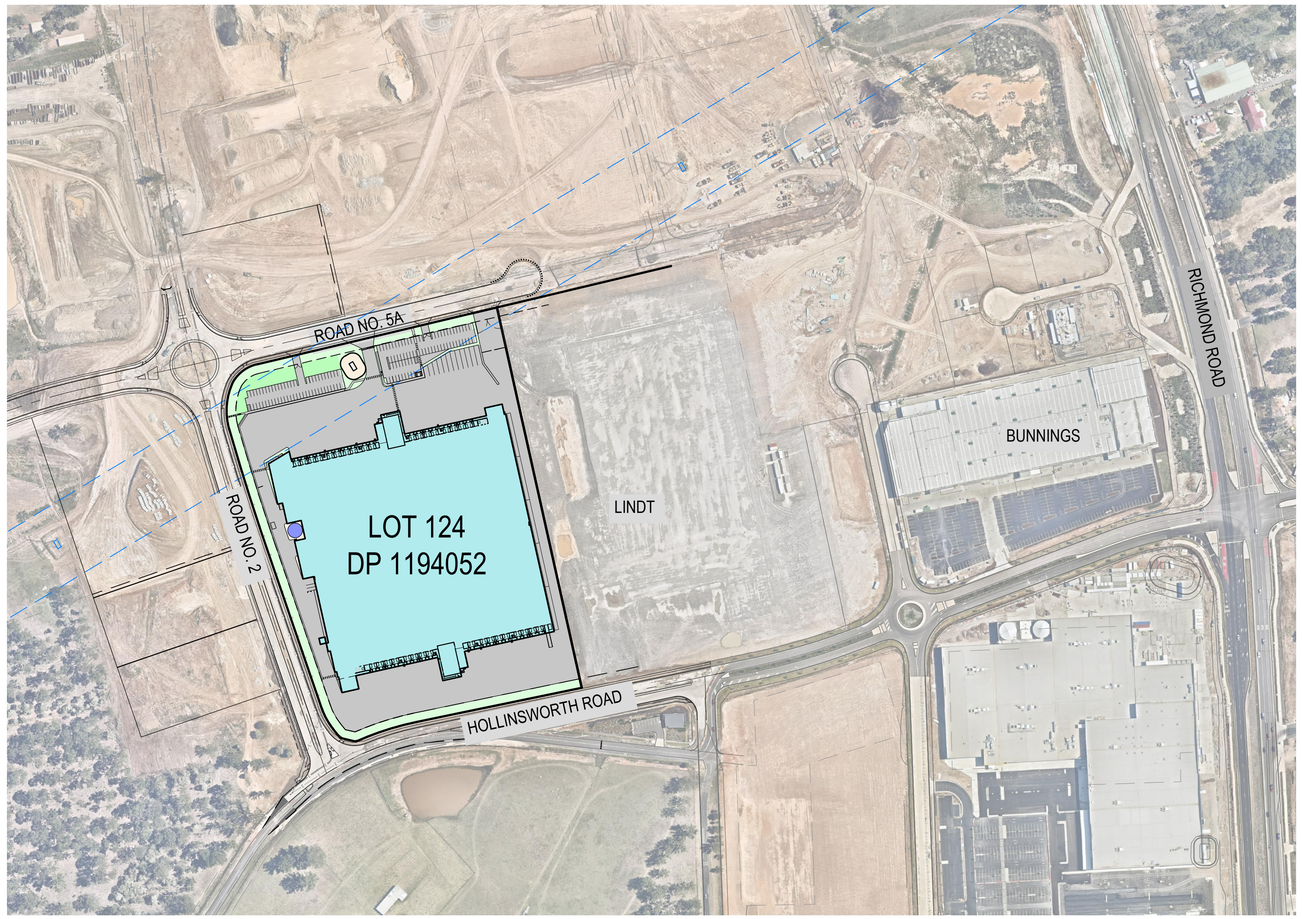

LOCATION PLAN
1:2000

Beca

SWIRE COLD STORAGE PTY LTD
MARSDEN PARK PROJECT
LOT 124, DP 1194052 (UNREGISTERED)

CIVIL DRAWINGS
and
DRAWINGS FOR TRANSGRID
for
EIS SUBMISSION

Prepared by Beca Pty Ltd
Reference 2520460-960

www.beca.com

DRAWING LIST
CONCEPT CIVIL DRAWINGS

DRAWING NO.	REV	DRAWING TITLE
2520460-96-0-600	B	LOCATION PLAN AND DRAWING LIST
2520460-96-0-601	A	EXISTING CONDITIONS PLAN
2520460-96-0-602	A	EARTHWORKS PLAN
2520460-96-0-603	A	STORMWATER DRAINAGE PLAN
2520460-96-0-604	B	PAVEMENT AND GRADING PLAN
2520460-96-0-605	A	CIVIL CROSS SECTIONS
2520460-96-0-606	A	TYPICAL CIVIL DETAILS - SHEET 1
2520460-96-0-607	B	TYPICAL CIVIL DETAILS - SHEET 2
2520460-96-0-608	B	EAST BOUNDARY LONG SECTION
2520460-96-0-609	A	SOIL EROSION AND SEDIMENT CONTROL PLAN
2520460-96-0-610	A	EROSION CONTROL DETAILS

DRAWING LIST
DRAWINGS FOR TRANSGRID

DRAWING NO.	REV	DRAWING TITLE
2520460-96-0-650	A	SITE PLAN SHOWING TRANSGRID CABLES
2520460-96-0-651	A	ELEVATION SHOWING TRANSGRID CABLES
2520460-96-0-652	A	DESIGN LEVELS WITHIN TRANSGRID EASEMENT
2520460-96-0-653	A	UTILITIES WITHIN TRANSGRID EASEMENT
34849 SHEET 1 OF 2	17/2/15	MATTHEW FREEBURN SURVEY PLAN OF TRANSMISSION CABLES
34849 SHEET 2 OF 2	17/2/15	MATTHEW FREEBURN SURVEY LONG SECTIONS OF TRANSMISSION CABLES

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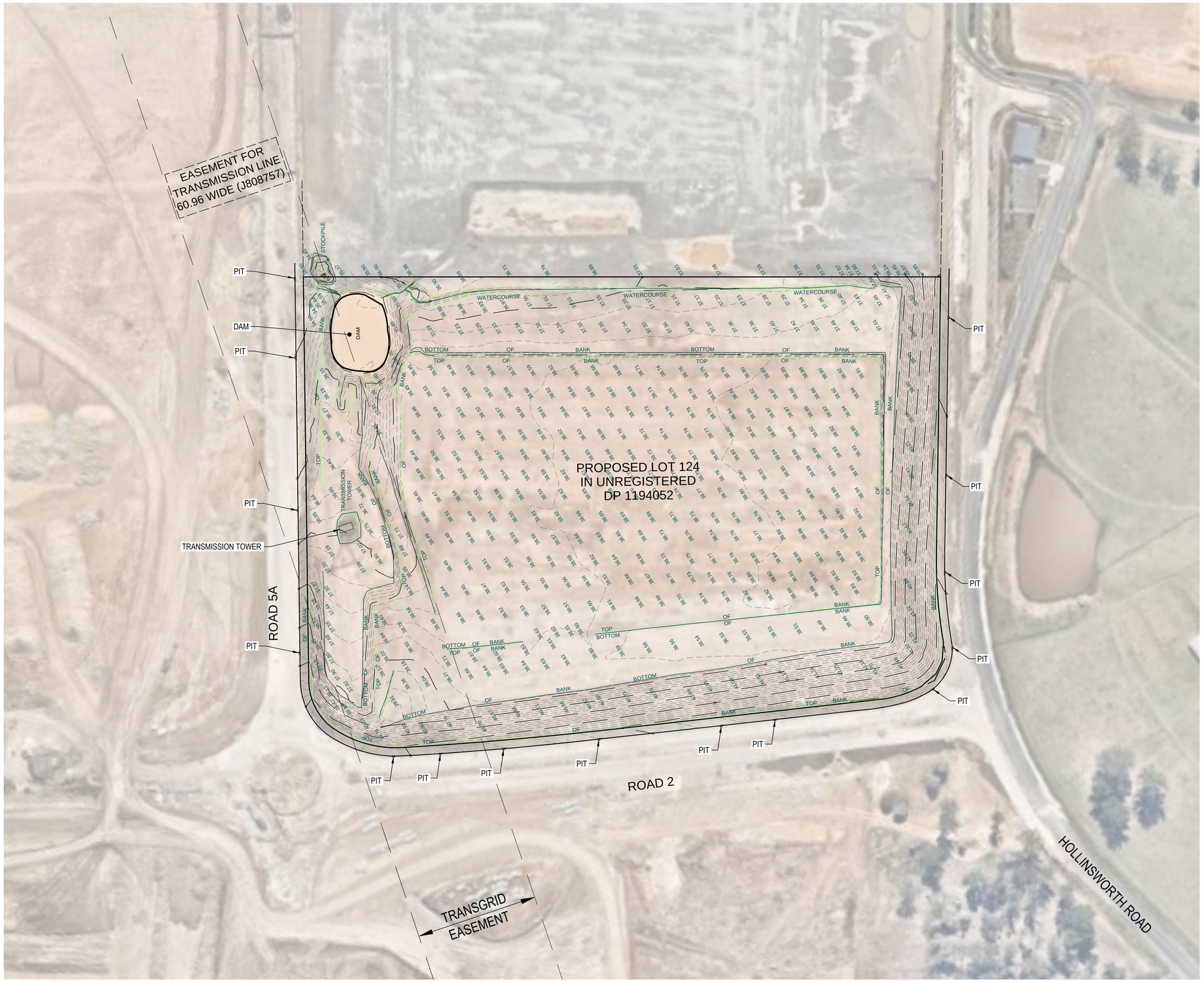

LEGEND

30 — MAJOR CONTOURS (1.0m SPACING)

MINOR CONTOURS (0.2m SPACING)

NOTES

1. SURVEY FROM MATHEW FREEBURN DRAWING J-33444-WAE-LOT 124 DATED 28/01/15.
2. LEVELS TO AHD BASED ON PM 69582 RL 43.42 AHD.

