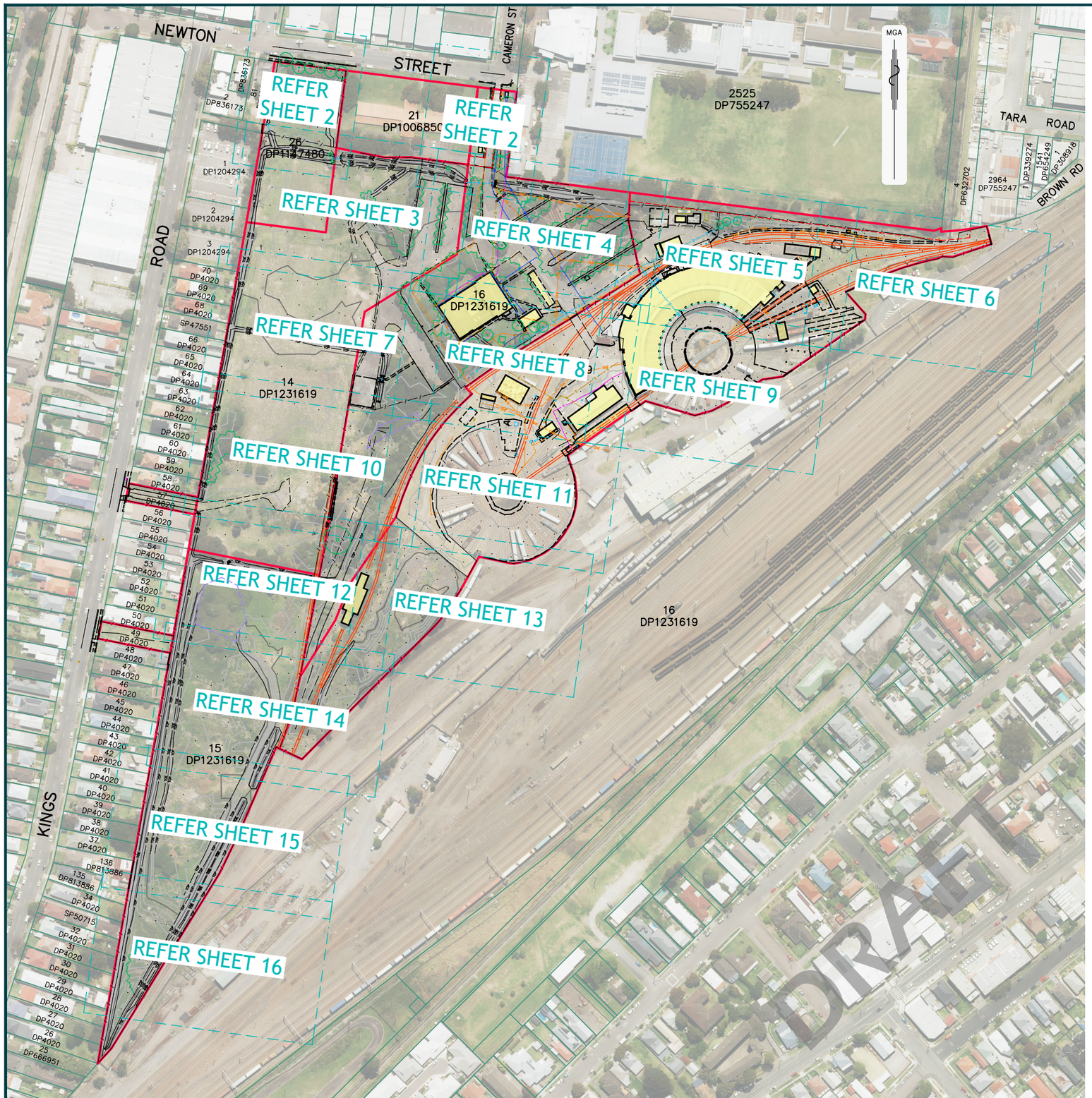

SURVEY INFORMATION

1. THE SURVEY IS ON GROUND CO-ORDINATES.

   -THE ORIGIN OF CO-ORDINATES IS PM 12392
   MGA CO-ORDINATES
   E 380879.437 N 6356319.815
   (GDA 2020) (ZONE 56)
   -SOURCE OF CO-ORDINATES: SCIMS
   -DATE 28/06/2022

