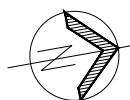
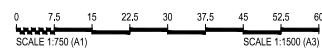


1. ALL DIMENSIONS IN METRES UNO.
2. HP GAS MAIN PRESENT ON GINDURRA ROAD.
3. EXISTING CONTOURS ARE AT 0.5m INTERVALS

	5m HIGH CONCRETE PANEL NOISE WALL
	IRRIGATED LANDSCAPED BUFFER (5m) - SEE LANDSCAPE ARCHITECTURAL PLANS
	MELALEUCA BICONVEXA PROTECTION AREA - APZ
	PAVEMENT AREA (CONCRETE)
	SEALED SURFACE (ASPHALT)
	RECYCLED CRUSHED CONCRETE ROADBASE WITH GEOTEXTILE MEMBRANE
	CONCRETE KERB AND GUTTER
	PROPOSED RETAINING WALL
	3m HIGH CONCRETE BLOCK WALL FOR NOISE ATTENUATION
	DISH DRAIN
	TRUCK PARKING AREA
	WAITING AREA
	PROPOSED SPRINKLER OUTLET FOR DUST SUPPRESSION.
	PROPOSED MISTING OUTLET FOR DUST SUPPRESSION.
	BARRAMY GROSS POLLUTANT TRAP (4 OFF)
	PROPOSED BUILDINGS
	BIOSWALE. REFER TO SHEET 115 FOR DETAILS



5	10/12/2020	REVISED FOR DA - MULCHER & CRUSHER BUILDINGS REVISED	ML	ML
4	07/04/2020	REVISED FOR DA	AB	ML
3	27/03/2020	REVISED FOR DA	GA	ML
2	20/01/2020	FOR DA	GA	ML
REV	DATE	DESCRIPTION	BY	CKD



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PROJECT: PROPOSED KARIONG SAND & SOIL SUPPLIES FACILITY - SSD8660
GENERAL ARRANGEMENT PLAN

CLIENT: KARIONG SAND & SOIL SUPPLIES

JOB REF No:	197
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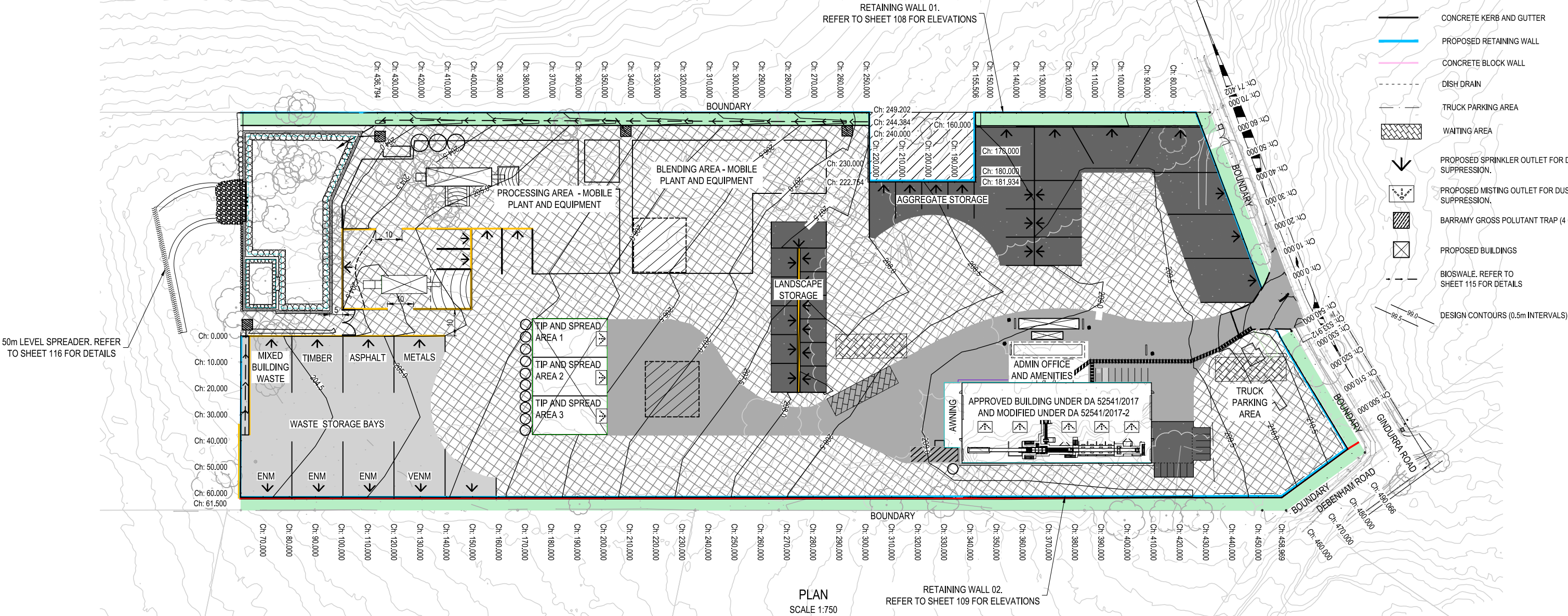
DESIGNED:	G. ABDULAHED
DRAWN:	G. ABDULAHED
CHECKED:	M. LIEBMAN

