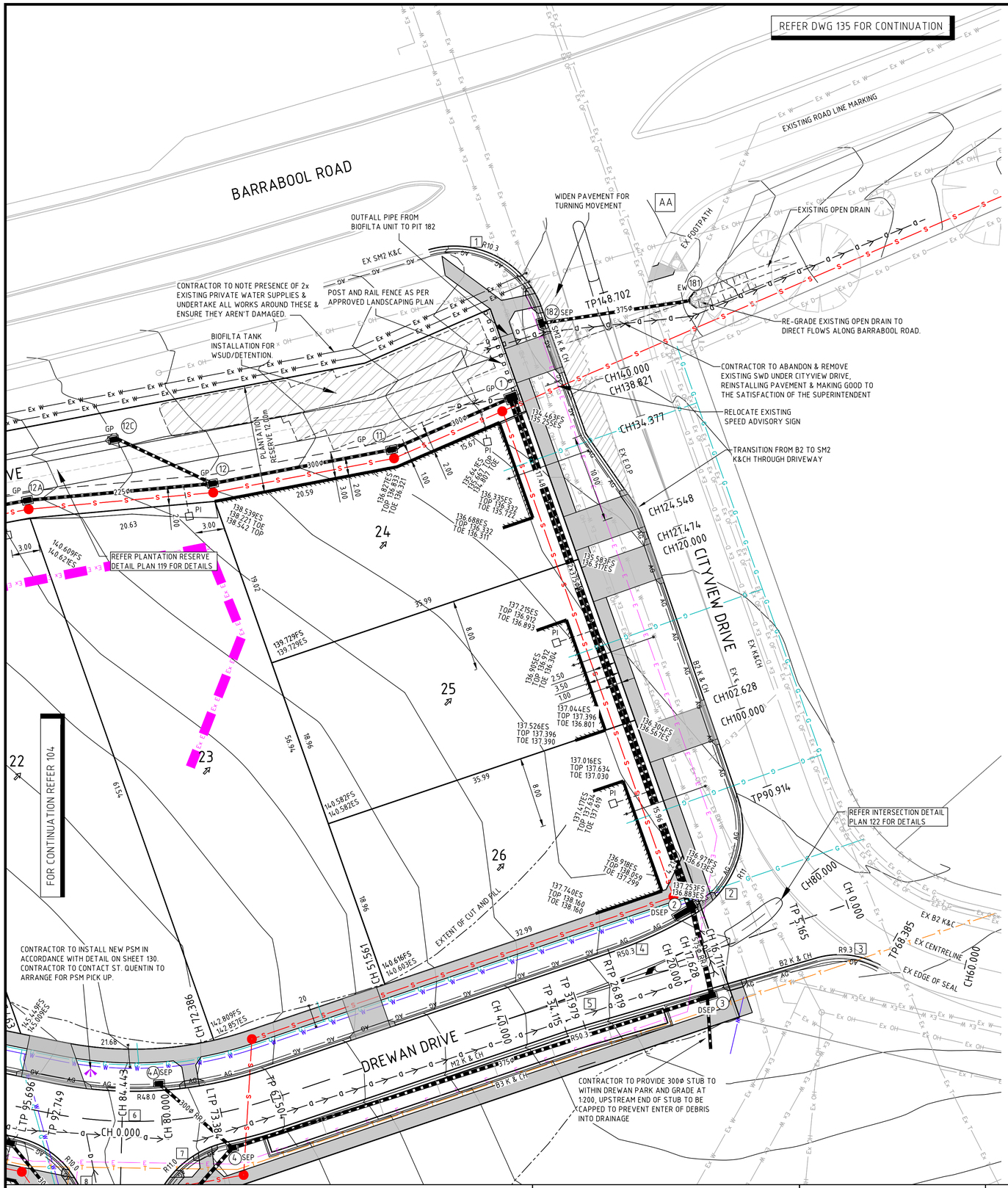

NOTE:
EXISTING ACTIVE LV ELECTRICAL SUPPLY TO LAND SALES OFFICE. TO BE MAINTAINED DURING STAGE CONSTRUCTION. TO BE DE-COMMISSIONED AT COMPLETION OF WORKS WHERE DIRECTED BY SUPERINTENDENT

NOTE:
CONTRACTOR TO PREPARE A ACTIVITY METHOD STATEMENT (AMS) TO BARWON WATER PRIOR TO UNDERTAKING WORKS AROUND EXISTING 375ø WATER MAIN IN CITYVIEW DRIVE

