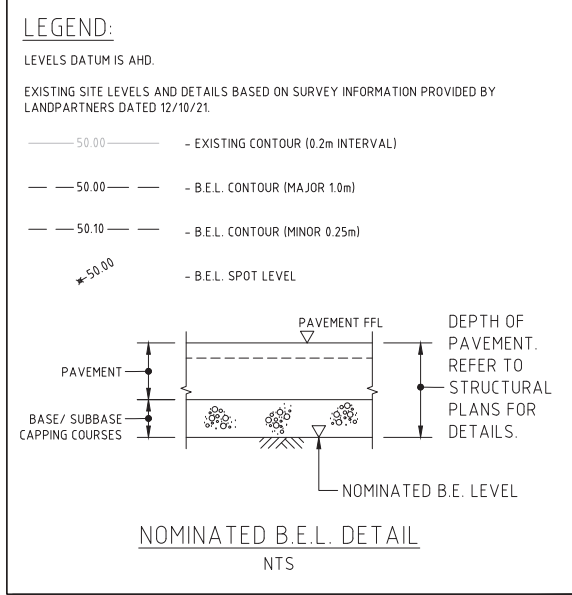


- SITE PREPARATION NOTES:**
- ALL EARTHWORKS SHALL BE COMPLETED GENERALLY IN ACCORDANCE WITH THE GUIDELINES SPECIFIED BY THE GEOTECHNICAL ENGINEER.
 - EXISTING LEVELS ARE BASED ON INFORMATION PROVIDED BY LANDPARTNERS TITLED SY075383.000.5.1 DATED 12/10/2021.
 - STRIP ANY TOP SOIL OR DELETERIOUS MATERIAL AND DISPOSE OF FROM SITE OR STORE AS DIRECTED.
 - COMPLETE CUT TO FILL EARTHWORKS TO ACHIEVE THE REQUIRED LEVELS AS INDICATED ON THE DRAWINGS WITH A TOLERANCE OF +0mm/-10mm THROUGH BUILDING PADS/PAVEMENTS AND +0mm/-20mm ELSEWHERE.
 - PREPARE STEEP BATTERS TO RECEIVE FILL BY CONSTRUCTING BENCHING TO FACILITATE FILL PLACEMENT AND COMPACTION.
 - AREAS TO RECEIVE FILL (THAT ARE NOT ON BENCHED BATTERS) AND AREAS IN CUT SHALL BE PROOF ROLLED TO IDENTIFY ANY SOFT HEAVING MATERIAL. SOFT MATERIAL SHALL BE BOXED OUT AND REMOVED PRIOR TO FILL PLACEMENT. PROOF ROLLING TO BE INSPECTED BY A GEOTECHNICAL ENGINEER OR THE EARTHWORKS DESIGNER.
 - SITE WON FILL SHALL BE COMPACTED IN MAXIMUM 300mm LAYERS AND TO DRY OR HLF DENSITY RATIOS (STANDARD COMPACTION) OF BETWEEN 98% AND 103%. THE PLACEMENT MOISTURE VARIATION OR HLF MOISTURE VARIATION SHALL BE CONTROLLED TO BE BETWEEN 2% DRY AND 2% WET.
 - IMPORTED FILL SHALL BE COMPACTED IN MAXIMUM 300mm LAYERS AND TO DRY OR HLF DENSITY RATIOS (STANDARD COMPACTION) OF BETWEEN 98% AND 103%. THE PLACEMENT MOISTURE VARIATION OR HLF MOISTURE VARIATION SHALL BE CONTROLLED TO BE BETWEEN 2% DRY AND 2% WET.
 - ALL ENGINEERED FILL PARTICLES SHALL BE ABLE TO BE INCORPORATED WITHIN A SINGLE LAYER. FURTHER, LESS THAN 30% OF PARTICLES SHALL BE RETAINED ON THE 37.5 mm SIEVE. ENGINEERED FILL SHALL BE ABLE TO BE TESTED IN ACCORDANCE WITH THE STANDARD COMPACTION METHOD (AS1289.5.4.1) OR HLF TEST METHOD (AS1289.5.7.1). THESE METHODS REQUIRE LESS THAN 20% RETAINED ON THE 37.5 mm SIEVE. WHERE BETWEEN 20% AND 30% OF PARTICLES ARE RETAINED ON THE 37.5 mm SIEVE THE ABOVE TEST METHODS SHALL STILL BE ADOPTED AND TEST REPORTS ANNOTATED APPROPRIATELY. THESE REQUIREMENTS SHOULD BE MET BY THE MATERIAL AFTER PLACEMENT AND COMPACTION.
 - ALL THE EARTHWORKS UNDERTAKEN AND THE SUBGRADE CONDITION IN THE CUT AREAS (IN THE STATED PERIOD) ARE DOCUMENTED IN THE REPORTS AND HAVE BEEN UNDERTAKEN IN ACCORDANCE WITH THE SPECIFICATION.
 - PRIOR TO ANY EARTHWORKS, EROSION CONTROL AS OUTLINED IN THE EROSION AND SEDIMENTATION CONTROL PLAN SHALL BE COMPLETED.
 - EXISTING ROCK, IF ANY, SHALL BE REMOVED BY HEAVY ROCK BREAKING OR RIPPING.
 - MATCH EXISTING LEVELS AT BATTER INTERFACE.
 - CONTRACTOR TO MATCH EXISTING LEVELS AT THE INTERFACE OF EARTHWORKS AND EXISTING SURFACE AT BATTER LOCATIONS OR WHERE NO RETAINING WALLS ARE PRESENT. ANY DISCREPANCY BETWEEN DESIGN AND EXISTING LEVELS TO BE REFERRED TO THE ENGINEER FOR DIRECTION OR ADJUSTMENTS TO DESIGN LEVELS.
 - DURING EARTHWORKS THE CONTRACTOR IS TO ENSURE ALL AREAS ARE FREE DRAINING & WILL NOT RETAIN WATER DURING RAINFALL. PROVIDE TEMPORARY MEASURES AS REQUIRED TO ENSURE FREE FLOWING RUNOFF THROUGH MANAGED DRAINAGE PATHS, DIVERSION DRAINS OR OTHER SUITABLE DISPOSAL METHOD AS AGREED DURING THE WORKS. REFER ANY CONCERNS TO THE ENGINEER. REFER TO EROSION AND SEDIMENT CONTROL DRAWINGS AND NOTES.



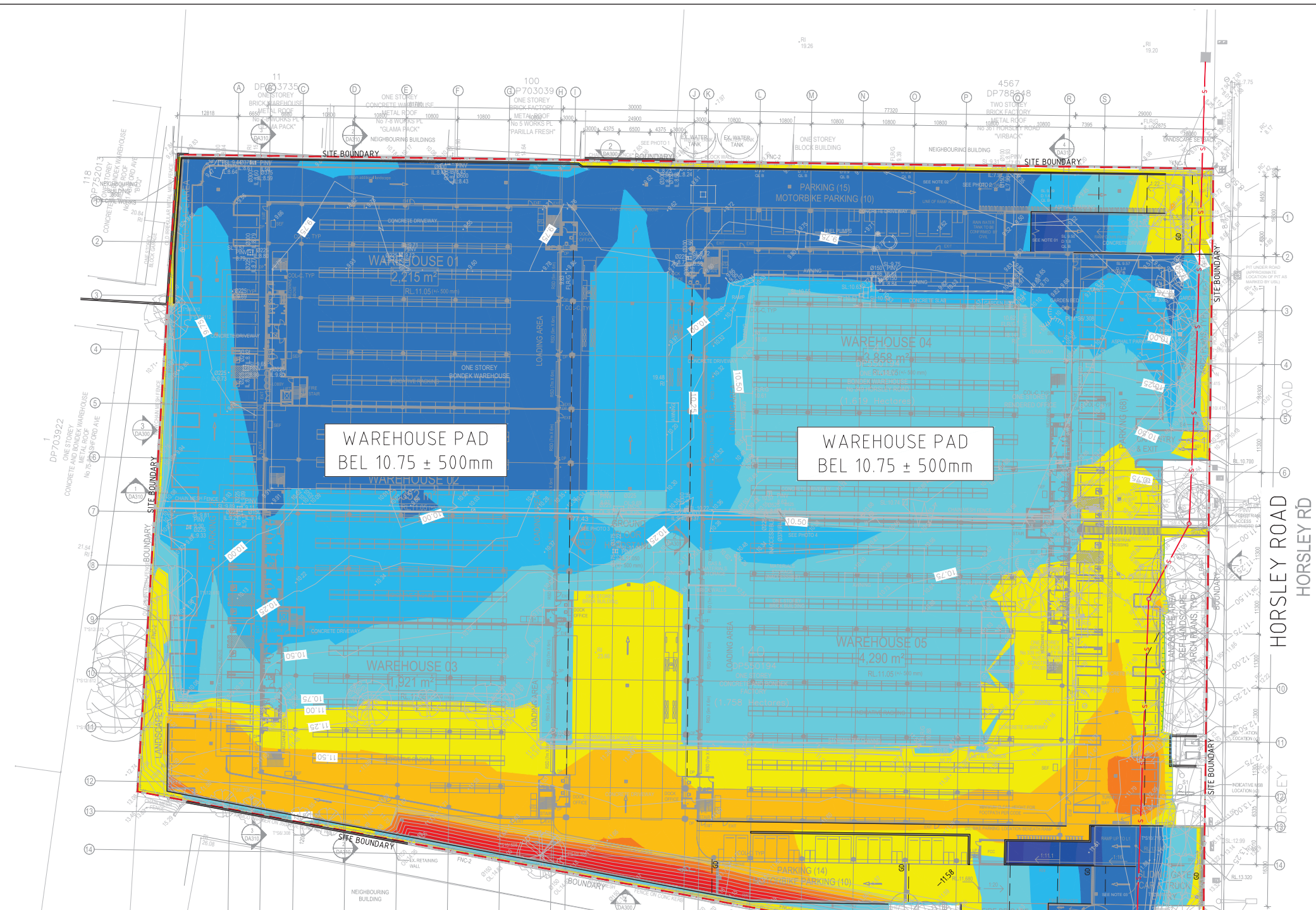
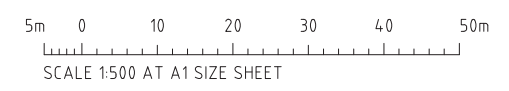
EARTHWORK ESTIMATES