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PRELIMINARY
NOT FOR CONSTRUCTION

No.	Revision	By	Chk	Appd	Date
A	CONCEPT DESIGN	GM	PWC	PS	21.05.15

Drawing Originator: Beca

Original Scale (A1) 1 : 1000	Design	DP	21.05.15
	Drawn	GM	21.05.15
Reduced Scale (A3) 1 : 2000	Dsg Verifier	PWC	21.05.15
	Dwg Check	NP	21.05.15

Client: SWIRE COLD STORAGE PTY LTD

Project: MARSDEN PARK OVERALL DEVELOPMENT

Title: CONCEPT EXISTING CONDITIONS PLAN

Discipline: CIVIL

Drawing No.: 2520460-96-0-601 Rev.: A

Document No. 2520460-96-0-601.DWG

DO NOT SCALE

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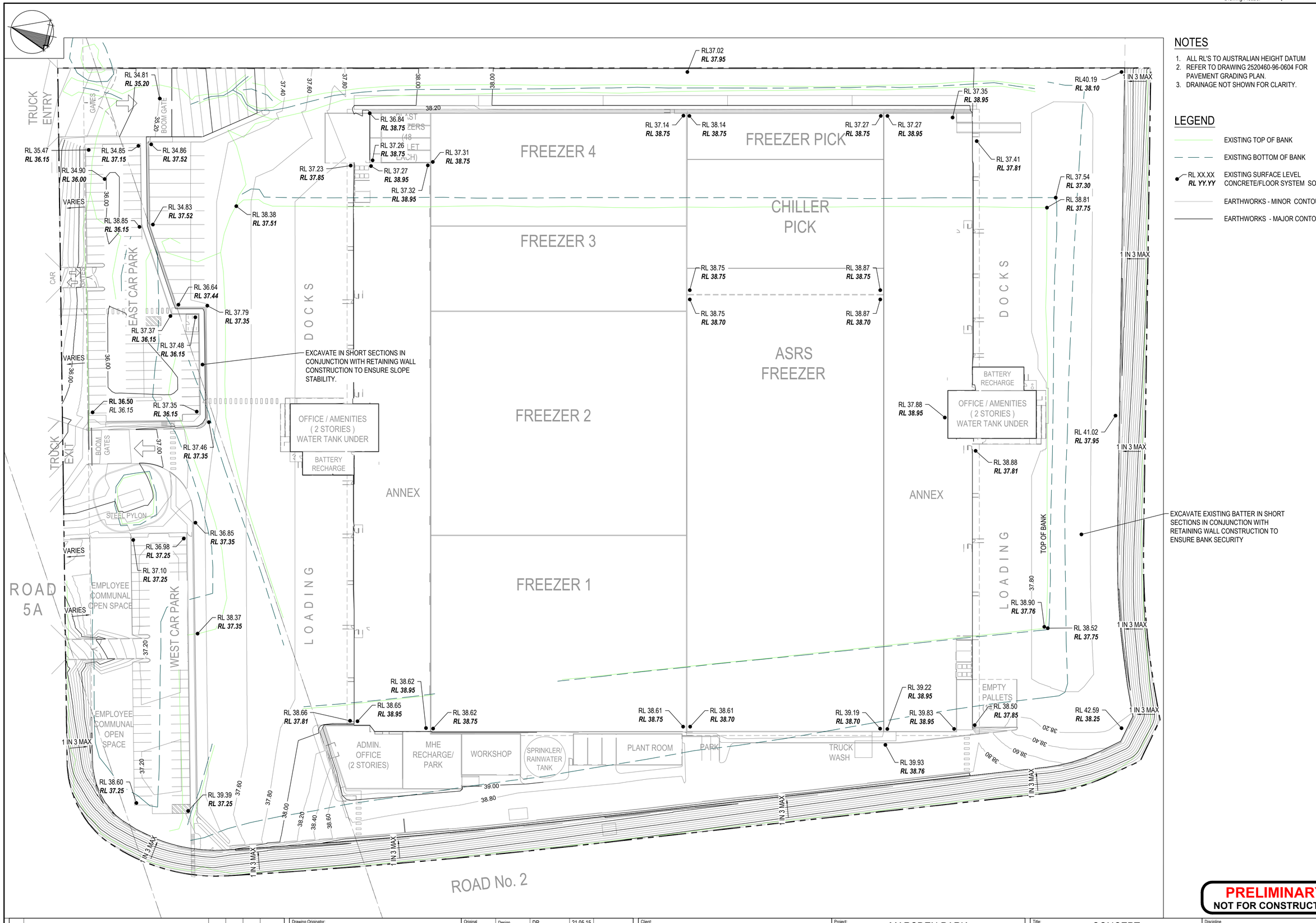
Drawing Plotted: 21 May 2015 10:25 AM



NOTES

1. ALL RL'S TO AUSTRALIAN HEIGHT DATUM
2. REFER TO DRAWING 2520460-96-0604 FOR PAVEMENT GRADING PLAN.
3. DRAINAGE NOT SHOWN FOR CLARITY.

LEGEND

- EXISTING TOP OF BANK
- EXISTING BOTTOM OF BANK
- RL XX.XX / *RL YY.YY* — EXISTING SURFACE LEVEL / CONCRETE/FLOOR SYSTEM SOFFIT LEVEL
- EARTHWORKS - MINOR CONTOUR
- EARTHWORKS - MAJOR CONTOUR

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PRELIMINARY
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No.	Revision	By	Chk	Appd	Date
A	CONCEPT DESIGN	GM	PWC	PS	21.05.15

Drawing Originator: Beca

Original Scale (A1) 1 : 500	Design	DP	21.05.15
	Drawn	GM	21.05.15
Reduced Scale (A3) 1 : 1000	Dsg Verifier	PWC	21.05.15
	Dwg Check	NP	21.05.15

Client: SWIRE COLD STORAGE PTY LTD

Project: MARSDEN PARK OVERALL DEVELOPMENT

Title: CONCEPT EARTHWORKS PLAN

Discipline: CIVIL

Drawing No.: 2520460-96-0-602 Rev.: A

Document No. 2520460-96-0-602.DWG

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Drawing Plotted: 21 May 2015 10:32 AM

MARSDEN PARK DEVELOPMENT DRAINAGE OUTLET PIT IL32.20 DN1350 OUTLET

IL 33.06

TRUCK ENTRY

GATES

BOOM GATE

3 x HUMES JELLYFISH
2xJF3600-27-5
1xJF2400-10-2

1 x HG40A HUME GUARD

BLAST FREEZERS (48 PALLET EACH)

FREEZER 4

FREEZER PICK

CHILLER PICK

FREEZER 3

TWO AWMA TOP SEALING PENSTOCK GATE VALVE ON INLETS, WITH FULL PERIMETER SEAL AND ELECTRIC ACTUATOR. VALVES TO CLOSE ON ACTIVATION OF A FIRE ALARM

CAR

EAST CAR PARK

JUNCTION PIT WITH BERMAD IR-450-60-R VALVE AND FLOAT CONTROL. SHUT VALVE WHEN WATER REACHES RL36.5

D O C K S

CONCRETE SPOON DRAIN ALONG FRONT OF DOCK PODS

OVERFLOW PIPE FROM UNDERGROUND RAINWATER TANK

500kL UNDERGROUND RAINWATER TANK

FREEZER 2

ASRS FREEZER

ROOF STORMWATER TO BE COLLECTED BY SYPHONIC SYSTEM DISCHARGING TO RAINWATER TANKS UNDER OFFICE/AMENITIES BUILDINGS

OFFICE / AMENITIES (2 STORIES) WATER TANK UNDER

BATTERY RECHARGE

SYPHONIC DRAINAGE OUTLETS INTO RAINWATER TANK

TRUCK EXIT

BOOM GATES

STEEL PYLON

ANNEX

FREEZER 1

LOADING

ROAD 5A

EMPLOYEE COMMUNAL OPEN SPACE

WEST CAR PARK

ADMIN. OFFICE (2 STORIES)