NOTE:
SEWER MANHOLES IN THE FOOTPATH ARE TO BE ORIENTED SO THAT THE MANHOLE LID STRUCTURE IS CENTRALLY LOCATED WITHIN THE FOOTPATH

NOTE:
CONTRACTOR TO CONNECT AG DRAIN FOR BEHIND RETAINING WALLS TO LOT PROPERTY INLETS

LEGEND

ITEM	DESCRIPTION
Ex D	EXISTING STORMWATER DRAIN
	FUTURE STORMWATER DRAIN
	PROPOSED STORMWATER DRAIN
	EXISTING STORMWATER PIT
	FUTURE STORMWATER PIT
	PROPOSED STORMWATER PIT
X JP	STORMWATER PIT NUMBER / TYPE
AG	90 DIAMETER UPVC AGRICULTURAL DRAIN
EX AG	EX AGRICULTURAL DRAIN
D	100 YEAR FLOOD PATH SURFACE FLOW
	STORMWATER FLOW
Ex S	EXISTING SEWER
S	FUTURE SEWER
S	PROPOSED SEWER
	EXISTING SEWER MH
	FUTURE SEWER MH
	PROPOSED SEWER MH
Ex W	EXISTING WATER
W	FUTURE WATER
W	PROPOSED WATER
	PROPOSED WATER SV
	PROPOSED WATER FP
	EXISTING WATER METER
E	PROPOSED FUTURE ELECTRICITY
T	PROPOSED FUTURE TELSTRA
G	PROPOSED FUTURE GAS
Ex E	EXISTING ELECTRICITY SUPPLY
Ex OH	EXISTING OVERHEAD ELECTRICITY SUPPLY
Ex T	EXISTING UNDERGROUND TELEGRAPH CABLE
Ex G	EXISTING UNDERGROUND GAS PIPE
Ex OF	EXISTING OPTIC FIBER
	PROPOSED KERB AND CHANNEL
	FUTURE KERB AND CHANNEL
	FUTURE SPOON DRAIN
R7.55	RADIUS OF CURVE MEASURED TO BACK OF KERB OR CENTRELINE
X	CURVE NUMBER
HP	HIGH POINT
	RETAINING WALL
	FUTURE RETAINING WALL
ES	EXISTING SURFACE
FS	FINISHED SURFACE
TOP / TOE	TOP / TOE OF RETAINING WALL
	PROPERTY CONNECTION
Ex E	EXISTING UNDERGROUND ELECTRICAL SUPPLY TO SALES OFFICE

Rev	Description	Date	By	App
04	AMENDED AS PER COUNCIL COMMENTS	07.08.18	N.C	M.J
03	SWD LINE 12 AMENDED	17.07.18	N.C	M.J
02	SWD PITS 5 & 6 UPDATED	26.04.18	A.V	B.R
01	ISSUED FOR CONSTRUCTION	13.03.18	A.V	M.J

SCALE AT A1 1:250 0 2.5 5 7.5 10 12.5m

villawood properties
Communities Designed for Living

ST. QUENTIN
Surveyors · Town Planners · Engineers
51 LITTLE FYANS STREET,
P.O. BOX 919, GEELONG 3220
TELEPHONE (03) 5201 1811 FAX (03) 5229 2909

Project Name: WANDANA ESTATE - STAGE 1
335 BARRABOOL ROAD
WANDANA HEIGHTS

Drawing Title: DETAIL PLAN
SHEET 1 OF 3

Level Datum	AHD
Contour Interval	1m
Date of Survey	09 / 2015
Designed By	M.J / N.C
Drawn By	N.C / A.V
Date Drawn	06.07.17
Scale	NOTED

