



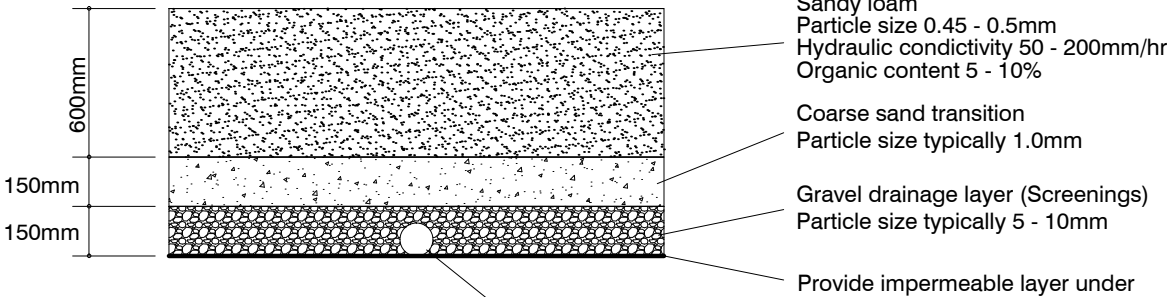
SCALE
Basin plan 1:1 250
Location plan and detail NTS

ORIENTATION
NORTH

LEGEND

Pacific Pine Estate Balance boundary

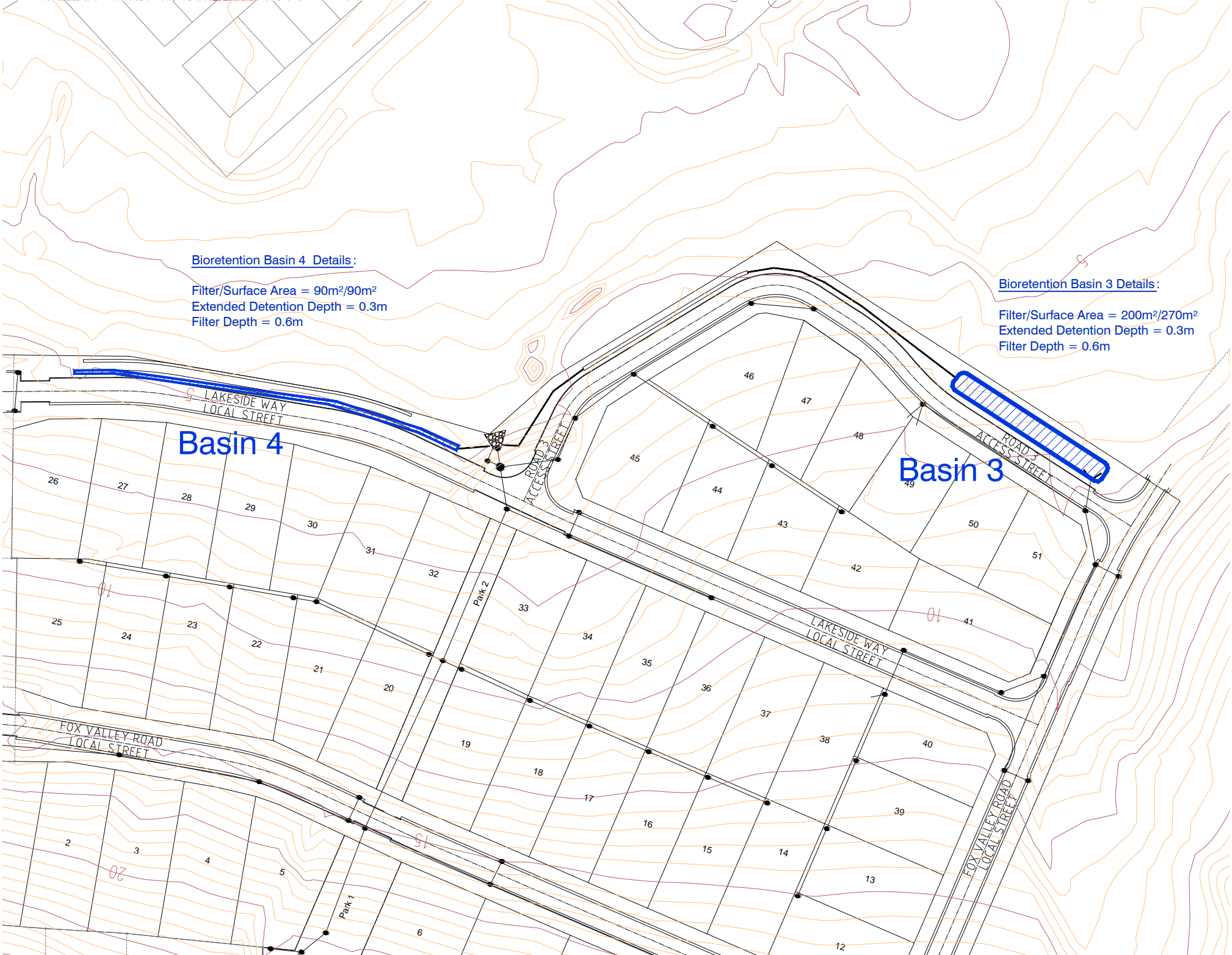
SOURCES
Contours and proposed layout supplied by
Kennedy Surveying and SMEC Urban



