GOLDEN PLAINS SHIRE

ATTACHMENTS

Under Separate Cover
Council Meeting

6.00pm Tuesday 28 July 2020

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PETTAVEL WINERY PROPOSAL

PLANNING PERMIT APPLICATION

Further Information Request

PETTAVEL AUSTRALIA PTY LTD
159 MUHLEBACH RD, SUTHERLANDS CREEK VIC 3331

PETTAVEL WINERY PROPOSAL

1. INTRODUCTION

With the northern boundary fronting Muhlebach Road, the property of 129 ha comprises unequal parts of elevated, gently undulating land, dropping sometimes steeply to extensive arable alluvial flat along the Moorabool River for approximately 3km as rear southern boundary. The current business includes wine grape production and other farming operation. The property is occupied by vineyard with a total of 40 ha, a large dam and 3 small storage ponds, farming land, owner's residence, a guest cottage, a farm office and 4 farm sheds.

Grape varieties at Pettavel Vineyards are as follows:

TABLE: ESTIMATEDGRAPE PRODUCTION/ GRAPE SALES/GRAPE FOR WINE MAKING PER YEAR

Varieties	Pinot N	Cab S	Cab F	Merlot	Shiraz	Petit V	Chard	Sauv.B	Riesling	Viognier	TOTAL
Grape Yield	60	19	5	5	50	5	40	25	15	6	230
Grape Sales	50	5	3	2	15	2	30	15	5	3	130
Wine Making	10	14	2	3	35	3	10	10	10	3	100

During the past 5 years, the total grape production is around 230T per year on average. We sell grapes to local wineries and make our wine at Yarra Valley mainly for export. We plan to have our own winery on site, producing wines by crashing about 100t of grapes from March to April each year, and keep other current businesses as they are now.

This proposal is to build a winery with a capacity to process 100t of grapes. It also includes the requirement of a Cellar Door facility for the sales of wine, as well as a current farm office extension.

The copy of updated plans for the proposed winery and farm office extension is attached with this proposal.

2. SITE MAP & SITE PLAN

The location of the proposed winery and farm office extension are shown in the attached site plan and site maps.

Updated location and structure of the proposed winery will offer a better vineyard view at the Cellar Door entry. It is also a result of considering making the full use of solar energy and storm water collection. Using modern technology to produce grape seeds and grape skin based products in the future is under planning, and the increased area of our winery will provide the possibility for it. The updated winery will connect and separate visiting zone and outside operation zone, which is more effective for landscaping and practicing purpose.

The site maps indicate surrounding land uses and buffer distances to the sensitive ones of the development.

The site plan also highlights the septic tank, surface irrigation, storm water storage, farming chemical treatment as well as composting, which will be given detailed explanation in our waste management plan later.

3. TRAFIC MOVEMENTS

Expected traffic movements include 5 aspects:

- Cellar door guest: our Cellar Door will open by appointment only, expecting 6-12 visits per week.
- Grape sales: there will be 130t grapes per year for sale as shown in the grape production table above. This will need around 40 trucks for delivery during harvesting from March to April every year, which gives an average of 2.2t grapes being delivered each day.
- Wine delivery: around 10 containers of bottle wines to be delivered for export from the site every year before vintage time.
- 1 vehicle per month is estimated for delivering vineyard chemical, fertilizer and wine dry goods.
- Winery staff and vineyard labors: up to 10 vehicles per day during peak periods. (please note – split shifts will be employed during peak periods)

Our proposal will not affect the current traffic movement seriously. Our Cellar Door will open only by appointment and we are only expecting 6-12 customers per week. Our wine will be produced on site, which will reduce the traffic movement from delivering our grapes to other wineries.

4. MARC MANAGEMENT

Around 35t of organic wastes including grape skins and grape seeds will be created during harvesting time from March to May. All these wastes will be moved to the organic composting area, as indicated in the picture below and will be reused as an organic fertilizer to the vineyard once ready.

5. WATER MANAGEMENT

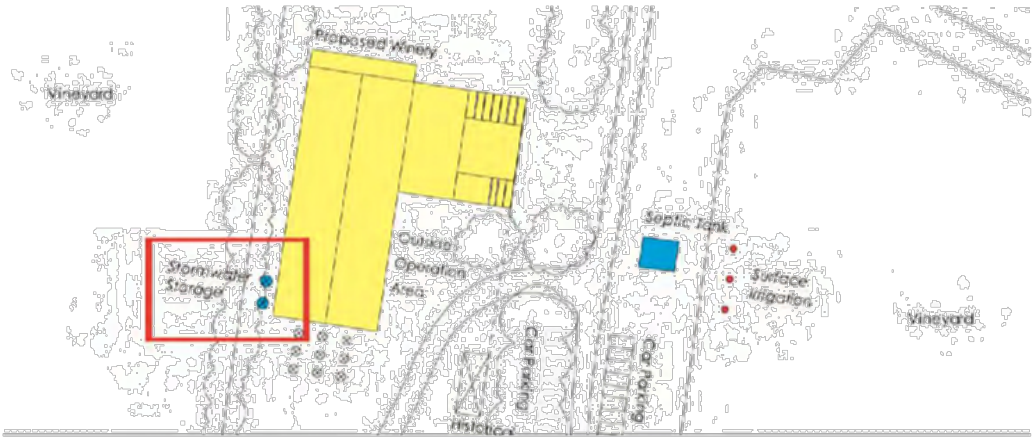
5.1 STORM WATER MANAGEMENT

The maximum rainfall in Geelong area is 681.9mm and the average is 469.8mm for the past 10 years.

The proposed roof to harvest storm water is around 1200m².

The roof harvestable volume of storm water is 826m³ (1200 X 681.9/1000).

Two 50m³ tanks are to be installed to harvest rainfall from roof, and the water will be reused for washing and irrigation purpose. It will also be connected with a pipe leading to the dam for later irrigation.



5.2 WATER USE CALCULATION

Total water use of the proposed winery is shown in the table below.

