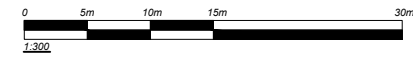




ROOF PLANS
SCALE 1:300 (A1)



ISSUE	DATE	AMENDMENT DESCRIPTION
1	29.11.2021	AMENDED AS PER COUNCIL REQUEST

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The WILLIAMS RIVER STEEL
GROUP OF COMPANIES
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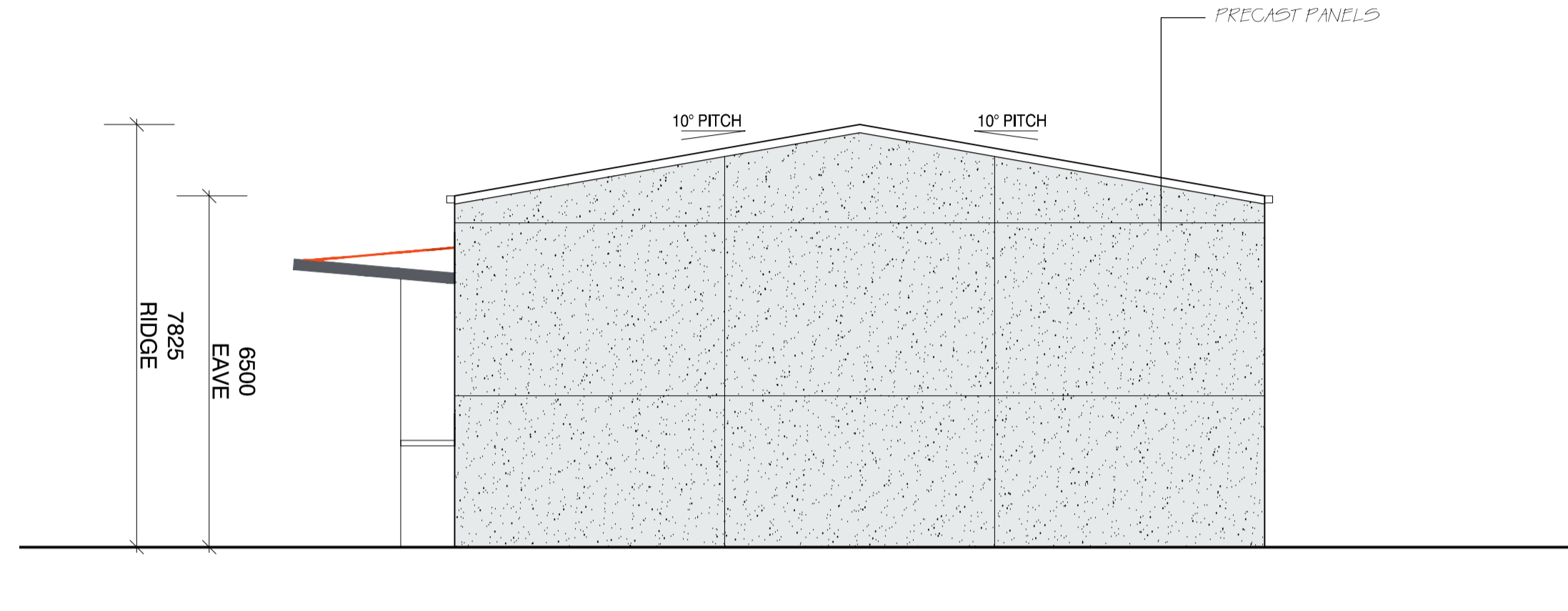
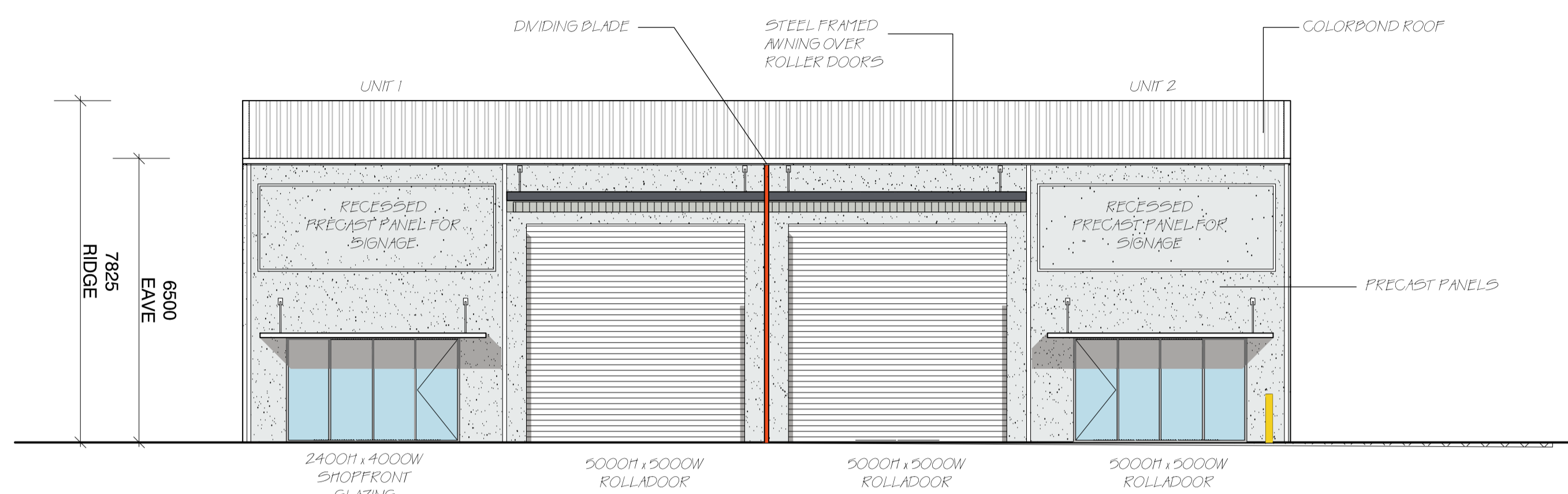
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LOT 18 DP 264183
52 RACECOURSE ROAD
RUTHERFORD

CLIENT: SHARPE'S TRACTORS

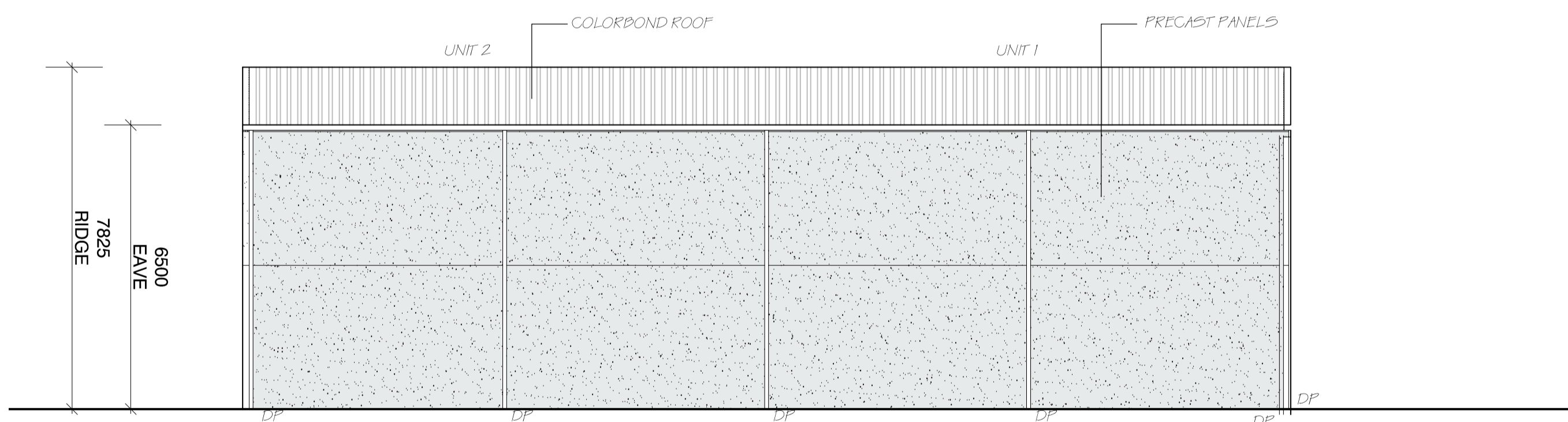
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ROOF PLANS			
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JOB No:	JN 612375	DRW No:	-
PAGE SIZE:	A1	PAGE No:	A08
		ISSUE:	1

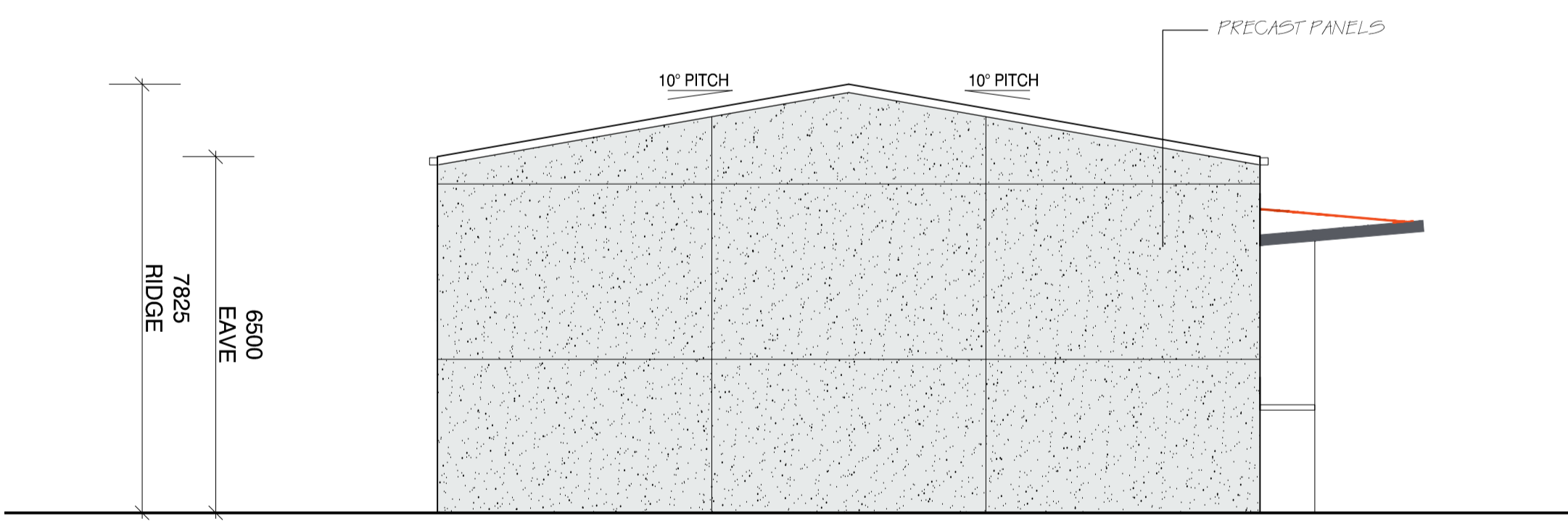


NORTH ELEVATION
SCALE 1:100 (A1)

