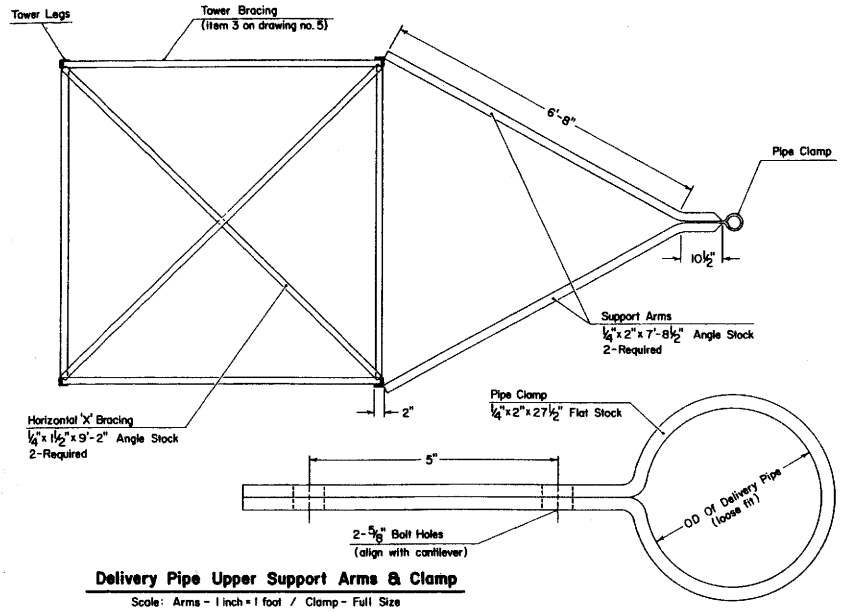
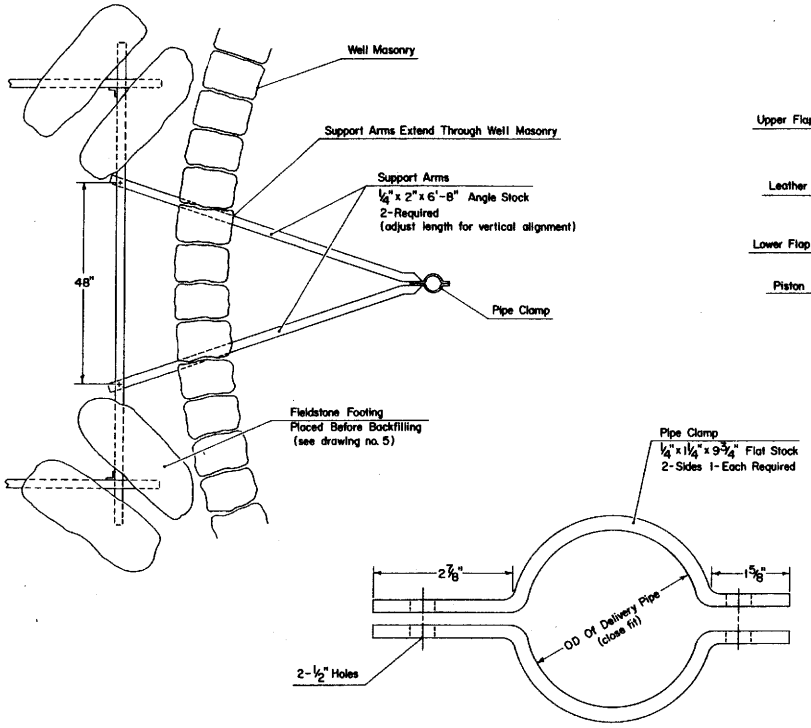
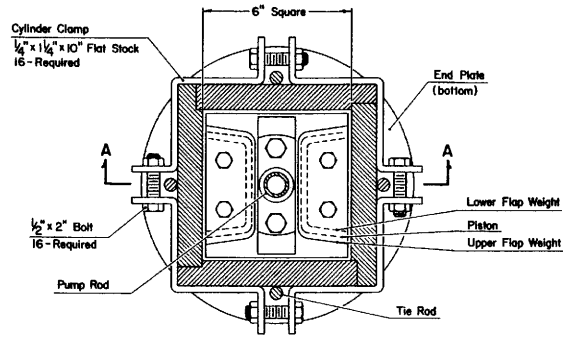


