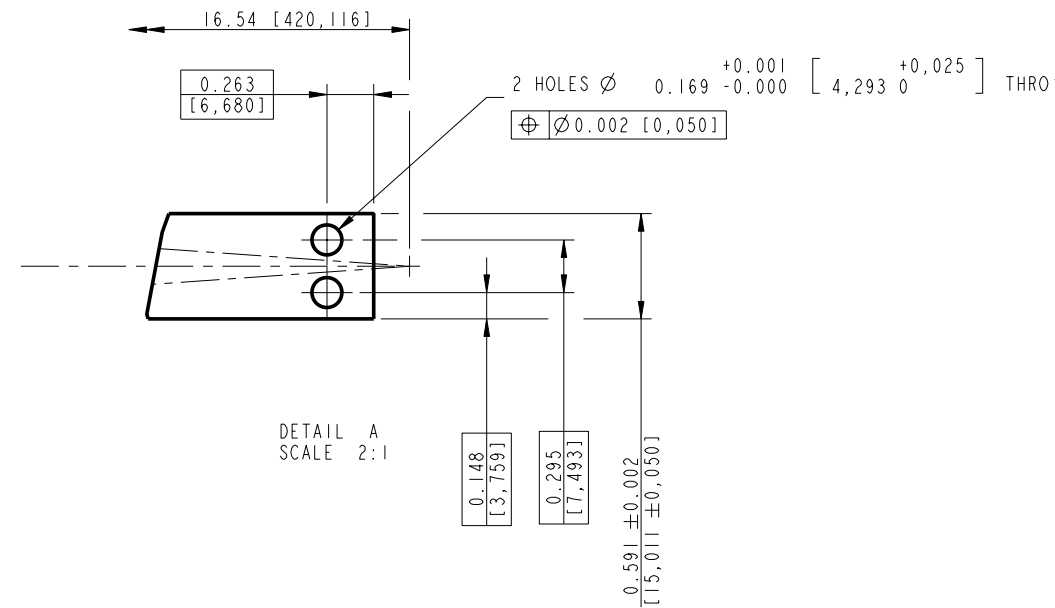
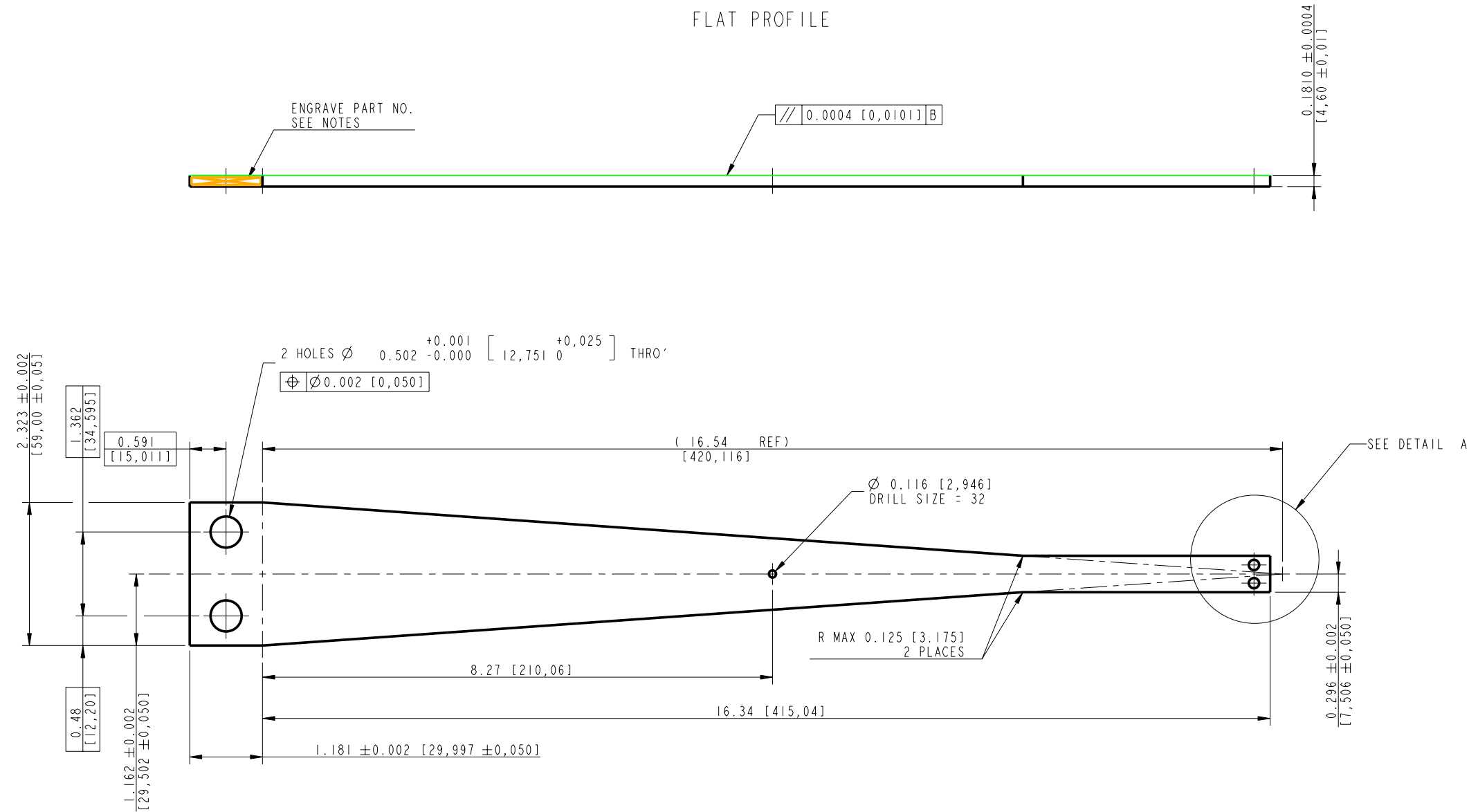


