DECLARATION: I declare the enclosed assignment is my own work and has not previously been submitted for assessment. This work complies with Curtin University rules concerning plagiarism and copyright. I have retained a copy of this assignment for my own records.

Signed: RYAN COBLE-NEAL Date: 23.09.2022

School of Civil and Mechanical Engineering

Engineering Graphics (MCEN2005)

Dr. Ilyas Mazhar

Assignment

DETAIL AND ASSEMBLY DRAWINGS

Ryan Coble-Neal

19182641@student.curtin.edu.au

Due: 23 September 2022 @5pm

Table of Contents

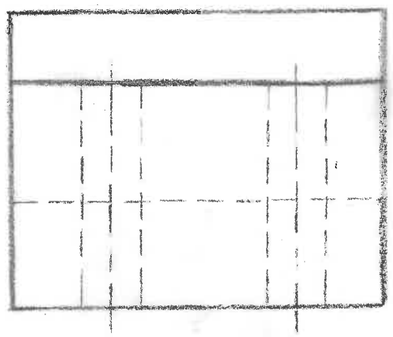
Assumptions/Explanations

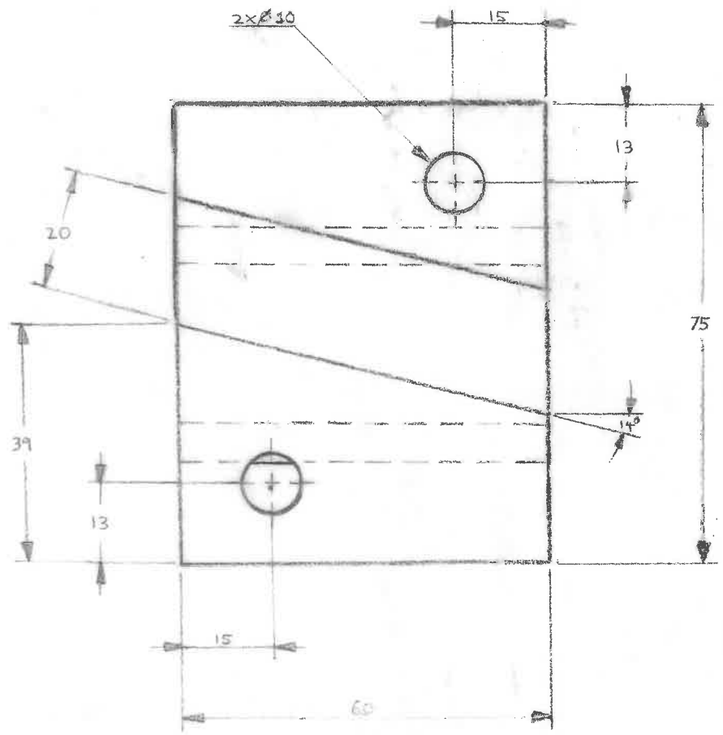
The hidden details in the sectioned half of Question 3 are omitted as they do not add clarity and instead clutter the section.

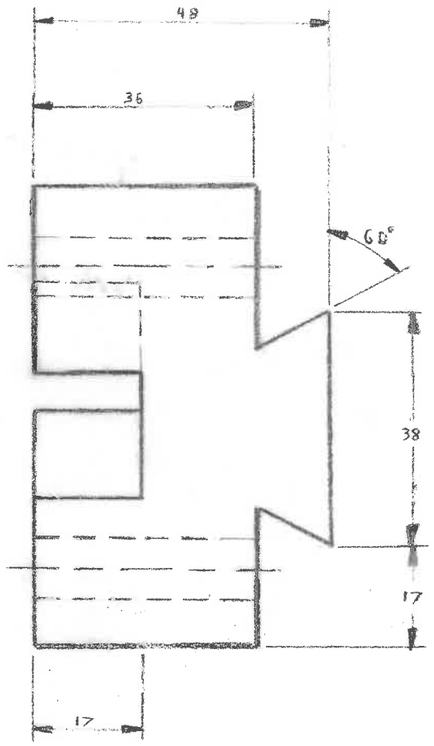
The auxiliary views in Question 4 are partial auxiliary views as the hidden details do not add any further clarity. Additionally, a dimension note "ROUND" is added as the round that it points to cannot be shown with a simple auxiliary view as it would be hidden. The 30 degree angular dimension is shown inside the view as it would result in an unnecessarily long extension line if it were taken outside of the view. Further to this it is taken as a direct dimension from the draft.