TOTAL WATER USE IN KL EXCLUDING VINEYARD IRRIGATION														
ITEM \ MONTH	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**Total**	**Go To**
1.Daily Utility (toilet, drink...) 10 people; 20 people during vintage Ref: Storm (1997) Winery Utilities	1	1	2	2	1	1	1	1	1	1	1	2	15	**Septic tank**
2.Water for Destemming and Crushing for processing 100t grapes Ref:Estimated water use in vineyard engineering			20	50									70	**Surface Irrigation**
3.Estimated Water for Pressing Ref:Estimated water use in vineyard engineering			30	10									40	**Surface Irrigation**
4.Tanks &BarrelWash average 1kl per ton wine; 21 tanks each time and 3 times per year	4	10	15	15	10	3	3			3			63	**Details in 5.3.4**
5.Bottling and Cleaning	10	10	1	1	1	1	2	2	2	2	2	2	35	**Pond**
Total	**15**	**21**	**68**	**78**	**12**	**5**	**6**	**3**	**3**	**6**	**3**	**3**	**223**	

As indicated by the calculation, a total of 223t water will be used as a result of our proposal.75% of the water is for the vintage time from February to April. The maximum daily water usage in April is about 2.6t.

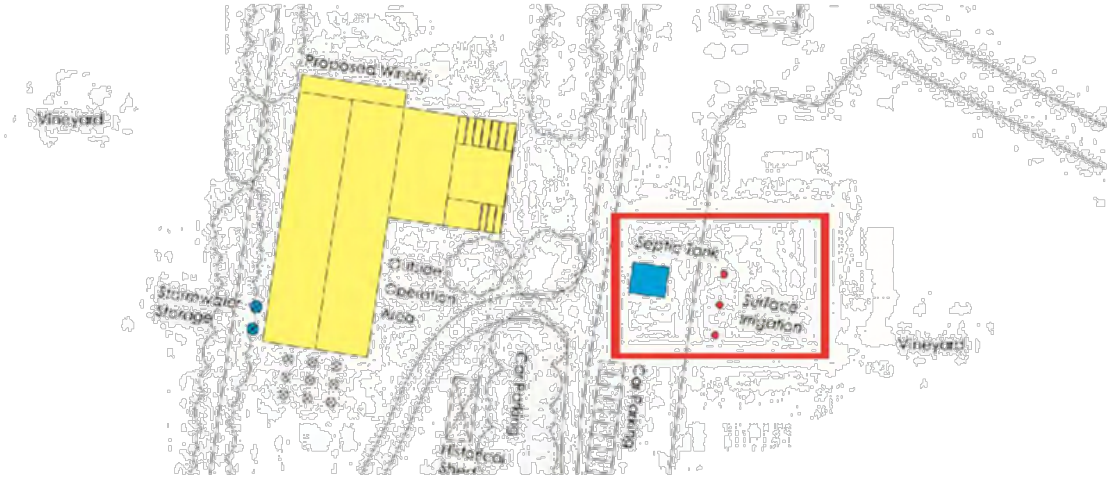
5.3. WASTE WATER MANAGEMENT

The waste water management aims to avoid or minimize the waste water on site and to reuse the wastewater as much as possible in accordance to Industry Best Practice.

There are 5 types of waste water expected from the proposed development as addressed in the table of *Total Water Use in KL Excluding Vineyard Irrigation*. Detailed explanations are provided.

5.3.1 Daily Utility

The waste will go to the septic tank following EPA requirement and will irrigate through surface-irrigation to the downhill vineyard.



5.3.2 Water for Destemming and Crushing

After grapes are destemmed and the crushed, the water used for washing grape bins and other equipment will contain organic content and high-sugar content. Water maintains fresh until the sugar or organic content turn it polluted. The proposed management aims to use the water straight away before polluted through surface irrigation of the septic tank. The water can be used for irrigating as it will meet the standard of irrigation.

A few of fine mesh screens will be installed on ground both inside and outside the operation area for any drainage.

5.3.3 Water for Pressing

The management for water used in the procedure of pressing and removing skins for producing red wine is the same with the management for water used in destemming and crushing.

5.3.4 Tanks & Barrels Wash

Extreme care must be taken at this stage to ensure that a large amount of biocides or acid and caustic wastes are not discharged to the vineyard. There are 3 types of washing water in practice and will be treated differently as follows:

a. The volume of caustic washing will be about 6t, which is 10% of the 63t per year. The waste water will be handled by liquid waste services.

b. The other 10% of the 60t washing water with no detergent is less caustic but is still under the standard of reuse.This amount of waste water will be handled by liquid waste services.
c. The volume of the rest waste water from tanks and barrels washing is about 50t. This is good for recycle and it is proposed to connect to the pond storage for irrigation later.

