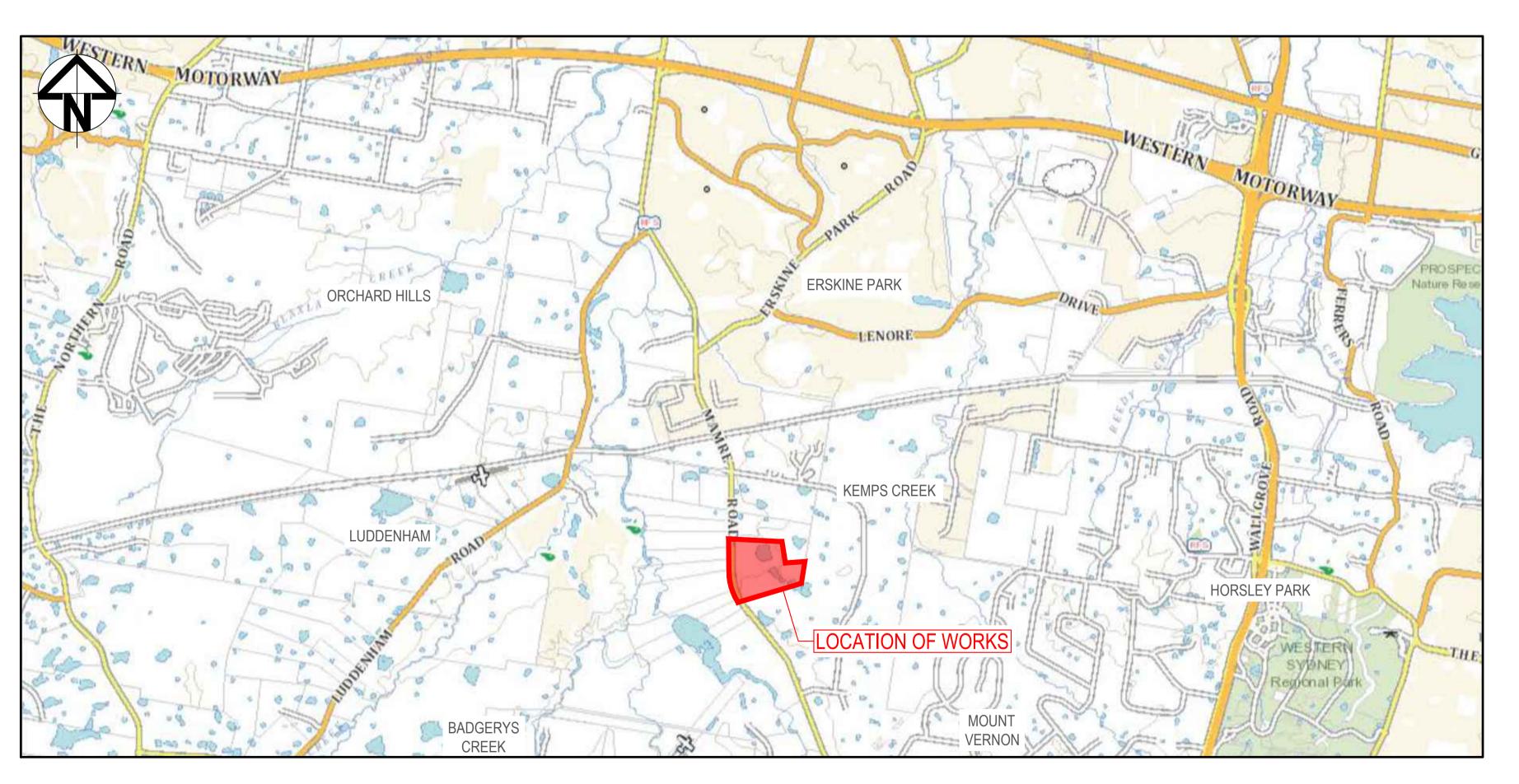
ASPECT INDUSTRIAL ESTATE



STAGE 1B CIVIL WORKS PACKAGE SUBDIVISION WORKS CERTIFICATE 788-882 MAMRE ROAD, KEMPS CREEK SSD-10448



THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ITT & RELEVANT COUNCIL CONSTRUCTION SPECIFICATIONS, AUSTRALIAN STANDARDS & AUTHORITY GUIDELINES

LOCALITY PLAN NOT TO SCALE

ISSUED FOR CONSTRUCTION 20-10-22 ISSUED FOR SWC APPROVAL Date Description

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Scales		Drawn	JB/MH
		Designed	JB/MH
Grid	GDA2020	Checked	DS
Height Datum	AHD	Approved	DS

ASPECT INDUSTIAL ESTATE MAMRE ROAD. **KEMPS CREEK** STAGE 1B

COVER SHEET AND

LOCALITY PLAN

FOR CONSTRUCTION

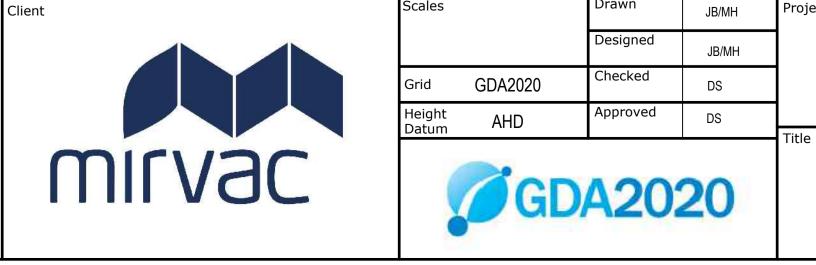
roject - Drawing No. 18-596-C8000

Civil Engineers and Project Managers

	DRAWING LIST
DRAWING No.	DRAWING TITLE
18-596-C8000	COVER SHEET AND LOCALITY PLAN
18-596-C8001	DRAWING LIST
18-596-C8002	NOTES AND LEGENDS SHEET SHEET 1
18-596-C8003	NOTES AND LEGENDS SHEET SHEET 2
18-596-C8005	GENERAL ARRANGEMENT PLAN
18-596-C8010	TYPICAL SECTIONS
18-596-C8012	TYPICAL ROAD SECTIONS
18-596-C8015	TYPICAL DETAILS SHEET 1
18-596-C8016	TYPICAL DETAILS SHEET 2
18-596-C8017	TYPICAL DETAILS SHEET 3
18-596-C8050	CONTROL LINE SETOUT PLAN
18-596-C8101	ROADWORKS AND STORMWATER DRAINAGE SHEET 1
18-596-C8102	ROADWORKS AND STORMWATER DRAINAGE SHEET 2
18-596-C8103	ROADWORKS AND STORMWATER DRAINAGE SHEET 3
18-596-C8104	ROADWORKS AND STORMWATER DRAINAGE SHEET 4
18-596-C8105	ROADWORKS AND STORMWATER DRAINAGE SHEET 5
18-596-C8106	ROADWORKS AND STORMWATER DRAINAGE SHEET 6
18-596-C8107	ROADWORKS AND STORMWATER DRAINAGE SHEET 7
18-596-C8121	INTERSECTION PLAN SHEET 1
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18-596-C8126	INTERSECTION PLAN SHEET 6
18-596-C8131	ROAD LONGITUDINAL SECTION SHEET 1
18-596-C8132	ROAD LONGITUDINAL SECTION SHEET 2
18-596-C8201	BULK EARTHWORKS CUT/FILL PLAN
18-596-C8301	PAVEMENT MARKING AND SIGNPOSTING
18-596-C8321	PAVEMENT PLAN
18-596-C8401	STORMWATER DRAINAGE LONGITUDINAL SECTION SHEET 1
18-596-C8402	STORMWATER DRAINAGE LONGITUDINAL SECTION SHEET 2
18-596-C8403	STORMWATER DRAINAGE LONGITUDINAL SECTION SHEET 3
18-596-C8404	STORMWATER DRAINAGE LONGITUDINAL SECTION SHEET 4
18-596-C8405	STORMWATER DRAINAGE LONGITUDINAL SECTION SHEET 5
18-596-C8406	STORMWATER DRAINAGE LONGITUDINAL SECTION SHEET 6
18-596-C8412	STORMWATER DRAINAGE CATCHMENT PLAN (POST-DEVELOPED)
18-596-C8421	STORMWATER DRAINAGE DETAILS SHEET 1
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18-596-C8431	STRUCTURE SETOUT DETAILS SHEET 1
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18-596-C8441	DETENTION BASIN DETAIL PLAN SHEET 1
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18-596-C8501	ROAD CROSS SECTIONS ROAD 01 SHEET 1
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18-596-C8631	EROSION AND SEDIMENT CONTROL PLAN
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18-596-C8701	PROPOSED FENCING PLAN
18-596-C8711	PROPOSED FENCING DETAILS SHEET 1
18-596-C8712	PROPOSED FENCING DETAILS SHEET 2
18-596-C8801	VEHICLE TURN PATH PLAN SHEET 1
18-596-C8802	VEHICLE TURN PATH PLAN SHEET 2
40 500 00000	VEHICLE TURN PATH PLAN SHEET 3
18-596-C8803	

			Bar Scales
1	ISSUED FOR CONSTRUCTION	17-11-22	
Α	ISSUED FOR SWC APPROVAL	20-10-22	
Issue	Description	Date	
	100mm on Original		

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Scales		Drawn	JB/MH
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ASPECT INDUSTIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B

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Civil Engineers and Project Managers

Project - Drawing No.

FOR CONSTRUCTION Issue 18-596-C8001

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SITEWORKS NOTES

- ORIGIN OF LEVELS:- REFER SURVEY NOTES.
- CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES TO BE REPORTED TO AT & L.
- MAKE SMOOTH CONNECTION WITH EXISTING WORKS
- ALL TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL
- ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACKFILLED WITH SAND TO 300mm ABOVE PIPE. WHERE PIPE IS UNDER PAVEMENTS BACKFILL. REMAINDER OF TRENCH TO UNDERSIDE OF PAVEMENT WITH SAND OR APPROVED GRANULAR MATERIAL COMAPACTED IN 150mm LAYERS TO MINIMUM 98% MODIFIED MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1. (OR A DENSITY INDEX OF NOT LESS THAN 75)
- 6. PROVIDE 10mm WIDE EXPANSION JOINTS BETWEEN BUILDINGS AND ALL CONCRETE OR UNIT PAVEMENTS.
- ASPHALTIC CONCRETE SHALL CONFORM TO TINSW SPECIFICATION
- ALL BASECOURSE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH TfNSW FORM 3051 (UNBOUND), TfNSW FORM 3052 (BOUND) COMPACTED TO MINIMUM 98% MODIFIED DENSITY IN ACCORDANCE WITH AS 1289 5.2.1 FREQUENCY OF COMPACTION TESTING SHALL NOT BE LESS THAN 1 TEST PER 50m OF BASECOURSE MATERIAL PLACED.
- ALL SUB-BASE COURSE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH TINSW FORM 3051, 3051.1 AND COMPACTED TO MINIMUM 95% MODIFIED DENSITY IN ACCORDANCE WITH A.S 1289 5.2 FREQUENCY OF COMPACTION TESTING SHALL NOT BE LESS THAN 1 TES PER 50m³ OF SUB-BASE COURSE MATERIAL PLACED.
- 10. AS AN ALTERNATIVE TO THE USE OF IGNEOUS ROCK AS A SUB-BASE MATERIAL IN (9) A CERTIFIED RECYCLED CONCRETE MATERIAL COMPLYING WITH TINSW FORM 3051 AND 3051.1 WILL BE CONSIDERED. SUBJECT TO MATERIAL SAMPLES AND APPROPRIATE CERTIFICATIONS BEING PROVIDED TO THE SATISFACTION OF AT & L.
- SHOULD THE CONTRACTOR WISH TO USE A RECYCLED PRODUCT THE CONTRACTOR IS TO SEEK ACCEPTANCE OF THE PRODUCT FROM AT&L. THE PRICE DIFFERENCE BETWEEN AN IGNEOUS PRODUCT AND A RECYCLED PRODUCT SHALL BE CLEARLY INDICATED.
- WHERE NOTED ON THE DRAWINGS THAT WORKS ARE TO BE CARRIED BY OTHERS, (eg. ADJUSTMENT OF SERVICES), THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CO-ORDINATION OF THESE WORKS
- 13. ALL WORKS CARRIED OUT ADJACENT TO AND WITHIN TRANSGRID'S EASEMENT TO COMPLY WITH TRANSGRID'S GUIDELINES AND REQUIREMENTS.
- 14. ALL WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH PENRITH CITY COUNCIL'S ENGINEERING CONSTRUCTION SPECIFICATION FOR CIVIL

SURVEY NOTES

THE EXISTING SITE CONDITIONS SHOWN ON THE FOLLOWING DRAWINGS HAVE BEEN INVESTIGATED BY LAND PARTNERS PTY LTD & LTS LOCKLEY, BEING REGISTERED SURVEYORS. THE INFORMATION IS SHOWN TO PROVIDE A BASIS FOR DESIGN. AT & L DOES NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE SURVEY BASE OR ITS SUITABILITY AS A BASIS FOR CONSTRUCTION DRAWINGS.

