

KIWI CATTLE YARDS



Wooden Cattle Yard Design Guide

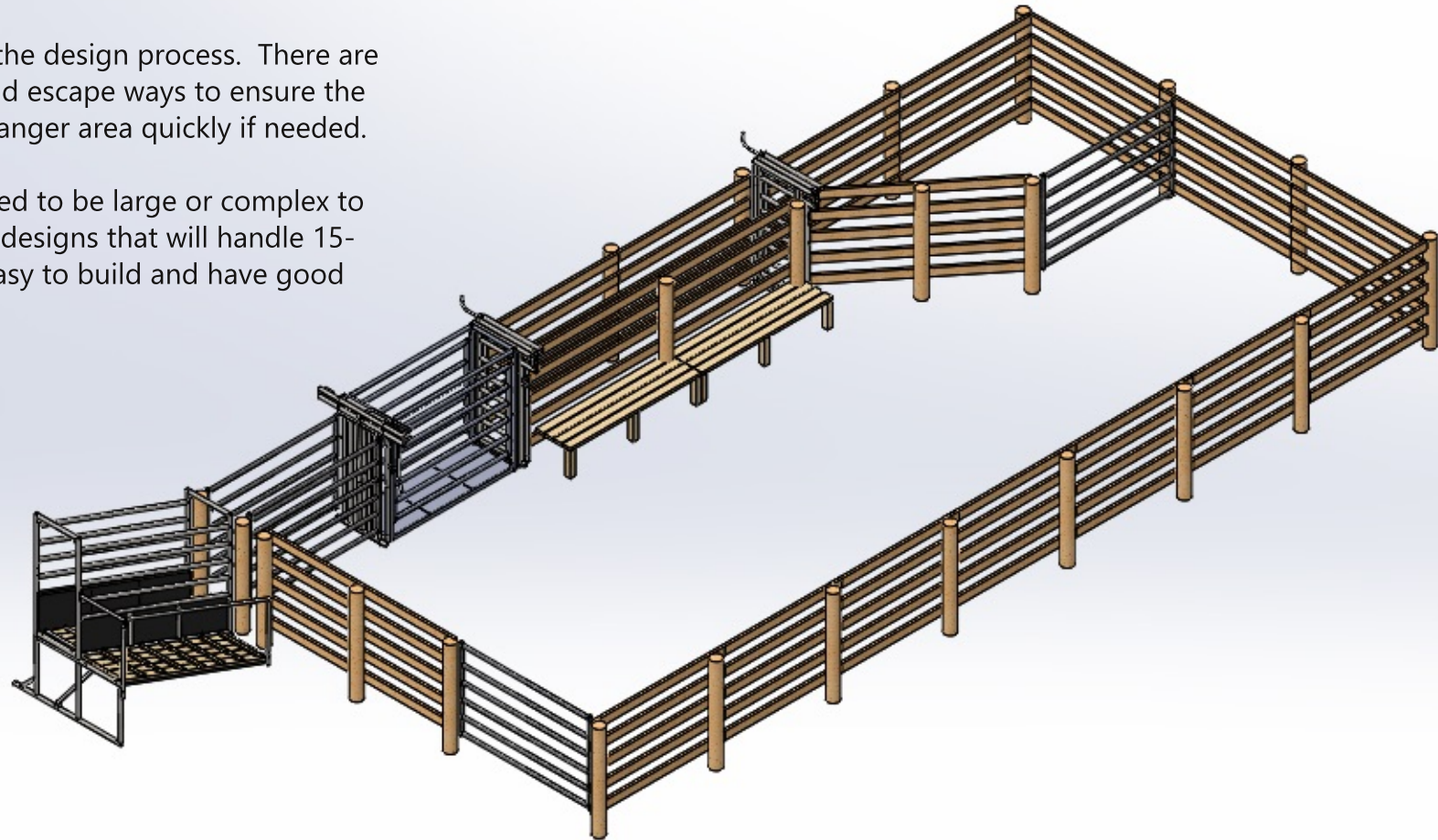
Wooden Cattle yard design guide

Yard design

Whether you are running 5 cattle or 500, the design and layout of your cattle yard is the most important thing to consider. Good design will lend itself to safe and efficient cattle handling, and make your animal management as stress free as possible.

Safety needs to be front of mind, in the design process. There are self-locking slam latches on gates and escape ways to ensure the stock handler can move out of the danger area quickly if needed.

The design of your yard does not need to be large or complex to be effective, below are seven simple designs that will handle 15-100 head of cattle. These are fairly easy to build and have good animal flow.



Yard location

When deciding on the location of your cattle yards there is some important points to consider.

Stock access

Centrally located yards are ideal for and save time moving cattle on larger properties, a good race leading into the yards or holding paddock makes accessing the yards easier.

Truck access

If the cattle yards are to be used for loading and unloading, stock truck access needs to be considered. Smaller trucks can get into loading ramps that are in tighter area, however if you are moving large numbers of stock you may need to consider large truck and trailer access to your yard. Your stock agent or stock truck driver will be able to advise you on any access issues you may have.

Keep in mind the rear doors are on the right-hand side (drivers' side) of the truck.

Yard Size

It is important to make sure your yard is big enough for your requirements.

Here are some guidelines for pen sizes.

Animal size, kg	Holding pen area, m ²	Forcing pen area m ²
100-300	1.3	0.6
300-500	1.4	1.0
over 500	1.6	1.2
Cows & Calves	2.2	2.2

Materials

Posts should be minimum 200mm diameter and 2.7m long, 1.8m out of the ground. Post spacings should be around 2.5m, this can be adjusted to suit. Posts on high pressure areas, e.g. forcing pen race, should be concreted in the ground. Rails should be 150x50mm with 200-250mm spacings.

Gate posts should be longer at 3.1m, with 1.3m in the ground. Rails can either be nailed or screwed to the posts, Screws are preferable as they are easy to use and can be simply removed if needed. Gates can either be steel or wooden, steel gates are preferable as they are lighter, stronger and don't bend, sag or break, wooden gates can be cheaper and be a good use of material off-cuts.



Yard Designs

25 Head Yard

This yard is a basic rectangular design that will hold and work about 25–30 head of cattle. The race will hold two adult cattle plus one in the crush, while the forcing yard holds around seven head.

40 Head Yard

This yard is based on the 25 head plan with an extra pen of 57m² added to increase capacity.

55 Head Yard

This yard is again based on the 25 head plan with an extra pen that you can draft into.

80 Head Yard

This yard increases the capacity again with an third pen.

35 Head Circular Yard

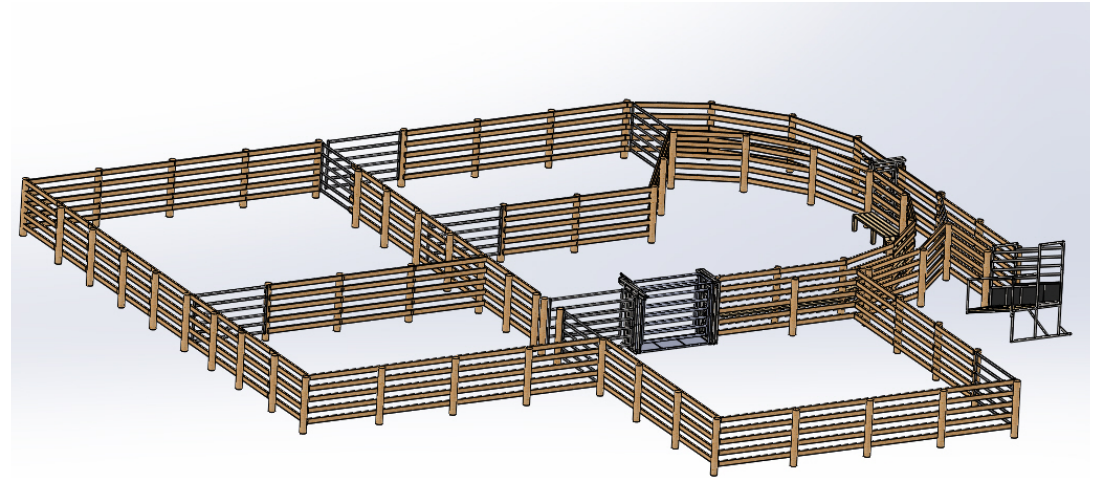
This design includes a 10m long curved drenching race that gives great cattle flow.

45 Head Circular Yard

This design includes an extra pen and increased capacity over the 35 head design.

100 Head Circular Yard

This design features a separate load out location and extra pens for even more capacity.



Notes

The designs in this guide may need small alterations to better suit your situation, move entry and exit gates to better suit your farm and race layout.

The yard sizes in these plans are based on working capacities. The pens will typically hold double this number. Additional working and holding capacity can be easily obtained by extending the yards. either by adding extra holding pens or increasing the sizes of the existing pens.

Drenching races should be 750mm wide. Any wider than this can tempt cattle to turn around, any narrower can cause cattle to bump their shoulders or hips. The squeeze gap should ideally be 300mm, just enough room to squeeze through. Small access gates can also be installed in place of the squeeze gap.

Ideally concrete the high traffic areas, the forcing pen, drenching race and crush area. 100-125mm thick concrete is optimal with a rough stamped or brushed surface to increase grip.

Steel yards vs. Wooden yards


It is no secret that steel cattle yards cost more than their wooden equivalent. But steel yards do not, sag, break, splinter, rot or require any maintenance and after 10 years will still work like new.

