Outline

1. Dr. Wight: no response yet.

2. Shear beams:
   - Revised computed shear strength data: eliminated unreliable data points.
   - Updating database: will develop empirical equation for shear strength of ECC including all? (not sure if could include data from tests of beam having stirrups and extracting ECC contribution) Data points from literature. In particular, will include two new references found in a recent literature search:


3. NEEShub
   - Started, but was having trouble uploading data. Seemed to be a permission issue that was solved after exchanging several communications with an IT Tech support technician from NEEShub.
   - Will return to this after we are done with the DfD column models.
   - Would it be possible to have an undergraduate research assistant in charge of doing all of this? I think it would be really helpful, considering that there will be a lot of data coming out of my 7 column tests and the 2-span bridge model. You

4. DfD columns
   - Svend made threads at the ends of one NiTi SMA bar. He said he was going to try and do the middle dog-bone portion. Called him today and he said he has not tried it yet... how long could we wait? I think if we don’t get an estimate from him by December 1st we should go with Polytec again.
   - Got Gr. 80 bars with Harris Salinas Rebar in Carson City, machined them and got them bent.
   - Installed strain gages in rebar that go in both Cu and NiTi footings (Figure 1).
Figure 1. Installation of strain gages in DfD col. Footing rebar

- Templates were used to: Place the footing longitudinal rebar (Fig. 2) and column rebar (Fig. 3) in the right spots.

Figure 2. Template for footing rebar
Currently installing remaining 8 strain gages that go in the column cage (Fig. 4). Strain gages in the CFRP shell were installed last week.
- Cans will be fixed (probably tack-welded to pencil rods) to the rebar cage so they don’t move during casting (Fig. 5)

Figure 5. Steel cans to be part of DfD column

- Forms and rebar for column head still left to build, Brendan and Don are working ‘top-speed’ to have everything ready ASAP. Plan was initially to pour Concrete (2 footings, one column + head) this Friday, November 13, but more likely we will be casting on Monday, November 18. Removable wood shells will be used to keep threads clear of concrete during casting (Fig. 6).

- Visited Ed Little’s shop during the weekend (Fig. 7-12). George was there and we briefly discussed some simple questions Ed had. They will be building 5 elements (one extra). Ed said the cost increase was only of around 10%. The fifth element will be used in case anything is wrong with any of the other 4 (I hope not), but more likely will be used for them to have a display model. Ed said the plan is to be casting ECC this Friday Nov. 15 or Saturday Nov. 16, will you be back by then? Pls. let me know so that we can plan having you during casting if you want.

- Ed had a water-cut plywood template made, which I borrowed to check Don’s template. It fit perfectly (Fig.13)
Figure 6. Wood shells to keep threads clear of concrete

Figure 7. Hardware and forms for ECC element
Figure 8. Forms and spirals for ECC element

Figure 9. Cardboard tubes for ECC element
Figure 10. Steel plate with shear studs

Figure 11. Split-tube shims
Figure 12. ECC element fabrication as of November 11
Figure 13. Water-cut plywood template