Delivery Pipe Upper Support Arms & Clamp

Scale: Arms - 1 inch = 1 foot / Clamp - Full Size

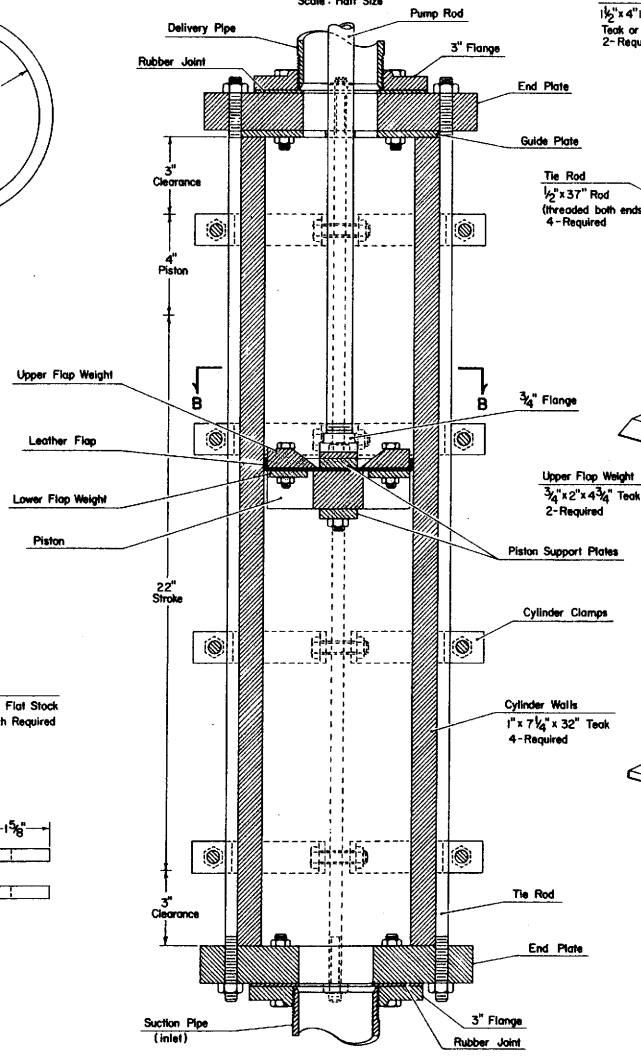


Delivery Pipe Lower Support Arms & Clamp

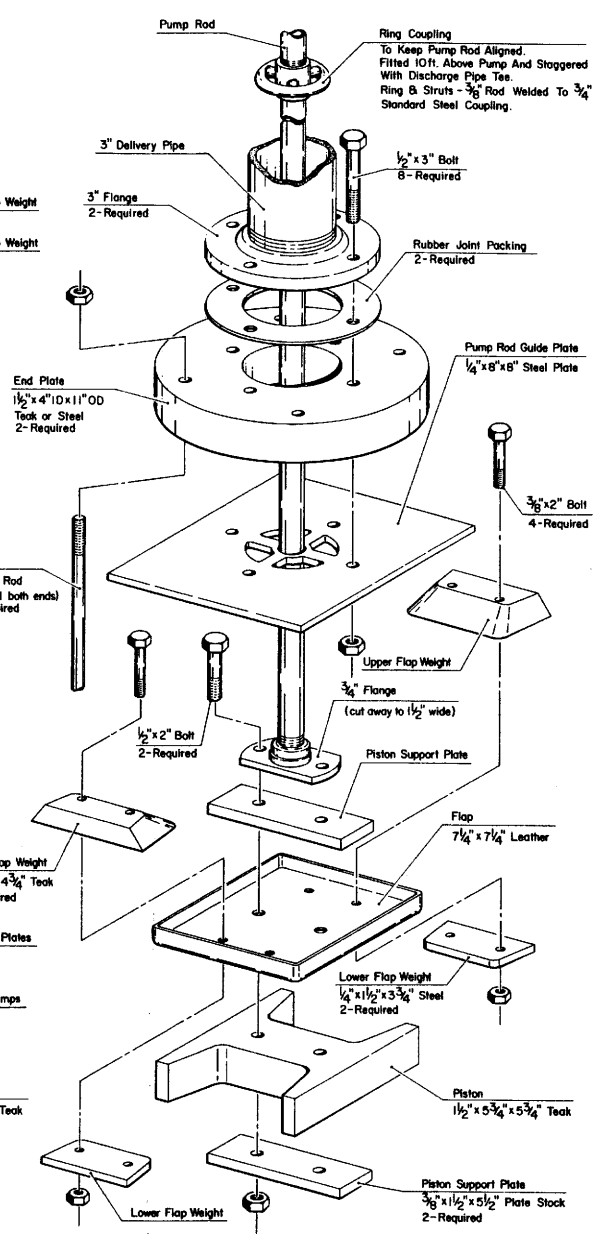


Section View B-B Cylinder & Piston

Scale: Half Size



Section View A-A Cylinder & Piston



Exploded View - Piston Assembly

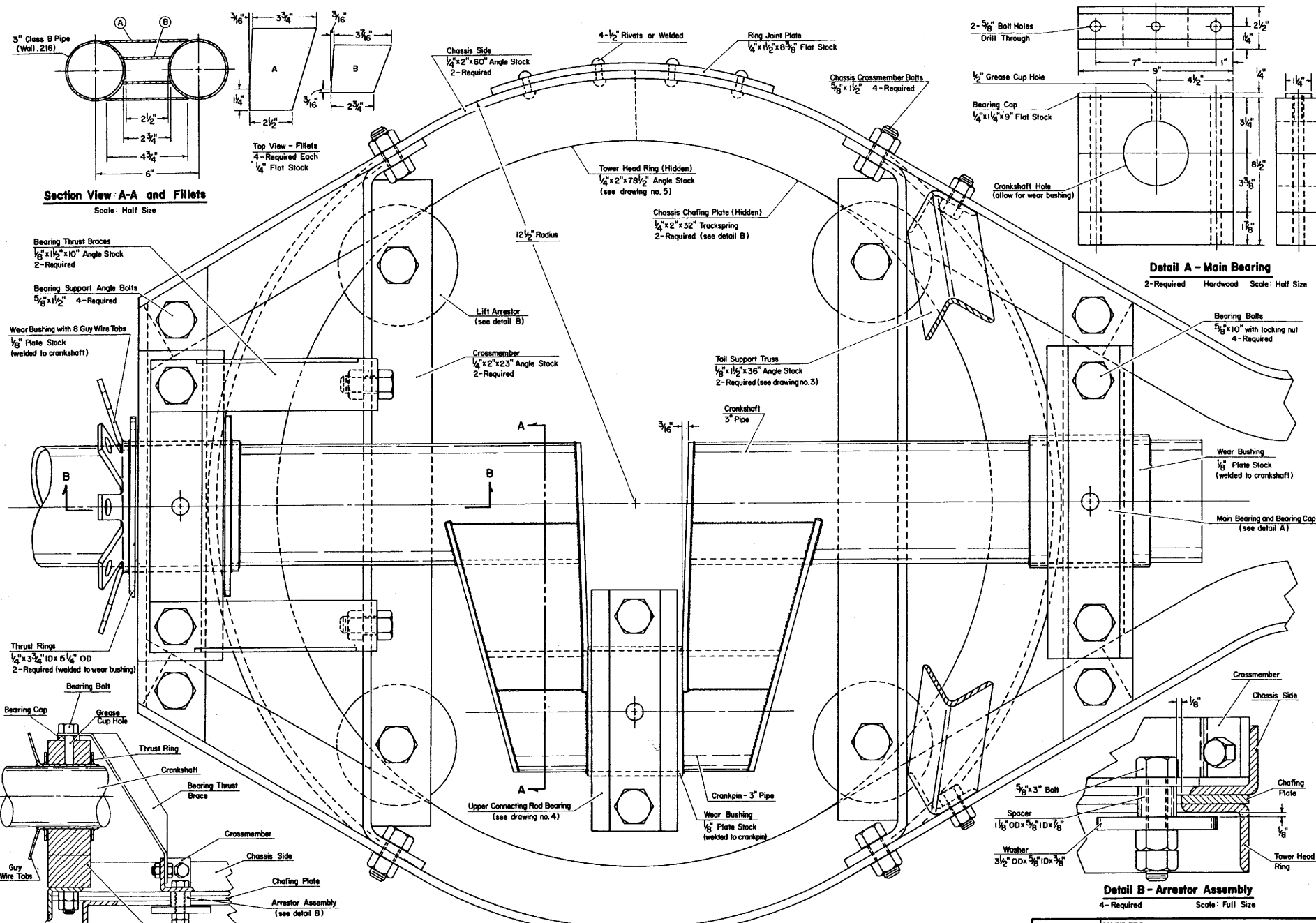
Do Not Scale

VITA
VOLUNTEERS IN TECHNICAL ASSISTANCE
1815 NORTH LYNN STREET
ARLINGTON, VIRGINIA 22209 USA

PROJECT TITLE
24 Ft. Dia. Sailwing Windmill

DRAWING TITLE
Upper & Lower Delivery Pipe Support Arms & Clamps And Teakwood Piston Pump

