

The following four pages are some drawings which really aren't plans per-say, but sketches. The first two are the ones I used during construction. Page three is the drawing I gave to the graphic artist so he could make the Director (Shockwave) file and the last page is a detail to did today to help you understand how the bed frames are joined. All lumber is dimensional, meaning a 1x4 is actually 3/4" thick by 3-1/2" wide.

As you can see there is just enough information on the drawings to keep me on track and at the same allow me to solve problems easily. If you plan to make a futon from my ideas you will need to make your own drawings. These aren't detailed (or engineered) enough to rely on. Plus, making your own drawings will help you visualize what it is you're making and help you solve your construction problems up front.

Please note, the location of the bolt for the seat bottom roller isn't in the 2x2 as located on the first page. I located it a couple of inches forward so I could drill through the frame and put a lock nut behind it. If I put it in the 2x2 I would need to use a dowel pin (a headless screw with wood threads on one end and machine threads on the other.) which I didn't want to deal with.

Also, the arm frame is quite different as you can see in the third drawing. I needed to raise the back arm support to accommodate the roller guide for the seat back. Also, I used a 1x4 for the arm rests and not the 2x2 in the drawing.

In the bed frame you'll notice that the 1x4 maple is backed with a 1x2 cleat made of poplar. The slats attach to this cleat and the 2x2 where the two bed frames are joined. The idea here was to have the mattress set into the bed frame so that the 1x4s would hold it from slipping off. When I preassembled the bed frames there wasn't enough space from the top of the slats to the top of the 1x4 to keep the mattress in. To make a long story short, I planed the slats down from their original 3/4" thickness to make more room to hold the mattress. This also lightened the bed frames considerably with no adverse affect to the strength. I considered making the cleat a 1x1, as opposed to a 1x2, but didn't.