MHE RECHARGE/ PARK

WORKSHOP

SPRINKLER/ RAINWATER TANK

PLANT ROOM

PARK

TRUCK WASH

EMPTY PALLETS (14X13)

CONCRETE SPOON DRAIN ALONG DOCK PODS (NOT SHOWN FOR CLARITY)

AXLE WEIGHER

ROAD No. 2

LEGEND

- RCP — STORMWATER PIPE & FLOW DIRECTION (REINFORCED CONCRETE PIPE)
- DN450 — PIPE DIAMETER
- TRENCH DRAIN
- PROPERTY BOUNDARY
- DP1 — DOWNPIPE FROM LOW LEVEL DOCK POD ROOF
- DP2 — BUILDING DOWNPIPE AS REQUIRED
- HUMES JELLYFISH
- IL XX.XX — INVERT LEVEL
- RM — RISING MAIN TO TRANSFER HARVESTED RAINWATER TO FURTHER 500kL RAINWATER STORAGE CAPACITY AT COMBINED SPRINKLER/RAINWATER TANK BY PLANT ROOM (TOTAL RAINWATER CAPACITY = 1500kL)
- RAINWATER TANK

NOTES

1. DOWN PIPES FROM ROOF AREAS EXCLUDING THE FREEZERS & ANNEX TO CONNECT TO NEAREST DRAINAGE PITS.
2. RCP SHALL BE CLASS 2 RRJ UNO.
3. uPVC PIPES SHALL BE DN150 SN8 UNO.
4. RETAINING WALL CUT OFF DRAINS AND SUBSOIL DRAINS SHALL BE CONNECTED TO STORMWATER PITS WITH uPVC PIPE AT MIN GRADE 1:100.

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No.	Revision	By	Chk	Appd	Date
A	CONCEPT DESIGN	GM	PWC	PS	21.05.15

Drawing Originator: Beca

Original Scale (A1) 1 : 500	Design	DP	21.05.15
Reduced Scale (A3) 1 : 1000	Drawn	GM	21.05.15
	Dsg Verifier	PWC	21.05.15
	Dwg Check	NP	21.05.15

Client: SWIRE COLD STORAGE PTY LTD

Project: MARSDEN PARK OVERALL DEVELOPMENT

Title: CONCEPT STORMWATER DRAINAGE PLAN

Discipline: CIVIL

Drawing No.: 2520460-96-0-603

Rev.: A

PRELIMINARY
NOT FOR CONSTRUCTION

DO NOT SCALE

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Document No. 2520460-96-0-603.DWG

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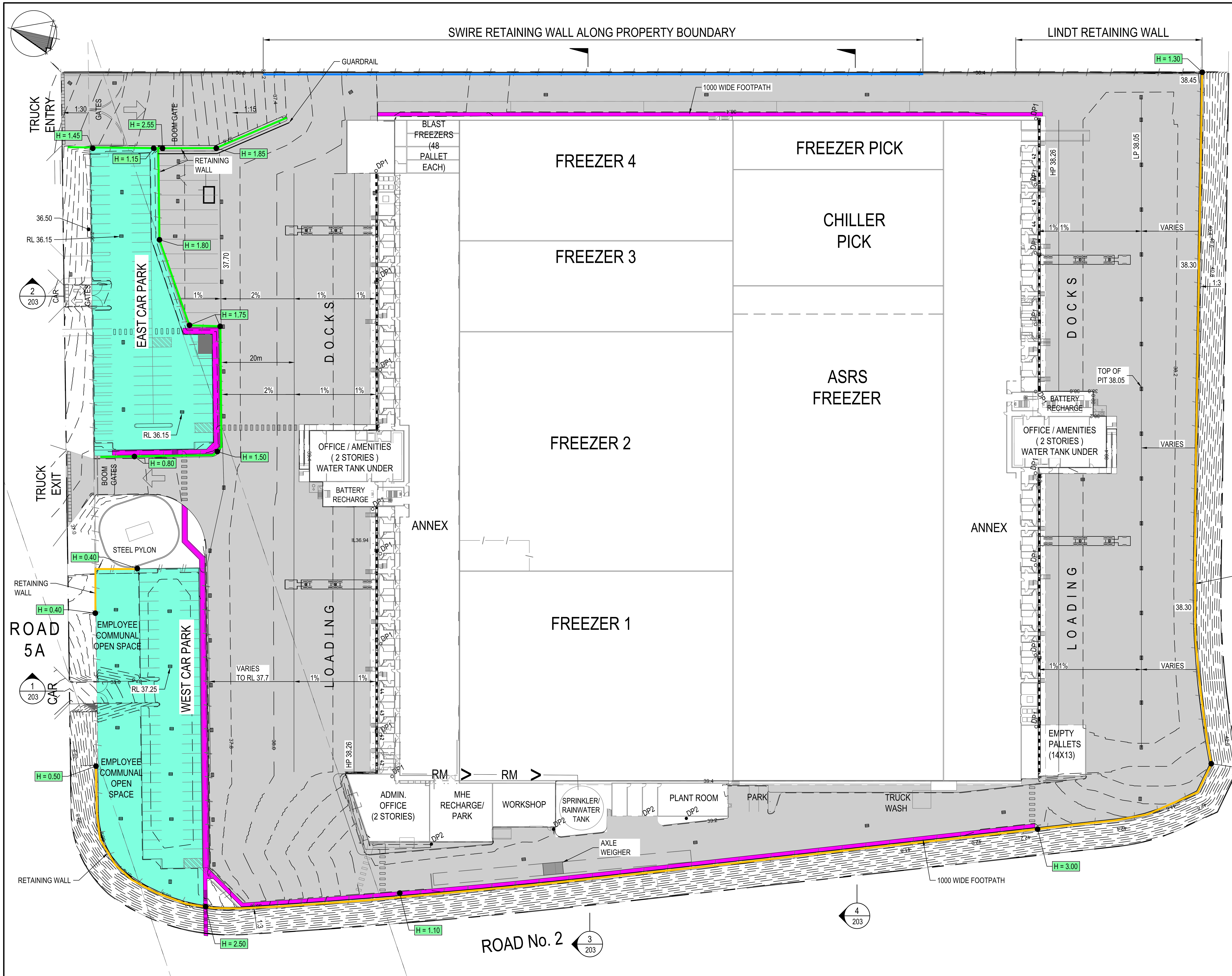
SWIRE RETAINING WALL ALONG PROPERTY BOUNDARY
LINDT RETAINING WALL
GUARDRAIL
1000 WIDE FOOTPATH
TRUCK ENTRY
GATES
BOOM GATE
RETAINING WALL
H = 1.45
H = 2.55
H = 1.15
H = 1.85
H = 1.80
H = 1.75
H = 1.50
H = 0.80
H = 1.30
36.50
RL 36.15
EAST CAR PARK
CAR GATES
20m
TRUCK EXIT
BOOM GATES
STEEL PYLON
H = 0.40
RETAINING WALL
H = 0.40
ROAD 5A
EMPLOYEE COMMUNAL OPEN SPACE
WEST CAR PARK
RL 37.25
VARIES TO RL 37.7
H = 0.50
RETAINING WALL
H = 2.50
H = 1.10
ROAD No. 2
BLAST FREEZERS (48 PALLET EACH)
FREEZER 4
FREEZER 3
FREEZER 2
FREEZER 1
FREEZER PICK
CHILLER PICK
ASRS FREEZER
ANNEX
ANNEX
D O C K S
L O A D I N G
OFFICE / AMENITIES (2 STORIES) WATER TANK UNDER
BATTERY RECHARGE
TOP OF PIT 38.05
HP 38.26
LP 38.05
HP 38.26
38.45
38.30
38.30
VARIES
EMPTY PALLETS (14X13)
RM
ADMIN. OFFICE (2 STORIES)
MHE RECHARGE/ PARK
WORKSHOP
SPRINKLER/ RAINWATER TANK
PLANT ROOM
PARK
TRUCK WASH
AXLE WEIGHER
H = 2.80
H = 3.00
RETAINING WALL
1000 WIDE FOOTPATH

LEGEND

- CONCRETE PAVEMENT (CRCP)
- CONCRETE FOOTPATH (1m WIDE)
- CONCRETE PAVEMENT CARPARK (JRCP)
- SPOON DRAIN
- KEYSTONE GRAVITY RETAINING WALL
- KEYSTONE SOIL REINFORCED RETAINING WALL
- KEYSTONE RETAINING WALL GRAVITY OR SOIL REINFORCED
- STORMWATER PIT
- MINOR CONTOURS AT 0.2m INTERVALS
- MAJOR CONTOURS AT 1.0m INTERVALS
- H = X.XX RETAINING WALL HEIGHT FROM TOP OF PAVEMENT (m)

NOTES

1. REFER DRAWINGS 2520460-96-0-606 AND 607 FOR DETAILS.

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No.	Revision	By	Chk	Appd	Date
B	CONCEPT DESIGN - REISSUE	GM	PWC	PS	29.05.15
A	CONCEPT DESIGN	GM	PWC	PS	21.05.15

Drawing Originator: Beca

Original Scale (A1) 1 : 500
Reduced Scale (A3) 1 : 1000

Design	DP	21.05.15
Drawn	GM	21.05.15
Dsg Verifier	PWC	21.05.15
Dwg Check	NP	21.05.15

