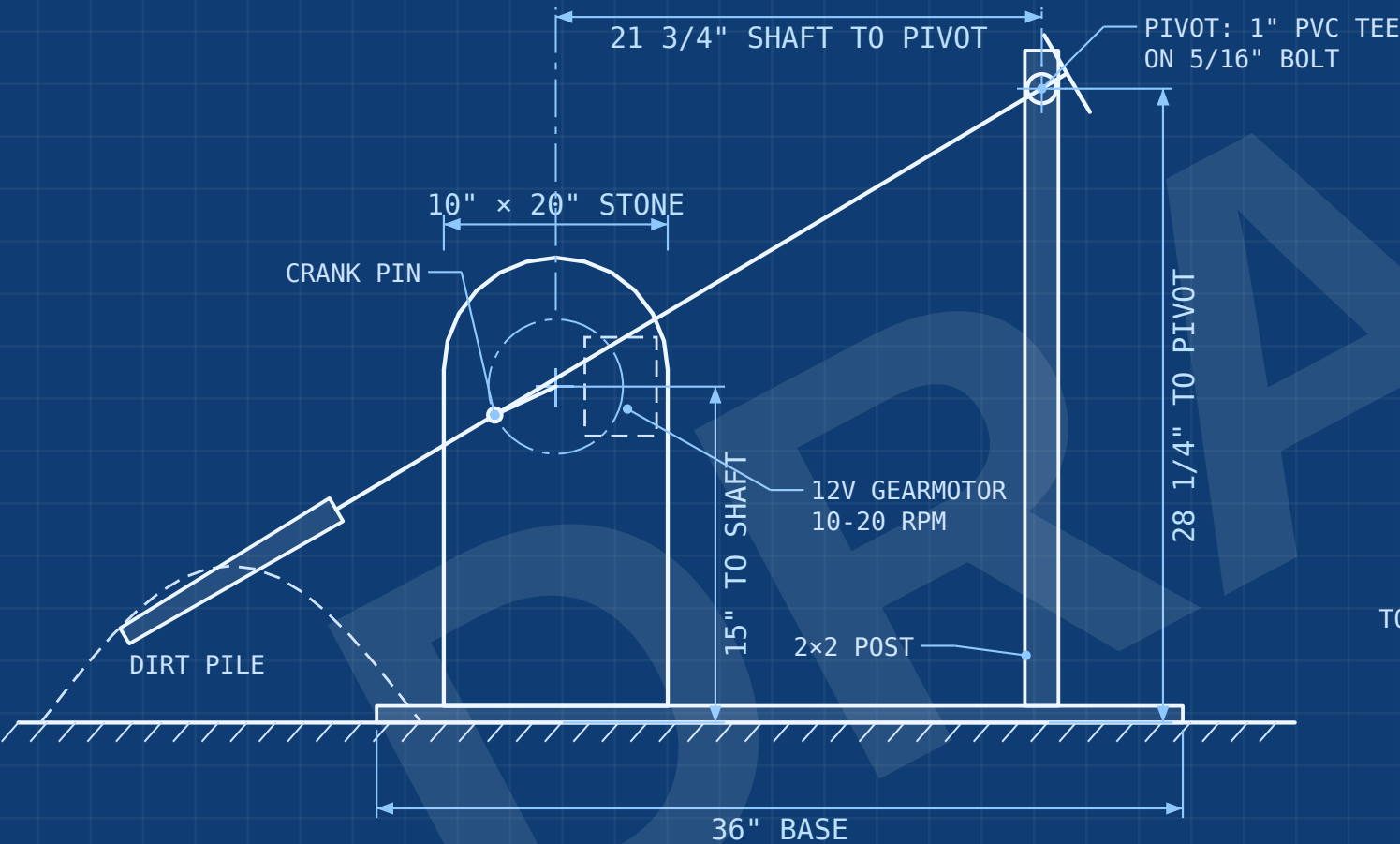
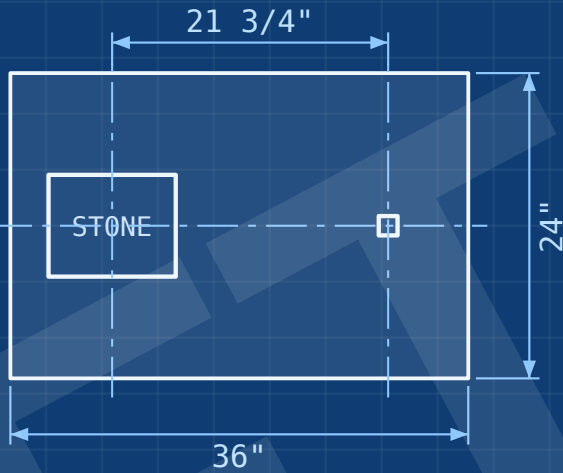


