

Subject: RE: bammer

We had it made by a company that someone worked for many years ago. Any welder has the capability to make it, some thoughts; The height of the existing bammer is great, the closed end needs to be flat to use as a hammer, I think it weighs 70lbs and this seems to be the right weight, our bammer has 3 handles - 4 would be better, the handles need to be smooth and not catch on hands.

----- Original Message -----

Subject: Using The "Bammer" in an Eagle Scout Project in Reading

Date: Mon, Sep 20, 2010 at 9:28 PM

We at AVIS have a few different bridges/boardwalks that we use depending upon the ground that we are trying to bridge. First I would suggest that you get a ten foot long piece of 1/2" rebar to probe the ground with to determine if you can drive 4x4 piles into the ground; if it is rocky or hard ground, you may not be able to bam the posts into the ground. And, the probing will tell you how long of a 4x4 to use.

If you can push the rebar into the ground at least two feet then you can bam pointed 4x4's into the muck - we have used 16' footers pounded down 14' into one deep marsh! If you can't easily push the rebar into the ground then I'd suggest a different approach.

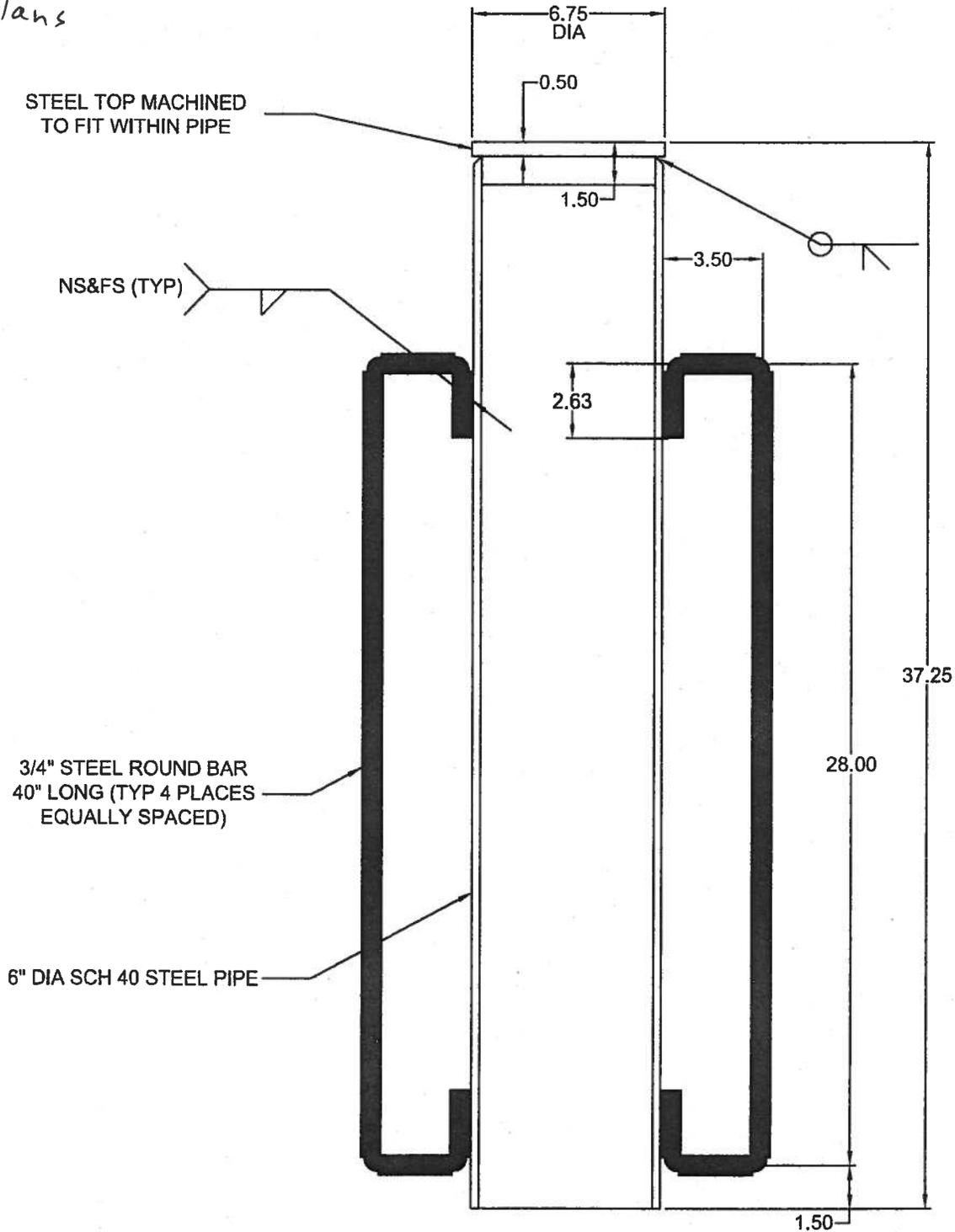
Always use pressure treated lumber and I'd suggest that the lumber yard precut the lumber to length rather than you cutting it at the job site. It's a nominal fee to cut it to length and saves you a lot of time.

