APPENDIX C

CENTRIFUGE MODEL

SHOP DRAWINGS
This appendix contains detailed shop drawings that were used to construct the centrifuge model for test CLM02. The purpose of this appendix is to communicate important model construction details that may be of interest to other centrifuge researchers. Further details about the model construction process can be found in Meehan et al. (2005a) and Meehan et al. (2005b), which are available on the UC Davis NEES website (http://nees.ucdavis.edu/). The following figures are contained in this appendix:

- **Figure C-1.** This figure is a plan view of the design concept that was used in test CLM02. It shows the concrete bases in the rigid container, the sliding block models, the static loading system, and the points of water application and drainage from the model.

- **Figure C-2.** This figure is a side view of the design concept that was used in test CLM02. It shows the same design elements as Figure C-1.

- **Figure C-3.** This figure shows a detailed side view of one of the sliding block specimens.

- **Figure C-4.** This figure shows a detailed plan view of the upper steel plate. The weir system and kaolinite injection locations are shown.

- **Figure C-5.** This figure shows a detailed plan view of the lower steel plate.

- **Figure C-6.** This figure shows a plan view of the consolidation mold that was used to create the stiff clay specimens for the sliding block model.

- **Figure C-7.** This figure shows a side view of the consolidation mold that was used to create the stiff clay specimens for the sliding block model. The upper figure shows an outer view of the consolidation mold. The lower figure shows how the detailed consolidation layer system fit within the consolidation mold.

- **Figure C-8.** This figure shows a detailed side view of the layered system that was used to consolidate the sliding block models.

- **Figure C-9.** This figure shows instrument sizes and dimensions.

- **Figure C-10.** This figure shows the locations of the instruments that were used on each of the sliding block models.

- **Figure C-11.** This figure shows overall instrument locations and instrument numbers.
Figure C-1. Overall Concept for Centrifuge Test CLM02 – Plan View.
Figure C-2. Overall Concept for Centrifuge Test CLM02 – Side View.
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3/4” steel plate

1/4” porous plastic, with 1/16” machined grooves

1” clay layer slickensides at 0.5”

3/4” steel plate (upper surface roughened to bond to clay)

1/4” x 1/4” aluminum side water guide (*See Note below)

1/8” x 1/2” aluminum “weir”

1/4” diameter hole for saturating the porous plastic

1/4” x 1/4” aluminum side water guide (*See Note below)

1/8” x 1/2” aluminum “weir”

1/4” diameter hole for saturating the porous plastic

*Note: aluminum side water guide is 1/4” wide by 1/2” tall on the outside edges of the model, to account for the curvature of the water’s surface that results from the curvature of the g-field across the width of the specimen.

SCALE
(inches)

0 0.5 1

Figure C-3. Detailed Side View of Specimen During Test.
Figure C-4. Detailed View of Upper Steel Plate.
Figure C-5. Detailed View of Lower Steel Plate.
Figure C-6. Consolidation Mold, Plan View.
Figure C-7. Consolidation Mold, Side View.
Figure C-8. Consolidation Layer System, Detail View.
Figure C-9. Instrument Sizes and Dimensions.
KEY:  
A = Accelerometer  
P = Pore Pressure Transducer  
D = Displacement Transducer (LP or LVDT)  
L = Load Cell  

Figure C-10. Location of Instruments on Each Sliding Block Model.
Figure C-11. Instrument Locations.