TELFORD CIVIL
CONSULTING CIVIL & STORMWATER ENGINEERS

PROPOSED MIXED-USE DEVELOPMENT
68-80 O'CONNELL STREET, CADDENS
CIVIL ENGINEERING PLANS

ISSUED FOR DEVELOPMENT APPLICATION

LOCALITY PLAN
N.T.S

LOT 1 & 2 DP 1268507

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HOLDMARK

PENRITH CITY COUNCIL

PROPOSED MIXED-USE DEVELOPMENT
68-80 O'CONNELL STREET, CADDENS
CIVIL ENGINEERING PLANS

PROJECT No.:	STAGE:	MILESTONE:	REVISION DATE:	DRAWING No.:	REVISION:
25037	1	DA	08/08/2025	000	A

GENERAL NOTES

1. ALL WORK IS TO CONFORM TO THE CURRENT COUNCIL STANDARDS, DRAWINGS AND SPECIFICATIONS U.N.O.
2. WHERE CONNECTION IS TO BE MADE TO EXISTING CONSTRUCTION, THE CONTRACTOR SHALL CONFIRM THE LOCATION AND LEVEL OF THIS CONSTRUCTION PRIOR TO COMMENCING WORK ON ANY CRITICAL SECTION. THE SUPERINTENDENT MAY VARY LEVELS AND GRADIENTS OF NEW WORKS TO ACHIEVE A SATISFACTORY CONNECTION.
3. LEVEL DATUM IS AHD.
4. ALL DIMENSIONS ARE IN METRES U.N.O.
5. PRIOR TO CONSTRUCTION, THE CONTRACTOR IS TO BE SATISFIED OF THE CORRECT LOCATIONS OF ALL EXISTING SERVICES WHETHER INDICATED OR NOT ON THE PLANS. ANY DAMAGE TO EXISTING SERVICES IS TO BE RECTIFIED AT THE CONTRACTORS EXPENSE.
6. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY BENCH MARK LEVELS AND ADVISE THE SUPERINTENDENT OF ANY DISCREPANCIES.
7. PRIOR TO CONSTRUCTION, THE CONTRACTOR IS TO CONFIRM WITH THE SUPERINTENDENT THE FOLLOWING:
   - 7.A. ALL INSPECTION HOLD POINTS;
   - 7.B. ALL COMPLIANCE TESTING REQUIREMENTS.
8. ANY WORK ON EXISTING SERVICES THAT REQUIRE RELOCATION BY AUTHORITIES SHALL BE CARRIED OUT BY THE RELEVANT AUTHORITY, BUT WITHIN TERMS OF THE CONTRACT, AND SHALL BE CO-ORDINATED BY THE CONTRACTOR.
9. AT COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL ARRANGE FOR AN INDEPENDENT LICENSED SURVEYOR TO CARRY OUT A "WORKS AS CONSTRUCTED" SURVEY IN ACCORDANCE WITH THE CURRENT COUNCIL STANDARDS AND SUBMIT THE DETAILS SHOWN ON A PLAN TO THE SUPERINTENDENT.
10. ALL VERGES ARE TO BE FULLY TURFED WITH COUCH. REFER TO LANDSCAPE ARCHITECTS PLANS FOR DETAILS.

EARTHWORKS NOTES

1. EARTHWORKS NOTES ARE TO BE READ IN CONJUNCTION WITH THE GENERAL AND COORDINATION NOTES.
2. EARTHWORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH PROCEDURES SET DOWN IN AS3798 'GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS'.
3. BULK EARTHWORKS INCLUDING CLEARING, FILLING AND TESTING, ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE CURRENT COUNCIL STANDARDS, DRAWINGS AND SPECIFICATIONS. COUNCIL STANDARDS SUPERSEDE ANY NOTES OR SPECIFICATIONS WRITTEN ON THE DESIGN DRAWINGS.
4. BULK EARTHWORKS LEVELS SHALL BE DETERMINED RELATIVE TO THE FINISHED SURFACE LEVELS. REFER TO ARCHITECTURAL DRAWINGS FOR SLAB LEVELS, TO STRUCTURAL ENGINEERS DRAWINGS FOR BUILDING AND PATH SLAB THICKNESS, AND TO CIVIL ENGINEERS DRAWINGS FOR EXTERNAL FINISHED SURFACE LEVELS AND EXTERNAL PAVEMENT THICKNESSES.
5. TOPSOIL SHALL BE STOCKPILED AS DIRECTED BY THE SUPERINTENDENT ON SITE.
6. PRIOR TO PLACEMENT OF ANY FILLING, ALL TOPSOIL AND ORGANIC MATERIAL IS TO BE REMOVED AND THE SUBGRADE SHALL BE UNIFORMLY COMPACTED TO THE MINIMUM DRY DENSITY RATIOS SHOWN IN NOTE 8. ANY SOFT SPOTS REVEALED BY COMPACTION SHALL BE REMOVED AS DIRECTED BY THE SUPERINTENDENT AND BACKFILLED WITH COMPACTED SELECT FILL.
7. MOISTURE CONTENT OF COMPACTED FILL SHOULD BE MAINTAINED WITHIN 2% OF OPTIMUM MOISTURE CONTENT.
8. FILL SHALL BE COMPACTED IN MAXIMUM 200mm THICK LAYERS (LOOSE THICKNESS) TO THE FOLLOWING MINIMUM DRY DENSITY RATIOS (STANDARD COMPACTION A.S.1289.5-1):
   - 8.A. UPPER 0.3m OF PAVEMENT SUBGRADE = 100%;
   - 8.B. UNDER BUILDINGS = 98%;
   - 8.C. GENERAL FILL = 95%.
9. ALL FILL MATERIAL PLACED ON THE SITE SHALL COMPRISE ONLY NATURAL EARTH AND ROCK, AND IS TO BE FREE OF CONTAMINANTS (AS DEFINED BY SECTION 11 OF THE ENVIRONMENTAL PROTECTION ACT 1994), NOXIOUS, HAZARDOUS, DELETERIOUS AND ORGANIC MATERIALS. NO DEMOLITION MATERIAL IS TO BE USED. SUITABLE FILL MATERIAL IS DEEMED TO COMPLY WITH THE REQUIREMENTS OF CLAUSE 4.3 OF AS3798, 'GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS'.
10. IMPORTED FILL SHALL COMPLY WITH THE FOLLOWING:
    - 10.A. SOAKED CBR = MINIMUM OF 15%;
    - 10.B. LIQUID LIMIT = 30% MAX;
    - 10.C. PLASTICITY INDEX = 15% MAX;
    - 10.D. MAXIMUM AGGREGATE SIZE = 75mm;
    - 10.E. PASSING 0.075mm SIEVE = 30% MAX;
    - 10.F. SHRINK/SWELL INDEX = 1.0% MAX.
11. THE CONTRACTOR IS TO ENGAGE, AT THEIR EXPENSE, AN APPROVED NATA REGISTERED LABORATORY TO CARRY OUT SITE CONTROL TO 'LEVEL 1' STANDARD AS SET OUT IN APPENDIX B OF AS3798-2007 'GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS' AND PROVIDE A 'LEVEL 1' REPORT ON COMPLETION OF EARTHWORKS.

BEFORE YOU DIG www.byda.com.au
Zero Damage - Zero Harm

DISCLAIMER

ALL INFRASTRUCTURE INFORMATION (MAINS, SEWER, PIPES ETC.) IS DERIVED FROM DIAL BEFORE YOU DIG RECORDS. EVERY EFFORT WAS MADE TO ENSURE ACCURACY OF THESE RECORDS WHEN COMPILED. NO WARRANTY IS GIVEN TO CURRENCY OF DEPTHS AND LEVELS DUE TO THE POSSIBILITY OF SUBSEQUENT ALTERATION OF LEVELS THROUGH FILLING OR EXCAVATION. USERS OF THE INFORMATION IN THIS DRAWING/DESIGN SHOULD TAKE ALL REASONABLE STEPS TO VERIFY THE RELEVANT INFORMATION BEFORE COMMENCING EXCAVATING OR CONSTRUCTION WORK. TELFORD CONSULTING CIVIL AND STORMWATER ENGINEERS TAKE NO RESPONSIBILITY FOR APPARENT ERRORS OR INACCURACIES IN THE INFORMATION PROVIDED.

DRAINAGE NOTES

1. DRAINAGE NOTES ARE TO BE READ IN CONJUNTION WITH THE GENERAL AND COORDINATION NOTES.
2. CONTRACTOR IS TO CHECK THAT THE PROPOSED PIPE WORKS DO NOT CLASH WITH EXISTING SERVICES PRIOR TO ANY TRENCH EXCAVATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY CLASHES ARE FOUND FOR ADVICE ON ANY DESIGN REQUIREMENTS.
3. STRUCTURES HAVE BEEN DESIGNED FOR OPERATIONAL LOADS ONLY. THE CONTRACTOR IS RESPONSIBLE FOR THE ASSESSMENT OF CONSTRUCTION LOADS AND PROVISION OF ANY TEMPORARY BRACING, PROPPING, ETC. REQUIRED DURING CONSTRUCTION. STRUCTURES SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED.
4. ALL TRENCH EXCAVATIONS AND CONSTRUCTION IS TO BE IN ACCORDANCE WITH THE WORKPLACE HEALTH AND SAFETY 1989 AS AMENDED AND THE MINE REGULATIONS ACT.
5. ALL TRENCHES IN TRAFFICABLE AND NON TRAFFICABLE ZONES SHALL BE BACKFILLED TO DENSITY RATIOS, FREQUENCIES AND LAYER INTERVALS IN ACCORANCE WITH THE CURRENT COUNCIL STANDARDS. ALL TEST RESULTS SHALL BE FORWARDED TO THE SUPERINTENDENT AS THEY BECOME AVAILABLE.
6. ALL PRECAST CONCRETE PIPES ARE TO BE MANUFACTURED IN ACCORDANCE WITH AS 4058. STORMWATER PIPES SHALL BE TO FOLLOWING CLASSES U.N.O.
   - 6.A. REINFORCED CONCRETE PIPES (RCP) = CLASS 2;
   - 6.B. FIBRE REINFORCED PIPES (FRC) = CLASS 2;
   - 6.C. uPVC = CLASS 'SEH'.
7. ALL RCP PIPES SHALL HAVE THE FOLLOWING JOINTS U.N.O.
   - 7.A. RCP <=600 DIA = RUBBER RING JOINTED (RRJ);
   - 7.B. RCP >600 DIA = FLUSH JOINTED (FJ).
8. ROOFWATER PIPES SHALL BE uPVC PIPES CLASS 'SH' U.N.O.
9. REFER TO STORMWATER LONGITUDINAL SECTIONS FOR ALL STRUCTURE TYPES, SIZES, LEVELS AND GRATE TYPES. GRATES SHALL BE TRAFFICABLE CLASS 'D' U.N.O.
10. MANHOLE AND FIELD INLET ACCESS SHALL BE INSTALLED AS DESCRIBED BELOW IN ACCORDANCE WITH AS1657:
    - 10.A. GULLY/FIELD INLETS >1.35m DEPTH: STEP IRONS;
    - 10.B. MANHOLES 0.850m-3.0m DEPTH: STEP IRONS;
    - 10.C. MANHOLES >3.0m DEPTH: FIXED ACCESS LADDER.
11. TEST CERTIFICATES AND MATERIAL CERTIFICATION DOCUMENTATION IS REQUIRED FOR ALL PIPES, FITTINGS, BOX CULVERTS AND OTHER PRECAST CONCRETE PRODUCTS.
12. ALL STORMWATER SETOUT IS TO CENTRE OF STRUCTURE U.N.O.