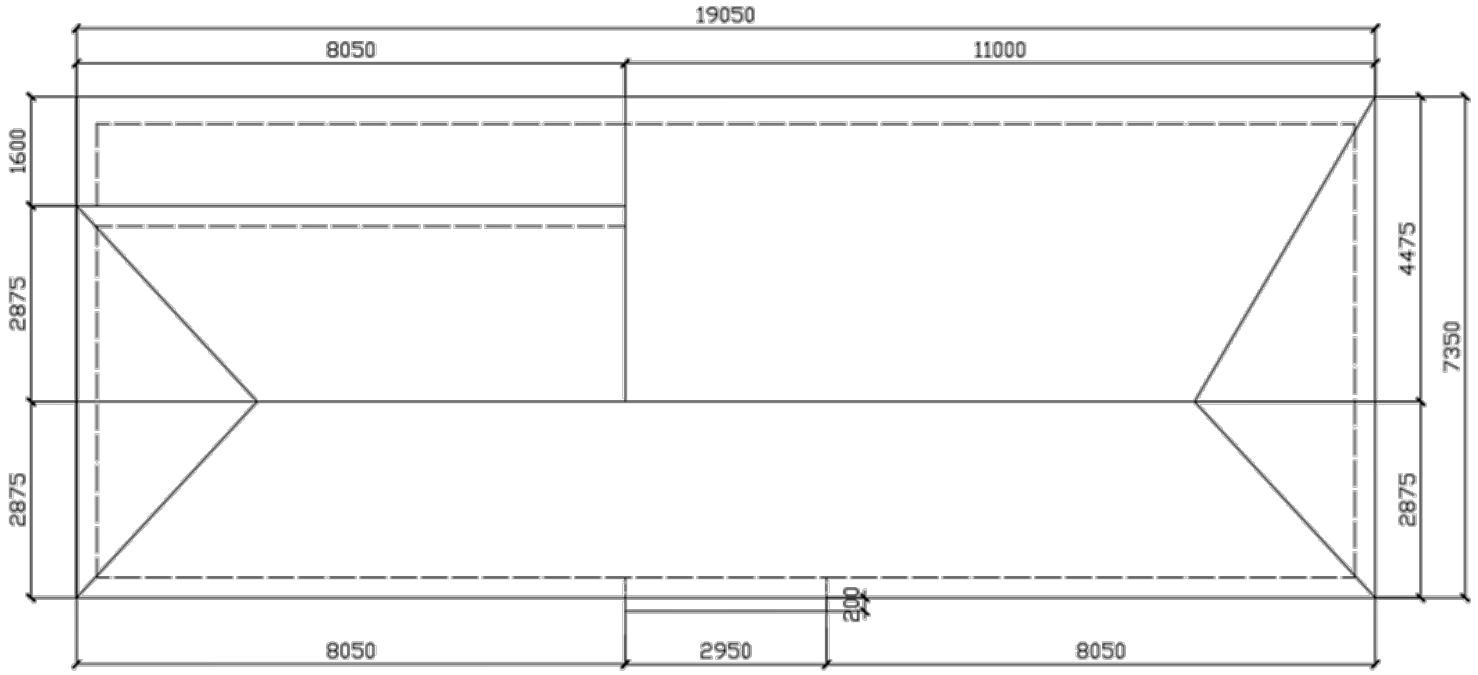
5.3.5 Bottling and Cleaning

The water after bottling and cleaning is still good for recycling. It is proposed to connect to the pond storage for irrigation later.

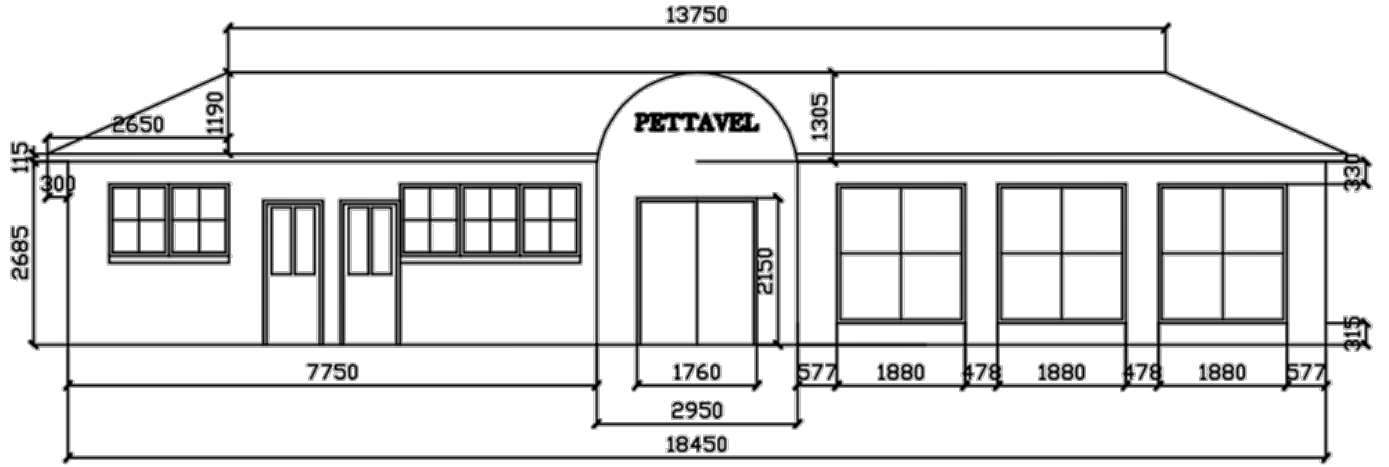
6. LAND CAPABILITY ASSESSMENT

We have authorized Provincial Geotechnical Pty Ltd to undertake the Land Capability Assessment for us. It might take 1-2 weeks more for them to finalize the assessment report. We will send it to Council once we receive the report.