SHEET:	106	DATE:	10/12/2020
SHEET No:	1 OF 9	SIZE:	A1
SCALE:	1:750	DATUM:	AHD
COORD. ORIGIN:			

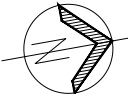
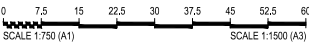
- NOTES:
- 1. ALL DIMENSIONS IN METRES UNO.
 - 2. HP GAS MAIN PRESENT ON GINDURRA ROAD.

LEGEND

- 5m HIGH CONCRETE PANEL NOISE WALL
- IRRIGATED LANDSCAPED BUFFER (5m) - SEE LANDSCAPE ARCHITECTURAL PLANS
- MELALEUCA BICONVEXA PROTECTION AREA - APZ
- PAVEMENT AREA (CONCRETE)
- SEALED SURFACE (ASPHALT)
- RECYCLED CRUSHED CONCRETE ROADBASE WITH GEOTEXTILE MEMBRANE
- CONCRETE KERB AND GUTTER
- PROPOSED RETAINING WALL
- CONCRETE BLOCK WALL
- DISH DRAIN
- TRUCK PARKING AREA
- WAITING AREA
- PROPOSED SPRINKLER OUTLET FOR DUST SUPPRESSION.
- PROPOSED MISTING OUTLET FOR DUST SUPPRESSION.
- BARRAMY GROSS POLLUTANT TRAP (4 OFF)
- PROPOSED BUILDINGS
- BIOSWALE. REFER TO SHEET 115 FOR DETAILS
- DESIGN CONTOURS (0.5m INTERVALS)



PLAN
SCALE 1:750



5	10/12/2020	REVISED FOR DA - CRUSHER AND MULCHER BUILDING CHANGED	ML	ML
4	07/04/2020	REVISED FOR DA	AB	ML
3	27/03/2020	REVISED FOR DA	GA	ML
2	20/01/2020	FOR DA	GA	ML
REV	DATE	DESCRIPTION	BY	CKD



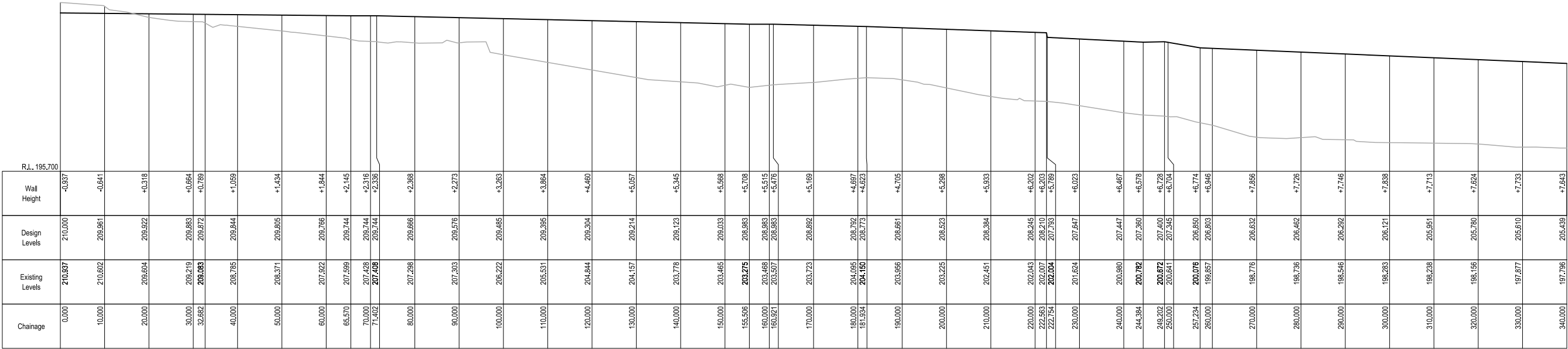
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PROJECT:	PROPOSED KARIONG SAND & SOIL SUPPLIES FACILITY - SSD8660
CIVIL WORKS PLAN	
CLIENT:	KARIONG SAND & SOIL SUPPLIES
JOB REF No:	197