EROSION AND SEDIMENT CONTROL NOTES

1. EROSION & SEDIMENT CONTROL (ESC) NOTES ARE TO BE READ IN CONJUNCTION WITH THE GENERAL AND COORDINATION NOTES.
2. ALL ESC MEASURES SHALL BE IN ACCORDANCE WITH CURRENT COUNCIL STANDARDS, DRAWINGS AND SPECIFICATIONS U.N.O.
3. CONSTRUCTION OF ALL SEDIMENT CONTROL MANAGEMENT DEVICES SHALL BE TO THE SATISFACTION OF THE SUPERINTENDENT. THE CONTRACTOR IS TO FOLLOW THE CONSTRUCTION PHASE AS OUTLINED:
   - 3.A. CONSTRUCTION OF EROSION AND SEDIMENT DEVICES;
   - 3.B. STRIPPING TOPSOIL;
   - 3.C. BULK EARTHWORKS;
   - 3.D. SERVICES, BUILDING, PAVEMENT AND ROAD CONSTRUCTION;
   - 3.E. LANDSCAPED AREAS TO BE TOPSOILED, TURFED, MULCHED OR PLANTED.
4. THE CONTRACTOR IS TO PROVIDE A CONSTRUCTION TRAFFIC SHAKEDOWN DEVICE AT ALL RELEVANT POINTS OF EXIT FROM THE SITE. THE CONTRACTOR SHALL CLEAN OUT AND MAINTAIN THE SHAKEDOWN DEVICE REGULARLY TO ENSURE EFFICIENT OPERATION.
5. THE CONTRACTOR SHALL PROVIDE SILT FENCES IMMEDIATELY DOWNSTREAM OF ANY SOIL STOCKPILES.
6. BOTH TEMPORARY AND PERMANENT ESC MEASURES SHALL BE MAINTAINED AT A SUITABLE LEVEL/CONDITION THROUGHOUT CONSTRUCTION TO THE SATISFACTION OF THE SUPERINTENDENT.
7. ALL TEMPORARY ESC MEASURES SHALL BE MAINTAINED AND FULLY OPERATIONAL DURING THE CONSTRUCTION AND MAINTENANCE PERIOD, AND ARE TO BE REMOVED AFTER THE SATISFACTORY COMPLETION OF AN 'OFF MAINTENANCE' INSPECTION BY THE SUPERINTENDENT.
8. ALL ESC MEASURES ARE TO BE INSPECTED AT LEAST DAILY, PRIOR TO EXPECTED RAINFALL AND AFTER RAINFALL. ANY DAMAGE OR EXCESS EROSION/SEDIMENT IS TO BE REPAIRED/MANAGED AS REQUIRED TO MAINTAIN CONTROL DEVICES.
9. ALL ESC MEASURES MUST SUIT THE PREVAILING CLIMATE/WEATHER CONDITIONS AT THE TIME OF CONSTRUCTION.
10. THE CONTRACTOR IS TO ENSURE THE SUPPRESSION OF DUST AT ALL TIMES DURING THE CONSTRUCTION AND MAINTENANCE PERIOD OF THE DEVELOPMENT. ENVIRONMENTAL HARM AND NUISANCE FROM DUST IS TO BE PREVENTED. ACCEPTABLE METHODS INCLUDE:
    - 10.A. WATERING;
    - 10.B. PROMOTING VEGETATION IN WIND EROSION PRONE AREAS;
    - 10.C. CONSTRUCTING WIND BREAKS;
    - 10.D. MULCHING.
11. THE CONTRACTORS VEHICLES & PLANT SHALL NOT OPERATE OUTSIDE THE LIMITS OF THE IMMEDIATE CONSTRUCTION AREA AND ARE RESTRICTED FROM CROSSING OR DISTURBING AREAS NOT SUBJECT TO CONSTRUCTION.
12. ANY WATER TRAPPED WITHIN THE TEMPORARY SEDIMENT BASIN IS TO BE REGULARLY TESTED DURING THE COURSE OF CONSTRUCTION. REFER TO WATER QUALITY MONITORING TABLE FOR DETAILS.
13. ALL DISTURBED GROUND IS TO BE GRASS SEEDED TO PREVENT EROSION IF THE DISTURBED GROUND IS TO BE LEFT "OPEN" FOR A PERIOD GREATER THAN ONE (1) MONTH.

LEGEND

DESCRIPTION	PROPOSED	EXISTING	FUTURE
STORMWATER PIPELINE	375Ø		
STORMWATER DRAINAGE PITS			
DRAINAGE LINE No. 3 DRAINAGE PIT No. 10	3 / 10	3 / 10	3 / 10
CONCRETE HEADWALL			
SUBSOIL DRAIN	SS SS		
150mm KERB AND GUTTER	K&G	EXIST. K&G	FUT. K&G
ROLL KERB AND GUTTER	RK	EXIST. RK	FUT. RK
KERB ONLY	KO	EXIST. KO	FUT. KO
EDGE STRIP	ES	EXIST. ES	FUT. ES
MOUNTABLE KERB	MK	EXIST. MK	FUT. MK
DISH CROSSING	DC	EXIST. DC	FUT. DC
VEHICULAR CROSSING	VC	EXIST. VC	FUT. VC
PEDESTRIAN RAMP	PR	EXIST. PR	FUT. PR
EDGE OF BITUMEN	EOB	EXIST. EOB	FUT. EOB
ROAD PAVEMENT			
BATTERS			
CONCRETE PATHWAY			
CONTOURS	99.0 99.5	99.0 99.5	99.0 99.5
SITE REGRADING AREA	CUT FILL		
SERVICE LINES SEWER, GAS, WATER, ELECTRICITY	S G W E	ExS ExG ExW ExE	
COMMUNICATION LINES TELSTRA, FIBRE OPTIC, NBN	T OP NBN	ExT ExOP ExNBN	
OVER HEAD LINES AND POLES	EO	ExEO	
SERVICE PITS TELECOM PIT, ACCESS CHAMBER, HYDRANT, STOP VALVE, AIR VALVE	TP AC H SV AV		
LIMIT OF ROAD CONSTRUCTION			
STAGE BOUNDARY			
FENCE POST AND RAIL FENCE SECURITY FENCE		REMOVE RETAIN	
RETAINING WALL			
ROCK WALL			
ROOF WATER OUTLET TO KERB			
ROOF WATER OUTLET TO BACK OF PIT			

NOT FOR CONSTRUCTION

Issue	Description	Date	Design	Checked
A	ISSUE FOR DEVELOPMENT APPLICATION	08/08/2025	J.T.K.	J.A.B.

1cm at full size (0, 10cm, 20cm)

Certification By Dr. Michel Chaiya
B.E., M.E. (Res), Ph.D., F.I.E. Aust., CPEng.,
Civil & Structural Engineer

Client: HOLDMARK
Council: PENRITH CITY COUNCIL
Scale:

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Project: 68-80 O'CONNELL STREET, CADDENS
PROPOSED MIXED-USE DEVELOPMENT
CIVIL ENGINEERING PLANS
DEVELOPMENT APPLICATION

Drawing Title: GENERAL NOTES & LEGEND

Scale	Project No.	Dwg. No.	Issue
N.T.S. A1	25037	001	A

LEGEND

- EXISTING LOT BOUNDARY
- 43.00 EXISTING CONTOUR
- EXISTING ROAD CENTRELINE
- EXISTING STRUCTURES TO BE DEMOLISHED
- EXISTING EDGE OF BITUMEN
- EXISTING TOP OF BANK TO BE REMOVED
- EXISTING BOTTOM OF BANK TO BE REMOVED
- EXISTING FENCE TO BE REMOVED
- EXISTING ROAD PAVEMENT TO BE RETAINED
- EXISTING ROAD PAVEMENT TO BE REMOVED
- EXISTING CONCRETE FOOTPATH
- EXISTING CONCRETE FOOTPATH TO BE REMOVED
- ExE EXISTING ELECTRICITY
- ExS EXISTING SEWER MAIN
- ExG EXISTING GAS
- ExW EXISTING WATER MAIN
- ExT EXISTING TELSTRA
- EXISTING TREES TO BE RETAINED
- EXISTING TREES TO BE REMOVED
- PP EXISTING POWER POLE TO BE RELOCATED
- PP EXISTING POWER POLE TO BE RETAINED

EXISTING PRAM RAMPS TO BE RETAINED.
EXISTING ROAD PAVEMENT TO BE RETAINED.
EXISTING KERB AND GUTTER, VERGE AND CONCRETE FOOTPATH TO BE REMOVED.
EXISTING LIGHT POLE TO BE RELOCATED.
EXISTING ROAD PAVEMENT TO BE REMOVED.
EXISTING FENCE TO BE REMOVED.
CORR ROAD
EXISTING HEADWALL TO BE REMOVED.
EXISTING EASEMENT TO BE REMOVED.
EXISTING CONCRETE FOOTPATH TO BE DEMOLISHED.
EXISTING CONCRETE FOOTPATH TO BE RETAINED.
EXISTING STORMWATER CHANNEL TO REMAIN UNDISTURBED.
EXISTING LIGHT TOWER TO BE REMOVED.
EXISTING ROAD TO BE RETAINED.
AVENUE
EXISTING ROAD TO BE DEMOLISHED.
THIRD
BM NAIL TOP KERB RL: 50.58 A.H.D.
EXISTING FENCE TO BE REMOVED.
LOT 1 DP 1268507
LOT 3 DP 1268507
LOT 2 DP 1268507
EXISTING CAR PARK AREA TO BE DEMOLISHED.
EXISTING SEPTIC TANK TO BE REMOVED.
EXISTING FENCE TO BE REMOVED.
EXISTING KERB AND GUTTER AND VERGE TO BE REMOVED.
EXISTING NEIGHBOURING DRIVEWAYS TO REMAIN UNDISTURBED.
O'CONNELL STREET

NOT FOR CONSTRUCTION

Issue	Description	Date	Design	Checked
A	ISSUE FOR DEVELOPMENT APPLICATION	08/08/2025	J.T.K.	J.A.B.