You bam the 4x4's into the ground and when you get the 4x4 close to the ground, you turn the bammer over and use it like a hammer to push the 4x4 down. There is always two to four feet of extra 4x4 that sticks up that you cut off later. Also, the 4x4's don't bam into the ground perfectly straight but you will figure out how to make it work out. Try to design the boardwalk so that the superstructure of 4x4's and cross planking is hidden under the 2x6 planking treads and the final product will look good to the eye.

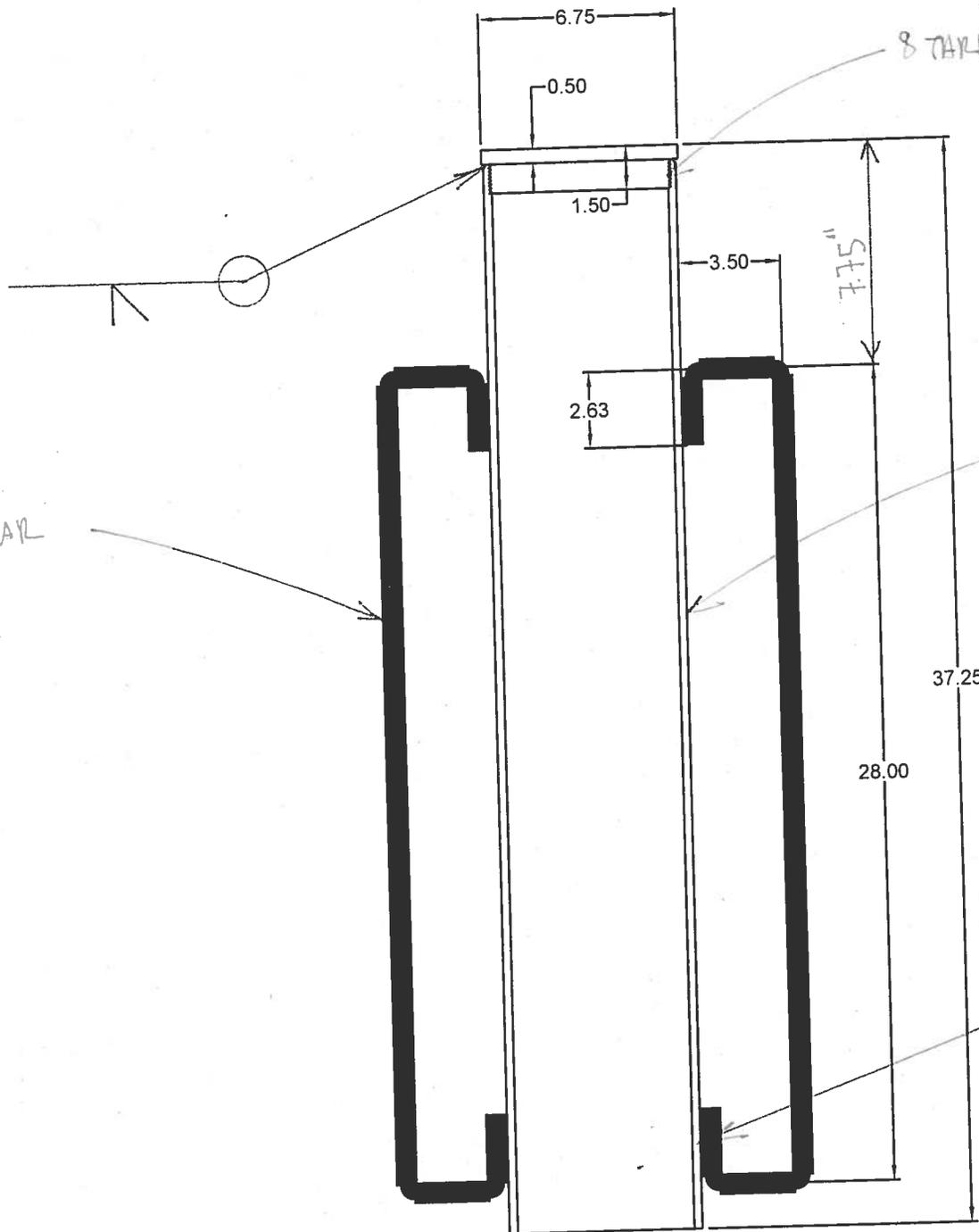
Plan the boardwalk to be level from end to end and more importantly, level side to side, otherwise when there is a coating of frozen ice on the boardwalk in the winter, people will not be able to safely use it.