The dimensions shown inside the view in Question 5 are done so because to have them outside of the view would lead to multiple extension lines cutting not only other dimension lines but also dimension text. Additionally, the repetition of the size 32 dimension is shown as it is a direct dimension taken from the draft and adds clarity as determining its size from the drawing is difficult due to the slight offset between the end of that dimension and the diameter of the larger circular feature.

The knurling shown in Question 6 is visible as the shaft is not sectioned, hence its outer surface should be visible. Additionally a dimension note for the size of chamfers is given. No dimensions are shown as it is a general assembly. Since we are asked to provide an assembly drawing simply to show the working relationship of the parts an envelope dimension is not needed either.







ALL DIMENSIONS IN MILLIMETERS

DO NOT SCALE

DRAFTER: RYAN COBLE-ASAL

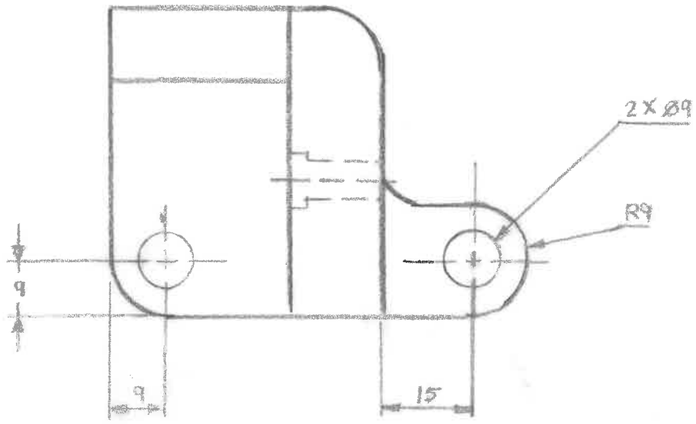
CHECKER: DR. ILYAS MAZHAR

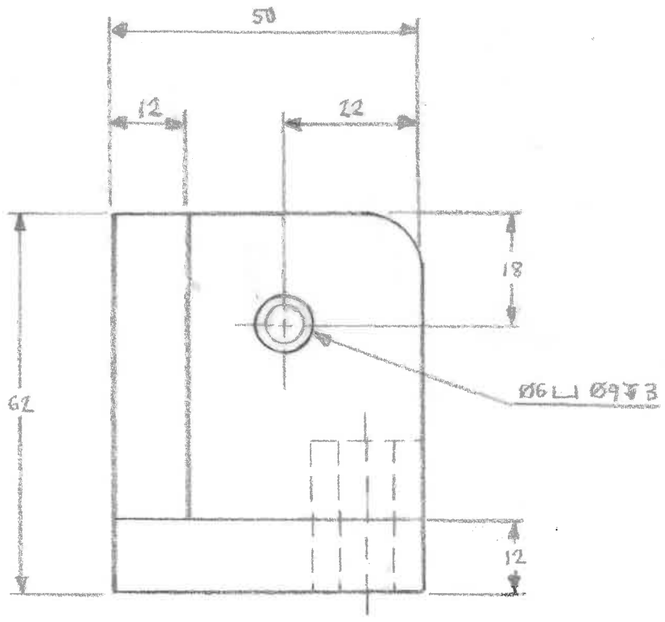
APPROVER: DR. ILYAS MAZHAR

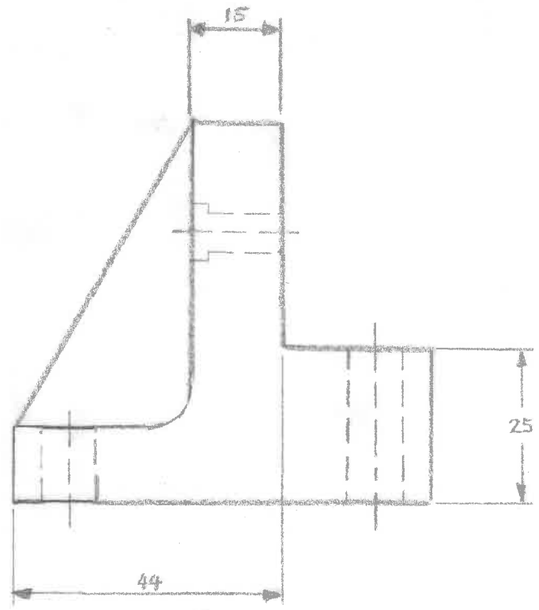
CURTIN UNIVERSITY

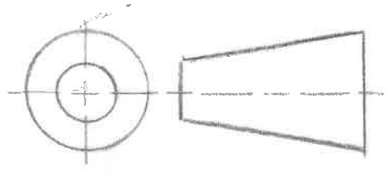
DOVETAIL SLIDE

MCEN2005	AMT/DTS/021	A3
SCALE 1:1	MILD STEEL	









