# Jefferson Lab Alignment Group Data Transmittal 

TO: J. Fischer, O. Pastor
DATE: 24 Jan 2014
FROM: Kelly Tremblay DETAILS:

Checked:
\# : B1539
data : inspection\hallblshielding plates\140108A
The shielding plates for the Hall B Torus magnet were measured January 14 ${ }^{\text {th }}$, 2014. Listed below are the results for back panel B [ref dwg B00000-04-01-1224 revB]. The table's columns below are as follows:
Name - name for the circle / bolt hole measured referenced to the plot at the bottom
dVec - sum of the error found versus design
dRad - difference in the radius found versus design
dX - difference in X coordinate (design - found)
dY - difference in $Y$ coordinate(design - found)
$d Z$ - difference in height (design - found) for points on bent plane.
Units are millimeters. Bent section data follows the Sketch on final page.

| Ideal | dVec | dRad | dX | dY |
| :--- | ---: | ---: | ---: | ---: |
| d ht |  |  |  |  |
| ci_bb1 | 0.15 | -0.03 | -0.01 | 0.15 |
| ci_bb2 | 0.15 | -0.03 | -0.02 | 0.15 |
| ci_bb3 | 0.14 | -0.03 | -0.04 | 0.14 |
| ci_bb4 | 0.11 | -0.03 | -0.06 | 0.10 |
| ci_bb5 | 0.11 | -2.96 | -0.08 | 0.08 |
| ci_bb6 | 0.11 | -0.03 | -0.08 | 0.08 |
| ci_bb7 | 0.08 | -0.03 | -0.07 | 0.04 |
| ci_bb8 | 0.08 | -0.03 | -0.08 | 0.02 |
| ci_bb9 | 0.12 | -0.03 | -0.10 | 0.06 |
| ci_bb10 | 0.16 | -0.04 | -0.01 | 0.16 |
| ci_bb11 | 5.19 | -0.40 | -0.03 | -5.19 |
| ci_bb12 | 0.14 | -0.03 | -0.05 | 0.13 |
| ci_bb13 | 0.13 | -0.03 | -0.06 | 0.11 |
| ci_bb14 | 0.12 | -0.03 | -0.08 | 0.08 |
| ci_bb15 | 0.11 | -0.03 | -0.09 | 0.06 |
| ci_bb16 | 0.09 | -0.03 | -0.08 | 0.03 |
| ci_bb17 | 0.83 | -0.04 | -0.03 | 0.83 |
| ci_bb18 | 0.16 | -0.03 | -0.01 | 0.16 |
| ci_bb19 | 0.07 | 3.10 | 0.07 | -0.01 |
| ci_bb20 | 0.08 | 3.11 | 0.08 | 0.01 |
| ci_bb21 | 0.09 | 3.10 | -0.08 | 0.03 |
| ci_bb22 | 0.09 | 3.09 | -0.08 | -0.05 |


| ci_bb25 | 75.39 | 9.72 | -65.04 | -38.14 |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| ci_bb26 | 41.47 | 9.72 | 15.98 | -38.27 |  |
| ci_bb27 | 0.10 | 2.10 | -0.09 | -0.05 | 4.22 |
| ci_bb28 | 0.10 | 0.43 | -0.10 | 0.00 | 2.93 |

The angle formed by the bent and main plane was found to be 59.545 degrees.
The coordinates calculated from where the intersection of the two planes occured are:

| Point | $\mathrm{X}[\mathrm{mm}]$ | $\mathrm{Y}[\mathrm{mm}]$ |
| :---: | :--- | :--- |
| 1 | 1765.28 | 0.00 |
| 2 | 1609.75 | 388.09 |