Mr. Dargie
(Andover Village Improvement Society)

"Bammer" Plans



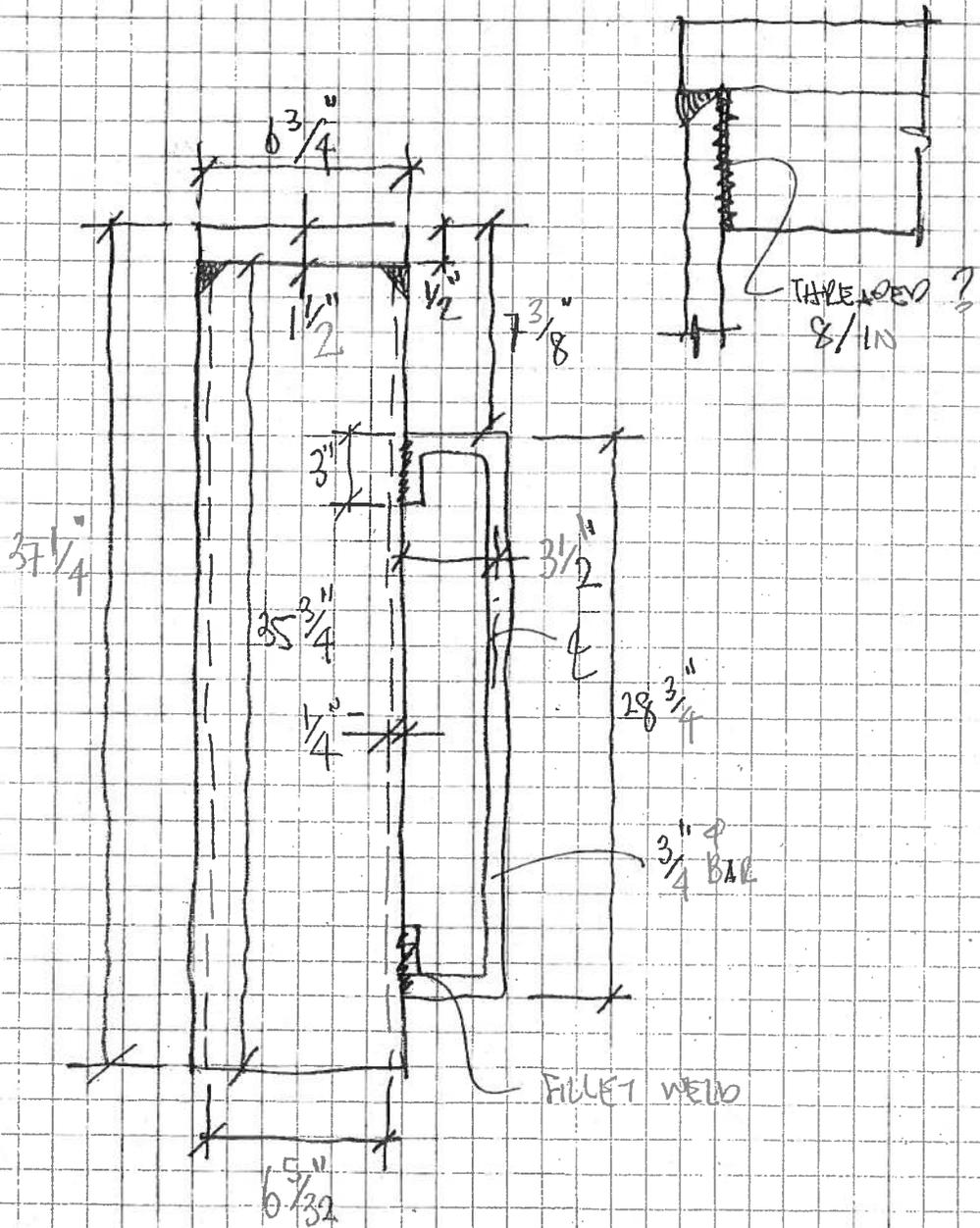
8 THREADS PER INCH



3/4" ROUND BAR
40" LONG
4 TOTAL

6" SCH. 40
STEEL

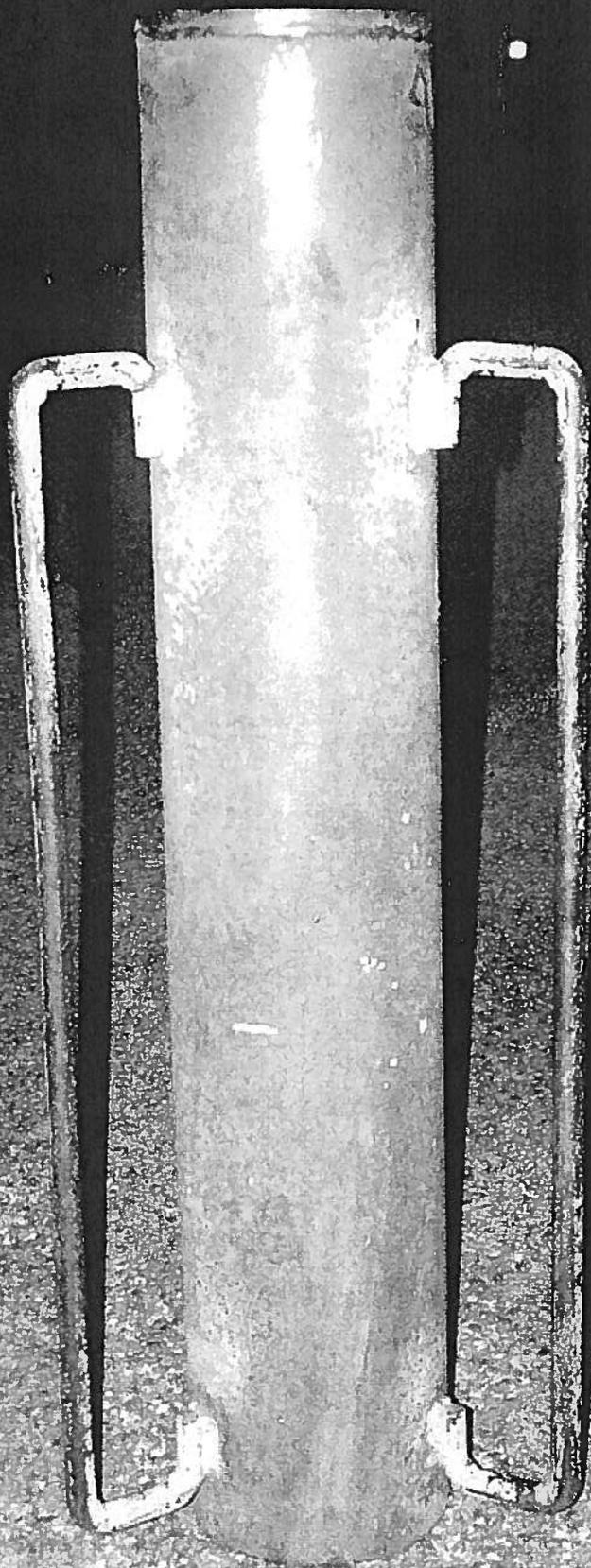
2" TYP.



$$36 \frac{5}{4} - 35 \frac{3}{4} = 1 \frac{1}{2}$$

$\frac{1}{2} = 0.28 \text{ IN}$
 $OD = 6.63 \text{ IN}$
 $ID = 6.07 \text{ IN}$
 $WT = 18.98 \text{ PP}$

Total WT:
 $36 \frac{3}{4} / 12 \times 18.98 \text{ PP} = 58 \text{ | 12}$
 35
 148
 864



The Bammer

-David Dargie

The Bammer is AVIS' secret to boardwalk construction. The Bammer is a hollow cylinder that is closed on the top and fits over a 4-by-4 support post (see picture at right). The Bammer's job is to sink support posts for the boardwalk through 3 to 16 feet of muck until it hits solid ground. Its 70 pound weight does the trick, that and the muscle-power of two or three people.

