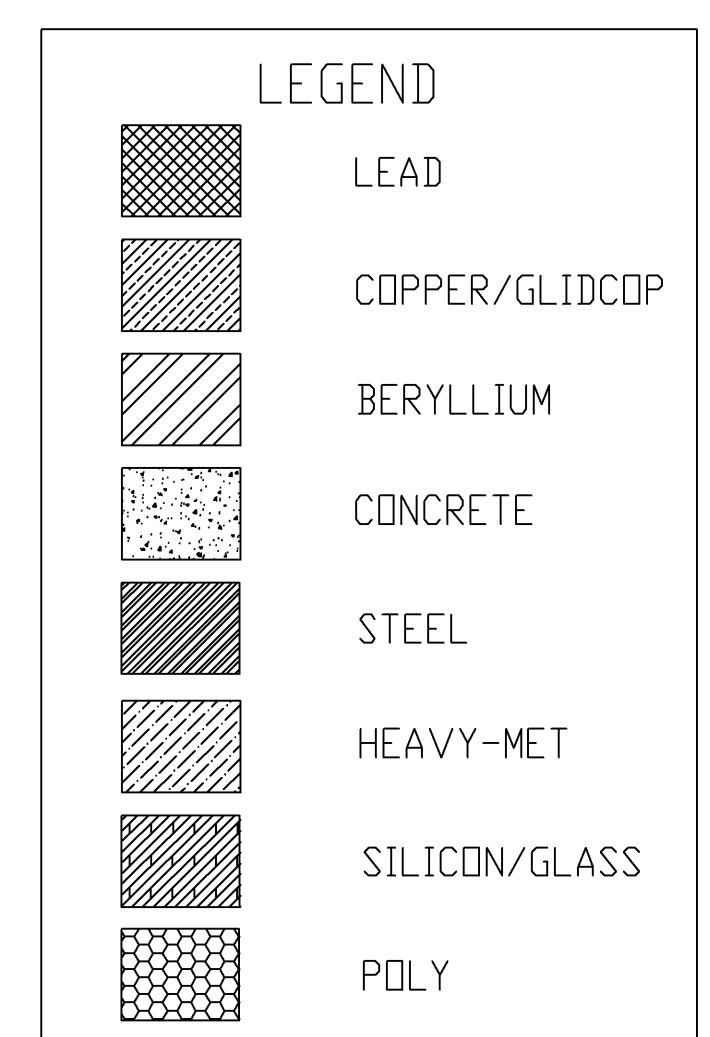
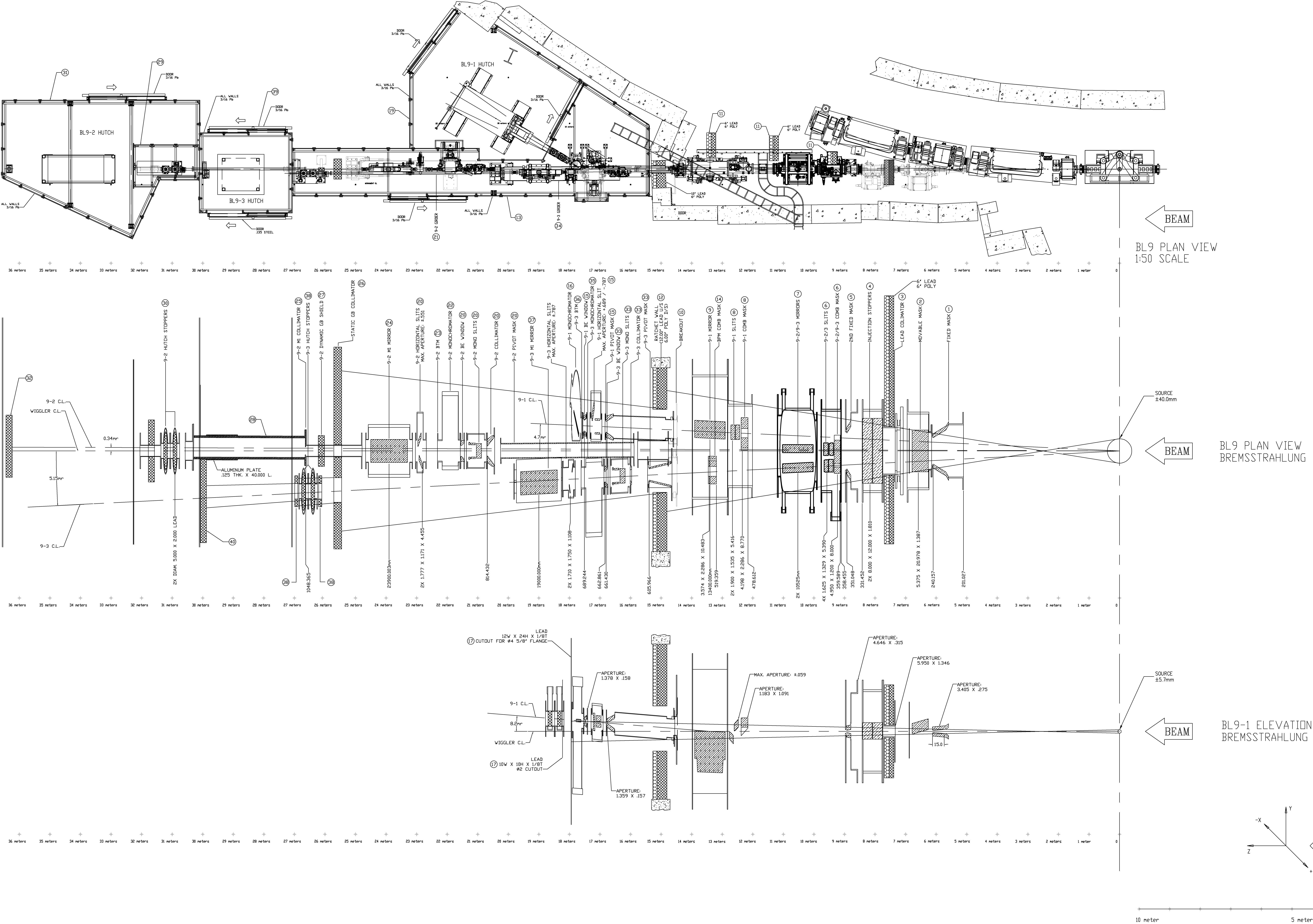


