



POTTS HILL RESIDENTIAL PRECINCT

COOPER ROAD & BRUNKER ROAD, POTTS HILL

CONCEPT CIVIL DESIGN

FOR PROJECT APPLICATION



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Rev	Date	Description	Drawn	Appd
1	23/10/2009	ISSUE FOR COMMENT	DPT	SGB
2	13/11/2009	DRAFT ISSUE FOR PROJECT APPLICATION	DPT	SGB
A	19/11/2009	PROJECT APPLICATION ISSUE	DPT	SGB
B	22/12/2009	RESUBMIT FOR PROJECT APPLICATION	DPT	SGB



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Checked	RTG	Date	13/11/2009
Designed	SGB	Date	13/11/2009
Verified	MKH	Date	19/11/2009
Approved	MKH	Date	19/11/2009

Client LANDCOM

POTTS HILL RESIDENTIAL PRECINCT

COVER SHEET & DRAWING SCHEDULE

Status	NOT FOR CONSTRUCTION
Date	23/10/2009
Design Number	600246-001
Revision	B

NOT CONSTRUCTION ISSUE

NOTES

GENERAL

- 1. THE INFORMATION CONTAINED ON THESE DRAWINGS IS FOR CONCEPT CIVIL ENGINEERING PURPOSES ONLY. ALL DISCREPANCIES WITH OTHER CONSULTANT'S DOCUMENTATION THAT COULD RESULT IN CHANGES TO THE CONCEPT CIVIL ENGINEERING DETAILS SHOULD BE REFERRED TO THE ENGINEER.
- 2. ALL WORK IS SUBJECT TO DETAIL DESIGN. THE CONCEPT DETAILS SHOWN HEREIN ARE INTENDED TO DEMONSTRATE A FEASIBLE ENGINEERING DESIGN SOLUTION. HOWEVER, DETAILS SUCH AS SITE LEVELS, DRAINAGE LAYOUT AND OTHER SITE FEATURES ARE SUBJECT TO CHANGE DURING THE DETAILED DESIGN PROCESS.

SURVEY

- 1. CO-ORDINATES AND LEVELS OBTAINED FROM SURVEY BY LEAN AND HAYWOOD REF. 7686201 DATED JUL Y 2007
- 2. ALL LEVELS ARE TO AHD.
- 3. ALL CHAINAGES AND LEVELS ARE IN METRES, AND DIMENSIONS IN MILLIMETRES.
- 4. CO-ORDINATES RELATE TO MGA

BASE PLANS

- 1. BASE PLAN ADOPTED FROM ARCHITECTUS, REF. V0251(B). RECEIVED 16 OCTOBER 2009
- 2. FOR ADDITIONAL DETAILS REFER DOCUMENTATION BY ARCHITECTUS (ARCHITECTS), PLACE DESIGN (LANDSCAPE ARCHITECTS) AND OTHER SPECIALIST CONSULTANTS.

STORMWATER DRAINAGE

- 1. AN INDICATIVE STORMWATER LAYOUT HAS BEEN PRESENTED ON THIS PLAN SET. FULL DETAILS (INCLUDING HGL ANALYSIS) TO BE PROVIDED AT DETAILED DESIGN STAGE.
- 2. WHERE INTERALLOTMENT DRAINAGE LINES (IAD) PASS ADJACENT OR BELOW DWELLINGS, THE PIPE IS TO BE CONCRETE ENCASED AND DWELLINGS PIERED AS REQUIRED. DETAILS TO BE PROVIDED AT DETAILED DESIGN STAGE.
- 3. ROAD DRAINAGE TO BE DESIGNED FOR 10YR ARI STORM EVENT
- 4. OVERLAND FLOW PATHS TO BE DESIGNED FOR 100YR ARI STORM EVENT

POTABLE WATER

- 1. POTABLE WATER IS TO BE PROVIDED TO SITE FROM THE EXISTING SYDNEY WATER NETWORK IN BROOKER AND COOPER ROAD
- 2. CONNECTION INTO THE EXISTING NETWORK IS SUBJECT TO APPROVAL BY SYDNEY WATER
- 3. INTERNAL RETICULATION MAIN SIZE TO BE CONFIRMED DURING DETAILED DESIGN