SITE AREA	= 3.37 Ha
CUT	= - 4.340m ³
FILL	= + 16.540m ³
ALLOWANCES	
DETAILED EXCAVATION (2,000m ³ /Ha)	= - 6.740m ³
BALANCE	= + 5.460m ³ (i.e. FILL OVER CUT)

NOTE:
BULK EARTHWORKS QUANTITIES ARE APPROXIMATE ONLY AND ARE DETERMINED ASSUMING EXISTING PAVEMENT/BUILDING SLABS ARE REMOVED TO A DEPTH OF 200mm. A NOMINAL 300mm ALLOWANCE HAS BEEN MADE FOR PAVEMENTS ACROSS THE SITE. PAVEMENT DEPTHS ARE TO BE CONFIRMED DURING DETAIL DESIGN DEVELOPMENT. NO ALLOWANCE HAS BEEN MADE FOR EROSION & SEDIMENT CONTROL, BULKING, COMPACTION OF FILLED SOILS.

LEVELS NOTE:

LEVELS SHOWN TO BE ±500mm FROM THOSE SHOWN. FINAL LEVELS SUBJECT TO FINAL GEOTECHNICAL INVESTIGATIONS, ARCHITECTURAL LAYOUT AND ACHIEVING A CUT TO FILL EARTHWORKS BALANCE OVER THE PROPERTY.



DEPTH RANGE

No.	FROM DEPTH	TO DEPTH	COLOUR	DEPTH RANGE VOLUME
1	-3.500	-3.000	Red	0m ³
2	-3.000	-2.500	Red	14m ³
3	-2.500	-2.000	Red	63m ³
4	-2.000	-1.500	Red	125m ³
5	-1.500	-1.000	Orange	199m ³
6	-1.000	-0.500	Yellow	839m ³
7	-0.500	0.000	Yellow	3226m ³
8	0.000	0.500	Light Blue	9332m ³
9	0.500	1.000	Light Blue	5502m ³
10	1.000	1.500	Blue	1377m ³
11	1.500	2.000	Blue	112m ³
12	2.000	2.500	Blue	63m ³
13	2.500	3.000	Blue	32m ³
14	3.000	3.500	Blue	15m ³

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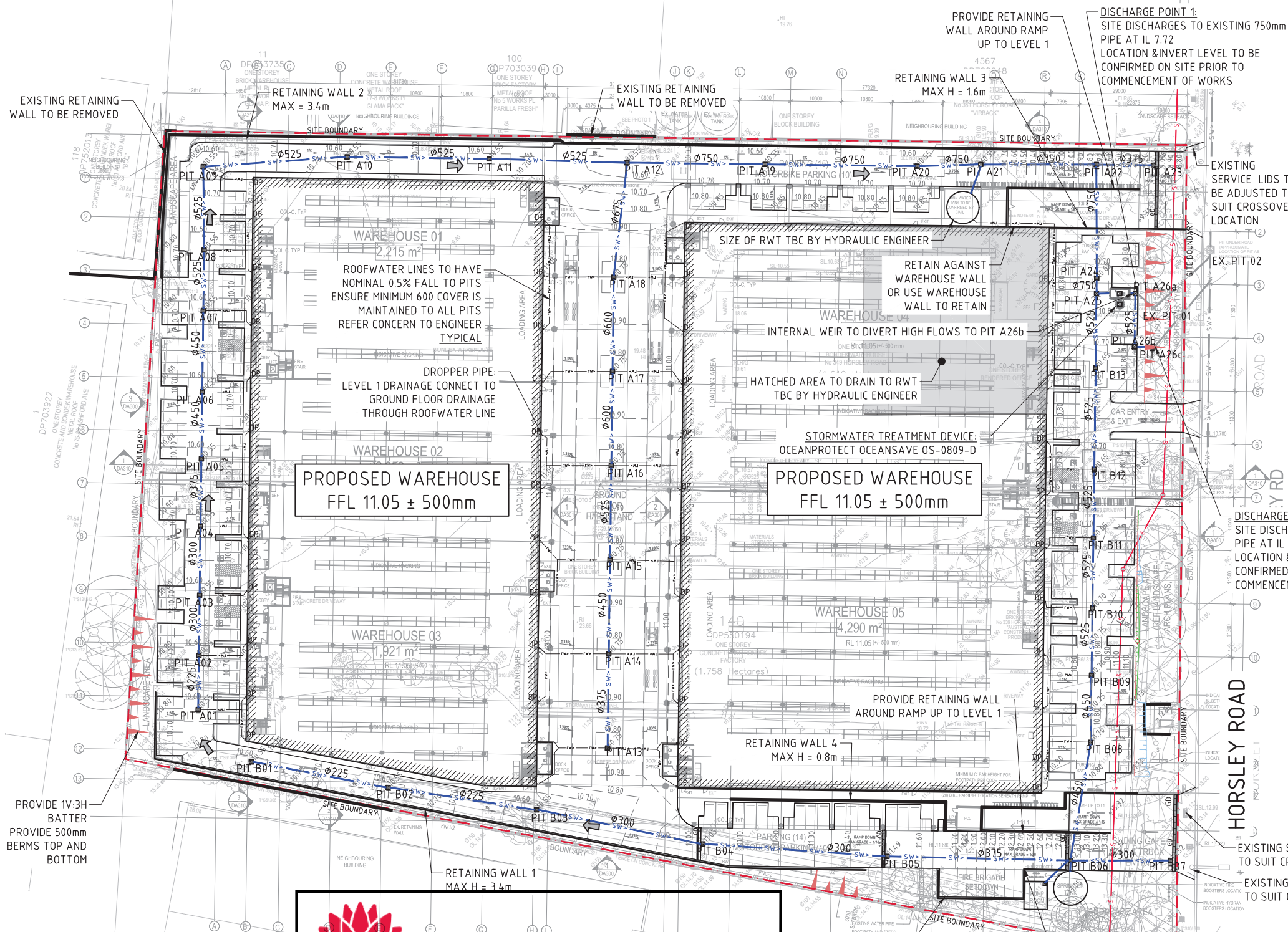
Approved application number: SSD-45998963