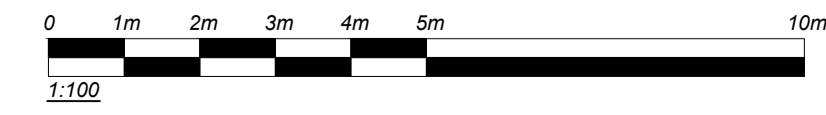
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SCALE 1:100 (A1)



SOUTH ELEVATION
SCALE 1:100 (A1)



EAST ELEVATION
SCALE 1:100 (A1)



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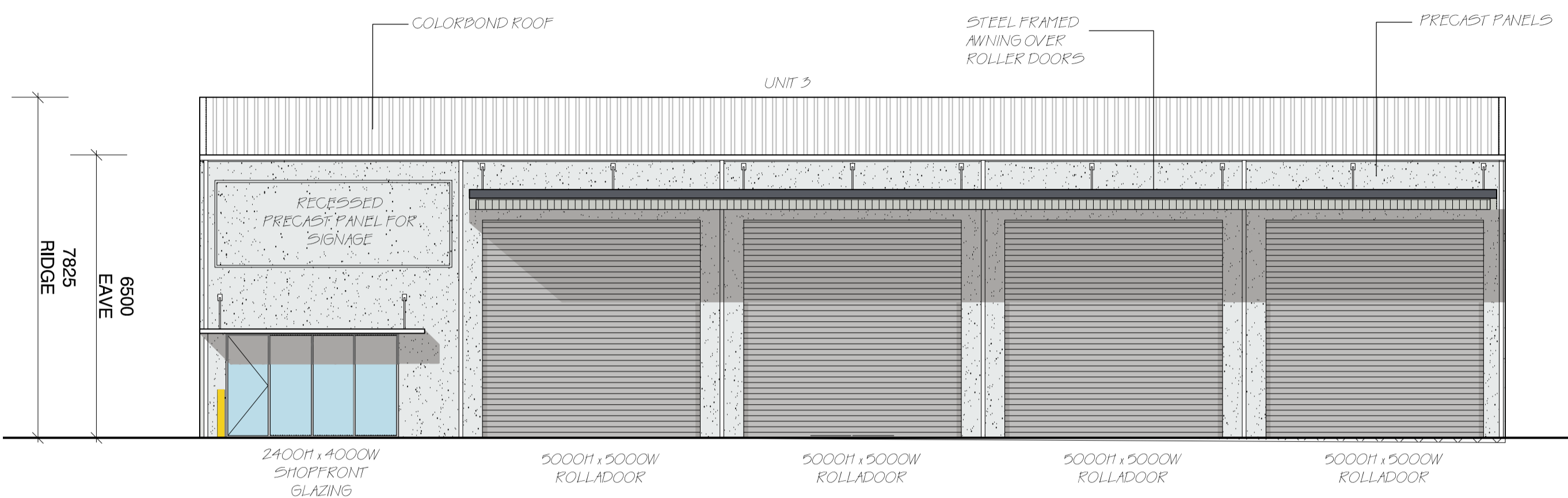
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52 RACECOURSE ROAD
RUTHERFORD

CLIENT: SHARPES TRACTORS

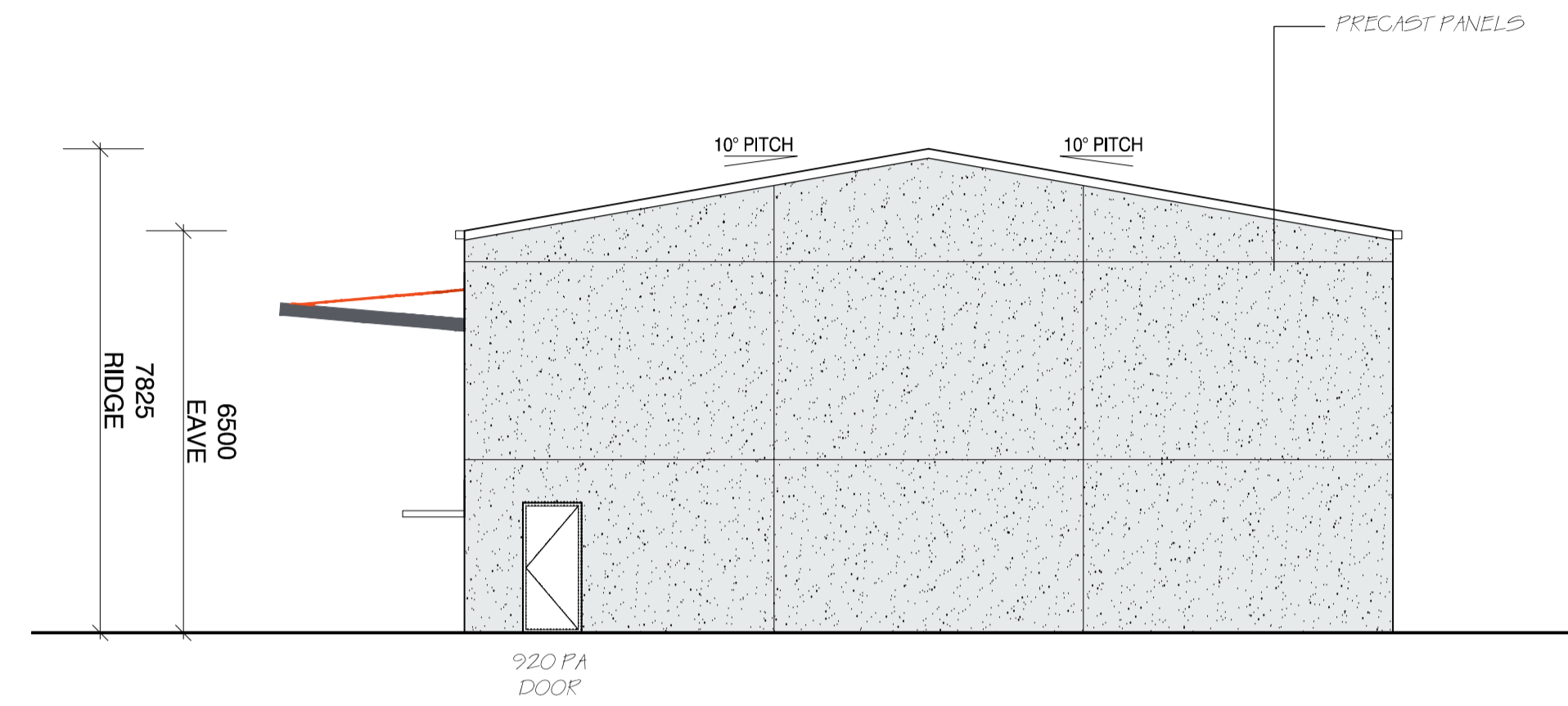
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UNIT 1 & 2 ELEVATIONS

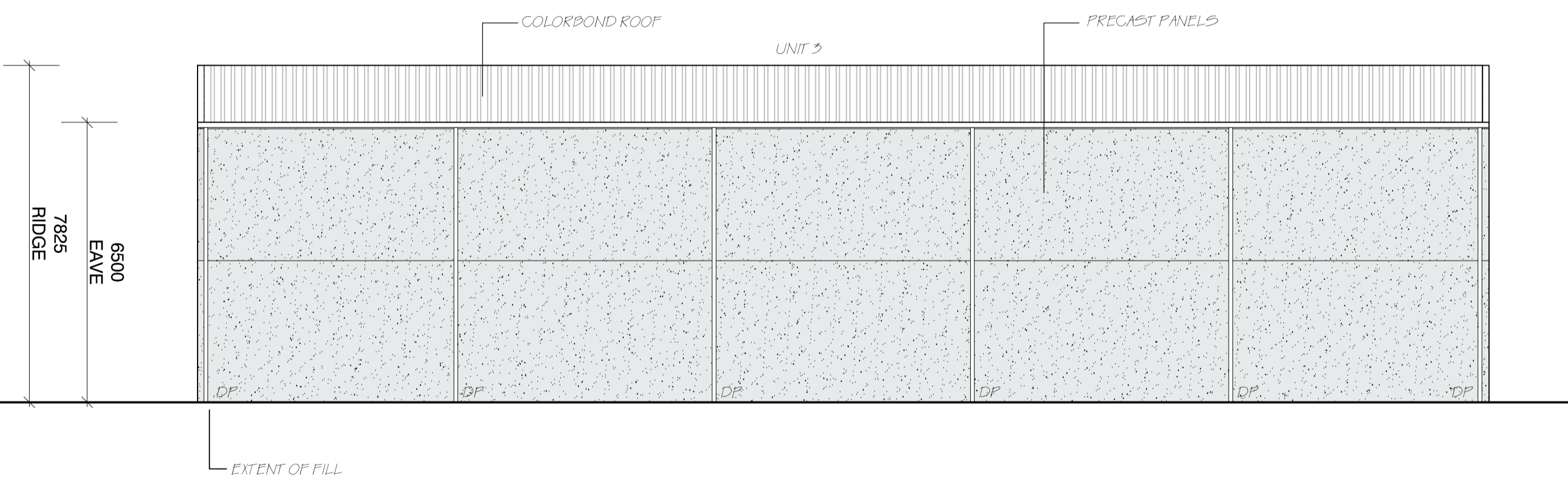
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JOB No.: JN 612375	DRW No.: -		
PAGE SIZE: A1	PAGE No.: A04	ISSUE: 1	