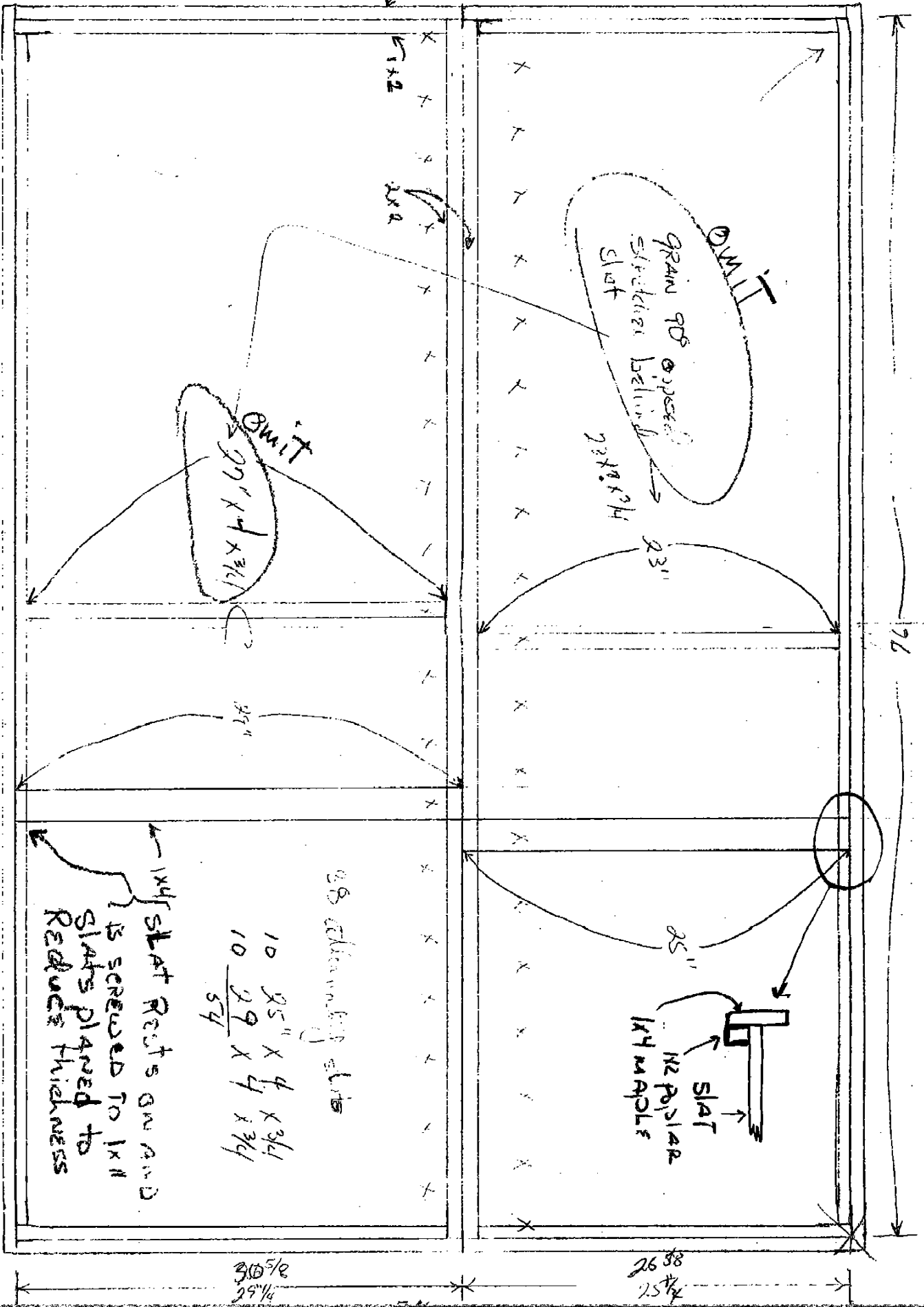
Happy Innovating

Greg



Bed frame

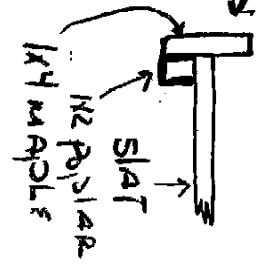
to 3/4"



1x4 slat rests on and  
 is screwed to 1x11  
 slats planed to  
 reduce thickness