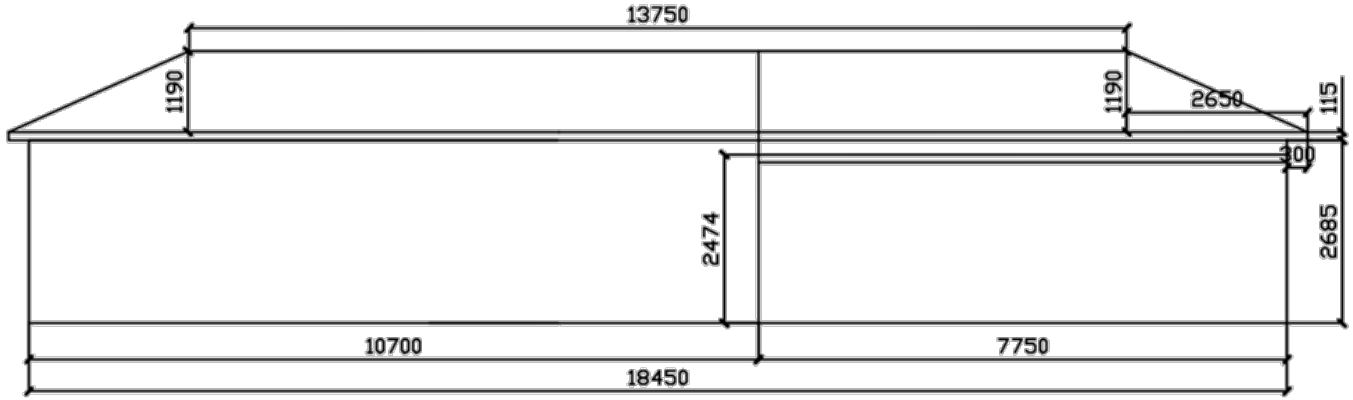
Farm Office Extension



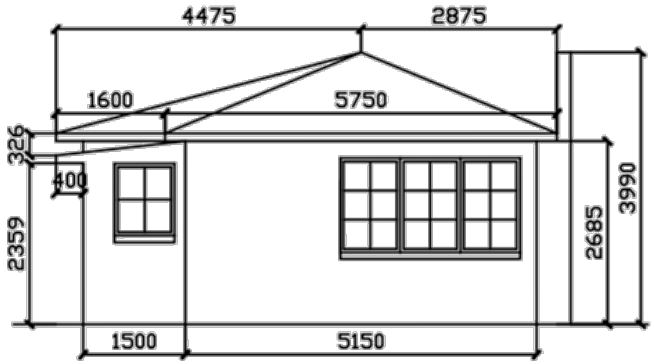
Roof Plan 1:100



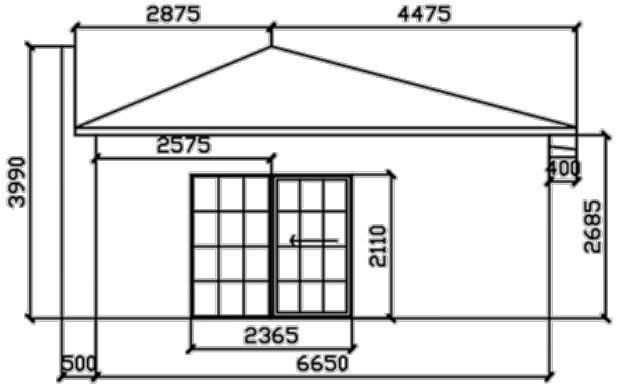
East Elevation 1:100



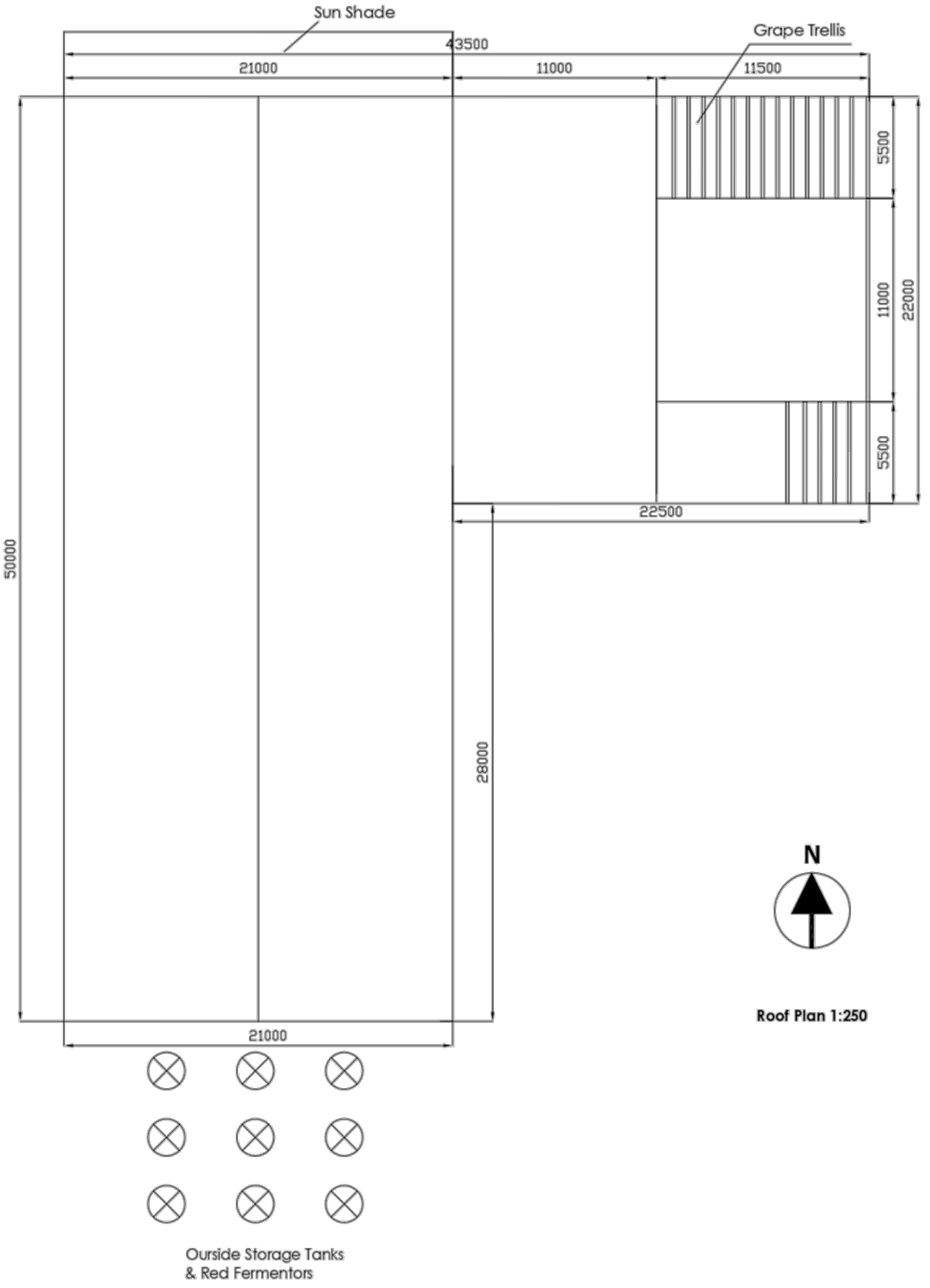
West Elevation 1:100

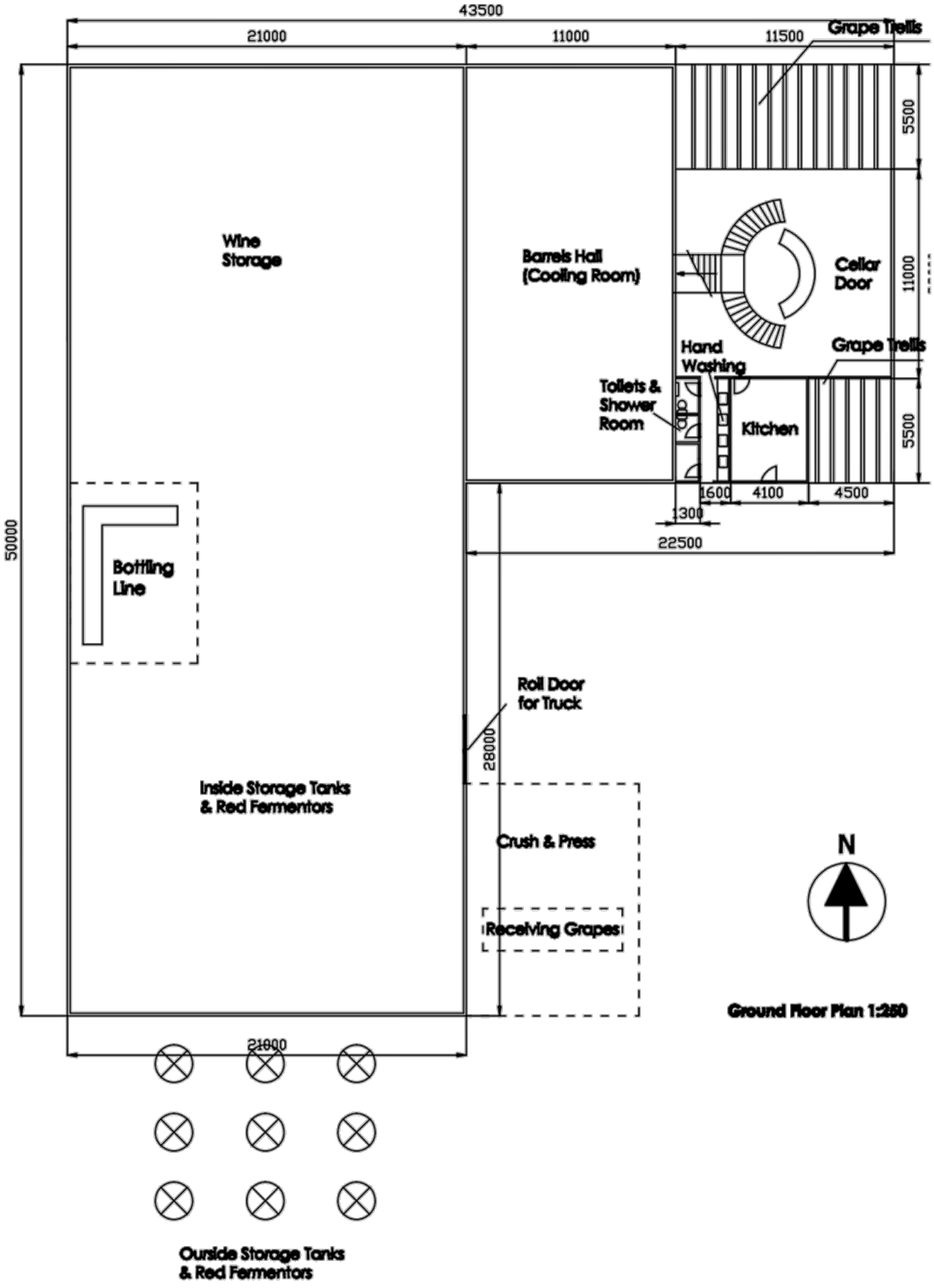


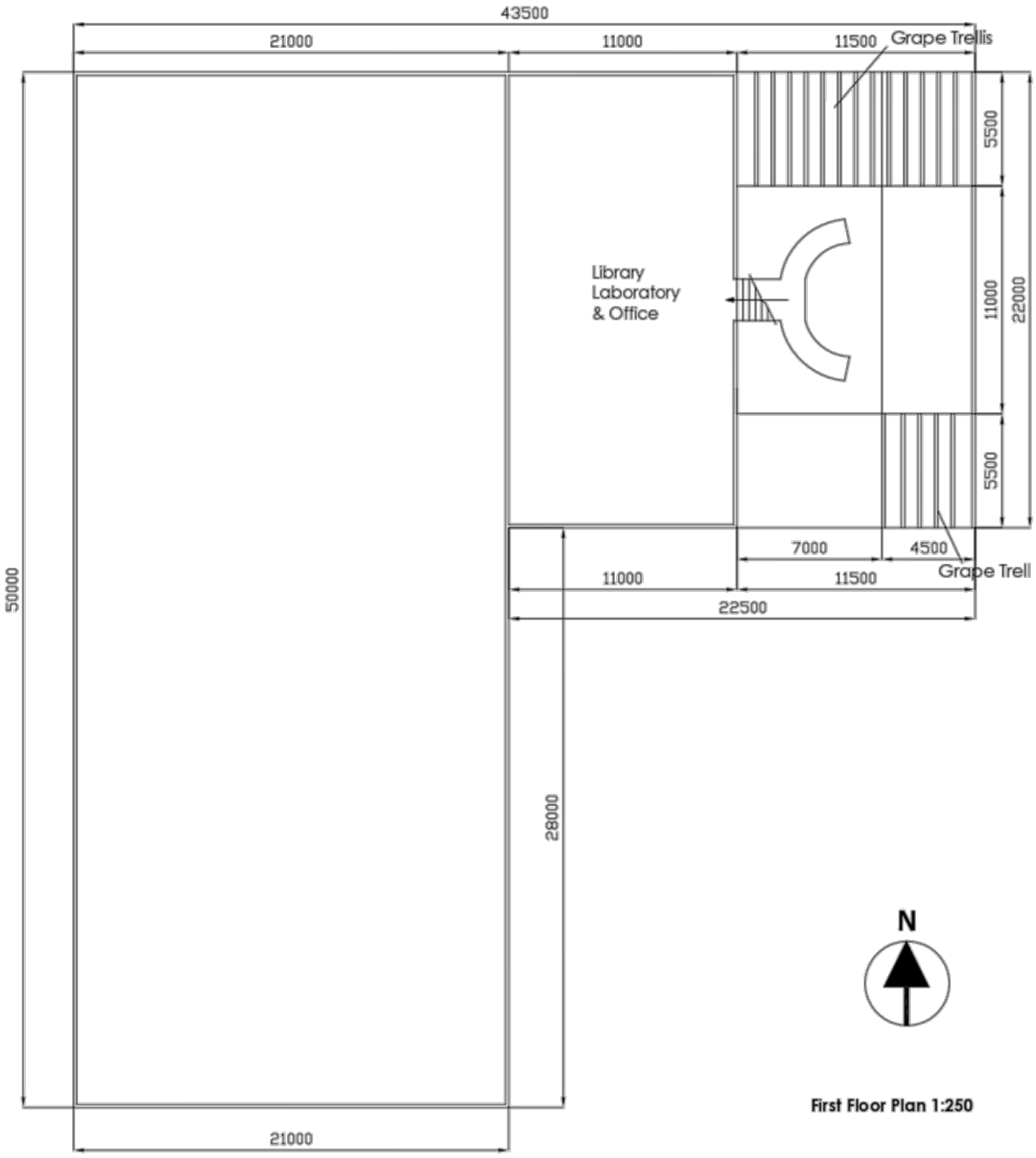
South Elevation 1:100



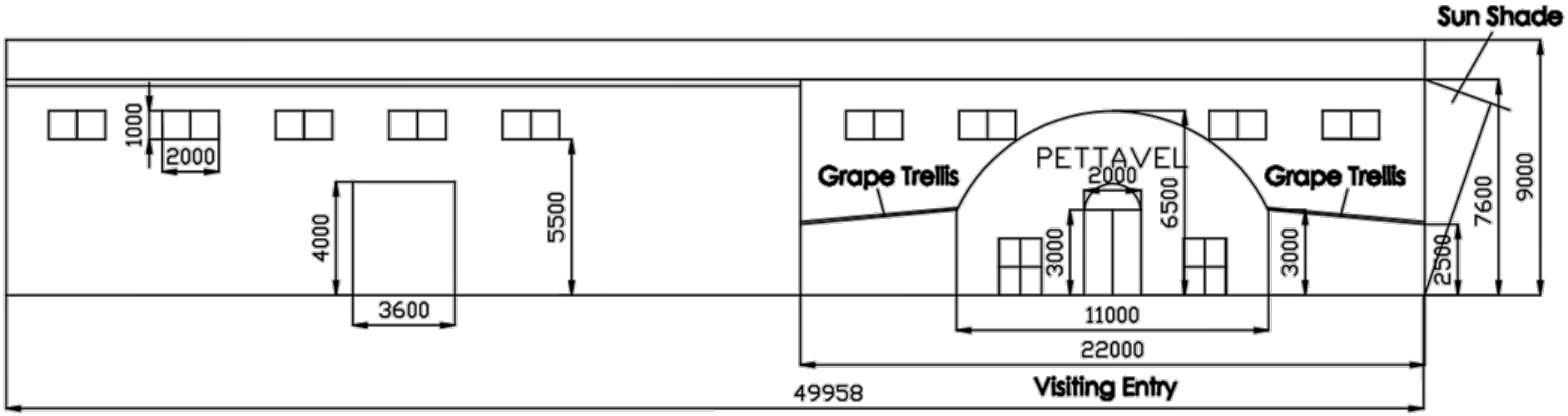