To determine how long a given support post should be, a long metal rod is used to probe the depth of the muck. The necessary length differs for each boardwalk and even along an individual boardwalk. The average below-ground length is 3 to 6 ft, but 16 ft. lengths are not unheard of. An additional 2 ft length extends above ground to support the boardwalk itself. After putting a rough point on one end of the support post, the Bammer is placed on the other end. In the beginning, each bam drives the support post six inches into the ground, but by the end each bam drives the post only a 1/4 inch. So there are between 20 and 100 bams for each post until it reaches solid earth. At that point the Bammer drivers are completely worn out and rest while planning the next post to set.

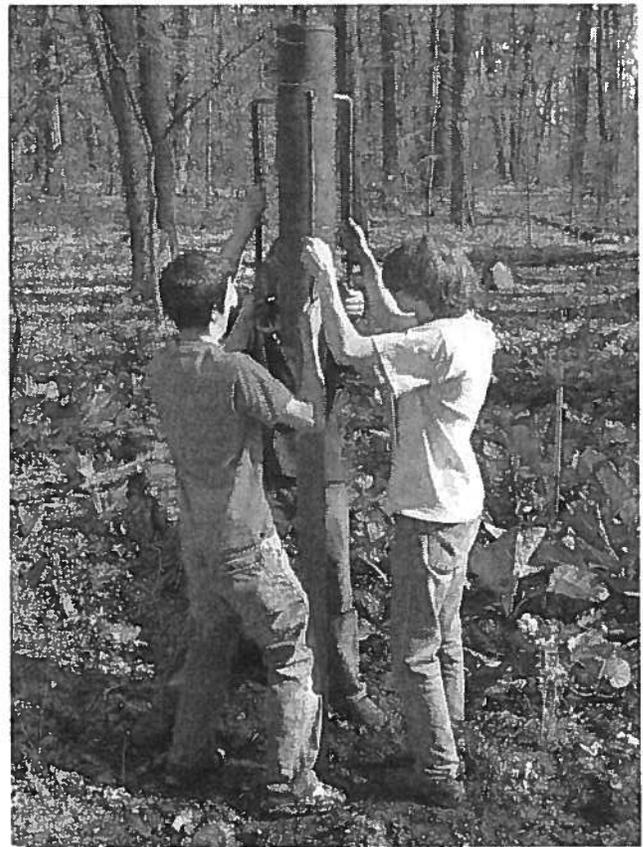


Photo by Mark Cutler

PA students Hank Williams, Ian Wollman and Wolfgang Siewert lift the Bammer to drop it on a support post for the new Stanley Reservation boardwalk.

The Saga of the Bammer's First Boardwalk

-Nat Smith

The Bammer's first use was in the early 80's for the creation of our first big boardwalk, the one behind the High School joining Indian Ridge to the West Parish Meadow. I had approached some contractors to see what it might cost to construct the same. They said it was impossible; machines couldn't get in there and any man would refuse to stand in gunk such that you sink a foot at your first step. But I had seen these lovely boardwalks in National Parks in Florida and thought that there has got to be a way. Shortly thereafter, I was on the trails on Plum Island. They were gorgeous, built on quicksand-like land and just what I wanted. So I asked around and found the local guy who had made the boardwalks. I met with him and he suggested that I just take his Bammer, use it and copy it if I wanted. Wow.

Al Koch arranged to have a copy of the bammer made for AVIS. Now we were set to make the boardwalk. For human power I turned to my 21-year-old son Scott and we hired another young guy from town. David Dargie and I suggested the lay-out through the swamp with plenty of turns for strength and interest. We bought treated 4-by-4s about 10 feet long and

showed the boys how to use the Bammer to get them down in the ground. Use an axe to make a point on one end, then put the Bammer on the other end and bam a lot. It worked beautifully for about eight posts. They hung the cross pieces and then nailed on the joists above those cross pieces. Piece of cake.

Until one day the Bammer sunk a ten-footer all the way into the ground, all ten feet of it. We had told these bammer boys to bam each vertical 4-by-4 down until it hard-panned and couldn't go down any more.

So now we order 12 and 14 footers. Some of them went all the way down too, but more seriously the increasing length of the 4-by-4s meant the bammer placed on top of the vertical

4-by-4 was now so high up in the air that only 10-foot-tall humans could reach the Bammer handles to do the bamming. I recall vividly the day when I went out there to watch these guys in muck nearly up to their knees with a very long 4-by-4, pointed at one end with a Bammer on the other end so high up that you couldn't touch the bottom of the 4-foot-longer bammer. "So what do

They said it was impossible ... any man would refuse to stand in gunk such that you sink a foot at your first step.