2. ALL REDUCED LEVELS ARE ON AUSTRALIAN HEIGHT DATUM (A.H.D)

   -ORIGIN OF LEVELS PM 12392. RL7.936
   -SOURCE OF REDUCED LEVELS: SCIMS
   -DATE OF REDUCED LEVELS 28/06/2022

3. CONTOUR INTERVAL IS 0.2m.

4. MGA AND ISG CO-ORDINATE SYSTEMS ARE BASED ON A MATHEMATICAL EARTH MODEL AND SUBJECT TO VARIABLE SCALE FACTORS. DISTANCES CALCULATED FROM CO-ORDINATES MAY VARY SIGNIFICANTLY FROM GROUND MEASUREMENTS. IF FURTHER CLARIFICATION IS REQUIRED CONTACT MONTEATH AND POWYS.

IMPORTANT NOTES

1. THE POSITION OF SERVICES LOCATED BY ACCREDITED SERVICES CONTRACTOR USING CONDUCTIVE TRACING TECHNIQUES ARE RECORDED ON THIS PLAN. MONTEATH & POWYS ARE UNABLE TO VERIFY THE ACCURACY OF THESE LOCATIONS AND ADVISE THE REQUIREMENT FOR POSITIVE IDENTIFICATION PRIOR TO EXCAVATION OR CONSTRUCTION IN THEIR VICINITY. ANY DEPTHS OF SERVICES FROM INDUCTIVE TRACING WHICH ARE INDICATED ON THIS PLAN ARE INDICATIVE ONLY AND SHOULD BE VERIFIED BY POTHOLING IF CRITICAL TO DESIGN.
2. THE BOUNDARIES SHOWN ON THIS PLAN ARE BASED ON OUR FIELD SURVEY. TO FORMALISE THESE DIMENSIONS, WE WOULD RECOMMEND THE PREPARATION OF A REDEFINITION PLAN, SUITABLE FOR LODGEMENT AND REGISTRATION WITH NSW LAND REGISTRY SERVICES.
3. CRITICAL LEVELS (E.G. FLOOR LEVELS) AND CRITICAL LOCATIONS (E.G. STRUCTURES) THAT HAVE NOT BEEN SHOWN MUST BE VERIFIED BY FURTHER SURVEY PRIOR TO FINAL DESIGN.
4. NO EXCAVATIONS HAVE BEEN MADE TO DETERMINE THE EXTENT TO WHICH ANY SUBJECT WALLS, FOUNDATIONS OR FOOTINGS MAY ENCROACH UPON ADJOINING LAND.
5. NO EXCAVATIONS HAVE BEEN MADE TO DETERMINE THE EXTENT TO WHICH ANY ADJOINING WALLS, FOUNDATIONS OR FOOTINGS MAY ENCROACH UPON SUBJECT LAND.
6. ALL TREE DIMENSIONS, HEIGHT (H), CANOPY (C) AND TRUNK DIAMETER (D) HAVE BEEN ESTIMATED. IF ACCURATE DIMENSIONS ARE REQUIRED FOR DESIGN PURPOSES, FURTHER SURVEY SHOULD BE REQUESTED.
7. CONTOURS SHOWN DEPICT THE TOPOGRAPHY. CONTOURS DO NOT REPRESENT THE EXACT LEVEL AT ANY PARTICULAR POINT, EXCEPT AT SPOT LEVELS SHOWN.
8. THIS PLAN MUST REMAIN UNALTERED AS ISSUED BY MONTEATH & POWYS. ALTERING ANY PART OF THIS PLAN DESTROYS THE INTEGRITY OF THE PLAN. ANY REVISIONS REQUESTED MUST BE ISSUED BY MONTEATH & POWYS.
9. THESE NOTES ARE AN INTEGRAL PART OF THIS PLAN. REPRODUCTION OF THIS PLAN OR OF ANY PART OF THIS PLAN, WITHOUT THESE NOTES BEING INCLUDED IN FULL, WILL RENDER THE INFORMATION SHOWN ON SUCH REPRODUCTION INVALID AND NOT SUITABLE FOR USE.

