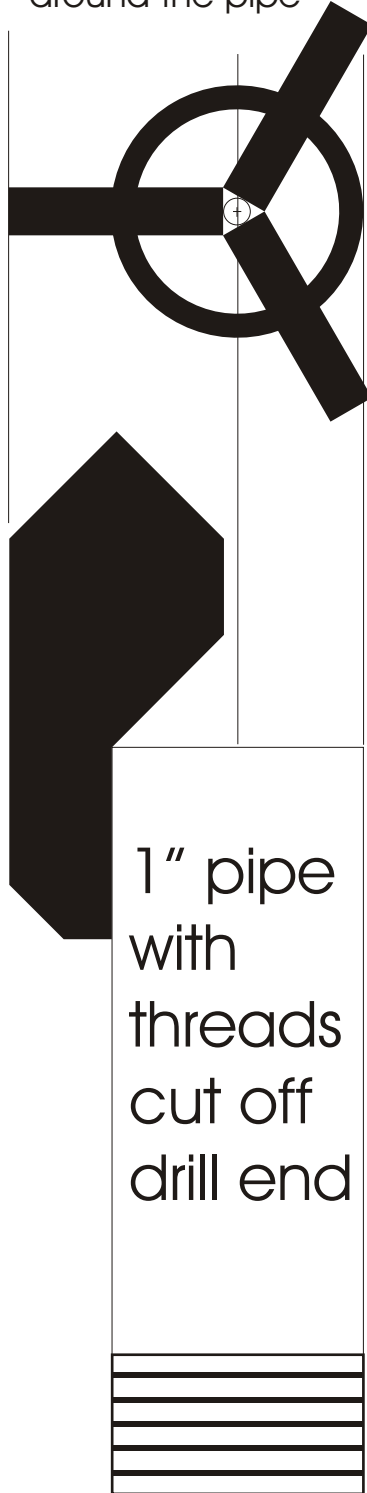


Three teeth
mounted equidistant
around the pipe



1" nominal pipe size
1 5/16" OD actual

2.375" bore hole drill bit

teeth made from 0.25" metal

teeth end 0.07" from center
for edges to line up

for CNC machines
a tooth can be made
from the following
lines and angles

-90 for 1"
180 for 0.25"
135 for 0.4"
90 for 1.8"
45 for 0.79"
-45 for 0.79"
-90 for 0.5"
-135 for 0.82

weld both sides of the teeth to
the pipe and to each other
where they come together,

Print PDF with scaling = none
print graphic at 100 dpi
here is a 6" reference line