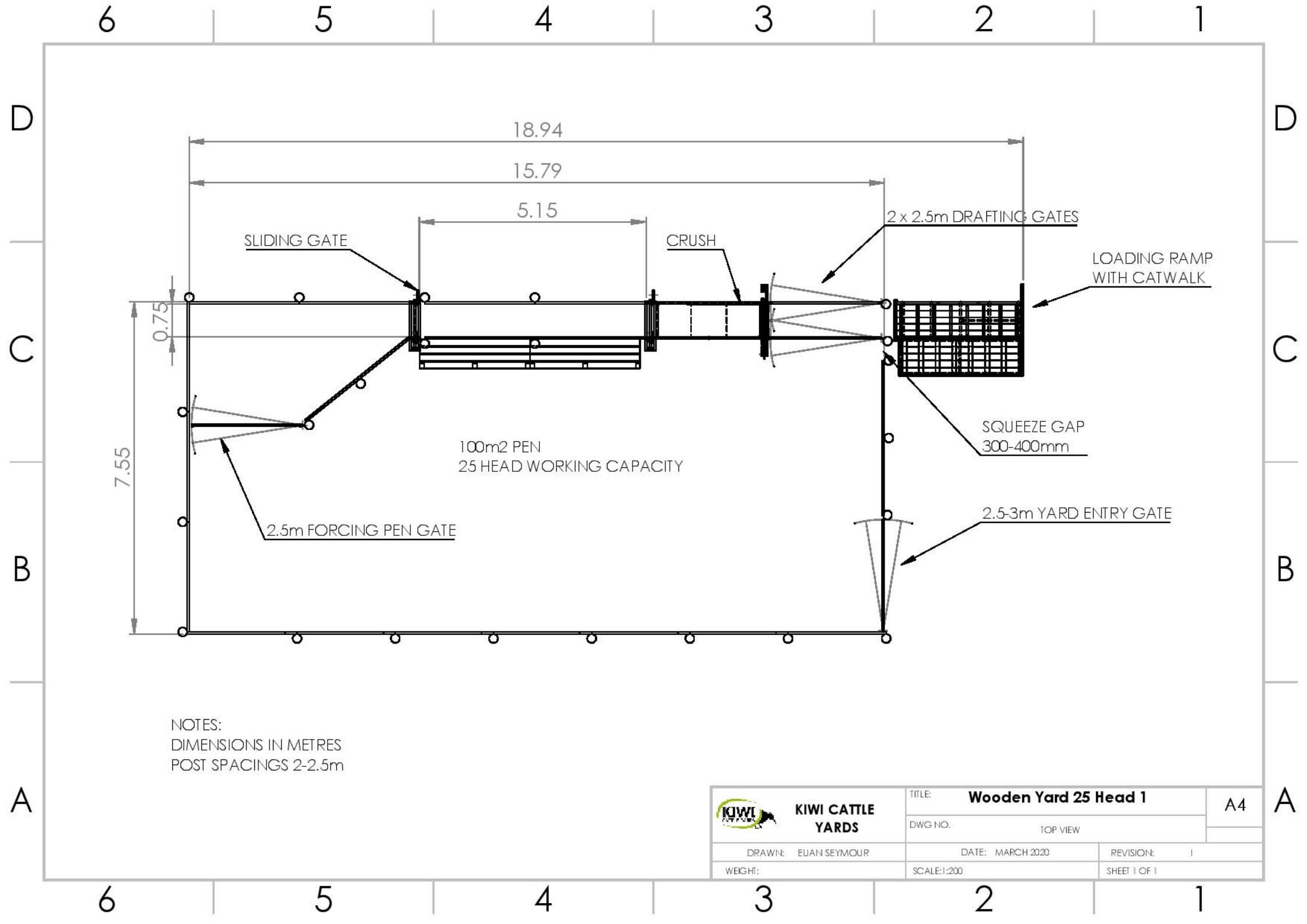
Here is a break down comparing the yard costs based on a 50 head yard over a ten year period.


	Wooden Yards		Kiwi Cattle Yards	
Materials cost		\$10,000		\$25,000
Headbail and sliding gates		\$4,200		Included
Labour setup cost, 2 labour units	7, 8hr days@\$60/hr	\$6,720	1.5 8hr days@\$60/hr	\$720
Yearly maintenance including labour				
-re-hang sunken gates				
-broken rails				
-posts moved	\$500 per year	\$5,000	NA	\$0
Change of farming system				
need larger holding pen	Whole pen made larger ,		Add 4 Panels ,30 head pen	\$2,240
	new posts and rails	\$3,000	becomes 50 head pen	
	labour 3, 8hr days@\$60/hr	\$1,440	labour 1 hour	\$60
10 year totals		\$30,360		\$28,020

After you have finished with your kiwi cattle yards you can easily take them down, sell them, or take them to another location or new farm – which is another benefit of steel yards.



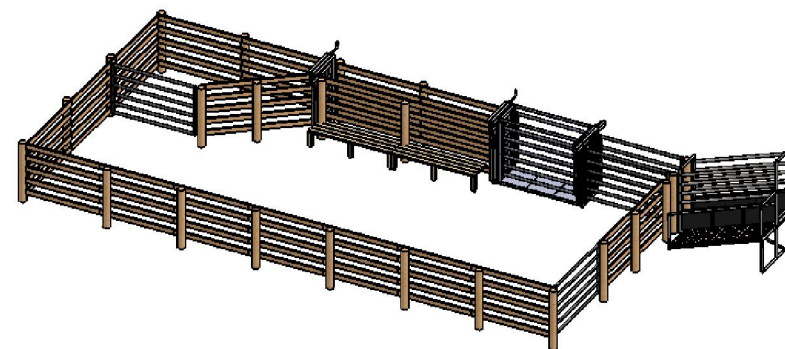
 KIWI CATTLE YARDS	TITLE Wooden Yard 25 Head		A4
	DWG NO. SCOTTIE VIEW		
DESIGNER FRANK SYMONS	DATE MARCH 2020	REVISION 1	
WINDING	SCALE 1:200	SHEET 1 OF 1	



 KIWI CATTLE YARDS	TITLE: Wooden Yard 25 Head 1		A4
	DWG NO. TOP VIEW		
DRAWN: EUAN SEYMOUR	DATE: MARCH 2020	REVISION: I	
WEIGHT:	SCALE:1:200	SHEET 1 OF 1	


NOTES

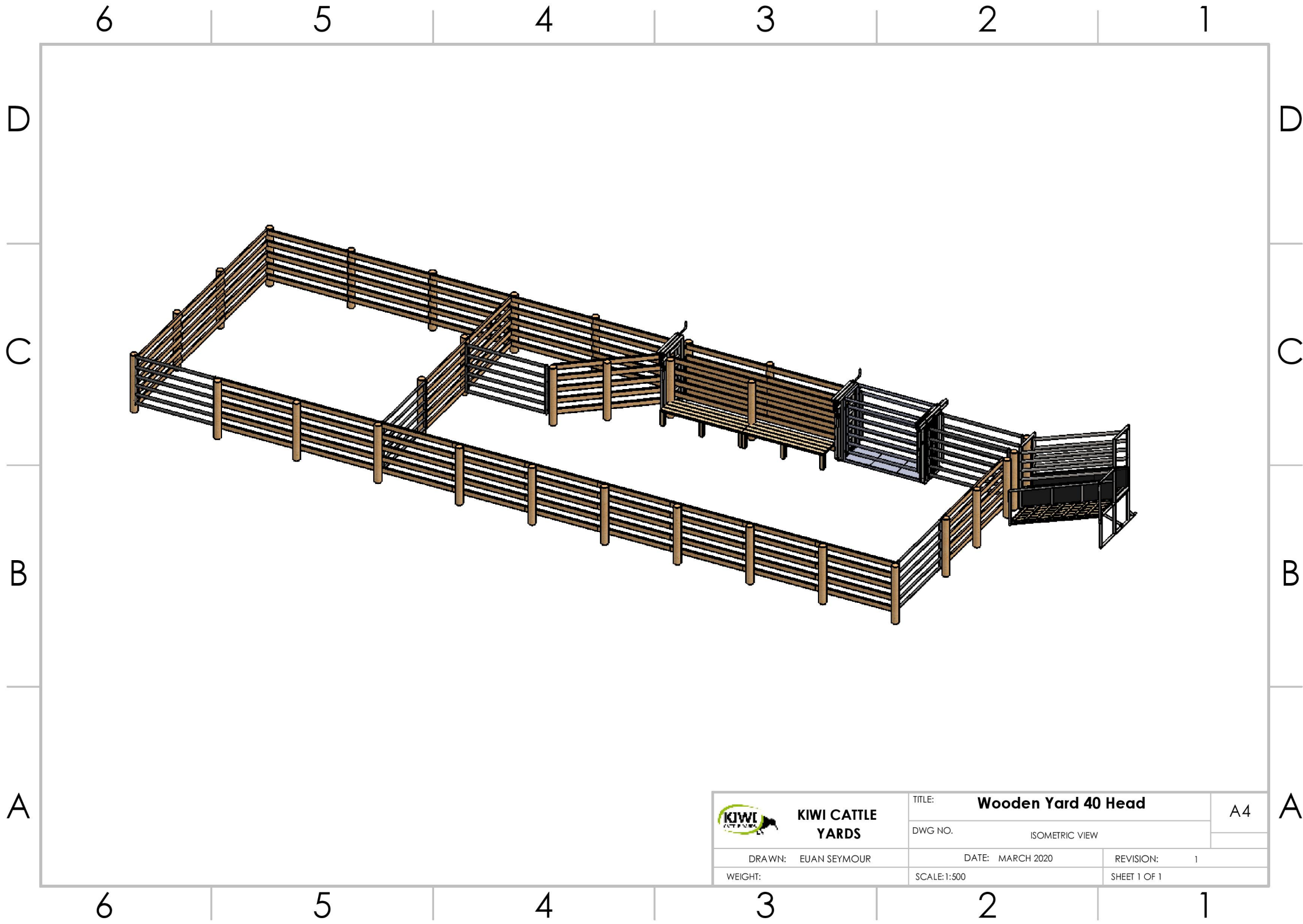
- YARD WORKING CAPACITY IS 25 HEAD
- YARD HOLDING CAPACITY IS 50 HEAD
- POSTS SHOULD BE 2-2.5m APART 1.8m ABOVE GROUND
- RAIL GAP SHOULD BE 210mm
- IDEAL CATWALK HEIGHT IS 500-600mm
- DRENCHING RACE IS 750mm WIDE




PARTS LIST


PART	DESCRIPTION	QUANTITY
POSTS	200 - 220mm 2.7m STRAINER	19
GATE POSTS	200-220mm 3.2m STRAINER	4
RAILS	150 x 50 H3 RAILS	280m
YARD GATES	2.5m STEEL GATES	4
SLIDING GATES	SLIDING GATES	1
CRUSH	CADET CRUSH	1
LOADING RAMP	BEEF LOADING RAMP WITH CATWALK	1
SLAM LATCHES	20mm SLAM LATCHES	4
GUDGEONS	275mm GUDGEONS	8
NAILS/SCREWS	125mm NAILS OR 100mm SCREWS	280 APPROX.