LEGEND

BUILDING
COL COLUMN
FL FLOOR LEVEL
DRAINAGE
DIP DRAINAGE INLET PIT
INV INVERT LEVEL
KIP KERB INLET PIT
OBV OBVERT LEVEL
SIP SURFACE INLET PIT
SWMH STORMWATER MANHOLE
ELECTRICITY
EDB ELECTRICITY DISTRIBUTION BOARD
EPI ELECTRICITY PILLAR
EPT ELECTRICITY PIT
LP LIGHT POLE
PLP POWER & LIGHT POLE
PP POWER POLE
GAS
GM GAS MARKER
MISCELLANEOUS
MPIT MISCELLANEOUS PIT
SEWER
SMH SEWER MANHOLE
IPS SEWER INSPECTION POINT
SVT SEWER VENT
STRUCTURE
BOL BOLLARD
SGN SIGN POST
TELECOMMUNICATIONS
TPI TELECOMMUNICATIONS PILLAR
TPT TELECOMMUNICATIONS PIT
TREES
TR TREE
H HEIGHT OF TREE
C SPREAD OF CANOPY
D DIAMETER OF TRUNK
WATER
HYD HYDRANT
SV STOP VALVE
WMT WATER METER

LINE TYPES

- DRAIN PIPE
- DISH DRAIN
- UNDERGROUND ELECTRICAL HV CABLE
- UNDERGROUND ELECTRICAL LV CABLE
- ELECTRICAL PAINT MARK
- OVERHEAD ELECTRICITY CABLE
- TELECOMMUNICATIONS CABLE
- FIBRE OPTIC CABLE
- GAS MAIN
- SEWER MAIN
- WATER MAIN
- FENCING
- GUARD RAIL
- RETAINING WALL
- EDGE OF CONCRETE
- TOP OF BANK
- TOE OF BANK
- CENTRELINE OF BITUMEN
- EDGE OF BITUMEN
- EDGE OF GRAVEL
- UNDERGROUND ELECTRICITY CABLE (DBYD)
- TELECOMMUNICATIONS CABLE (DBYD)
- GAS MAIN (DBYD)
- SEWER MAIN (DBYD)
- WATER MAIN (DBYD)
- DRAINAGE (DBYD)

X.XX DENOTES DEPTH TO TOP OF SERVICE

DIAL BEFORE YOU DIG www.1100.com.au

0 20 40 60 80 100m
REDUCTION RATIO – 1:1500 (A1)
REDUCTION RATIO – 1:3000 (A3)

REVISIONS						
	.	.	.	.	.	xx.xx.21
	No	REVISION	SVY	DFT	CHK	DATE

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Surveyed	Drafted	Checked
M&P	MAK	DS

REGISTERED SURVEYOR
@A1 : 1:1500
@A3 : 1:3000
DO NOT SCALE

Original Size: A1

Client: TRANSPORT FOR NSW

Title: DETAIL SURVEY OFLOT 26 DP 1147480, LOTS 13-16 DP 1231619 & LOT 49 & 57 SEC A DP 4020
BROADMEADOW LOCOMOTIVE PRECINCT, 35 CAMERON STREET, BROADMEADOW