FLAT PROFILE



NOTES: (UNLESS OTHERWISE SPECIFIED)

- REMOVE ALL SHARP EDGES. R.02 MIN.
- DO NOT SCALE FROM DRAWING.
- ALL MACHINING FLUIDS SHALL BE WATER SOLUBLE AND FREE OF SULFUR, CHLORINE AND SILICONE, SUCH AS CINCINNATI WILCOXON'S C/INTECH 410 (STAINLESS STEEL).
- SCRIBE: ENGRAVE OR STAMP DRAWING PART NUMBER ON NOTED SURFACE OF PART AND A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST PART AND PROCEED CONSECUTIVELY. USE "01" HIGH CHARACTERS. EXAMPLE: 0020100-001, A VIBRATORY TOOL MAY BE USED.
- INTERPRET DIMENSIONS PER: ANSI Y14.5 1987
- PRIOR TO DELIVERY HARDEN BY HEAT TREATMENT AT 430°C FOR 100 HOURS AND AIR COOL.
- DURING HEAT TREATMENT THE PART MUST BE SUPPORTED SO THAT IT DOES NOT CHANGE RADIUS DUE TO SELF WEIGHT.

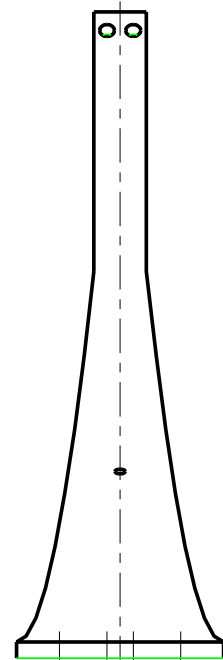
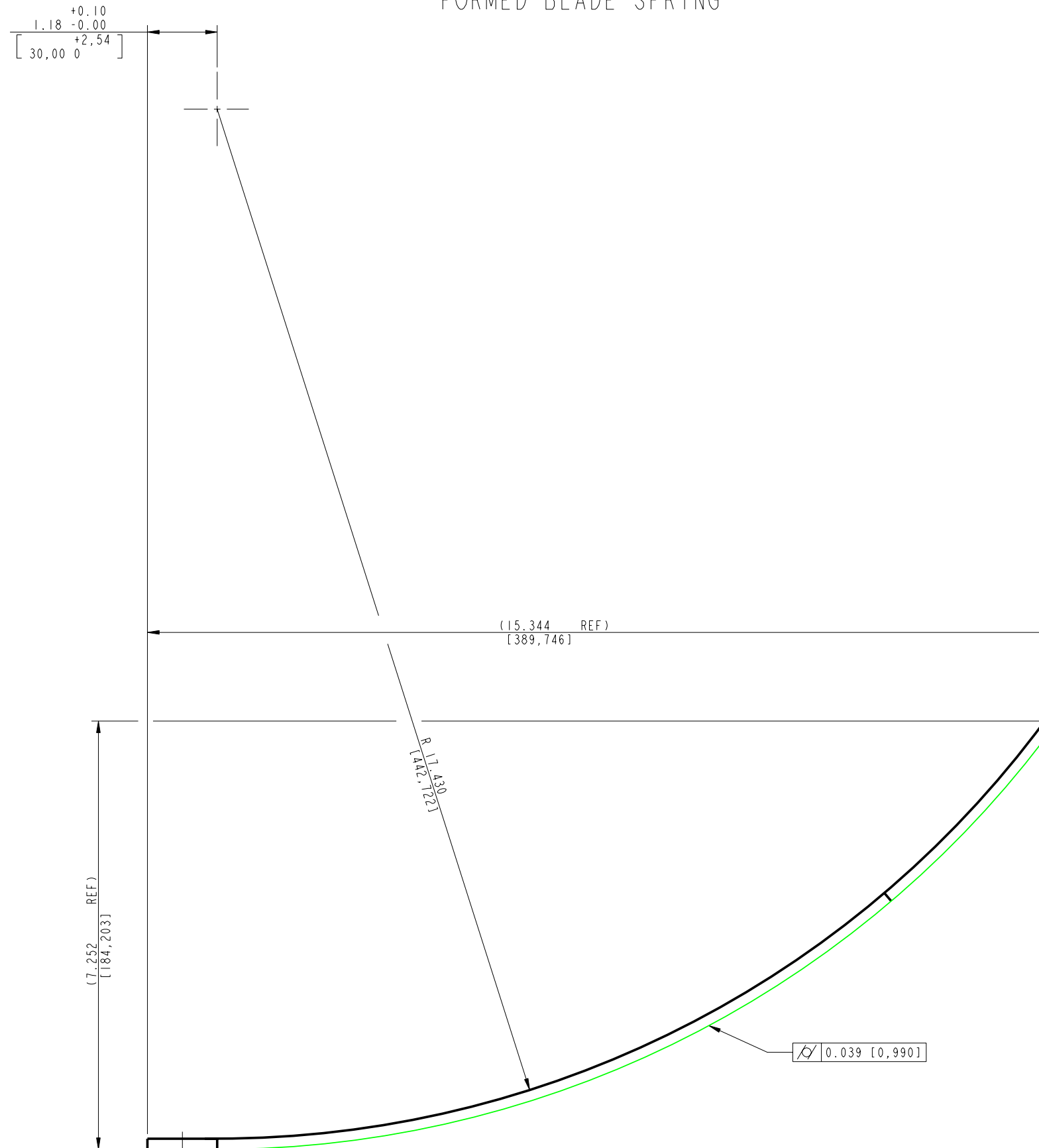
DIMENSIONS ARE IN INCHES (mm)		CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY OR, GLASGOW UNIVERSITY GEO 600 GROUP RUTHERFORD APPLIED LABORATORIES	
TOLERANCES:		SYSTEM	ADVANCED LIGO
X.XX $\pm$ 0.01 (0,250 mm)		SUB-SYSTEM	GIS
X.XXX $\pm$ 0.005		HEAT ASST	UPPER MASS
ANGULAR $\pm$ 0,250 °		PART NAME	MIDDLE BLADE SPRING
MATERIAL: MARIANG STEEL 250		DRG. NO.	D040297
FINISH: CLEAN AND DEGREASED		SCALE 1:1	PROJECTION:  SHEET 1 OF 3
$\sigma_{max}$ (mm) Ra = 32 (0,8)			
NAME	DATE		
DRAWN I. WILMOT 07/07/04			
CHECKED			
APPROVED			