DESIGNED BY	DRAWN BY	APPROVED BY	SCALE	DRAWING NUMBER
W.Smith	W.Gensel			1

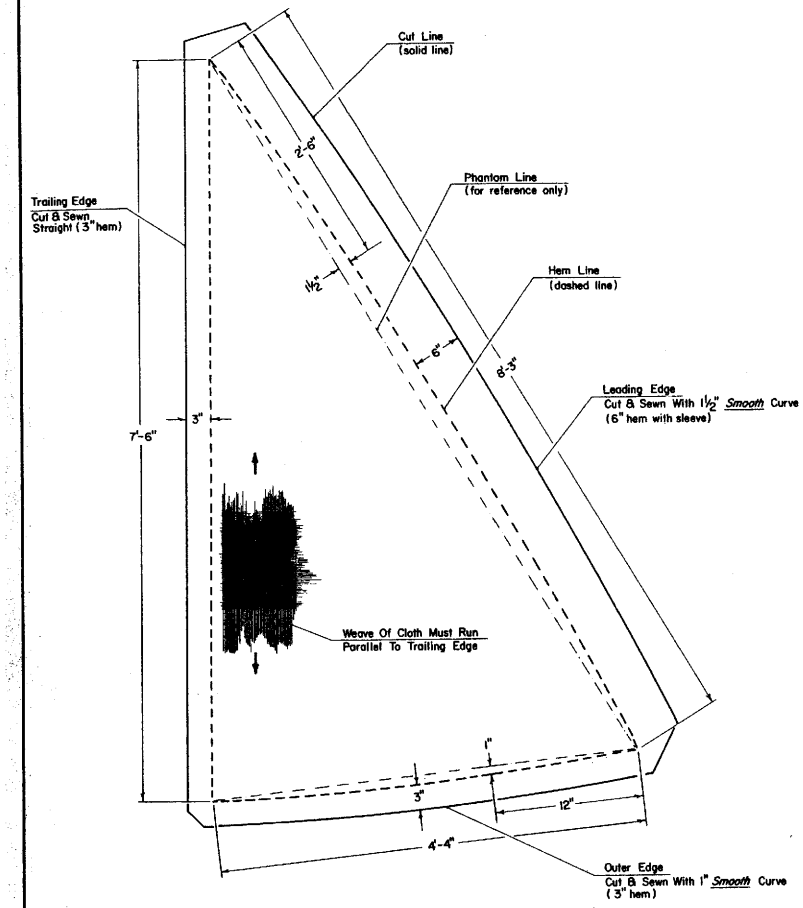


VITA
3849 NORTH LYNN STREET
ARLINGTON, VIRGINIA 22207 USA

PROJECT TITLE
24 Ft. Dia. Sailwing Windmill

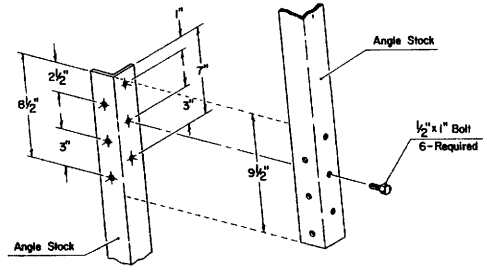
DRAWING TITLE
Reciprocating Chassis Assembly
With Crank, Lift Arrestor & Main Bearing