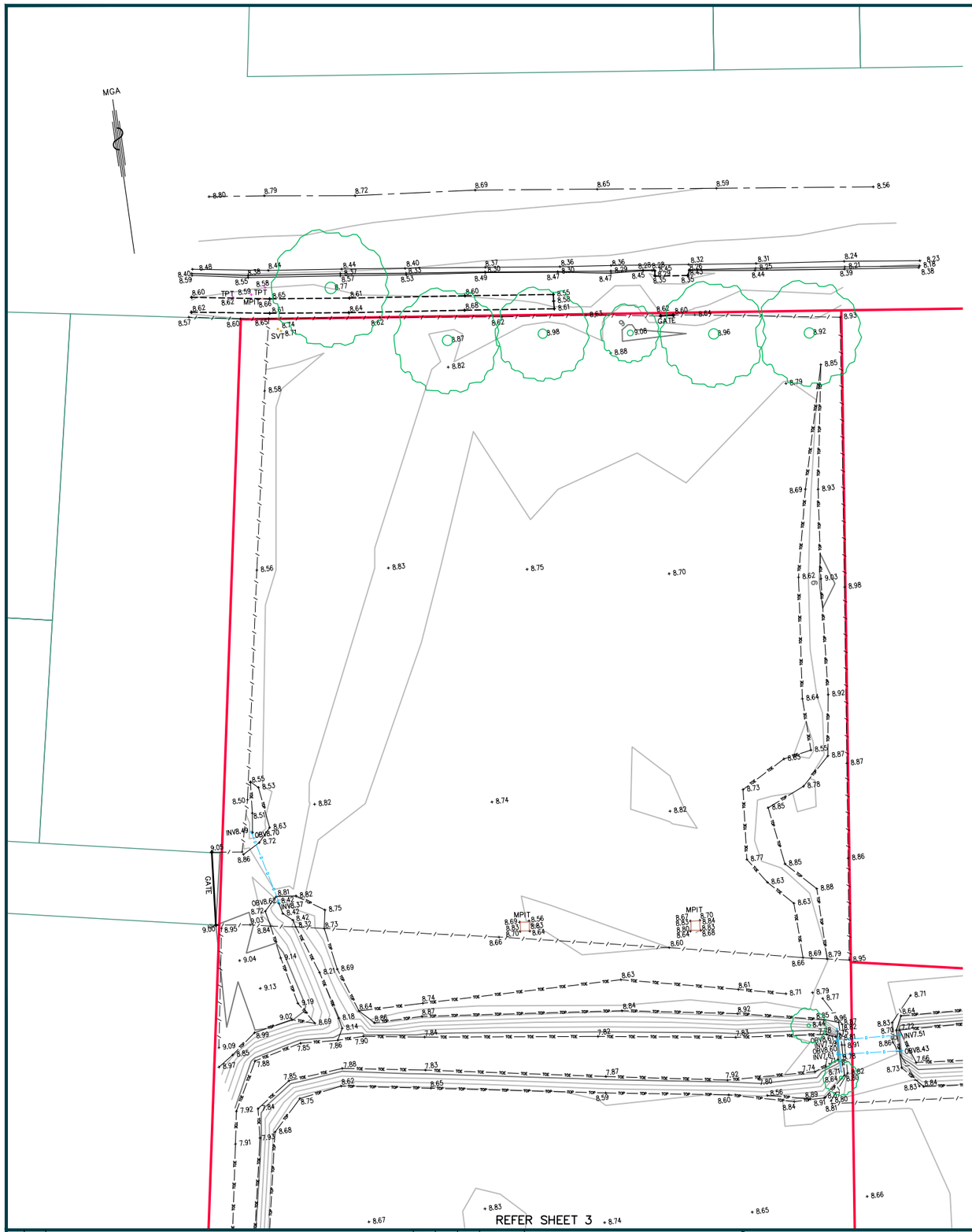
CAD File: 220240B | Ref No: 22/0240 | Date: 05/08/2022