INTRALINE NAME: TD-1039-980-

FOR INTERNAL USE ONLY:

E=186Mpa  
 ALPHA=1.35  
 TOTAL SUSP MASS = 50 KG  
 U1 MASS = 11 KG  
 PREDICTED:  
 F = 2.48Hz  
 1st INTERNAL MODE = 98.17Hz  
 σ MAX = 990Mpa  
 REF: COMMUNICATION WITH BLADE COMMITTEE

# FORMED BLADE SPRING



NOTES: (UNLESS OTHERWISE SPECIFIED)

- REMOVE ALL SHARP EDGES. R.02 MIN.
- DO NOT SCALE FROM DRAWING.
- ALL MACHINING FLUIDS SHALL BE WATER SOLUBLE AND FREE OF SULFUR, CHLORINE AND SILICONE, SUCH AS CINCINNATI WILACRON'S CINTECH 410 (STAINLESS STEEL).
- SCRIBE: ENGRAVE OR STAMP DRAWING PART NUMBER ON NOTED SURFACE OF PART AND A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST PART AND PROCEED CONSECUTIVELY. USE 077 HIGH CHARACTERS. EXAMPLE: 0020180-001, A VIBRATORY TOOL MAY BE USED.
- INTERPRET DIMENSIONS PER: ANSI Y14.5 1982
- PRIOR TO DELIVERY HARDEN BY HEAT TREATMENT AT 435°C FOR 100 HOURS AND AIR COOL.
- DURING HEAT TREATMENT THE PART MUST BE SUPPORTED SO THAT IT DOES NOT CHANGE RADIUS DUE TO SELF WEIGHT.

DIMENSIONS ARE IN INCHES (mm)		CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY GLASGOW UNIVERSITY GEO 600 GROUP RUTHERFORD APPLIED LABORATORIES	
TOLERANCES:	X.XX ±0.01 (0.250 mm)	SYSTEM	ADVANCED LIGO
	X.XXX ±0.005	SUB-SYSTEM	SUS
	ANGULAR ±0.250 °	HEAT ASST	UPPER MASS
MATERIAL:	MARAGING STEEL 250	PART NAME	MIDDLE BLADE SPRING
FINISH:	CLEAN AND DEGREASED	DRG. NO.	D040297
σ <sub>max</sub> (Gsm)	Ra = 32 (0.8)	DATE	07/27/24
NAME		SCALE	1:1
DATE		PROJECTION	1st
DRAWN	L. WILSON	SHEET	2 OF 3
CHECKED			
APPROVED			