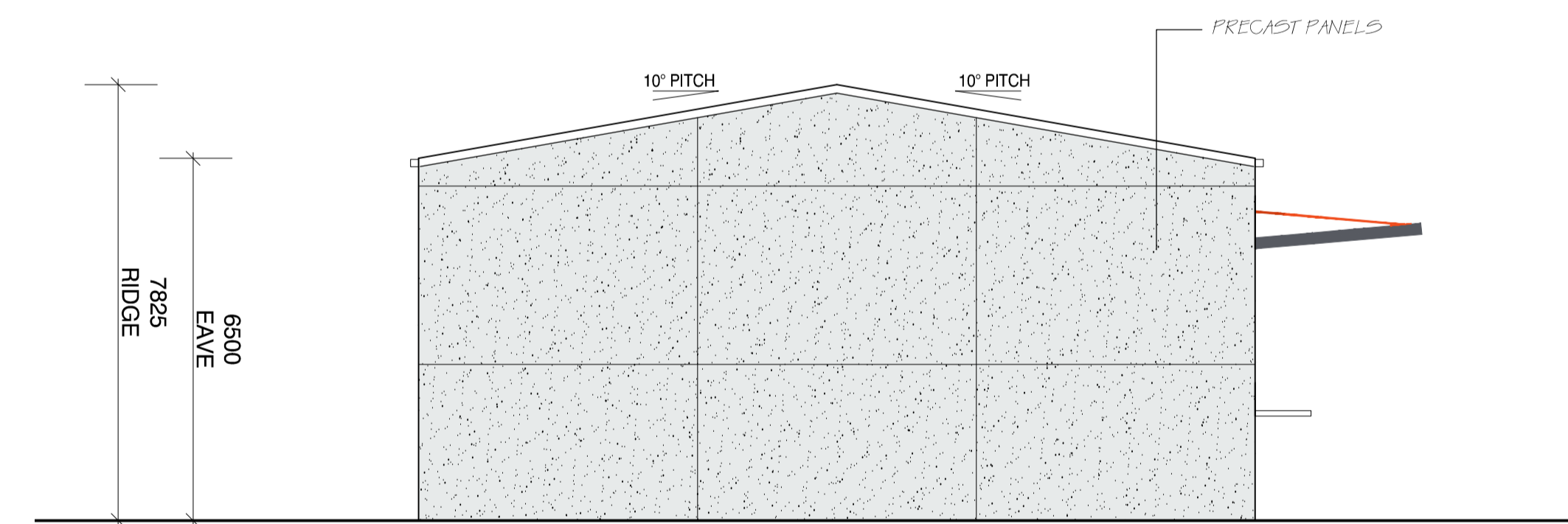
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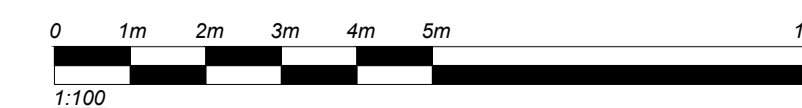
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SCALE 1:100 (A1)



SOUTH ELEVATION
SCALE 1:100 (A1)



EAST ELEVATION
SCALE 1:100 (A1)



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LOT 18 DP 264183
52 RACECOURSE ROAD
RUTHERFORD

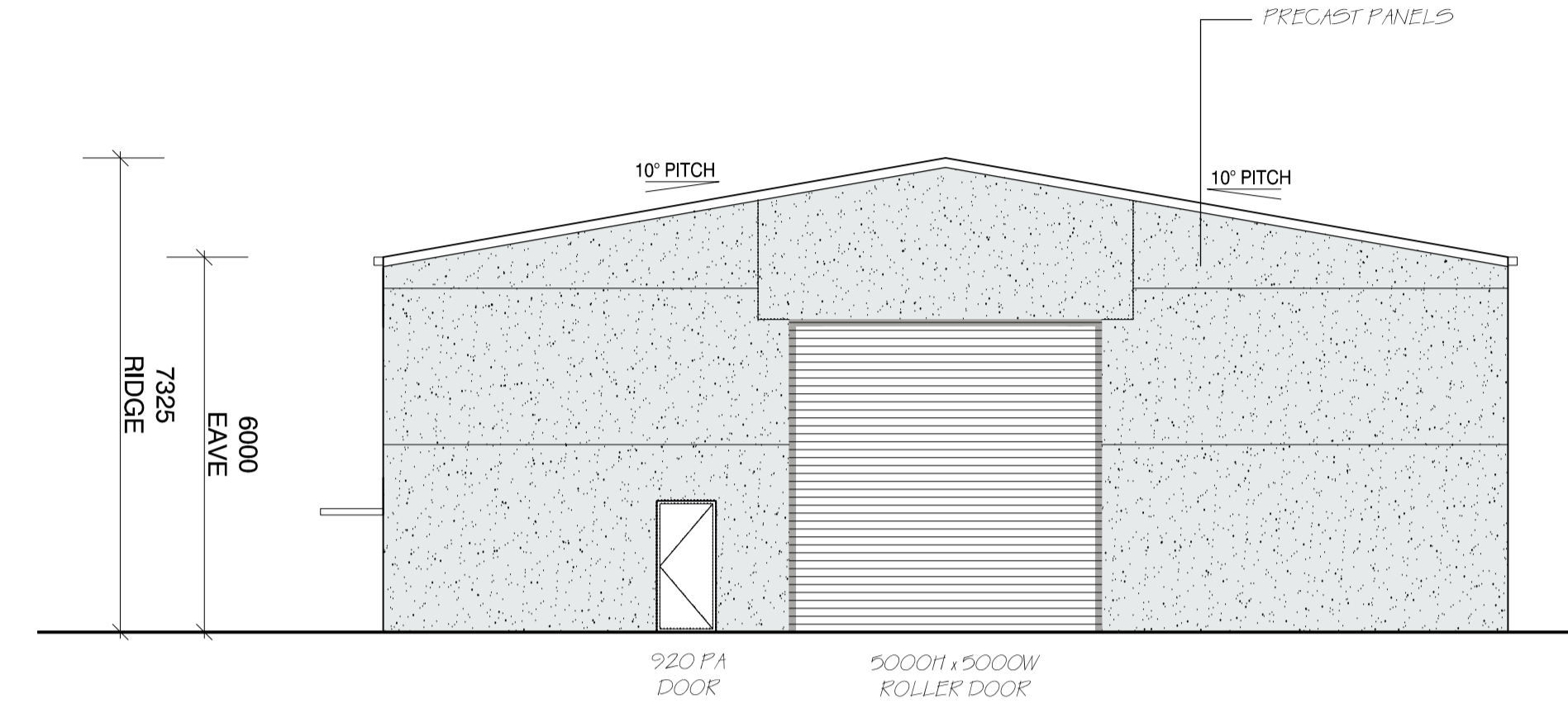
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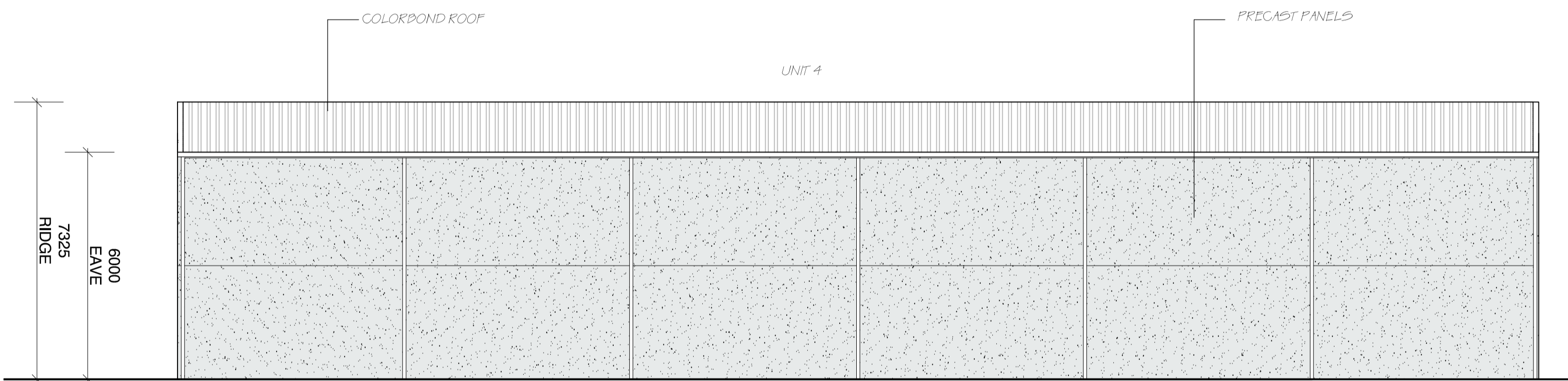
UNIT 3 ELEVATIONS			
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JOB No.: JN 612375	DRW No.: -		
PAGE SIZE: A1	PAGE No.: A05	ISSUE: 1	