Granted on: 9 June 2023

Signed: JF Sheet number: 18 of 24

BULK EARTHWORKS PLAN
SCALE 1:500

FOR INFORMATION



- STORMWATER DRAINAGE NOTES:**
- ALL STORMWATER WORKS TO BE COMPLETED IN ACCORDANCE WITH AUSTRALIAN STANDARD AS3500.3 PLUMBING AND DRAINAGE, PART 3: STORMWATER DRAINAGE.
 - THE MINOR (PIPED) SYSTEM HAS BEEN DESIGNED FOR THE 1 IN 20 YEAR ARI STORM EVENT AND THE MAJOR (OVERLAND) SYSTEM HAS BEEN DESIGNED FOR THE 1 IN 100 YEAR ARI STORM EVENT.
 - ALL FINISHED PAVEMENT LEVELS SHALL BE AS INDICATED ON FINISHED LEVELS PLANS C014618.00-SSDA40.
 - PIT SIZES SHALL BE AS INDICATED IN THE SCHEDULE WHILE PIPE SIZES AND DETAILS ARE PROVIDED ON PLAN.
 - EXISTING STORMWATER PIT LOCATIONS AND INVERT LEVELS TO BE CONFIRMED BY SURVEY PRIOR TO COMMENCING WORKS ON SITE.
 - ALL STORMWATER PIPES Ø375 OR GREATER SHALL BE CLASS 2 (WITH HS2 SUPPORT) REINFORCED CONCRETE WITH RUBBER RING JOINTS UNLESS NOTED OTHERWISE.
 - ALL PIPES UP TO AND INCLUDING Ø300 TO BE uPVC GRADE S8 UNO.
 - PIPE CLASS NOMINATED ARE FOR IN-SERVICE LOADING CONDITIONS ONLY. CONTRACTOR IS TO MAKE ANY NECESSARY ADJUSTMENTS REQUIRED FOR CONSTRUCTION CONDITIONS.
 - ALL CONCRETE PITS GREATER THAN 1000mm DEEP SHALL BE REINFORCED USING N12-200 EACH WAY CENTERED IN WALL AND BASE. LAP MINIMUM 300mm WHERE REQUIRED. ALL CONCRETE FOR PITS SHALL BE Fc=25 MPa. PRECAST PITS MAY BE USED WITH THE APPROVAL OF THE ENGINEER.
 - IN ADDITION TO ITEM 9 ABOVE, ALL CONCRETE PITS GREATER THAN 3000mm DEEP SHALL HAVE WALLS AND BASE THICKNESS INCREASED TO 200mm.
 - PIPES SHALL BE LAID AS PER PIPE LAYING DETAILS. PARTICULAR CARE SHALL BE TAKEN TO ENSURE THAT THE PIPE IS FULLY AND EVENLY SUPPORTED. RAM AND PACK FILLING AROUND AND UNDER BACK OF PIPES AND PIPE FAUCETS, WITH NARROW EDGED RAMPERS OR OTHER SUITABLE TAMPING DETAILS.
 - CONCRETE PIPES UNDER, OR WITHIN THE ZONE OF INFLUENCE OF PAVED AREAS SHALL BE LAID USING HS2 TYPE SUPPORT, AS A MINIMUM. IN ACCORDANCE WITH AS 3725. AGGREGATE BACKFILL SHALL NOT BE USED FOR PIPE BEDDING AND OR HAUNCH/SIDE SUPPORT.
 - WHERE PIPE LINES ENTER PITS, PROVIDE 2m LENGTH OF STOCKING WRAPPED SLOTTED Ø100 uPVC TO EACH SIDE OF PIPE.
 - ALL SUBSOIL DRAINAGE LINES SHALL BE Ø100 SLOTTED uPVC WITH APPROVED FILTER WRAP LAID IN 300mm WIDE GRANULAR FILTER UNLESS NOTED OTHERWISE. LAY SUBSOIL LINES TO MATCH FALLS OF LAND AND/OR 1 IN 200 MINIMUM. PROVIDE CAPPED CLEANING EYE (RODDING POINT) AT UPSTREAM END OF LINE AND AT 30m MAX. CTS. PROVIDE SUBSOIL LINES TO ALL PAVEMENT/ LANDSCAPED INTERFACES, TO REAR OF RETAINING WALLS (AS NOMINATED BY STRUCTURAL ENGINEER) AND AS SHOWN ON PLAN.
 - WHERE SUBSOIL DRAINAGE PASSES UNDER A PAVEMENT OR A SLAB, UNSLOTTED uPVC ARE TO BE PROVIDED UNLESS NOTED OTHERWISE.
 - ALL PIPE GRADES 1 IN 200 MINIMUM UNO.
 - PROVIDE STEP IRONS IN PITS DEEPER THAN 1000mm.
 - MIN. 600 COVER TO PIPE OVERT BENEATH ROADS & MIN. 400 COVER BENEATH LANDSCAPED AND PEDESTRIAN AREAS.
 - PIT COVERS IN TRAFFICABLE PAVEMENT SHALL BE CLASS D 'HEAVY DUTY'. THOSE LOCATED IN NON-TRAFFICABLE AREAS SHALL BE CLASS B 'MEDIUM DUTY' U.N.O.
 - PROVIDE CLEANING EYES (RODDING POINTS) TO PIPES AT ALL CORNERS AND T-JUNCTIONS WHERE NO PITS ARE PRESENT.
 - DOWN PIPES (DP) TO BE AS PER HYDRAULIC ENGINEERS DETAILS WITH CONNECTOR TO MATCH DP SIZE U.N.O. ON PLAN. PROVIDE CLEANING EYE AT GROUND LEVEL.
 - PIPE LENGTHS NOMINATED ON PLAN OR LONGSECTIONS ARE MEASURED FROM CENTER OF PITS TO THE NEAREST 0.5m AND DO NOT REPRESENT ACTUAL LENGTH. THE CONTRACTOR IS TO ALLOW FOR THIS.
 - WHERE CONNECTION TO EXISTING INGROUND DRAINAGE SYSTEMS, OPEN SWALES, CHANNELS OR ANY OTHER EXISTING SYSTEM, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION AND INVERT ON SITE AT THE BEGINNING OF THE CONSTRUCTION PERIOD. REFER ANY VARIANCE FROM DOCUMENTATION OR SURVEYS TO THE ENGINEER FOR CLARIFICATION.

LEGEND:

LEVELS DATUM IS AHD.

EXISTING SITE LEVELS AND DETAILS BASED ON SURVEY INFORMATION PROVIDED BY LANDPARTNERS DATED 12/10/21.

- SGGP, SINGLE GRATED GULLY PIT
- SJP, SEALED JUNCTION PIT
- KIP, KERB INLET PIT
- GD, GRATED DRAIN (300W x 225D UNO)
- PROPOSED DRAINAGE LINE
- EXISTING DRAINAGE LINE
- ROOFWATER DOWNPIPE (INDICATIVE)
- ROOFWATER LINE
- OVERLAND FLOW DIRECTION
- FINISHED PAVEMENT CONTOUR (MAJOR) 0.5m INTERVALS
- FINISHED PAVEMENT CONTOUR (MINOR) 0.1m INTERVALS

LEVELS NOTE:
 LEVELS SHOWN TO BE ±500mm FROM THOSE SHOWN. FINAL LEVELS SUBJECT TO FINAL GEOTECHNICAL INVESTIGATIONS, ARCHITECTURAL LAYOUT AND ACHIEVING A CUT TO FILL EARTHWORKS BALANCE OVER THE PROPERTY.