0 1cm at full size 10cm 20cm

Certification By Dr. Michel Chaaya
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Civil & Structural Engineer

Client: HOLDMARK

Council: PENRITH CITY COUNCIL

Scale: 0 10 20 30 m
SCALE 1:500 @ A1

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PROPOSED MIXED-USE DEVELOPMENT
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Drawing Title: EXISTING SERVICES AND DEMOLITION PLAN

Scale	A1	Project No.	Dwg. No.	Issue
1:500		25037	002	A

LEGEND

- SEDIMENT FENCE (SD 6-8)
- STABILISED ACCESS POINT
- GEOTEXTILE INLET FILTER (SD 6-12) DURING CONSTRUCTION OF THE ROAD. MESH & GRAVEL INLET FILTER (SD 6-11) AFTER CONSTRUCTION OF LINTEL. FILTER TO BE REMOVED AFTER COMPLETION OF ALL WORKS AND PRIOR TO SUBDIVISION CERTIFICATE
- CUT AREA
- FILL AREA
- EXISTING ROAD PAVEMENT
- CLEAN WATER DIVERSION SWALE
- DIRTY WATER DIVERSION SWALE
- DESIGN CONTOURS
- EXISTING CONTOURS
- TEMPORARY SEDIMENT BASIN
- EXTENT OF WORKS
- EXISTING LOT BOUNDARY
- PROPOSED LOT BOUNDARY
- PROPOSED STORMWATER PIPE
- PROPOSED TEMPORARY HEADWALL
- PROPOSED GABION WALL
- PROPOSED CONCRETE RETAINING WALL
- PROPOSED TEC FENCE

NOTE:
ROAD BATTERS SHOWN ARE POSSIBLE TEMPORARY BATTERS DURING ROAD CONSTRUCTION.

PROVIDE STABILISED SITE ACCESS.

PROPOSED TEC FENCE.

CORR

ROAD

LIMIT OF CONSTRUCTION. TIE IN NEATLY INTO EXISTING LEVELS.

EXISTING STORMWATER CHANNEL TO REMAIN UNDISTURBED.

THREATENED ECOLOGICAL COMMUNITY

DIRTY WATER SWALE WITH ROCK CHECK DAMS.

PROPOSED TEMPORARY SEDIMENT BASIN 2.

ROAD 1

PROVIDE SEDIMENT FENCE (SD 6-8).

DIRTY WATER SWALE WITH ROCK CHECK DAMS.

ROAD 2

PROPOSED TEMPORARY SEDIMENT BASIN 1.

PROVIDE SEDIMENT FENCE (SD 6-8).

THIRD AVENUE

LOT 3 DP 1268507

ROAD 1

PROVIDE SEDIMENT FENCE (SD 6-8).

ROAD 2

POSSIBLE STOCKPILE SITE

O'CONNELL STREET

LIMIT OF ROAD CONSTRUCTION.

NOT FOR CONSTRUCTION

Issue	Description	Date	Design	Checked
A	ISSUE FOR DEVELOPMENT APPLICATION	08/08/2025	J.T.K.	J.A.B.

1cm at full size (0 – 10cm – 20cm)

Certification By Dr. Michel Chaiya
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Project:
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PROPOSED MIXED-USE DEVELOPMENT
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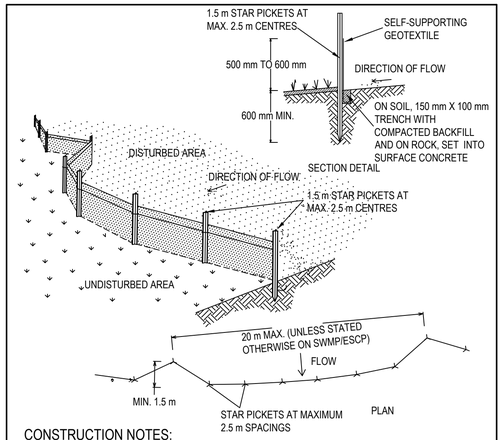
DEVELOPMENT APPLICATION

Drawing Title:
EROSION AND SEDIMENT CONTROL PLAN

Scale	Project No.	Dwg. No.	Issue
1:500 A1	25037	100	A



CONSTRUCTION NOTES:

1. CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND IN THE DESIGN STORM EVENT, USUALLY THE 10-YEAR EVENT.
2. CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
3. DRIVE 1.5 METRE LONG STAR PICKETS INTO GROUND AT 2.5m INTERVALS (MAX) AT THE DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.
4. FIX SELF-SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE POSTS ENSURING IT GOES TO THE BASE OF THE TRENCH. FIX THE GEOTEXTILE WITH WIRE TIES OR AS RECOMMENDED BY THE MANUFACTURER. ONLY USE GEOTEXTILE SPECIFICALLY PRODUCED FOR SEDIMENT FENCING. THE USE OF SHADE CLOTH FOR THIS PURPOSE IS NOT SATISFACTORY.
5. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP.
6. BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.

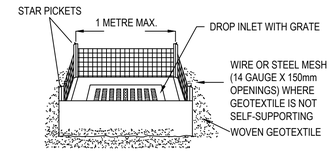
SEDIMENT FENCE SD 6-8

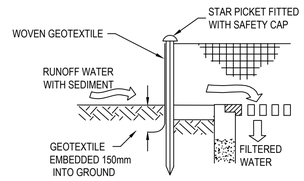
NOTE: THIS PRACTICE ONLY TO BE USED WHERE SPECIFIED IN AN APPROVED SWMP/ESCP.

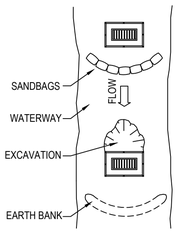
CONSTRUCTION NOTES:

1. INSTALL FILTERS TO KERB INLETS ONLY AT SAG POINTS.
2. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT AND FILL IT WITH 25mm TO 50mm GRAVEL.
3. FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH X 400mm WIDE.
4. PLACE THE FILTER AT THE OPENING LEAVING AT LEAST A 100mm SPACE BETWEEN IT AND THE KERB INLET. MAINTAIN THE OPENING WITH SPACER BLOCKS.
5. FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
6. SANDBAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE PROVIDING THEY ARE PLACED SO THAT THEY FIRMLY ABUT EACH OTHER AND SEDIMENT-LADEN WATERS CANNOT PASS BETWEEN.

MESH AND GRAVEL INLET FILTER SD 6-11







FOR DROP INLETS AT NON-SAG POINTS, SANDBAGS, EARTH BANK OR EXCAVATION USED TO CREATE ARTIFICIAL SAG POINT

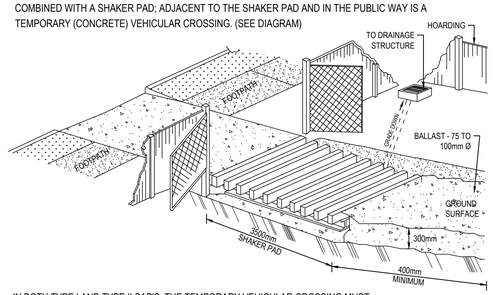
CONSTRUCTION NOTES:

1. FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE OR STRAW BALES.
2. FOLLOW STANDARD DRAWING 6-7 AND STANDARD DRAWING 6-8 FOR INSTALLATION PROCEDURES FOR THE STRAW BALES OR GEOFABRIC. REDUCE THE PICKET SPACING TO 1m CENTRES.
3. IN WATERWAYS, ARTIFICIAL SAG POINTS CAN BE CREATED WITH SANDBAGS OR EARTH BANKS AS SHOWN IN THE DRAWING.
4. DO NOT COVER THE INLET WITH GEOTEXTILE UNLESS THE DESIGN IS ADEQUATE TO ALLOW FOR ALL WATERS TO BYPASS IT.

GEOTEXTILE INLET FILTER SD 6-12

STABILISED ACCESS POINT-TYPE 2

THE TYPE II SAP DESIGN IS MORE DEFINED IN THAT IT REQUIRES AN AREA OF BALLAST WITHIN THE SITE COMBINED WITH A SHAKER PAD; ADJACENT TO THE SHAKER PAD AND IN THE PUBLIC WAY IS A TEMPORARY (CONCRETE) VEHICULAR CROSSING. (SEE DIAGRAM)



IN BOTH TYPE I AND TYPE II SAP'S, THE TEMPORARY VEHICULAR CROSSING MUST:

- CONNECT TO AN EXISTING GUTTER LAYBACK (WHERE THE KERB AND GUTTER EXIST). IF A GUTTER LAYBACK DOES NOT EXIST, THEN THE CONNECTION MUST BE MADE TO THE GUTTER BY REMOVING THE ADJCENT KERB SECTION ONLY.
- CONNECT TO A DISH CROSSING (WHERE KERB AND GUTTER DOES NOT EXIST). IF A DISH CROSSING DOES NOT EXIST, THEN IT MUST BE CONSTRUCTED IN ACCORDANCE WITH DETAILS CONTAINED IN COUNCIL'S ISSUED FOOTPATH CROSSING LEVELS.

IT SHOULD BE NOTED THAT THESE TYPES OF SAPS ARE CONSIDERED TO BE APPLICABLE FOR THE MAJORITY OF ACTIVITIES HOWEVER SOME SITES MAY REQUIRE SPECIAL CONSIDERATION.

SHAKER PAD (CATTLE GRID)

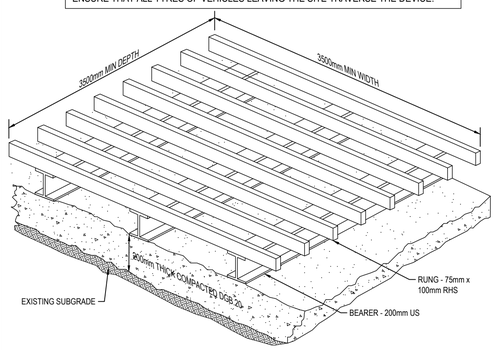
A CORRECTLY DESIGNED AND INSTALLED SHAKER PAD WILL ASSIST IN PREVENTING SEDIMENT TRANSFER FROM A SITE. ANY STABILISED ACCESS POINT (SAP) CAN BE DESIGNED WITH A SHAKER PAD (COMPULSORY IN TYPE II SAP'S).