Notes
Filter conductivity to be measured in
accordance with AS4419:2003.
Filter organic content to be measured
in accordance with AS1289 4.1.1.

100mm dia perforated
PVC Pipe to be graded
to fall to a free draining
outlet.

TYPICAL BIORETENTION BASIN FILTER ZONE DETAIL



Bioretention Basin 4 Details:
Filter/Surface Area = 90m²/90m²
Extended Detention Depth = 0.3m
Filter Depth = 0.6m

Bioretention Basin 3 Details:
Filter/Surface Area = 200m²/270m²
Extended Detention Depth = 0.3m
Filter Depth = 0.6m

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AGRICULTURE WATER ENVIRONMENT

PROJECT
PACIFIC PINES ESTATE
LENNOX HEAD, NSW

CLIENT
LEND LEASE

DRAWING
BIORETENTION BASIN
DETAILS

DATE 24/09/2012	DRAWN BWS
SCALE 1:1 250 & NTS	CHECKED CMA
PROJECT NO 10734	REVISION B
DRAWING NO 1.6	



SCALE
1:5 000



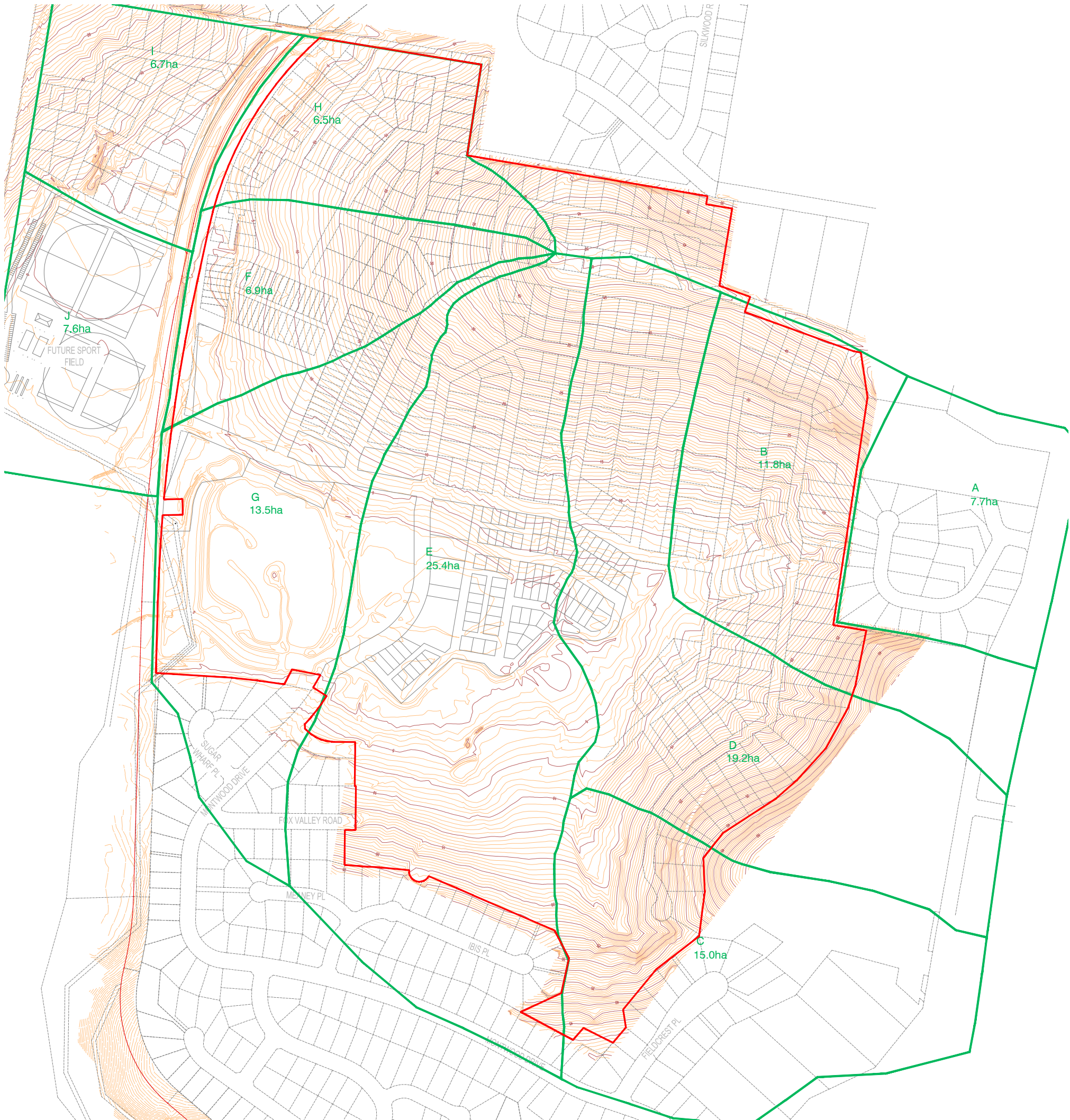
ORIENTATION
NORTH

LEGEND

- Pacific Pines Estate
balance boundary
- WBNM base case
catchment boundary