DESIGNED BY	DRAWN BY	APPROVED BY	SCALE	DRAWING NUMBER
W. Smith	W. Gensel			2



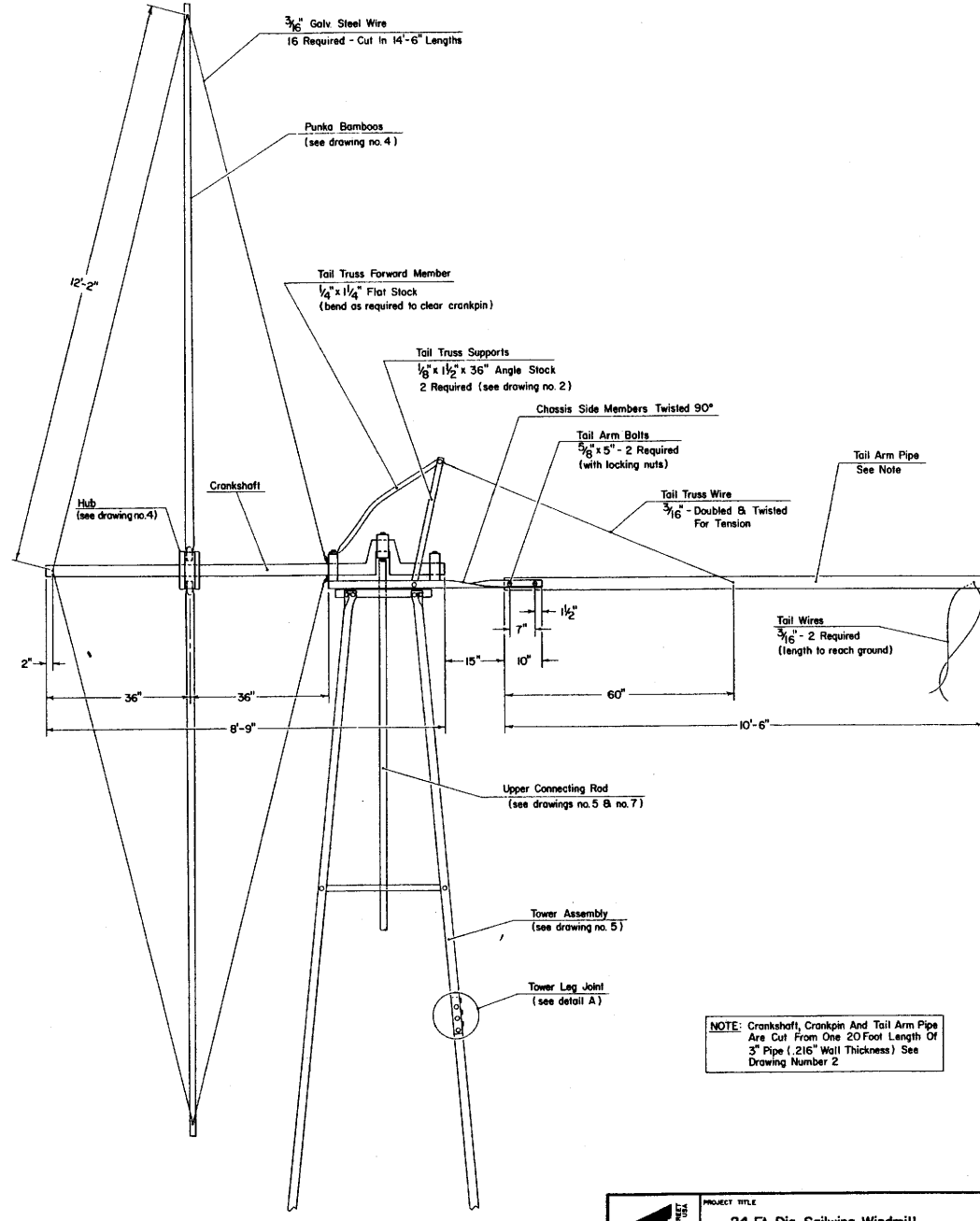
Sail Cutting Pattern

8 Required Scale: 2 inches = 1 foot



Detail A - Tower Leg Joint

As Required



Side View - Punka And Tail Arm Assembly

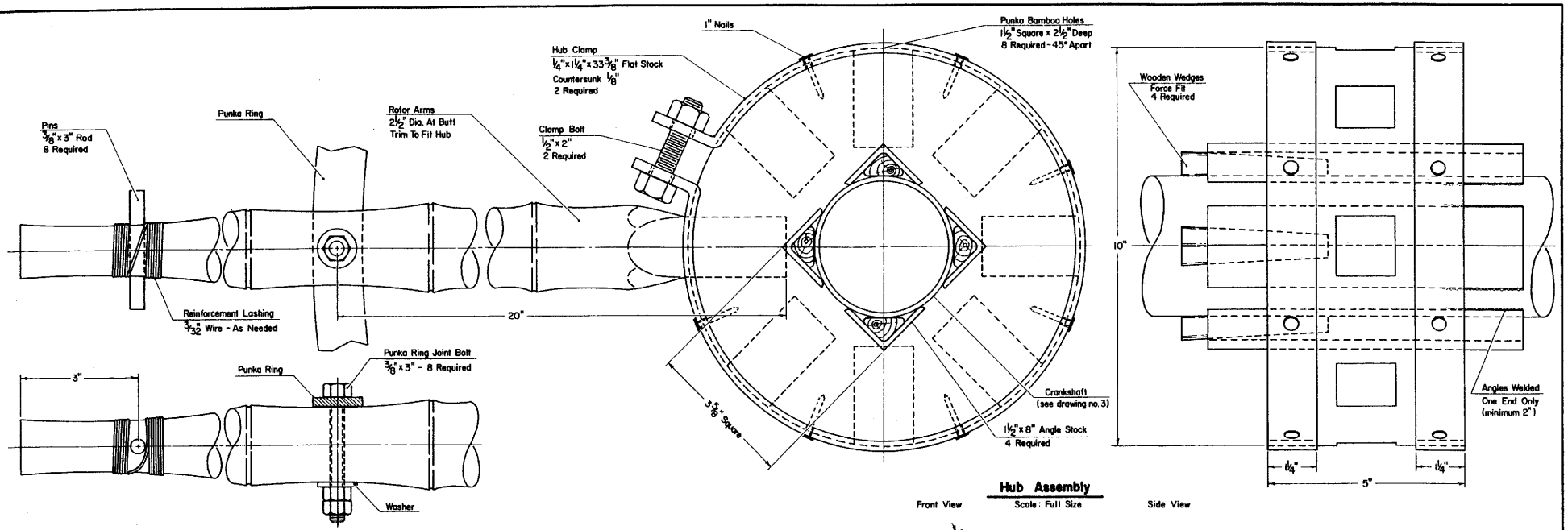
NOTE: Crankshaft, Crankpin And Tail Arm Pipe Are Cut From One 20 Foot Length Of 3" Pipe (.216" Wall Thickness) See Drawing Number 2

VITA
3706 NORTH LYNN STREET
ARLINGTON, VIRGINIA 22207 U.S.A.