Department of Planning and Environment

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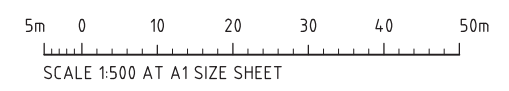
Approved application number: SSD-45998963

Granted on: 9 June 2023

Signed: JF Sheet number: 19 of 24

STORMWATER DRAINAGE PLAN - GROUND
 SCALE 1:500

FOR INFORMATION



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REVISED FOR NEW ARCHITECTURAL	22.03.23	F																										
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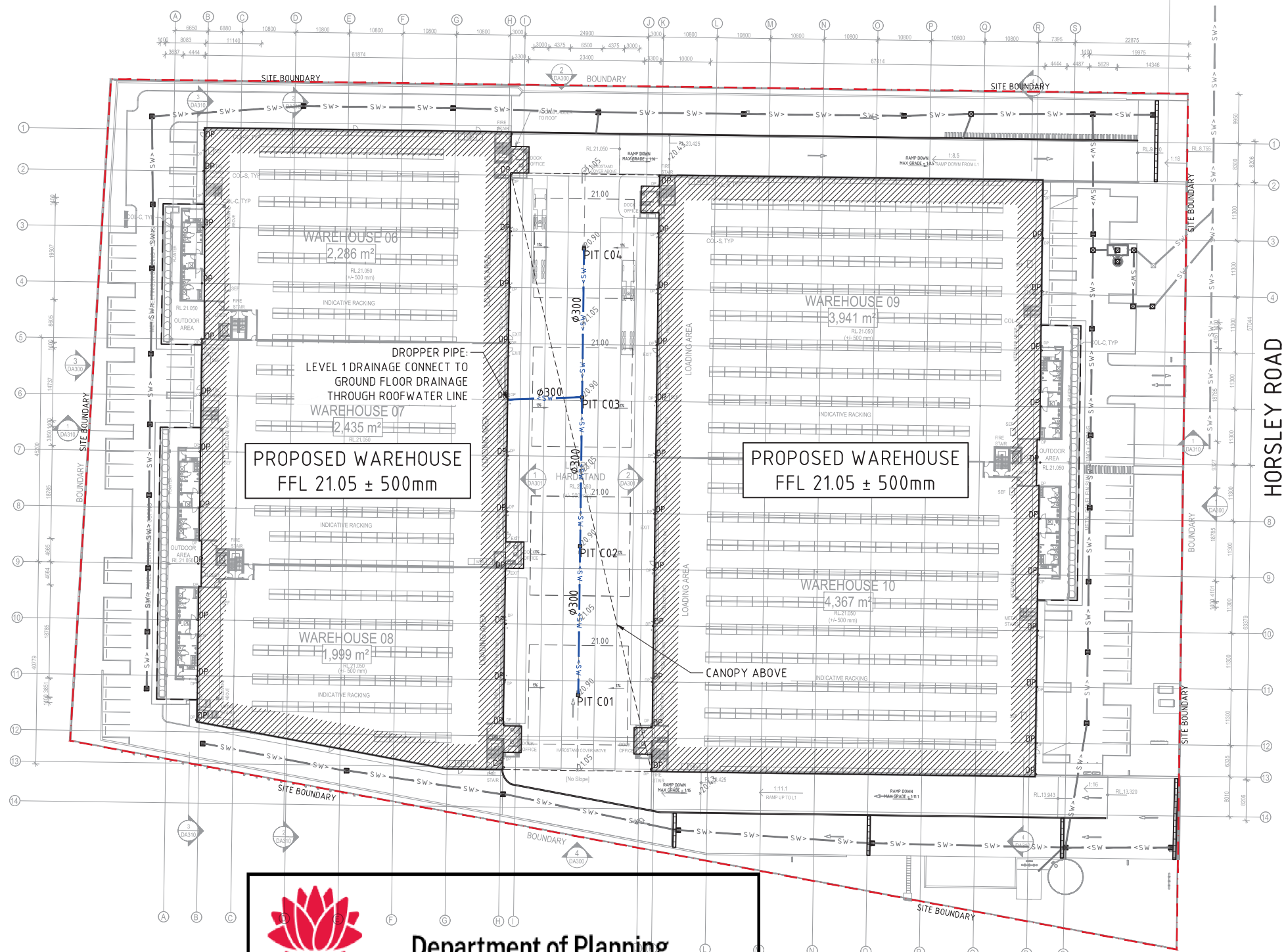
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 - THE MINOR (PIPED) SYSTEM HAS BEEN DESIGNED FOR THE 1 IN 20 YEAR ARI STORM EVENT AND THE MAJOR (OVERLAND) SYSTEM HAS BEEN DESIGNED FOR THE 1 IN 100 YEAR ARI STORM EVENT.
 - ALL FINISHED PAVEMENT LEVELS SHALL BE AS INDICATED ON FINISHED LEVELS PLANS C014618.00-SSDA51.
 - PIT SIZES SHALL BE AS INDICATED IN THE SCHEDULE WHILE PIPE SIZES AND DETAILS ARE PROVIDED ON PLAN.
 - EXISTING STORMWATER PIT LOCATIONS AND INVERT LEVELS TO BE CONFIRMED BY SURVEY PRIOR TO COMMENCING WORKS ON SITE.
 - ALL STORMWATER PIPES #375 OR GREATER SHALL BE CLASS 2 (WITH HS2 SUPPORT) REINFORCED CONCRETE WITH RUBBER RING JOINTS UNLESS NOTED OTHERWISE.
 - ALL PIPES UP TO AND INCLUDING #300 TO BE uPVC GRADE SN8 UNO.
 - PIPE CLASS NOMINATED ARE FOR IN-SERVICE LOADING CONDITIONS ONLY. CONTRACTOR IS TO MAKE ANY NECESSARY ADJUSTMENTS REQUIRED FOR CONSTRUCTION CONDITIONS.
 - ALL CONCRETE PITS GREATER THAN 1000mm DEEP SHALL BE REINFORCED USING N12-200 EACH WAY CENTERED IN WALL AND BASE. LAP MINIMUM 300mm WHERE REQUIRED. ALL CONCRETE FOR PITS SHALL BE F_c=25 MPa. PRECAST PITS MAY BE USED WITH THE APPROVAL OF THE ENGINEER.
 - IN ADDITION TO ITEM 9 ABOVE, ALL CONCRETE PITS GREATER THAN 3000mm DEEP SHALL HAVE WALLS AND BASE THICKNESS INCREASED TO 200mm.
 - PIPES SHALL BE LAID AS PER PIPE LAYING DETAILS. PARTICULAR CARE SHALL BE TAKEN TO ENSURE THAT THE PIPE IS FULLY AND EVENLY SUPPORTED. RAM AND PACK FILLING AROUND AND UNDER BACK OF PIPES AND PIPE FAUCETS, WITH NARROW EDGED RAMPERS OR OTHER SUITABLE TAMPING DETAILS.
 - CONCRETE PIPES UNDER, OR WITHIN THE ZONE OF INFLUENCE OF PAVED AREAS SHALL BE LAID USING HS2 TYPE SUPPORT, AS A MINIMUM. IN ACCORDANCE WITH AS 3725. AGGREGATE BACKFILL SHALL NOT BE USED FOR PIPE BEDDING AND OR HAUNCH/SIDE SUPPORT.
 - WHERE PIPE LINES ENTER PITS, PROVIDE 2m LENGTH OF STOCKING WRAPPED SLOTTED #100 uPVC TO EACH SIDE OF PIPE.
 - ALL SUBSOIL DRAINAGE LINES SHALL BE #100 SLOTTED uPVC WITH APPROVED FILTER WRAP LAID IN 300mm WIDE GRANULAR FILTER UNLESS NOTED OTHERWISE. LAY SUBSOIL LINES TO MATCH FALLS OF LAND AND/OR 1 IN 200 MINIMUM PROVIDE CAPPED CLEANING EYE (RODDING POINT) AT UPSTREAM END OF LINE AND AT 30m MAX. CTS. PROVIDE SUBSOIL LINES TO ALL PAVEMENT/LANDSCAPED INTERFACES, TO REAR OF RETAINING WALLS (AS NOMINATED BY STRUCTURAL ENGINEER) AND AS SHOWN ON PLAN.
 - WHERE SUBSOIL DRAINAGE PASSES UNDER A PAVEMENT OR A SLAB, UNSLOTTED uPVC ARE TO BE PROVIDED UNLESS NOTED OTHERWISE.
 - ALL PIPE GRADES 1 IN 200 MINIMUM UNO.
 - PROVIDE STEP IRONS IN PITS DEEPER THAN 1000mm.
 - MIN. 600 COVER TO PIPE OBVERT BENEATH ROADS & MIN. 400 COVER BENEATH LANDSCAPED AND PEDESTRIAN AREAS.
 - PIT COVERS IN TRAFFICABLE PAVEMENT SHALL BE CLASS D 'HEAVY DUTY', THOSE LOCATED IN NON-TRAFFICABLE AREAS SHALL BE CLASS B 'MEDIUM DUTY' U.N.O.
 - PROVIDE CLEANING EYES (RODDING POINTS) TO PIPES AT ALL CORNERS AND T-JUNCTIONS WHERE NO PITS ARE PRESENT.
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 - WHERE CONNECTION TO EXISTING INGROUND DRAINAGE SYSTEMS, OPEN SWALES, CHANNELS OR ANY OTHER EXISTING SYSTEM, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION AND INVERT ON SITE AT THE BEGINNING OF THE CONSTRUCTION PERIOD. REFER ANY VARIANCE FROM DOCUMENTATION OR SURVEYS TO THE ENGINEER FOR CLARIFICATION.