PRIOR TO THE COMMENCEMENT OF THE WORKS. THE CONTRACTOR SHALL UNDERTAKE A DETAILED BOUNDARY SURVEY AND COMPARE AGAINST THE DESIGN FOR DISCREPANCIES. SHOULD DISCREPANCIES BE ENCOUNTERED DURING CONSTRUCTION

BETWEEN THE SURVEY DATA, DESIGN DATA AND ACTUAL FIELD DATA, CONTACT AT & L IMMEDIATELY.

THE FOLLOWING NOTES HAVE BEEN TAKEN DIRECTLY FROM THE ORIGINAL SURVEY DOCUMENTS.

THE TITLE BOUNDARIES SHOWN HEREON WERE NOT MARKED AT THE TIME OF SURVEY AND HAVE BEEN DETERMINED BY PLAN DIMENSIONS ONLY AND NOT BY FIELD SURVEY.

SERVICES SHOWN HEREON HAVE BEEN LOCATED WHERE POSSIBLE BY FIELD SURVEY. IF NOT ABLE TO BE SO LOCATED, SERVICES HAVE BEEN PLOTTED FROM THE RECORDS OF RELEVANT AUTHORITIES WHERE AVAILABLE AND HAVE BEEN NOTED ACCORDINGLY ON THE PLAN. WHERE SUCH RECORDS DO NOT EXIST OR ARE INADEQUATE A NOTATION HAS BEEN MADE HEREON.

PRIOR TO ANY DEMOLITION, EXCAVATION OR CONSTRUCTION ON THE SITE, THE RELEVANT AUTHORITY SHOULD BE CONTACTED FOR POSSIBLE LOCATION OF FURTHER UNDERGROUND SERVICES AND DETAILED LOCATIONS OF ALL SERVICES.

DEWATERING

ISSUED FOR CONSTRUCTION

ISSUED FOR SWC APPROVAL

Description

100mm on Original

IF REQUIRED ANY DEWATERING WORKS TO BE AS PER THE DEWATERING PROCEDURE AS CONTAINED WITHIN THE CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN (CEMP).

EXISTING UNDERGROUND SERVICES

- THE LOCATIONS OF UNDERGROUND SERVICES SHOWN IN THIS SET OF DRAWINGS HAVE BEEN PLOTTED FROM SURVEY INFORMATION AND SERVICE AUTHORITY INFORMATION. THE SERVICE INFORMATION HAS BEEN PREPARED ONLY TO SHOW THE APPROXIMATE POSITIONS OF ANY KNOWN SERVICES AND MAY NOT BE AS CONSTRUCTED OR ACCURATE.
- 2. AT & L CAN NOT GUARANTEE THAT THE SERVICES INFORMATION SHOWN ON THESE DRAWINGS ACCURATELY INDICATES THE PRESENCE OR ABSENCE OF SERVICES OR THEIR LOCATION AND WILL ACCEPT NO LIABILITY FOR INACCURACIES IN THE SERVICES INFORMATION SHOWN FROM ANY CAUSE WHATSOEVER.
- CONTRACTORS SHALL TAKE DUE CARE WHEN EXCAVATING ONSITE INCLUDING HAND EXCAVATION WHERE NECESSARY.
- CONTRACTORS ARE TO CONTACT THE RELEVANT SERVICE AUTHORITY PRIOR TO COMMENCEMENT OF EXCAVATION WORKS.
- CONTRACTORS ARE TO UNDERTAKE A SERVICES SEARCH, PRIOR TO COMMENCEMENT OF WORKS ON SITE. SEARCH RESULTS ARE TO BE KEPT ON SITE AT ALL TIMES.
- PRIOR TO COMMENCEMENT OF WORKS, THE CONTRACTOR IS TO CONFIRM THE ALIGNMENT AND LEVELS OF ALL EXISTING SERVICES AT ALL LOCATIONS WHERE THE PROPOSED SERVICES ARE TO CROSS. CONNECT TO, OR ARE LOCATED IN CLOSE PROXIMITY TO THE EXISTING SERVICES.

CONCRETE NOTES

- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600 CURRENT EDITION WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
- CONCRETE QUALITY ALL REQUIREMENTS OF THE CURRENT ACSE CONCRETE SPECIFICATION DOCUMENT 1 SHALL APPLY TO THE FORMWORK REINFORCEMENT AND CONCRETE UNLESS NOTED OTHERWISE.

ELEMENT	AS 3600 F'c MPa	SPECIFIED	NOMINAL
	AT 28 DAYS	SLUMP	AGG. SIZE
VEHICULAR BASE KERBS, PATHS, AND PITS	32 25	60 80	20 20

- CEMENT TYPE SHALL BE (ACSE SPECIFICATION) TYPE SL - PROJECT CONTROL TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 1379.

- NO ADMIXTURES SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING BY AT & L.
- CLEAR CONCRETE COVER TO ALL REINFORCEMENT FOR DURABILITY SHALL BE 40mm TOP AND 70mm FOR EXTERNAL EDGES UNLESS NOTED OTHERWISE.
- ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON MILD STEEL PLASTIC TIPPED CHAIRS, PLASTIC CHAIRS OR CONCRETE CHAIRS AT NOT GREATER THAN 1m CENTRES BOTH WAYS, BARS SHALL BE TIED AT ALTERNATE INTERSECTIONS.
- THE FINISHED CONCRETE SHALL BE A DENSE HOMOGENEOUS MASS, COMPLETELY FILLING THE FORMWORK. THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS. ALL CONCRETE INCLUDING SLABS ON GROUND AND FOOTINGS SHALL BE COMPACTED AND CURED IN ACCORDANCE WITH TfNSW SPECIFICATION R83
- REINFORCEMENT SYMBOLS:
- N DENOTES GRADE 450 N BARS TO AS 1302 GRADE N
- R DENOTES 230 R HOT ROLLED PLAIN BARS TO AS 1302 SL DENOTES HARD-DRAWN WIRE REINFORCING FABRIC TO AS 1304

NUMBER OF BARS IN GROUP _ _ BAR GRADE AND TYPE

17 N 20 250 NOMINAL BAR SIZE IN mm - SPACING IN mm

THE FIGURE FOLLOWING THE FABRIC SYMBOL SL IS THE REFERANCE NUMBER FOR FABRIC TO AS 1304.

8. FABRIC SHALL BE LAPPED IN ACCORDANCE WITH THE FOLLOWING DETAIL:

— LAP TWO WIRES

DECOMMISSIONING / DEMOLITION

- DEMOLITION OF EXISTING DWELLING TO BE CONDUCTED IN ACCORDANCE WITH THE PROVISIONS OF AS2601-2001 - DEMOLITION OF STRUCTURES BY CONTRACTORS EXPERIENCED IN THIS CLASS OF WORK AND HOLDING REQUIRED CURRENT PERMITS AND LICENSES AS REQUIRED.
- EXISTING INTERNALS FENCING, CATTLE YARDS, UTILITIES AND OTHER REDUNDANT STRUCTURES TO BE DEMOLISHED AND REMOVED TO AN APPROVED WASTE MANAGEMENT FACILITY.
- DAM DECOMMISSIONING TO BE COMPLETED AS PER THE DAM DECOMMISSIONING PROCEDURE AS CONTAINED WITHIN THE CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN (CEMP).
- 4. ALL EXISTING SERVICES (INCLUDING SEPTIC TANKS) SHALL BE REMOVED FROM SITE.

Bar Scales

17-11-22

20-10-22

Date

ALL UNDERGROUND CABLES AND PIPES SHALL BE GRUBBED OUT AND CAPPED AT THE BOUNDARY OF THE SITE.

CONTINUED ABOVE

DECOMMISSIONING / DEMOLITION

CONTINUED FROM BELOW

- ALL OVERHEAD SERVICES SHALL BE REMOVED FROM WITHIN THE SITE BOUNDARY AND MADE SAFE AT THE TERMINATION LOCATION. ANY POLES SHALL BE REMOVED FROM THE SITE.
- ALL EXISTING SERVICES TO BE CONSIDERED AS LIVE UNTIL THE CONTRACTOR HAS TESTED AND CONFIRMED TO THE SUPERINTENDENT THAT THE SERVICES ARE DEAD / REDUNDANT.