Client: SWIRE COLD STORAGE PTY LTD

Project: MARSDEN PARK OVERALL DEVELOPMENT

Title: CONCEPT PAVEMENT AND GRADING PLAN

Discipline: CIVIL

Drawing No. 2520460-96-0-604 Rev. B

Document No. 2520460-96-0-604.DWG

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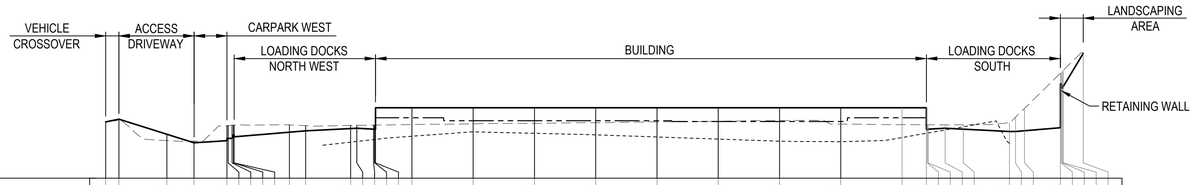

LEGEND

- – – – – – EXISTING SURFACE LEVEL
- - - - - - - - TOP OF SHALE LAYER
- — · — · — BUILDING - CONCRETE SLAB SOFFIT
- ——— PAVEMENT/FINISHED FLOOR LEVEL

DATUM 35

CHAINAGE	DESIGN SURFACE	BUILDING - FLOOR SYSTEM SOFFIT	TOP OF SHALE LAYER	EXISTING SURFACE LEVEL
0	38.680			38.68
4.31	38.854			38.78
20	37.872			37.45
28.86	37.318			37.42
39.59	37.450			38.43
40	37.600			38.44
41.27	37.600			38.45
41.77	37.850			38.46
41.93	37.850			38.46
60	38.005			38.48
65.28	38.094			38.43
80	38.241		37.36	38.45
82	38.261		37.4	38.46
87.49	38.206		37.52	38.47
87.8	38.160		37.53	38.47
88.1	38.200		37.54	38.47
100	39.600	38.95	37.74	38.5
120	39.600	38.75	38.03	38.55
140	39.600	38.75	37.93	38.58
160	39.600	38.75	37.83	38.62
180	39.600	38.75	37.69	38.68
200	39.600	38.7	37.56	38.72
220	39.600	38.7	37.42	38.76
240	39.600	38.7	37.39	38.53
260	39.600	38.95	37.66	38.5
267.95	39.600		37.94	38.49
268.26	38.160		37.95	38.49
268.56	38.206		37.96	38.49
274.06	38.261		38.15	38.48
280	38.202		38.36	38.49
295.06	38.051		37.27	38.63
297.06	38.051			38.98
300	38.101			39.56
311.7	38.300			41.86
312.02	41.167			41.92
312.32	40.867			41.98
312.62	41.017			42.04
319.15	43.151			43.19

1 / 604 LONGITUDINAL SECTION

HORZ SCALE 1:1000
VERTICAL SCALE 1:200

DATUM 31

CHAINAGE	DESIGN SURFACE	BUILDING - FLOOR SYSTEM SOFFIT	TOP OF SHALE LAYER	EXISTING SURFACE LEVEL
0	42.896			42.9
6.53	40.739			41.68
6.93	40.590			41.6
7.24	40.740			41.55
7.54	40.890			41.49
8.64	39.172			41.27
8.82	39.022			41.23
19.32	39.200			39.14
20	39.350			39
33.62	39.350		37.97	38.62
40	39.600	38.75	38.21	38.6
60	39.600	38.75	37.85	38.6
80	39.600	38.75	37.39	38.61
100	39.600	38.75	36.73	38.65
120	39.600	38.75	36.12	38.67
140	39.600	38.75	35.44	38.65
160	39.600	38.75	34.84	38.66
180	39.600	38.75	34.25	38.63
200	39.600	38.75	34.16	37.3
213.56	39.600	38.75	34.58	37.06
213.73	38.474		34.58	37.05
215.76	38.450		34.64	36.98
220	38.300			36.8
226.43	38.300			36.86
226.61	38.450			36.86

3 / 604 LONGITUDINAL SECTION

HORZ SCALE 1:1000
VERTICAL SCALE 1:200

DATUM 30

CHAINAGE	DESIGN SURFACE	BUILDING - FLOOR SYSTEM SOFFIT	TOP OF SHALE LAYER	EXISTING SURFACE LEVEL
0	35.357			
4.28	35.526			35.48
13.28	36.500			36.18
14.18	36.500			36.18
16.68	36.250			36.18
20	36.273			36.04
24.35	36.304			35.98
32.93	36.350			35.69
35.19	36.500			36.08
35.39	37.972			36.12
40	37.774			36.92
47.18	37.700			37.89
60	37.956		33.15	38.46
66.89	38.094		33.74	38.5
80	38.225		34.83	38.51
83.61	38.261		35.11	38.52
89.11	38.206		35.31	38.53
89.41	38.160		35.31	38.53
89.71	38.200	38.95	35.3	38.53
100	39.600	38.95	35.15	38.57
120	39.600	38.75	34.86	38.61
140	39.600	38.75	34.71	38.64
160	39.600	38.75	34.54	38.67
180	39.600	38.75	34.35	38.72
200	39.600	38.7	34.77	38.78
220	39.600	38.7	35.78	38.81
240	39.600	38.7	36.78	38.87
260	39.600	38.95	37.66	38.88
269.51	39.600	38.95	38.05	38.91
269.81	38.160		38.06	38.91
270.11	38.206		38.08	38.92
275.61	38.261		38.3	38.93
280	38.217		38.48	38.93
296.61	38.051		39.03	37.77
298.61	38.051		38.26	37.79
300	38.075			38.04
312.87	38.300			40.6
313.16	39.999			40.66
313.46	39.705			40.72
313.77	39.849			40.78
320	41.892			42.02
320.37	42.015			42.01

2 / 604 LONGITUDINAL SECTION

HORZ SCALE 1:1000
VERTICAL SCALE 1:200

DATUM 33

CHAINAGE	DESIGN SURFACE	BUILDING - FLOOR SYSTEM SOFFIT	TOP OF SHALE LAYER	EXISTING SURFACE LEVEL
0	43.420			43.44
6.51	41.268			42.24
6.91	41.118			42.16
7.21	41.268			42.1
7.51	41.419			42.04
8.61	39.123			41.82
8.76	39.123			41.79
9.11	38.972			41.72
20	39.048		37.61	39.54
23.01	39.068		37.67	38.94
26.26	39.300		37.66	38.65
40	39.600	38.7	37.64	38.54
60	39.600	38.7	37.38	38.77
80	39.600	38.7	37.3	38.76
100	39.600	38.7	37.07	38.77
120	39.600	38.7	36.54	38.79
140	39.600	38.7	35.6	38.79
160	39.600	38.7	35.54	38.8
180	39.600	38.75	35.66	38.23
200	39.600	38.75	36.18	37.26
206.2	39.600	38.75	36.13	37.19
208.4	38.450		36.11	37.16
219.07	38.300			37.09
219.25	38.450			37.09

4 / 604 LONGITUDINAL SECTION

HORZ SCALE 1:1000
VERTICAL SCALE 1:200

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No.	Revision	By	Chk	Appd	Date
A	CONCEPT DESIGN	GM	PWC	PS	21.05.15

Drawing Originator: Beca

Original Scale (A1) AS SHOWN
Reduced Scale (A3) -

Design	DP	21.05.15	Approved For Construction*
Drawn	GM	21.05.15	
Dsg Verifier	PWC	21.05.15	
Dwg Check	NP	21.05.15	Date

* Refer to Revision 1 for Original Signature

Client: SWIRE COLD STORAGE PTY LTD

Project: MARSDEN PARK
OVERALL DEVELOPMENT

Title: CONCEPT
CIVIL CROSS SECTIONS

Discipline: CIVIL

Drawing No. 2520460-96-0-605

Rev. A

Document No. 2520460-96-0-605.DWG

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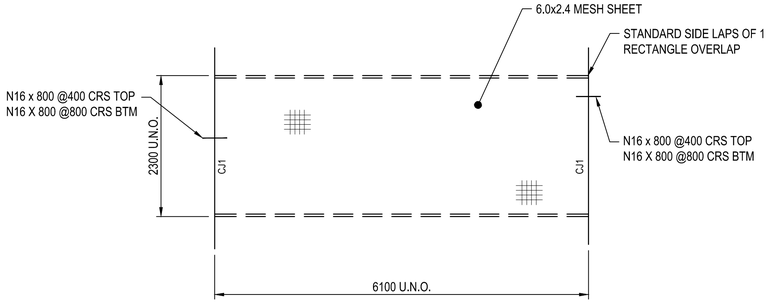
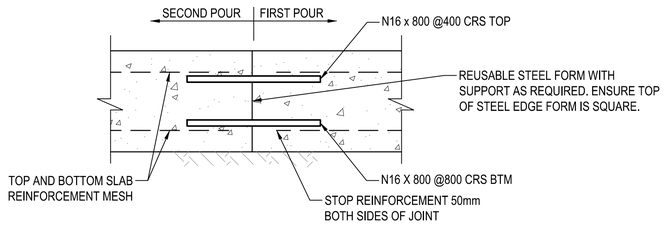
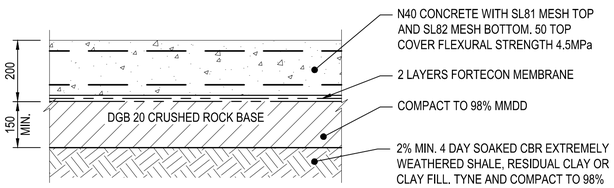