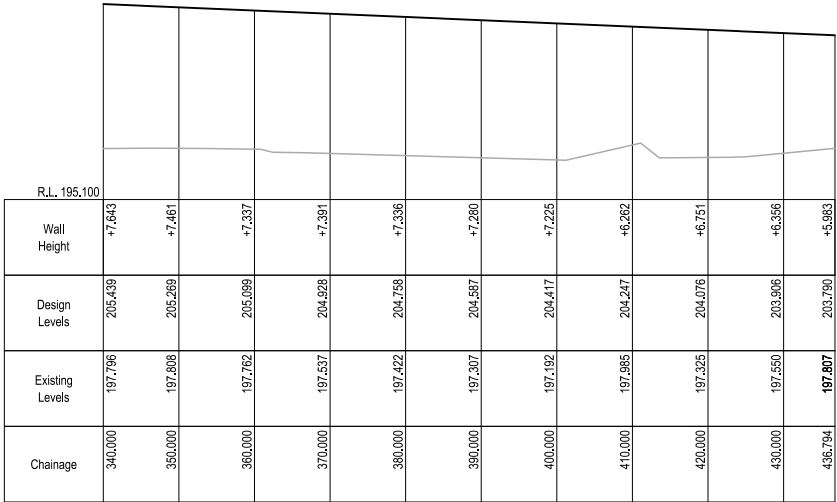
DESIGNED:	G. ABDULAHED	SHEET:	107	DATE:	10/12/2020
DRAWN:	G. ABDULAHED	SHEET No:	2 OF 9	SIZE:	A1
CHECKED:	M. LIEBMAN	SCALE:	1:750	DATUM:	AHD
COORD. ORIGIN:					





WALL01 ELEVATION (CH0.000 - CH340.000)

SCALES H 1:500
 V 1:200

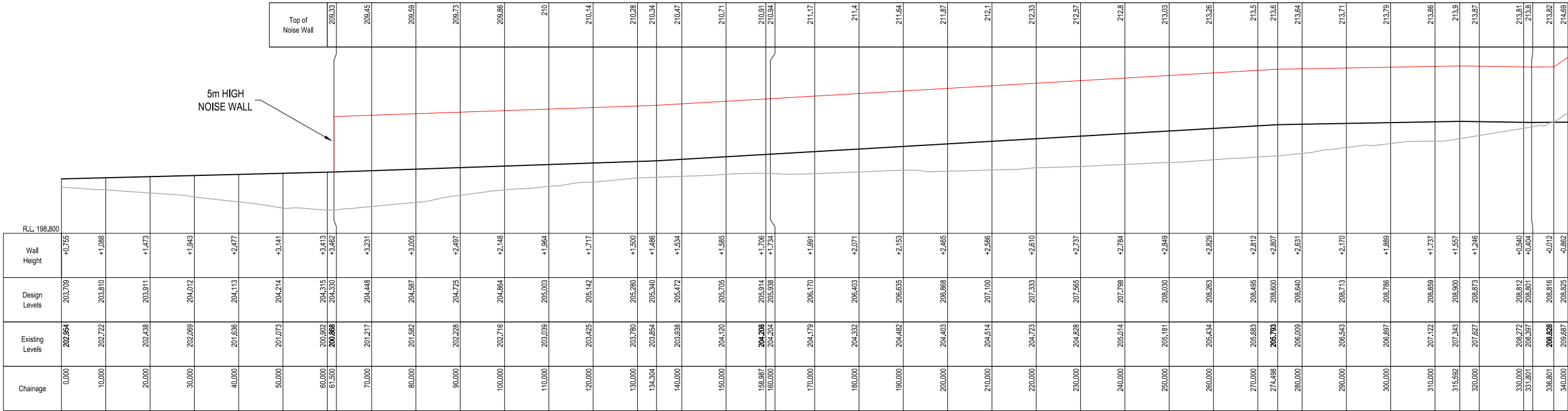


WALL01 ELEVATION (CH340.000 - CH436.794)