PROJECT TITLE
24 Ft. Dia. Sailwing Windmill

DRAWING TITLE
Punka And Tail Arm Assembly
& Sail Cutting Pattern

DESIGNED BY	DRAWN BY	APPROVED BY	SCALE	DRAWING NUMBER
W.Smith	W.Gensel			3

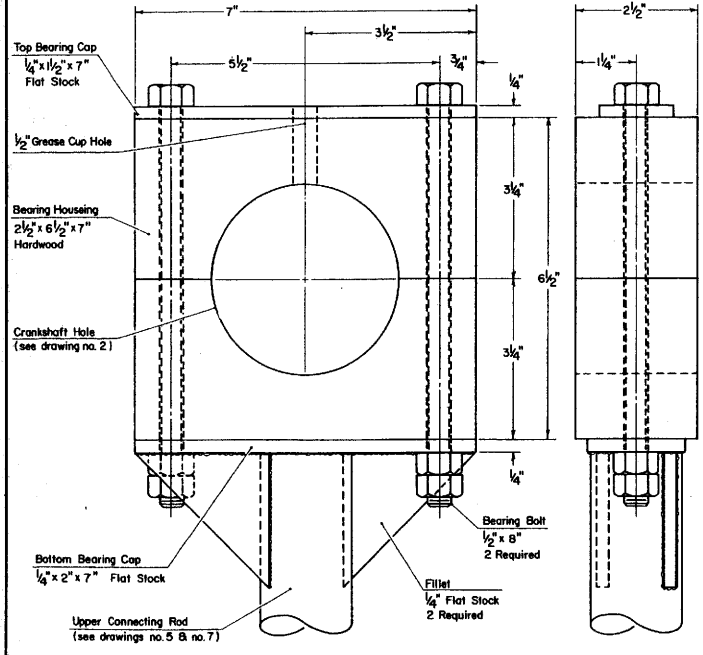


Hub Assembly

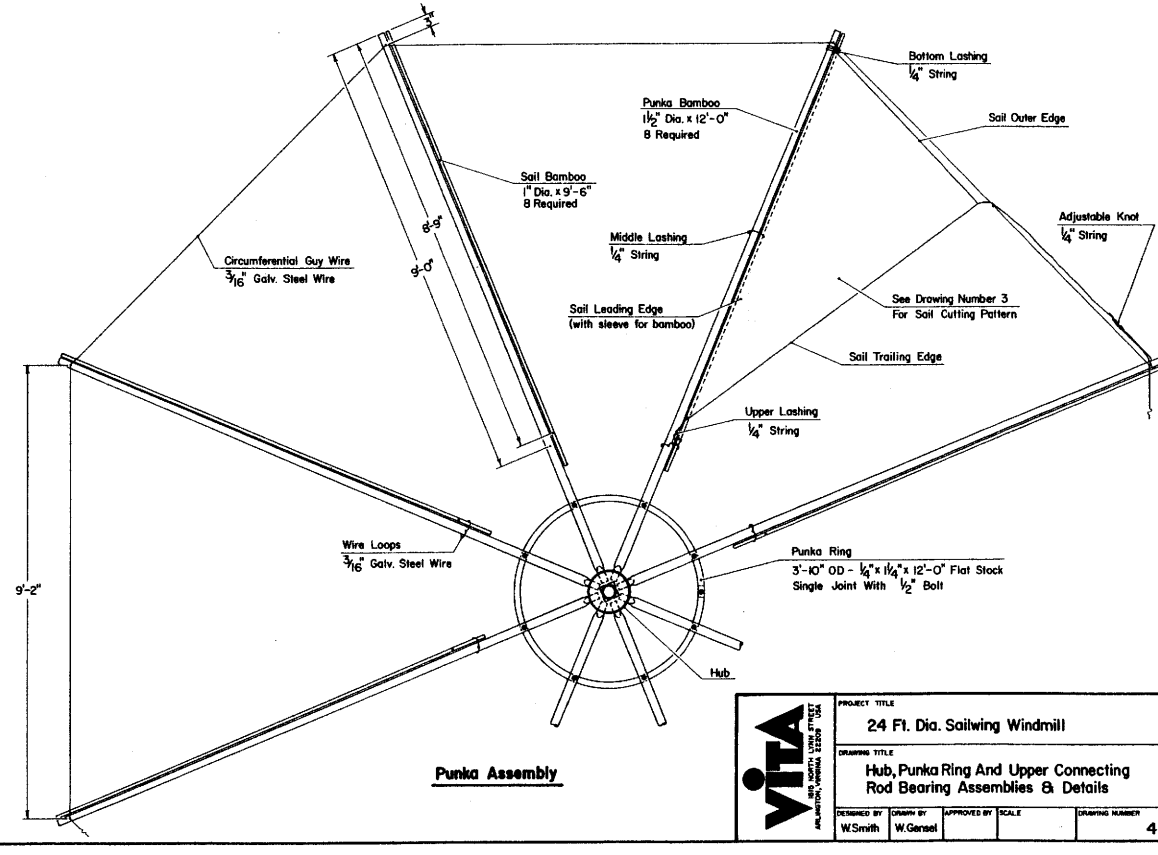
Scale: Full Size

Top View - Bamboo Tip And Punka Ring Joint

Scale: Full Size



Upper Connecting Rod Bearing



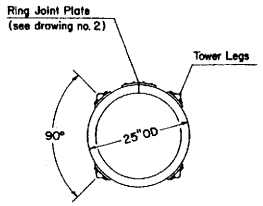
Punka Assembly

VITA
3706 NORTH LYNN STREET
ARLINGTON, VIRGINIA 22207 USA

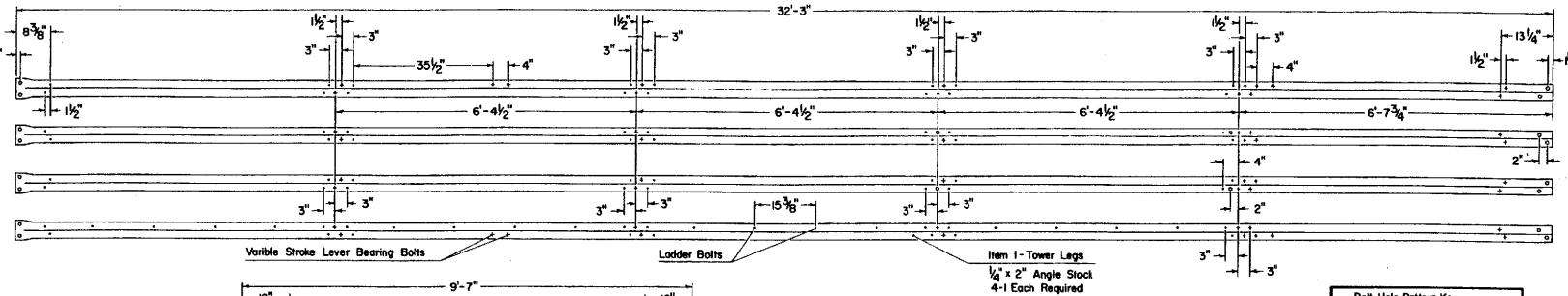
PROJECT TITLE
24 Ft. Dia. Sailwing Windmill

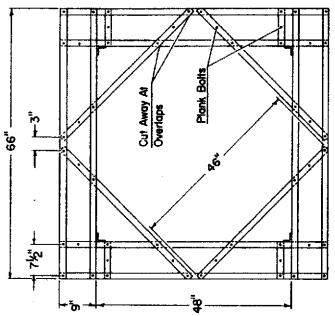
DRAWING TITLE
Hub, Punka Ring And Upper Connecting Rod Bearing Assemblies & Details