28 additional slats

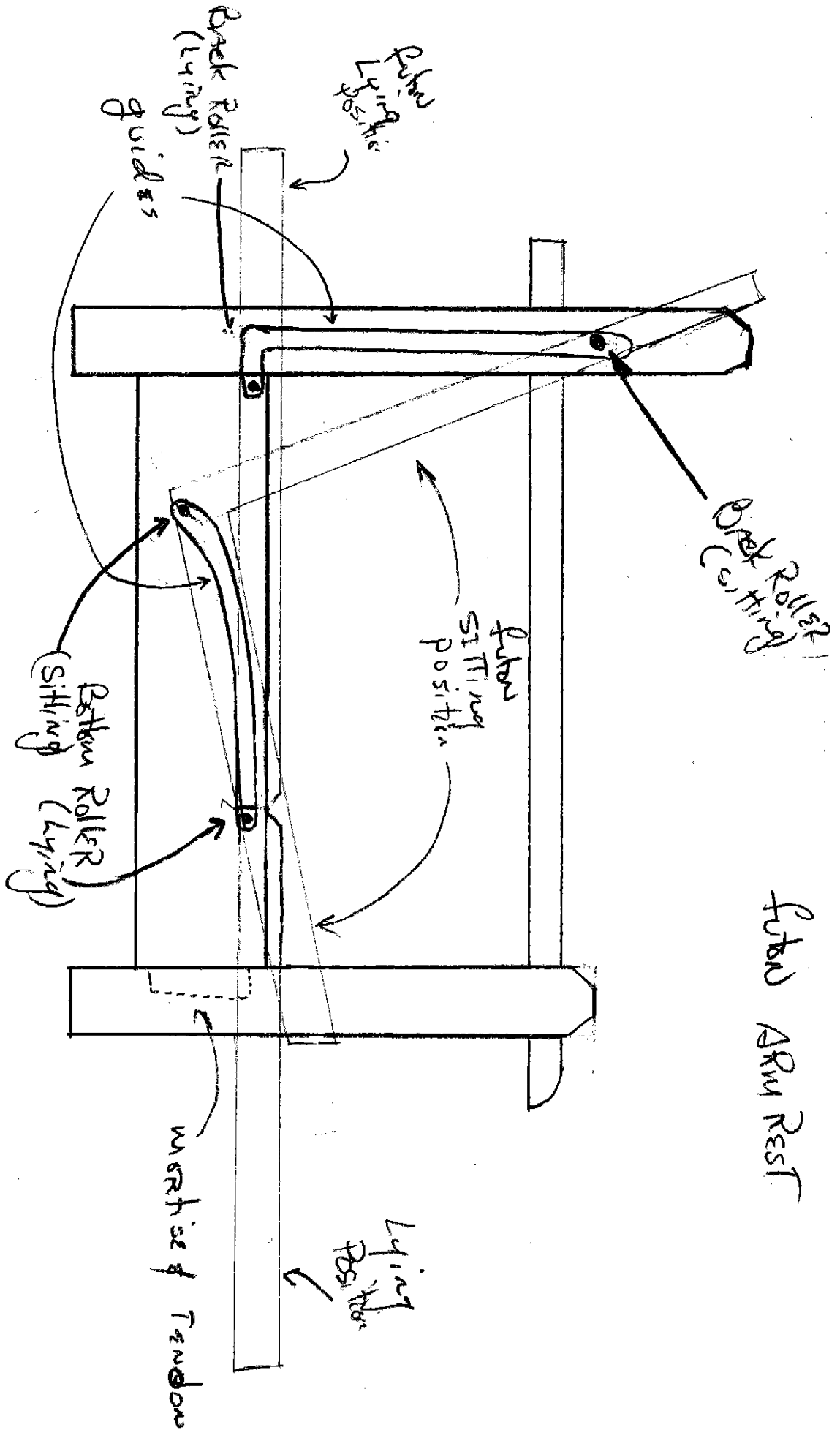
$$10 \frac{2 \frac{3}{4}}{54} \times 4 \times \frac{3}{4}$$