LEGEND:

LEVELS DATUM IS AHD.

EXISTING SITE LEVELS AND DETAILS BASED ON SURVEY INFORMATION PROVIDED BY LANDPARTNERS DATED 12/10/21.

- SGGP, SINGLE GRATED GULLY PIT
- SJP, SEALED JUNCTION PIT
- KIP, KERB INLET PIT
- GD, GRATED DRAIN (300W x 225D UNO)
- PROPOSED DRAINAGE LINE - LEVEL 1
- PROPOSED DRAINAGE LINE - GROUND
- EXISTING DRAINAGE LINE
- ROOFWATER DOWNPIPE (INDICATIVE)
- ROOFWATER LINE
- OVERLAND FLOW DIRECTION
- FINISHED PAVEMENT CONTOUR (MAJOR) 0.5m INTERVALS
- FINISHED PAVEMENT CONTOUR (MINOR) 0.1m INTERVALS



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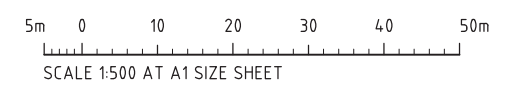
Granted on: 9 June 2023

Signed: JF Sheet number: 20 of 24

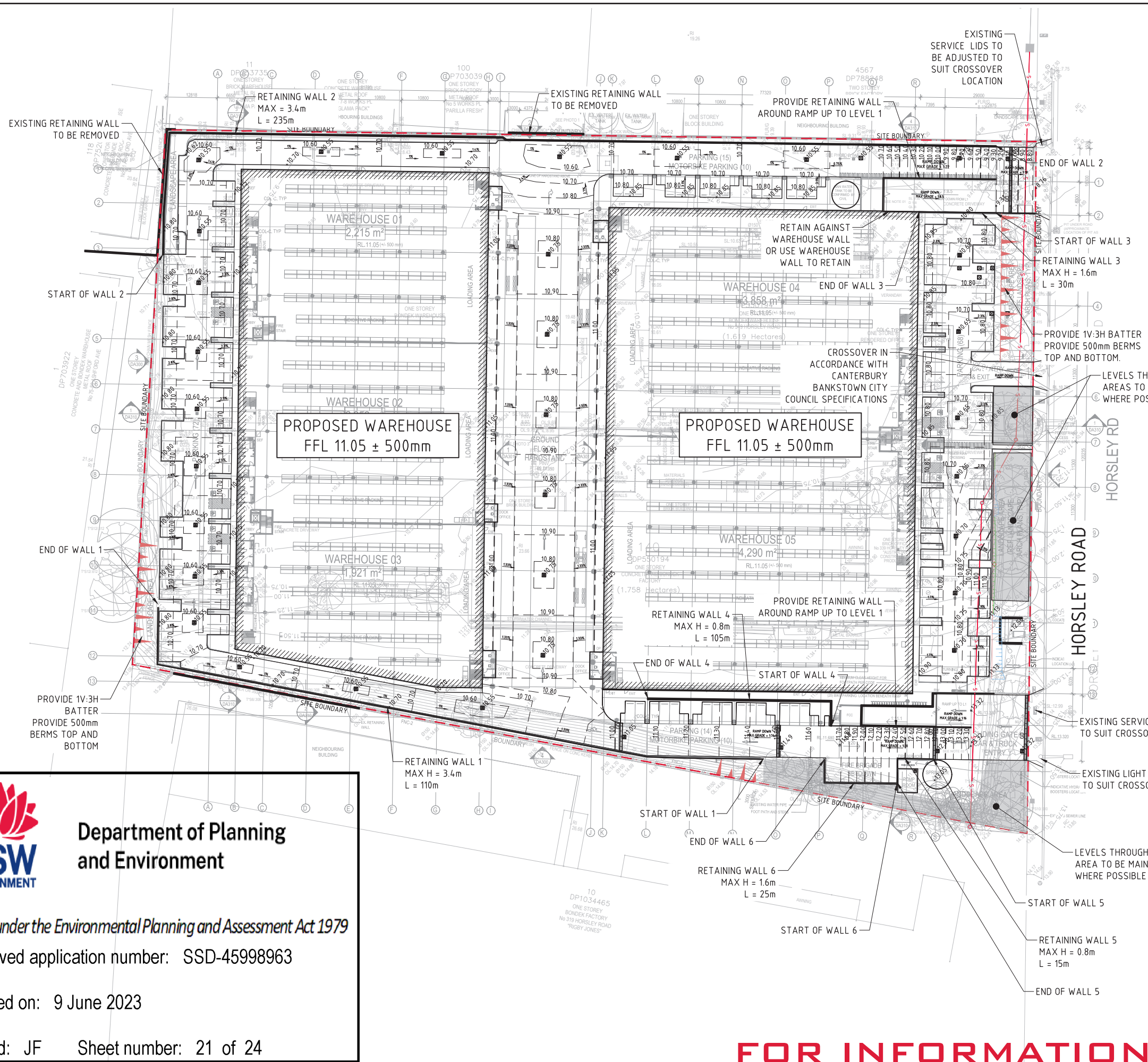
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LEVELS SHOWN TO BE ±500mm FROM THOSE SHOWN. FINAL LEVELS SUBJECT TO FINAL GEOTECHNICAL INVESTIGATIONS, ARCHITECTURAL LAYOUT AND ACHIEVING A CUT TO FILL EARTHWORKS BALANCE OVER THE PROPERTY.

FOR INFORMATION



ARCHITECT 	CLIENT 	PROJECT INDUSTRIAL DEVELOPMENT 339-349 HORSLEY ROAD, MILPERRA NSW, 2214	CONSULT AUSTRALIA 	Costin Roe Consulting Pty Ltd. ABN 50 003 696 446 PO Box N419 Sydney NSW 1220 Level 4, 8 Windmill Street, Millers Point NSW 2000 p: +61 2 9251 7699 f: +61 2 9241 3731 e: mail@costinroe.com.au w: costinroe.com.au	DRAWING TITLE STORMWATER DRAINAGE PLAN - LEVEL 1 DRAWING No C014618.00-SSDA41
REVISED FOR NEW ARCHITECTURAL 22.03.23 C ISSUED FOR INFORMATION 26.08.22 B PRELIMINARY ISSUE ONLY 29.07.22 A AMENDMENTS DATE ISSUE					ISSUE C