North Elevation 1:100


Sun Shade
Grape Trellis
43500
21000
11000
11500
5500
11000
22000
5500
22500
50000
28000
N
Roof Plan 1:250
21000
Ourside Storage Tanks
& Red Fermentors


43500
21000
11000
11500
Grape Trells
5500
11000
5500
Wine Storage
Barrels Hall (Cooling Room)
Cellar Door
Hand Washing
Grape Trells
Toilets & Shower Room
Kitchen
1600
4100
4500
1300
22500
50000
Bottling Line
Roll Door for Truck
28000
Inside Storage Tanks & Red Fermentors
Crush & Press
Receiving Grapes
N
Ground Floor Plan 1:250
21000
Ouside Storage Tanks & Red Fermentors

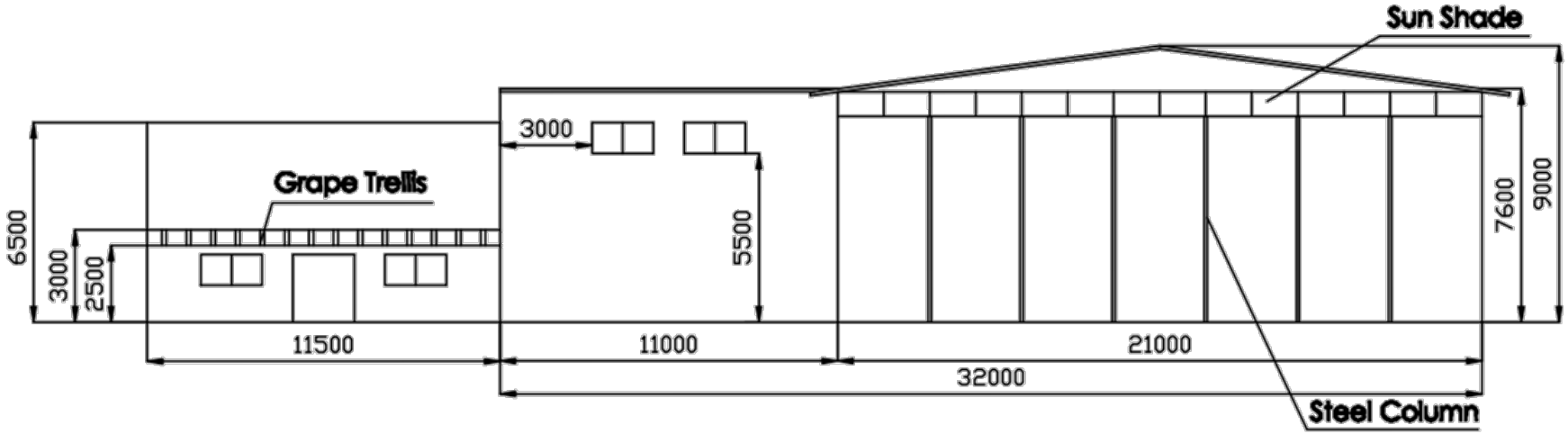

43500
21000
11000
11500
Grape Trellis
5500
11000
22000
5500
Library
Laboratory
& Office
7000
4500
Grape Trell
11000
11500
22500
50000
28000
21000
N
First Floor Plan 1:250