KERBING NOTES

- ALL CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 25 MPa U.N.O IN REINFORCED CONCRETE NOTES.
- ALL KERBS, GUTTERS, DISH DRAINS AND CROSSINGS TO BE CONSTRUCTED ON MIN. 100mm GRANULAR BASECOURSE COMPACTED TO MINIMUM 95% MODIFIED DRY DENSITY (AS 1289 5.2.1).
- EXPANSION JOINTS (E.J) TO BE FORMED FROM 10mm COMPRESSIBLE CORK FILLER BOARD FOR THE FULL DEPTH OF THE SECTION AND CUT TO PROFILE. EXPANSION JOINTS TO BE LOCATED AT DRAINAGE PITS, ON TANGENT POINTS OF CURVES AND ELSEWHERE AT MAX 12m CENTRES EXCEPT FOR INTEGRAL KERBS WHERE THE EXPANSION JOINTS ARE TO MATCH THE JOINT LOCATIONS IN THE SLABS.
- WEAKENED PLANE JOINTS TO BE MIN 3mm WIDE AND LOCATED AT 3m CENTRES EXCEPT FOR INTEGRAL KERBS WHERE THE WEAKENED PLANE JOINTS ARE TO MATCH THE JOINT LOCATIONS IN THE SLABS.
- BROOM FINISH TO ALL RAMPED AND VEHICULAR CROSSINGS. ALL OTHER KERBING OR DISH DRAINS TO BE STEEL FLOAT FINISHED.
- 6. IN THE REPLACEMENT OF KERB AND GUTTER :-IF REQUIRED EXISTING ROAD PAVEMENT IS TO BE SAWCUT 900mm U.N.O. FROM THE LIP OF GUTTER. UPON COMPLETION OF THE NEW KERB AND GUTTER NEW BASECOURSE AND SURFACE TO BE LAID 900mm WIDE

STORMWATER DRAINAGE NOTES

- STORMWATER DESIGN CRITERIA: (A) AVERAGE RECURRENCE INTERVAL 1:100 YEARS MAJOR STORM (OVERLAND FLOW)
 1:20 YEARS MINOR STORM (PIPED NETWORK)
- B) RAINFALL INTENSITIES: TIME OF CONCENTRATION:5 MINUTES 1:100 YEARS= 219 mm/hr
- 1:20 YEARS= 167 mm/hr (C) RUNOFF COEFFICIENTS:
- ROOF AREAS: C 100 =1.0 EXTERNAL PAVEMENTS: C 100 =1.0 PIPES 300 DIA. AND LARGER ARE TO BE REINFORCED CONCRETE (RCP) OR
- FIBRE-REINFORCED CONCRETE (FRC) CLASS '3' APPROVED SPIGOT AND SOCKET WITH RUBBER RING JOINTS. U.N.O. ALL ROAD CROSSINGS TO BE CLASS '4' U.N.O.
- PIPES UP TO 300 DIA SHALL BE SEWER GRADE uPVC WITH SOLVENT WELDED JOINTS.
- EQUIVALENT STRENGTH VCP OR FRC PIPES MAY BE USED, SUBJECT TO THE APPROVAL OF PENRITH CITY COUNCIL. ALL STORMWATER DRAINAGE LINES UNDER PROPOSED BUILDING SLABS
- TO BE uPVC PRESSURE PIPE GRADE 6. ENSURE ALL VERTICALS AND DOWNPIPES ARE uPVC PRESSURE PIPE, GRADE 6 FOR A MIN OF 3.0m IN 6. PIPES TO BE INSTALLED TO TYPE HS2 SUPPORT IN ACCORDANCE WITH AS 3725 IN ALL CASES BACKFILL TRENCH WITH SAND TO 300mm ABOVE
- PIPE. WHERE PIPE IS UNDER PAVEMENTS BACKFILL REMAINDER OF TRENCH TO UNDERSIDE OF PAVEMENT WITH SAND OR APPROVED GRANULAR MATERIAL COMPACTED IN 150mm LAYERS TO MINIMUM 98% STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1. (OR A DENSITY INDEX OF NOT LESS THAN 75)
- ALL INTERNAL WORKS WITHIN PROPERTY BOUNDARIES ARE TO COMPLY WITH THE REQUIREMENTS OF AS 3500 3.1 (1998) AND AS/NZS 3500 3.2 (1998). ENLARGERS. CONNECTIONS AND JUNCTIONS TO BE PREFABRICATED FITTINGS
- WHERE PIPES ARE LESS THAN 300 DIA. WHERE SUBSOIL DRAINS PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS
- UNSLOTTED uPVC SEWER GRADE PIPE IS TO BE USED. 10. CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES. GRADES SHOWN ARE
- NOT TO BE REDUCED WITHOUT APPROVAL. GRATES AND COVERS SHALL CONFORM TO AS 3996 AND PENRITH
- CITY COUNCIL CONSTRUCTION SPECIFICATIONS. 12. AT ALL TIMES DURING CONSTRUCTION OF STORMWATER PITS. ADEQUATE SAFETY
- PROCEDURES SHALL BE TAKEN TO ENSURE AGAINST THE POSSIBILITY OF PERSONNEL FALLING DOWN PITS. ALL EXISTING STORMWATER DRAINAGE LINES AND PITS THAT ARE TO REMAIN ARE

TO BE INSPECTED AND CLEANED. DURING THIS PROCESS ANY PART OF THE

- STORMWATER DRAINAGE SYSTEM THAT WARRANTS REPAIR SHALL BE REPORTED TO THE SUPERINTENDENT/ENGINEER FOR FURTHER DIRECTIONS. ALL STORMWATER PITS ARE TO BE CAST IN-SITU IN ACCORDANCE WITH THE STORMWATER DETAILS AND SPECIFICATIONS, UNLESS APPROVED BY THE
- SUPERINTENDENT / PENRITH CITY COUNCIL. IF APPROVED AND IN ADDITION TO THE SPECIFICATION, ALL PRE-CAST PITS ARE TO BE STRUCTURALLY CERTIFIED TO MEET RELEVANT
- AUSTRALIAN STANDARDS (AS3600, AS3996). ALL PRECAST PITS TO BE FOUNDED ON CONCRETE BLINDING LAYER WITH A MINIMUM ALLOWABLE BEARING CAPACITY OF 100KPA UP TO 3.0M DEPTH TO INVERT AND 150KPA FROM 3.0M TO 6.0M DEPTH TO INVERT (MINIMUM 100MM THICK 25MPA OR DEEPER TO ENSURE MINIMUM SPECIFIED BEARING CAPACITY IS
- ACHIEVED). PRE-CAST STORMWATER PITS ARE TO BE CUSTOM MADE WITH OPENINGS WITHIN +50MM OD OF PIPE, HEIGHTS AND PIPE PENETRATIONS DURING MANUFACTURE. ANY ADDITIONAL PENETRATIONS SHALL BE CORE DRILLED AND STEEL BLOWN OUT TO MANUFACTURERS REQUIREMENTS, IF REQUIRED.
- DEMOLITION SAWS ARE NOT TO BE USED IN ANY CIRCUMSTANCES. SINGLE UNITS PREFERRED BUT IF REQUIRED MINIMUM RISER DEPTH 600MM PIT INSTALLATION AND JOINTING PIPES TO PITS SHALL BE UNDERTAKEN IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. **CONTINUED ABOVE**

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STORMWATER DRAINAGE NOTES

CONTINUED FROM BELOW

- ANY DAMAGE TO THE STRUCTURAL INTEGRITY OF THE PRE-CAST PIT WILL BE REPAIRED AND STRUCTURALLY CERTIFIED TO THE SATISFACTION OF THE SUPERINTENDENT / PENRITH CITY COUNCIL.
- ALL PRE-CAST PIT PENETRATIONS SHALL BE CUT SO THAT IT IS FLUSH
- WITH THE INTERNAL WALL
- PIPE JOINTING/SEALING OF PIPE PENETRATION TO BE WITH A NON-SHRINK MORTAR MIX, E.G. LANKO 702 DURABED OR SIMILAR APPROVED.
- SUBSOIL DRAINAGE FLUSHING AND/OR INTERMEDIATE RISERS TO BE INSTALLED AT 40m CENTRES, AND AT ALL UPSTREAM ENDPOINTS
- ANY ADDITIONAL PENETRATIONS TO ANY STRUCTURAL CONCRETE (E.G. STORMWATER PITS, CULVERTS, HEADWALLS ETC.) SHALL BE CORE DRILLED AND STEEL BLOWN OUT TO MANUFACTURERS REQUIREMENTS, IF REQUIRED.

EMBANKMENT CONSTRUCTION

SEQUENCE

- STRIP VEGETATION AND TOPSOIL FROM EMBANKMENT AREA AND STOCKPILE TOPSOIL FOR LATER USE. CUT BACK AREA TO FIRM GROUND.
- CONSTRUCT EMBANKMENT IN PRESENCE OF QUALIFIED AND EXPERIENCED GEOTECHNICAL ENGINEER IF NOT ROCK.
- IN THE CASE WHERE THE EMBANKMENT AREAS SHOW ANY FAILURE. THE CONTRACTOR IS TO ENGAGE A QUALIFIED AND EXPERIENCED GEOTECHNICAL ENGINEER TO DETERMINE THE CAUSE AND METHOD OF RECTIFICATION
- COMPACT CLAY STABILISED WITH GYPSUM (3% BY DRY MASS, MINIMUM) AS APPROVED BY A QUALIFIED AND EXPERIENCED GEOTECHNICAL ENGINEER INTO THE CUT-OFF TRENCH OF LAYERS NOT EXCEEDING 150mm LOOSE THICKNESS TO A DRY DENSITY EQUIVALENT TO 98% OF THAT DETERMINED BY STANDARD COMPACTION (AS 1289.5.1.1) AND AT A MOISTURE CONTENT OF -2% TO +2% OF OPTIMUM MOISTURE CONTENT.
- GYPSUM STABILISED NATURAL SOILS EXPOSED IN EMBANKMENT AREA WITH MINIMUM 3% GYPSUM BY DRY MASS AND COMPACT AS FOR #4. ALL TO THE APPROVAL OF A QUALIFIED AND EXPERIENCED GEOTECHNICAL ENGINEER.
- CONSTRUCT BODY OF EMBANKMENT WITH CLAYEY MATERIAL WON FROM SITE. COMPACT THE CLAYEY MATERIAL APPROVED BY A QUALIFIED AND EXPERIENCED GEOTECHNICAL ENGINEER IN LAYERS NOT EXCEEDING 150mm THICKNESS TO A DRY DENSITY EQUIVALENT TO 98% OF THAT DETERMINED BY STANDARD COMPACTION (AS 1289.5.1.1) AND AT A MOISTURE CONTENT OF -2% TO +2% OF OPTIMUM MOISTURE CONTENT. MOST IMPORTANTLY. IF SHRINKAGE CRACKS OCCUR, AS DIRECTED BY A QUALIFIED AND EXPERIENCED GEOTECHNICAL ENGINEER.
- OVERFILL THE EMBANKMENT AND TRIM OFF, SO THAT THE ENTIRE BODY OF THE EMBANKMENT IS COMPACTED.
- TRIM THE EMBANKMENTS BATTERS TO THE OVERFILLED MATERIAL, STABILISE THE UPSTREAM CLAY BATTERS WITH WELL MIXED GYPSUM (3% BY DRY MASS, MINIMUM) AND COMPACT TO MIN. 98% STD -2% TO +2% OMC.
- PLACE ROCK RIP-RAP AS SHOWN.
- RECOVER TOPSOIL FROM STOCKPILE AND SPREAD OVER EMBANKMENT AND CUT BATTERS (A THIN COVER OF TOPSOIL ONLY HAS BEEN NOMINATED). ONLY LIGHTLY TRACK-ROLL THE TOPSOIL AND THEN LANDSCAPE IN ACCORDANCE WITH THE LANDSCAPE AREA DRAWINGS.
- WATER AND FERTILISE LANDSCAPE AS REQUIRED BY CLIMACTIC CONDITIONS TO ENSURE THE LANDSCAPE IS SUCCESSFUL.
- 12. AT THE COMPLETION OF WORK WRITTEN CONFIRMATION AND CERTIFICATION IS TO BE PROVIDED FROM A QUALIFIED AND EXPERIENCED GEOTECHNICAL ENGINEER THAT THE EMBANKMENTS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THESE DRAWINGS.