ALL DIMENSIONS IN MILLIMETERS DO NOT SCALE ALL FILLETS R6 ALL ROUNDS R9

DRAWN BY:
19192641 RYAN COBLE-NEAL

DATE:
23/09/2022

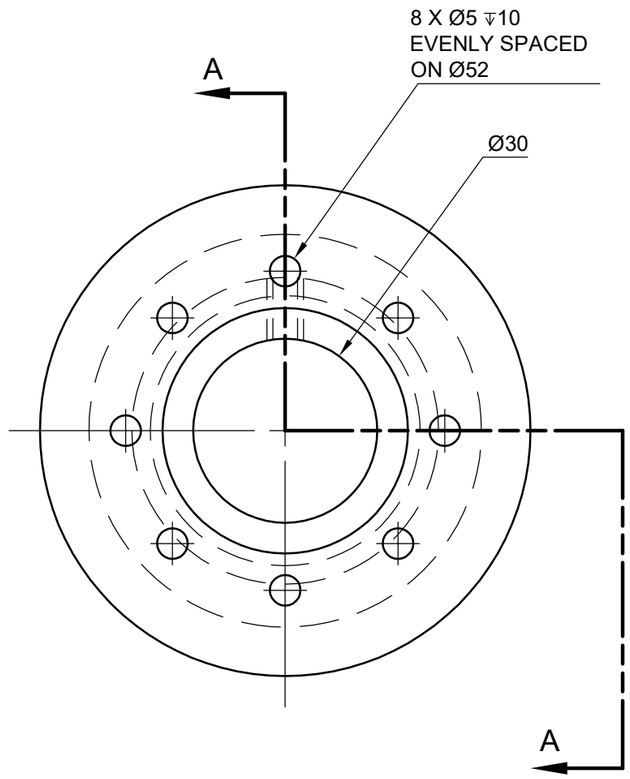
CHECKED BY:
DR. ILYAS MAZHAR

APPROVED BY:
DR. ILYAS MAZHAR

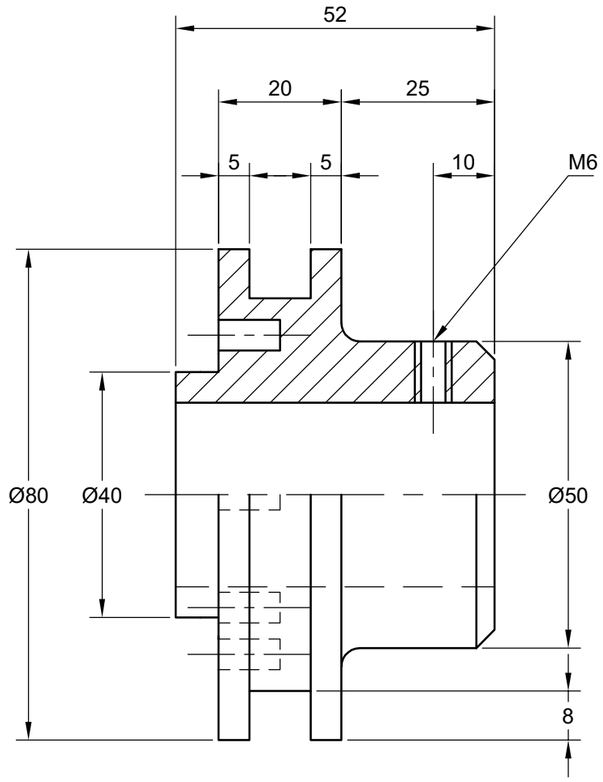
CURTIN UNIVERSITY

SADDLE BASE

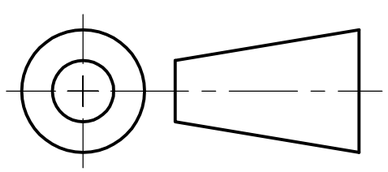
	AMT / SDB / 013	A3
SCALE 1:1	CAST IRON	



LEFT VIEW

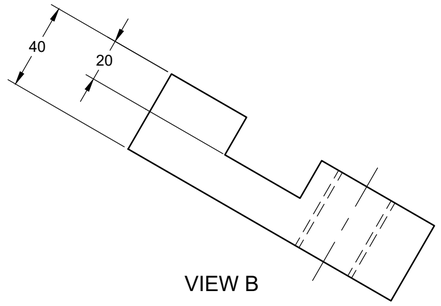


SECTION A-A

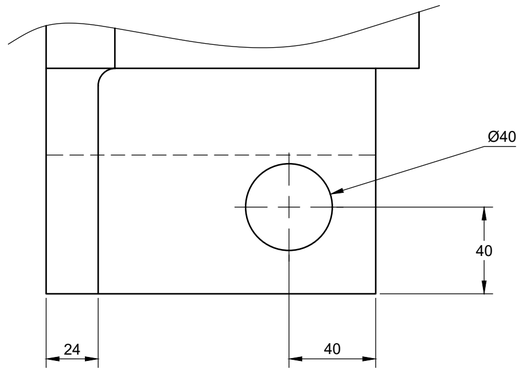


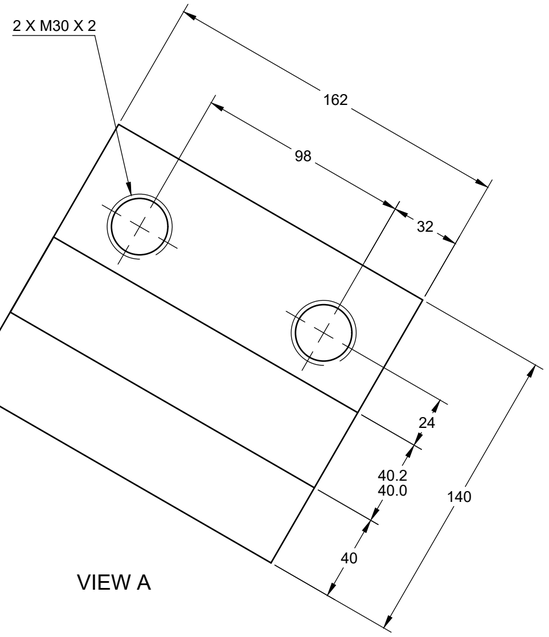
ALL DIMENSIONS IN MILLIMETERS | DO NOT SCALE | ALL CHAMFERS 3 X 45° | ALL FILLETS R3