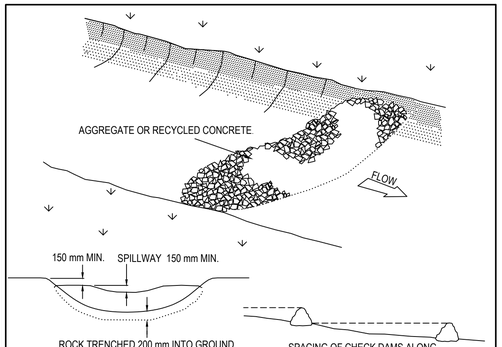
SHAKER PADS CAN BE DESIGNED AND CONSTRUCTED TO ENABLE RE-USE ON FUTURE PROJECTS.

THE SHAKER PAD:

- MUST BE DESIGNED AND CERTIFIED BY A PRACTICING STRUCTURAL ENGINEER. THE CERTIFIED DESIGN SHOULD BE SUBMITTED WITH THE RELEVENT APPLICATION.
- CAN BE CONSTRUCTED FROM ANY SUITABLE MATERIAL.
- MUST BE LOCATED ON A SUITABLY PREPARED AND COMPACTED SUB-GRADE/BASE MATERIAL.
- MUST BE SITUATED SUCH THAT THE RUNGS OF THE SHAKER PAD ARE LEVEL WITH THE ADJOINING NATURAL SURFACE.
- MUST BE A MINIMUM OF 3.5m IN LENGTH.
- MUST BE A MINIMUN OF 3.5m IN WIDTH.
- MUST HAVE CLEAR SPACING BETWEEN RUNGS OF 200 - 250mm.
- RUNGS MUST HAVE A MAXIMUM WIDTH (BEARING AREA) OF 75mm.
- MUST HAVE A MINIMUM CLEAR DEPTH OF 300mm IE FROM THE TOP OF THE RUNG TO THE FINISHED SUB-GRADE/BASE LEVEL.

THE SHAKER PAD MUST BE PROVIDED WITH SUITABLE BARRIERS AT THE SIDES TO ENSURE THAT ALL TYRES OF VEHICLES LEAVING THE SITE TRAVERSE THE DEVICE.

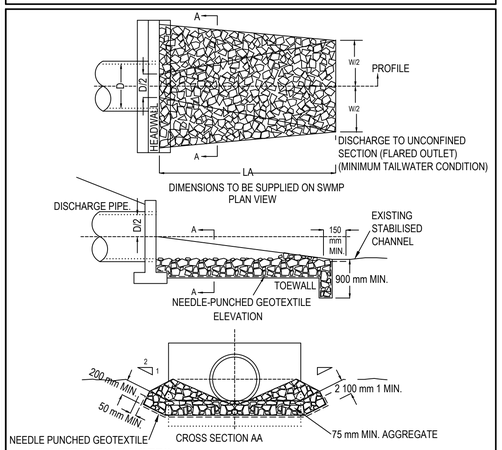




CONSTRUCTION NOTES:

1. CHECK DAMS CAN BE BUILT WITH VARIOUS MATERIALS, INCLUDING ROCKS, LOGS, SANDBAGS AND STRAW BALES. THE MAINTENANCE PROGRAM SHOULD ENSURE THEIR INTEGRITY IS RETAINED, ESPECIALLY WHERE CONSTRUCTED WITH STRAW BALES. IN THE CASE OF BALES, THIS MIGHT REQUIRE THEIR REPLACEMENT EACH TWO TO FOUR MONTHS.
2. TRENCH THE CHECK DAM 200 mm INTO THE GROUND ACROSS ITS WHOLE WIDTH. WHERE ROCK IS USED, FILL THE TRENCHES TO AT LEAST 100 mm ABOVE THE GROUND SURFACE TO REDUCE THE RISK OF UNDERCUTTING.
3. NORMALLY, THEIR MAXIMUM HEIGHT SHOULD NOT EXCEED 600 mm ABOVE THE GULLY FLOOR. THE CENTRE SHOULD ACT AS A SPILLWAY, BEING AT LEAST 150 mm LOWER THAN THE OUTER EDGES.
4. SPACE THE DAMS SO THE TOE OF THE UPSTREAM DAM IS LEVEL WITH THE SPILLWAY OF THE NEXT DOWNSTREAM DAM.

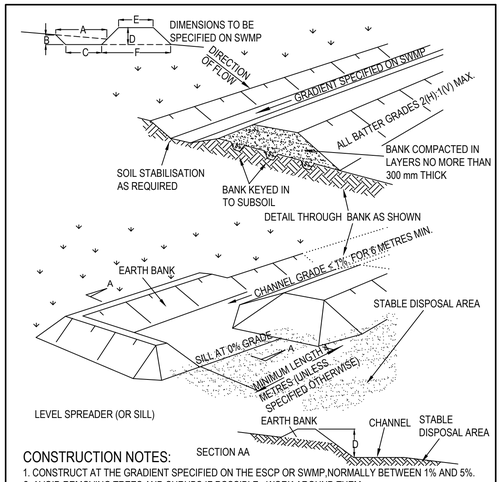
ROCK CHECK DAM SD 5-4



CONSTRUCTION NOTES:

1. COMPACT THE SUBGRADE FILL TO THE DENSITY OF THE SURROUNDING UNDISTURBED MATERIAL.
2. PREPARE A SMOOTH, EVEN FOUNDATION FOR THE STRUCTURE THAT WILL ENSURE THAT THE NEEDLE-PUNCHED GEOTEXTILE DOES NOT SUSTAIN SERIOUS DAMAGE WHEN COVERED WITH ROCK.
3. SHOULD ANY MINOR DAMAGE TO THE GEOTEXTILE OCCUR, REPAIR IT BEFORE SPREADING ANY AGGREGATE. FOR REPAIRS, PATCH ONE PIECE OF FABRIC OVER THE DAMAGE, MAKING SURE THAT ALL JOINTS AND PATCHES OVERLAP MORE THAN 300mm.
4. LAY ROCK FOLLOWING THE DRAWING, ACCORDING TO TABLE 5.2 OF LANDCOM (2004) AND WITH A MINIMUM DIAMETER OF 75mm.
5. ENSURE THAT ANY CONCRETE OR RIPRAP USED FOR THE ENERGY DISSIPATER OR THE OUTLET PROTECTION CONFORMS TO THE GRADING LIMITS SPECIFIED ON THE SWMP.

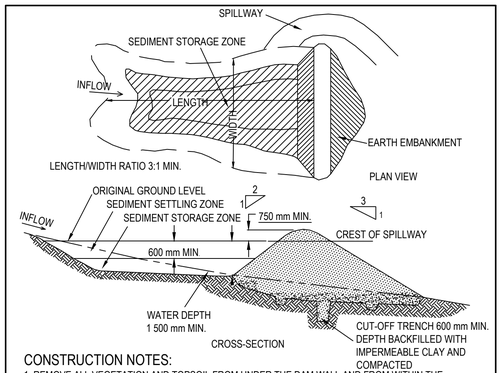
ENERGY DISSIPATER SD 5-8



CONSTRUCTION NOTES:

1. CONSTRUCT AT THE GRADIENT SPECIFIED ON THE ESCP OR SWMP,NORMALLY BETWEEN 1% AND 5%.
2. AVOID REMOVING TREES AND SHRUBS IF POSSIBLE - WORK AROUND THEM.
3. ENSURE THE STRUCTURES ARE FREE OF PROJECTIONS OR OTHER IRREGULARITIES THAT COULD IMPEDE WATER FLOW.
4. BUILD THE DRAINS WITH CIRCULAR, PARABOLIC OR TRAPEZOIDAL CROSS SECTIONS, NOT V-SHAPED, AT THE DIMENSIONS SHOWN ON THE SWMP.
5. ENSURE THE BANKS ARE PROPERLY COMPACTED TO PREVENT FAILURE.
6. COMPLETE PERMANENT OR TEMPORARY STABILISATION WITHIN 10 DAYS OF CONSTRUCTION FOLLOWING TABLE 5.2 IN LANDCOM (2004).
7. WHERE DISCHARGING TO ERODIBLE LANDS, ENSURE THEY OUTLET THROUGH A PROPERLY CONSTRUCTED LEVEL SPREADER.
8. CONSTRUCT THE LEVEL SPREADER AT THE GRADIENT SPECIFIED ON THE ESCP OR SWMP, NORMALLY LESS THAN 1% OR LEVEL.
9. WHERE POSSIBLE, ENSURE THEY DISCHARGE WATERS ONTO EITHER STABILISED OR UNDISTURBED DISPOSAL SITES WITHIN THE SAME SUBCATCHMENT AREA FROM WHICH THE WATER ORIGINATED. APPROVAL MIGHT BE REQUIRED TO DISCHARGE INTO OTHER SUBCATCHMENTS.

EARTH BANK (HIGH FLOWS) SD 5-6



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 PERCENT 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.