SCALES H 1:500
 V 1:200

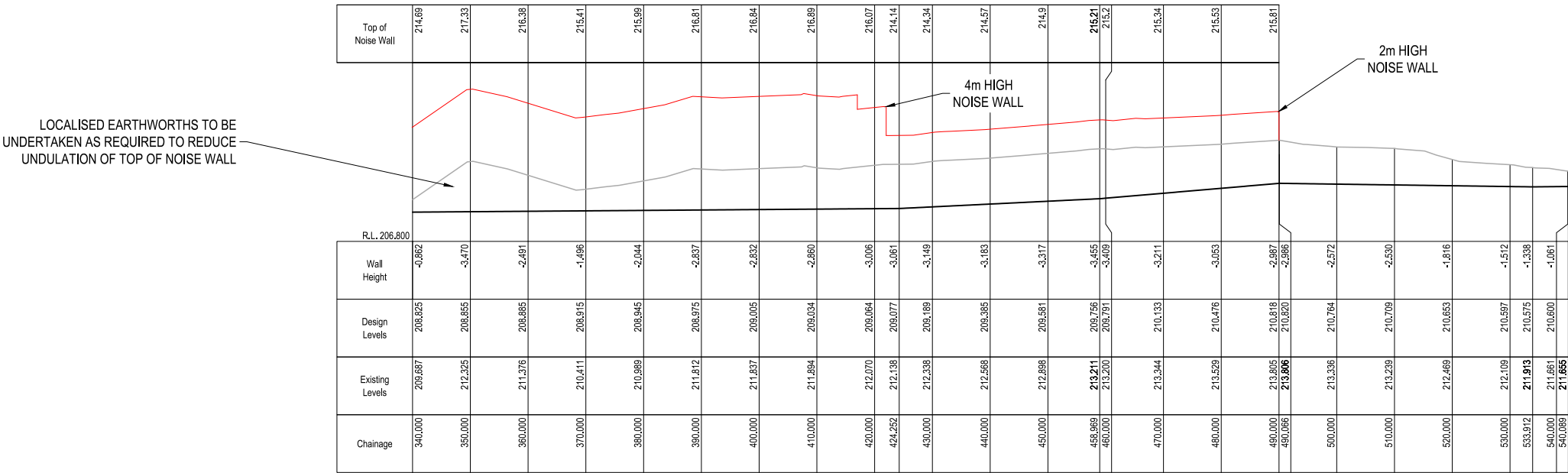


	4	07/04/2020	REVISED FOR DA	AB	ML	 Sustainability Workshop T: +61 (0) 247878428 M: 0468 423 299 4 Park Ave, Blackheath, NSW www.sustainabilityworkshop.com	PROJECT: PROPOSED KARIONG SAND & SOIL SUPPLIES FACILITY - SSD8660 RETAINING WALL LONG SECTIONS - SHEET 1 OF 2	DESIGNED: G. ABDULAHED	SHEET: 108	DATE: 07/04/2020
	3	27/03/2020	REVISED FOR DA	AB	ML			DRAWN: G. ABDULAHED	SHEET No: 3 OF 9	SIZE: A1
	2	20/01/2020	REVISED FOR DA	GA	ML			SCALE: DATUM: AHD		
	1	16/12/2019	FOR DA	GA	ML					
	REV	DATE	DESCRIPTION	BY	CKD					
							CLIENT: KARIONG SAND & SOIL SUPPLIES	JOB REF No: 197	CHECKED: M. LIEBMAN	COORD. ORIGIN:



WALL02 ELEVATION (CH0.000 - CH340.000)

SCALES H 1:500
V 1:200



WALL02 ELEVATION (CH340.000 - CH540.089)