DESIGNED BY	DRAWN BY	APPROVED BY	SCALE	DRAWING NUMBER
W.Smith	W.Gensel			4

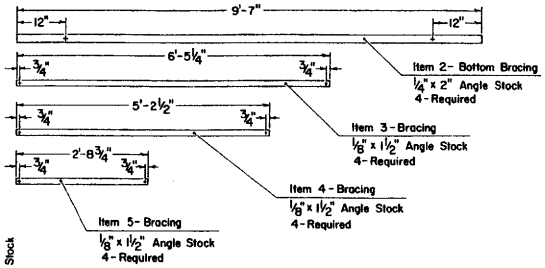


Detail A - Tower Head Ring



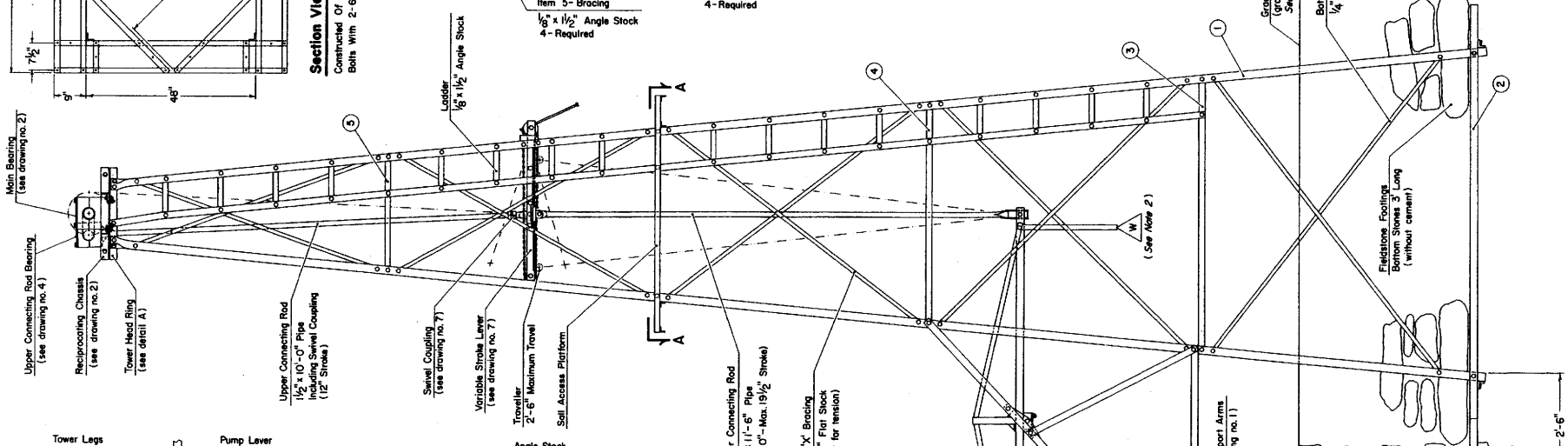


Section View A-A Platform
Constructed Of ⅛" x 1½" Angle Stock And ⅜" Bolts With 2-66" & 2-48" Wood Planks

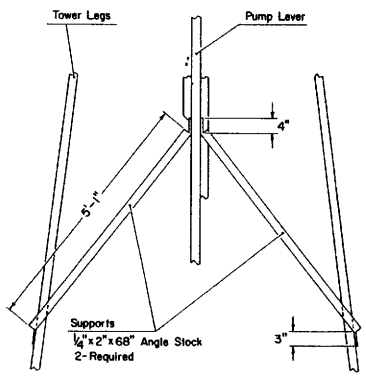


Tower Legs & Bracing Bolt Hole Patterns

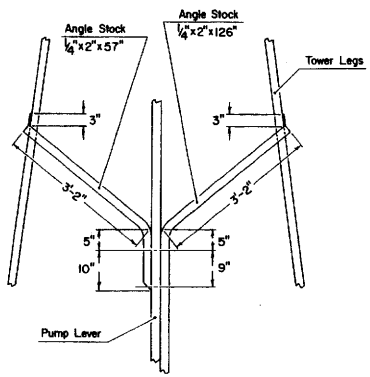
Bolt Hole Pattern Key		
Symbol	Hole Size	From Angle Edge
○	⅝"	1"
+	½"	⅞"
·	⅜"	⅞"



Tower And Pump Lever Assembly



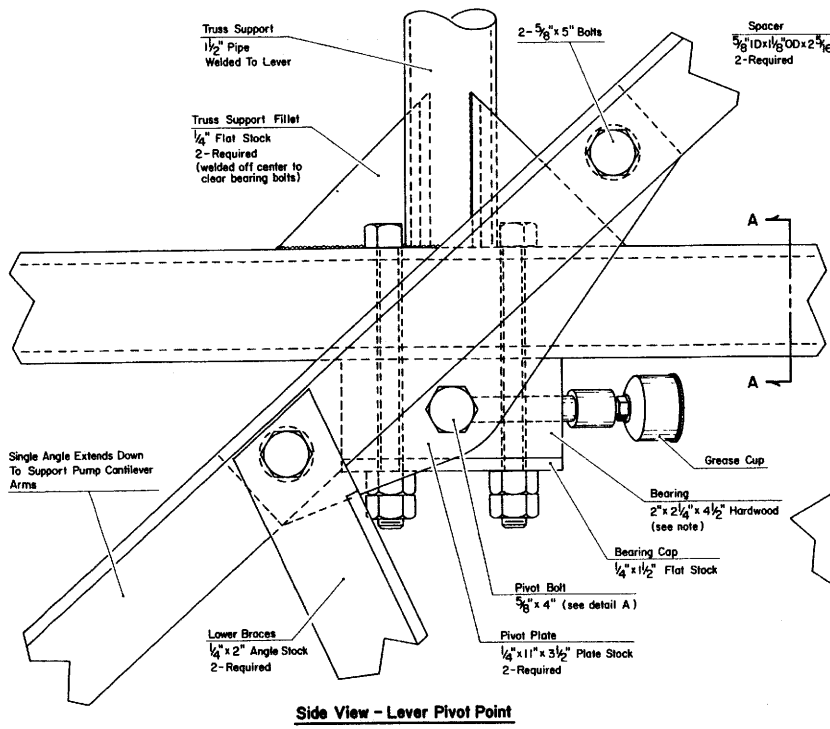
View A - Lever Lower Supports



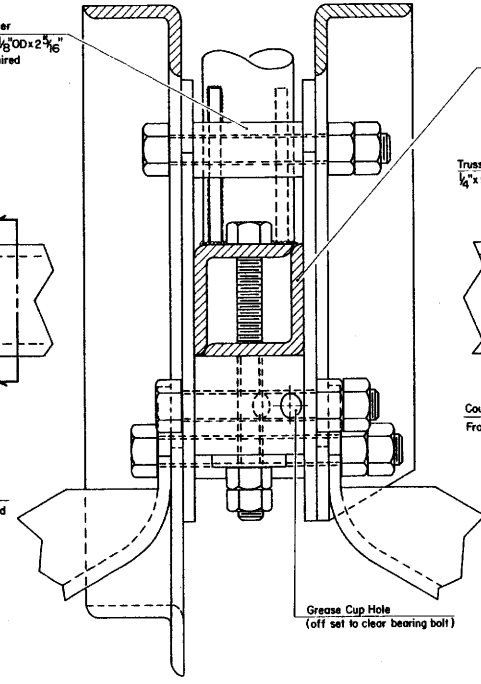
View B - Lever Upper Supports

NOTE 1. All Buried Stock To Be Coated With Pitch At The Time Of Assembly
NOTE 2. Weight (W) = Weight Of Pump Rod Plus One Half Of The Water Column Weight