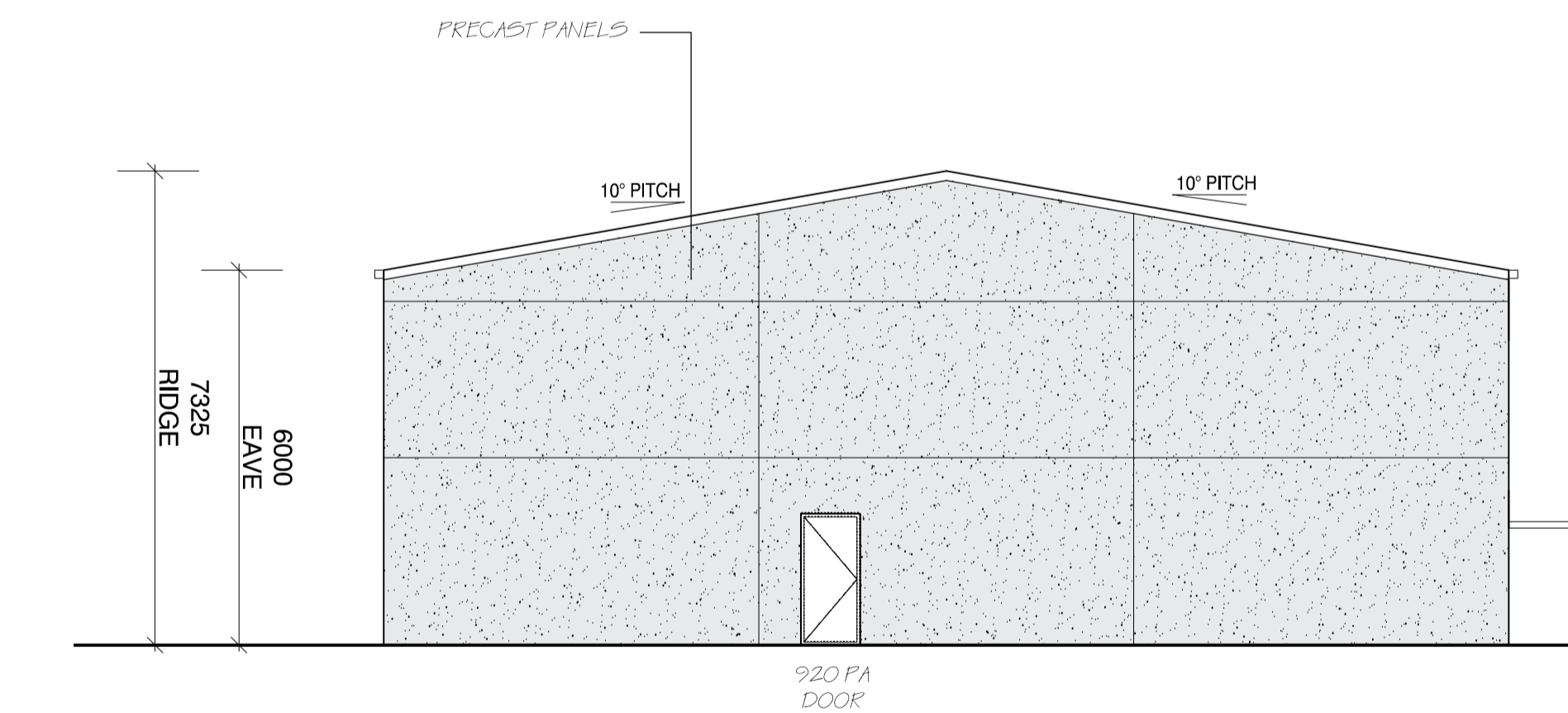
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SCALE 1:100 (A1)



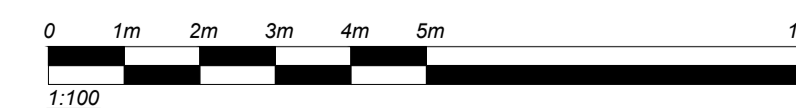
WEST ELEVATION
SCALE 1:100 (A1)



SOUTH ELEVATION
SCALE 1:100 (A1)



EAST ELEVATION
SCALE 1:100 (A1)



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LOT 18 DP 264183
52 RACECOURSE ROAD
RUTHERFORD

CLIENT: SHARPES TRACTORS

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UNIT 4 ELEVATIONS			
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JOB No.: JN 612375	DRW No.: -		
PAGE SIZE: A1	PAGE No.: A06	ISSUE: 1	

GENERAL

G1 These drawings shall be read in conjunction with the architectural and other consultants' drawings / specifications and with other such written instructions as may be issued during the construction. Any discrepancy shall be referred to the Engineer before commencing the work.

G2 All dimensions are in millimeters, UNO (unless noted otherwise).

G3 These drawings shall not be scaled, refer to dimensions given only or refer to the Architectural drawings.

G4 All levels and setting out dimensions shown on the drawings shall be checked on site prior to the commencement of the work.

G5 During construction the structure shall be maintained in a stable condition with no part being overstressed.

G6 Existing services, where shown, have been drawn based on supplied information and as such their accuracy can not be guaranteed. It is the responsibility of the contractor to determine their exact location prior to the commencement of work.

G7 All service trenches under vehicular pavements shall be back filled in accordance with the respective authorities requirements.

G8 All trench backfill material shall be compacted to the same density as the surround material.

G9 All site disturbed areas shall be reinstated to the original condition, including kerbs, footpaths, concrete areas, gravel and grassed areas, etc.

G10 It is the contractor responsibility to obtain all authority approvals.

STORMWATER DRAINAGE

S1 The stormwater drainage design has been carried out in accordance with AS / NZS 3500.3 "Stormwater Drainage" & AS / NZS 3500.2.3 "Stormwater Drainage - Acceptable Solutions".

S2 Any variations to the design levels shall be referred to the engineer immediately for approval.

S3 Any variations to specified products or details shall be referred to the engineer for approval prior to their installation.

S4 Subsoil drainage shall be provided to all retaining walls & embankments. They shall be a minimum of 100mm slotted pipe in filter sock surrounded by crushed rock. They shall drain to the stormwater drainage system.

SEDIMENT & EROSION CONTROL NOTES

E1 The sediment & erosion controls shall be maintained effectively for the duration of the project. They shall not be removed until the site has been stabilized or landscaped to the principal certifying authorities satisfaction.

E2 A single all weather access way shall be provided at the front of the property consisting of 50-80 mm aggregate or similar material with a minimum thickness of 150 mm laid over needle-punched geotextile fabric (Biotin A14 or similar) and installed prior to any works being commenced on site.

E3 Where the building works are greater than a single dwelling development, a shaker pad must be installed as part of the vehicular accessway. The shaker pad shall be:

- Established on suitable prepared & compacted material.
- Constructed such that it is flush with the adjoining surfaces.
- A minimum of 5000 mm in length and breadth.
- Designed with rungs spaced 200-250 mm apart & with a maximum width of 75 mm each.

E4 The contractor shall ensure that no soil or fill encroaches upon adjacent areas during the project.

E5 The contractor shall ensure that all kerb inlets and drains affected by stormwater flow from the site are protected at all times during the project. Kerb inlet sediment traps shall be installed along the immediate vicinity along the street frontage. These shall be regularly maintained during the project.

E6 The street / road shall be kept clean from dirt and debris from vehicles departing the site.

E7 Sediment fencing shall be secured to posts (please note that if star pickets or similar are used then plastic safety caps shall be installed on top of the posts) at 2000 mm intervals with the geotextile fabric embedded a minimum of 200 mm in to the soil.

E8 All the topsoil stripped from the site shall be stockpiled such that it does not interfere with drainage lines and stormwater inlet pits. The stockpile shall be suitably covered with an impervious membrane and screened by sediment fencing.

SOIL CONSERVATION NOTE:

C1 Prior to the commencement of the site works the following shall be provided to capture water borne sediments:

- Sediment trap
- Washout area

C2 These shall be maintained regularly during the course of the construction with the sediment trap cleaned after each storm event.

SEDIMENT TRAP

T1 A 1000 x 1000 mm square by 500 mm deep pit located at the lowest point of the site.

WASHOUT AREA

W1 The washout area shall be 1800 x 1800 mm allocated for the washing of tools & equipment in accordance with the detail below.

SEDIMENT FENCE

F1 Provide sediment fence on down slope boundary as shown on plan.

F2 Geotextile fabric to be buried 200 mm below ground at the lower edge.

Dive post a minimum of 600mm Overlap

Stakes driven 600 mm into the ground with the first stake angled towards the previously laid bale

Geotextile filter fabric fasten on top edge

Disturbed Area

Undisturbed Area

F3 Drainage area is 0.5 HA with a maximum slope gradient 1:2 maximum and a maximum slope length of 50 m.

VEHICLE ACCESS TO SITE

V1 Vehicle access to the building site shall be restricted to a single point so as to reduce the amount of soil deposited on the street pavement.

BUILDING MATERIAL STOCKPILES

M1 Where there are stockpiles of material on site they shall be located at least 2000 mm away from any hazard including surfaces with grades greater than 15%, away from zones of concentrated stormwater flows, away from driveways, temporary vehicular accessways, footpaths, nature strips, kerbs, open swales & the drip zone of trees.

M2 Sediment fencing shall be installed downslope of all stockpiles.