ISSUED FOR CONSTRUCTION

ENGINEERING MANAGER APPROVED

Project Ref.	Sheet No.	Rev.
14808E	103	04

ENGINEERING

LEGEND

ITEM	DESCRIPTION
Ex D	EXISTING STORMWATER DRAIN
	FUTURE STORMWATER DRAIN
	PROPOSED STORMWATER DRAIN
	EXISTING STORMWATER PIT
	FUTURE STORMWATER PIT
	PROPOSED STORMWATER PIT
X JP	STORMWATER PIT NUMBER / TYPE
AG	90 DIAMETER UPVC AGRICULTURAL DRAIN
EX AG	EX AGRICULTURAL DRAIN
D	100 YEAR FLOOD PATH SURFACE FLOW
	STORMWATER FLOW
Ex S	EXISTING SEWER
S	FUTURE SEWER
S	PROPOSED SEWER
	EXISTING SEWER MH
	FUTURE SEWER MH
	PROPOSED SEWER MH
Ex W	EXISTING WATER
W	FUTURE WATER
W	PROPOSED WATER
	PROPOSED WATER SV
	PROPOSED WATER FP
	EXISTING WATER METER
E	PROPOSED FUTURE ELECTRICITY
T	PROPOSED FUTURE TELSTRA
G	PROPOSED FUTURE GAS
Ex E	EXISTING ELECTRICITY SUPPLY
Ex OH	EXISTING OVERHEAD ELECTRICITY SUPPLY
Ex T	EXISTING UNDERGROUND TELEGRAPH CABLE
Ex G	EXISTING UNDERGROUND GAS PIPE
Ex OF	EXISTING OPTIC FIBER
	PROPOSED KERB AND CHANNEL
	FUTURE KERB AND CHANNEL
	FUTURE SPOON DRAIN
R7.55	RADIUS OF CURVE MEASURED TO BACK OF KERB OR CENTRELINE
X	CURVE NUMBER
HP	HIGH POINT
	RETAINING WALL
	FUTURE RETAINING WALL
ES	EXISTING SURFACE
FS	FINISHED SURFACE
TOP / TOE	TOP / TOE OF RETAINING WALL
	PROPERTY CONNECTION
Ex E	EXISTING UNDERGROUND ELECTRICAL SUPPLY TO SALES OFFICE

STAGE 4
TO BE BUILT CONCURRENTLY WITH STAGE 1

NOTE:
EXISTING ACTIVE LV ELECTRICAL SUPPLY TO LAND SALES OFFICE. TO BE MAINTAINED DURING STAGE CONSTRUCTION. TO BE DE-COMMISSIONED AT COMPLETION OF WORKS WHERE DIRECTED BY SUPERINTENDENT

NOTE: SEWER MANHOLES IN THE FOOTPATH ARE TO BE ORIENTED SO THAT THE MANHOLE LID STRUCTURE IS CENTRALLY LOCATED WITHIN THE FOOTPATH

CONTRACTOR TO NOTE PRESENCE OF 2x EXISTING PRIVATE WATER SUPPLIES & UNDERTAKE ALL WORKS AROUND THESE & ENSURE THEY AREN'T DAMAGED.

BIOFILTA TANK INSTALLATION FOR WSUD/DETENTION.

PLANTATION RESERVE

REFER PLANTATION RESERVE DETAIL PLAN 119 FOR DETAILS

TRANSITION FROM B3 TO B2 K&CH THROUGH LOT 19 DRIVEWAY

EXTENT OF CUT AND FILL

20mTRANSITION TO 2 WAY CROSS FALL

ONE WAY CROSS FALL

FOOTPATH

DESIGN ℄

B3 K & CH

B2 K & CH

REFER INTERSECTION DETAIL PLAN 123 FOR DETAILS

REFER INTERSECTION DETAIL PLAN 124 FOR DETAILS

TRANSITION FROM B3 TO B2 K&CH THROUGH DSEP 6

CONTRACTOR TO INSTALL NEW PSM IN ACCORDANCE WITH DETAIL ON SHEET 130. CONTRACTOR TO CONTACT ST. QUENTIN TO ARRANGE FOR PSM PICK UP.

BROWNHILL DRIVE

DREWAN DRIVE

LOOKOUT WAY

DREWAN PARK

FOR CONTINUATION REFER 105

FOR CONTINUATION REFER 103

STAGE 4

Rev	Description	Date	By	App
04	AMENDED AS PER COUNCIL COMMENTS	07.08.18	N.C	M.J
03	SWD LINE 12 AMENDED	17.07.18	N.C	M.J
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01	ISSUED FOR CONSTRUCTION	13.03.18	A.V	M.J

SCALE AT A1 1:250 0 2.5 5 7.5 10 12.5m

villawood properties
Communities Designed for Living

ST. QUENTIN
Surveyors · Town Planners · Engineers
51 LITTLE FYANS STREET,
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TELEPHONE (03) 5201 1811 FAX (03) 5229 2909

Project Name: WANDANA ESTATE - STAGE 1
335 BARRABOOL ROAD
WANDANA HEIGHTS

Drawing Title: DETAIL PLAN
SHEET 2 OF 3

Level Datum	AHD
Contour Interval	1m
Date of Survey	09 / 2015
Designed By	M.J / N.C
Drawn By	N.C / A.V.
Date Drawn	06.07.17
Scale	NOTED