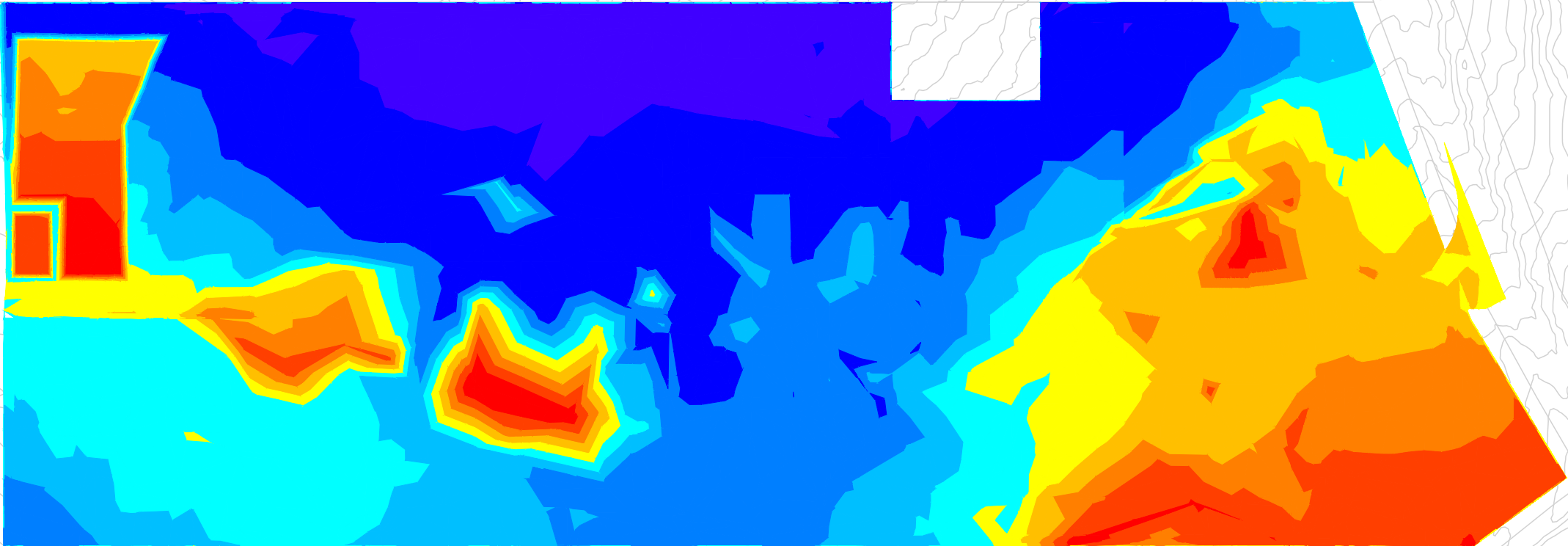
SCALES H 1:500
V 1:200



	4	07/04/2020	REVISED FOR DA	AB	ML	 Sustainability Workshop T: +61 (0) 247878428 M: 0468 423 299 4 Park Ave, Blackheath, NSW www.sustainabilityworkshop.com	PROJECT: PROPOSED KARIONG SAND & SOIL SUPPLIES FACILITY - SSD8660 RETAINING WALL LONG SECTIONS - SHEET 2 OF 2	CLIENT: KARIONG SAND & SOIL SUPPLIES	JOB REF No: 197	DESIGNED: G. ABDULAHED	SHEET: 109	DATE: 07/04/2020
	3	27/03/2020	REVISED FOR DA	AB	ML					DRAWN: G. ABDULAHED	SHEET No: 4 OF 9	SIZE: A1
	2	20/01/2020	REVISED FOR DA	GA	ML						SCALE:	DATUM: AHD
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	REV	DATE	DESCRIPTION	BY	CKD							

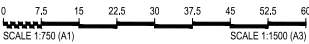
NOTES:

1. NET FILL VOLUME ABOVE EXISTING SURFACE = 107,200m³
2. NET CUT VOLUME BELOW EXISTING SURFACE = 35,900m³
3. BALANCE OF CUT : FILL = (107,200m³ - 35,900m³) = 71,300m³ FILL REQUIRED
4. PAVEMENT VOLUME = 25,200m³
5. DRAINAGE LAYER VOLUME = 8,400m³
6. CONCRETE AREA = 6,600m²
7. ASPHALT AREA = 11,500m²
8. UNSEALED PAVEMENT AREA = 30,500m²
9. ALL ABOVE AREAS ARE EXCLUDING BUILDINGS



Levels Table			
Number	Minimum Level	Maximum Level	Colour
1	-6.000	-4.000	Red
2	-4.000	-3.000	Orange
3	-3.000	-2.000	Yellow
4	-2.000	-1.000	Light Yellow
5	-1.000	0.000	Yellow
6	0.000	1.000	Light Green
7	1.000	2.000	Green
8	2.000	3.000	Dark Green
9	3.000	5.000	Blue
10	5.000	8.000	Dark Blue