 KIWI CATTLE YARDS	TITLE: Wooden Yard 25 Head 2		A4
	DWG NO. <div>NOTES AND PARTS LIST</div>		
DRAWN: EUAN SEYMOUR	DATE: MARCH 2020	REVISION: 1	
WEIGHT:	SCALE: 1:200	SHEET 1 OF 1	



 KIWI CATTLE YARDS	TITLE: Wooden Yard 40 Head		A4
	DWG NO. ISOMETRIC VIEW		
	DRAWN: EUAN SEYMOUR	DATE: MARCH 2020	REVISION: 1
WEIGHT:	SCALE: 1:500	SHEET 1 OF 1	



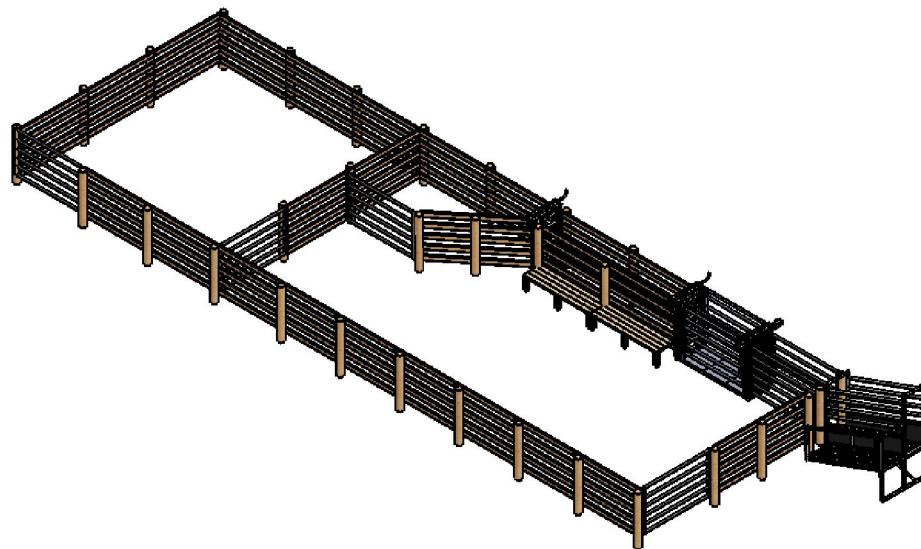
 KIWI CATTLE YARDS	TITLE: Wooden Yard 40 Head 1		A4
	DWG NO. TOP VIEW		
DRAWN: EUAN SEYMOUR	DATE: MARCH 2020	REVISION: 1	
WEIGHT:	SCALE: 1:500	SHEET 1 OF 1	


NOTES

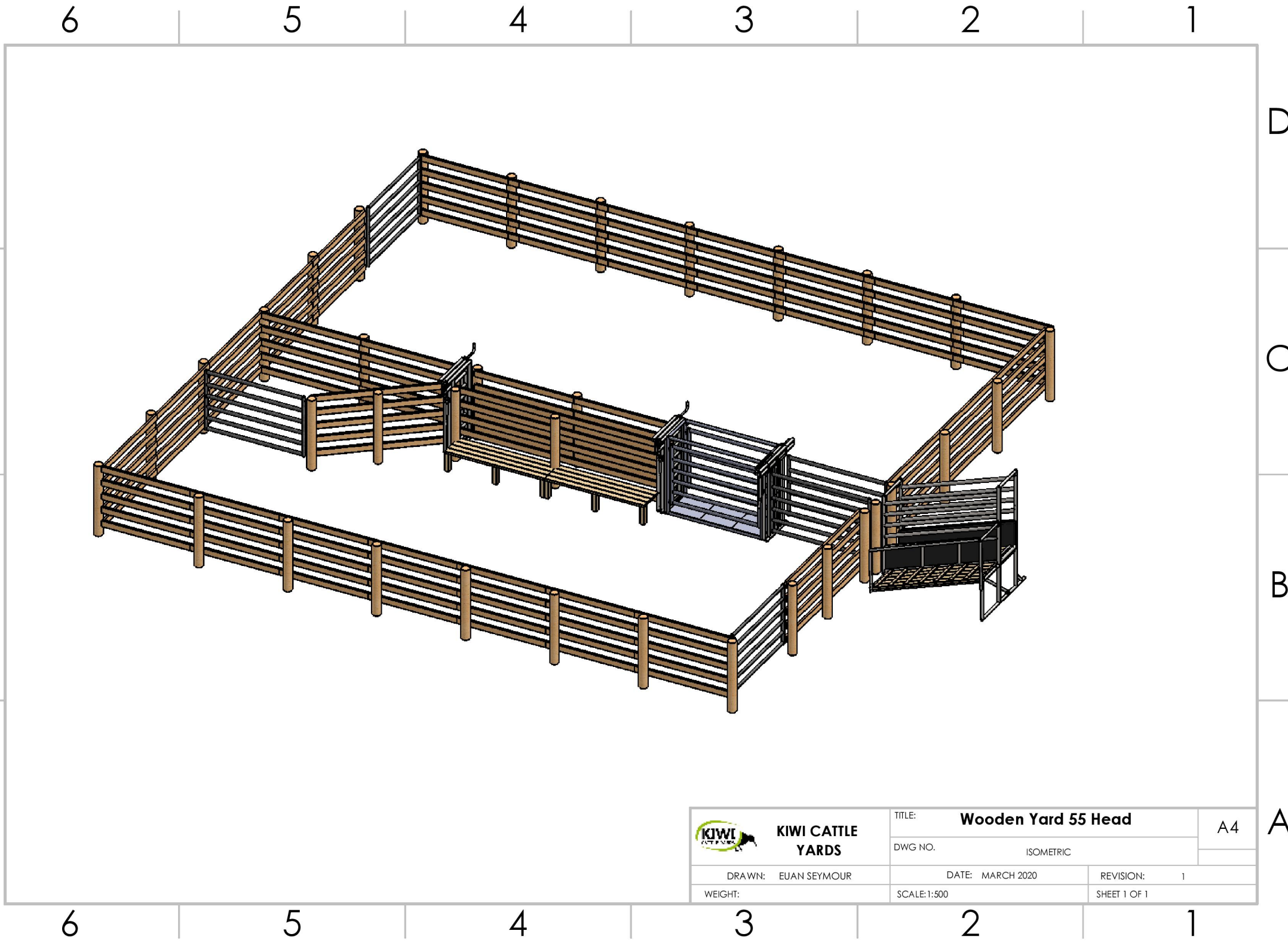
- YARD WORKING CAPACITY IS 40 HEAD
- YARD HOLDING CAPACITY IS 80 HEAD
- POSTS SHOULD BE 2-2.5m APART 1.8m ABOVE GROUND
- RAIL GAP SHOULD BE 210mm
- IDEAL CATWALK HEIGHT IS 500-600mm
- DRENCHING RACE IS 750mm WIDE