PROPOSED WINERY



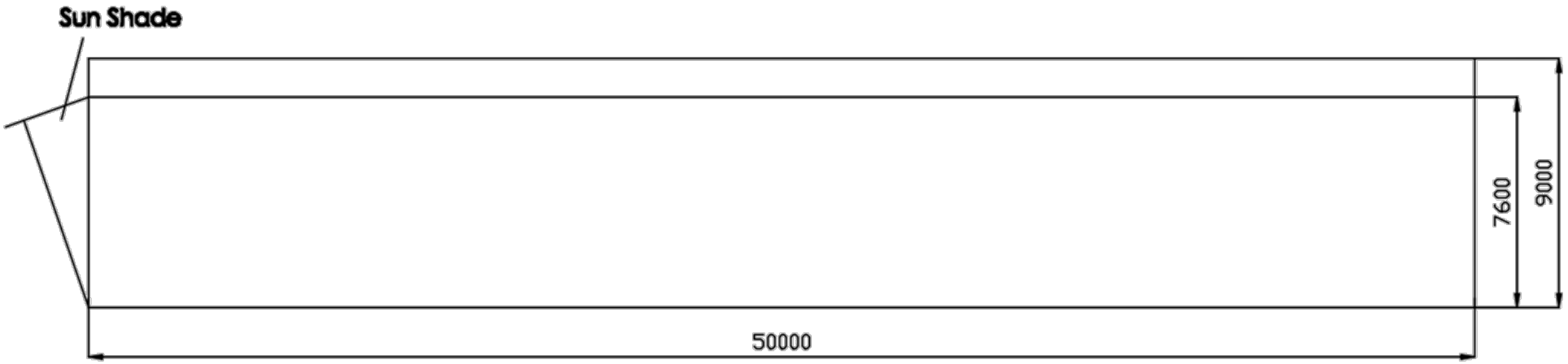
East Elevation 1:200

PROPOSED WINERY



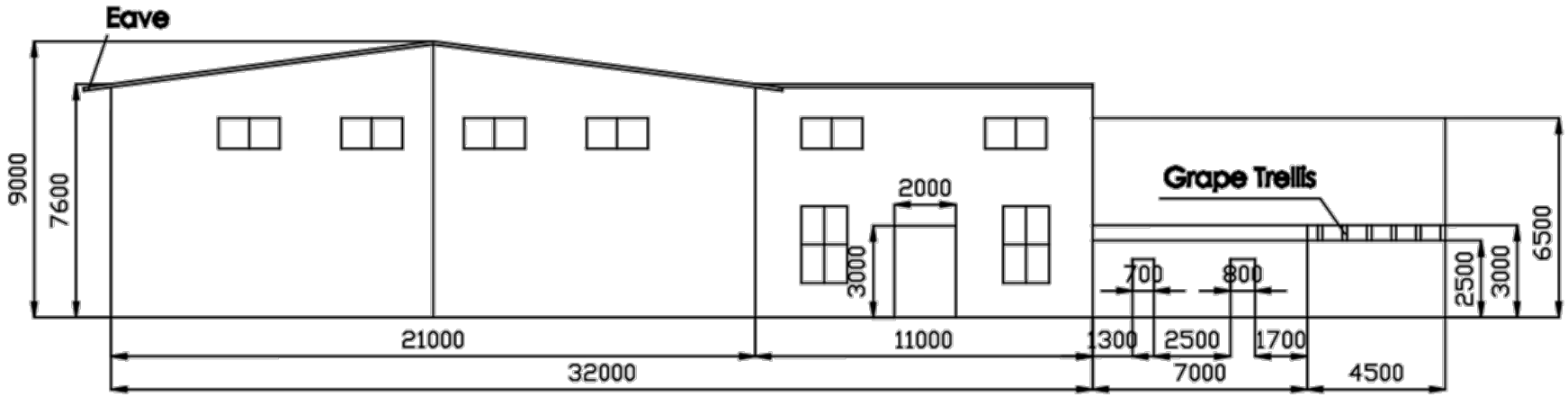
North Elevation 1:200

PROPOSED WINERY

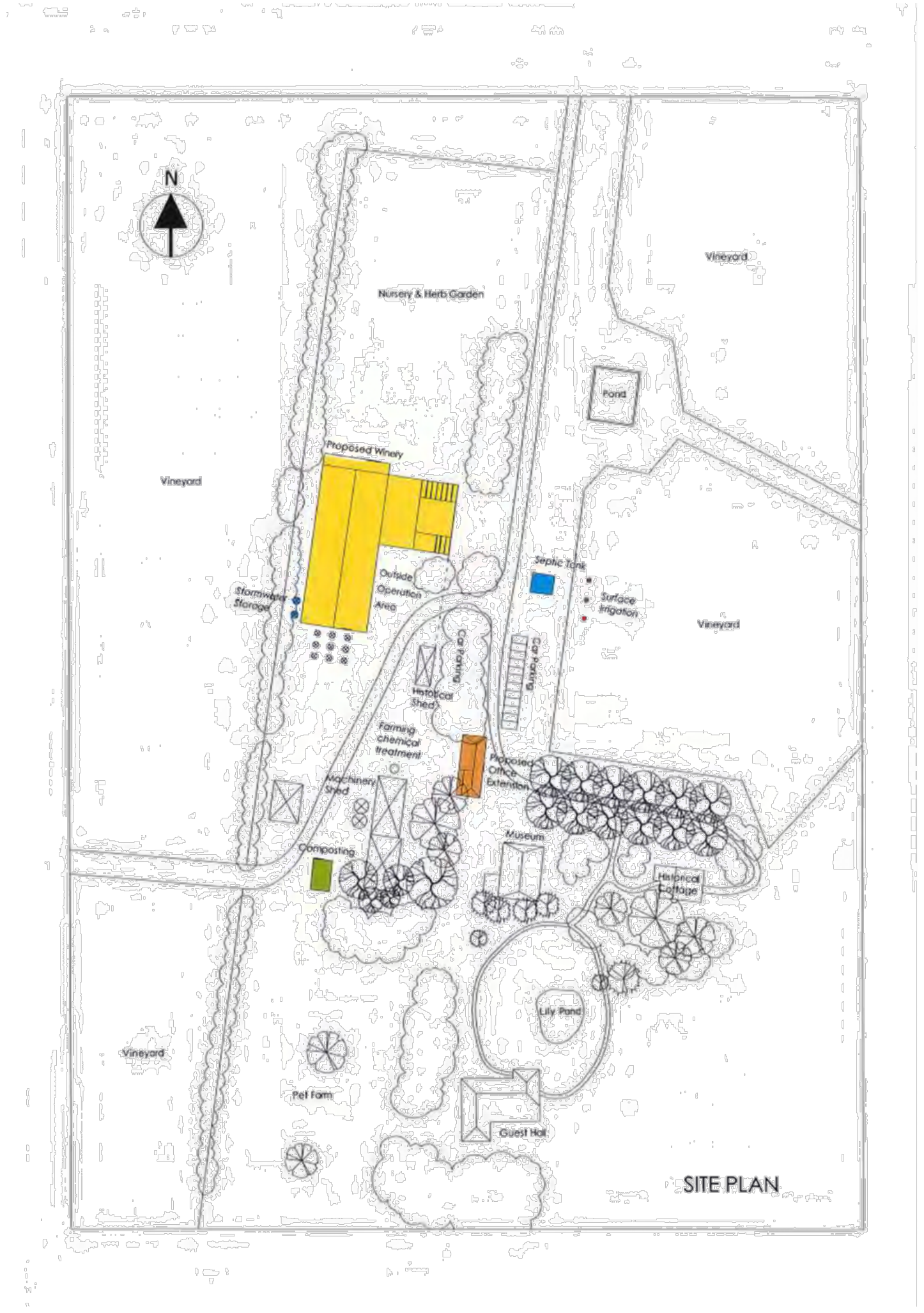


West Elevation 1:200

PROPOSED WINERY

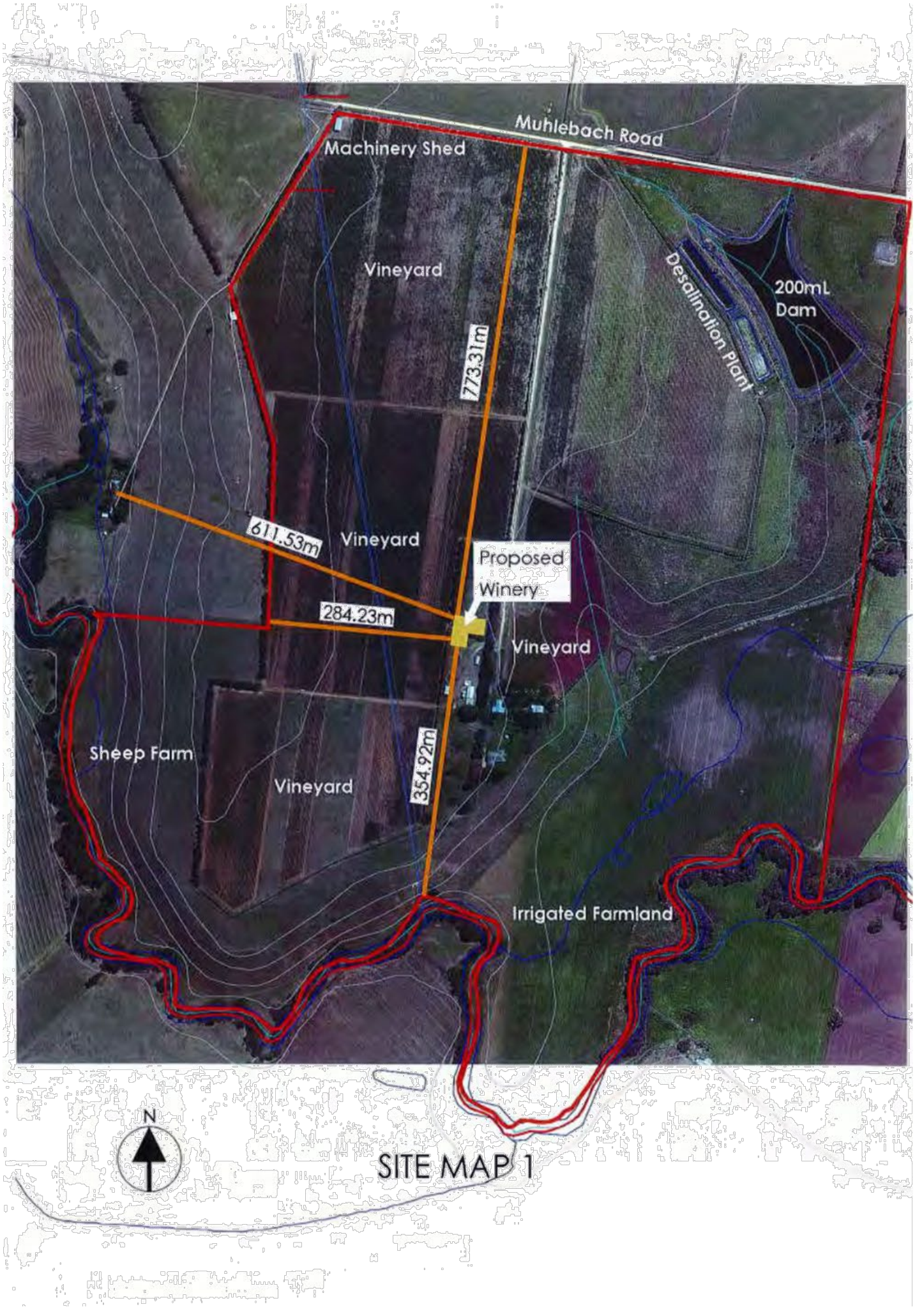


South Elevation 1:200


N
Vineyard
Nursery & Herb Garden
Pond
Proposed Winery
Vineyard
Septic Tank
Outside Operation Area
Stormwater Storage
Surface Irrigation
Vineyard
Historical Shed
Farming chemical treatment
Machinery Shed
Proposed Office Extention
Museum
Composting
Historical Cottage
Lily Pond
Vineyard
Pet Farm
Guest Hall
SITE PLAN


Proposed Winery
Septic Tank
105.27m
Proposed Office Extention
194.40m
Guest Hall
N

SITE MAP 2


Muhlebach Road
Machinery Shed
Vineyard
Desalination Plant
200mL Dam
773.31m
611.53m
Vineyard
Proposed Winery
284.23m
Vineyard
Sheep Farm
Vineyard
354.92m
Irrigated Farmland
N
SITE MAP 1