SOURCES

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PROJECT
PACIFIC PINES ESTATE
LENNOX HEAD, NSW

CLIENT
LEND LEASE

DRAWING
WBNM BASE CASE
CATCHMENT PLAN

DATE
24/09/2012

SCALE
1:5 000

PROJECT NO
10734

DRAWN
BWS

CHECKED
CMA

REVISION
B



SCALE
1:5 000



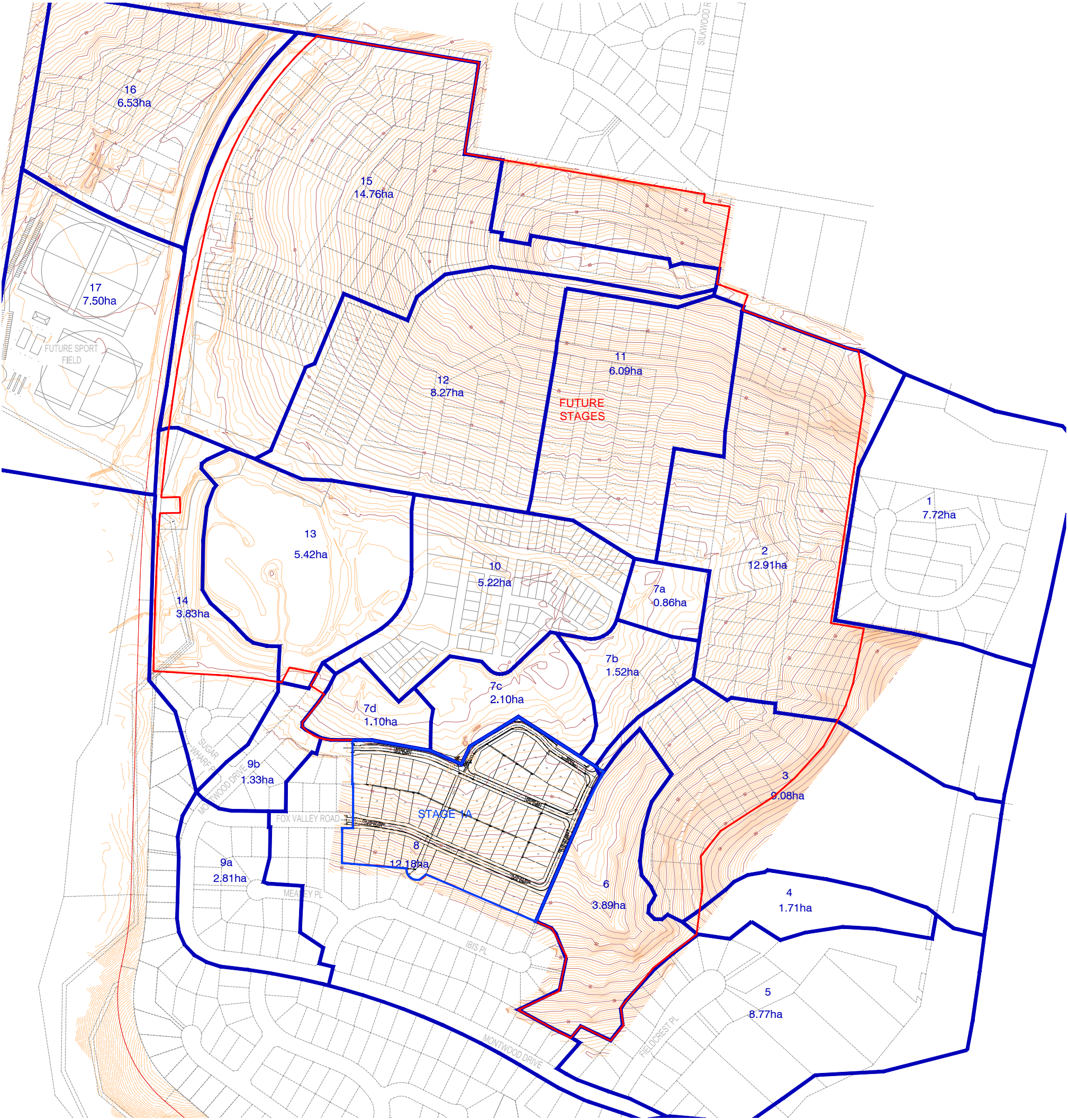
ORIENTATION
NORTH

LEGEND

- Pacific Pines Estate balance boundary
- Stage 1A boundary
- WBNM developed case catchment boundary

SOURCES

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PROJECT
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LENNOX HEAD, NSW

CLIENT
LEND LEASE

DRAWING
WBNM DEVELOPED CASE
CATCHMENT PLAN

DATE
24/09/2012

SCALE
1:5 000

PROJECT NO
10734

DRAWN
BWS

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CMA

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B



SCALE
1:5 000

ORIENTATION
NORTH

LEGEND

- Pacific Pines Estate Balance Boundary
- WBNM developed case catchment boundary
- Detention Basin