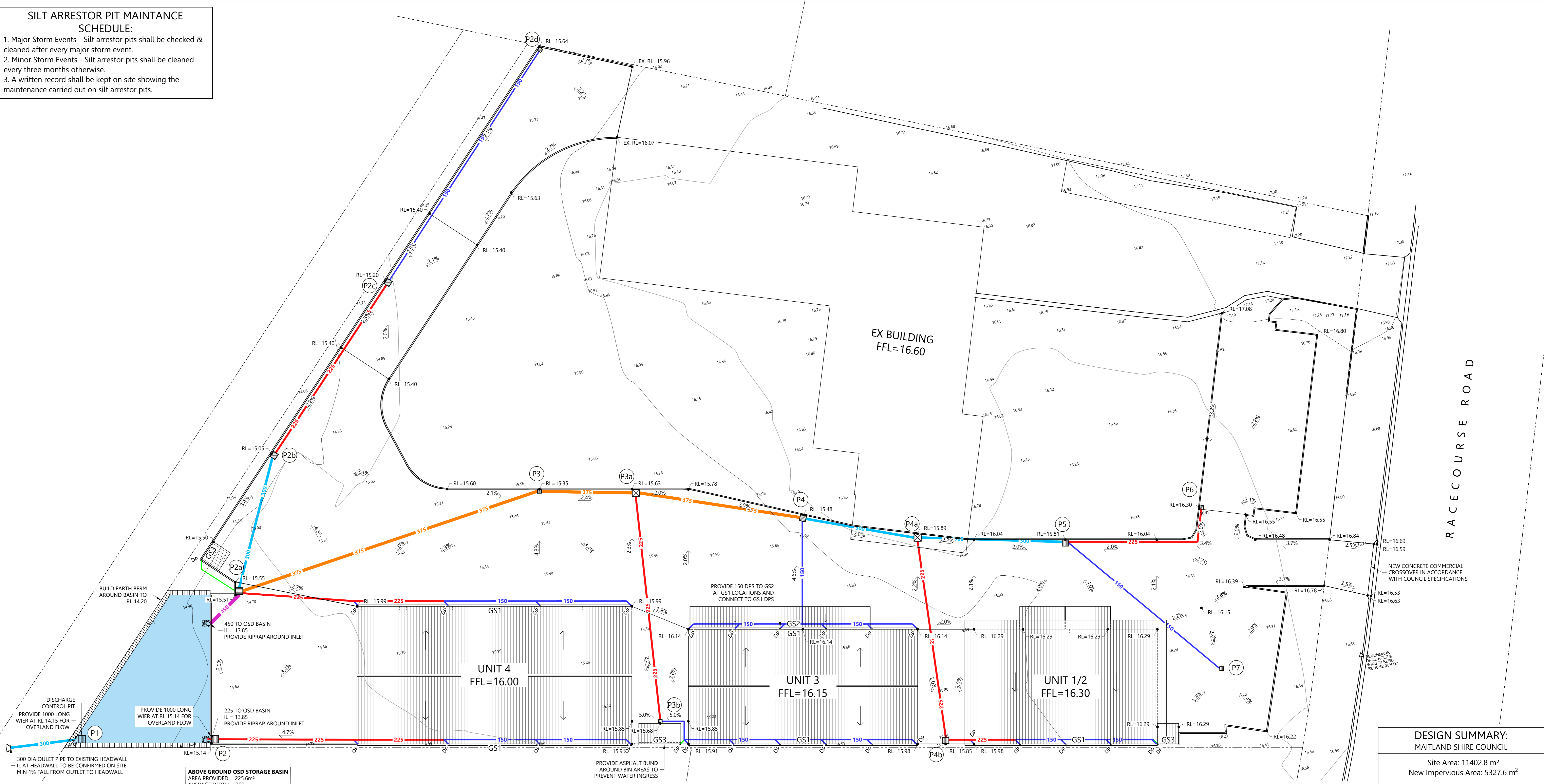
M3 The stockpile shall be covered with an impervious cover and held down firmly at all corners and sides.

SANDBAG KERB SEDIMENT TRAP

K1 In certain circumstances extra sediment trapping may be needed in the street gutter.

SILT ARRESTOR PIT MAINTANCE SCHEDULE:

1. Major Storm Events - Silt arrestor pits shall be checked & cleaned after every major storm event.
2. Minor Storm Events - Silt arrestor pits shall be cleaned every three months otherwise.
3. A written record shall be kept on site showing the maintenance carried out on silt arrestor pits.



ABOVE GROUND OSD STORAGE BASIN
 AREA PROVIDED = 225.6m²
 AVERAGE DEPTH = 300mm
 VOLUME PROVIDED IN BASIN = 67.7m³
 BASIN BASE RL = 13.85
 MAX WATER RL = 14.15

STORMWATER DRAINAGE PLAN

- All drainage lines shall be UPVC (Class SH) Stormwater Drainage Pipe, UNO.
- All drainage lines shall be laid @ 1% minimum fall, UNO.

LEGEND

DP	Downpipe - Refer Gutter Schedule
100	100 dia. UPVC Stormwater Drainage Line
150	150 dia. UPVC Stormwater Drainage Line
225	225 dia. UPVC Stormwater Drainage Line
300	300 dia. UPVC Stormwater Drainage Line
375	375 dia. UPVC Stormwater Drainage Line
450	450 dia. RCP Stormwater Drainage Line