EARTH BASIN - WET (APPLIES TO 'TYPE D' AND 'TYPE F' SOILS ONLY) SD 6-4

SEDIMENT BASIN 1 SIZING CALCULATIONS

$Vs = 10 * R_{(Y\%,5\text{-day})} * C_V * A$

WHERE,

Vs = VOLUME OF SETTLING ZONE (m^3)
$R_{(Y\%,5\text{-day})}$ = Y%, 5-DAY RAINFALL DEPTH (mm)
C_V = VOLUMETRIC RUNOFF COEFFICIENT
A = EFFECTIVE CATCHMENT SURFACE AREA CONNECTED TO THE BASIN (ha)

$R_{(Y\%,5\text{-day})}$ = 23.3 mm
C_V = 0.5
A = 2.474 ha

SETTLING ZONE VOLUME = 288.221 m^3

SEDIMENT STORAGE VOLUME = 50% SETTLING ZONE VOLUME = 144 m^3

TOTAL SEDIMENT BASIN VOLUME = 432.332 m^3

SEDIMENT BASIN 2 SIZING CALCULATIONS

$Vs = 10 * R_{(Y\%,5\text{-day})} * C_V * A$

WHERE,

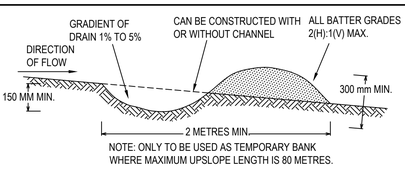
Vs = VOLUME OF SETTLING ZONE (m^3)
$R_{(Y\%,5\text{-day})}$ = Y%, 5-DAY RAINFALL DEPTH (mm)
C_V = VOLUMETRIC RUNOFF COEFFICIENT
A = EFFECTIVE CATCHMENT SURFACE AREA CONNECTED TO THE BASIN (ha)

$R_{(Y\%,5\text{-day})}$ = 23.3 mm
C_V = 0.5
A = 1.31 ha

SETTLING ZONE VOLUME = 152.615 m^3

SEDIMENT STORAGE VOLUME = 50% SETTLING ZONE VOLUME = 76.3 m^3

TOTAL SEDIMENT BASIN VOLUME = 228.923 m^3



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

CONSTRUCTION NOTES:

1. BUILD WITH GRADIENTS BETWEEN 1 PERCENT AND 5 PERCENT.
2. AVOID REMOVING TREES AND SHRUBS IF POSSIBLE - WORK AROUND THEM.
3. ENSURE THE STRUCTURES ARE FREE OF PROJECTIONS OR OTHER IRREGULARITIES THAT COULD IMPEDE WATER FLOW.
4. BUILD THE DRAINS WITH CIRCULAR, PARABOLIC OR TRAPEZOIDAL CROSS SECTIONS, NOT V SHAPED.
5. ENSURE THE BANKS ARE PROPERLY COMPACTED TO PREVENT FAILURE.
6. COMPLETE PERMANENT OR TEMPORARY STABILISATION WITHIN 10 DAYS OF CONSTRUCTION.

EARTH BANK (LOW FLOW) SD 5-5

NOT FOR CONSTRUCTION

Issue	Description	Date	Design	Checked
A	ISSUE FOR DEVELOPMENT APPLICATION	08/08/2025	J.T.K.	J.A.B.

0 1cm at full size 10cm 20cm

Certification By Dr. Michel Chaaya
B.E., M.E. (Res), Ph.D., F.I.E. Aust., CPEng.,
Civil & Structural Engineer

Client: HOLDMARK

Council: PENRITH CITY COUNCIL

Scale:

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Email : info@telfordcivil.com.au
Phone : 02 7809 4931
Company : Telford Consulting Pty Ltd

Project: 68-80 O'CONNELL STREET, CADDENS
PROPOSED MIXED-USE DEVELOPMENT
CIVIL ENGINEERING PLANS
DEVELOPMENT APPLICATION

Drawing Title: EROSION AND SEDIMENT CONTROL DETAILS

Scale	A1	Project No.	Dwg. No.	Issue
N.T.S.		25037	110	A

LEGEND

- EXISTING LOT BOUNDARY
- EXISTING ROAD PAVEMENT
- 100.0 DESIGN CONTOURS
- 100.0 EXISTING CONTOURS
- EXTENT OF WORKS
- PROPOSED CONCRETE RETAINING WALL
- PROPOSED TEC FENCE
- EXISTING TREES TO BE RETAINED
- EXISTING TREES TO BE REMOVED
- BASEMENT EXTENT
- GROUND FLOOR EXTENT
- PROPOSED GABION WALL
- PROPOSED CONCRETE RETAINING WALL

LEGEND

- CUT -21m TO -5.5m
- CUT -5.5m TO -5m
- CUT -5m TO -4.5m
- CUT -4.5m TO -4m
- CUT -4m TO -3.5m
- CUT -3.5m TO -3m
- CUT -3m TO -2.5m
- CUT -2.5m TO -2m
- CUT -2m TO -1.5m
- CUT -1.5m TO -1m
- CUT -1m TO -0.5m
- CUT -0.5m TO 0m
- FILL 0m TO 0.5m
- FILL 0.5m TO 1m
- FILL 1m TO 1.5m
- FILL 1.5m TO 3m
- FILL 3m TO 4.5m
- FILL 4.5m TO 6m

CUT & FILL VOLUMES

CUT = 259,843m³
FILL = 20,860m³
BALANCE = 238,983m³ (EXCESS FILL)

NOTE:

NUMBERS DO NOT TAKE INTO CONSIDERATION SERVICES TRENCHING OR TOPSOIL REMOVAL/RESPREADING OR SLAB THICKNESSES OR ROADS BOXING.

CORR
ROAD
PROPOSED TEC FENCE.
EXISTING STORMWATER CHANNEL TO REMAIN UNDISTURBED.
THREATENED ECOLOGICAL COMMUNITY
PROPOSED 1 IN 4 BATTERS.
PROPOSED MAX 2.6m HIGH GABION WALL.
LIMIT OF CONSTRUCTION. TIE IN NEATLY INTO EXISTING LEVELS.
ROAD 1
ROAD 2
THIRD AVENUE
LOT 3 DP 1268507
PROPOSED MAX 1.5m HIGH CONCRETE WALL.
BUILDING U LEVEL RL 53.30
BUILDING T LEVEL RL 53.70
BM NAIL TOP KERB RL: 50.58 A.H.D.
BUILDING S LEVEL RL 53.30
BUILDING R2 LEVEL RL 53.30
BUILDING R1 LEVEL RL 53.30
BUILDING P LEVEL
BUILDING E GROUND FLOOR RL 53.70
RAIN GARDEN AREA
DEEP SOIL AREA
BUILDING C GROUND FLOOR RL 55.70
BUILDING B LOWER GROUND FLOOR RL 55.70
BUILDING F GROUND FLOOR RL 53.50
BUILDING G GROUND FLOOR RL 53.50
BUILDING H GROUND FLOOR RL 57.50
BUILDING J GROUND FLOOR RL 57.50
BUILDING N GROUND FLOOR RL 53.20
BUILDING M LOWER GROUND FLOOR RL 53.30
BUILDING L LOWER GROUND FLOOR
BUILDING K GROUND FLOOR RL 51.50
RETAIL AREA
RL 48.500
SPECIALITY
AMENITIES
BOH
CAR PARKING
48.80
RAMP UP 1:14
TENANCY
MALL SECURITY ZONE
O'CONNELL STREET
LIMIT OF ROAD CONSTRUCTION.

NOT FOR CONSTRUCTION

Issue	Description	Date	Design	Checked
A	ISSUE FOR DEVELOPMENT APPLICATION	08/08/2025	J.T.K.	J.A.B.

1cm at full size 10cm 20cm

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Scale: 0 10 20 30 m — SCALE 1:500 @ A1

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Project: 68-80 O'CONNELL STREET, CADDENS
PROPOSED MIXED-USE DEVELOPMENT
CIVIL ENGINEERING PLANS
DEVELOPMENT APPLICATION

Drawing Title: BULK EARTHWORKS PLAN

Scale	Project No.	Dwg. No.	Issue
1:500 A1	25037	200	A

LEGEND

- EXISTING LOT BOUNDARY
- PROPOSED LOT BOUNDARY
- 104.0 — DESIGN CONTOURS
- 102.0 — EXISTING CONTOURS
- K&G — PROPOSED KERB & GUTTER
- PROPOSED ROAD CENTRELINE
- EXISTING ROAD CENTRE LINE
- PROPOSED ROAD PAVEMENT
- PROPOSED CONCRETE FOOTPATH
- EXISTING ROAD PAVEMENT
- EXISTING CONCRETE FOOTPATH
- EXISTING EDGE OF BITUMEN
- PROPOSED TEC FENCE
- EXTENT OF WORKS
- PR — PROPOSED PRAM RAMP
- PROPOSED SAG PIT
- PROPOSED KERB INLET PIT
- PROPOSED JUNCTION PIT
- PROPOSED STORMWATER PIPE
- PROPOSED CONCRETE HEADWALL
- PROPOSED GABION WALL
- PROPOSED CONCRETE RETAINING WALL
- EXISTING TREES TO BE RETAINED

NOTE

- REFER TO TEL25037.SW.DA - 68-80 O'CONNELL STREET, CADDENS [A] FOR INTERNAL STORMWATER DETAILS.
- PROPOSED FUTURE ROUNDABOUT AT O'CONNELL STREET AND CORR ROAD INTERSECTION, SUBJECT TO ROADS ACT APPROVAL.

TIE INTO EXISTING FOOTPATH.

CORR

LIMIT OF CONSTRUCTION. TIE IN NEATLY INTO EXISTING LEVELS.

ROAD

4.80m
11.80m
6.00m

MAKE CONNECTION WITH EXISTING KERB INLET PIT AT IL 47.38. (TO BE CONFIRMED AT CC STAGE).

TIE INTO EXISTING SHARED PATH.

PROPOSED 1.5m CONCRETE FOOTPATH

EXISTING PLANTING GROUND COVER TO REMAIN UNDISTURBED.

PROPOSED TEC FENCE.

EXISTING STORMWATER CHANNEL TO REMAIN UNDISTURBED.

THREATENED ECOLOGICAL COMMUNITY

PROPOSED MAX 2.6m HIGH GABION WALL.

PROPOSED 1.5m CONCRETE FOOTPATH

ROAD 1

ROAD 2

PROPOSED CONCRETE MEDIAN.

PROPOSED CONCRETE HEADWALL.

BM NAIL TOP KERB RL: 50.58 A.H.D.

FOR MORE INFORMATION REFER TO ARCHITECT'S DETAILS

FOR MORE INFORMATION REFER TO ARCHITECT'S DETAILS

PROPOSED 1.5m CONCRETE FOOTPATH

PROPOSED 1.5m CONCRETE FOOTPATH

PROPOSED 1.5m CONCRETE FOOTPATH

PROPOSED MAX 1.5m HIGH CONCRETE WALL.

TIE INTO EXISTING FOOTPATH.

TIE INTO EXISTING FOOTPATH.

LIMIT OF ROAD CONSTRUCTION. TIE IN NEATLY INTO EXISTING LEVELS.

EXISTING NEIGHBOURING DRIVEWAYS TO REMAIN UNDISTURBED.