- FINISHED LEVELS PLAN NOTES:**
- LEVELS DATUM IS AUSTRALIAN HEIGHT DATUM (A.H.D.).
 - GRADING REQUIREMENTS TO BE COMPLETED IN ACCORDANCE WITH AUSTRALIAN STANDARD AS2890.1, AS2890.2 AND AS2890.6.
 - ALL CONTOUR LINES & SPOT LEVELS INDICATE FINISHED PAVEMENT LEVELS U.N.O. ON PLAN.
 - CONTOUR INTERVALS
 - THE MINOR CONTOUR INTERVAL IS 0.1m.
 - THE MAJOR CONTOUR INTERVAL IS 0.5m.
 - HARDSTAND GRADING
 - MINIMUM PAVEMENT GRADE IS TO BE 1:100 (1%).
 - GRADING OF ON-GRADE DOCKS TO BE 1:100 (1%) FALL AWAY FROM THE DOCK FACE FOR A LENGTH OF 15m U.N.O.
 - GRADING OF TRUCK CIRCULATION ZONES TO BE MINIMUM AS NOTED ABOVE, 3-4% NOMINAL AND MAX. 5%.
 - CAR PARKING AREA GRADES
 - MINIMUM PAVEMENT GRADE IS TO BE 1:100 (1%), DESIRABLE MINIMUM GRADE 1:50 (2%).
 - MAXIMUM PAVEMENT GRADE IS TO BE 1:20 (5%) IN CARPARKING AREAS AND 1:25 (4%) ELSEWHERE.
 - DISABLED ACCESS PARKING ZONES AND SHARED SPACE TO BE MAXIMUM OF 1:33 (3%) IN ASPHALT PAVEMENT AND MAXIMUM OF 1:40 (2.5%) IN CONCRETE PAVEMENT.
 - CARPARK RAMP GRADES TO BE MAX 1:5 WITH 2.5m SMOOTH TRANSITION AT TOP AND BOTTOM U.N.O.
 - TRUCK RAMP GRADES
 - MAXIMUM B-DOUBLE OR 19.0m AV RAMP GRADES ARE TO BE 1:8.3 (12%) U.N.O. ON PLAN.
 - PROVIDE MINIMUM 4.0m LONG TRANSITION WHERE CHANGES OF GRADE EXCEED 1:20 (5%) AT A CREST U.N.O.
 - PROVIDE MINIMUM 3.0m LONG TRANSITION WHERE CHANGE OF GRADE EXCEED 1:20 (5%) AT A SAG U.N.O.
 - TRANSITIONS ARE TO PROVIDE A SMOOTH CONTINUOUS CIRCULAR AND TANGENTIAL CHANGE IN GRADE TO ENSURE NO SHARP OR ACUTE CHANGES IN GRADE ARE PRESENT.
 - WHERE FIRE BRIGADE ACCESS IS REQUIRED, MAXIMUM RAMP GRADIENTS ARE TO BE 1:6 (16.6%), DESIRABLE RAMP GRADIENTS ARE TO BE 1:8 (12.5%) WITH 7m TRANSITION TOP AND BOTTOM U.N.O. ON PLAN.
 - PERMANENT BATTER SLOPES ARE TO HAVE A MAXIMUM GRADE OF 1V:3H U.N.O. BASED ON GEOTECHNICAL ASSESSMENT. PROVIDE MINIMUM 0.5m BERM BETWEEN THE BACK OF KERB OR PAVEMENT EDGES AND THE TOP OR TOE OF A BATTER. ALL BATTER SLOPE WITH GRADES AT OR EXCEEDING 1V:6H ARE TO BE TURFED IMMEDIATELY OR APPROPRIATE EROSION CONTROL IS TO BE PROVIDED TO THE SATISFACTION OF THE ENGINEER.
 - ALL FOOTPATHS ARE TO FALL AWAY FROM THE BUILDING AT 2.5% NOMINAL GRADE.
 - ALL PAVEMENTS ARE TO BE SET AT 30mm BELOW THE FINISHED FLOOR LEVEL OF THE WAREHOUSE AND OFFICE AREAS. PROVIDE LOCAL FEATHERING AT DOORWAYS OR ROLLER SHUTTERS TO PROVIDE FLUSH FINISH AS REQUIRED.
 - WHERE NEW AND EXISTING INTERFACING IS REQUIRED, MATCH EXISTING LEVELS AND PROVIDE SMOOTH INTERFACE BETWEEN NEW AND EXISTING GRADIENTS. REFER ANY CONCERNS TO THE ENGINEER.

LEGEND:

LEVELS DATUM IS AHD.

- SGGP, SINGLE GRATED GULLY PIT
- SJP, SEALED JUNCTION PIT
- KIP, KERB INLET PIT
- GD, GRATED DRAIN (300W x 225D U.N.O.)
- 50.00 - FINISHED PAVEMENT CONTOUR (MAJOR) 0.5m INTERVALS
- 50.10 - FINISHED PAVEMENT CONTOUR (MINOR) 0.1m INTERVALS

HORSLEY RD
HORSLEY ROAD

Department of Planning and Environment

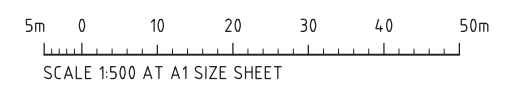
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Approved application number: SSD-45998963

Granted on: 9 June 2023

Signed: JF Sheet number: 21 of 24

FOR INFORMATION



AMENDMENTS	DATE	ISSUE
REVISED FOR NEW ARCHITECTURAL	22.03.23	F
REVISED AS CLOUDED	27.02.23	E
REVISED AS CLOUDED	16.09.22	D
REVISED AS CLOUDED	13.09.22	C
ISSUED FOR INFORMATION	26.08.22	B
PRELIMINARY ISSUE ONLY	29.07.22	A



PROJECT
INDUSTRIAL DEVELOPMENT
339-349 HORSLEY ROAD, MILPERRA
NSW, 2214



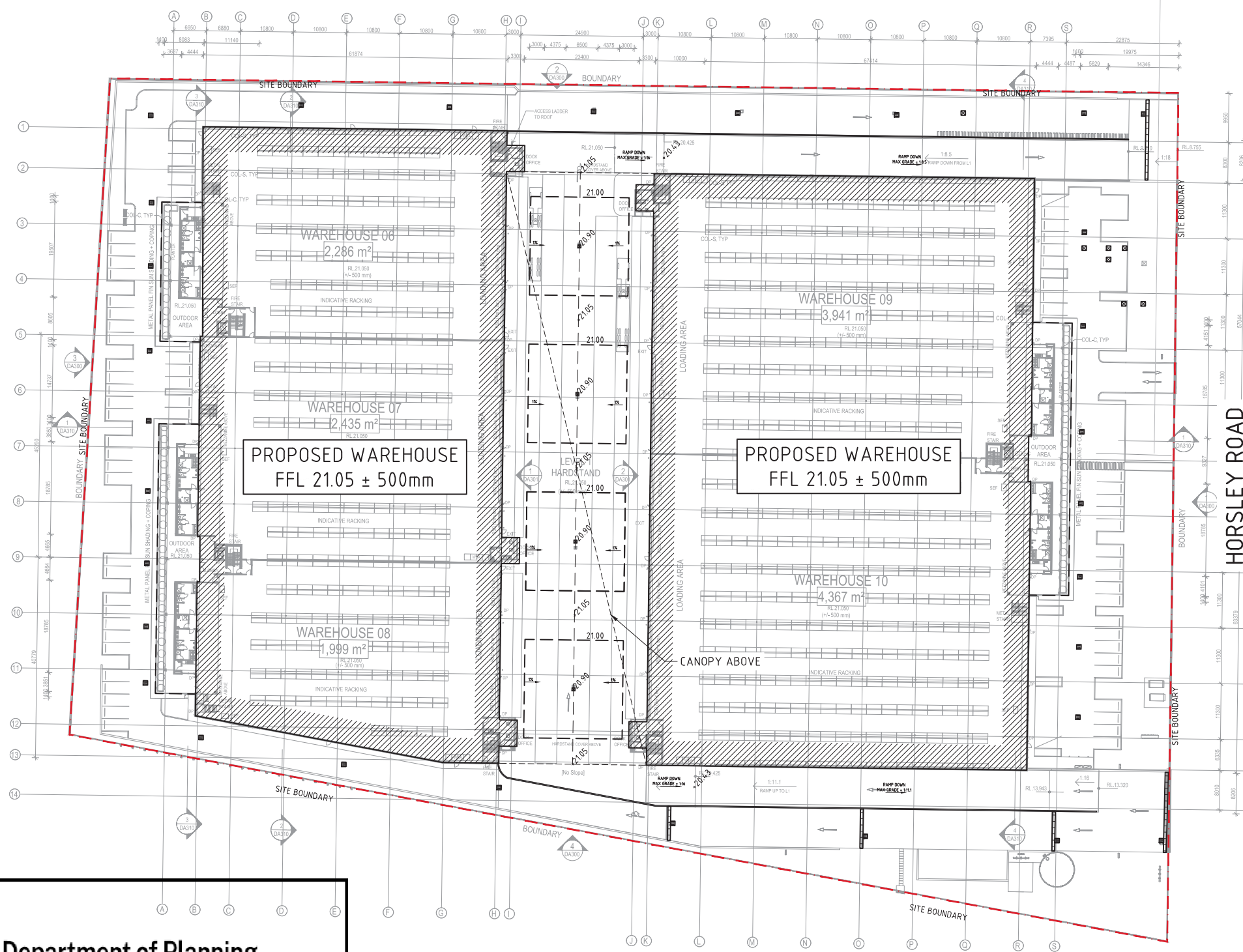
Costin Roe Consulting Pty Ltd.
ABN 50 003 696 446
PO Box N419 Sydney NSW 1220
Level 4, 8 Windmill Street, Millers Point NSW 2000
p: +61 2 9251 7699 f: +61 2 9241 3731
e: mail@costinroe.com.au w: costinroe.com.au