STORMWATER DOWNPIPE AND GUTTER SCHEDULE

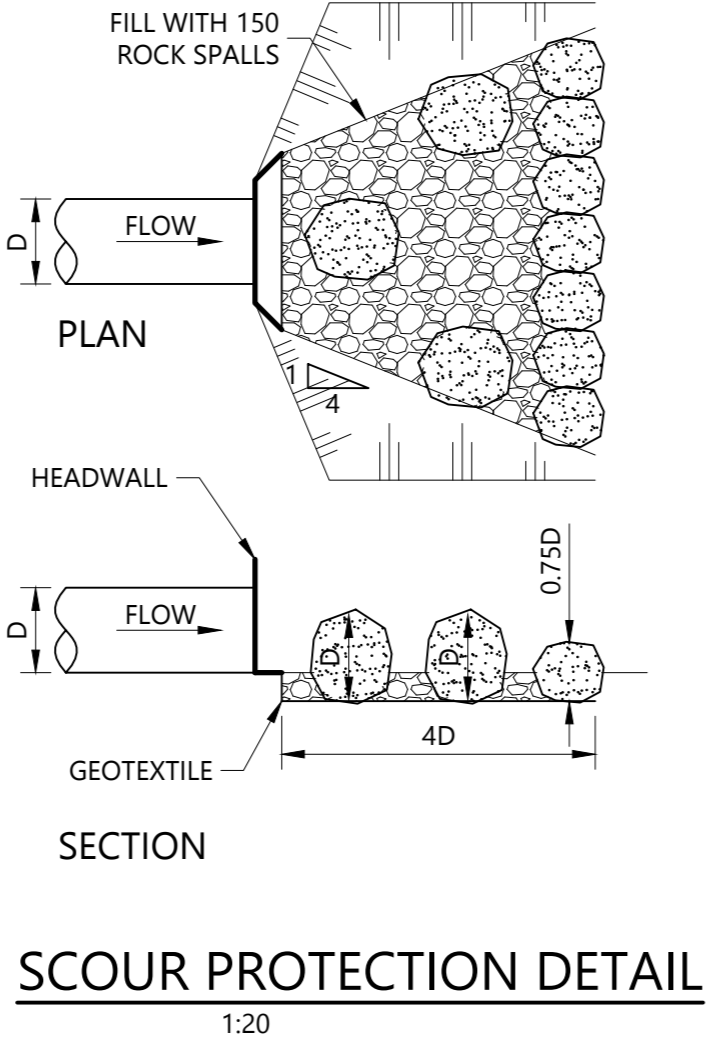
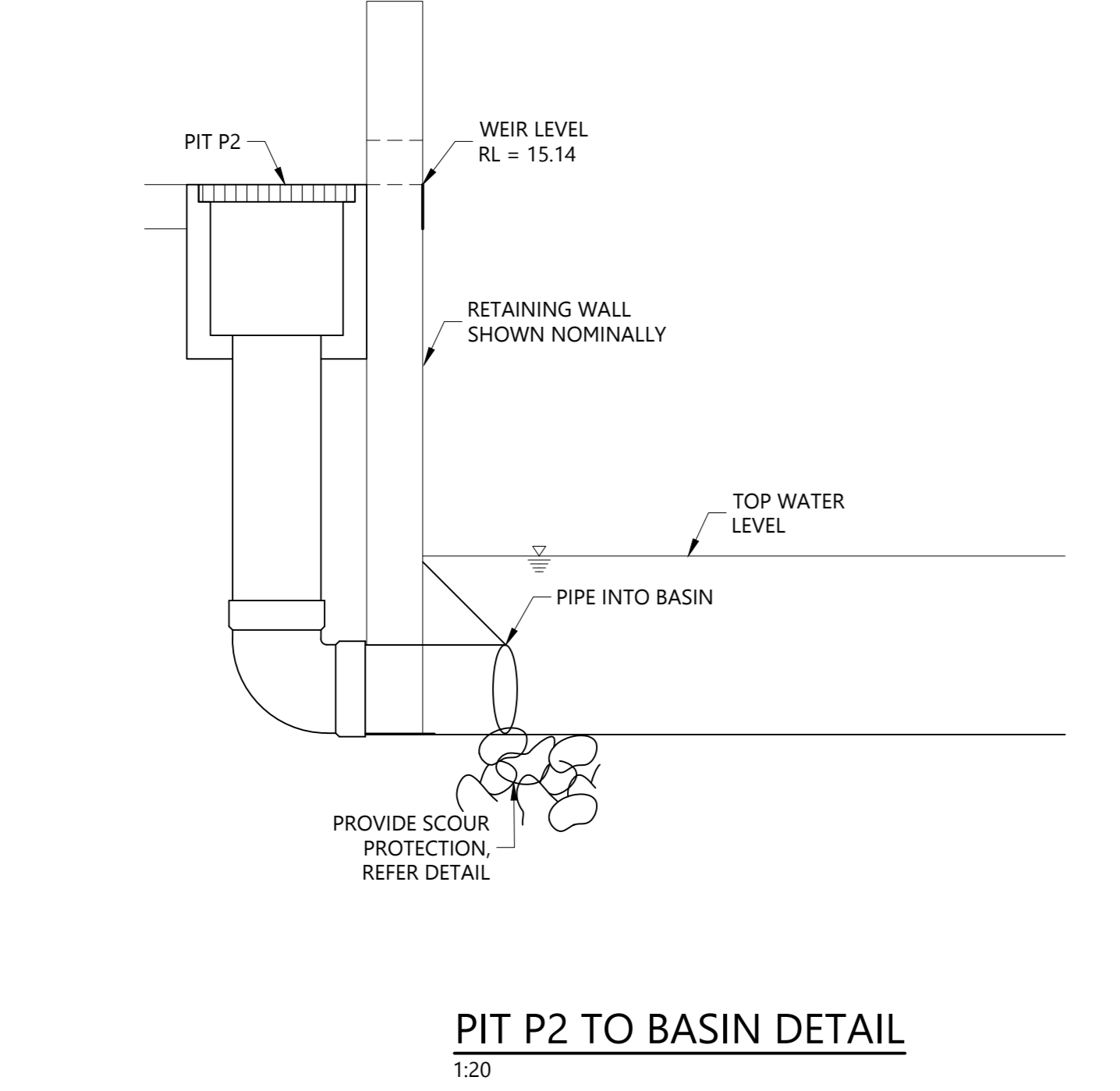
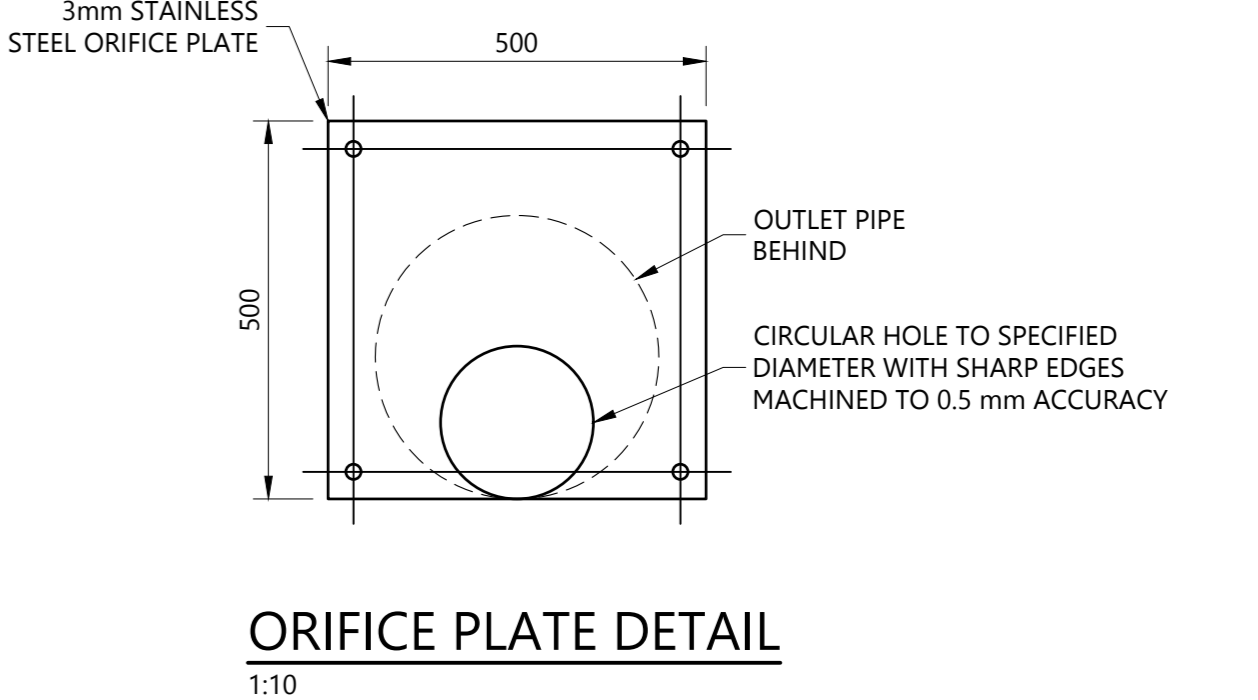
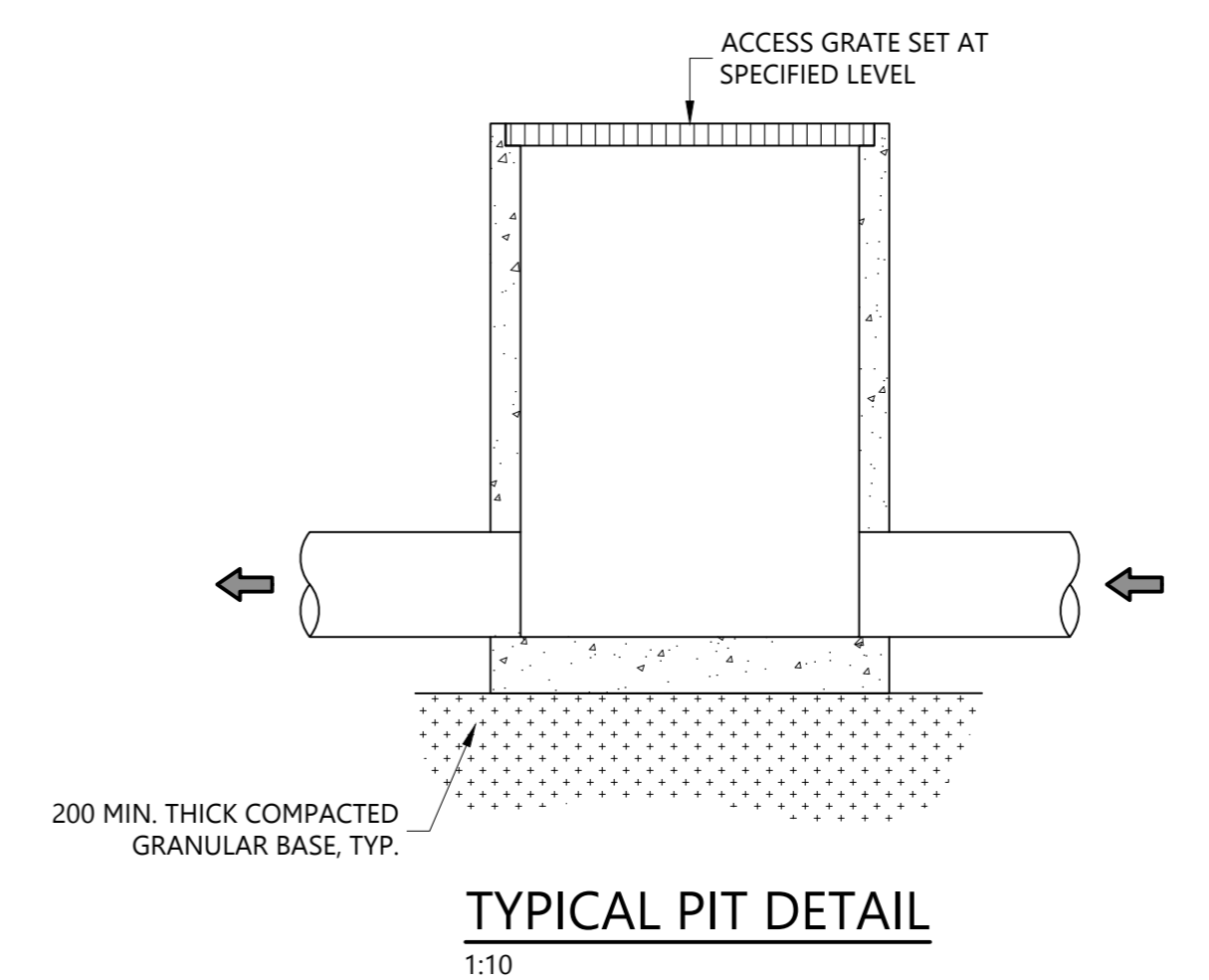
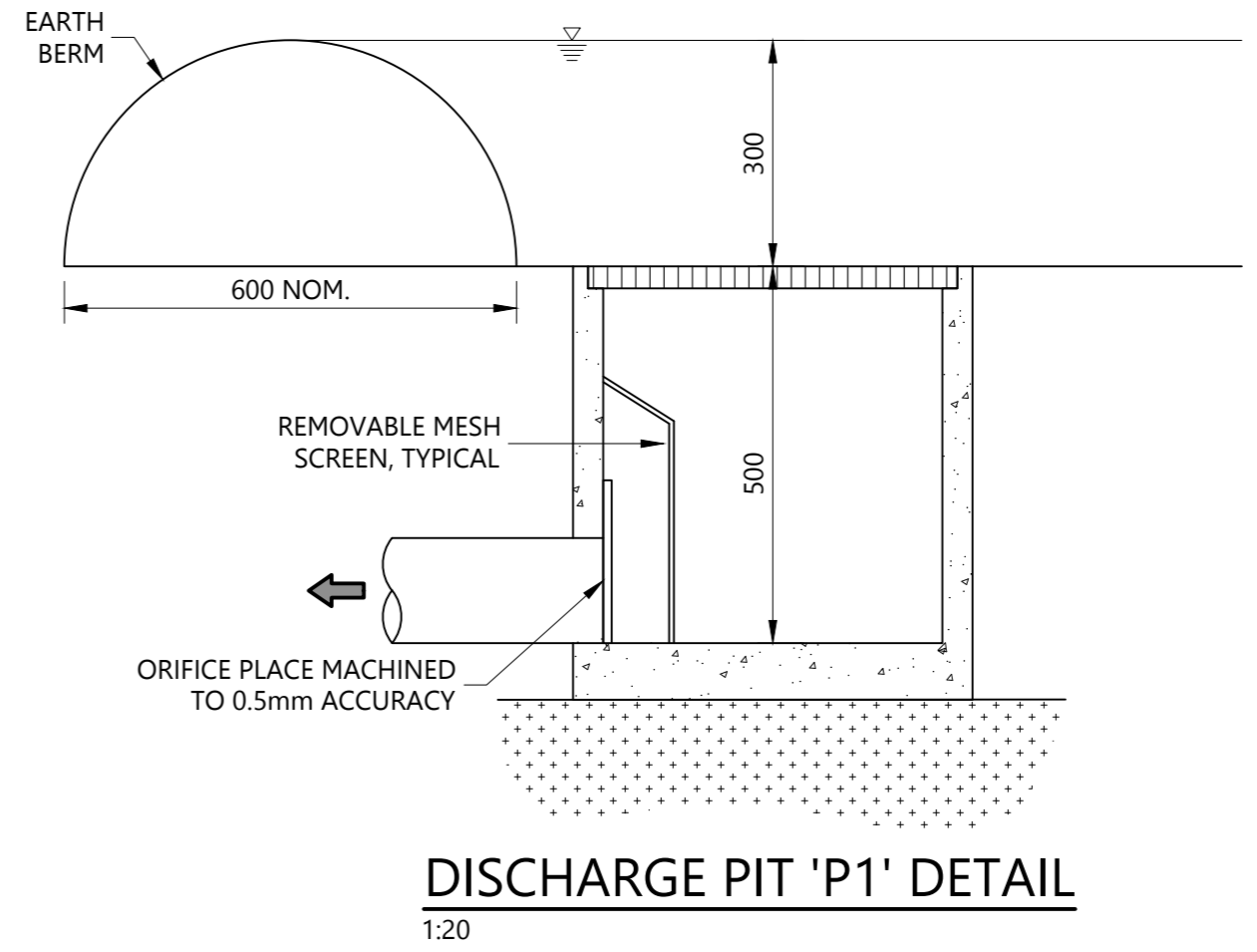
MARK	TYPE OF GUTTER	SIZE OF GUTTER	SIZE OF DOWNPIPES
GS1	Eaves Gutter	200 Wide x 150 Deep	150 DIA.
GS2	Box Gutter	350 Wide x 150 Deep	150 DIA.
GS3	Eaves Gutter	Lyaght Sheerline	100 DIA.