PLAN
SCALE 1:750



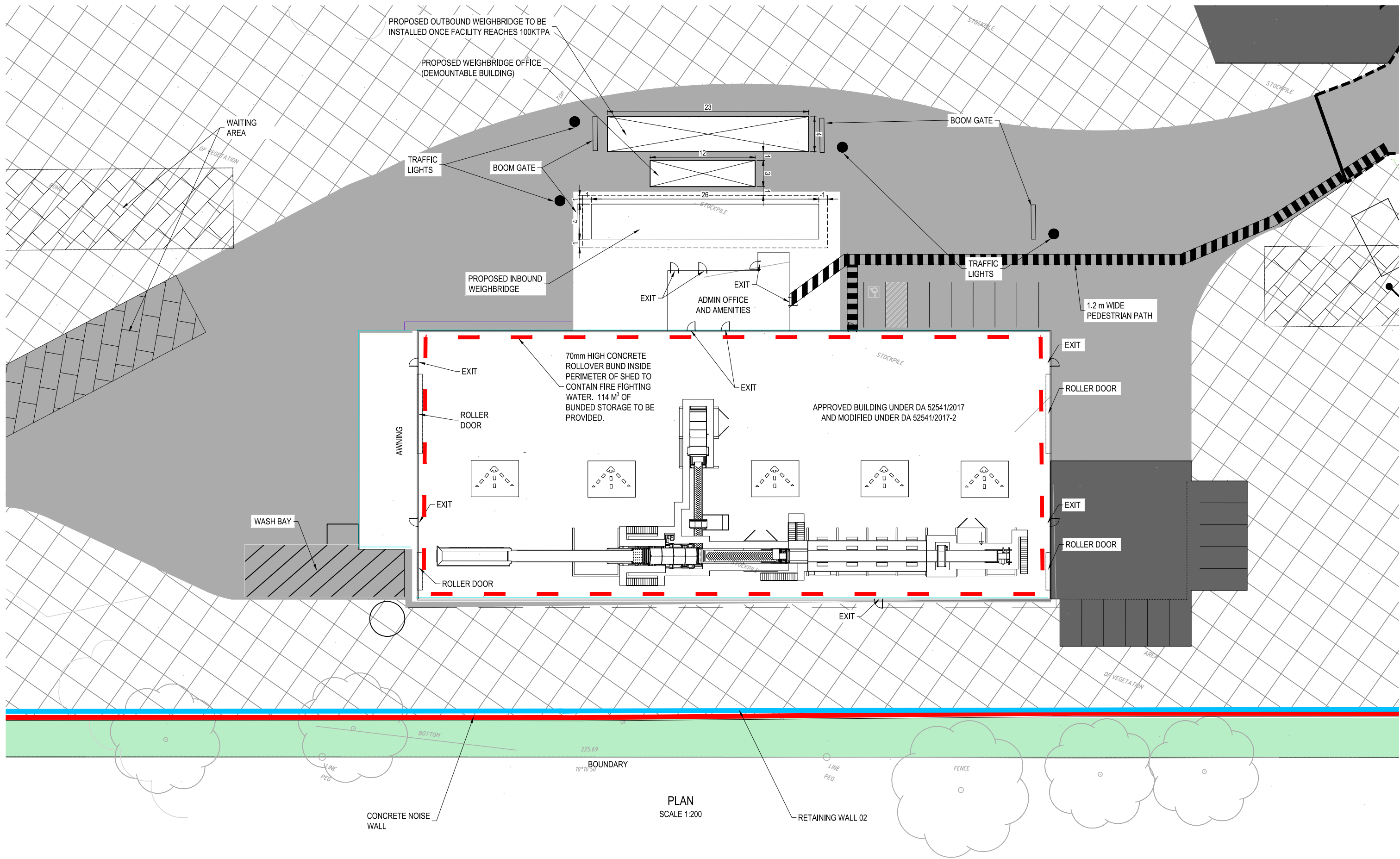
4	07/04/2020	REVISED FOR DA	AB	ML
3	27/03/2020	REVISED FOR DA	AB	ML
2	20/01/2020	REVISED FOR DA	GA	ML
1	16/12/2019	FOR DA	GA	ML
REV	DATE	DESCRIPTION	BY	CKD



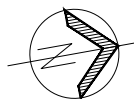
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PROJECT: PROPOSED KARIONG SAND & SOIL SUPPLIES FACILITY - SSD8660 BULK EARTHWORKS PLAN		DESIGNED: G. ABDULAHED	SHEET: 110	DATE: 07/04/2020
CLIENT: KARIONG SAND & SOIL SUPPLIES		DRAWN: G. ABDULAHED	SHEET No: 5 OF 9	SIZE: A1
JOB REF No: 197		CHECKED: M. LIEBMAN	SCALE: 1:750	DATUM: AHD
		COORD. ORIGIN:		



0 2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0
SCALE 1:200 (A1) SCALE 1:400 (A3)



5	20/04/2020	REVISED FOR DA	AB	ML
4	7/04/2020	REVISED FOR DA	AB	ML
3	23/01/2020	REVISED FOR DA	GA	ML
2	20/01/2020	FOR DA	GA	ML
REV	DATE	DESCRIPTION	BY	CKD



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PROJECT:
PROPOSED KARIONG SAND & SOIL SUPPLIES FACILITY - SSD8660
DETAILED SECONDARY PROCESSING BUILDING PLAN