DRAWING TITLE
FINISHED LEVELS PLAN - GROUND

DRAWING No
C014618.00-SSDA50

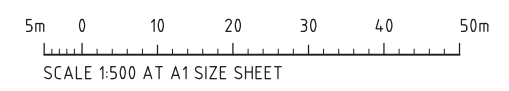
ISSUE
F



- FINISHED LEVELS PLAN NOTES:**
- LEVELS DATUM IS AUSTRALIAN HEIGHT DATUM (A.H.D.).
 - GRADING REQUIREMENTS TO BE COMPLETED IN ACCORDANCE WITH AUSTRALIAN STANDARD AS2890.1, AS2890.2 AND AS2890.6.
 - ALL CONTOUR LINES & SPOT LEVELS INDICATE FINISHED PAVEMENT LEVELS U.N.O. ON PLAN.
 - CONTOUR INTERVALS
 - THE MINOR CONTOUR INTERVAL IS 0.1m.
 - THE MAJOR CONTOUR INTERVAL IS 0.5m.
 - HARDSTAND GRADING
 - MINIMUM PAVEMENT GRADE IS TO BE 1:100 (1%).
 - GRADING OF ON-GRADE DOCKS TO BE 1:100 (1%) FALL AWAY FROM THE DOCK FACE FOR A LENGTH OF 15m U.N.O.
 - GRADING OF TRUCK CIRCULATION ZONES TO BE MINIMUM AS NOTED ABOVE, 3-4% NOMINAL AND MAX. 5%.
 - CAR PARKING AREA GRADES
 - MINIMUM PAVEMENT GRADE IS TO BE 1:100 (1%), DESIRABLE MINIMUM GRADE 1:50 (2%).
 - MAXIMUM PAVEMENT GRADE IS TO BE 1:20 (5%) IN CARPARKING AREAS AND 1:25 (4%) ELSEWHERE.
 - DISABLED ACCESS PARKING ZONES AND SHARED SPACE TO BE MAXIMUM OF 1:33 (3%) IN ASPHALT PAVEMENT AND MAXIMUM OF 1:40 (2.5%) IN CONCRETE PAVEMENT.
 - CARPARK RAMP GRADES TO BE MAX 1:5 WITH 2.5m SMOOTH TRANSITION AT TOP AND BOTTOM U.N.O.
 - TRUCK RAMP GRADES
 - MAXIMUM B-DOUBLE OR 19.0m AV RAMP GRADES ARE TO BE 1:8.3 (12%) U.N.O. ON PLAN
 - PROVIDE MINIMUM 4.0m LONG TRANSITION WHERE CHANGES OF GRADE EXCEED 1:20 (5%) AT A CREST U.N.O.
 - PROVIDE MINIMUM 3.0m LONG TRANSITION WHERE CHANGE OF GRADE EXCEED 1:20 (5%) AT A SAG U.N.O.
 - TRANSITIONS ARE TO PROVIDE A SMOOTH CONTINUOUS CIRCULAR AND TANGENTIAL CHANGE IN GRADE TO ENSURE NO SHARP OR ACUTE CHANGES IN GRADE ARE PRESENT.
 - WHERE FIRE BRIGADE ACCESS IS REQUIRED, MAXIMUM RAMP GRADIENTS ARE TO BE 1:6 (16.6%), DESIRABLE RAMP GRADIENTS ARE TO BE 1:8 (12.5%) WITH 7m TRANSITION TOP AND BOTTOM U.N.O. ON PLAN.
 - PERMANENT BATTER SLOPES ARE TO HAVE A MAXIMUM GRADE OF 1V:3H U.N.O. BASED ON GEOTECHNICAL ASSESSMENT. PROVIDE MINIMUM 0.5m BERM BETWEEN THE BACK OF KERB OR PAVEMENT EDGES AND THE TOP OR TOE OF A BATTER.
 - ALL BATTER SLOPE WITH GRADES AT OR EXCEEDING 1V:6H ARE TO BE TURFED IMMEDIATELY OR APPROPRIATE EROSION CONTROL IS TO BE PROVIDED TO THE SATISFACTION OF THE ENGINEER.
 - ALL FOOTPATHS ARE TO FALL AWAY FROM THE BUILDING AT 2.5% NOMINAL GRADE.
 - ALL PAVEMENTS ARE TO BE SET AT 30mm BELOW THE FINISHED FLOOR LEVEL OF THE WAREHOUSE AND OFFICE AREAS. PROVIDE LOCAL FEATHERING AT DOORWAYS OR ROLLER SHUTTERS TO PROVIDE FLUSH FINISH AS REQUIRED.
 - WHERE NEW AND EXISTING INTERFACING IS REQUIRED, MATCH EXISTING LEVELS AND PROVIDE SMOOTH INTERFACE BETWEEN NEW AND EXISTING GRADIENTS. REFER ANY CONCERNS TO THE ENGINEER.

LEGEND:
LEVELS DATUM IS AHD.

- SGGP, SINGLE GRATED GULLY PIT
- SJP, SEALED JUNCTION PIT
- KIP, KERB INLET PIT
- GD, GRATED DRAIN (300W x 225D UNO)
- FINISHED PAVEMENT CONTOUR (MAJOR) 0.5m INTERVALS
- FINISHED PAVEMENT CONTOUR (MINOR) 0.1m INTERVALS



FOR INFORMATION

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REVISED FOR NEW ARCHITECTURAL	22.03.23	C
ISSUED FOR INFORMATION	26.08.22	B
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PROJECT INDUSTRIAL DEVELOPMENT 339-349 HORSLEY ROAD, MILPERRA NSW, 2214					
DESIGNED DS	DRAWN NZ	DATE JULY '22	CHECKED DS	SIZE A1	SCALE AS SHOWN
CAD REF: C014618-00-SSDA51					

Costin Roe Consulting Pty Ltd.
ABN 50 003 696 446

PO Box N419 Sydney NSW 1220
Level 4, 8 Windmill Street, Millers Point NSW 2000
p: +61 2 9251 7699 f: +61 2 9241 3731
e: mail@costinroe.com.au w: costinroe.com.au

CIVIL & STRUCTURAL ENGINEERS

DRAWING TITLE FINISHED LEVELS PLAN - LEVEL 1	
DRAWING No C014618.00-SSDA51	ISSUE C



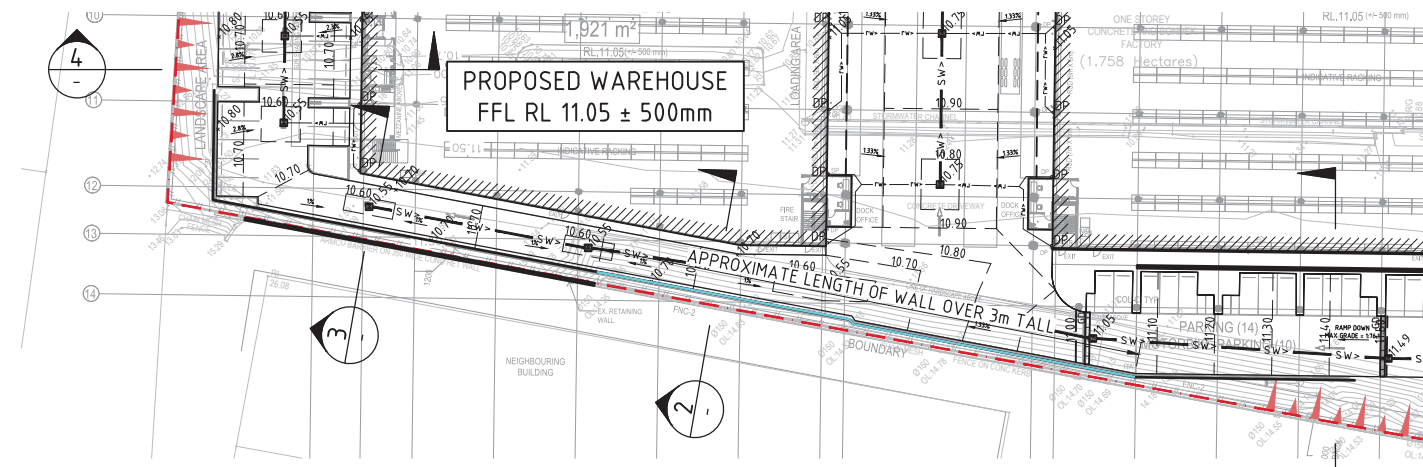
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SOUTHERN RETAINING WALL SETOUT
SCALE 1:500



SECTION 1:50
SOUTHERN RW 1

SECTION 1:50
SOUTHERN RW 2

SECTION 1:50
SOUTHERN RW 3

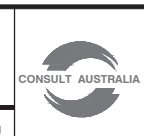
SECTION 1:50
SOUTHERN RW 4

FOR INFORMATION

ISSUED FOR INFORMATION	03.02.23	A
AMENDMENTS	DATE	ISSUE



PROJECT INDUSTRIAL DEVELOPMENT 339-349 HORSLEY ROAD, MILPERRA NSW, 2214						
DESIGNED DS	DRAWN NZ	DATE JULY '22	CHECKED DS	SIZE A1	SCALE AS SHOWN	CAD REF: C014618.00-SKC01