THIRD AVENUE

LOT 1 DP 1268507

LOT 2 DP 1268507

LOT 3 DP 1268507

BUILDING C GROUND FLOOR RL 55.70

BUILDING B LOWER GROUND FLOOR RL 56.20

BUILDING E GROUND FLOOR RL 53.70

BUILDING S LEVEL 1 RL 53.50

BUILDING F GROUND FLOOR RL 55.60

BUILDING G GROUND FLOOR RL 56.50

BUILDING H GROUND FLOOR RL 57.90

BUILDING R2 LEVEL 1 RL 53.50

BUILDING R1 LEVEL 1 RL 53.50

BUILDING P LEVEL 1

BUILDING N GROUND FLOOR RL 56.20

BUILDING N LOWER GROUND FLOOR RL 56.30

BUILDING L LOWER GROUND FLOOR

BUILDING K LEVEL 1 RL 61.90

RAIN GARDEN AREA

DEEP SOIL AREA

RETAIL AREA RL 48.500

SPECIALITY

AMENITIES

BOH

CAR PARKING

TENANCY

BWS LIQUOR STORE

KIOSK

MALL SECURITY ZONE

O'CONNELL STREET

NOT FOR CONSTRUCTION

Issue	Description	Date	Design	Checked
A	ISSUE FOR DEVELOPMENT APPLICATION	08/08/2025	J.T.K.	J.A.B.

1cm at full size | 10cm | 20cm

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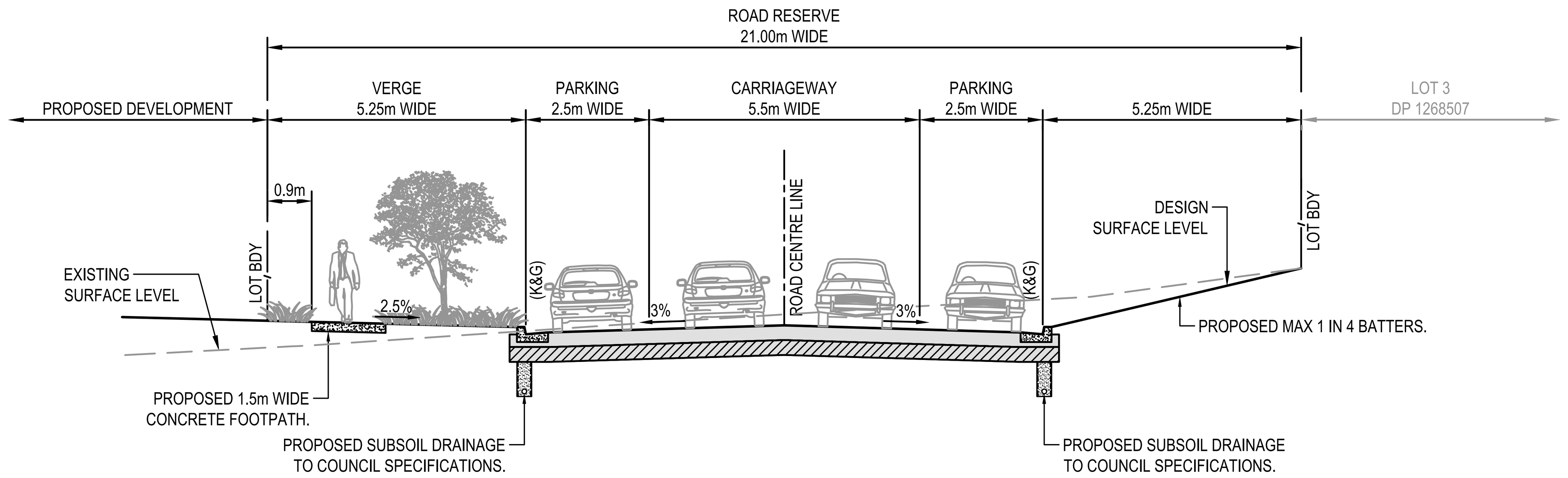
Project: 68-80 O'CONNELL STREET, CADDENS
PROPOSED MIXED-USE DEVELOPMENT
CIVIL ENGINEERING PLANS
DEVELOPMENT APPLICATION

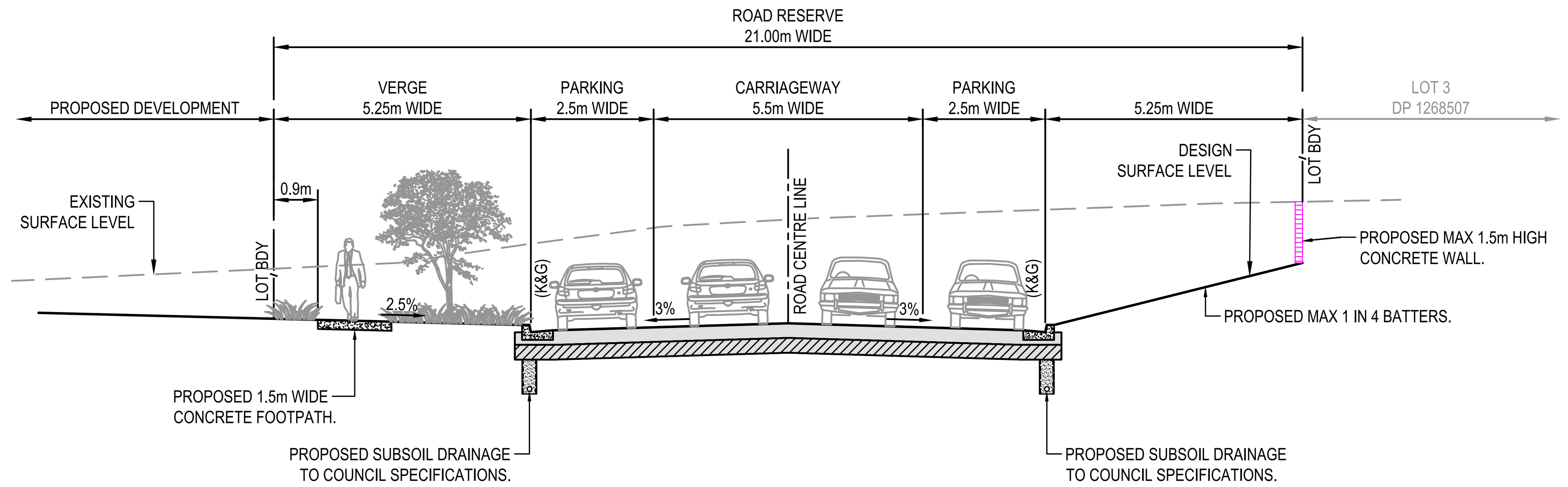
Drawing Title: ENGINEERING PLAN

Scale	Project No.	Dwg. No.	Issue
1:500 A1	25037	300	A



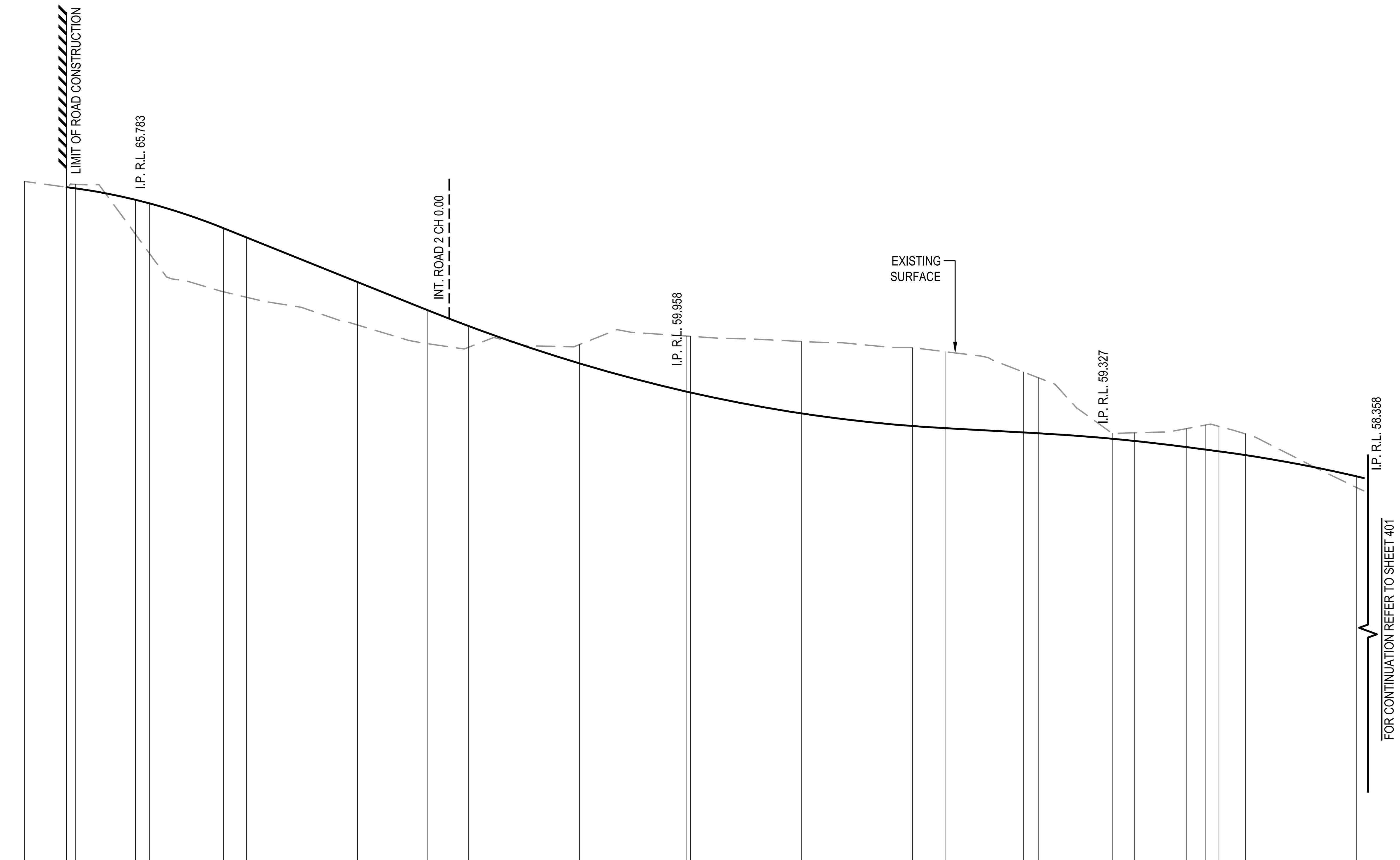
TYPICAL CROSS SECTION - ROAD 1
(CH 0.00 - CH 75.00)
(CH 145.00 - CH 175.00)

SCALE 1:100



TYPICAL CROSS SECTION - ROAD 1
(CH 75.00 - CH 145.00)