DRAWN BY: 19182641 RYAN COBLE-NEAL	CURTIN UNIVERSITY
DATE: 15/09/2022	HEAVY DUTY PULLEY
CHECKED BY: DR. ILYAS MAZHAR	AMT / HDP / 071A — A3
APPROVED BY: DR. ILYAS MAZHAR	SCALE 1:1 — CAST IRON

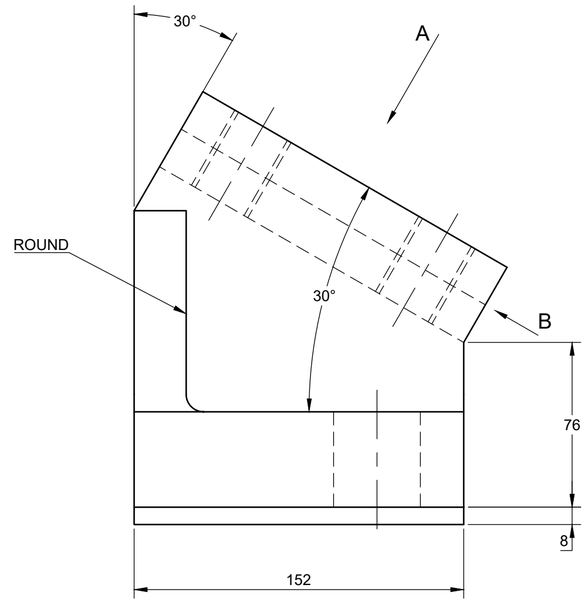


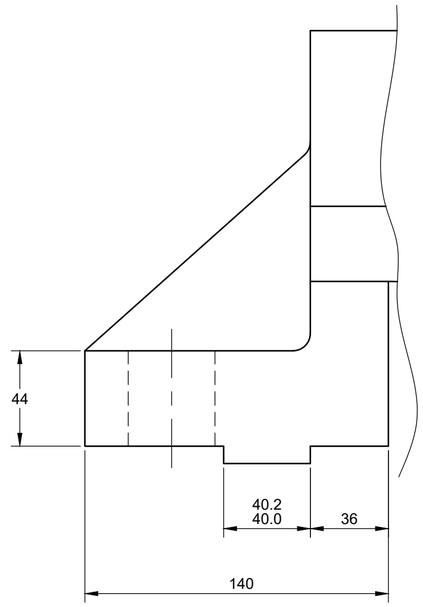
VIEW B

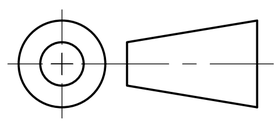




VIEW A

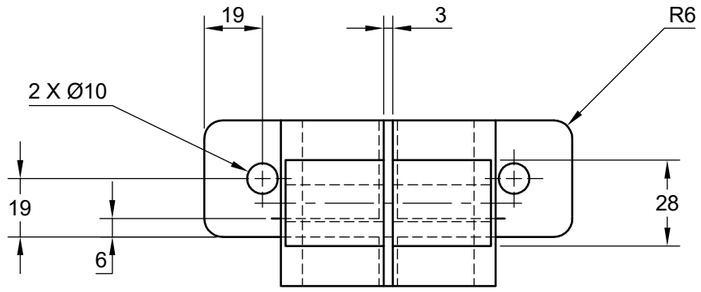