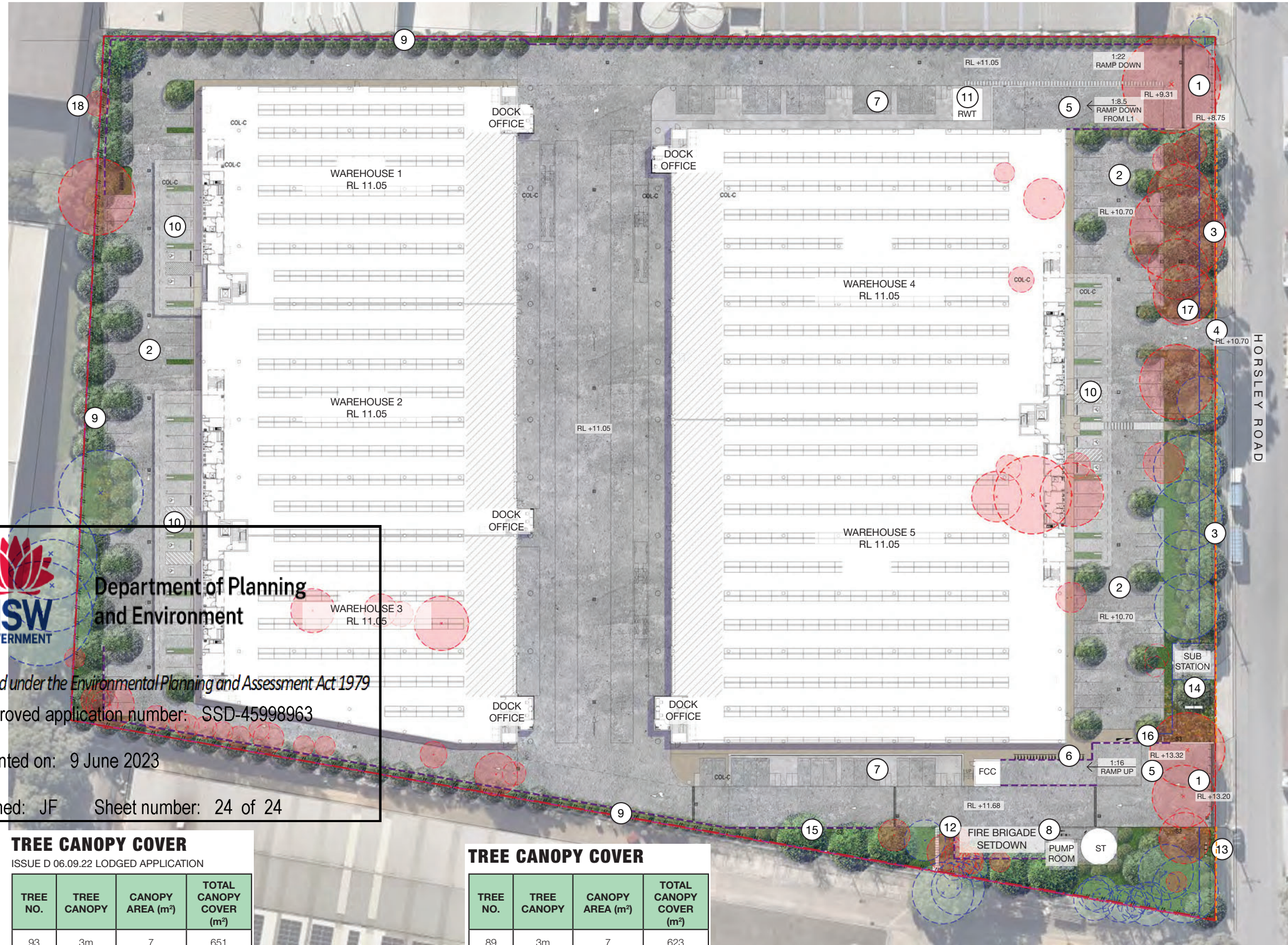


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Level 4, 8 Windmill Street, Millers Point NSW 2000
p: +61 2 9251 7699 f: +61 2 9241 3731
e: mail@costinroe.com.au w: costinroe.com.au



DRAWING TITLE SOUTHERN RETAINING WALL SECTIONS	
DRAWING No C014618.00-SKC01	ISSUE A

LANDSCAPE MASTERPLAN



CONTEXT PLAN

KEY

- - - SITE BOUNDARY
- 2100mm HT PALISADE SECURITY FENCE TO ARCHITECT'S DETAILS
- 2100mm HT CHAIN WIRE FENCE TO ARCHITECT'S DETAILS
- - - CONCRETE EDGING
- - - RETAINING WALL TO CIVIL ENGINEER'S DETAILS
- PROPOSED TREE PLANTING REFER TO PLANT SCHEDULE
- PLANTING BEDS REFER TO PLANT SCHEDULE
- CONCRETE SURFACE TO ENGINEER'S DETAILS
- PAVED / TILED SURFACE TO ARCHITECT'S DETAILS
- EXISTING TREES TO BE RETAINED
- EXISTING TREES TO BE REMOVED

DESIGN NOTES

1. SITE ENTRY
 - CAR + TRUCK ENTRY
 - SLIDING GATE TO ARCHITECT'S DETAILS
2. CARPARK
3. LANDSCAPE FRONT SETBACK
4. CAR ENTRY + EXIT
 - SLIDING GATE TO ARCHITECT'S DETAILS
5. RAMP
6. BIKE PARKING LOCATION BENEATH RAMP
7. RAMP OVER CARPARK
8. FIRE SERVICES
9. BOUNDARY PLANTING
10. SUN SHADING AND OFFICE ABOVE
11. RAIN WATER TANK TO BE CONFIRMED BY CIVIL ENGINEER
12. FOOT PATH AND STEPS
13. HYDRANT BOOSTERS LOCATION
14. S1 PYLON SIGNAGE BY OTHERS
15. S2 WAYFINDING SIGN BY OTHERS
16. S3 WAYFINDING SIGN BY OTHERS
17. S4 WAYFINDING SIGN BY OTHERS
18. EXISTING TREE REMOVED BY THE ADJACENT LANDOWNER AFTER LODGING THE APPLICATION

Department of Planning and Environment

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TREE CANOPY COVER

ISSUE D 06.09.22 LODGED APPLICATION

TREE NO.	TREE CANOPY	CANOPY AREA (m ²)	TOTAL CANOPY COVER (m ²)
93	3m	7	651
29	5m	20	580
32	6m	30	960
23	8m	50	1150
6	10m	78	468

TOTAL SITE AREA 33,772

TOTAL TREE NO. 183

TOTAL SQM CANOPY COVER 3,809

TOTAL CANOPY PERCENTAGE 11.29%

TREE CANOPY COVER

TREE NO.	TREE CANOPY	CANOPY AREA (m ²)	TOTAL CANOPY COVER (m ²)
89	3m	7	623
53	5m	20	1060
24	6m	30	720
35	8m	50	1750
6	10m	78	468

TOTAL SITE AREA 33,772

TOTAL TREE NO. 207

TOTAL SQM CANOPY COVER 4,621

PROPOSED CANOPY COVER PERCENTAGE 13.68%

TOTAL EXISTING CANOPY COVER 1,457

TOTAL CANOPY PERCENTAGE 18%

TOTAL SQM LANDSCAPE AREA 3,250.26

TOTAL LANDSCAPE PERCENTAGE 9.62%

TOTAL SQM L1 LANDSCAPE AREA 106.69

AND PLANTERBOX (75% OF 142.25m²)

TOTAL PERMEABLE AREA 3,356.95

TOTAL PERMEABILITY PERCENTAGE 10%

PROJECT	DRAWING TITLE	PROJECT NO.	PURPOSE	SCALE	REVISION	DATE	DRAWN	CHECKED	PAGE	CLIENT
PROPOSED INDUSTRIAL DEVELOPMENT 339-349 HORSLEY RD, MILPERRA NSW 2214	LANDSCAPE MASTERPLAN	H8-22035	DA SUBMISSION	1:800 @A3	G	24.04.2023	KM	DV	L02	Hale



NOT FOR CONSTRUCTION