CLIENT:
KARIONG SAND & SOIL SUPPLIES

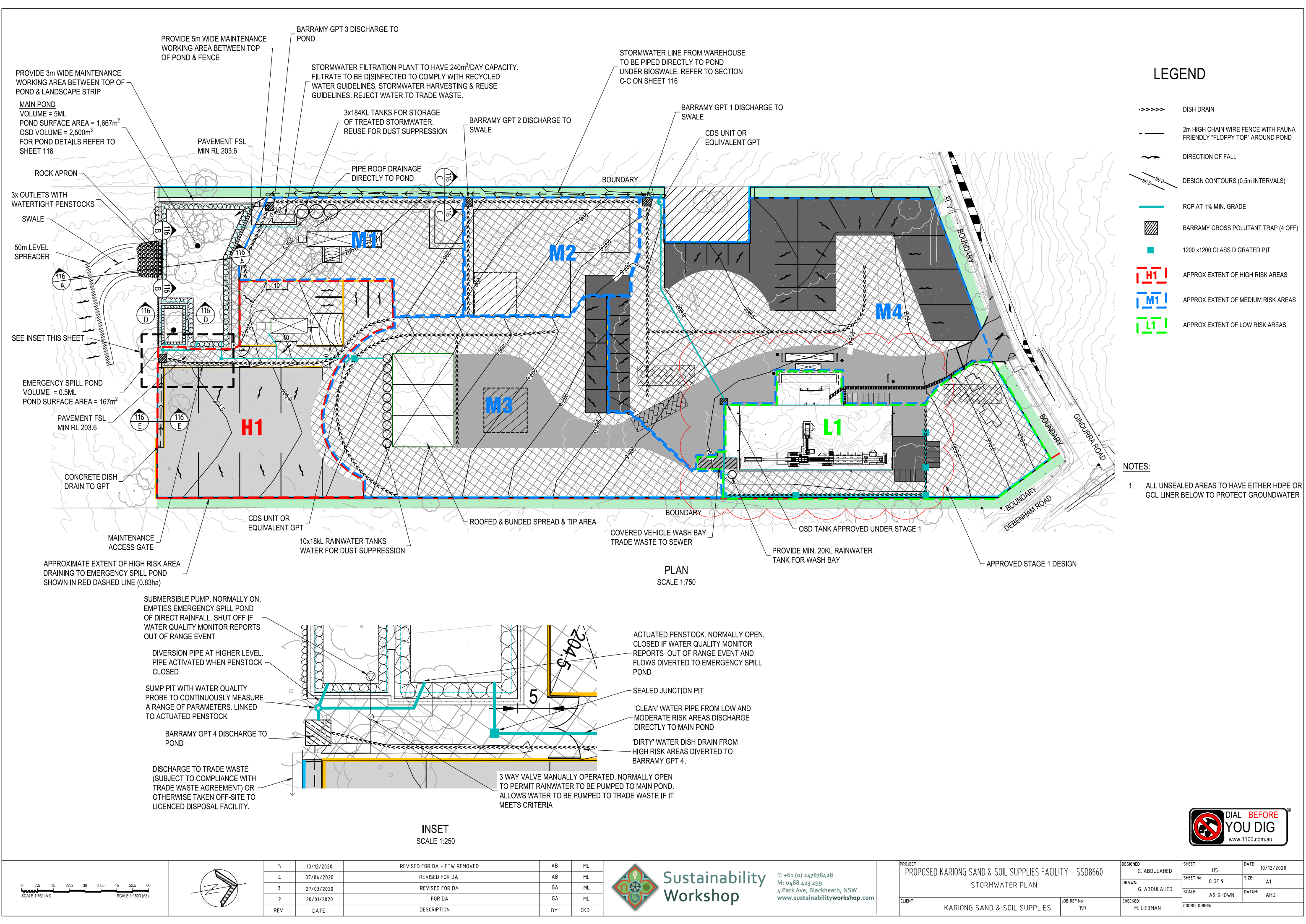
JOB REF No:
197

DESIGNED:
G. ABDULAHED
DRAWN:
G. ABDULAHED
CHECKED:
M. LIEBMAN

SHEET:
113
SHEET No:
7 OF 9
SCALE:
1:200
COORD. ORIGIN:

DATE:
20/04/2020
SIZE:
A1
DATUM:
AHD

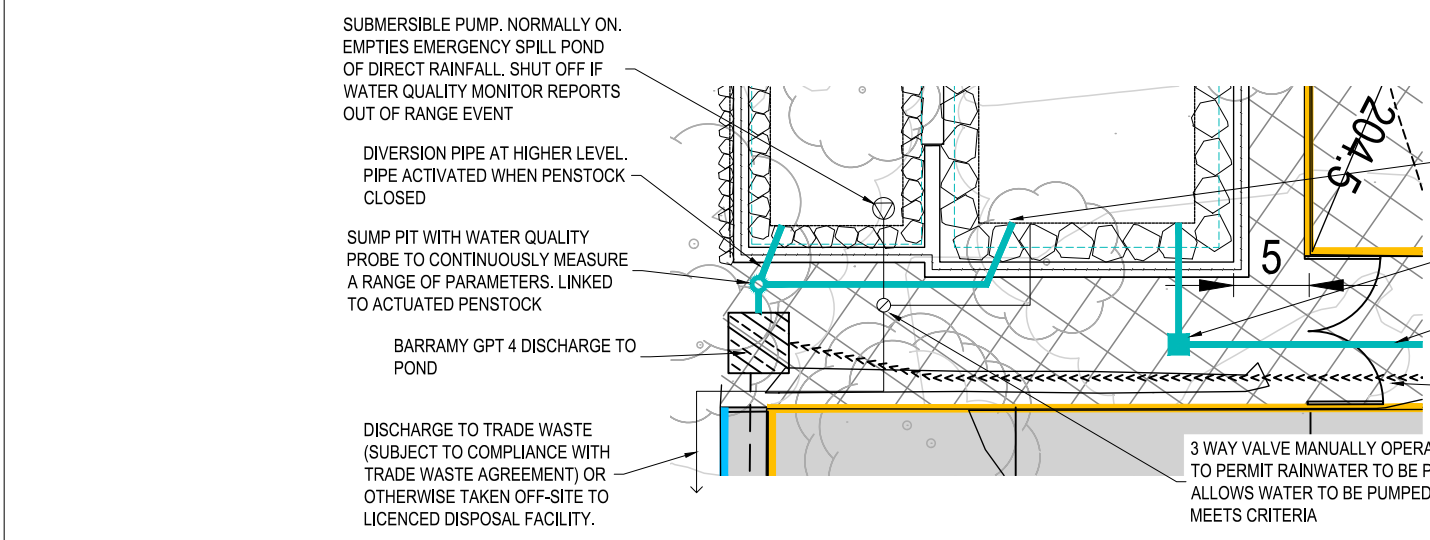




LEGEND

- >>>> DISH DRAIN
- 2m HIGH CHAIN WIRE FENCE WITH FAUNA FRIENDLY "FLOPPY TOP" AROUND POND
- ~ DIRECTION OF FALL
- DESIGN CONTOURS (0.5m INTERVALS)
- RCP AT 1% MIN. GRADE
- ▨ BARRAMY GROSS POLLUTANT TRAP (4 OFF)
- 1200 x1200 CLASS D GRATED PIT
- [H1] APPROX EXTENT OF HIGH RISK AREAS
- [M1] APPROX EXTENT OF MEDIUM RISK AREAS
- [L1] APPROX EXTENT OF LOW RISK AREAS

- NOTES:
- ALL UNSEALED AREAS TO HAVE EITHER HDPE OR GCL LINER BELOW TO PROTECT GROUNDWATER



- SUBMERSIBLE PUMP. NORMALLY ON. EMPTIES EMERGENCY SPILL POND OF DIRECT RAINFALL. SHUT OFF IF WATER QUALITY MONITOR REPORTS OUT OF RANGE EVENT
- DIVERSION PIPE AT HIGHER LEVEL. PIPE ACTIVATED WHEN PENSTOCK CLOSED
- SUMP PIT WITH WATER QUALITY PROBE TO CONTINUOUSLY MEASURE A RANGE OF PARAMETERS. LINKED TO ACTUATED PENSTOCK
- BARRAMY GPT 4 DISCHARGE TO POND
- DISCHARGE TO TRADE WASTE (SUBJECT TO COMPLIANCE WITH TRADE WASTE AGREEMENT) OR OTHERWISE TAKEN OFF-SITE TO LICENCED DISPOSAL FACILITY.
- ACTUATED PENSTOCK. NORMALLY OPEN. CLOSED IF WATER QUALITY MONITOR REPORTS OUT OF RANGE EVENT AND FLOWS DIVERTED TO EMERGENCY SPILL POND
- SEALED JUNCTION PIT
- 'CLEAN' WATER PIPE FROM LOW AND MODERATE RISK AREAS DISCHARGE DIRECTLY TO MAIN POND
- 'DIRTY' WATER DISH DRAIN FROM HIGH RISK AREAS DIVERTED TO BARRAMY GPT 4.
- 3 WAY VALVE MANUALLY OPERATED. NORMALLY OPEN TO PERMIT RAINWATER TO BE PUMPED TO MAIN POND. ALLOWS WATER TO BE PUMPED TO TRADE WASTE IF IT MEETS CRITERIA