ISSUED FOR CONSTRUCTION

ENGINEERING MANAGER APPROVED

Project Ref.	Sheet No.	Rev.
14808E	104	04

ENGINEERING

STAGE 4

STAGE 5

BROWNHILL DRIVE

DREWAN PA

LOOKOUT WAY

FOR CONTINUATION REFER 104

FOR CONTINUATION REFER RIGHT

FOR CONTINUATION REFER LEFT

TRANSITION FROM B2 TO B3 K&CH THROUGH LOT 119 DRIVEWAY

TRANSITION TO 1 WAY CROSSFALL

EDGE STRIP

LIMIT OF WORKS CH 62.371

LIMIT OF WORKS CH 123.144

EXTENT OF CUT AND FILL

TEMPORARY TURNING CIRCLE

TEMPORARY POST & WIRE FENCE AROUND TURNING AREA

NOTE:
SEWER MANHOLES IN THE FOOTPATH ARE TO BE ORIENTED SO THAT THE MANHOLE LID STRUCTURE IS CENTRALLY LOCATED WITHIN THE FOOTPATH

NOTE:
EXISTING ACTIVE LV ELECTRICAL SUPPLY TO LAND SALES OFFICE. TO BE MAINTAINED DURING STAGE CONSTRUCTION. TO BE DE-COMMISSIONED AT COMPLETION OF WORKS WHERE DIRECTED BY SUPERINTENDENT

LEGEND

	EXISTING WATER METER
E	PROPOSED FUTURE ELECTRICITY
T	PROPOSED FUTURE TELSTRA
G	PROPOSED FUTURE GAS
Ex E	EXISTING ELECTRICITY SUPPLY
Ex OH	EXISTING OVERHEAD ELECTRICITY SUPPLY
Ex T	EXISTING UNDERGROUND TELEGRAPH CABLE
Ex G	EXISTING UNDERGROUND GAS PIPE
Ex OF	EXISTING OPTIC FIBER
	PROPOSED KERB AND CHANNEL
	FUTURE KERB AND CHANNEL
	FUTURE SPOON DRAIN
R7.55	RADIUS OF CURVE MEASURED TO BACK OF KERB OR CENTRELINE
X	CURVE NUMBER
HP	HIGH POINT
	RETAINING WALL
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ES	EXISTING SURFACE
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TOP / TOE	TOP / TOE OF RETAINING WALL
	PROPERTY CONNECTION
Ex E	EXISTING UNDERGROUND ELECTRICAL SUPPLY TO SALES OFFICE
Ex D	EXISTING STORMWATER DRAIN
	FUTURE STORMWATER DRAIN
	PROPOSED STORMWATER DRAIN
	EXISTING STORMWATER PIT
	FUTURE STORMWATER PIT
	PROPOSED STORMWATER PIT
X JP	STORMWATER PIT NUMBER / TYPE
AG	90 DIAMETER UPVC AGRICULTURAL DRAIN
EX AG	EX AGRICULTURAL DRAIN
D	100 YEAR FLOOD PATH SURFACE FLOW
	STORMWATER FLOW
Ex S	EXISTING SEWER
S	FUTURE SEWER
S	PROPOSED SEWER
	EXISTING SEWER MH
	FUTURE SEWER MH
	PROPOSED SEWER MH
Ex W	EXISTING WATER
W	FUTURE WATER
W	PROPOSED WATER
	PROPOSED WATER SV
	PROPOSED WATER FP

Rev	Description	Date	By	App
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SCALE AT A1 1:250 0 2.5 5 7.5 10 12.5m

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TELEPHONE (03) 5201 1811 FAX (03) 5229 2909

Project Name: WANDANA ESTATE - STAGE 1
335 BARRABOOL ROAD
WANDANA HEIGHTS

Drawing Title: DETAIL PLAN
SHEET 3 OF 3

Level Datum	AHD
Contour Interval	1m
Date of Survey	09 / 2015
Designed By	M.J / N.C
Drawn By	N.C / A.V
Date Drawn	06.07.17
Scale	NOTED

ISSUED FOR CONSTRUCTION

ENGINEERING MANAGER APPROVED

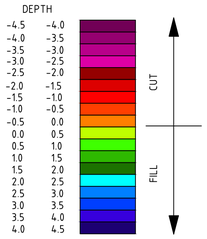
Project Ref.	Sheet No.	Rev.
14808E	105	04