SEWER

- 1. EXISTING SYDNEY WATER SEWER MAINS ARE LOCATED COOPER ROAD. IT IS PROPOSED TO DISCHARGE THE SITE TO THE EXISTING NETWORK
- 2. CONNECTION INTO THE EXISTING NETWORK IS SUBJECT TO APPROVAL BY SYDNEY WATER
- 3. INTERNAL RETICULATION MAIN SIZE TO BE CONFIRMED DURING DETAILED DESIGN

RECYCLED WATER

- 1. RECYCLED WATER MAY BE AVAILABLE TO THE SITE
- 2. THE RECYCLED WATER IS LIKELY TO HAVE ONLY UNDERGONE SECONDARY TREATMENT. AS SUCH A TERTIARY TREATMENT PLANT WOULD BE REQUIRED BEFORE THE WATER WOULD BE CONSIDERED SUITABLE FOR RESIDENTIAL USE
- 3. INVESTIGATIONS AND DISCUSSIONS WITH SYDNEY WATER AS TO THE PROVISION OF RECYCLED WATER TO THE SITE ARE ONGOING

EROSION AND SEDIMENT CONTROL

- 1. EROSION AND SEDIMENT CONTROL DETAILS SHOWN ARE INDICATIVE ONLY.
- 2. FULL DETAILS OF EROSION AND SEDIMENT CONTROLS TO BE PROVIDED AS PART OF THE DETAILED DESIGN
- 3. ULTIMATE RESPONSIBILITY FOR EROSION AND SEDIMENT CONTROL DETAILS LIES WITH THE CONTRACTOR.

ON-SITE DETENTION (OSD)

- 1. ON SITE DETENTION IS TO PROVIDED ON THE SITE TO MEET THE REQUIREMENTS OF BARKSTOWN CITY COUNCIL'S 'DEVELOPMENT ENGINEERING STANDARDS' JUNE 2009
- 2. PEAK DISCHARGE FROM THE SITE TO BE RESTRICTED TO PRE-DEVELOPMENT FLOWS FOR THE 5YR ARI (20% AEP) EVENT THROUGH TO THE 100YR (1% AEP) EVENT
- 3. DETENTION VOLUME TO BE PROVIDED IN A COMBINED DETENTION/WATER QUALITY BASIN
- 4. BASINS TO DISCHARGE TO THE EXISTING STREET NETWORK VIA NEW AND AUGMENTED DRAINAGE NETWORKS
- 5. ON SITE DETENTION REQUIREMENTS ASSESSED USING 'DRAINS' COMPUTER MODELLING SOFTWARE (VERSION 2009.6)
- 6. EXTERNAL (UPSTREAM) CATCHMENTS ASSUMED UNDEVELOPED AND BYPASS THE PROPOSED DETENTION/WATER QUALITY BASINS
- 7. ESTIMATED VOLUMES OF THE BASINS TO MEET DETENTION REQUIRES ARE:
 - * CATCHMENT 1 (NORTH): 1250m³
 - * CATCHMENT 2 (CENTRE): 3,700m³
 - * CATCHMENT 3 (SOUTH): 2,000m³
- 8. ALL ON SITE DETENTION CALCULATIONS ARE SUBJECT TO REVIEW AND VERIFICATION AT THE DETAILED DESIGN STAGE