EROSION AND SEDIMENT CONTROL

NOTES

GENERAL INSTRUCTIONS

- THE CONTRACTOR IS RESPONSIBLE FOR ENGAGING A SUITABLY QUALIFIED EROSION AND SEDIMENT CONSULTANT FOR THE DURATION OF THE CONTRACT WITH THE EXPERTISE IN DESIGNING AND DOCUMENTING THE CONTROLS TO ALLOW THE INSTALLATION AND MAINTENANCE OF THE EROSION AND SEDIMENT CONTROLS. SUITABLE EROSION AND SEDIMENT CONTROLS SHALL BE PROVIDED AND MAINTAINED BY THE CONTRACTOR REQUIRED TO SUIT THE CONSTRUCTION STAGING
- 2. ALL WORK SHALL BE GENERALLY CARRIED OUT IN ACCORDANCE WITH a. NSW DEPARTMENT OF HOUSING MANUAL "MANAGING URBAN STORMWATER, SOILS AND CONSTRUCTION", 4th EDITION, MARCH 2004. b. LOCAL AUTHORITY REQUIREMENTS
- c. EPA REQUIREMENTS 3. MAINTAIN THE EROSION CONTROL DEVICES TO THE SATISFACTION OF THE SUPERINTENDENT AND THE LOCAL AUTHORITY.
- 4. WHEN STORMWATER PITS ARE CONSTRUCTED, PREVENT SITE RUNOFF ENTERING UNLESS SEDIMENT FENCES ARE ERECTED AROUND PITS.
- 5. CONTRACTOR IS TO ENSURE ALL EROSION & SEDIMENT CONTROL DEVICES ARE MAINTAINED IN GOOD WORKING ORDER AND OPERATE EFFECTIVELY. REPAIRS AND OR MAINTENANCE SHALL BE UNDERTAKEN AS REQUIRED, PARTICULARLY FOLLOWING STORM EVENTS.

LAND DISTURBANCE

Client

6. WHERE PRACTICAL, THE SOIL EROSION HAZARD ON THE SITE WILL BE KEPT AS LOW AS POSSIBLE. TO THIS END, WORKS SHOULD BE UNDERTAKEN / INSTALLED AS DIRECTED BY THE CONTRACTORS EROSION AND SEDIMENT CONTROL CONSULTANT.

CONTINUED ABO\

Scales

EROSION AND SEDIMENT CONTROL

NOTES

CONTINUED FROM BELOW

SEDIMENT CONTROL

- 7. DURING WINDY WEATHER, LARGE, UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL.
- 8. FINAL SITE LANDSCAPING WILL BE UNDERTAKEN AS SOON AS POSSIBLE AND WITHIN 20 WORKING DAYS FROM COMPLETION OF CONSTRUCTION ACTIVITIES.
- 9. STOCKPILES WILL NOT BE LOCATED WITHIN 2 METRES OF HAZARD AREAS, INCLUDING LIKELY AREAS OF CONCENTRATED OR HIGH VELOCITY FLOWS SUCH AS WATERWAYS. WHERE THEY ARE BETWEEN 2 AND 5 METRES FROM SUCH AREAS, SPECIAL SEDIMENT CONTROL MEASURES SHOULD BE TAKEN TO MINIMISE POSSIBLE POLLUTION TO DOWNSLOPE WATERS, E.G. THROUGH INSTALLATION OF SEDIMENT FENCING.
- 0. ANY SAND USED IN THE CONCRETE CURING PROCESS (SPREAD OVER THE SURFACE) WILL BE REMOVED AS SOON AS POSSIBLE AND WITHIN 10 WORKING DAYS FROM PLACEMENT.
- . WATER WILL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS IT IS RELATIVELY SEDIMENT FREE, I.E. THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED AND/OR ANY LIKELY SEDIMENT HAS BEEN FILTERED THROUGH AN APPROVED
- 2. TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES WILL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE REHABILITATED.

OTHER MATTERS

- 3. ACCEPTABLE RECEPTORS WILL BE PROVIDED FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER.
- 14. ANY EXISTING TREES WHICH FORM PART OF THE FINAL LANDSCAPING PLAN WILL BE PROTECTED FROM CONSTRUCTION ACTIVITIES BY:
- (A) PROTECTING THEM WITH BARRIER FENCING OR SIMILAR
- MATERIALS INSTALLED OUTSIDE THE DRIP LINE

(B) ENSURING THAT NOTHING IS NAILED TO THEM

- (C) PROHIBITING PAVING, GRADING, SEDIMENT WASH OR PLACING OF STOCKPILES WITHIN THE DRIP LINE EXCEPT UNDER THE FOLLOWING CONDITIONS.
- (I) ENCROACHMENT ONLY OCCURS ON ONE SIDE AND NO CLOSER TO THE TRUNK THAN EITHER 1.5 METRES OR HALF THE DISTANCE BETWEEN THE OUTER EDGE OF THE DRIP LINE AND THE TRUNK, WHICH EVER IS THE GREATER
- (II) A DRAINAGE SYSTEM THAT ALLOWS AIR AND WATER TO CIRCULATE THROUGH THE ROOT ZONE (E.G. A GRAVEL BED) IS PLACED UNDER ALL FILL LAYERS OF MORE THAN 300 MILLIMETRES DEPTH
- (III) CARE IS TAKEN NOT TO CUT ROOTS UNNECESSARILY NOR TO COMPACT THE SOIL AROUND THEM.

STAGING

SUITABLE EROSION AND SEDIMENT CONTROLS SHALL BE PROVIDED AND MAINTAINED BY THE CONTRACTOR THROUGHOUT ALL STAGES OF WORKS, THROUGHOUT THE FULL TERM OF THE CONTRACT. WHERE SHOWN ON AT&L DRAWINGS OR WHERE DIRECTED BY THE SUPERINTENDENT OR PENRITH CITY COUNCIL'S ENGINEERS. THE CONTRACTOR IS RESPONSIBLE FOR DESIGNING, DOCUMENTING. INSTALLING AND MAINTAINING THE SEDIMENT AND EROSION CONTROLS REQUIRED TO SUIT THE SELECTED CONSTRUCTION STAGING. THIS IS TO BE DOCUMENTED IN THE FORM OF A SOIL AND WATER MANAGEMENT PLAN TO BE DEVELOPED BY THE CONTRACTOR AND THEIR EROSION ND SEDIMENT CONSULTANT AND PROVIDED BY THE SUPERINTENDENT PRIOR TO CONSTRUCTION COMMENCEMENT

SUCH CONTROLS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE PROTECTION OF THE ENVIRONMENT OPERATIONS ACT, PENRITH CITY COUNCIL'S SPECIFICATIONS AND THE OFFICE OF ENVIRONMENT AND HERITAGE'S 'MANAGING URBAN STORMWATER: SOILS AND CONSTRUCTION. LANDCOM, (4TH EDITION) MARCH 2004 (REPRINTED 2006) (THE "BLUE BOOK"). VOLUME 1 AND VOLUME 2.

EARTHWORKS NOTES

- WHERE EARTHWORKS ARE TO BE CONSTRUCTED ON OR AGAINST ANY EMBANKMENTS OR AGAINST ANY SLOPES AND THE EMBANKMENT/SLOPE IS STEEPER THAN 10(H):1(V) IN ANY DIRECTION, THE CONTRACTOR SHALL CUT TERRACES INTO THE SLOPE TO A MINIMUM DEPTH OF 300mm, EXCEPT WHERE SLOPES ARE STEEPER THAN 4(H):1(V) WHERE, MINIMUM DEPTH SHALL BE 600mm, TO ALLOW ADEQUATE KEY AND COMPACTION OF MATERIAL.
- THE CONTRACTOR SHALL PRODUCE A MATERIAL TRACKING REGISTER FOR ALL IMPORT AND EXPORT MATERIAL INCLUDING DEMOLITION WASTE. FOR INSTANCES WHERE CONTAMINATED MATERIAL IS EXPORTED FROM THE SITE, THE CONTRACTOR SHALL ENSURE A CHAIN OF CUSTODY REPORT AND CERTIFICATES ARE PROVIDED FOR THE **CONTAMINATED MATERIAL**

DESIGN & CERTIFICATION REQUIREMENTS

- THE CONTRACTOR IS TO PROVIDE STRUCTURAL CERTIFICATION ON ALL STRUCTURAL ELEMENTS, INCLUDING DESIGN CERTIFICATION AND FINAL CONSTRUCTION CERTIFICATION.
- THIS INCLUDES:
- ALL RETAINING WALLS CULVERTS EXCLUDING BASE SLABS
- HEADWALLS
- STORMWATER STRUCTURES ALL STRUCTURAL CERTIFICATES MUST BE PREPARED BY A

FOR LANDSCAPE SPECIFICATION.

SUITABLY QUALIFIED STRUCTURAL ENGINEER.

CONSTRUCTION SPECIFICATION

- . THESE DRAWINGS SHOULD BE READ IN CONJUCTION WITH PENRITH CITY COUNCIL'S LATEST REVISION OF THE 'ENGINEERING CONSTRUCTION SPECIFICATION FOR CIVIL WORKS'
- WHERE THERE IS A CONFLICT THE FOLLOWING IS TO OCCUR 2.1. NOTIFY THE DESIGN ENGINGEER AND/OR SUPERINTENDENT 2.2. THE PENRITH CITY COUNCIL'S SPECIFICATION TAKES PRECEDENCE
- REFER PELLS SULLIVAN MEYNINK REPORT PSM3739-006S REV 6 (DATED 13 OCT 2020) FOR BULK EARTHWORKS SPECIFICATIONS.

REFER SITE IMAGE LANDSCAPE SPECIFICATION (CURRENT REVISION)

PENRITH ITY COUNCIL This plan / document relates to Development Consent: SSD-10448-MOD-1 Subdivision Works Certificate: EA22/0045 Subject to the conditions outlined in the consent



CONTRACTOR SHALL CALL; DIAL BEFORE YOU DIG 1100 PRIOR TO COMMENCEMENT OF WORK TO OBTAIN ALL CURRENT SERVICE AUTHORITY PLANS

Civil Engineers and Project Managers



ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9923 1055 www.atl.net.au info@atl.net.au

Level 7, 153 Walker Street

Issue

North Sydney NSW 2060

FOR CONSTRUCTION Project - Drawing No.

18-596-C8002

SHEET F:\18-596 Mamre Road\6.0 Drgs\Civil\Final\CC\8000_STAGE 1B CC\18-596-C8002.dwg

PERMISSION OF AT&L



JB/MH Designed JB/MH Checked GDA2020 DS Height Approved DS AHD

NOTES AND LEGENDS SHEET

ASPECT INDUSTIAL ESTATE

MAMRE ROAD.