SCALE 1:100



V.C.: 20VC, 70VC, 20VC, 45VC

GRADE: -2.715%, -8.028%, -1.096%, -2.625%

HORIZ. GEOMETRY: R-19.75

DATUM R.L. 45

CHAINAGE	WAE LEVEL	DESIGN LEVEL	EXISTING LEVEL
0			66.24
5.60			66.08
6.88		66.05	66.16
15		65.75	64.82
16.88		65.65	64.3
26.88		64.98	63.26
30		64.73	63.11
45		63.53	62.36
54.43		62.77	61.86
60		62.34	61.76
75		61.33	61.83
89.43		60.56	62.07
90		60.54	62.06
105		59.97	61.92
120		59.63	61.75
124.43		59.57	61.64
135		59.46	61.09
137.01		59.44	60.94
147.01		59.29	59.43
150		59.23	59.45
157.01		59.06	59.56
159.66		59	59.66
161.44		58.95	59.63
165		58.85	59.42
180		58.27	57.98

LONGITUDINAL SECTION CENTRELINE - ROAD 1

SCALE (H) 1:500
(V) 1:100

NOT FOR CONSTRUCTION

Issue	Description	Date	Design	Checked
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Scale
0 10 20 30 m
SCALE 1:500 @ A1
0 2 4 6 m
SCALE 1:100 @ A1

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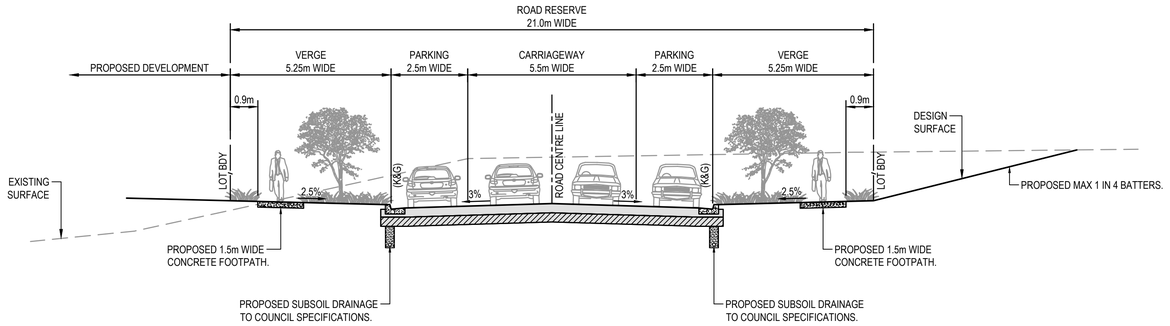
Project
68-80 O'CONNELL STREET, CADDENS
PROPOSED MIXED-USE DEVELOPMENT
CIVIL ENGINEERING PLANS
DEVELOPMENT APPLICATION

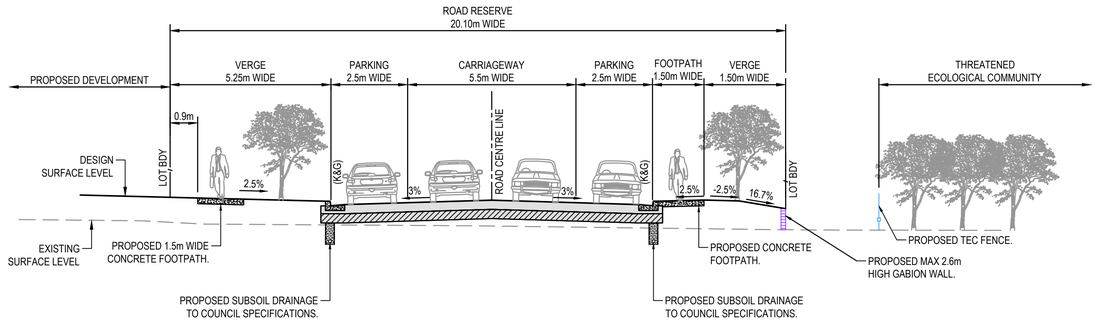
Drawing Title
ROAD 1 - LONGITUDINAL AND TYPICAL CROSS SECTIONS SHEET 1

Scale A1	Project No.	Dwg. No.	Issue
AS SHOWN	25037	400	A



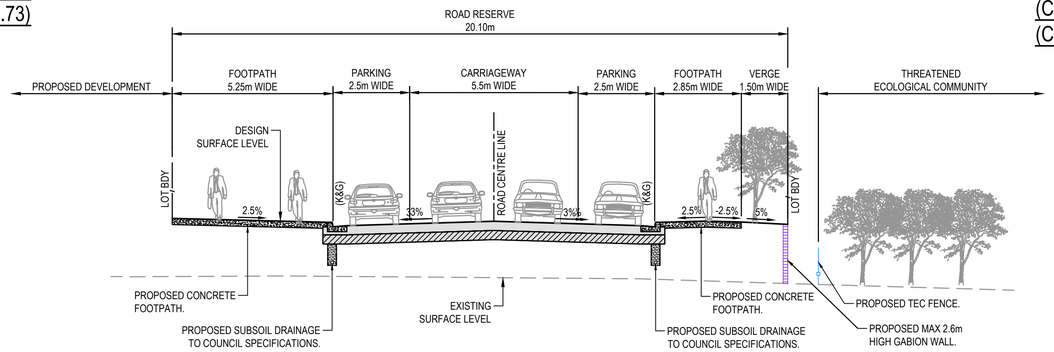
TYPICAL CROSS SECTION - ROAD 1
(CH 175.00 TO CH 240.00)
(CH 312.50 TO CH 414.73)

SCALE 1:100



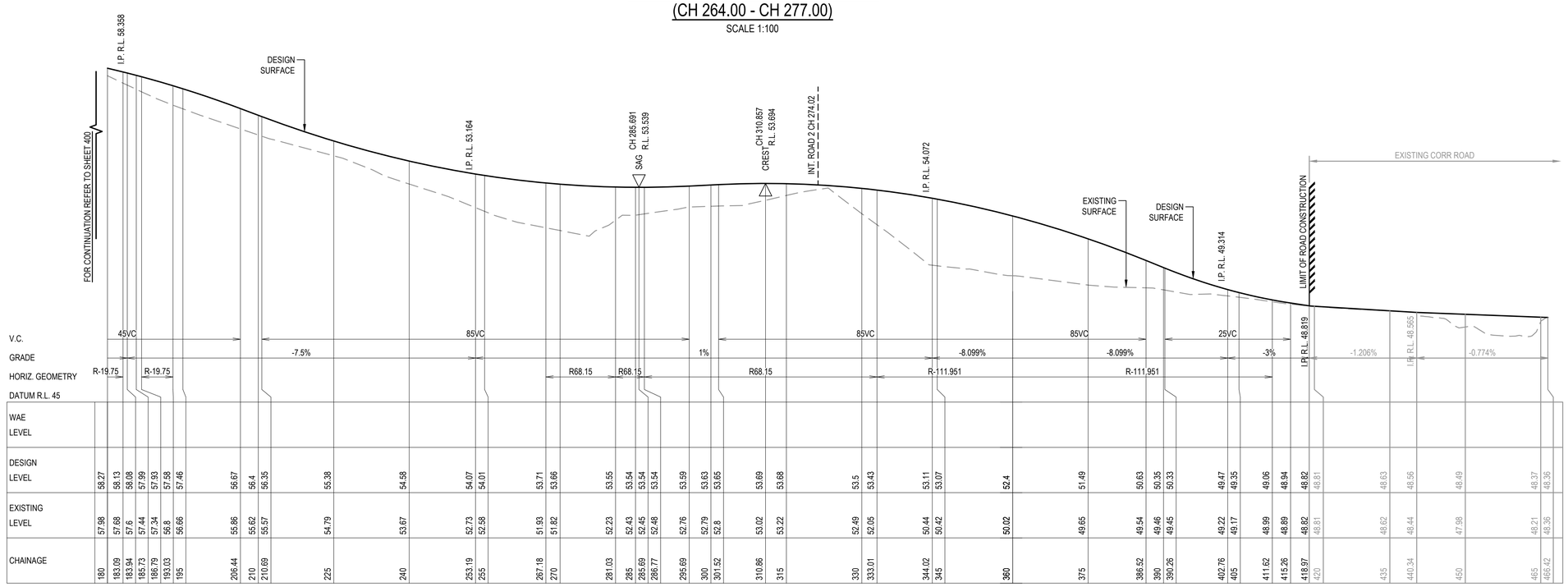
TYPICAL CROSS SECTION - ROAD 1
(CH 245.00 - CH 264.00)
(CH 277.00 - CH 308.50)

SCALE 1:100



TYPICAL CROSS SECTION - ROAD 1
(CH 264.00 - CH 277.00)

SCALE 1:100



LONGITUDINAL SECTION CENTRELINE - ROAD 1

SCALE (H) 1:500
(V) 1:100

NOT FOR CONSTRUCTION

Issue	Description	Date	Design	Checked
A	ISSUE FOR DEVELOPMENT APPLICATION	08/08/2025	J.T.K.	J.A.B.

1cm at full size (0 – 10cm – 20cm)

Certification By Dr. Michel Chaaya
B.E., M.E. (Res), Ph.D., F.I.E. Aust., CPEng.,
Civil & Structural Engineer

Client: HOLDMARK

Council: PENRITH CITY COUNCIL

Scale
SCALE 1:500 @ A1 (0, 10, 20, 30 m)
SCALE 1:100 @ A1 (0, 2, 4, 6 m)