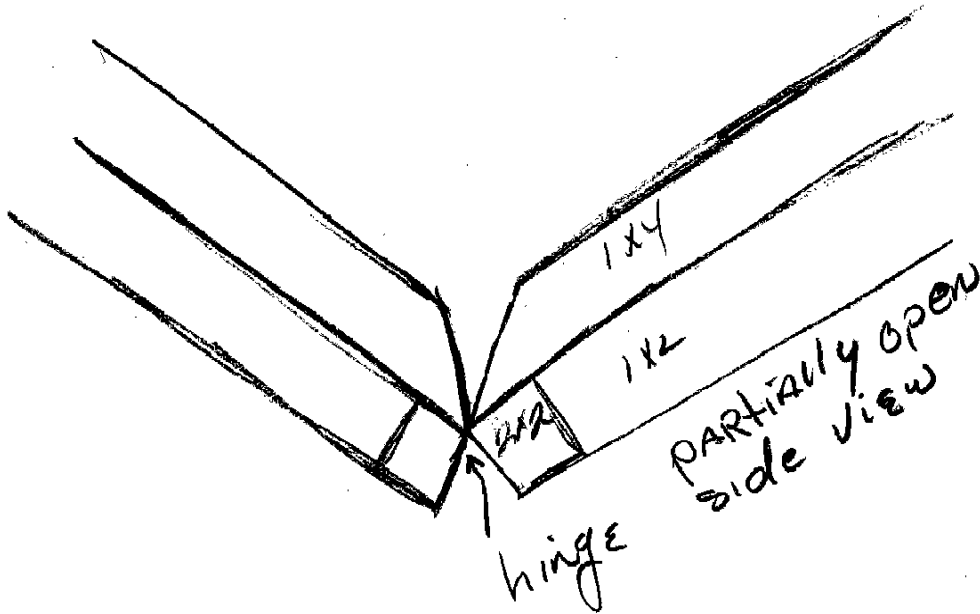
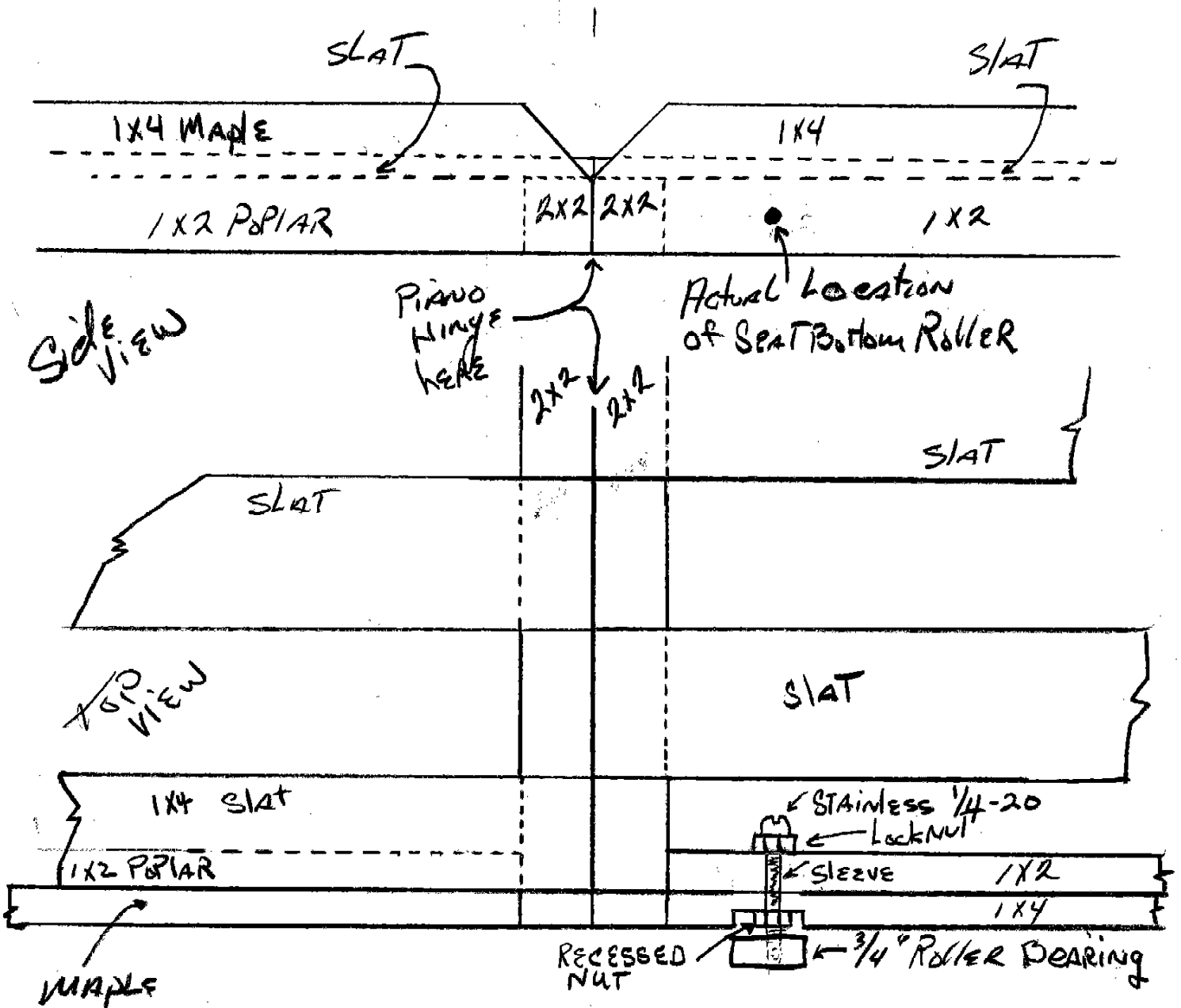
$$10 \frac{2 \frac{9}{4}}{54} \times 4 \times \frac{3}{4}$$


30 5/8  
 29 1/4

26 5/8  
 25 1/4

76





Futon  
Bed Frame Joining  
NOT Scaled