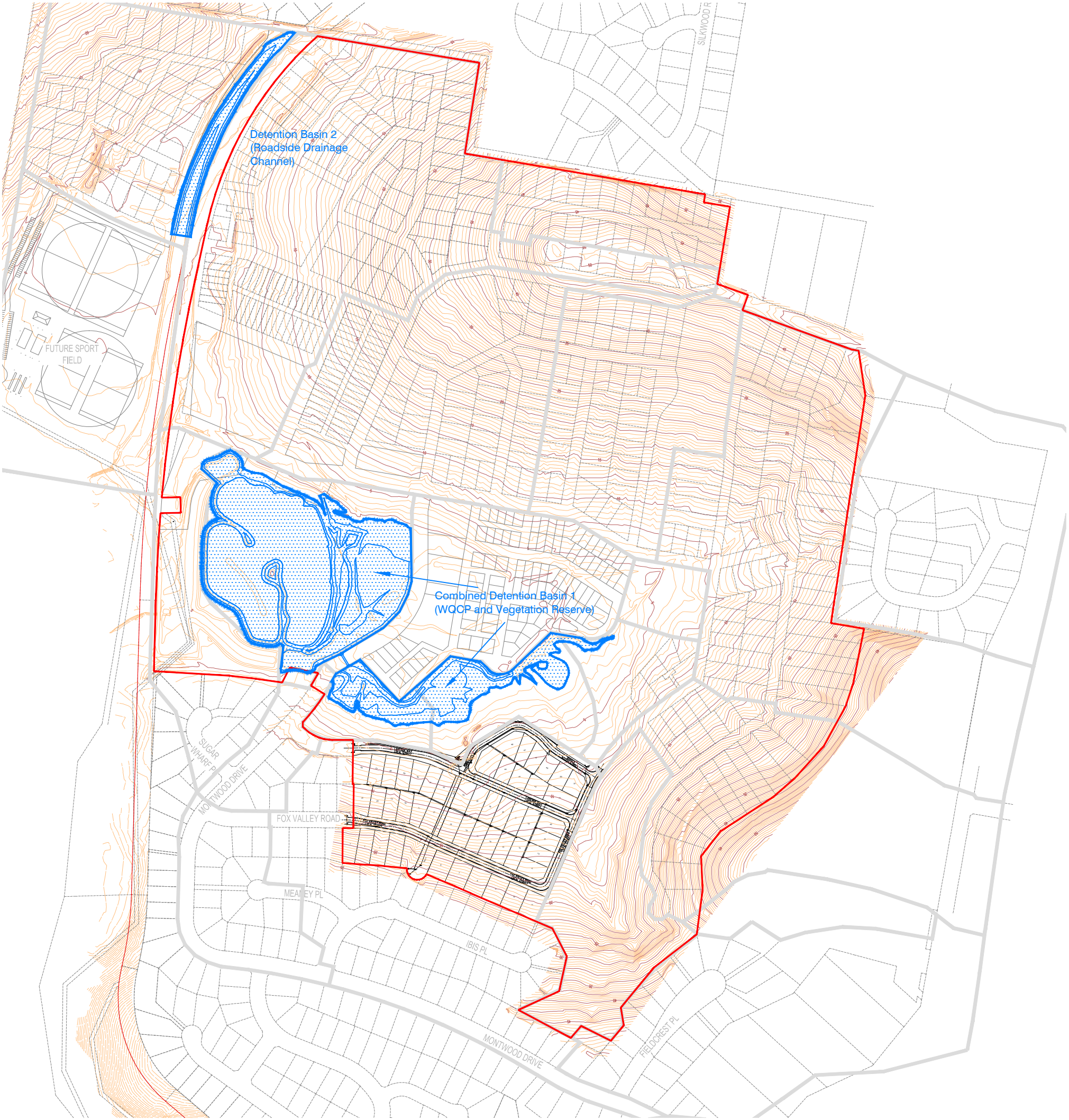
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AGRICULTURE WATER ENVIRONMENT