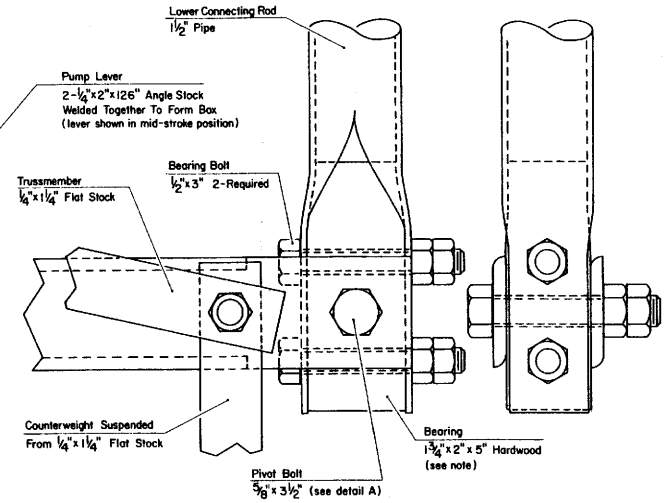
VITA 815 NORTH LYNN STREET ARLINGTON, VIRGINIA 22209 USA	PROJECT TITLE: 24 Ft. Dia. Sailwing Windmill				
	DRAWING TITLE: Tower And Pump Lever Assembly With Bolt Hole Patterns				
	DESIGNED BY: W.Smith	DRAWN BY: W.Gensel	APPROVED BY:	SCALE: 1 inch = 1 foot	DRAWING NUMBER: 5



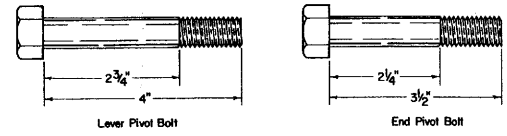
Side View - Lever Pivot Point



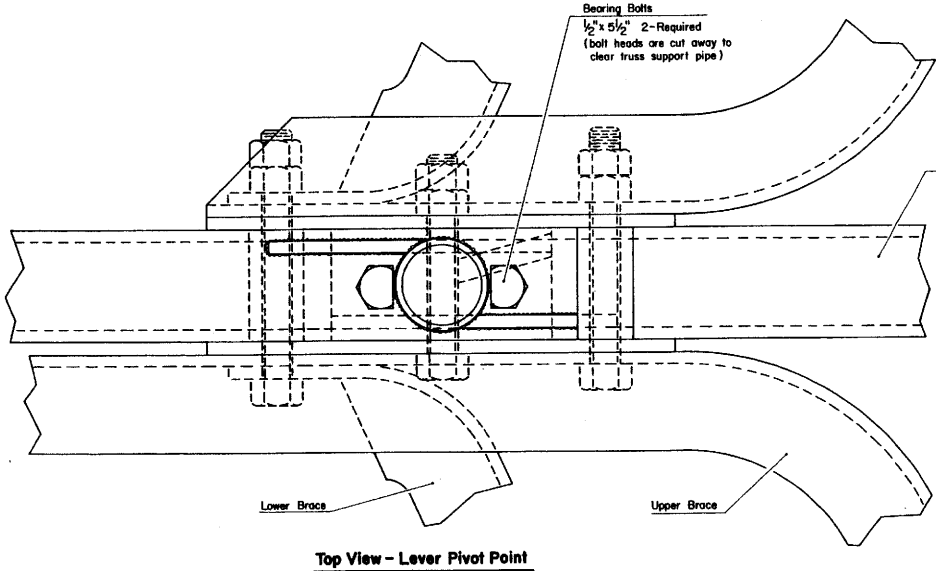
Section View A-A



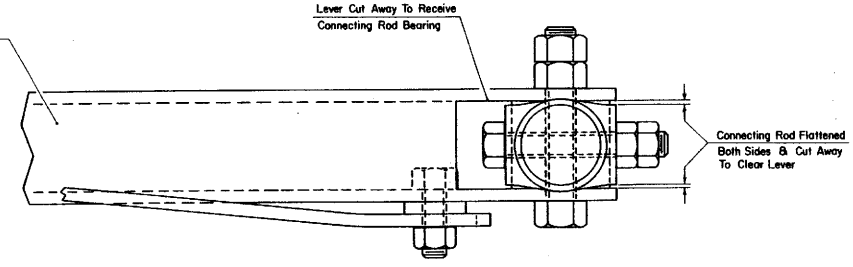
Lever End Pivot



Detail A - Pivot Bolts



Top View - Lever Pivot Point



NOTE: Replace Bearings Whenever Play Exceeds ½"

Top View - Lever End Pivot

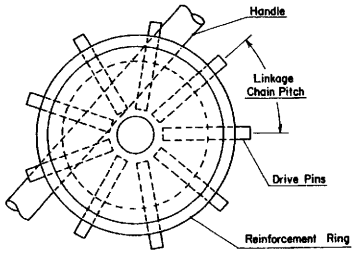
Optional Grease Cup Omitted

VITA
VOLUNTEERS IN TECHNICAL ASSISTANCE
ARLINGTON, VIRGINIA 22209 USA

PROJECT TITLE
24 Ft. Dia. Sailwing Windmill

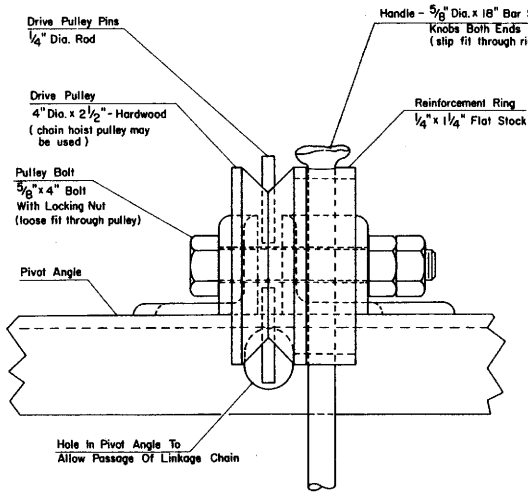
DRAWING TITLE
Pump Lever Pivot Point Assembly With Lower Connecting Rod Pivot Point Assembly