KEMPS CREEK

STAGE 1B

OVERALL SI	
LEGEND - Co	<u>OMBINED</u>
60.0	EXISTING BOUNDARY EXISTING CONTOUR
	PROPOSED BOUNDARY
	PROPOSED EASEMENT
	FUTURE BOUNDARY
	BATTER
F 48.81 ●	PROPOSED SURFACE LEVE PROPOSED MAJOR CONTOUR (1.0m INTERVAL) PROPOSED MINOR CONTOUR (0.20m INTERVAL)
K&G	KERB AND GUTTER (REFER PCC DWG. SD1003/1)
K&T	KERB AND TOE (REFER DWG. C8016)
MK	MOUNTABLE KERB (REFER PCC DWG. SD1003/2)
MK(B)	MOUNTABLE KERB WITH EXTENDED BACK (REFER PCC DWG. SD1003/2)
MK(C)	MOUNTABLE KERB WITH EXTENDED BACK (REFER DETAIL A DWG. C8017)
DD	CONCRETE DISH DRAIN (REFER DETAIL A DWG. C8017)
PR	PRAM RAMP (REFER PCC DWG. SD1002)
VC	VEHICLE CROSSOVER (REFER PCC DWG. SD1004)
1 11	STORMWATER BOX CULVERT WITH NUMBER OF SECTION
1 10	UPSTREAM STORMWATER DIVERSION BOX CULVERT WITH NUMBER OF SECTION
sc1	SPECIAL STORMWATER CULVERT SECTION
	STORMWATER PIPE
	UPSTREAM STORMWATER DIVERSION PIPE
	KERB INLET PIT (REFER PCC DWG. SD2001 U.N.O.)
	SURFACE INLET PIT (REFER PCC DWG. SD2002 U.N.O)
	JUNCTION PIT (REFER PCC DWG. SD2002 U.N.O)
<i></i>	LIMIT OF WORKS
>	SUBSOIL DRAINS WITH FLUSHING POINTS SUBSOIL DRAINAGE FLUSHING AND/OR INTERMEDIATE RISERS TO BE INSTALLED AT 40m CENTRES, AND AT ALL UPSTREAM END POINTS PER PCC SD2004
	SUBSOIL DRAINS BENEATH PAVEMENT REFER DETAIL DWG. C8017
>	GRASS LINED CATCH DRAIN REFER DWG C8016
s	PROPOSED GRAVITY SEWER REFER QALCHEK DRAWINGS FOR DETAILS
O	PROPOSED GRAVITY SEWER MANHOLE REFER QALCHEK DRAWINGS FOR DETAILS
0	PROPOSED GRAVITY SEWER MAINTENANCE SHAFT REFER QALCHEK DRAWINGS FOR DETAILS
•••	PROPOSED STREET LIGHT
x · x	REFER EDGEWATER DRAWINGS FOR DETAILS SERVICE / ITEM TO BE REMOVED
	PROPOSED RIP RAP SCOUR PROTECTION

BULK EARTHWORKS			PAVEMENT / ACCESS TRACKS			
EARTHWORKS	-50mm / +0mm	OF FINISHED SURFACE LEVEL (AFTER COMPACTION AND	CONCRETE			
		TRIMMING)	KERB	-5mm / +5mm	ALONG THE TOP OF KE	ERB OVER A LENGTH OF 5 METRES
CTODA NA ATER			KERB	-5mm / +5mm	ALONG THE FACE OF K	CERB OVER A LENGTH OF 5 METRES
STORMWATER BIDES (SHILLYERES	WITHIN 20mm	OF THE DESIGN INVERT LEVEL AT ANY POINT	PATH	-0mm / +10mm	OF FOOTPATH/SHAREI	D PATH FINISHED SURFACE LEVEL
PIPES/CULVERTS PIPES/CULVERTS	WITHIN 2011111 OF THE DESIGN INVERTILEVEL AT ANY POINT WITHIN 100mm OF THE PLAN POSITION SHOWN ON THE DRAWINGS OR		PATH	SURFACE OF THE F	PATH, INCLUDING JOINTS	S, MUST NOT POND WATER.
FIFLS/ COLVENTS	William 100mm	SPECIFIED AT ANY POINT				
HEADWALLS	WITHIN 20mm	OF THE DESIGN INVERT LEVEL AT ANY POINT				
HEADWALLS	WITHIN 100mm	OF THE PLAN POSITION SHOWN ON THE DRAWINGS OR SPECIFIED AT ANY POINT	VERGE			
CHAMBERS	WITHIN 20mm	OF THE INVERT LEVEL SHOWN ON THE DRAWINGS	TURF	-10mm / +0mm	OF PAVEMENT FINISH	ED SURFACE LEVEL (AFTER
CHAMBERS	WITHIN 200mm	LONGITUDINALLY OF THE PLAN POSITION, WITH REFERENCE TO THE CONTROL LINE FOR THE ROAD SHOWN ON THE DRAWINGS			COMPACTION) TO THE ADJOINING MATERIAL (FOOTPA KERBS, ETC)	
LINTELS	AS PER THE TOLEF	RANCES SPECIFIED FOR THE ADJOINING MATERIAL	MULCH	-10mm / +0mm	OF PAVEMENT FINISHED SURFACE LEVEL (AFTER COMPACTION) TO THE ADJOINING MATERIAL (FOOTPAT KERBS, ETC)	
COVERS	AS PER THE TOLEF	ANCES SPECIFIED FOR THE ADJOINING MATERIAL	RETAINING / NOISE WALLS			
			WALL	-20mm / +20mm	FROM ANY POINT ON THE WALL THE LEVEL MUST NO DEVIATE FROM THAT SPECIFIED	
GRATES	AS PER THE TOLEF	RANCES SPECIFIED FOR THE ADJOINING MATERIAL	WALL	-10mm / +10mm	MUST NOT DEVIATE FROM THE SPECIFIED INCLINATION F METER HEIGHT (BLOCK WALL) INCLINATION OF THE FACE OF THE COMPLETED WALL MUST NOT DEVIATE FROM THE SPECIFIED INCLINATION F METER HEIGHT (PANEL WALL)	
OPEN DRAINS	WITHIN 50mm	OF THE DESIGN LEVEL AT ANY POINT PROVIDED THAT THERE IS A CONTINUOUS DOWNGRADE (WITHOUT PONDING) IN	WALL	-5mm / +0mm		
		THE DIRECTION OF FLOW NOT LESS THAN 0.5% AT ANY POINT	WALL	-20mm / +20mm		
PAVEMENT / ACCESS TRACKS			TOLERANCE FOR	EMBANK	MENT BATT	ERS
SUBBASE	-10mm / +10mm	OF PAVEMENT COURSE THICKNESS (AFTER COMPACTION & TRIMMING)	LOCATION			NCE (mm)
SUBBASE	-10mm / +0mm	OF FINISHED SURFACE LEVEL (AFTER COMPACTION AND TRIMMING)	AT LEVEL OF TOP OF FORMATION		H:1V OR FLATTER +0/-150	SLOPE STEEPER THAN 1H:1V +0/-150
SUBBASE	-5mm / +5mm	ALONG THE FINISHED SURFACE (LAID IN ANY DIRECTION) OVER A LENGTH OF 3 METRES	UNDERSIDE OF PAVEMENT BETWEEN TOP OF FORMATION A 1m BELOW TOP OF FORMATION		+150/-150	+150/-150
BASECOURSE	-0mm / +20mm	OF PAVEMENT COURSE THICKNESS (AFTER COMPACTION & TRIMMING)	BEYOND 1m BELOW TOP OF FORMATION		+300/-300	+300/-300
BASECOURSE	-0mm / +10mm	OF FINISHED SURFACE LEVEL (AFTER COMPACTION AND TRIMMING)	REFER TO TfNSW R44 SPECIFICAT	TION		
BASECOURSE	-5mm / +5mm	ALONG THE FINISHED SURFACE (LAID IN ANY DIRECTION) OVER A LENGTH OF 3 METRES				
SEAL	-0mm / +10mm	OF PAVEMENT FINISHED SURFACE LEVEL (AFTER ROLLING AGGREGATE)				
SEAL	-5mm / +10mm	ALONG THE FINISHED SURFACE OVER THE CARRIAGEWAY WIDTH AT THE DATE OF PRACTICAL COMPLETION				
SEAL	SURFACE OF THE G JOINTS, MUST NO	COURSE, INCLUDING LONGITUDINAL AND TRANSVERSE T POND WATER.				
ASPHALT	-0mm / +10mm	OF PAVEMENT FINISHED SURFACE LEVEL (AFTER COMPACTION)				
ASPHALT	-5mm / +5mm	ALONG THE FINISHED SURFACE OVER THE CARRIAGEWAY WIDTH AT THE DATE OF PRACTICAL COMPLETION				
ASPHALT	-8mm / +8mm	ALONG THE FINISHED SURFACE OVER THE CARRIAGEWAY WIDTH AT THE COMPLETION OF THE DEFECT LIABILITY PERIOD				
ASPHALT	SURFACE OF THE O	COURSE, INCLUDING LONGITUDINAL AND TRANSVERSE T POND WATER.				

PENRITH CITY COUNCIL This plan / document relates to Development Consent: SSD-10448-MOD-1 Subdivision Works Certificate: EA22/0045 Subject to the conditions outlined in the consent

			Bar Scales
1	ISSUED FOR CONSTRUCTION	17-11-22	
Α	ISSUED FOR SWC APPROVAL	20-10-22	
Issue	Description	Date	

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Height Datum	AHD	Approved	DS	
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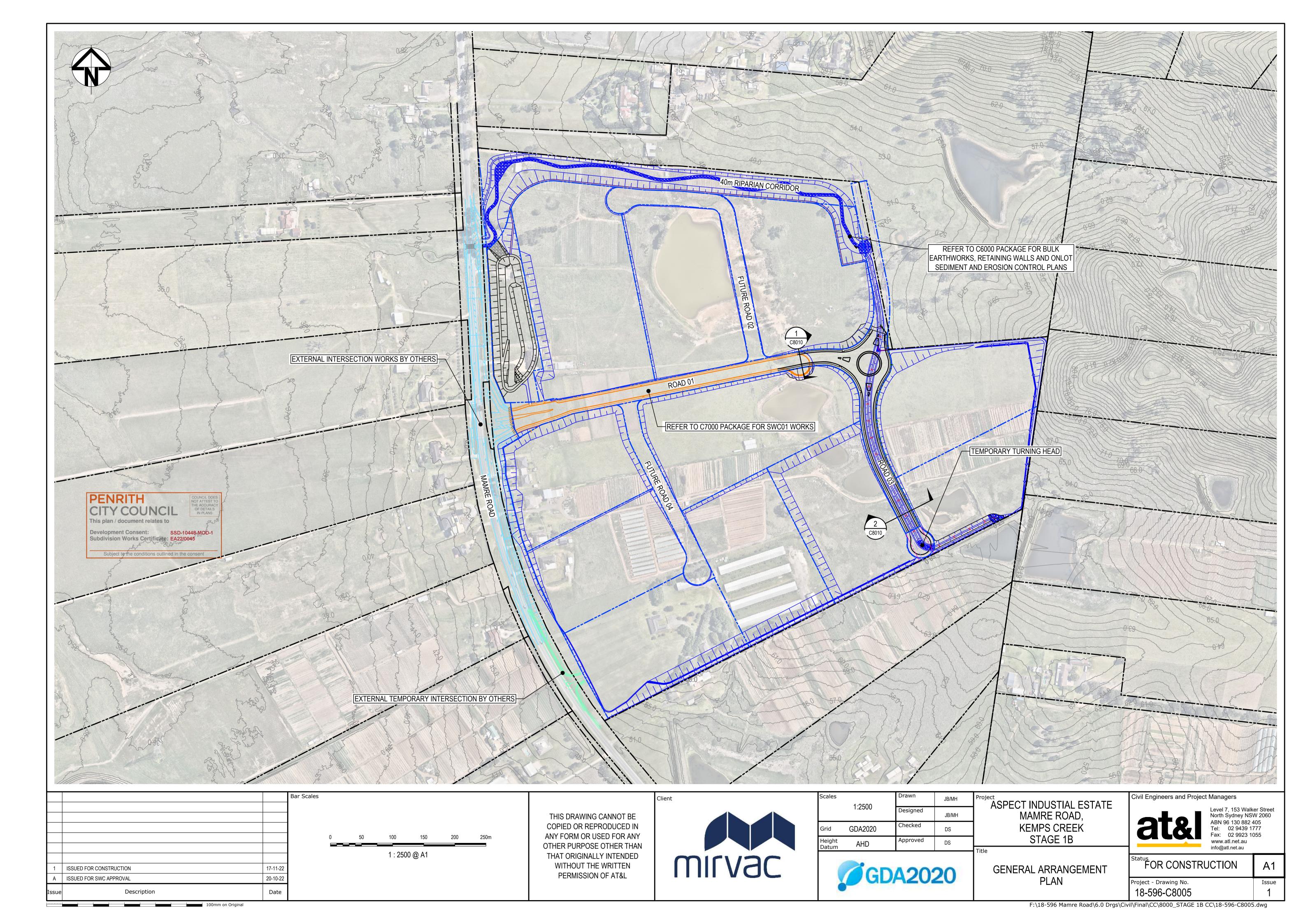
ASPECT INDUSTIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B