SIDE ELEVATION

SHOVEL SHOWN MID-SCOOP · GUESTS ON THE LEFT

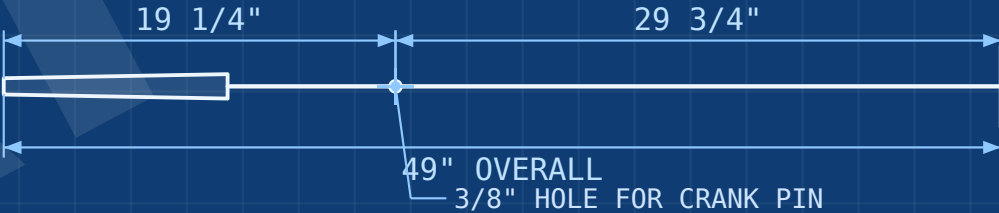


TOP VIEW · BASE



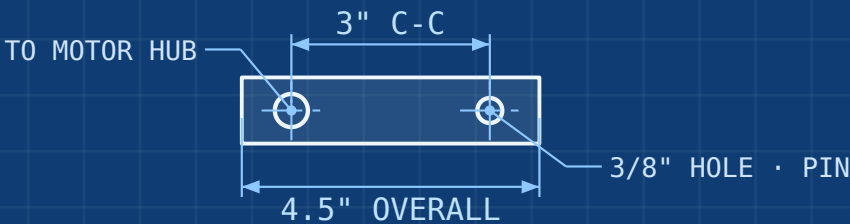
DETAIL B · SHOVEL

CUT THE HANDLE DOWN TO 49" OVERALL



DETAIL A · CRANK ARM

1/4" x 1" STEEL FLAT BAR



NOTES

1. All dimensions in inches.
2. Motor shaft centerline 15" above the ground, pointing sideways, parallel to the long edge of the base.
3. Drill the shovel shaft 3/8" at 19 1/4" from the blade tip and bolt it to the crank pin with washers and a nylock nut, free to turn.
4. Pivot center 28 1/4" above the ground and 21 3/4" behind the motor shaft. The handle must slide freely through the tee.
5. Turn the crank by hand before powering it. The blade must clear the base and the handle must stay in the tee.

CUT LIST & HARDWARE

QTY	PART	SIZE / SPEC
1	Base, 3/4" plywood	24 x 36
1	Post, 2x2	30" long
1	Stone housing	10 x 20, foam
1	12V gearmotor	10-20 RPM
1	Crank, 1/4" flat bar	1 x 4 1/2"
1	1" PVC tee + bolt	5/16" x 3 1/2"
1	Shovel, cut down	49" overall
1	Crank pin bolt	3/8" x 2" + nylock
1	Diode across motor	1N5400

PROP CONTROL · DIY PROJECT 01

PHANTOM GRAVEDIGGER

Slider-crank shovel · 12V gearmotor

SCALE	UNITS	SHEET
NOT TO SCALE	INCHES	1 OF 1
REV	DATE	DRAWN
A	2026-10-13	PROP CONTROL