PARTS LIST

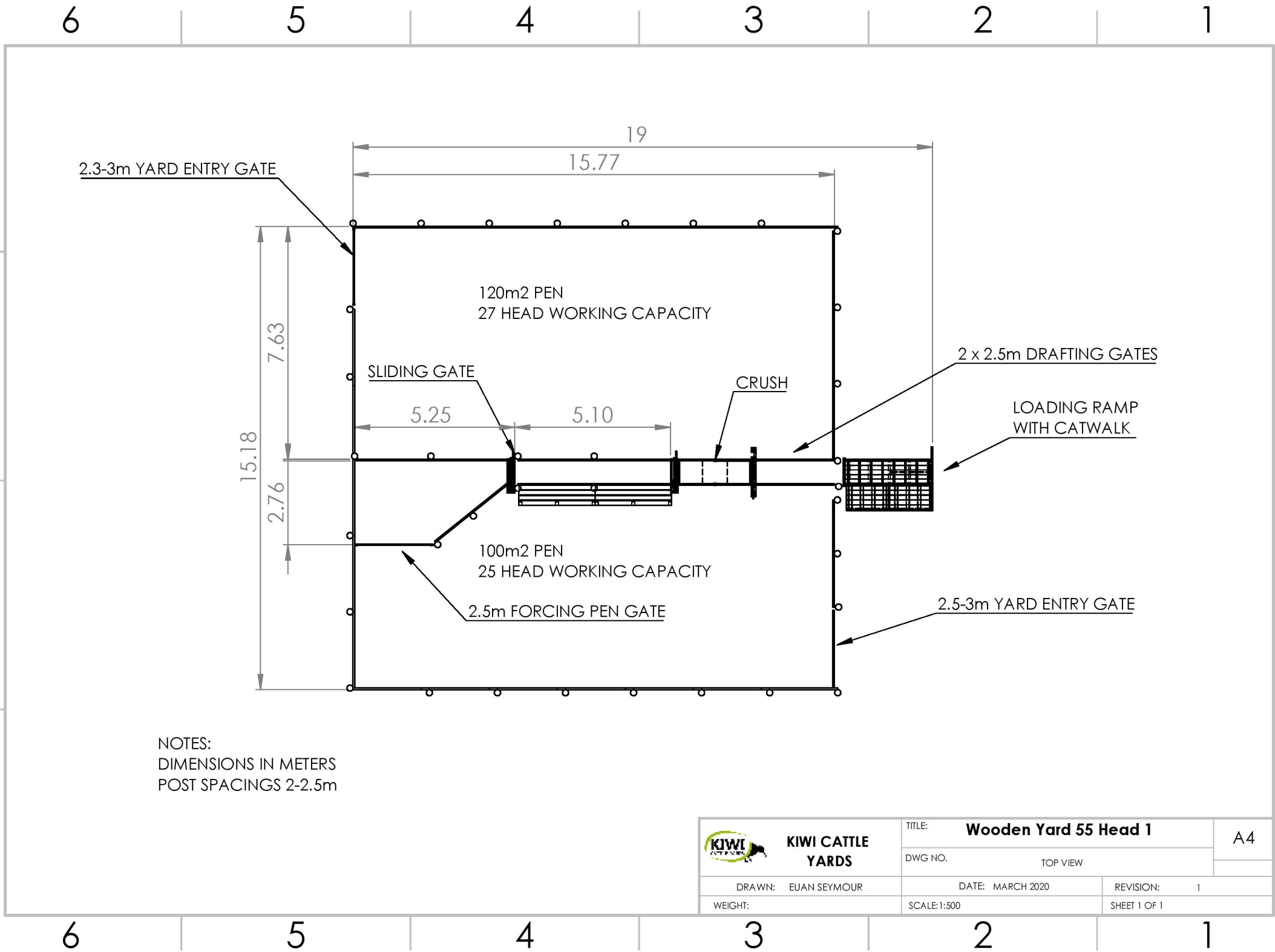
PART	DESCRIPTION	QUANTITY
POSTS	200 - 220mm 2.7m STRAINER	25
GATE POSTS	200-220mm 3.2m STRAINER	6
RAILS	150 x 50 H3 RAILS	340m
YARD GATES	2.5m STEEL GATES	6
SLIDING GATES	SLIDING GATES	1
CRUSH	CADET CRUSH	1
LOADING RAMP	BEEF LOADING RAMP WITH CATWALK	1
SLAM LATCHES	20mm SLAM LATCHES	6
GUDGEONS	275mm GUDGEONS	12
NAILS/SCREWS	125mm NAILS OR 100mm SCREWS	340 APPROX.




 KIWI CATTLE YARDS	TITLE: Wooden Yard 40 Head 2		A4
	DWG NO. NOTES AND PARTS LIST		
DRAWN: EUAN SEYMOUR	DATE: MARCH 2020	REVISION: 1	
WEIGHT:	SCALE: 1:500	SHEET 1 OF 1	



 KIWI CATTLE YARDS	TITLE: Wooden Yard 55 Head		A4
	DWG NO. ISOMETRIC		
DRAWN: EUAN SEYMOUR	DATE: MARCH 2020	REVISION: 1	
WEIGHT:	SCALE:1:500	SHEET 1 OF 1	



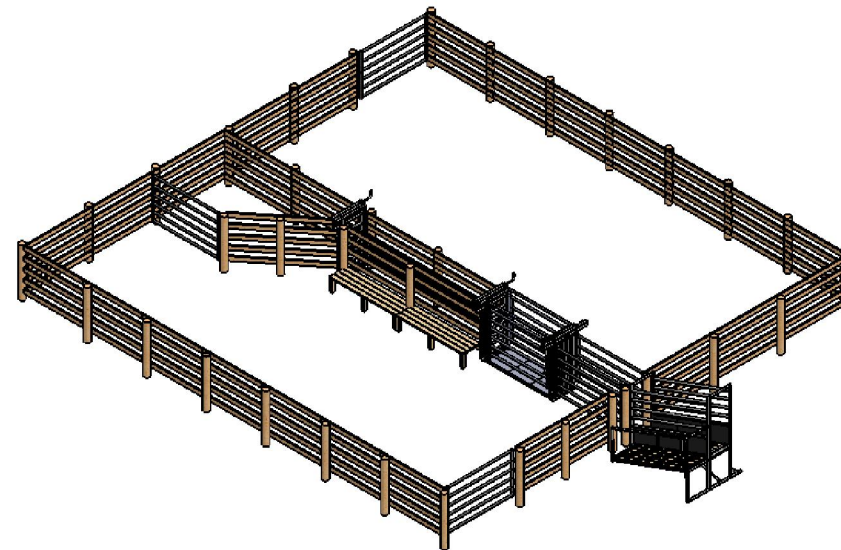
 KIWI CATTLE YARDS	TITLE: Wooden Yard 55 Head 1		A4
	DWG NO. TOP VIEW		
	DRAWN: EUAN SEYMOUR	DATE: MARCH 2020	REVISION: 1
WEIGHT:	SCALE: 1:500	SHEET 1 OF 1	

NOTES

- YARD WORKING CAPACITY IS 55 HEAD
- YARD HOLDING CAPACITY IS 110 HEAD
- POSTS SHOULD BE 2-2.5m APART 1.8m ABOVE GROUND
- RAIL GAP SHOULD BE 210mm
- IDEAL CATWALK HEIGHT IS 500-600mm
- DRENCHING RACE IS 750mm WIDE

PARTS LIST

PART	DESCRIPTION	QUANTITY
POSTS	200 - 220mm 2.7m STRAINER	30
GATE POSTS	200-220mm 3.2m STRAINER	5
RAILS	150 x 50 H3 RAILS	410m
YARD GATES	2.5m STEEL GATES	5
SLIDING GATES	SLIDING GATES	1
CRUSH	CADET CRUSH	1
LOADING RAMP	BEEF LOADING RAMP WITH CATWALK	1
SLAM LATCHES	20mm SLAM LATCHES	5
GUDGEONS	275mm GUDGEONS	10
NAILS/SCREWS	125mm NAILS OR 100mm SCREWS	410 APPROX.



**KIWI CATTLE
YARDS**

TITLE: **Wooden Yard 55 Head 2**

DWG NO. NOTES AND PARTS LIST

DRAWN: EUAN SEYMOUR

DATE: MARCH 2020

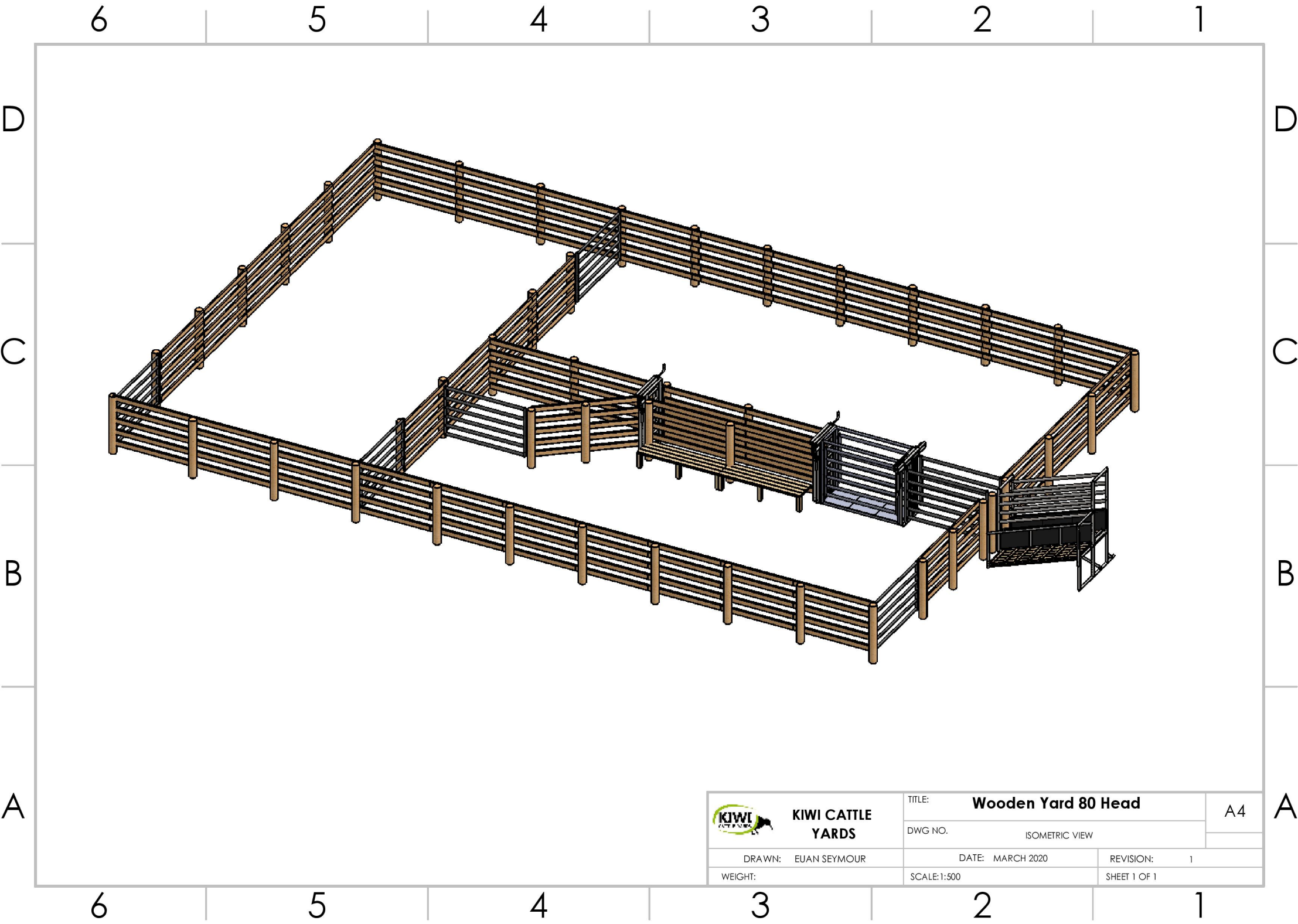
REVISION: 1

WEIGHT:

SCALE: 1:500

SHEET 1 OF 1

A4



**KIWI CATTLE
YARDS**

TITLE: **Wooden Yard 80 Head**

A4

DWG NO. ISOMETRIC VIEW

DRAWN: EUAN SEYMOUR

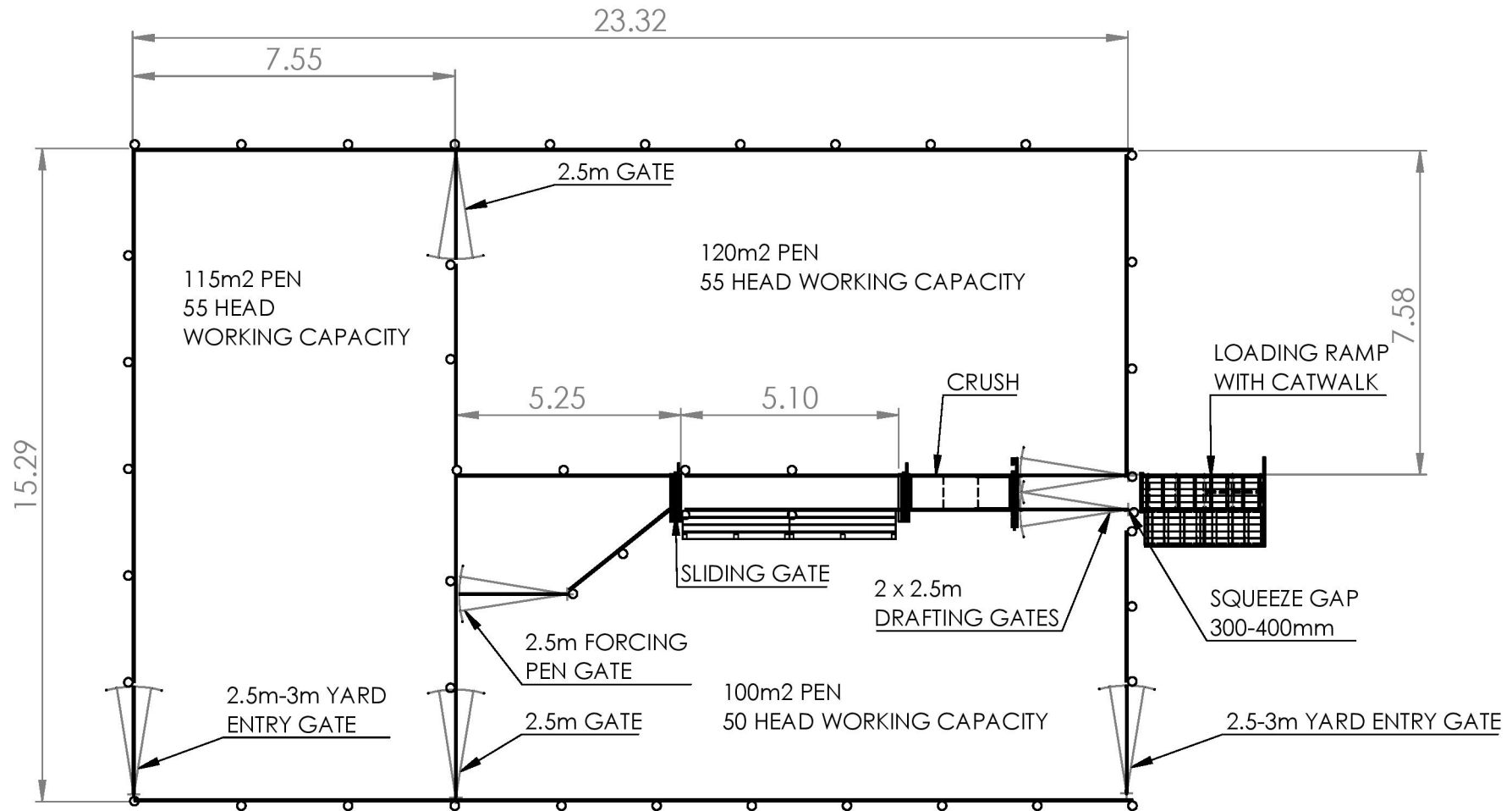
DATE: MARCH 2020

REVISION: 1


WEIGHT:

SCALE: 1:500

SHEET 1 OF 1



NOTES:
DIMENSIONS IN METRES
POST SPACINGS 2-2.5m

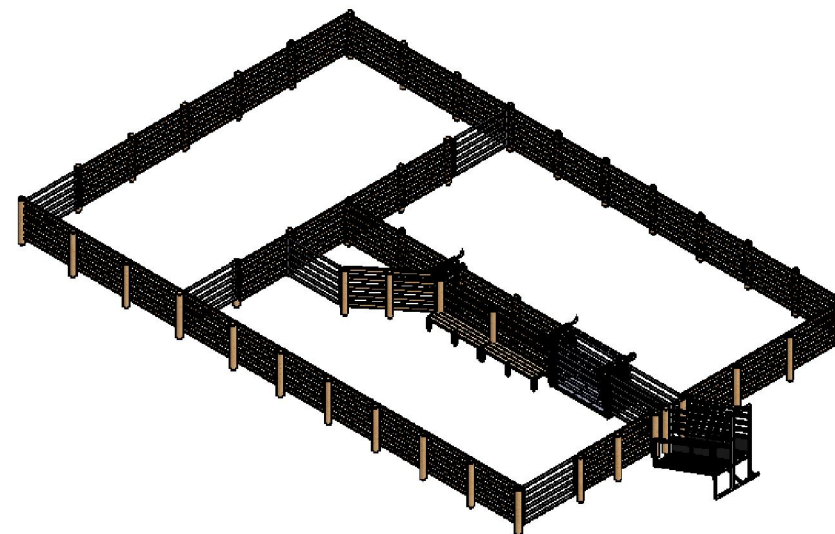
 KIWI CATTLE YARDS	TITLE: Wooden Yard 80 Head 1		A4
	DWG NO. TOP VIEW		
DRAWN: EUAN SEYMOUR	DATE: MARCH 2020	REVISION: 1	
WEIGHT:	SCALE: 1:500	SHEET 1 OF 1	


NOTES

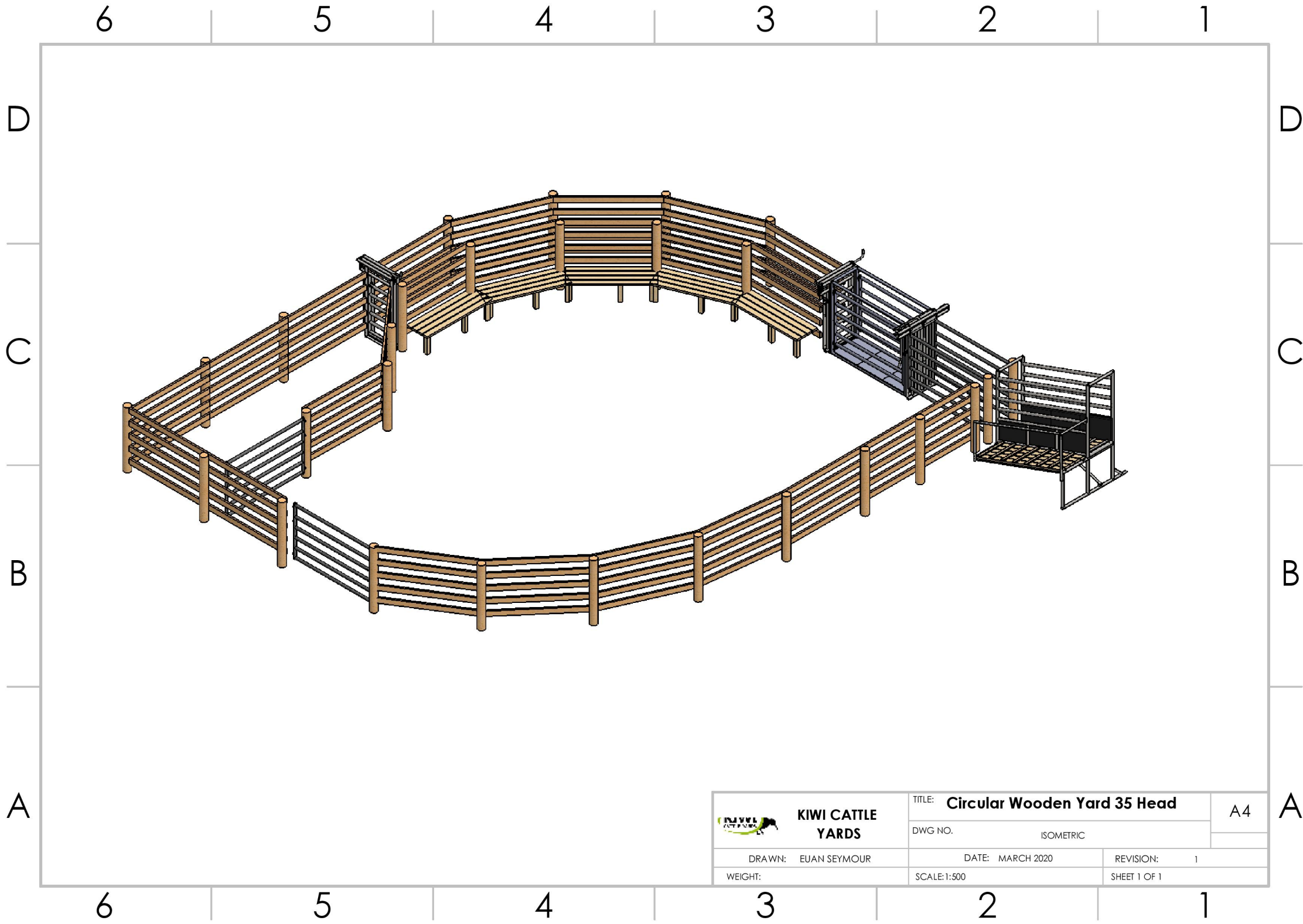
- YARD WORKING CAPACITY IS 80 HEAD
- YARD HOLDING CAPACITY IS 160 HEAD
- POSTS SHOULD BE 2-2.5m APART 1.8m ABOVE GROUND
- RAIL GAP SHOULD BE 210mm
- IDEAL CATWALK HEIGHT IS 500-600mm
- DRENCHING RACE IS 750mm WIDE