Civil Engineers and Project Managers

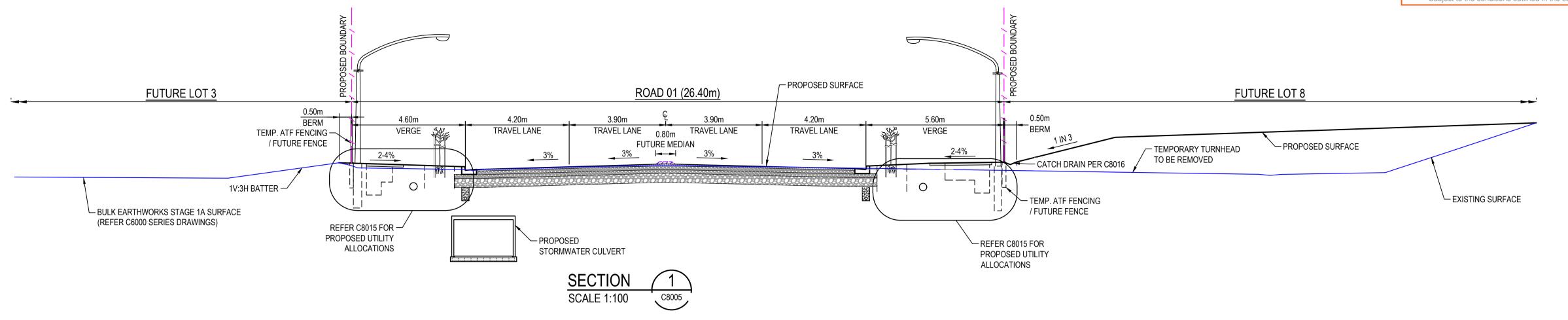
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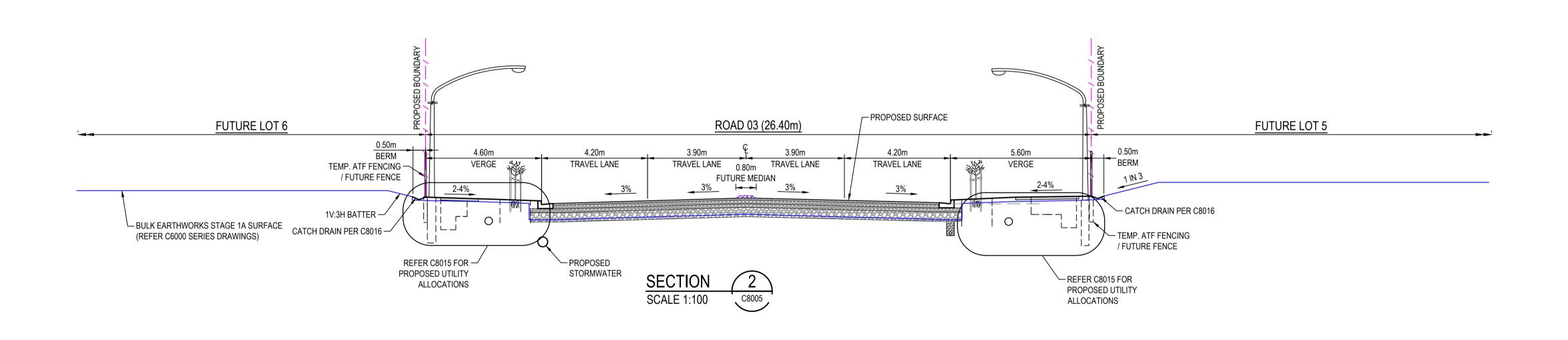
NOTES AND LEGENDS SHEET SHEET 2

FOR CONSTRUCTION Project - Drawing No. Issue 18-596-C8003









			Bar Scales
			0 2 4 6 8 10m
			4 400 0 44 4 000 0 40
			1 : 100 @ A1 1 : 200 @ A3
1	ISSUED FOR CONSTRUCTION	17-11-22	2
Α	ISSUED FOR SWC APPROVAL	20-10-22	2
Issue	Description	Date	

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Height	AHD	Approved	DS	
Datum				Tit

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ASPECT INDUSTIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B

TYPICAL SECTIONS

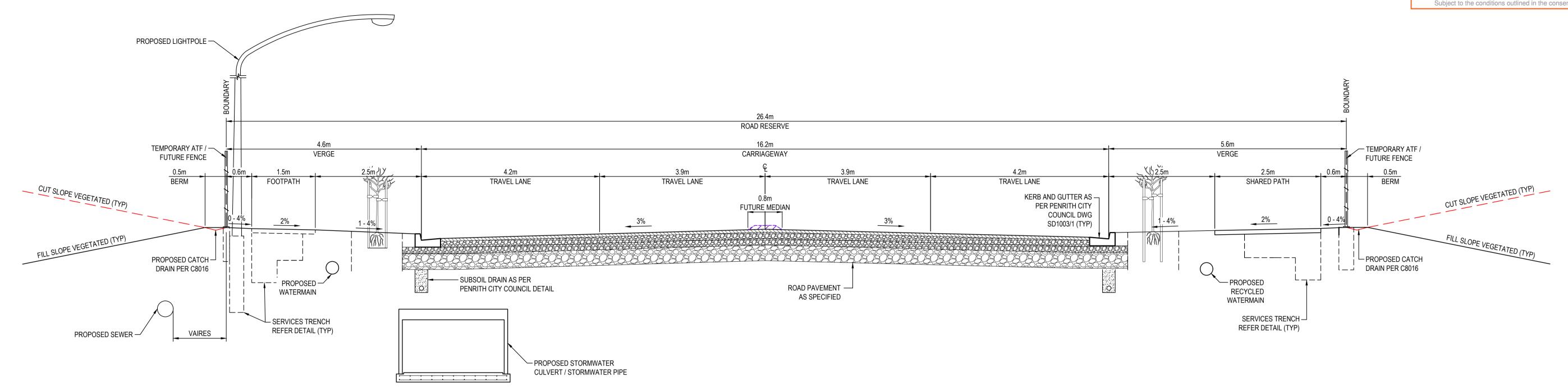
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Civil Engineers and Project Managers

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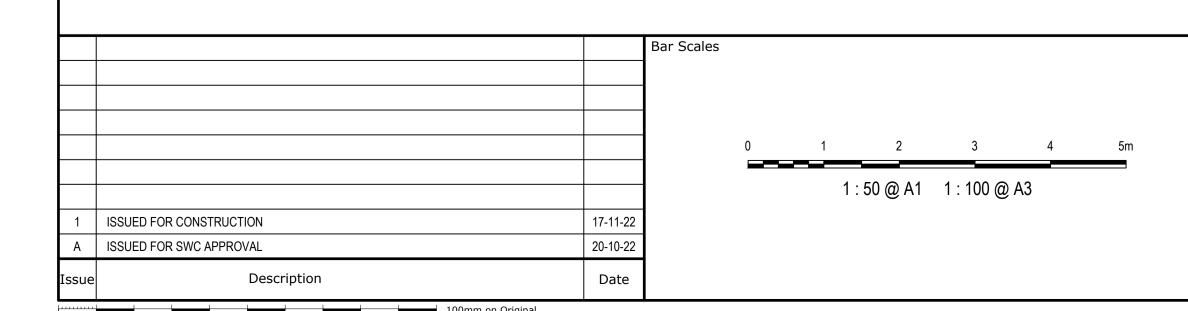
FOR CONSTRUCTION Issue 18-596-C8010





TYPICAL SECTION - ESTATE ROAD 01 / ROAD 03

SCALE 1:50



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Height Datum	AHD	Approved	DS	

ASPECT INDUSTIAL ESTATE
MAMRE ROAD,
KEMPS CREEK
STAGE 1B

at&

Civil Engineers and Project Managers

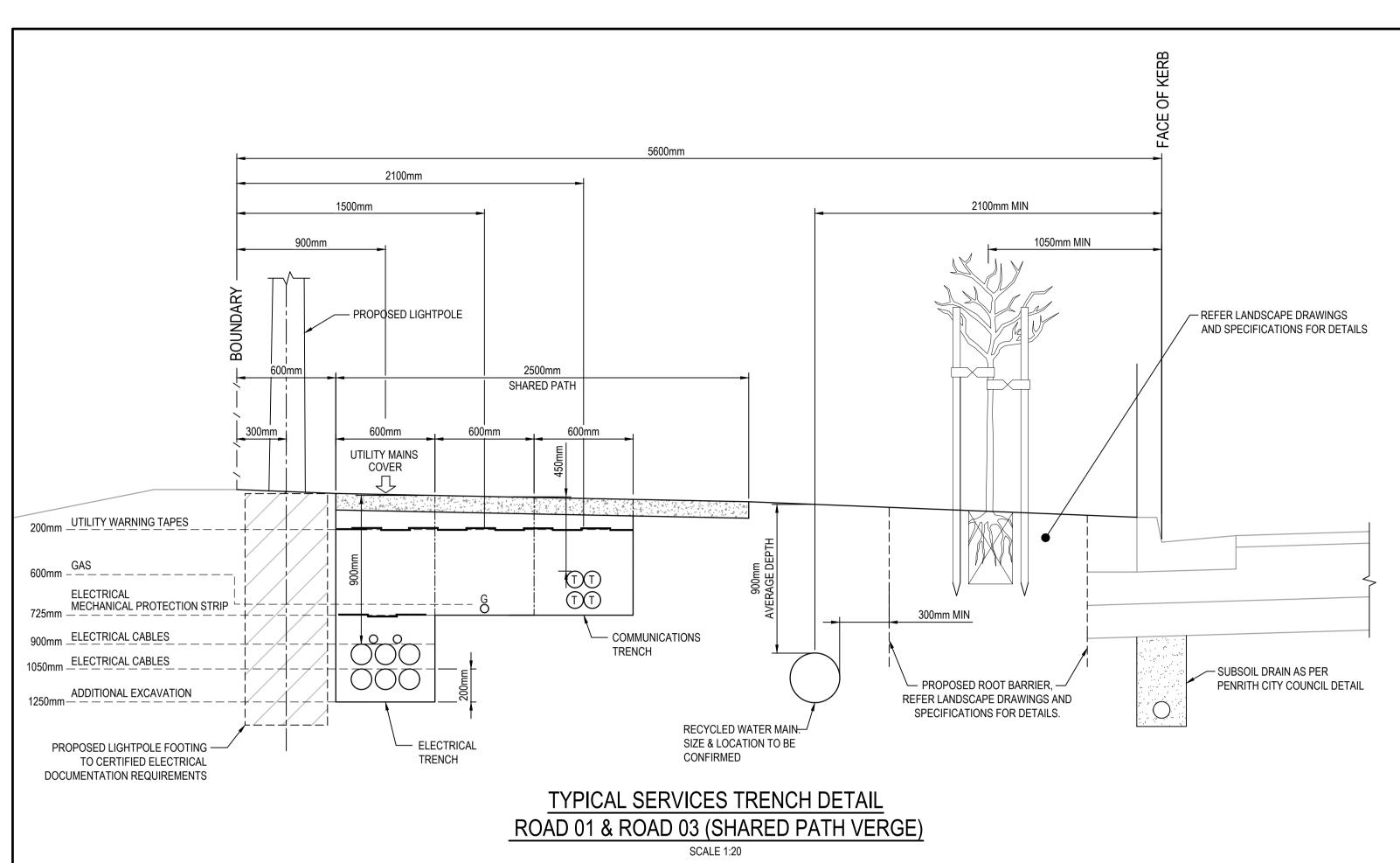
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Issue

Status FOR CONSTRUCTION
Project - Drawing No.