DETAIL E  
SCALE: 2/1  
9-3 MAXIMUM OFFSET POSITION  
ZERO POWER



GP 441-169-04

|   |  |  |
|---|--|--|
| DO NOT SCALE DRAWING  | CAD NAME: GP-441-169-04-C10-SLDWG  | NEXT ASSY:   |
| STANFORD SYNCHROTRON RADIATION LABORATORY   |  |  |
| STANFORD, CALIFORNIA  |  |  |
| UNLESS OTHERWISE NOTED<br>DIM. ARE IN INCHES  |  |  |
| TOLERANCES:<br>XXX +/- .005 ANGLES<br>XX +/- .01 +/- .01<br>X +/- .01<br>ALL SURFACES ✓ | APPROVALS:<br>NAME: J. CERINO<br>ENGR: J. CERINO<br>DRFTS: WILLA L.<br>CHKD: DCR | CODE 2000<br>SSRL - BEAMLINE 9<br>GENERAL<br>BL9<br>BL9 RAY TRACE<br>GP 441-169-04 C10<br>SCALE: 1/50 SHEET 3 OF 6 |



# BL9 PLAN VIEW BREMSSSTRAHLUNG

L9 PLAN VIEW  
50 SCALE

# BL9 PLAN VIEW BREMSSSTRAHLUNG

# BL9-1 ELEVATION BREMSSTRAHLUNG

**SCALE:**  
X-Y AXIS 1 : 5  
Z AXIS 1 : 50

0.3 meter

0.2 meter

0.1 meter

0 meter

10 meter      5 meter      1 meter

-X                  +X

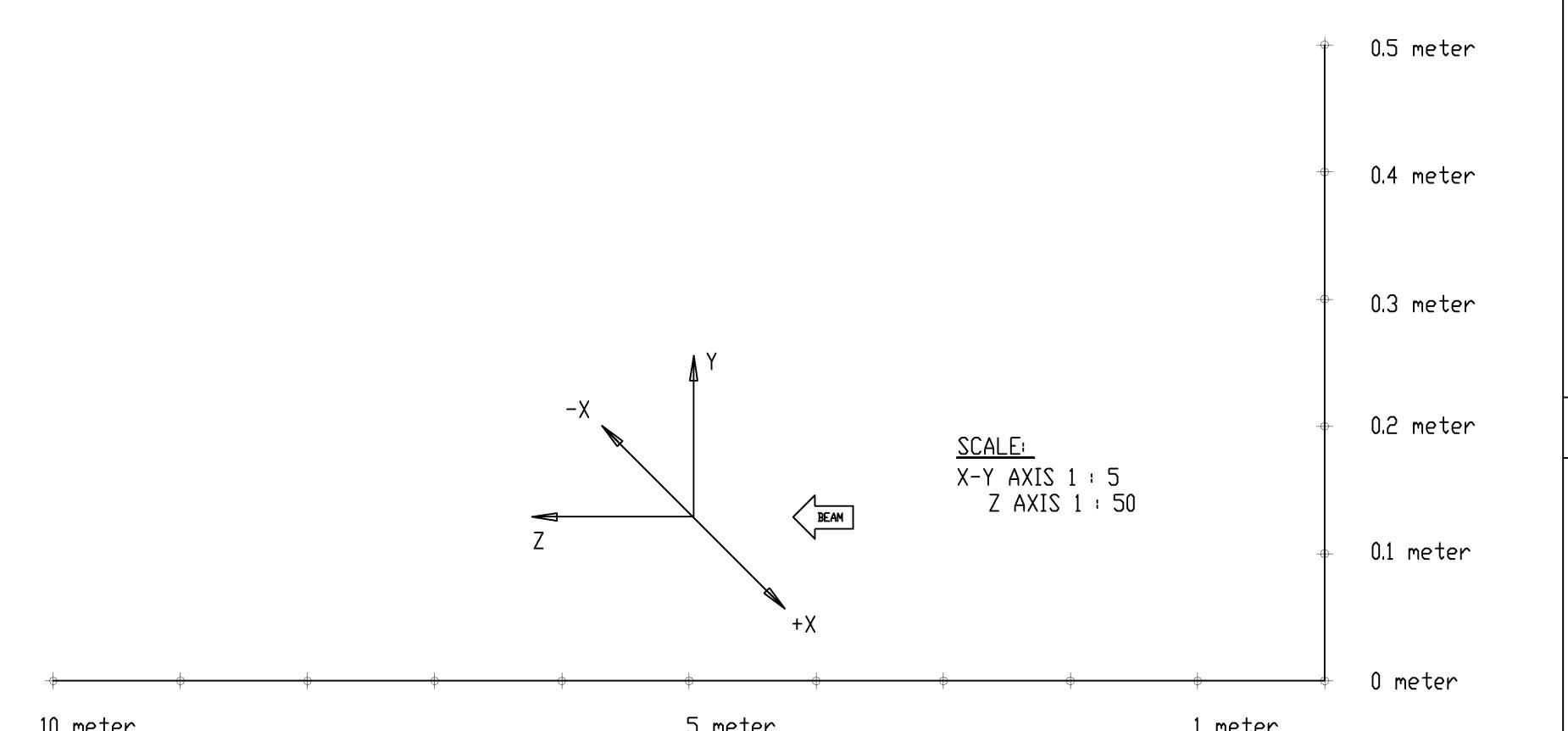
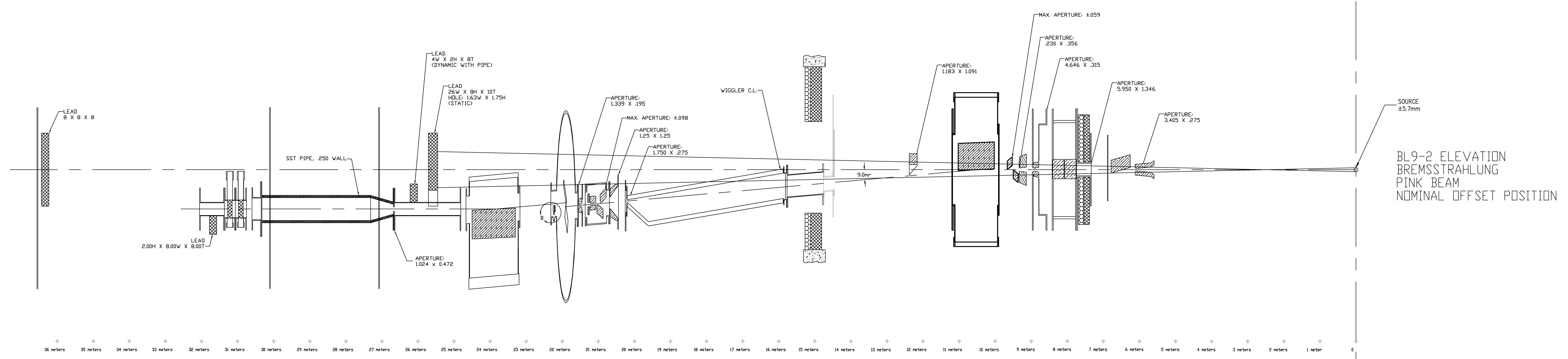
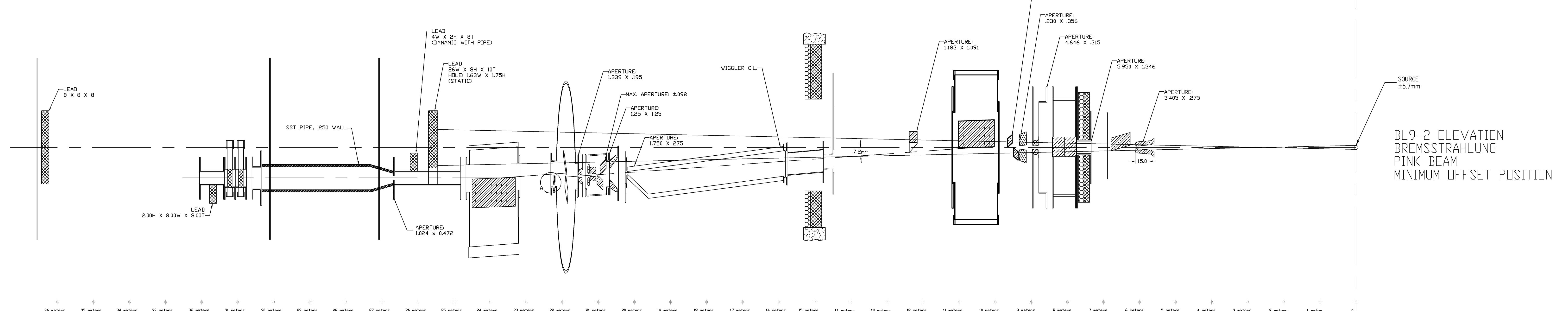
Z