WATER QUALITY

- 1. WATER QUALITY TREATMENT ON THE SITE HAS BEEN DESIGNED TO COMPLY WITH LANDCOM'S GUIDELINES FOR WATER SENSITIVE URBAN DESIGN
- 2. WATER QUALITY TREATMENT DESIGNED TO REDUCE THE MEAN ANNUAL LOAD OF POLLUTANTS BY:
 - * 45% FOR TOTAL NITROGEN (TN)
 - * 65% FOR TOTAL PHOSPHORUS (TP)
 - * 85% FOR TOTAL SUSPENDED SOLIDS (TSS)
- 3. WATER QUALITY TREATMENT ANALYSED USING 'MUSIC' COMPUTER SOFTWARE (VERSION 3.01)
- 4. WATER QUALITY TREATMENT PROPOSED TO BE A COMBINATION OF RAINWATER TANKS, GROSS POLLUTANT TRAPS (GPTs) AND BIORETENTION AREAS
- 5. RAINWATER TANKS TO BE PROVIDED IN EACH LOT
- 6. GROSS POLLUTANT TRAPS TO BE PROVIDED UPSTREAM OF DETENTION/WATER QUALITY BASINS.
- 7. BIORETENTION AREAS TO BE PROVIDED IN THE INVERT OF THE STORMWATER DETENTION BASINS
- 8. ESTIMATES BIORETENTION AREAS REQUIRED TO MEET TARGET POLLUTANT REMOVAL ARE:
 - * CATCHMENT 1 (NORTH): 600m²
 - * CATCHMENT 2 (CENTRE): 1,750m²
 - * CATCHMENT 3 (SOUTH): 750m²
- 9. ALL WATER QUALITY TREATMENTS CALCULATIONS ARE SUBJECT TO REVIEW AND VERIFICATION AT THE DETAILED DESIGN STAGE

EARTHWORKS

- 1. MAJORITY OF THE SITE IS UNDERLAIN BY FILL THAT WAS PLACED DURING THE CONSTRUCTION OF RESERVOIR No 2 (COMPLETED 1923)
- 2. DEPTH OF FILL MATERIAL HAS BEEN DERIVED FROM THE VARIOUS GEOTECHNICAL BORE LOGS THAT HAVE PREVIOUS BEEN UNDERTAKEN. IN TOTAL, OVER 200 BORE LOGS HAVE BEEN UNDERTAKEN ACROSS THE RESIDENTIAL PRECINCT
- 3. FOR DISCUSSION AND RECOMMENDATION ON THE EARTHWORKS STRATEGY, REFER TO THE GEOTECHNICAL REPORT PREPARED BY GEOTECHNIQUE
- 4. THE EARTHWORKS ON THE SITE ARE TO BE SUPERVISED BY AN APPROPRIATELY QUALIFIED AND EXPERIENCED GEOTECHNICAL ENGINEER

LEGEND

EXISTING

- KERB & GUTTER,
- EDGE OF BITUMEN
- FENCE LINE
- RETAINING WALL
- EXISTING DRAINAGE RCP
- STORMWATER PIT
- SEWER PIT
- COMMUNICATIONS PIT
- ELECTRICITY PIT
- POWER POLE
- POWER UNDERGROUND PILLAR
- LIGHT POLE
- SURVEY MARKER
- TREE
- BOUNDARY LINE

PROPOSED

- BOUNDARY LINE
- CYCLESWAY OF FOOTPATH
- RETAINING WALL
- RETAINING WALL HEIGHT
- LIMIT OF WORK
- DRAINAGE PIPE
- DRAINAGE PIT
- UTILITIES (EXISTING)
 - ELECTRICITY - ABOVE GROUND
 - TELSTRA - ABOVE GROUND
 - ELECTRICITY - BELOW GROUND
 - GAS - BELOW GROUND
 - SEWER - BELOW GROUND
 - TELSTRA - BELOW GROUND
 - WATER - BELOW GROUND

Rev	Date	Description	DPT	SGB
2	13/11/2009	DRAFT ISSUE FOR PROJECT APPLICATION	DPT	SGB
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Client LANDCOM