PARTS LIST

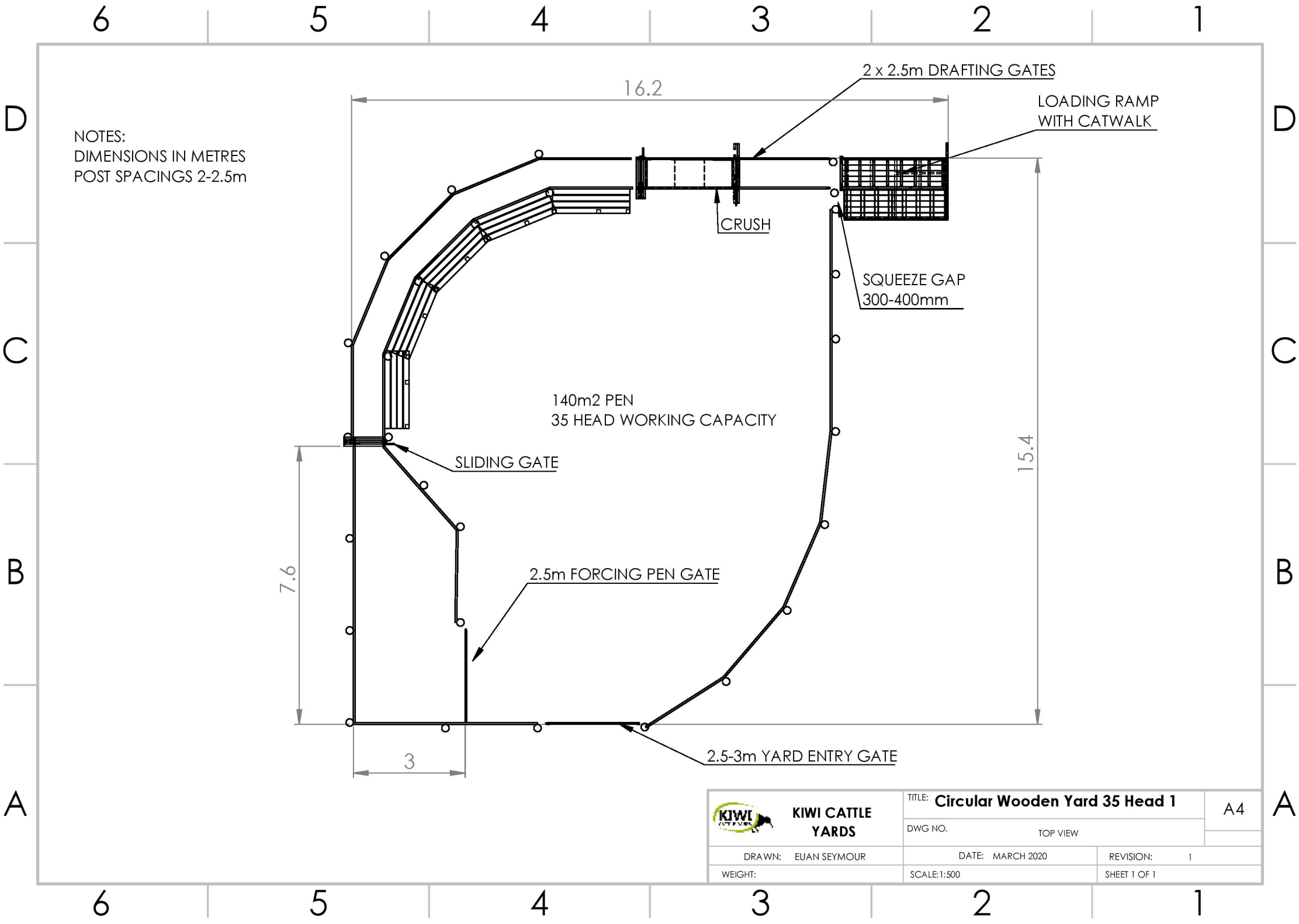
PART	DESCRIPTION	QUANTITY
POSTS	200 - 220mm 2.7m STRAINER	40
GATE POSTS	200-220mm 3.2m STRAINER	6
RAILS	150 x 50 H3 RAILS	560m
YARD GATES	2.5m STEEL GATES	6
SLIDING GATES	SLIDING GATES	1
CRUSH	CADET CRUSH	1
LOADING RAMP	BEEF LOADING RAMP WITH CATWALK	1
SLAM LATCHES	20mm SLAM LATCHES	6
GUDGEONS	275mm GUDGEONS	12
NAILS/SCREWS	125mm NAILS OR 100mm SCREWS	560 APPROX.




 KIWI CATTLE YARDS	TITLE: Wooden Yard 80 Head 2		A4
	DWG NO. <div>NOTES AND PARTS LIST</div>		
DRAWN: EUAN SEYMOUR	DATE: MARCH 2020	REVISION: 1	
WEIGHT:	SCALE: 1:500	SHEET 1 OF 1	



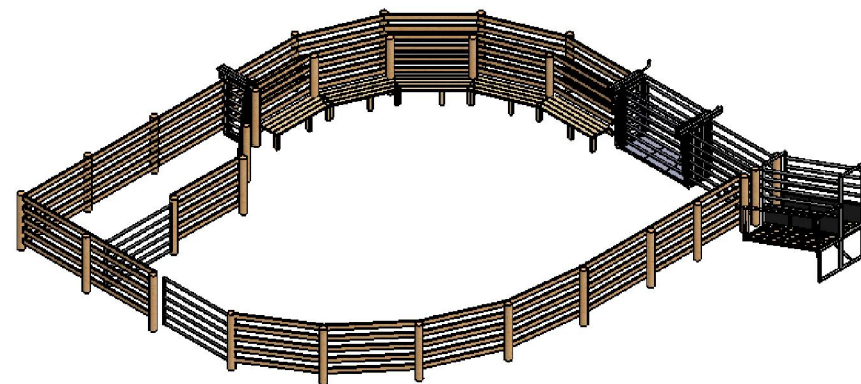
 KIWI CATTLE YARDS	TITLE: Circular Wooden Yard 35 Head		A4
	DWG NO. ISOMETRIC		
	DRAWN: EUAN SEYMOUR	DATE: MARCH 2020	REVISION: 1
WEIGHT:	SCALE: 1:500	SHEET 1 OF 1	



	TITLE: Circular Wooden Yard 35 Head 1		A4
	DWG NO.	TOP VIEW	
	DRAWN: EUAN SEYMOUR	DATE: MARCH 2020	REVISION: 1
WEIGHT:	SCALE: 1:500	SHEET 1 OF 1	

NOTES

- YARD WORKING CAPACITY IS 35 HEAD
- YARD HOLDING CAPACITY IS 70 HEAD
- POSTS SHOULD BE 2-2.5m APART 1.8m ABOVE GROUND
- RAIL GAP SHOULD BE 210mm
- IDEAL CATWALK HEIGHT IS 500-600mm
- DRENCHING RACE IS 750mm WIDE



PARTS LIST

PART	DESCRIPTION	QUANTITY
POSTS	200 - 220mm 2.7m STRAINER	24
GATE POSTS	200-220mm 3.2m STRAINER	4
RAILS	150 x 50 H3 RAILS	400m
YARD GATES	2.5m STEEL GATES	4
SLIDING GATES	SLIDING GATES	1
CRUSH	CADET CRUSH	1
LOADING RAMP	BEEF LOADING RAMP WITH CATWALK	1
SLAM LATCHES	20mm SLAM LATCHES	4
GUDGEONS	275mm GUDGEONS	12
NAILS/SCREWS	125mm NAILS OR 100mm SCREWS	400 APPROX.



**KIWI CATTLE
YARDS**

TITLE: **Circular Wooden Yard 35 Head 2**

A4

DWG NO.