BEAM

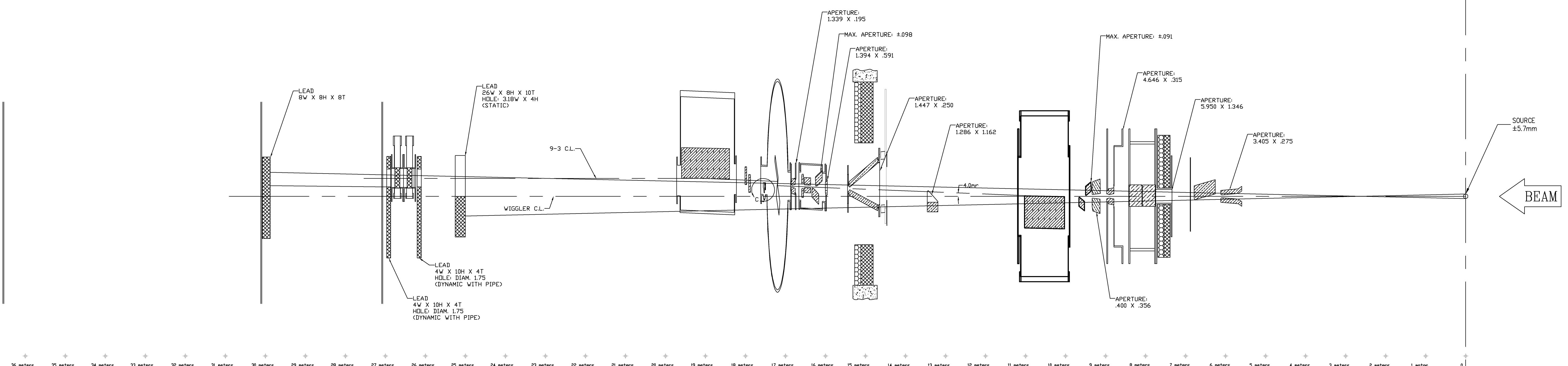
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| DO NOT SCALE DRAWING  | CAD NAME: GP-441-169-04-C10-S1.DWG                          | NEXT ASS'Y:                         | CODE 2000 |
| STANFORD SYNCHROTRON RADIATION LABORATORY                                       |   | SSRL - BEAMLINE 9<br>GENERAL<br>BL9 |           |
| STANFORD UNIVERSITY   | STANFORD, CALIFORNIA  | BL9 RAY TRACE                       |           |
| UNLESS OTHERWISE NOTED<br>DIM. ARE IN INCHES                                    | DATE: 1-5-95<br>ENGR: J. CERINO<br>DRFTS. VILLA LI<br>CHKD. | APPROVALS<br>SIGNED J. CERINO 4-96  |           |
| TOLERANCES:<br>.XXX +/- .005 ANGLES<br>.XX +/- .01 +<br>.X +-<br>ALL SURFACES ✓ | GP 441-169-04 C10 E   |                                     |           |
| SCALE: 1/50   |   | SHEET 4 OF 6                        |           |