TYPICAL (CRCP) POUR DETAIL PLAN
SCALE: 1:50

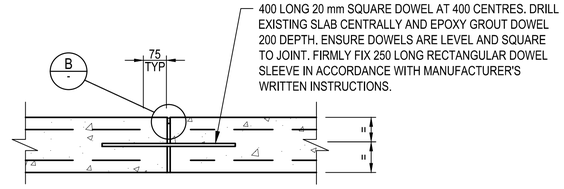


CONSTRUCTION JOINT DETAIL (CJ1)
SCALE 1:10

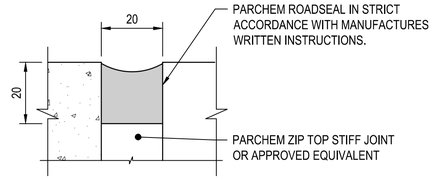


CONTINUOUSLY REINFORCED CONCRETE PAVEMENT (CRCP) DETAIL
SCALE 1:10

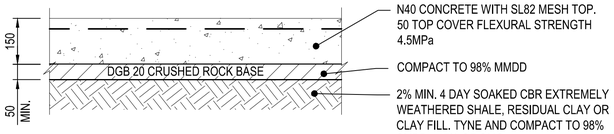
NOTE: EXPANSION JOINTS AT 50m MAX. INTERVALS



EXPANSION JOINT DETAIL (EJ)
SCALE 1:10

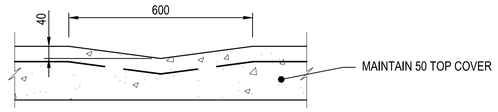


B DETAIL
SCALE 1:1

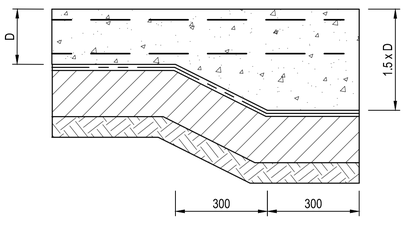


JOINTED REINFORCED CONCRETE PAVEMENT (JRCP) DETAIL
SCALE 1:10

NOTE: EXPANSION JOINTS AT 40.0m MAX. INTERVALS
SAWN JOINTS AT 6.0m INTERVALS



SPOON DRAIN DETAIL
SCALE 1:10



PAVEMENT EDGE THICKENING DETAIL
SCALE 1:10

PRELIMINARY
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No.	Revision	By	Chk	Appd	Date
A	CONCEPT DESIGN	GM	PWC	PS	21.05.15

Drawing Originator: Beca

Original Scale (A1) AS SHOWN
Reduced Scale (A3) -

Design	DP	21.05.15
Drawn	GM	21.05.15
Dsg Verifier	PWC	21.05.15
Dwg Check	NP	21.05.15

Client: SWIRE COLD STORAGE PTY LTD

Project: MARSDEN PARK OVERALL DEVELOPMENT

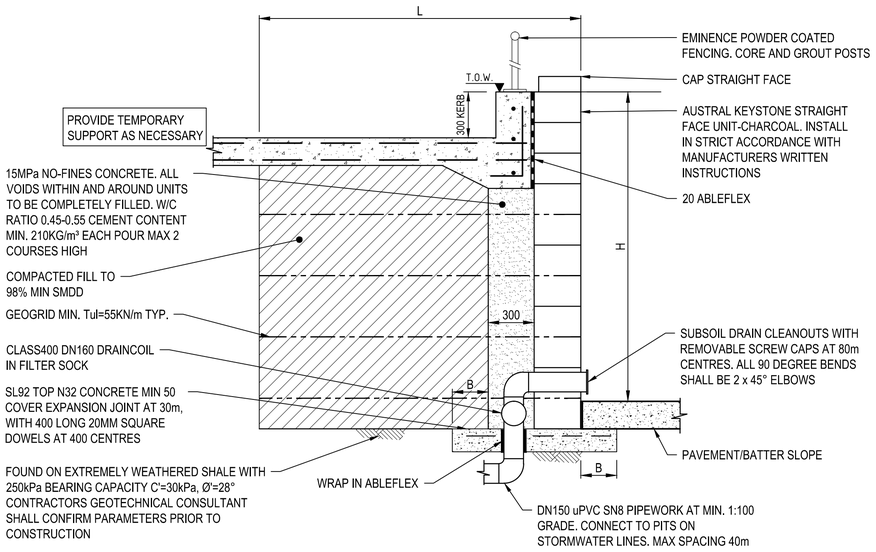
Title: CONCEPT CIVIL TYPICAL DETAILS SHEET 2 OF 2

Discipline: CIVIL

Drawing No.: 2520460-96-0-606

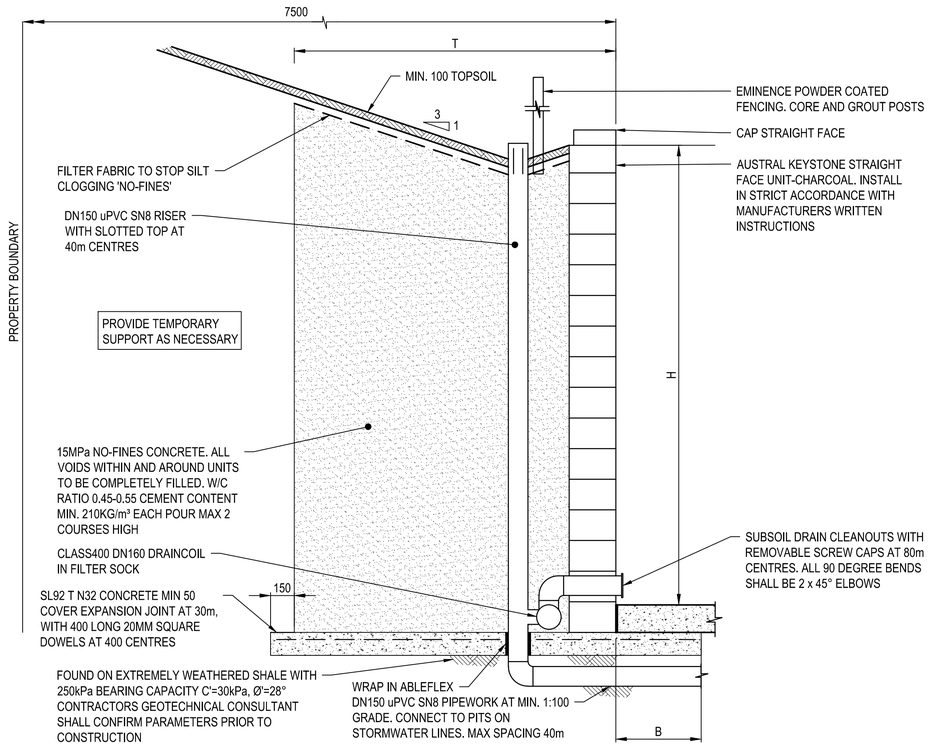
Rev.: A

Document No. 2520460-96-0-606.DWG



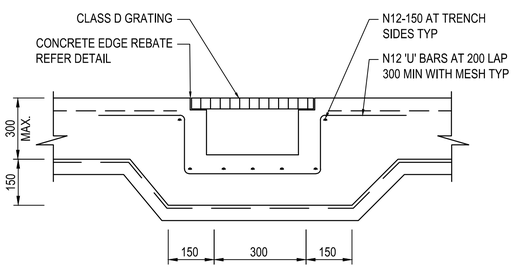
GEOGRID SOIL REINFORCED KEYSTONE WALL
SCALE: 1:20

GEOGRID SOIL REINFORCED KEYSTONE WALL		
WALL HEIGHT H (m)	L (m)	B (m)
1.0	1.6	0.15
1.4	2.0	0.15
1.8	2.2	0.6
2.2	3.5	0.6
2.6	4.0	0.6