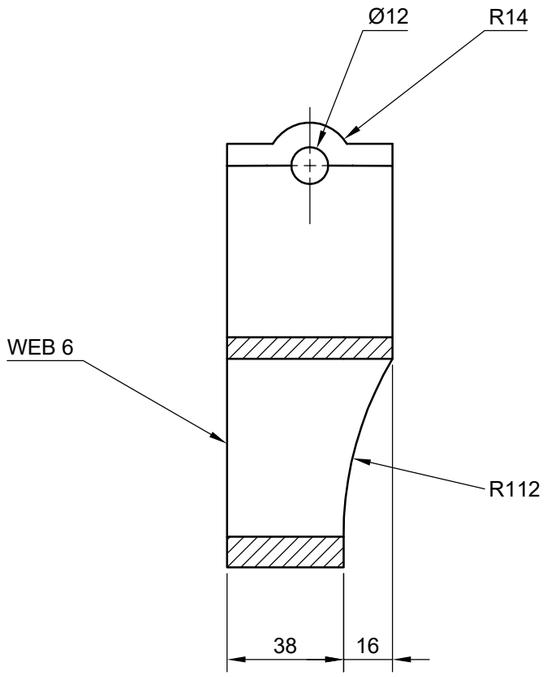




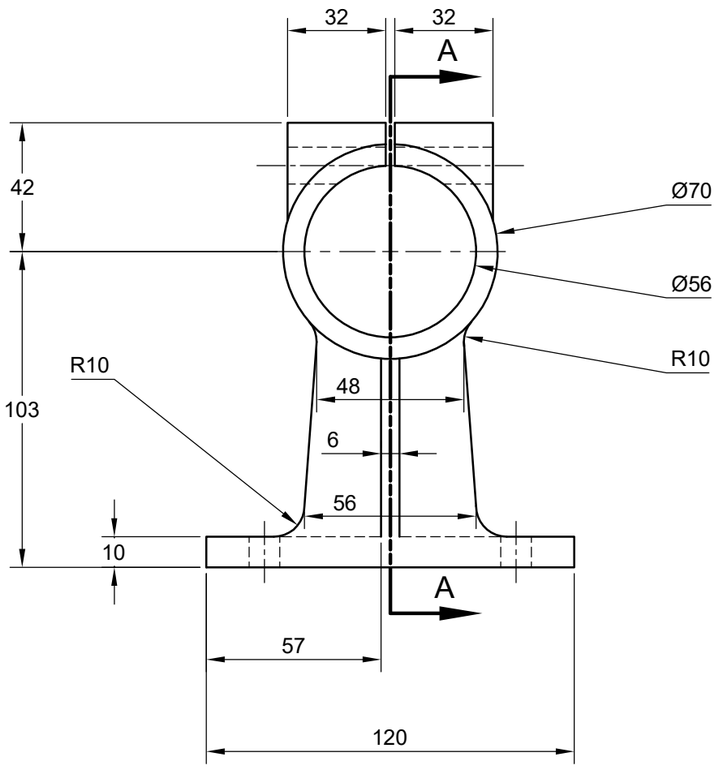
ALL DIMENSIONS IN MILLIMETERS DO NOT SCALE ALL FILLETS AND ROUNDS R8

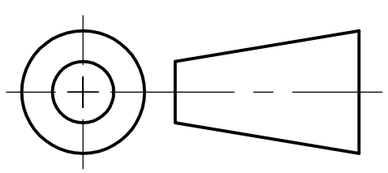
DRAWN BY: 19182641 RYAN COBLE-NEAL	CURTIN UNIVERSITY
DATE: 22/09/2022	ANGULAR SLIDE
CHECKED BY: DR. ILYAS MAZHAR	AMT / ASD / 033 — A2
APPROVED BY: DR. ILYAS MAZHAR	SCALE 1:2 — 1040 STEEL