ENGINEERING

FILL NOTES

1. EXISTING FILL ON SITE IS TO BE USED FOR PROPOSED ENGINEERED FILL. MATERIAL USED FOR ENGINEERED FILL SHOULD MEET THE FOLLOWING REQUIREMENTS:
   - NO WOOD/VEGETATION OR REFUSE.
   - NO CONCRETE OR ROCK PIECES GREATER THAN THAT APPROPRIATE FOR THE LAYER THICKNESS AND TYPE OF COMPACTION CONTROL TESTING .
   - NO STEEL REINFORCING
   - NO ORGANIC SILTS (TOPSOIL) AND MOISTURE SENSITIVE SILT SOIL
   - SOIL TO BE PLACED AT OR NEAR OPTIMUM MOISTURE CONTENT
2. TO MINIMIZE DIFFERENTIAL SETTLEMENT IT IS IMPORTANT THAT LAYERS CONSIST OF PREDOMINATELY THE SAME MATERIAL. CONTRACTOR TO BOX INTO THE UNDISTURBED EXISTING SURFACE ADJACENT TO EDGE OF FILL TO PROVIDE A SUITABLE JUNCTION AND AVOID FEATHERED EDGES.
3. ON COMPLETION OF THE FILL PLACEMENT, THE GEOTECHNICAL TESTING AUTHORITY SHALL PROVIDE DOCUMENTATION CONFIRMING THE SUITABILITY OF THE SUBGRADE FOR THE INTENDED PURPOSE.
4. FILL MATERIAL SHOULD BE PLACED IN A MAXIMUM LOOSE THICKNESS OF 300mm WITH A MAXIMUM PARTICLE SIZE OF 75mm. EACH LAYER SHOULD BE COMPACTED TO A MINIMUM DRY DENSITY RATIO (AS 12895.4.1) OF 95% STANDARD COMPACTION USING A VIBRATING PAD FOOT ROLLER FOR COHESIVE SOILS AND VIBRATING SMOOTH DRUM ROLLER FOR COHESIONLESS SOILS.
5. THE TOP 75mm SHOULD CONSIST OF SOIL WITH MAXIMUM PARTICLE SIZE AND MAXIMUM LIQUID LIMIT OF 20mm AND 35% RESPECTIVELY, COMPACTED IN LAYERS WITH MAXIMUM LOOSE THICKNESS OF 300mm TO A MINIMUM DRY DENSITY RATIO (AS 12895.4.1) OF 98% STANDARD COMPACTION.
6. CONVENTIONAL COMPACTION SHOULD BE CONDUCTED UNDER LEVEL 1 INSPECTION AND TESTING IN INCREMENTS NOT GREATER THAN 500mm IN ACCORDANCE WITH AS 3798-2007, 'GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS'. SECTION B.
7. COMPACTION CONTROL TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH THE TEST FREQUENCY RECOMMENDED IN AS3798-2007,'GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS',SECTION 7 & 8
8. THE SURFACE OF ALL FILL LAYERS MUST BE SHAPED TO PROVIDE DRAINAGE AND TO PREVENT PONDING.
9. THE CONTRACTOR IS RESPONSIBLE FOR THE TESTING OF ALL FILL. AT THE COMPLETION OF WORKS THE CONTRACTOR SHALL SUPPLY THE SUPERVISING ENGINEER WITH A CERTIFICATE FROM A NATA APPROVED GEOTECHNICAL ENGINEER CERTIFYING THAT FILL MEETS ABOVE REQUIREMENTS AND HAS BEEN TESTED TO LEVEL 1 STANDARDS.