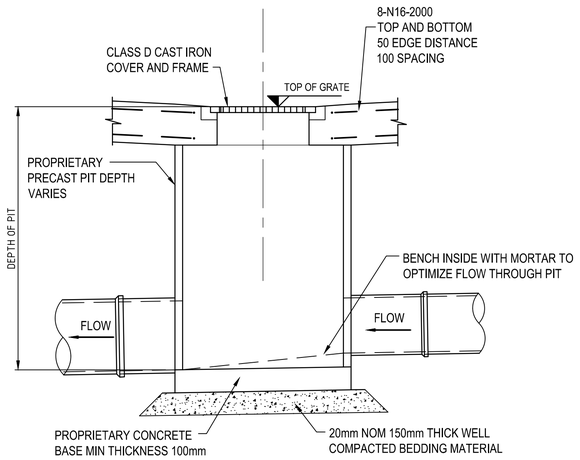


NO FINES GRAVITY KEYSTONE WALL
SCALE: 1:20

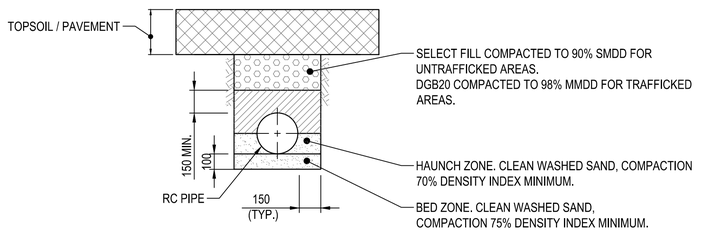
NO FINES GRAVITY KEYSTONE WALL		
WALL HEIGHT H (m)	T (m)	B (m)
1.0	1.0	0.6
1.4	1.2	0.6
1.8	1.5	0.6
2.2	1.8	1.0
2.6	1.9	1.0
3.0	2.1	1.0



TYPICAL TRENCH DRAIN DETAIL
SCALE 1:10



PRECAST PIT DETAIL
SCALE 1:20



STORMWATER RC PIPE TRENCH - TYPICAL DETAIL
SCALE 1:20

NOTE: MINIMUM COVER 450mm - UNTRAFFFICKED
MINIMUM COVER 600mm - TRAFFICKED

PRELIMINARY
NOT FOR CONSTRUCTION

No.	Revision	By	Chk	Appd	Date
B	CONCEPT DESIGN - REISSUE	GM	PWC	PS	29.05.15
A	CONCEPT DESIGN	GM	PWC	PS	21.05.15

Drawing Originator: Beca

Original Scale (A1) AS SHOWN Reduced Scale (A3) -			
Design	DP	21.05.15
Drawn	GM	21.05.15
Dsg Verifier	PWC	21.05.15
Dwg Check	NP	21.05.15

Client: SWIRE COLD STORAGE PTY LTD

Project: MARSDEN PARK OVERALL DEVELOPMENT

Title: CONCEPT CIVIL TYPICAL DETAILS SHEET 2 OF 2

Discipline: CIVIL

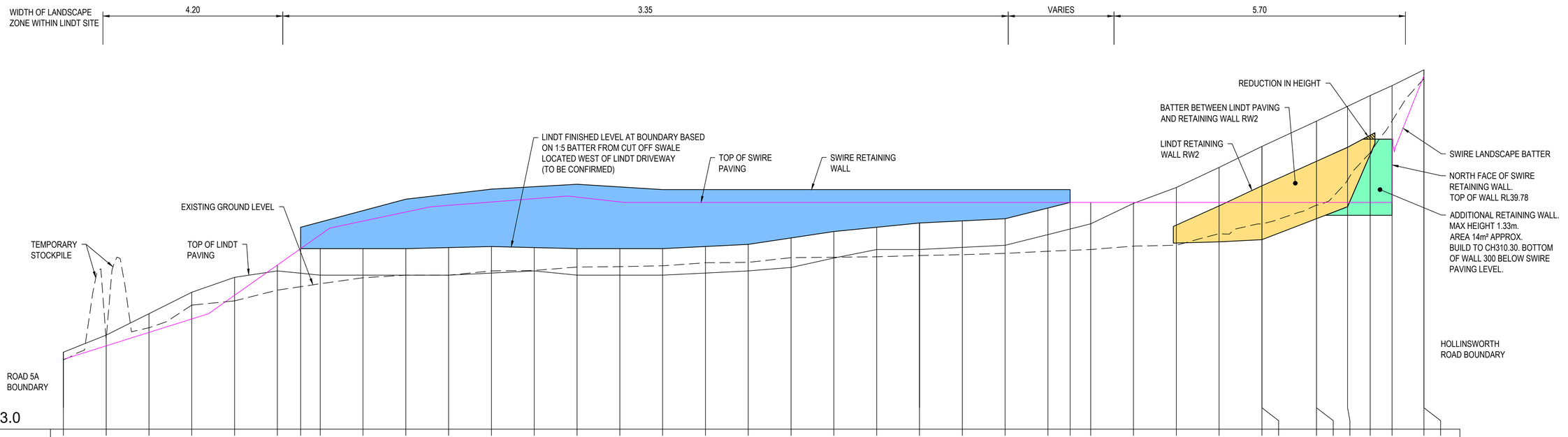
Drawing No.: 2520460-96-0-607 Rev.: B

DO NOT SCALE

IF IN DOUBT ASK.

NOTES

1. RL's ARE TO AHD.
2. CHAINAGE IS IN METERS.
3. RETAINING WALL HEIGHT HAS BEEN CALCULATED AS FOLLOWS:
   - BOTTOM OF WALL = RL OF LINDT PAVEMENT + LINDT KERB HEIGHT + LANDSCAPE WIDTH -1.0m (SWALE) AT GRADE (1V:5H)
   - TOP OF WALL = RL OF SWIRE PAVEMENT + 300 SWIRE KERB HEIGHT
4. RETAINING WALL HEIGHT TO BE VARIED ON SITE AS NECESSARY TO ACCOUNT FOR BLOCK INCREMENTS, CAPPING BLOCK AND SATISFACTORY FOUNDING MATERIAL.
5. REFER DRAWING 2520460-96-0-606 FOR DETAILS.



TOP OF LINDT PAVING (EAST OF LANDSCAPE ZONE)	34.800	35.200	35.700	36.200	36.550	36.700		36.600	36.600	36.600	36.600	36.650	36.700
TOP OF SWIRE PAVING ON BOUNDARY	34.630	34.948	35.263	35.577	36.130	36.837		37.543	37.865	38.076	38.233	38.311	38.389
EXISTING GROUND LEVEL ON BOUNDARY (FREEBURN SURVEY)	34.650	35.100	35.370	35.900	36.000	36.250		36.400	36.540	36.600	36.600	36.700	36.710
CHAINAGE	0.000	10.000	20.000	30.000	40.000	50.000	55.427	60.000	70.000	80.000	90.000	100.000	110.000
RETAINING WALL HEIGHT (mm)								623		1156		1341	

TOP OF LINDT PAVING (EAST OF LANDSCAPE ZONE)	36.600	36.600	36.600	36.650	36.700	36.780	37.000	37.200	37.200	37.250	37.300	37.550	
TOP OF SWIRE PAVING ON BOUNDARY	38.425	38.313	38.300	38.300	38.300	38.300	38.300	38.300	38.300	38.300	38.300	38.300	
EXISTING GROUND LEVEL ON BOUNDARY (FREEBURN SURVEY)	36.790	36.800	36.820	36.890	36.900	37.010	37.020	37.030	37.060	37.080	37.110	37.160	
CHAINAGE	120.000	130.000	140.000	150.000	160.000	170.000	180.000	190.000	200.000	210.000	220.000	230.000	235.200
RETAINING WALL HEIGHT (mm)	1505		1380		1280		980		780		680	430	

TOP OF LINDT PAVING (EAST OF LANDSCAPE ZONE)	37.800	38.280	38.650	39.120	39.610	39.610	40.200	40.200	40.546	40.800	41.030	41.030	41.400	41.400
TOP OF SWIRE PAVING ON BOUNDARY	38.300	38.300	38.300	38.300	38.300	38.300	38.300	38.300	38.300	38.300	38.450	38.450		
EXISTING GROUND LEVEL ON BOUNDARY (FREEBURN SURVEY)	37.200	37.280	37.300	37.570	37.800	37.800	38.236	38.236	38.825	39.465	40.207	40.207	41.194	41.194
CHAINAGE	240.000	250.000	260.006	270.000	280.000	280.000	292.757	292.757	300.000	305.302	310.347	310.400	317.847	317.847
RETAINING WALL HEIGHT (mm)														

EAST BOUNDARY - LONG SECTION

HORZ SCALE 1:500
VERTICAL SCALE 1:50

PRELIMINARY
NOT FOR CONSTRUCTION

No.	Revision	By	Chk	Appd	Date
B	PRELIMINARY - REVISED	GM	PC	PS	27.05.15
A	PRELIMINARY	GM	PC	PS	21.05.15

Drawing Originator: Beca

Original Scale (A1) AS SHOWN
Reduced Scale (A3) -

Design	DP	21.05.15
Drawn	GM	21.05.15
Dsg Verifier	PWC	21.05.15
Dwg Check	NP	21.05.15

Client: SWIRE COLD STORAGE PTY LTD

Project: MARSDEN PARK
OVERALL DEVELOPMENT

Title: CONCEPT
EAST BOUNDARY
LONG SECTION

Discipline: CIVIL

Drawing No. 2520460-96-0-608
Rev. B

Drawing Plotted: 21 May 2015 2:19 PM

EXISTING SWALE

EXISTING SEDIMENT BASIN

ACROSS EXISTING CHANNEL UNTIL CATCHMENT IS PAVED

PARTIALLY BACKFILL EXISTING SEDIMENT BASIN. CONSTRUCT STORMWATER DRAINAGE SYSTEM FROM LPOD UPSTREAM. PROVIDE SWALES TO PITS FURTHEST UPSTREAM IN THE DRAINAGE NETWORK. FILL BALANCE OF SEDIMENT BASIN AFTER STAGE 1 STORMWATER DRAINAGE SYSTEM HAS BEEN CONSTRUCTED.