Project - Drawing No. 18-596-C8012

TYPICAL ROAD SECTIONS



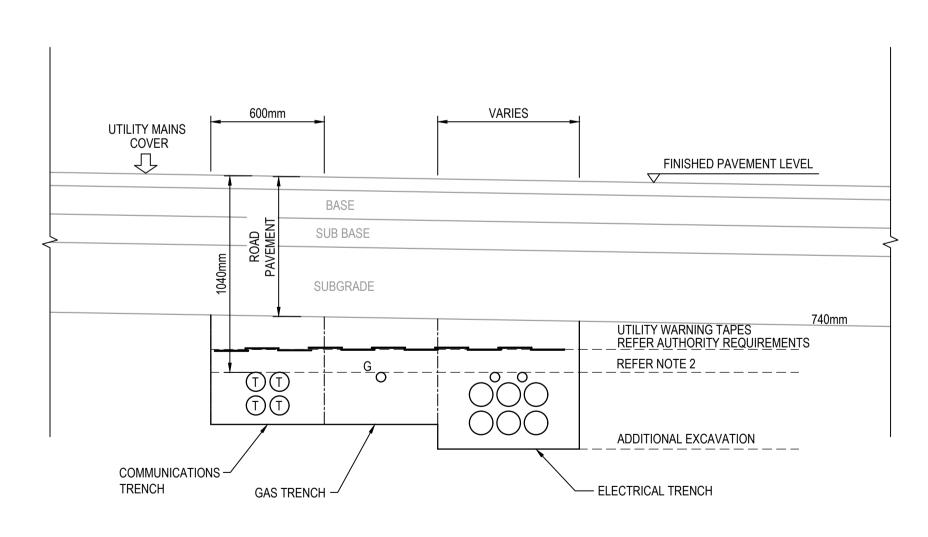
4600mm 2100mm MIN 1500mm 900mm REFER LANDSCAPE DRAWINGS — PROPOSED LIGHTPOLE AND SPECIFICATIONS FOR DETAILS 1500mm FOOTPATH UTILITY MAINS COVER 200mm UTILITY WARNING TAPES ELECTRICAL TT300mm MIN 900mm ELECTRICAL CABLES COMMUNICATIONS TRENCH 1050mm ELECTRICAL CABLES — SUBSOIL DRAIN AS PER PENRITH CITY COUNCIL DETAIL PROPOSED ROOT BARRIER, -ADDITIONAL EXCAVATION REFER LANDSCAPE DRAWINGS AND SPECIFICATIONS FOR DETAILS. POTABLE WATER MAIN. -SIZE & LOCATION TO BE CONFIRMED ELECTRICAL PROPOSED LIGHTPOLE FOOTING PROPOSED STORMWATER BOX CULVERT/PIPE. -**TRENCH** REFER TO PLANS FOR TYPE AND SIZES TO CERTIFIED ELECTRICAL DOCUMENTATION REQUIREMENTS

> TYPICAL SERVICES TRENCH DETAIL ROAD 01 & ROAD 03 (FOOTPATH VERGE)

> NOTE: FINAL NUMBER, SIZING AND SPACING OF CONDUITS AND PROTECTION STRIPS SUBJECT TO CERTIFIED ELECTRICAL AND COMMUNICATIONS AUTHORITY DOCUMENTATION.

SCALE 1:20

NOTE: FINAL NUMBER, SIZING AND SPACING OF CONDUITS AND PROTECTION STRIPS SUBJECT TO CERTIFIED ELECTRICAL AND COMMUNICATIONS AUTHORITY DOCUMENTATION.



TYPICAL SERVICES TRENCH DETAIL (ROAD CROSSING)

SCALE 1:20

1: FINAL NUMBER, SIZING AND SPACING OF CONDUITS AND PROTECTION STRIPS SUBJECT TO CERTIFIED ELECTRICAL AND COMMUNICATIONS

<u>NOTES</u>

Description

100mm on Original

AUTHORITY DOCUMENTATION. 2: UTILITY DEPTHS TO BE INSTALLED IN ACCORDANCE WITH AUTHORITY

REQUIREMENTS OR MINIMUM 300mm BELOW SUBGRADE, WHICHEVER IS THE MORE ONEROUS.

Bar Scales 1:20 @ A1 1:40 @ A3 ISSUED FOR CONSTRUCTION 17-11-22 ISSUED FOR SWC APPROVAL 20-10-22

Date

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Height Datum	AHD	Approved	DS	
Datum				Title

GDA2020

ASPECT INDUSTIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B

> TYPICAL DETAILS SHEET 1

Subdivision Works Certificate: EA22/0045 Subject to the conditions outlined in the consent Civil Engineers and Project Managers

CITY COUNCIL This plan / document relates to

Development Consent:

PENRITH

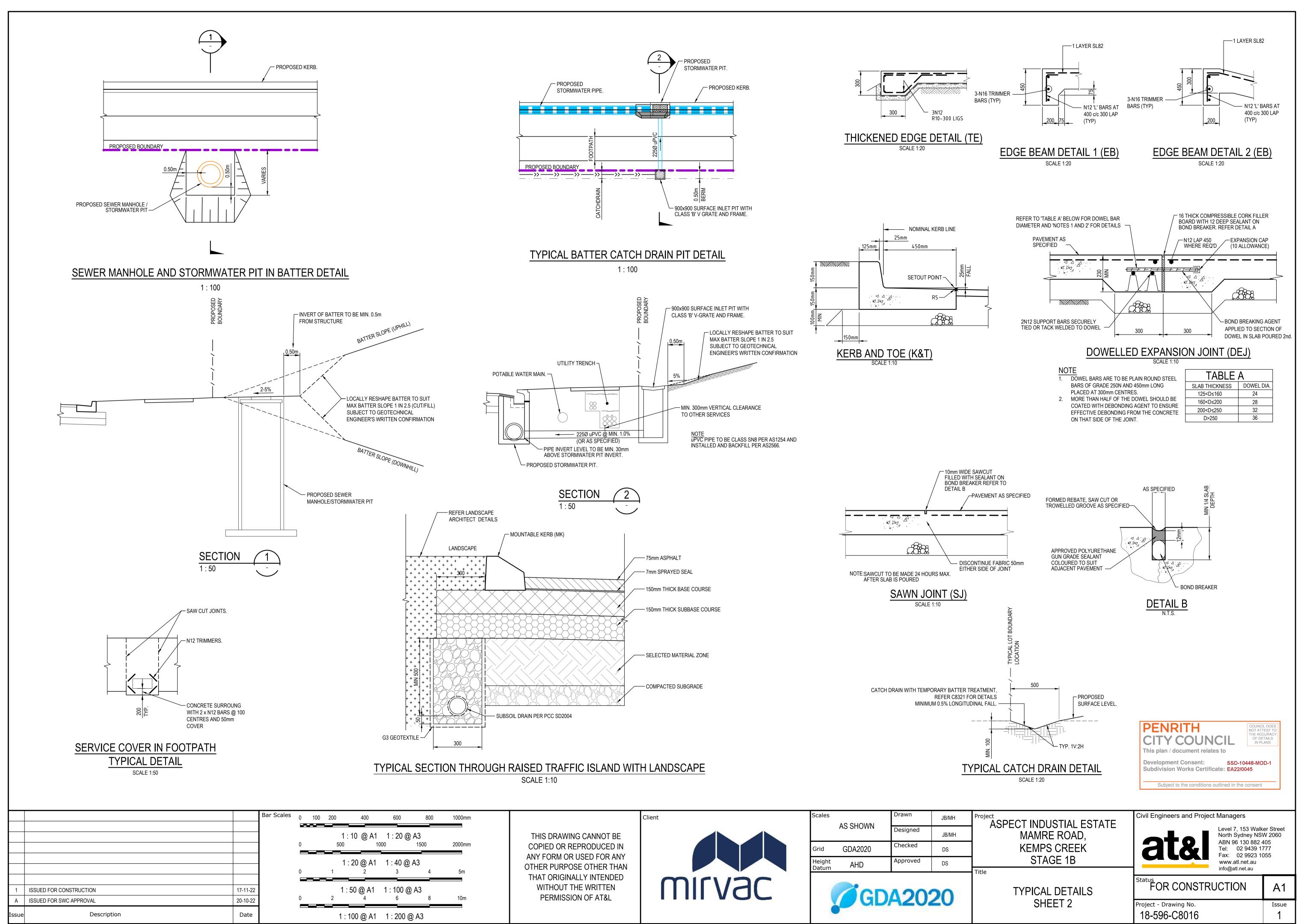
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OF DETAILS IN PLANS

SSD-10448-MOD-1

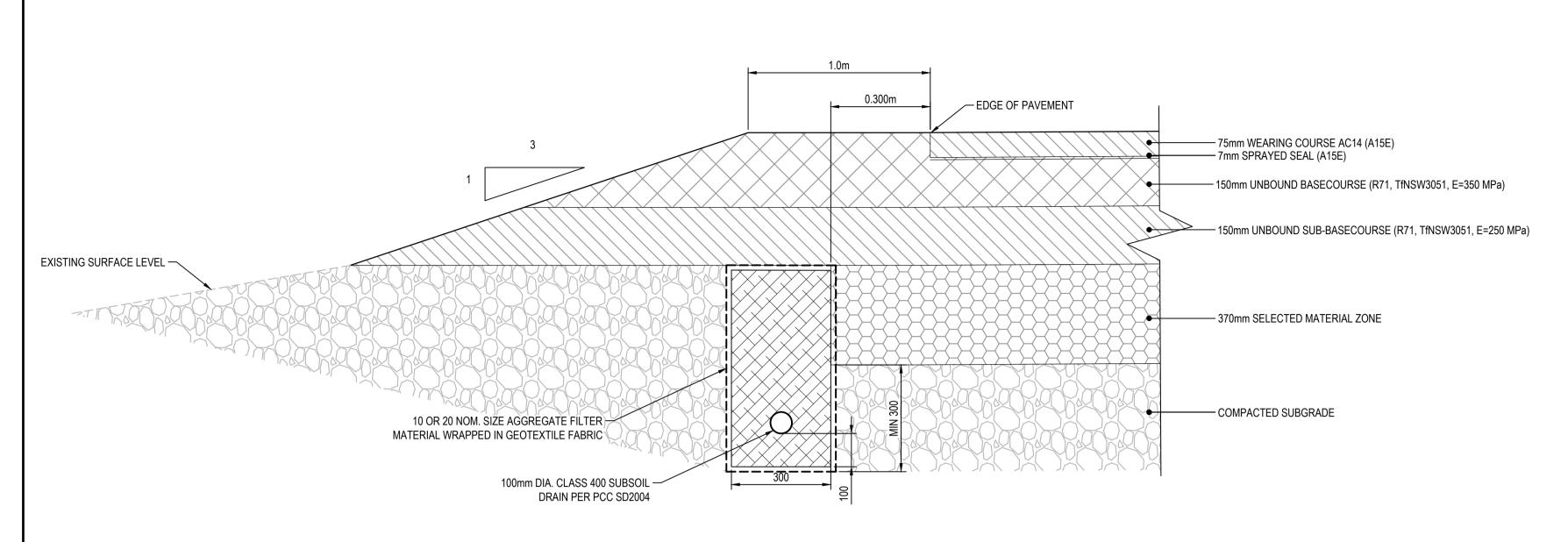
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Issue 18-596-C8015