LEGEND

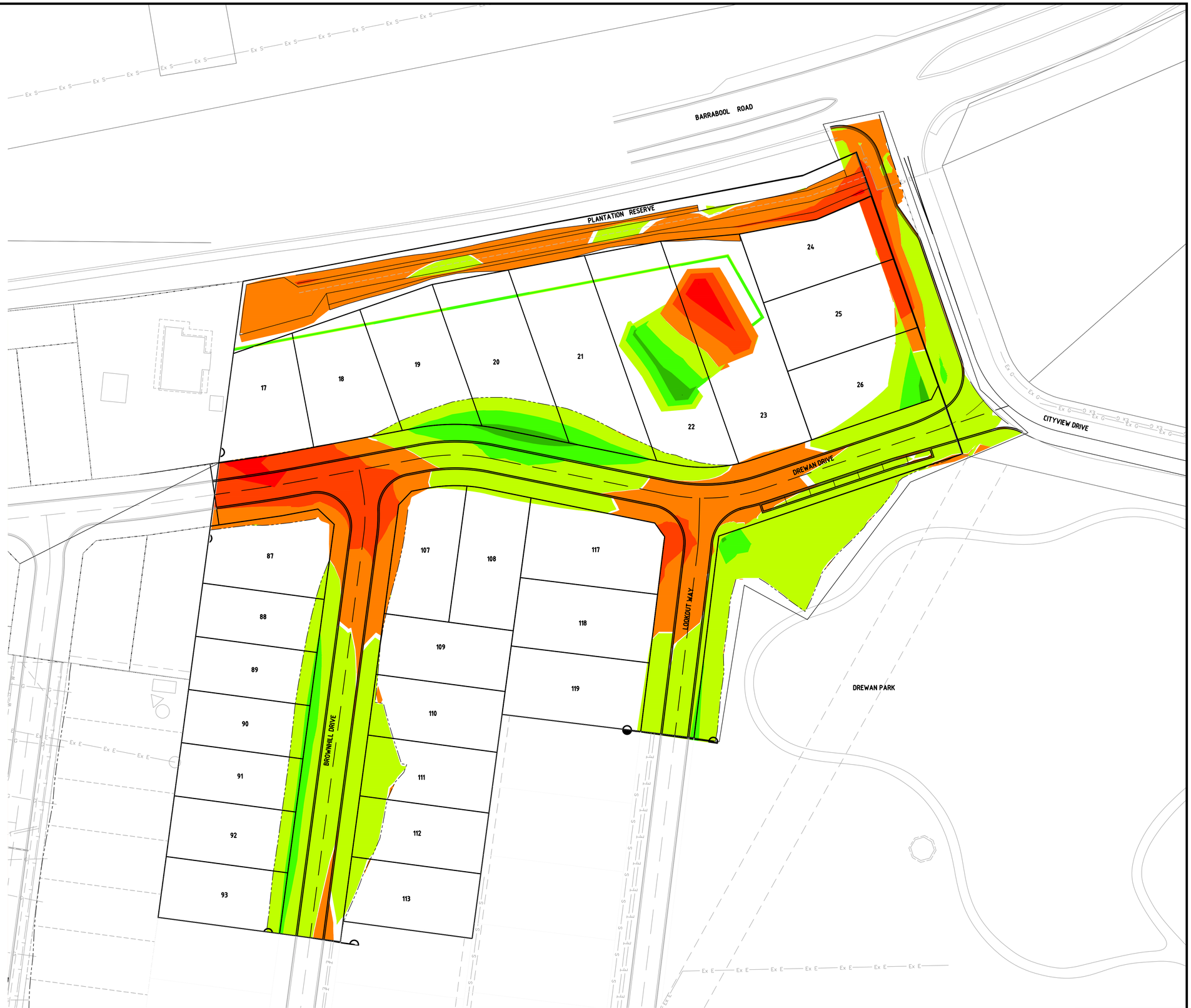


NOTE:
CONTRACTOR TO UNDERTAKE ALL SITE EARTHWORKS IN ACCORDANCE WITH THE SOIL MANAGEMENT PROTOCOL PREPARED BY GOLDER ASSOCIATES

NOTE:
EXISTING ACTIVE LV ELECTRICAL SUPPLY TO LAND SALES OFFICE. TO BE MAINTAINED DURING STAGE CONSTRUCTION. TO BE DE-COMMISSIONED AT COMPLETION OF WORKS WHERE DIRECTED BY SUPERINTENDENT

Ex E — EXISTING UNDERGROUND ELECTRICAL SUPPLY TO SALES OFFICE

SCALE AT A1 1:500 0 5 10 15 20 25m



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Project Name: WANDANA ESTATE - STAGE 1
335 BARRABOOL ROAD
WANDANA HEIGHTS

Drawing Title: EARTHWORKS DETAIL PLAN

Level Datum	AHD
Contour Interval	N/A
Date of Survey	09 / 2015
Designed By	M.J / N.C
Drawn By	N.C / A.V
Date Drawn	06.07.17
Scale	NOTED

ISSUED FOR CONSTRUCTION

ENGINEERING MANAGER APPROVED

Project Ref.	Sheet No.	Rev.
14808E	106	04

ENGINEERING