STAGE 1 CONSTRUCTION

STAGE 2 CONSTRUCTION

CONSTRUCT CROSSOVER, PAVEMENT AND TRENCH AT START OF CONSTRUCTION

15m

TEMPORARY TOPSOIL STOCKPILE LOCATION

STORMWATER DRAINAGE ONLY

STAGE 2 CONSTRUCTION

THIS STORMWATER LINE & PITS CONSTRUCTED IN STAGE 1. PITS CAST TO 150 BELOW BASE OF FRAME GRATE. COVER THOSE SHOWN WITHOUT FILTER

DN150 uPVC SN8 PIPE & RISER. REMOVE RISER AND CONNECT RETAINING WALL CUT OFF DRAIN & SUBSOIL DRAIN IN STAGE 2

LEGEND

- EARTH BANK
- STRAW BALE FILTER
- FILTER AT STORMWATER PIT
- STABILISED SITE ACCESS
- SEDIMENT FENCE
- SW SWALE (TEMPORARY)
- EXISTING CONTOURS (1.0m SPACING)

NOTES

1. THE SOIL EROSION AND SEDIMENT CONTROLS SHOWN ARE INDICATIVE ONLY AND ARE SUBJECT TO THE CONSTRUCTION METHODOLOGY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ALL REGULATIONS REGARDING THE PROTECTION OF THE ENVIRONMENT.
2. WORKS SHALL BE UNDERTAKEN IN ACCORDANCE WITH BLACKTOWN CITY COUNCIL'S SOIL EROSION AND SEDIMENT CONTROL POLICY AND MANAGING URBAN STROMWATER: SOILS AND CONSTRUCTION VOLUME 1 (4TH EDITION) DATED MARCH 2004.
3. GRADE FINISHED SURFACE TO SHED WATER EVENLY WITHOUT SHEET OR RILL EROSION OR CHANNELISATION UNTIL STORMWATER SYSTEM IS CONSTRUCTED.
4. REMOVE ALL EXCESS SPOIL FROM SITE
5. REFER DRAWING 2520460-96-0-207 FOR DETAILS.
6. TRUCK WASH BAY NOT SHOWN.

PRELIMINARY
NOT FOR CONSTRUCTION

No.	Revision	By	Chk	Appd	Date
A	CONCEPT DESIGN	GM	PWC	PS	21.05.15

Drawing Originator: Beca

Original Scale (A1) 1 : 500	Design	DP	--.05.15
	Drawn	GM	--.05.15
Reduced Scale (A3) 1 : 1000	Dsg Verifier	PWC	--.05.15
	Dwg Check	NP	--.05.15

Client: SWIRE COLD STORAGE PTY LTD

Project: MARSDEN PARK OVERALL DEVELOPMENT

Title: CONCEPT SOIL EROSION AND SEDIMENT CONTROL PLAN

Discipline: CIVIL

Drawing No.: 2520460-96-0-609

Rev.: A

DO NOT SCALE

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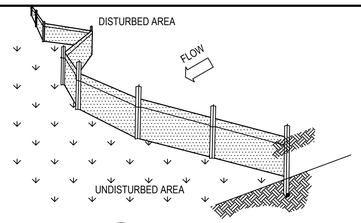
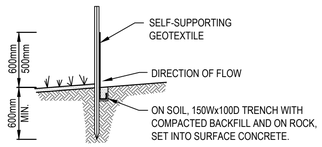
Document No. 2520460-96-0-609.DWG



A1 / DDC010 ELEVATION
NTS



A / - SECTION
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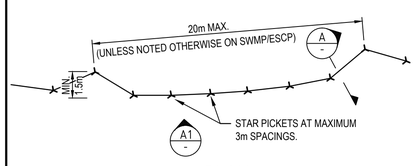
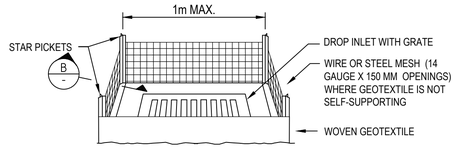


PLAN
NTS



1 / - DETAIL
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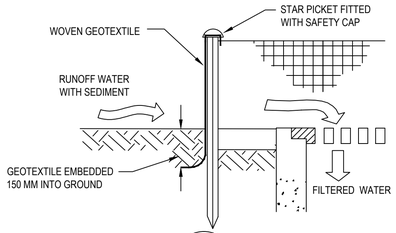

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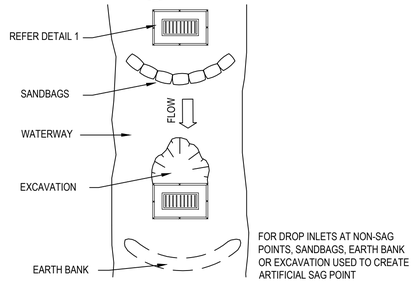

PLAN
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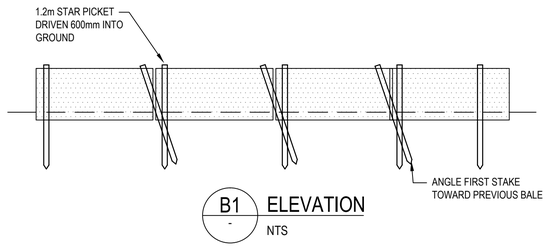
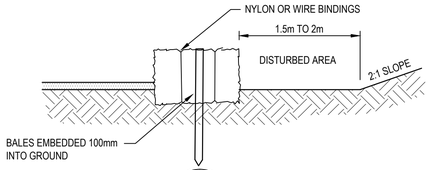
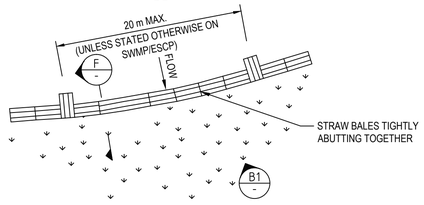


B1 / - ELEVATION
NTS



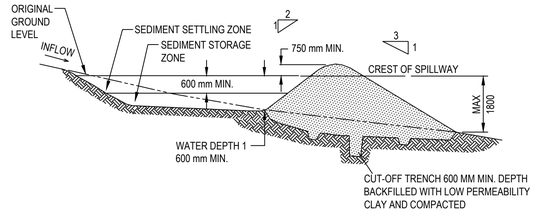
F / - SECTION
NTS



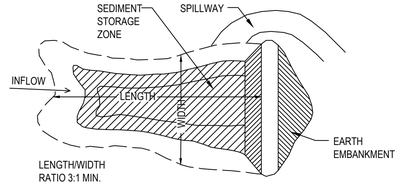
PLAN
NTS

STRAW BALE FILTER GENERAL CONSTRUCTION NOTES

1. CONSTRUCT STRAW BALE FILTER AS CLOSE AS POSSIBLE TO PARALLEL TO THE CONTOURS OF THE SITE OR THE TOE OF A SLOPE.
2. PLACE BALES LENGTHWISE IN A ROW WITH ENDS TIGHTLY ABUTTING. USE STRAW TO FILL ANY GAPS BETWEEN BALES. STRAWS TO BE PLACED PARALLEL TO GROUND.
3. MAXIMUM HEIGHT OF FILTER IS ONE BALE.
4. ON SOFT MATERIALS, EMBED EACH BALE IN THE GROUND 75mm TO 100mm AND ANCHOR WITH TWO 1.2m STAR PICKETS. ANGLE THE FIRST STAKE IN EACH BALE TOWARDS THE PREVIOUSLY LAID BALE. DRIVE STAKES 600mm INTO THE GROUND AND FLUSH WITH THE TOP OF THE BALES.
5. WHERE A STRAW BALE FILTER IS CONSTRUCTED DOWNSLOPE FROM DISTURBED BATTER THE BALES SHOULD BE LOCATED 1.5 TO 2m DOWN SLOPE FROM THE TOE OF THE BATTER.