POTTS HILL RESIDENTIAL PRECINCT

GENERAL NOTES

Status	NOT FOR CONSTRUCTION
Date	23/10/2009
Drawn	AHD
Scale	
Size	A1
Revision	2

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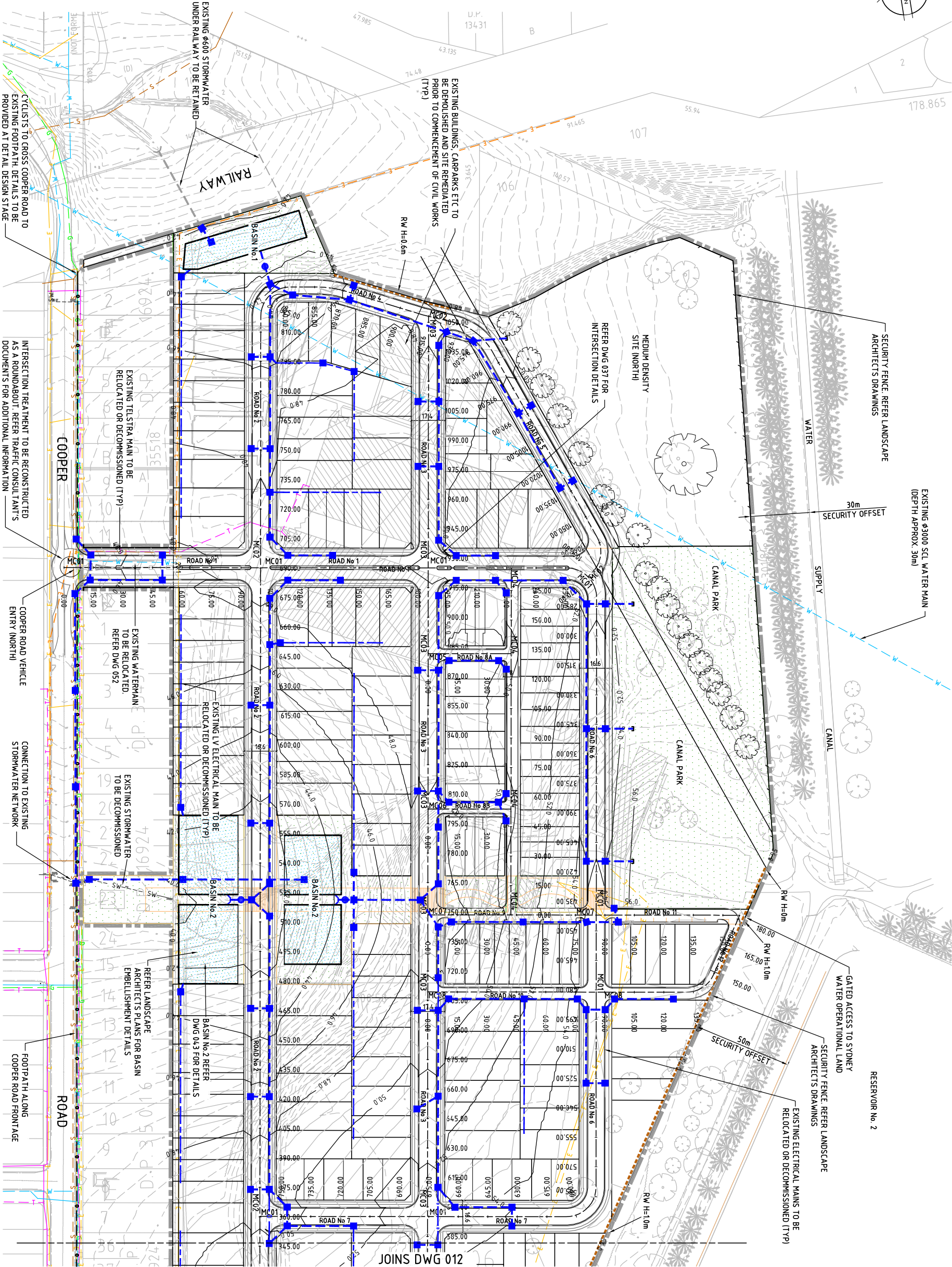
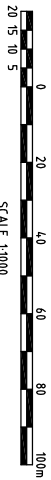