NOTES AND PARTS LIST

DRAWN: EUAN SEYMOUR

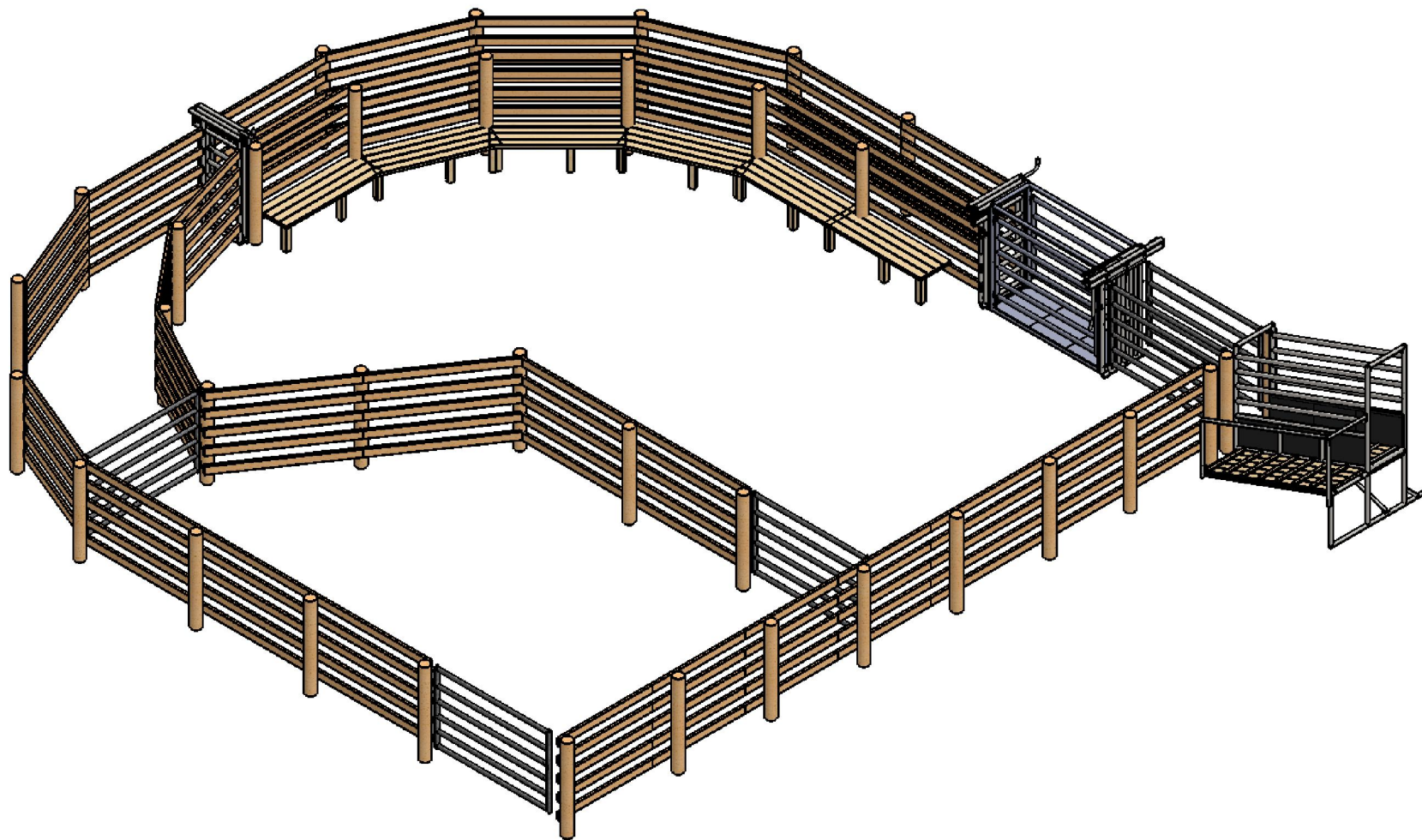
DATE: MARCH 2020

REVISION: 1

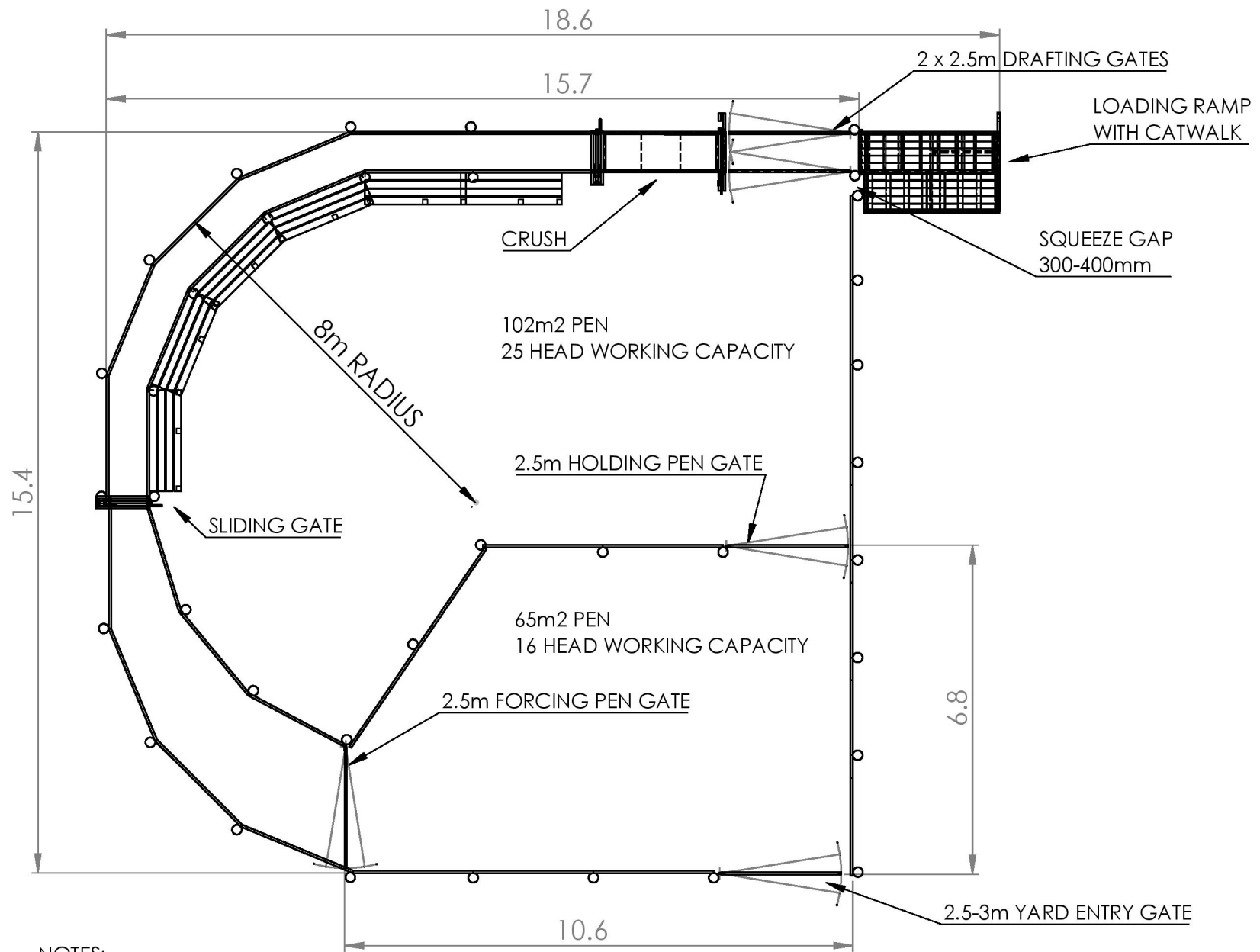
WEIGHT:

SCALE: 1:500


SHEET 1 OF 1



KIWI CATTLE YARDS	TITLE: Circular Wooden Yard 45 Head		A4
	DWG NO. ISOMETRIC VIEW		
	DRAWN: EUAN SEYMOUR	DATE: MARCH 2020	REVISION: 1
WEIGHT:	SCALE:1:500	SHEET 1 OF 1	



NOTES:
DIMENSIONS IN METRES
POST SPACINGS 2-2.5m

 KIWI CATTLE YARDS	TITLE: Circular Wooden Yard 45 Head 1		A4
	DWG NO.	TOP VIEW	
DRAWN: EUAN SEYMOUR	DATE: MARCH 2020	REVISION: 1	
WEIGHT:	SCALE: 1:500	SHEET 1 OF 1	


NOTES

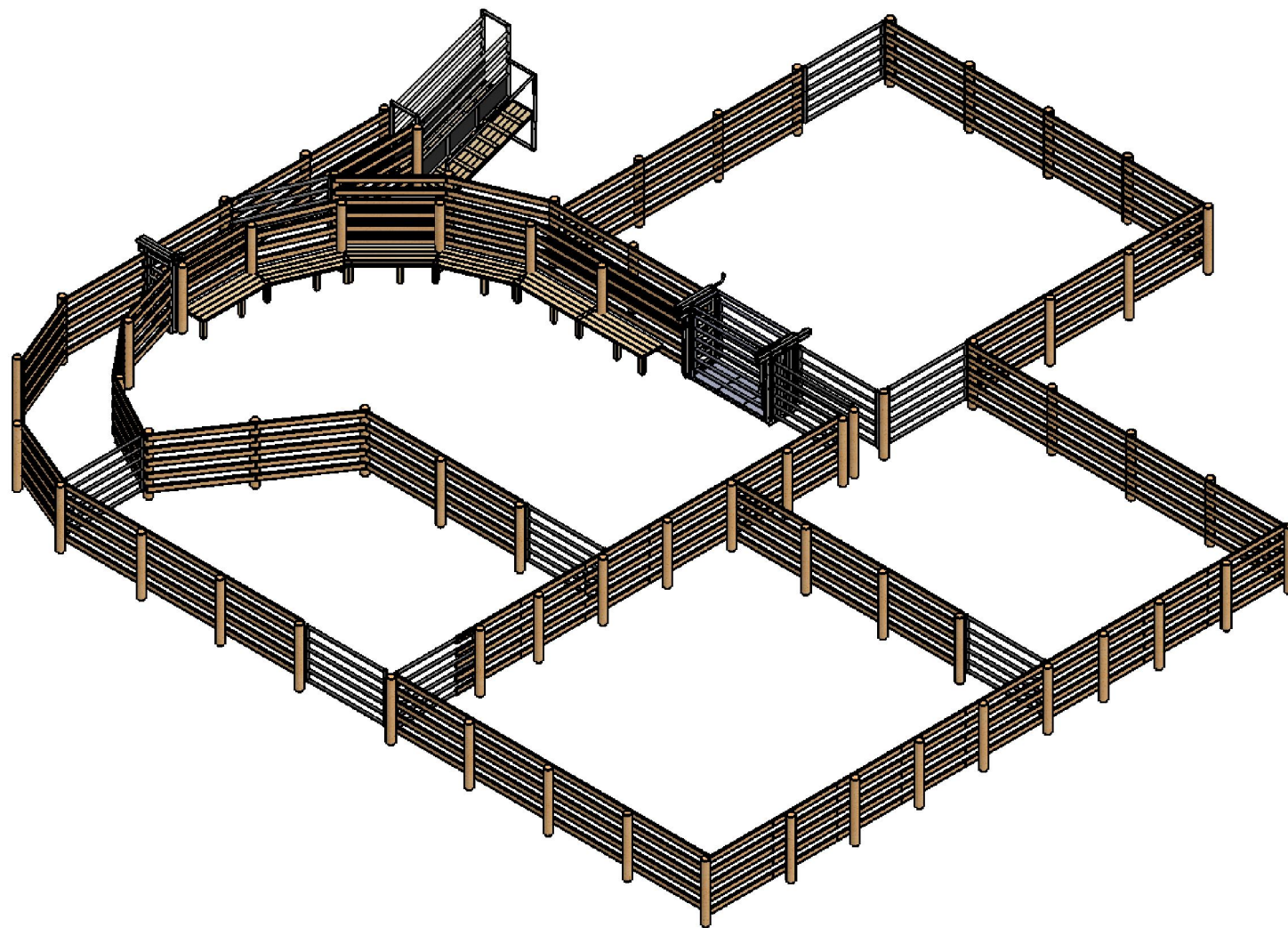
- YARD WORKING CAPACITY IS 45 HEAD
- YARD HOLDING CAPACITY IS 90 HEAD
- POSTS SHOULD BE 2-2.5m APART 1.8m ABOVE GROUND
- RAIL GAP SHOULD BE 210mm
- IDEAL CATWALK HEIGHT IS 500-600mm
- DRENCHING RACE IS 750mm WIDE