LEGEND

|                |
|----------------|
| LEAD           |
| COPPER/GLIDCOP |
| BERYLLIUM      |
| CONCRETE       |
| STEEL          |
| HEAVY-MET      |
| SILICON/Glass  |
| POLY           |

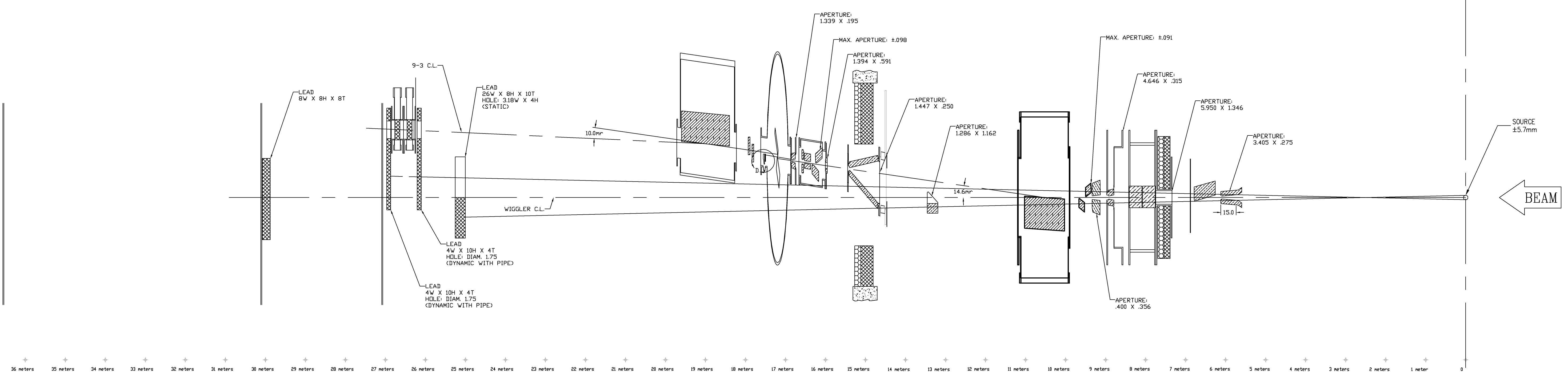


|   |   |   |  |
|---|---|---|--|
| DO NOT SCALE DRAWING                        | CAD NAME: GP-441-169-04-C10-SLDWG   | NEXT ASSY:  | CODE 2000  |
| STANFORD SYNCHROTRON RADIATION LABORATORY   |   |   |  |
| STANFORD, CALIFORNIA                        |   |   |  |
| UNLESS OTHERWISE NOTED<br>DIM ARE IN INCHES | TOLERANCES:<br>XXX +-.005 ANGLES<br>XX +-.01 +-.01<br>X +-.01<br>ALL SURFACES ✓ | APPROVALS:<br>D. CERINO<br>DRFTS. VILLA L.<br>CHKD. | SSRL - BEAMLINE 9<br>GENERAL<br>BL9<br>BL9 RAY TRACE |
| GP 441-169-04 C10                           | SCALE: 1/50   | SHEET 5 OF 6  | E  |