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1:10 @ A1 1:20 @ A3

17-11-22

20-10-22

Date

ISSUED FOR CONSTRUCTION

ISSUED FOR SWC APPROVAL

Description

NO FINES CONCRETE (RMS222)

NO FINES CONCRETE (RMS222)

ENCLOSED IN GEOTEXTILE FABRIC

SUBSOIL PIPE PER PCC SD2004

END OF ROAD PAVEMENT INTERFACE DETAIL

SCALE 1:10

SUBSOIL DRAIN IN PAVEMENT DETAIL

SCALE 1:10

Designed

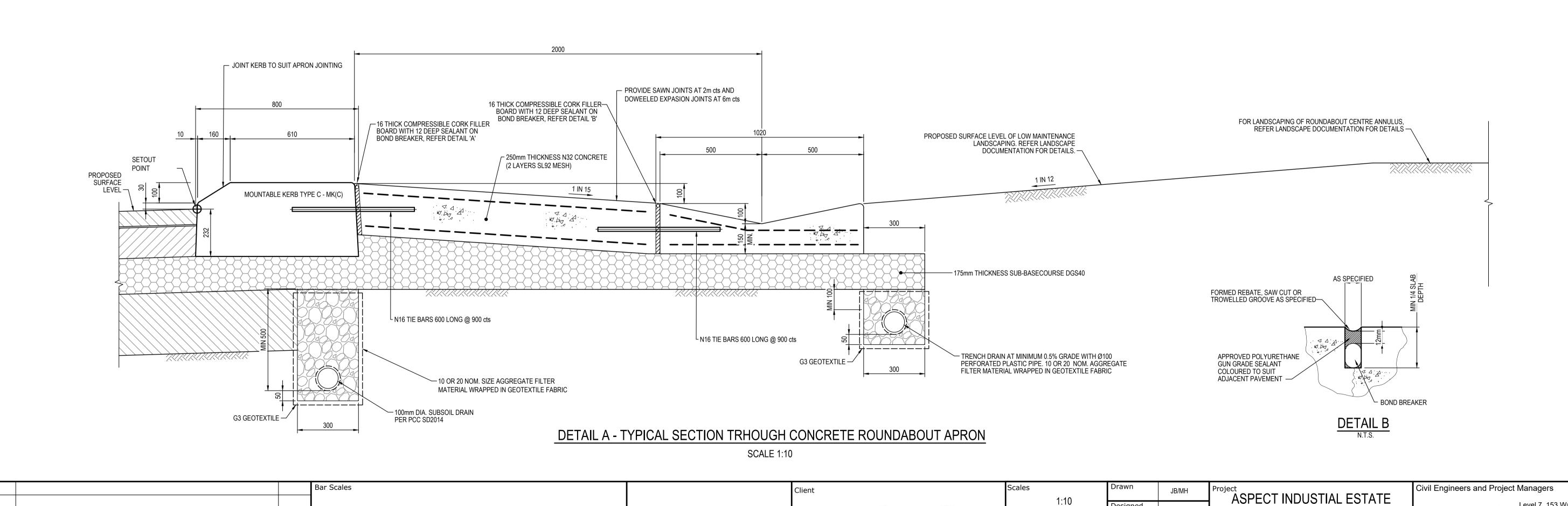
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GDA2020

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Project - Drawing No.

18-596-C8017

FOR CONSTRUCTION

MAMRE ROAD,

KEMPS CREEK

STAGE 1B

TYPICAL DETAILS

SHEET 3

Level 7, 153 Walker Street

Issue

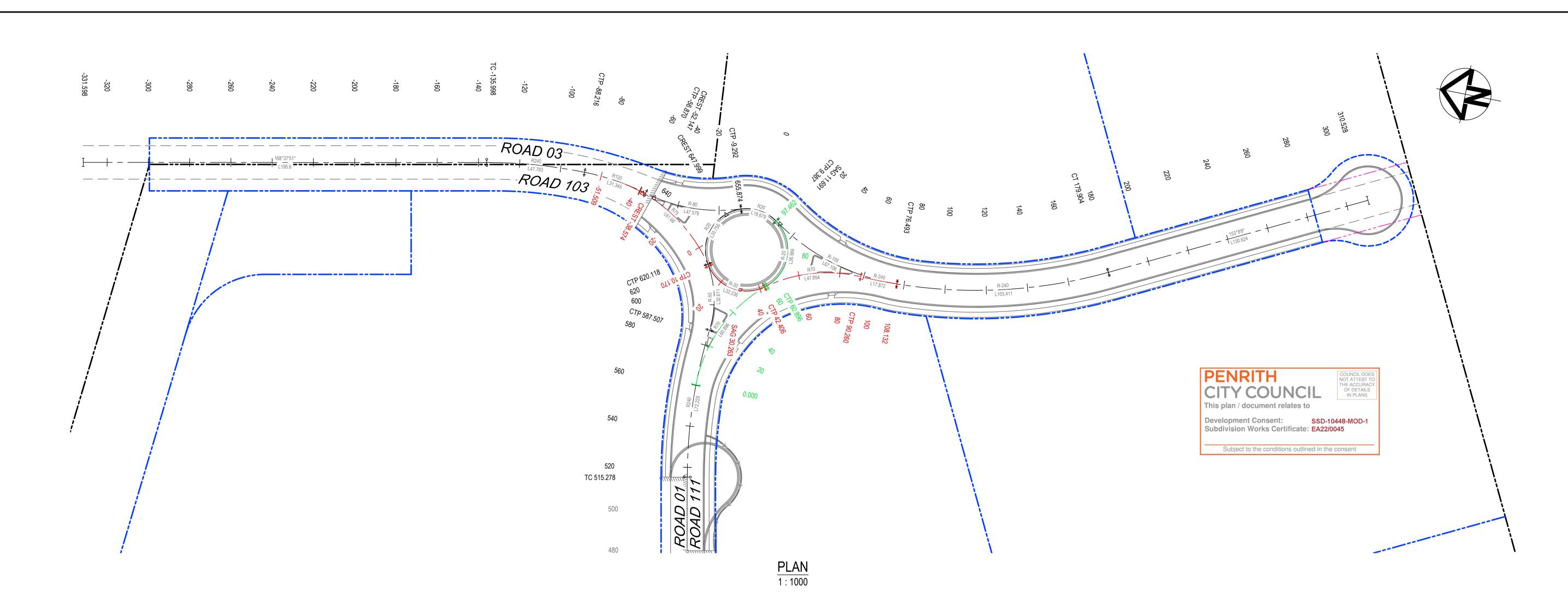
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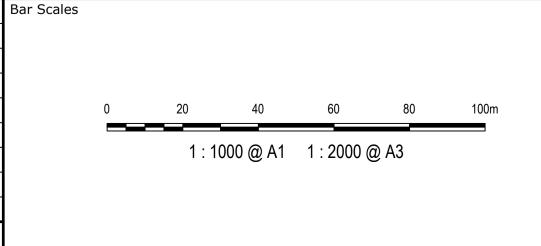
CONTROL ROAD - ROAD 01 HORIZONTAL POINTS							
PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP1	0.000	294705.871	6253037.413	82°59'28.38"			
TC	48.971	294754.476	6253043.389	82°59'28.38"			
IP 2	75.676	294780.995	6253046.649		R = -700.000	53.411	4°22'18.19"
СТ	102.382	294807.188	6253051.921	78°37'10.18"			
TC	515.278	295211.966	6253133.395	78°37'10.18"			
IP 3	551.392	295247.640	6253140.576		R = 240.000	72.229	17°14'35.96"
CC	587.507	295283.839	6253136.859	95°51'46.15"			
IP 4	603.812	295300.659	6253135.131		R = -50.000	32.611	37°22'10.52"
CC	620.118	295315.076	6253143.968	58°29'35.62"			
IP 5	637.996	295336.297	6253156.976		R = 20.000	35.756	102°26'01.17"
IP 6	655.874	295344.430	6253133.452	160°55'36.79"			

CONTROL ROAD - ROAD 111 HORIZONTAL POINTS								
PT CHAINAGE EASTING NORTHING BEARING RAD/SPIRAL A.LENGTH DEFL.AN								
IP 1	0.000	295256.611	6253138.100	89°21'06.19"				
IP 2	30.448	295289.134	6253138.468		R = 70.000	60.896	49°50'37.46"	
CC	60.896	295310.389	6253113.848	139°11'43.65"				
IP 3	79.179	295327.346	6253094.206		R = -20.000	36.566	104°45'14.70"	
IP 4	97.462	295342.022	6253115.606	34°26'28.95"				

CONTROL ROAD - ROAD 03 HORIZONTAL POINTS								
PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE	
IP 1	-331.598	295303.590	6253450.523	168°37'51.08"				
TC	-135.998	295342.149	6253258.761	168°37'51.08"				
IP 2	-112.107	295346.874	6253235.261		R = 240.000	47.783	11°24'26.08"	
СС	-88.216	295346.858	6253211.290	180°02'17.16"				
IP 3	-72.543	295346.847	6253195.528		R = 120.000	31.345	14°57'58.48"	
CC	-56.870	295342.767	6253180.303	195°00'15.64"				
IP 4	-33.081	295336.420	6253156.623		R = -80.000	47.579	34°04'32.52"	
CC	-9.292	295344.430	6253133.452	160°55'43.13"				
IP 5	0.048	295347.725	6253123.922		R = 20.000	18.679	53°30'41.97"	
CC	9.387	295342.022	6253115.606	214°26'25.10"				
IP 6	42.940	295322.373	6253086.953		R = -105.000	67.106	36°37'04.15"	
CC	76.493	295323.693	6253052.234	177°49'20.95"				
IP 7	128.198	295325.689	6252999.752		R = -240.000	103.411	24°41'14.86"	
СТ	179.904	295349.422	6252952.900	153°08'06.09"				
IP 8	310.528	295408.450	6252836.373	153°08'06.09"				

CONTROL ROAD - ROAD 103 HORIZONTAL POINTS							
PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	-51.509	295345.647	6253194.360	188°08'56.43"			
IP 2	-20.669	295341.011	6253161.986		R = 75.000	61.680	47°07'11.09"
CC	10.170	295314.134	6253143.353	235°16'07.53"			
IP 3	26.288	295297.009	6253131.482		R = -20.000	32.236	92°20'53.11"
CC	42.406	295309.572	6253114.858	142°55'14.42"			
IP 4	66.333	295324.588	6253094.989		R = 70.000	47.854	39°10'08.82"
CC	90.260	295323.679	6253070.101	182°05'23.23"			
IP 5	99.196	295323.353	6253061.167		R = -240.000	17.872	4°15'59.46"
IP 6	108 132	295323 693	6253052 234	177°49'23 77"			

1	ISSUED FOR CONSTRUCTION	17-11-22
Α	ISSUED FOR SWC APPROVAL	20-10-22
Issue	Description	Date



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Client

Scales	1,1000	Drawn	JB/MH
	1:1000	Designed	JB/MH
Grid	GDA2020	Checked	DS
Height	AHD	Approved	DS

ASPECT INDUSTIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B

Civil Engineers and Project Managers

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CONTROL LINE SETOUT PLAN

FOR CONSTRUCTION Project - Drawing No. Issue 18-596-C8050