PROJECT
PACIFIC PINES ESTATE
LENNOX HEAD, NSW

CLIENT
LEND LEASE

DRAWING
DETENTION BASIN LAYOUT

DATE 24/09/2012	DRAWN BWS
SCALE 1:5 000	CHECKED CMA
PROJECT NO 10734	DRAWING NO 1.9
	REVISION B



SCALE
Basin plan 1:1 250
Location plan and detail NTS



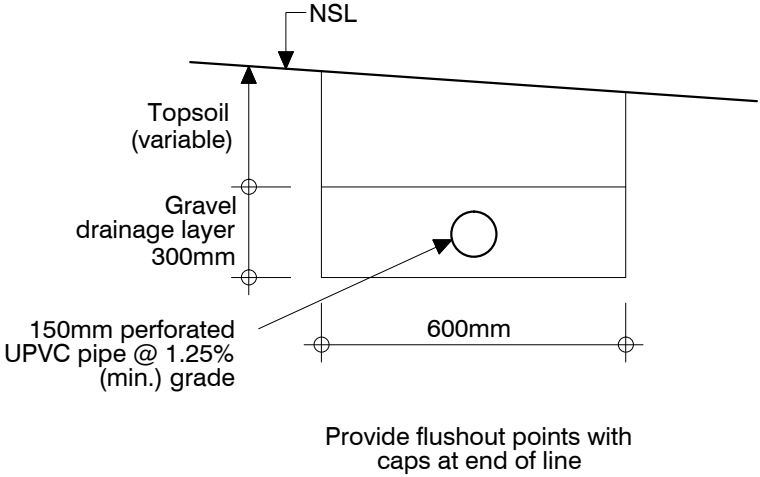
ORIENTATION
NORTH

LEGEND

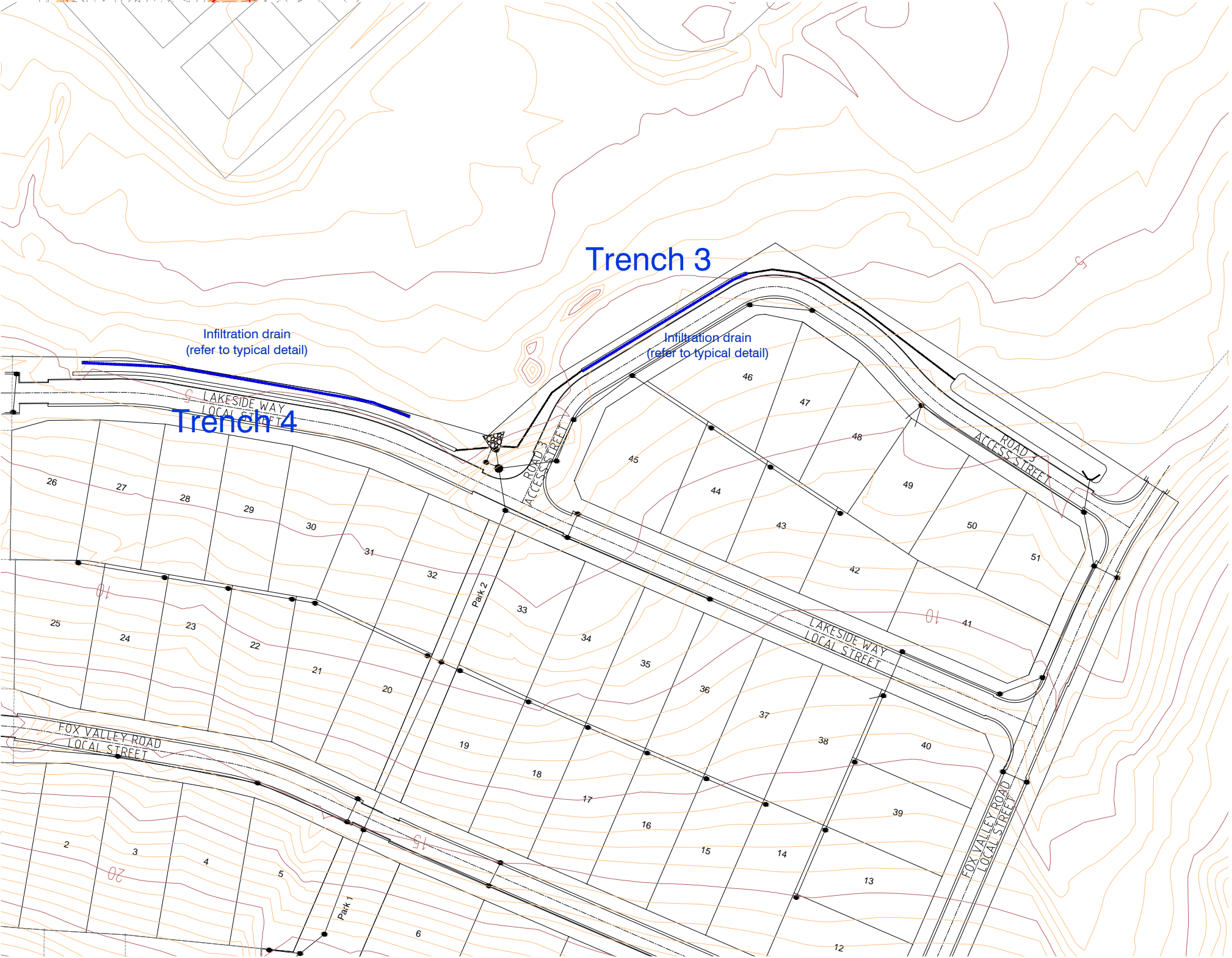
Pacific Pine Estate Balance boundary

SOURCES

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INFILTRATION TRENCH TYPICAL DETAIL



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PACIFIC PINES ESTATE
LENNOX HEAD, NSW

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LEND LEASE

DRAWING
INFILTRATION
TRENCH DETAILS

DATE 24/09/2012	DRAWN BWS
SCALE 1:1 250 & NTS	CHECKED CMA
PROJECT NO 10734	DRAWING NO 1.10
	REVISION B