DESIGNED BY	DRAWN BY	APPROVED BY	SCALE	DRAWING NUMBER
W.Smith	W.Gensel			6



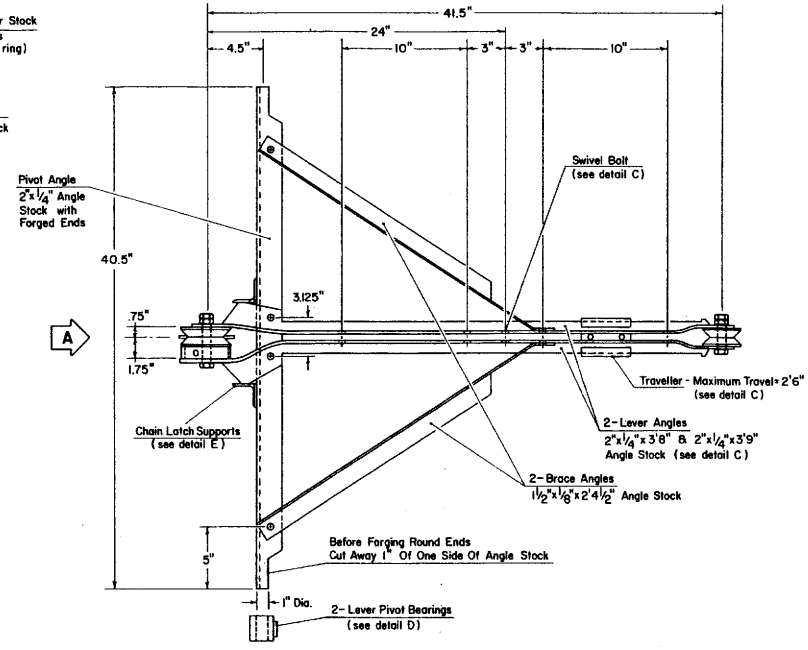
Detail A - Linkage Drive Pulley

Side View Scale: Full Size



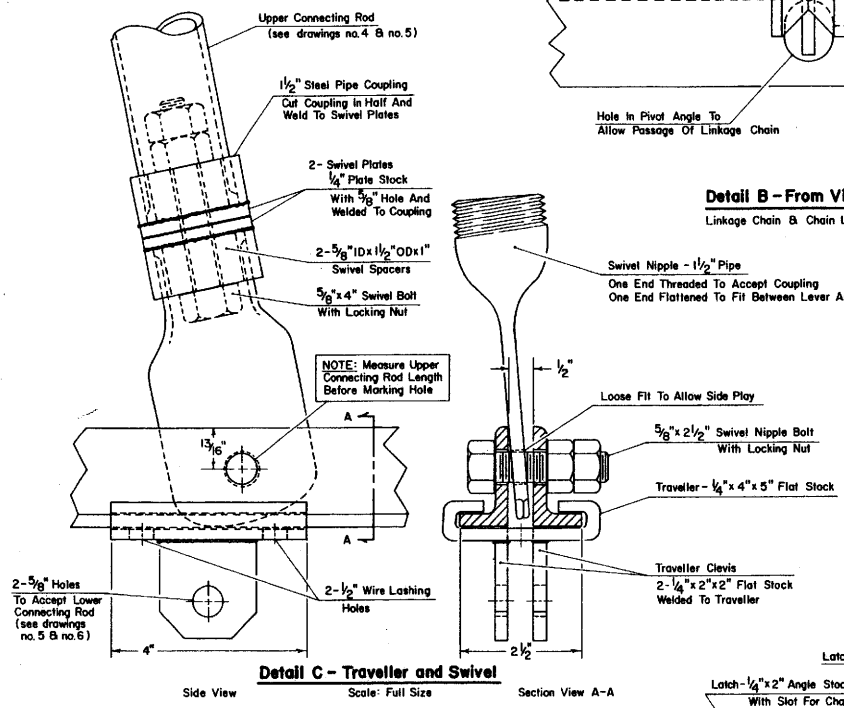
Detail B - From View 'A' - Drive Pulley

Linkage Chain & Chain Latch Omitted Scale: Full Size



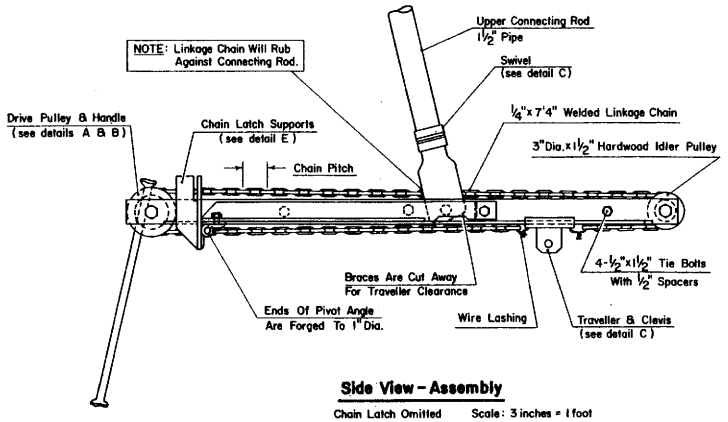
Top View - Assembly

Linkage Chain & Chain Latch Omitted
Scale: 3 inches = 1 foot



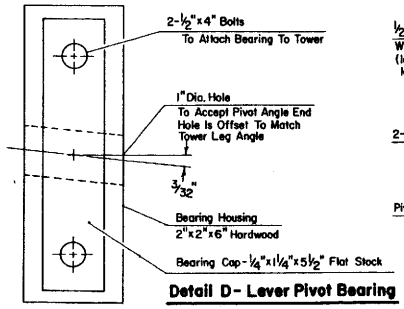
Detail C - Traveller and Swivel

Side View Scale: Full Size Section View A-A



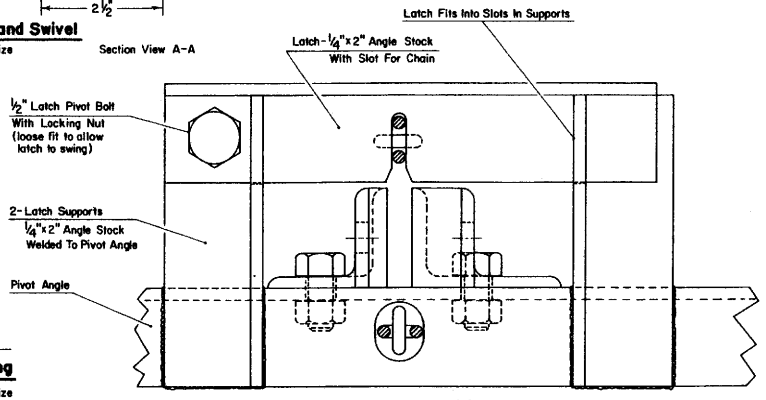
Side View - Assembly

Chain Latch Omitted Scale: 3 inches = 1 foot



Detail D - Lever Pivot Bearing

2 Required Scale: Full Size



Detail E - From View 'A' - Linkage Chain Latch

Drive Pulley Omitted

VITA
3706 NORTH LYNN STREET
ARLINGTON, VIRGINIA 22207 USA

PROJECT TITLE
24 Ft. Dia. Sailwing Windmill

DRAWING TITLE
Variable Stroke Lever
Assemblies & Details

DESIGNED BY	DRAWN BY	APPROVED BY	SCALE	DRAWING NUMBER
W. Smith	W. Genset			7