TELFORD CIVIL
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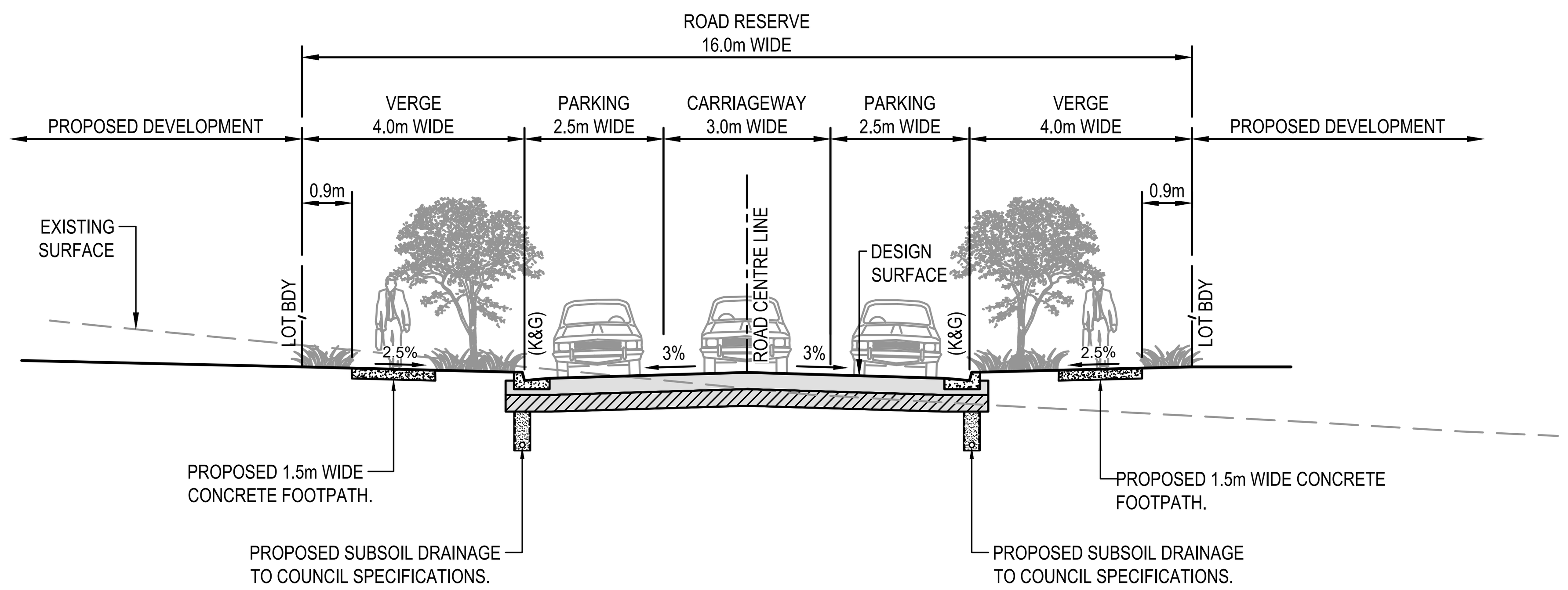
Phone : 02 7809 4931
Company : Telford Consulting Pty Ltd

Project
68-80 O'CONNELL STREET, CADDENS
PROPOSED MIXED-USE DEVELOPMENT
CIVIL ENGINEERING PLANS
DEVELOPMENT APPLICATION

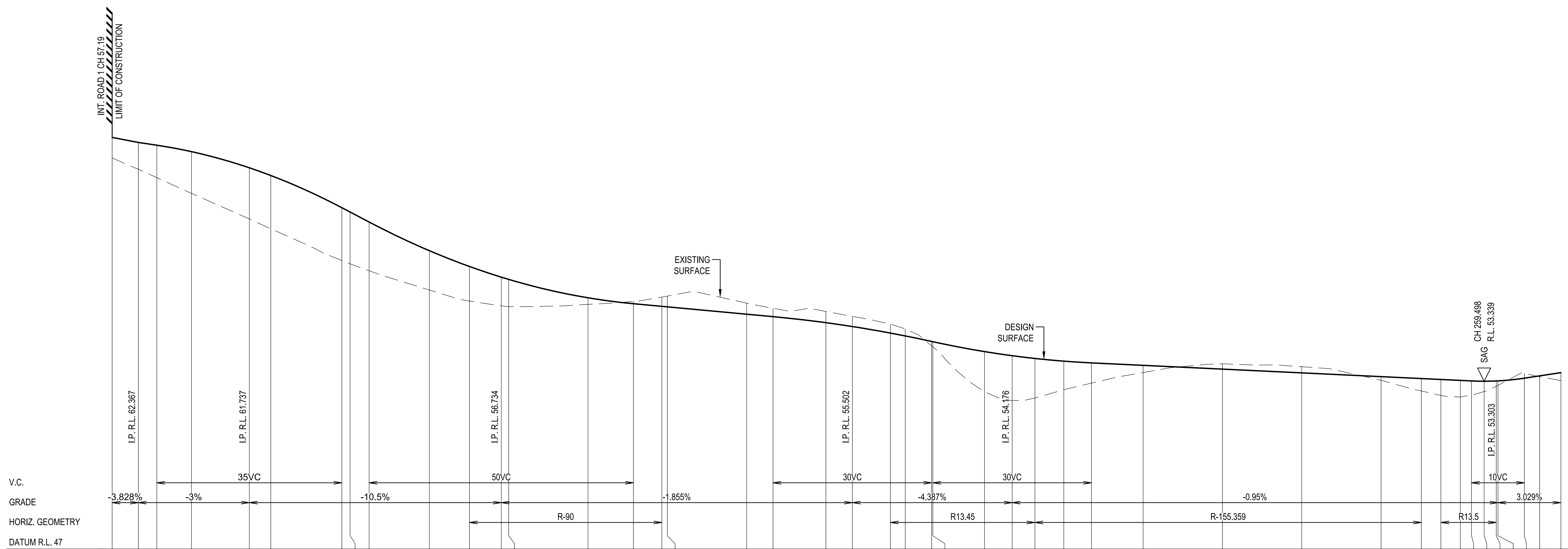
Drawing Title
ROAD 1 - LONGITUDINAL AND
TYPICAL CROSS SECTIONS
SHEET 2

Scale	Project No.	Dwg. No.	Issue
AS SHOWN (A1)	25037	401	A



TYPICAL CROSS SECTION - ROAD 2

SCALE 1:100



CHAINAGE	WAE LEVEL	DESIGN LEVEL	EXISTING LEVEL
0		62.56	61.78
4.95		62.37	61.35
8.44		62.26	61.04
15		62.02	60.44
25.94		61.41	59.48
30		61.12	59.1
43.44		59.9	57.9
45		59.74	57.78
48.59		59.36	57.52
60		58.27	56.79
67.58		57.68	56.37
73.59		57.27	56.19
75		57.19	56.16
90		56.49	56.24
98.59		56.27	56.35
103.97		56.17	56.52
105		56.15	56.56
120		55.87	56.29
125		55.78	56.1
135		55.55	55.98
140		55.41	55.79
147.2		55.16	55.5
150		55.05	55.32
155		54.84	54.67
155.22		54.83	54.64
165		54.46	52.94
170.22		54.3	52.61
174.52		54.2	52.7
180		54.1	53.02
185.22		54.03	53.29
195		53.94	53.69
210		53.8	54
225		53.66	53.91
240		53.51	53.38
247.63		53.44	52.97
251.32		53.41	52.8
255		53.37	52.74
257.11		53.35	52.82
259.5		53.34	52.94
261.79		53.35	53.15
262.11		53.35	53.18
267.11		53.45	53.63
270		53.54	53.51
274.02		53.66	53.36

LONGITUDINAL SECTION CENTRELINE - ROAD 2

SCALE (H) 1:500
(V) 1:100

NOT FOR CONSTRUCTION

Issue	Description	Date	Design	Checked
A	ISSUE FOR DEVELOPMENT APPLICATION	08/08/2025	J.T.K.	J.A.B.

0 1cm at full size 10cm 20cm

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Civil & Structural Engineer

Client: HOLDMARK

Council: PENRITH CITY COUNCIL

Scale
0 10 20 30 m
SCALE 1:500 @ A1
0 2 4 6 m
SCALE 1:100 @ A1

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Project
68-80 O'CONNELL STREET, CADDENS
PROPOSED MIXED-USE DEVELOPMENT
CIVIL ENGINEERING PLANS
DEVELOPMENT APPLICATION

Drawing Title
ROAD 2 - LONGITUDINAL AND TYPICAL CROSS SECTIONS

Scale A1	Project No.	Dwg. No.	Issue
AS SHOWN	25037	402	A

LEGEND

- BB — PROPOSED BARRIER LINES
- E1 — LEFT HAND EDGE LINE ON GENERAL PURPOSE ROAD
- TB — GIVE WAY LINE (USED WITH SIGNS)
- TB1 — GIVE WAY LINE (USED OF RIGHT SIDE OF ROAD)
- PROPOSED STREET NAME SIGN
- BB — EXISTING BARRIER LINES
- E1 — EXISTING LEFT HAND EDGE LINE ON GENERAL PURPOSE ROAD
- TB — EXISTING GIVE WAY LINE (USED WITH SIGNS)
- TB1 — EXISTING GIVE WAY LINE (USED OF RIGHT SIDE OF ROAD)
- PROPOSED RETRACTABLE BOLLARDS

NOTE:

- SIGNAGE AND LINEMARKING ARE SUBJECT TO SEPARATE APPROVAL OF COUNCIL'S LOCAL TRAFFIC COMMITTEE.
- ALL LINE MARKING MUST BE THERMO-PLASTIC REFLECTIVE UNLESS OTHERWISE NOTED.
- ALL PEDESTRIAN CROSSINGS ARE RAISED PEDESTRIAN CROSSINGS.
- PROPOSED FUTURE ROUNDABOUT AT O'CONNELL STREET AND CORR ROAD INTERSECTION, SUBJECT TO ROADS ACT APPROVAL.

LIMIT OF CONSTRUCTION. TIE IN NEATLY INTO EXISTING LEVELS.

CORR ROAD

AUTHORISED VEHICLES EXCEPTED

PROPOSED RETRACTABLE BOLLARDS.

ROAD 1

ROAD 2

THREATENED ECOLOGICAL COMMUNITY

BM NAIL TOP KERB RL: 50.58 A.H.D.

FOR MORE INFORMATION REFER TO ARCHITECT'S DETAILS

FOR MORE INFORMATION REFER TO ARCHITECT'S DETAILS

THIRD AVENUE

LOT 3 DP 1268507

LOT 2 DP 1268507

PROPOSED RETRACTABLE BOLLARDS.

AUTHORISED VEHICLES EXCEPTED

LIMIT OF ROAD CONSTRUCTION.

O'CONNELL STREET

NOT FOR CONSTRUCTION

Issue	Description	Date	Design	Checked
A	ISSUE FOR DEVELOPMENT APPLICATION	08/08/2025	J.T.K.	J.A.B.

Certification By Dr. Michel Chaaya
B.E., M.E. (Res), Ph.D., F.I.E. Aust., CPEng.,
Civil & Structural Engineer

Client: HOLDMARK

Council: PENRITH CITY COUNCIL

Scale: 0 10 20 30 m — SCALE 1:500 @ A1

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Project: 68-80 O'CONNELL STREET, CADDENS
PROPOSED MIXED-USE DEVELOPMENT
CIVIL ENGINEERING PLANS
DEVELOPMENT APPLICATION

Drawing Title: SIGNAGE AND LINEMARKING PLAN

Scale	Project No.	Dwg. No.	Issue
A1 1:500	25037	710	A