SECTION - EARTH BASIN - WET
NTS



PLAN
NTS

EARTH BASIN GENERAL CONSTRUCTION NOTES:

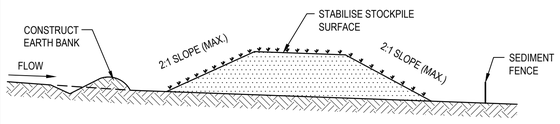
1. REMOVE ALL VEGETATION AND TOPSOIL FROM UNDER THE DAM WALL AND FROM WITHIN THE STORAGE AREA.
2. CONSTRUCT A CUT-OFF TRENCH 500 mm DEEP AND 1,200 mm WIDE ALONG THE CENTRELINE OF THE EMBANKMENT EXTENDING TO A POINT ON THE GULLY WALL LEVEL WITH THE RISER CREST.
3. MAINTAIN THE TRENCH FREE OF WATER AND RECOMPACT THE MATERIALS WITH EQUIPMENT AS SPECIFIED IN THE SWMP TO 95 PER CENT STANDARD PROCTOR DENSITY.
4. SELECT FILL FOLLOWING THE SWMP THAT IS FREE OF ROOTS, WOOD, ROCK, LARGE STONE OR FOREIGN MATERIAL.
5. PREPARE THE SITE UNDER THE EMBANKMENT BY RIPPING TO AT LEAST 100 MM TO HELP BOND COMPACTED FILL TO THE EXISTING SUBSTRATE.
6. SPREAD THE FILL IN 100 MM TO 150 MM LAYERS AND COMPACT IT AT OPTIMUM MOISTURE CONTENT FOLLOWING THE SWMP.
7. CONSTRUCT THE EMERGENCY SPILLWAY.
8. REHABILITATE THE STRUCTURE FOLLOWING THE SWMP.

SEDIMENT FENCE GENERAL CONSTRUCTION NOTES

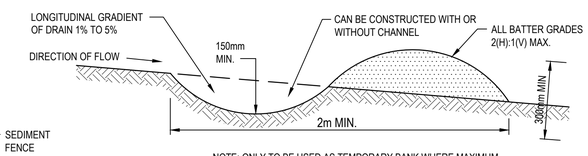
1. CONSTRUCT SEDIMENT FENCE AS CLOSE AS POSSIBLE TO PARALLEL TO THE CONTOURS OF THE SITE.
2. DRIVE 1.5m LONG STAR PICKETS INTO GROUND, 3m APART.
3. DIG A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE. BURY THE BOTTOM OF THE GEOTEXTILE.
4. BACKFILL TRENCH OVER BASE OF GEOTEXTILE.
5. FIX SELF-SUPPORTING GEOTEXTILE TO UPSLOPE SIDE OF STAR PICKETS WITH WIRE TIES OR AS RECOMMENDED BY GEOTEXTILE MANUFACTURER.
6. JOIN SECTIONS OF FABRIC AT STAR PICKETS WITH MIN. 150mm OVERLAP.

GEOTEXTILE INLET FILTER GENERAL CONSTRUCTION NOTES

1. FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE OR STRAW BALES.
2. IN WATERWAYS, ARTIFICIAL SAG POINTS CAN BE CREATED WITH SANDBAGS OR EARTH BANKS AS SHOWN IN THE DRAWING.
3. DO NOT COVER THE INLET WITH GEOTEXTILE UNLESS THE DESIGN IS ADEQUATE TO ALLOW FOR ALL WATERS TO BYPASS IT.

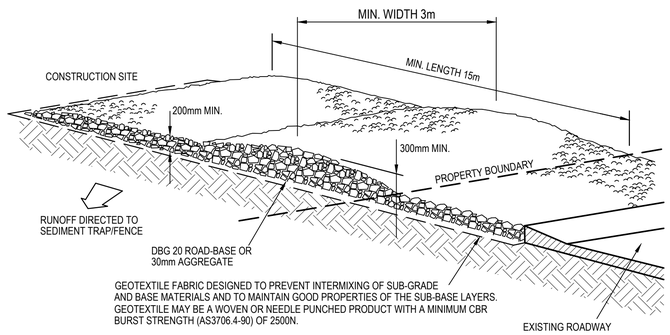


SECTION
NTS



NOTE: ONLY TO BE USED AS TEMPORARY BANK WHERE MAXIMUM UPSLOPE LENGTH IS 80m.

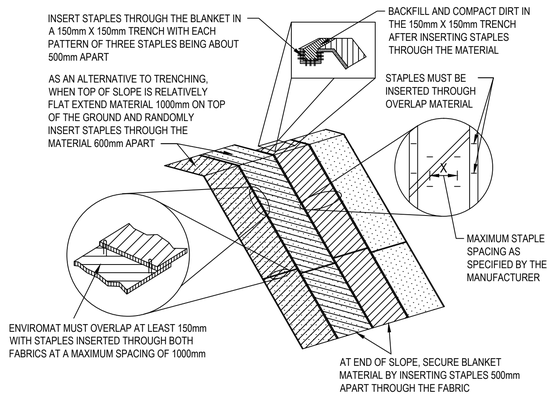
SECTION
NTS



VIEW
NTS

STABILIZED SITE ACCESS GENERAL CONSTRUCTION NOTES

1. STRIP TOPSOIL AND LEVEL SITE.
2. COMPACT SUBGRADE.
3. COVER AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
4. CONSTRUCT 200mm THICK PAD OVER GEOTEXTILE USING ROAD-BASE OR 30mm AGGREGATE. MINIMUM LENGTH 15m OR TO BUILDING ALIGNMENT. MINIMUM WIDTH 3m.
5. CONSTRUCT HUMP IMMEDIATELY WITHIN BOUNDARY TO DIVERT WATER TO A SEDIMENT FENCE OR OTHER SEDIMENT TRAP.



VIEW
NTS

STOCKPILES GENERAL CONSTRUCTION NOTES:

1. LOCATE STOCKPILE AT LEAST 5m FROM EXISTING VEGETATION, CONCENTRATED WATER FLOWS, ROADS AND HAZARD AREAS.
2. CONSTRUCT ON THE CONTOUR AS A LOW, FLAT, ELONGATED MOUND.
3. WHERE THERE IS SUFFICIENT AREA TOPSOIL STOCKPILES SHALL BE LESS THAN 2m IN HEIGHT.
4. REHABILITATE IN ACCORDANCE WITH THE SWMP/ESCP.
5. CONSTRUCT EARTH BANK ON THE UPSLOPE SIDE TO DIVERT RUN OFF AROUND THE STOCKPILE AND A SEDIMENT FENCE 1 TO 2m DOWNSLOPE OF STOCKPILE.

EARTH BANK (LOW FLOW) GENERAL CONSTRUCTION NOTES:

1. AVOID REMOVING TREES AND SHRUBS IF POSSIBLE.
2. DRAINS TO BE CIRCULAR, PARABOLIC OR TRAPEZOIDAL CROSS SECTION NOT V-SHAPED.
3. EARTH BANKS TO BE ADEQUATELY COMPACTED IN ORDER TO PREVENT FAILURE.
4. PERMANENT OR TEMPORARY STABILISATION OF THE EARTH BANK TO BE COMPLETED WITHIN 10 DAYS OF CONSTRUCTION.
5. ALL OUTLETS FROM DISTURBED LANDS ARE TO FEED INTO A SEDIMENT BASIN OR SIMILAR.
6. DISCHARGE RUNOFF COLLECTED FROM UNDISTURBED LANDS ONTO EITHER A STABILISED OR AN UNDISTURBED DISPOSAL SITE WITHIN THE SAME SUBCATCHMENT AREA FROM WHICH THE WATER ORIGINATED.
7. COMPACT BANK WITH A SUITABLE IMPLEMENT IN SITUATIONS WHERE THEY ARE REQUIRED TO FUNCTION FOR MORE THAN FIVE DAYS.
8. EARTH BANKS TO BE FREE OF PROJECTIONS OR OTHER IRREGULARITIES THAT WILL IMPEDE NORMAL FLOW.

SLOPE STABILISATION GENERAL CONSTRUCTION NOTES:

1. REMOVE ANY ROCKS, CLODS, STICKS OR GRASS FROM THE GROUND SURFACE BEFORE LAYING THE MATTING.
2. SPREAD TOPSOIL AS SHOWN ON THE DRAWINGS.
3. WHERE SHOWN ON THE DRAWINGS, COMPLETE FERTILISING AND SEEDING ON A PROPERLY PREPARED SEEDBED BEFORE LAYING ENVIROMAT.
4. ENSURE THE FABRIC CAN BE CONTINUOUSLY IN CONTACT WITH THE SOIL BY GRADING THE SURFACE CAREFULLY FIRST.
5. LAY THE MATTING IN "SHINGLE-FASHION" WITH THE ENDS OF EACH UPSTREAM ROLL OVERLAPPING THE NEXT ROLL DOWNSLOPE.
6. ENSURE SUFFICIENT STAPLES ARE USED TO MAINTAIN GOOD CONTACT BETWEEN THE SOIL AND THE MATTING.

PRELIMINARY
NOT FOR CONSTRUCTION

No.	Revision	By	Chk	Appd	Date
A	CONCEPT DESIGN	GM	PWC	PS	21.05.15

Drawing Originator: Beca

Original Scale (A1)			
NTS	Design	DP	21.05.15
Reduced Scale (A3)	Drawn	GM	21.05.15
-	Dsg Verifier	PWC	21.05.15
	Dwg Check	NP	21.05.15

Client: SWIRE COLD STORAGE PTY LTD

Project: MARSDEN PARK OVERALL DEVELOPMENT

Title: CONCEPT EROSION CONTROL DETAILS

Discipline: CIVIL

Drawing No.: 2520460-96-0-610

Rev.: A

Document No. 2520460-96-0-610.DWG

DO NOT SCALE

IF IN DOUBT ASK.