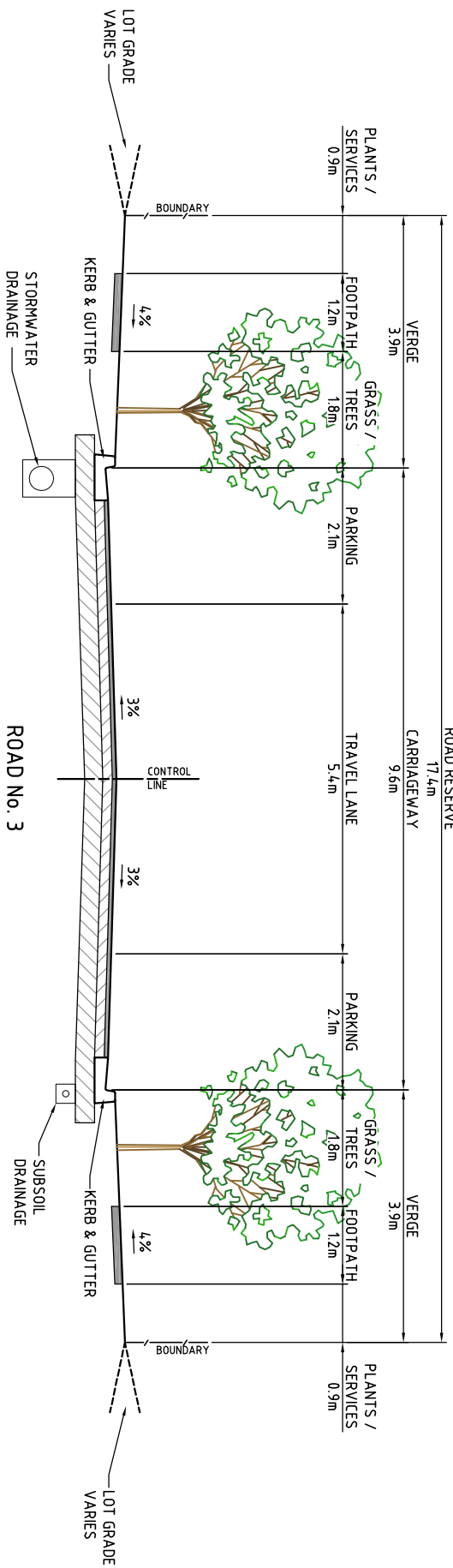
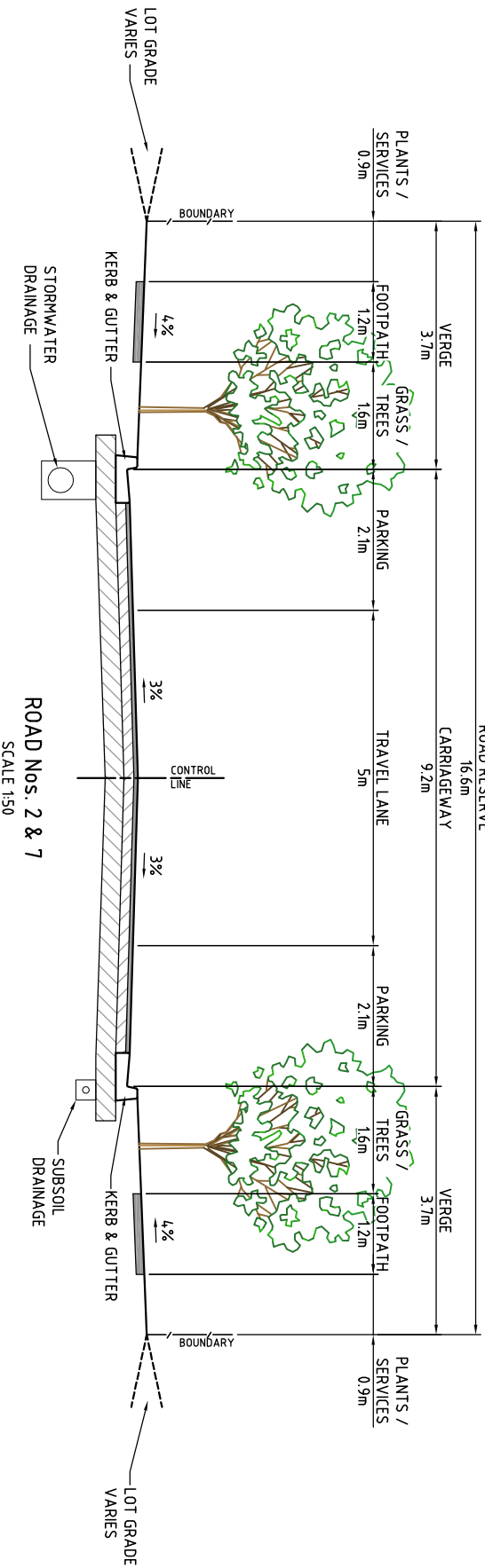
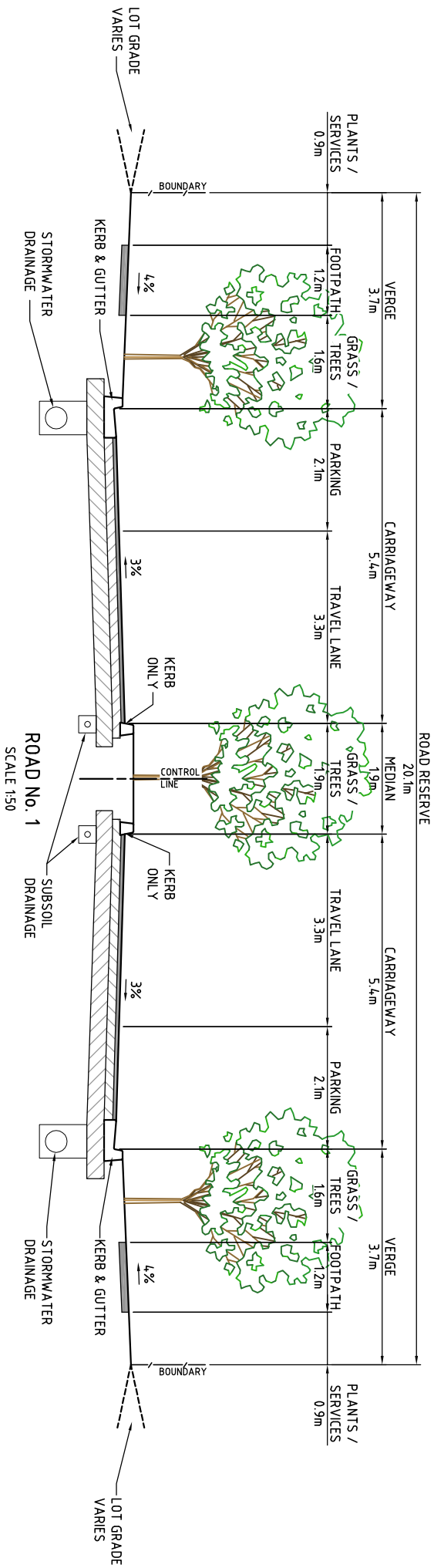
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GENERAL ARRANGEMENT PLAN - 1 OF 2		

STATUS
NOT FOR CONSTRUCTION
Date 23/10/2009 Datum AHD Scale AS SHOWN Size A1
Drawing Number 600246-011 Revision 2

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NOTES

1. LOCATION OF STORMWATER VARIES.
SUBSOIL DRAINAGE TO BE PROVIDED
WHERE STORMWATER IS NOT PRESENT
2. KERNS AND FOOTPATHS TO BANKSTOWN
CITY COUNCIL STANDARD

NOT CONSTRUCTION ISSUE

[illegible]

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Drawn	Date
DPT	13/11/2009
Checked RTC	Date 13/11/2009
Designed SGB	Date 13/11/2009
Verified	Date
Approved	Date

LANDCOM
POTTS HILL RESIDENTIAL PRECINCT

STATUS: NOT FOR CONSTRUCTION

Date	Drawn	Scale	Size
23/10/2009	AHD	AS SHOWN	A1

Drawing Number: 600246-015

Revision: 2

ON A1 ORIGINAL