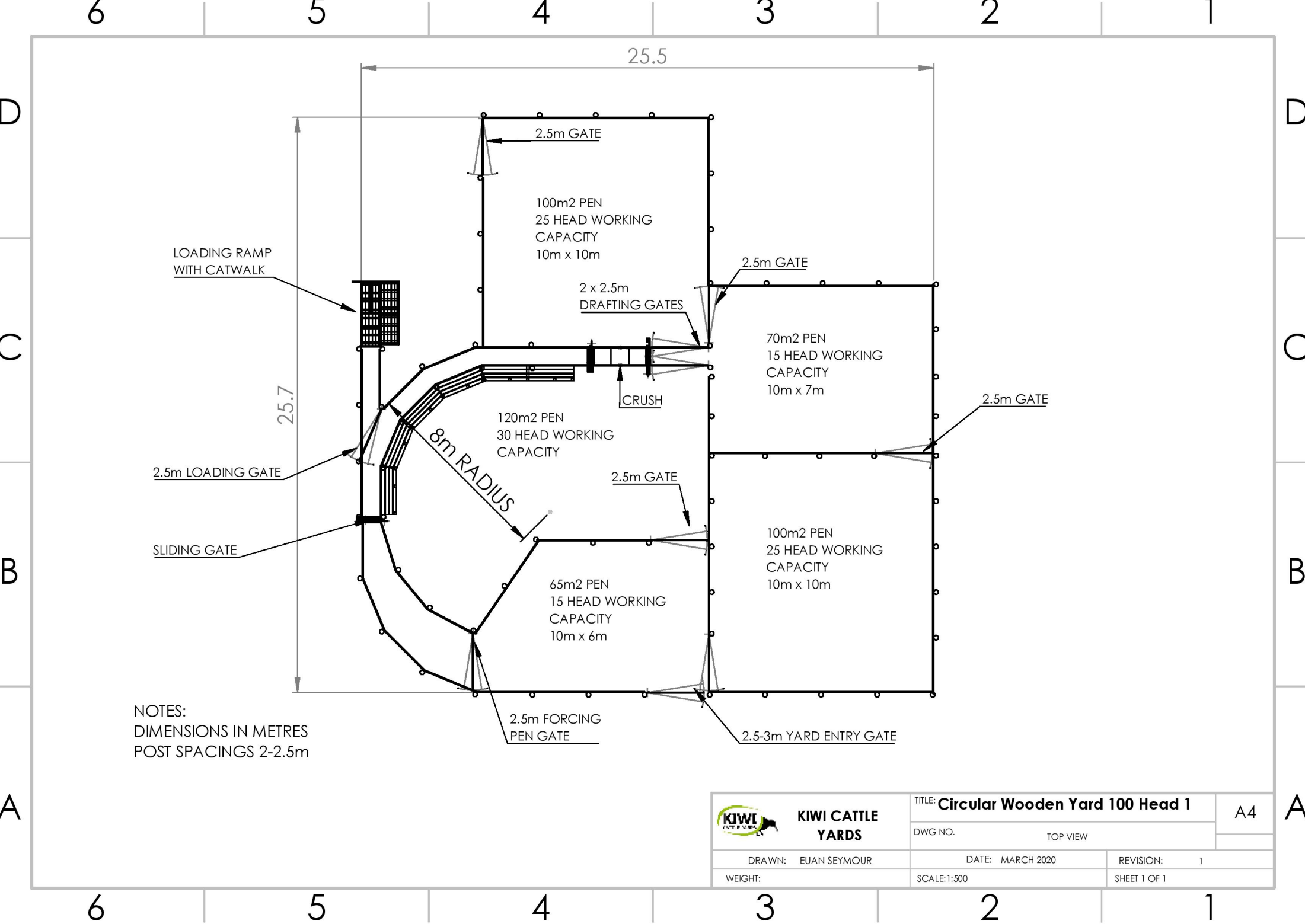
PARTS LIST


PART	DESCRIPTION	QUANTITY
POSTS	200 - 220mm 2.7m STRAINER	31
GATE POSTS	200-220mm 3.2m STRAINER	5
RAILS	150 x 50 H3 RAILS	450m
YARD GATES	2.5m STEEL GATES	5
SLIDING GATES	SLIDING GATES	1
CRUSH	CADET CRUSH	1
LOADING RAMP	BEEF LOADING RAMP WITH CATWALK	1
SLAM LATCHES	20mm SLAM LATCHES	5
GUDGEONS	275mm GUDGEONS	10
NAILS/SCREWS	125mm NAILS OR 100mm SCREWS	450 APPROX.

 KIWI CATTLE YARDS	TITLE: Circular Wooden Yard 45 Head 2		A4
	DWG NO.	NOTES AND PARTS LIST	
DRAWN: EUAN SEYMOUR	DATE: MARCH 2020	REVISION: 1	
WEIGHT:	SCALE: 1:500	SHEET 1 OF 1	



 KIWI CATTLE YARDS	TITLE: Circular Wooden Yard 100 Head		A4
	DWG NO. ISOMETRIC VIEW		
	DRAWN: EUAN SEYMOUR	DATE: MARCH 2020	REVISION: 1
WEIGHT:	SCALE:1:500	SHEET 1 OF 1	



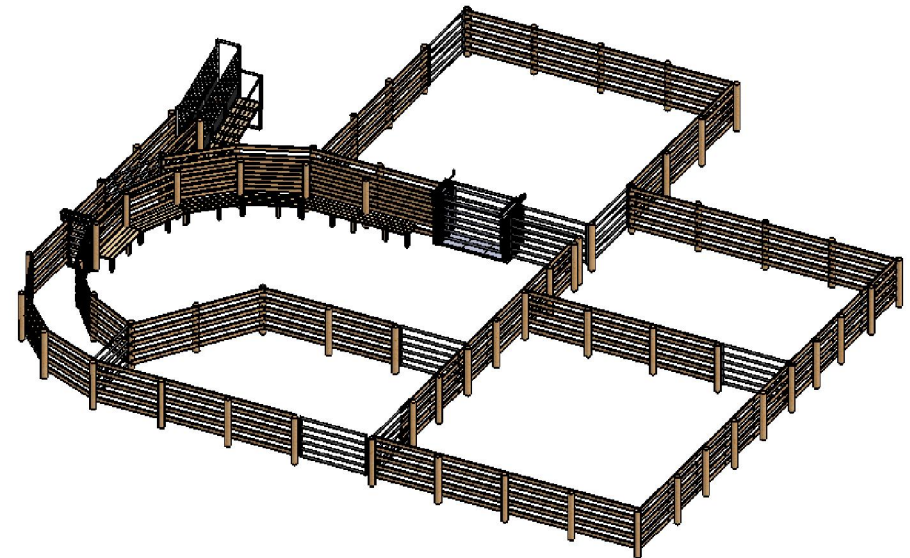
 KIWI CATTLE YARDS	TITLE: Circular Wooden Yard 100 Head 1		A4
	DWG NO. TOP VIEW		
	DRAWN: EUAN SEYMOUR	DATE: MARCH 2020	REVISION: 1
WEIGHT:	SCALE:1:500	SHEET 1 OF 1	


NOTES

- YARD WORKING CAPACITY IS 100 HEAD
- YARD HOLDING CAPACITY IS 200 HEAD
- POSTS SHOULD BE 2-2.5m APART 1.8m ABOVE GROUND
- RAIL GAP SHOULD BE 210mm
- IDEAL CATWALK HEIGHT IS 500-600mm
- DRENCHING RACE IS 750mm WIDE

PARTS LIST

PART	DESCRIPTION	QUANTITY
POSTS	200 - 220mm 2.7m STRAINER	59
GATE POSTS	200-220mm 3.2m STRAINER	10
RAILS	150 x 50 H3 RAILS	825m
YARD GATES	2.5m STEEL GATES	10
SLIDING GATES	SLIDING GATES	1
CRUSH	CADET CRUSH	1
LOADING RAMP	BEEF LOADING RAMP WITH CATWALK	1
SLAM LATCHES	20mm SLAM LATCHES	10
GUDGEONS	275mm GUDGEONS	20
NAILS/SCREWS	125mm NAILS OR 100mm SCREWS	825 APPROX.



 KIWI CATTLE YARDS	TITLE: Circular Wooden Yard 100 Head 2		A4
	DWG NO. NOTES AND PARTS LIST		
DRAWN: EUAN SEYMOUR	DATE: MARCH 2020	REVISION: 1	
WEIGHT:	SCALE: 1:500	SHEET 1 OF 1	