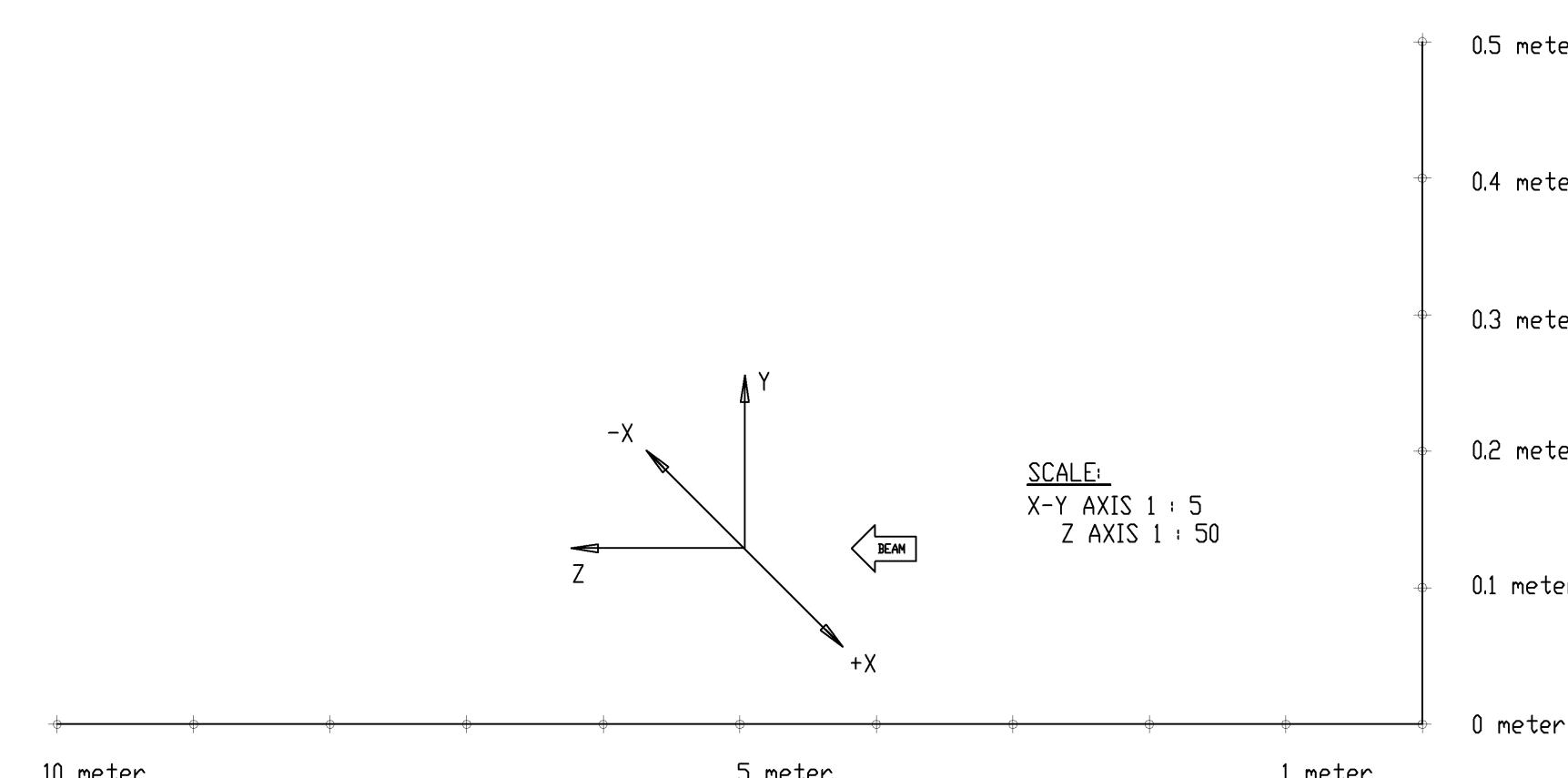


BL9-3 ELEVATION  
BREMSSTRAHLUNG  
PINK BEAM  
MINIMUM OFFSET POSITION

| LEGEND |                |
|--------|----------------|
|        | LEAD           |
|        | COPPER/GLIDCOP |
|        | BERYLLIUM      |
|        | CONCRETE       |
|        | STEEL          |
|        | HEAVY-MET      |
|        | SILICON/GLASS  |
|        | POLY           |



BL9-3 ELEVATION  
BREMSSTRAHLUNG  
PINK BEAM  
MAXIMUM OFFSET POSITION



GP 441-169-04

|  |   |   |  |
|--|---|---|--|
| DO NOT SCALE DRAWING                         | CAD NAME: GP-441-169-04-C10-SLDWG   | NEXT ASSY:  | CODE 2000  |
| STANFORD SYNCHROTRON RADIATION LABORATORY    |   |   |  |
| STANFORD, CALIFORNIA                         |   |   |  |
| UNLESS OTHERWISE NOTED<br>DIM. ARE IN INCHES | TOLERANCES:<br>XXX +/- .005 ANGLES<br>XX +/- .01 +/- .01<br>X +/- .01<br>ALL SURFACES ✓ | APPROVALS:<br>D. CERINO<br>DRFTS WILLA L.<br>CHKD | SSRL - BEAMLINE 9<br>GENERAL<br>BL9<br>BL9 RAY TRACE |
| GP 441-169-04 C10                            | SCALE: 1/50   | SHEET 6 OF 6                                      | E  |