NOTE: All Gutter Systems shall be GS1, UNO.

STORMWATER PIT SCHEDULE

MARK	PIT DIMENSIONS	PIPE INVERT R.L.		TOP OF PIT R.L.
		IN	OUT	
P1	900 x 900 SQ Grated Inlet Pit	-	13.35	13.85
P2	900 x 900 SQ Grated Inlet Pit	13.88	13.88	15.25
P2a	900 x 900 SQ Grated Inlet Pit	14.07	14.07	15.51
P2b	600 x 600 SQ Grated Inlet Pit	14.24	14.24	15.05
P2c	600 x 600 SQ Grated Inlet Pit	14.50	14.50	15.20
P2d	450 x 450 SQ Grated Inlet Pit	-	15.04	15.64
P3	900 x 900 SQ Grated Inlet Pit	14.30	14.30	15.35
P3a	900 x 900 SQ Closed Lid Pit	14.42	14.42	15.63
P3b	450 x 450 SQ Grated Inlet Pit	15.00	15.00	15.68
P4	600 x 600 SQ Grated Inlet Pit	14.63	14.63	15.48
P4a	900 x 900 SQ Closed Lid Pit	14.87	14.87	15.89
P4b	600 x 600 SQ Grated Inlet Pit	15.15	15.15	15.85
P5	600 x 600 SQ Grated Inlet Pit	15.06	15.06	15.81
P6	450 x 450 SQ Grated Inlet Pit	-	15.62	16.30
P7	450 x 450 SQ Grated Inlet Pit	-	15.39	15.99

All pits greater than 1200 mm deep shall have step irons.
 Maximum pit depths: 450 x 450 - 600 mm max. 600 x 600 - 900 mm max.
 600 x 900 - 1200 mm max. 900 x 900 - greater than 1200 mm



DESIGN SUMMARY:
 MAITLAND SHIRE COUNCIL

Site Area: 11402.8 m²
 New Impervious Area: 5327.6 m²

Stormwater Storage Controls
 Stormwater Volume Required = 12 m³ / 1000 m²
 Stormwater Volume Required = 63.9 m³
 Stormwater Volume Provided = 67.7 m³
 67.7 m³ > 63.9 m³ OK

Stormwater Discharge Controls
 Permissible Site Discharge = 12 l/s / 1000 m²
 Permissible Site Discharge = 63.9 l/s
 Site Discharge = 63.9 l/s < 63.9 l/s OK

Orifice Diameter Calculations
 Orifice Ø = 21.8 * (PSD / (h^{1.5}))^{0.5}
 = 21.8 * (63.9 / 0.8^{1.5})^{0.5}
 = 184.3mm

REVISION DATE AMENDMENT DESCRIPTION

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 ABN 69 101 621 390

Approved: Mitchell L Howes BE (Hons) MIEAust CRNG 8949 RBP EC 2884

Proposed Development
 52 Racecourse Road, Rutherford
 For Williams River Steel

Stormwater Drainage Plan

DRAWN: JH	DATE: 12.10.21	PROJECT: 16566
DESIGN: JH	SCALE: 1:200 1:10	DWG / REV: SW10 0

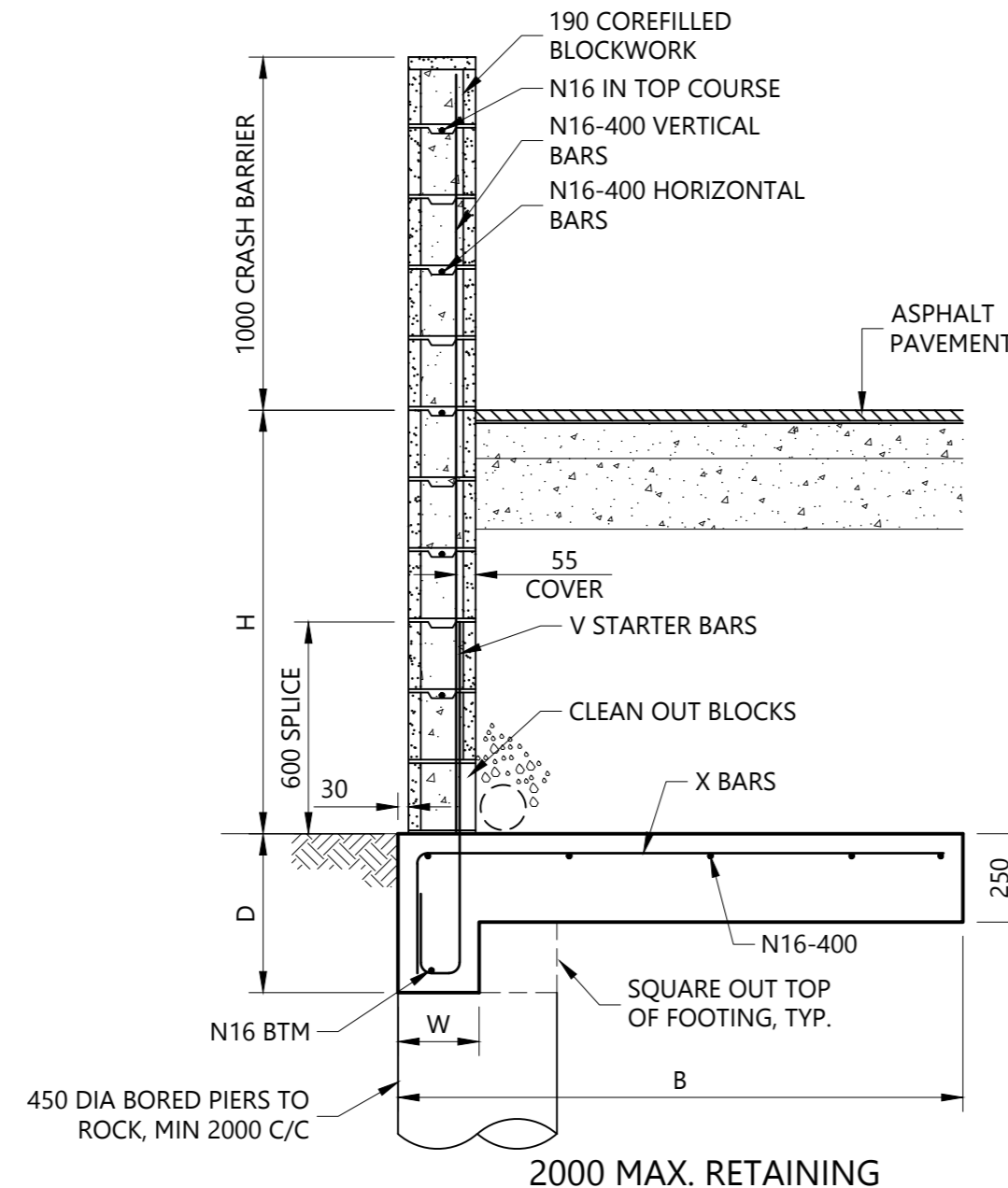
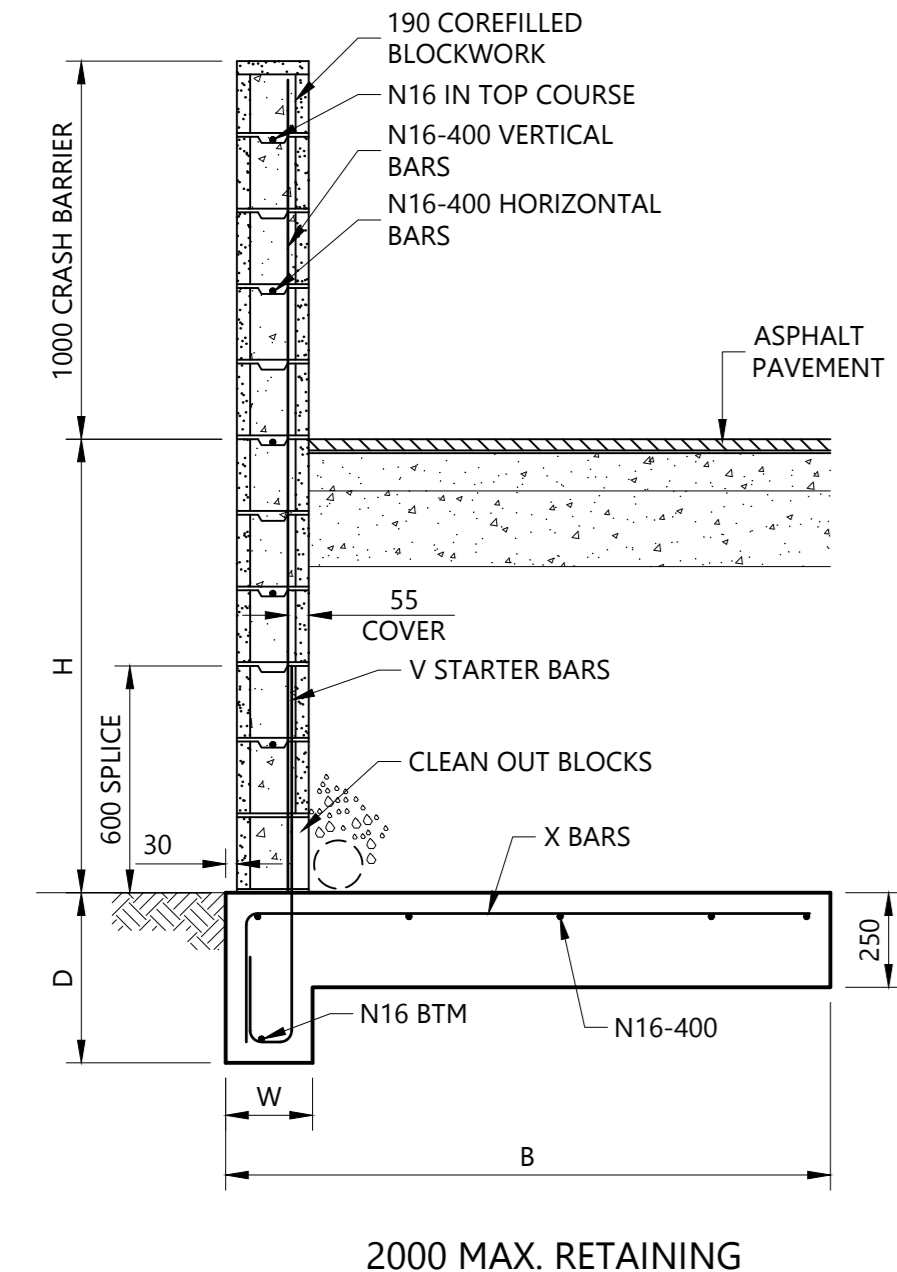