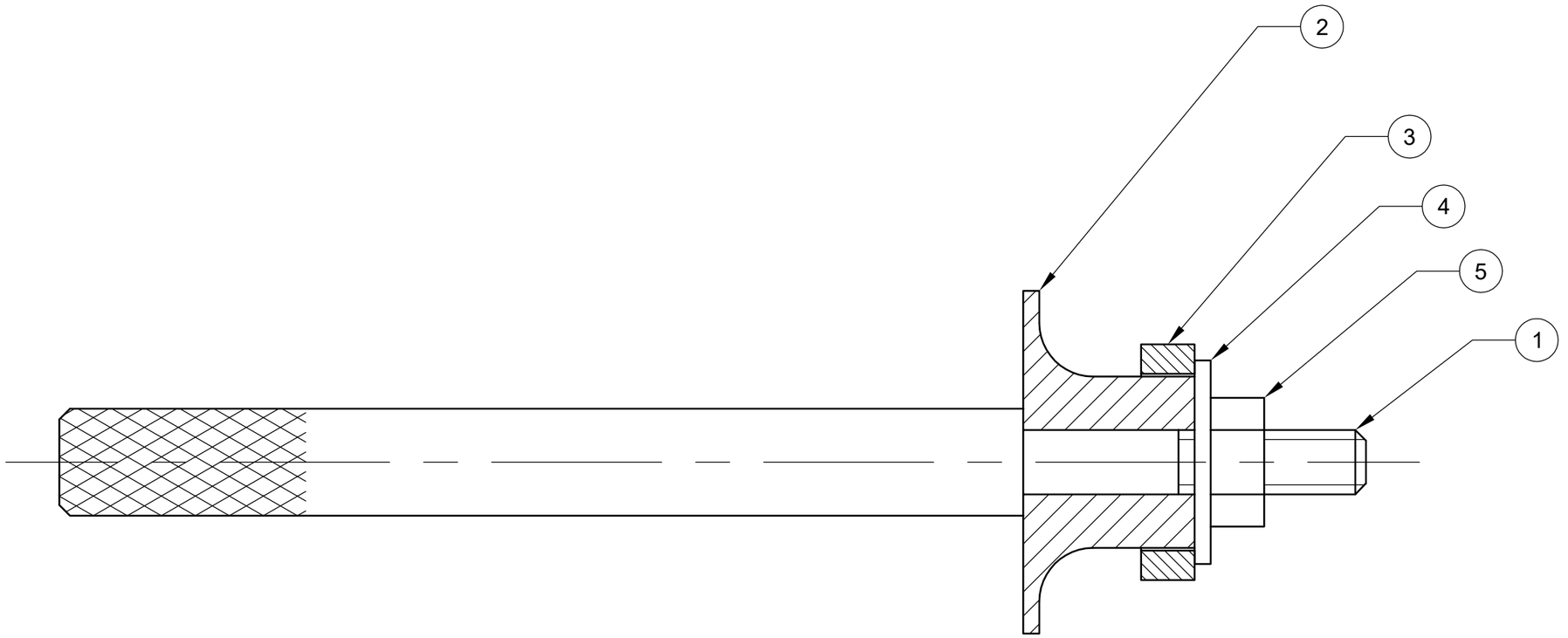
SECTION A-A





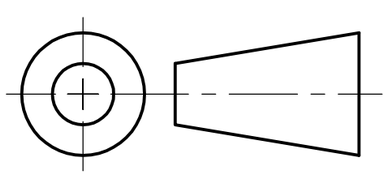
ALL DIMENSIONS IN MILLIMETERS DO NOT SCALE

DRAWN BY: 19182641 RYAN COBLE-NEAL	CURTIN UNIVERSITY
DATE: 23/09/2022	SHAFT BRACKET
CHECKED BY: DR. ILYAS MAZHAR	AMT / STB / 018 — A3
APPROVED BY: DR. ILYAS MAZHAR	SCALE 1:2 — 1020 STEEL



QTY	MATERIAL	DESCRIPTION	P.NO
1	STEEL	HEX NUT M12x1.75	5
1	STEEL	WASHER	4
1	1040 STEEL	COLLAR	3
2	1020 STEEL	FLANGE	2
1	1040 STEEL	BOLT	1

ALL DIMENSIONS IN MILLIMETERS DO NOT SCALE ALL CHAMFERS 2 x 2



DRAWN BY:
19182641 RYAN COBLE-NEAL

DATE:
21/09/2022

CHECKED BY:
DR. ILYAS MAZHAR

APPROVED BY:
DR. ILYAS MAZHAR

CURTIN UNIVERSITY

FLANGE JIG ASSEMBLY

AMT / FJA / 032

A3

SCALE 1:1