RACECOURSE ROAD

NEW CONCRETE COMMERCIAL CROSSOVER IN ACCORDANCE WITH COUNCIL SPECIFICATIONS

REFER TO STRUCTURAL DRAWINGS FOR RETAINING WALLS UNDER BUILDINGS

EXTERNAL PAVEMENT PLAN
 1:200
 AC Denotes AC pavement with 35 mm DG14 (320) over 300 mm compacted unbound subbase.
 Subgrade strength shall be a minimum CBR = 5%

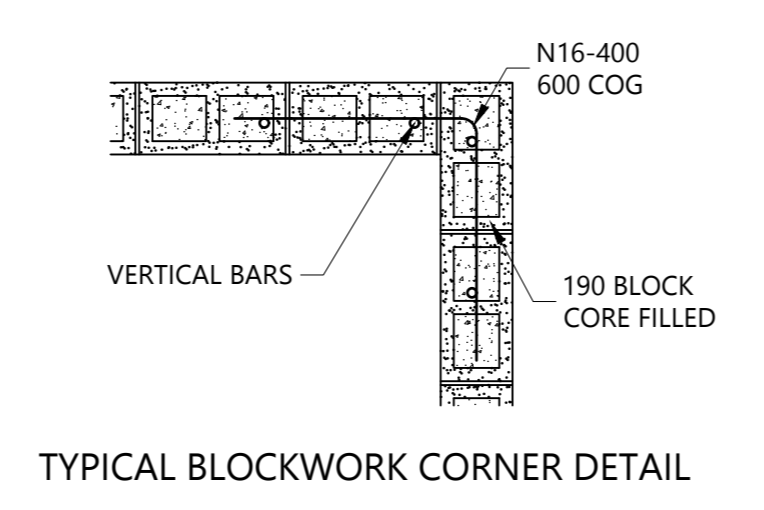


BLOCKWORK RETAINING WALL DETAILS - RW1
1:20

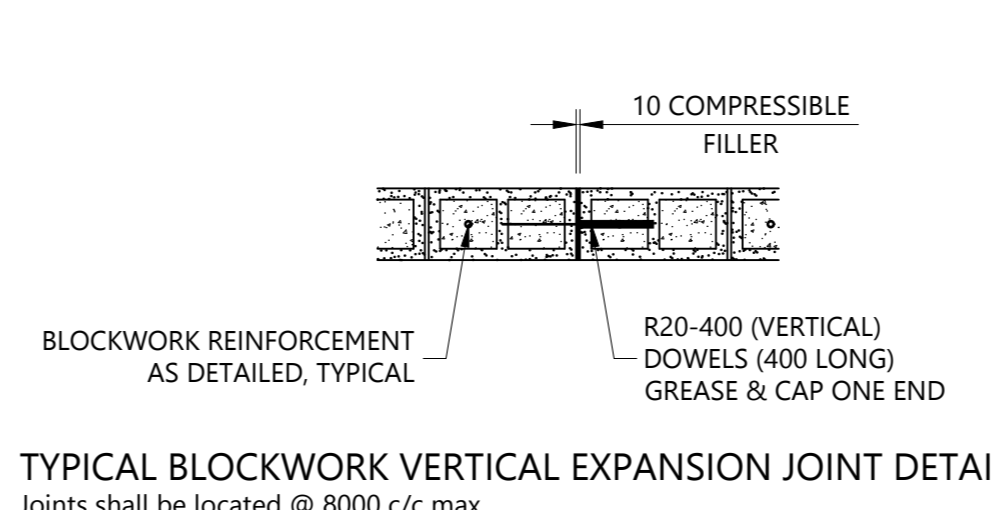
BLOCKWORK RETAINING WALL DETAILS - RW2
1:20

RW1 RETAINING WALL SCHEDULE				RW1 RETAINING WALL SCHEDULE			
RETAINING WALL BASE SIZES				RETAINING WALL HEIGHT			
WALL HEIGHT 'H'	BASE WIDTH 'B'	HEEL WIDTH 'W'	BASE DEPTH 'D'	WALL HEIGHT 'H'	HEIGHT OF 190 BLOCKS	HEIGHT OF 290 BLOCKS 'T'	REINFORCEMENT
800	800	180	350	800	800	-	N16-400
1000	900	180	350	1000	1000	-	N16-400
1200	1000	180	350	1200	1200	-	N16-400
1400	1100	230	450	1400	1400	-	N16-400
1600	1200	230	450	1600	1600	-	N16-400
1800	1400	230	450	1800	1800	-	N16-400
2000	1600	230	450	2000	2000	-	N20-400

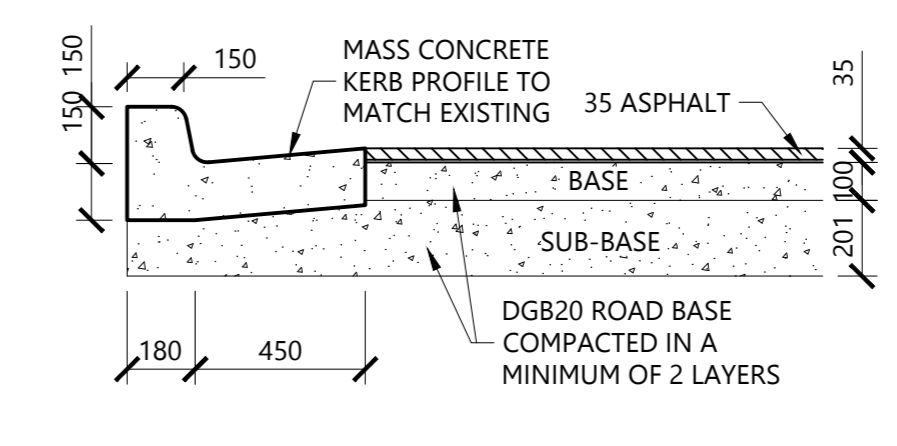
RW1 RETAINING WALL SCHEDULE				RW1 RETAINING WALL SCHEDULE			
RETAINING WALL BASE SIZES				RETAINING WALL HEIGHT			
WALL HEIGHT 'H'	BASE WIDTH 'B'	HEEL WIDTH 'W'	BASE DEPTH 'D'	WALL HEIGHT 'H'	HEIGHT OF 190 BLOCKS	HEIGHT OF 290 BLOCKS 'T'	REINFORCEMENT
800	800	180	350	800	800	-	N16-400
1000	900	180	350	1000	1000	-	N16-400
1200	1000	180	350	1200	1200	-	N16-400
1400	1100	230	450	1400	1400	-	N16-400
1600	1200	230	450	1600	1600	-	N16-400
1800	1400	230	450	1800	1800	-	N16-400
2000	1600	230	450	2000	2000	-	N20-400



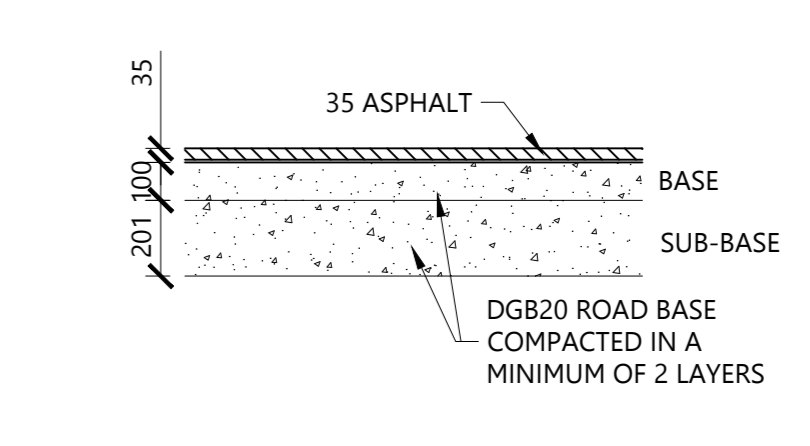
TYPICAL BLOCKWORK CORNER DETAIL



TYPICAL BLOCKWORK VERTICAL EXPANSION JOINT DETAIL
 Joints shall be located @ 8000 c/c max.



150 HIGH KERB DETAIL 'KB1'
1:20



FLEXIBLE PAVEMENT DETAILS
1:20

REVISION	DATE	AMENDMENT DESCRIPTION

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Approved: _____
Proposed Development
 52 Racecourse Road, Rutherford
 For Williams River Steel

External Pavement Plan

DRAWN: JH	DATE: 12.10.21	PROJECT: 16566
DESIGN: JH	SCALE: 1:200	DWG / REV: SW02 0

A4 ORIGINAL SIZE