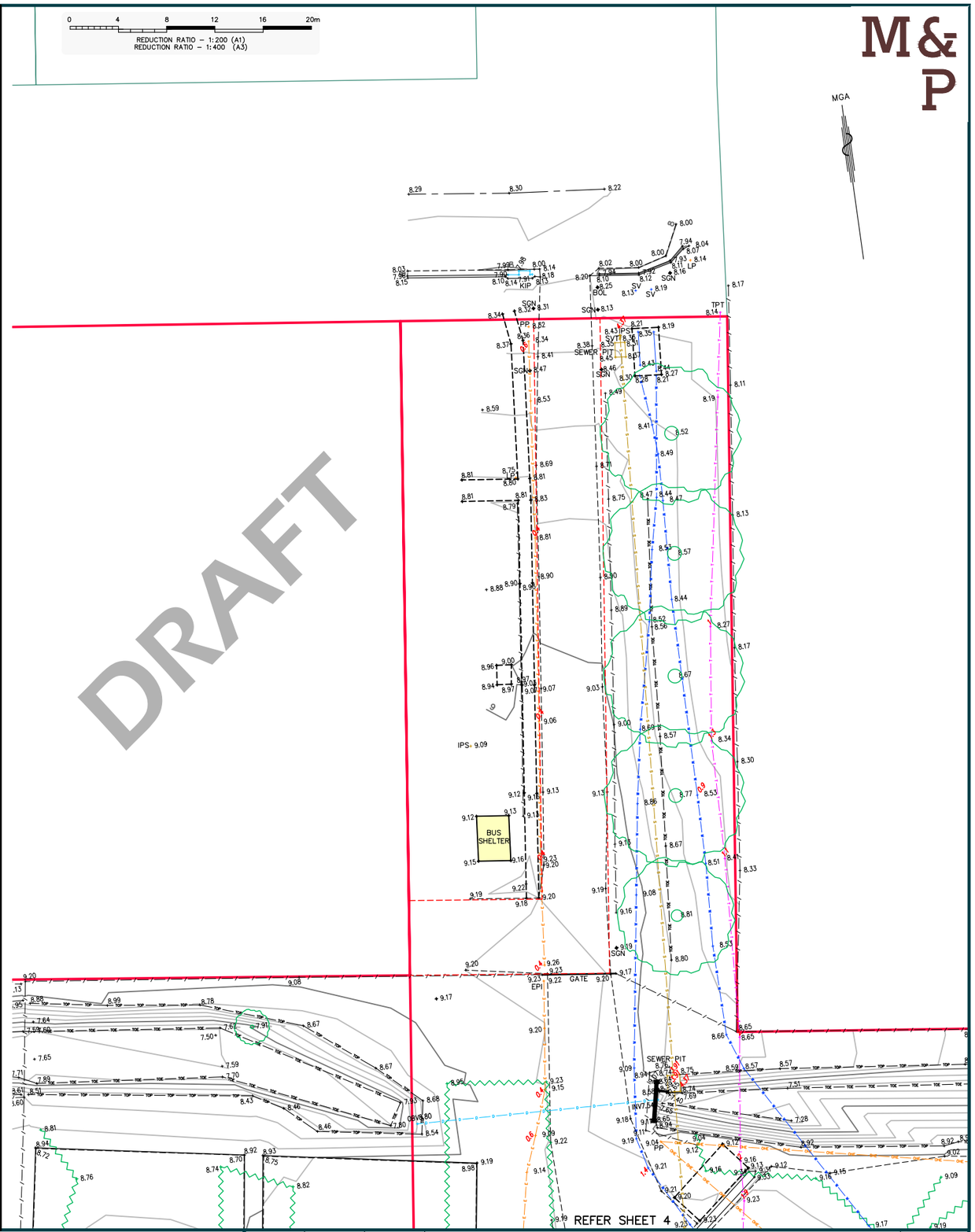
Sheet No. 1/16

Revision .

0 4 8 12 16 20m

REDUCTION RATIO – 1:200 (A1)
REDUCTION RATIO – 1:400 (A3)





REVISIONS

No	REVISION	SVY	DFT	CHK	DATE
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NEWCASTLE SYDNEY GUNNEDAH MUSWELLBROOK

Surveyed	Drafted	Checked
M&P	MAK	DS

REGISTERED SURVEYOR

@A1 : 1:200
@A3 : 1:400

DO NOT SCALE

Original Size: A1

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BROADMEADOW LOCOMOTIVE PRECINCT, 35 CAMERON STREET, BROADMEADOW

CAD File: 220240B | Ref No: 22/0240 | Date: 05/08/2022

Sheet No. 2 / 16

Revision •

REFER SHEET 2

REFER SHEET 4

REFER SHEET 7

MGA

GATE

MPIT

DRAFT

0 4 8 12 16 20m
REDUCTION RATIO – 1:200 (A1)
REDUCTION RATIO – 1:400 (A3)

REVISIONS

No	REVISION	SVY	DFT	CHK	DATE
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Surveyed	Drafted	Checked
M&P	MAK	DS

REGISTERED SURVEYOR

@A1 : 1:200
@A3 : 1:400

DO NOT SCALE

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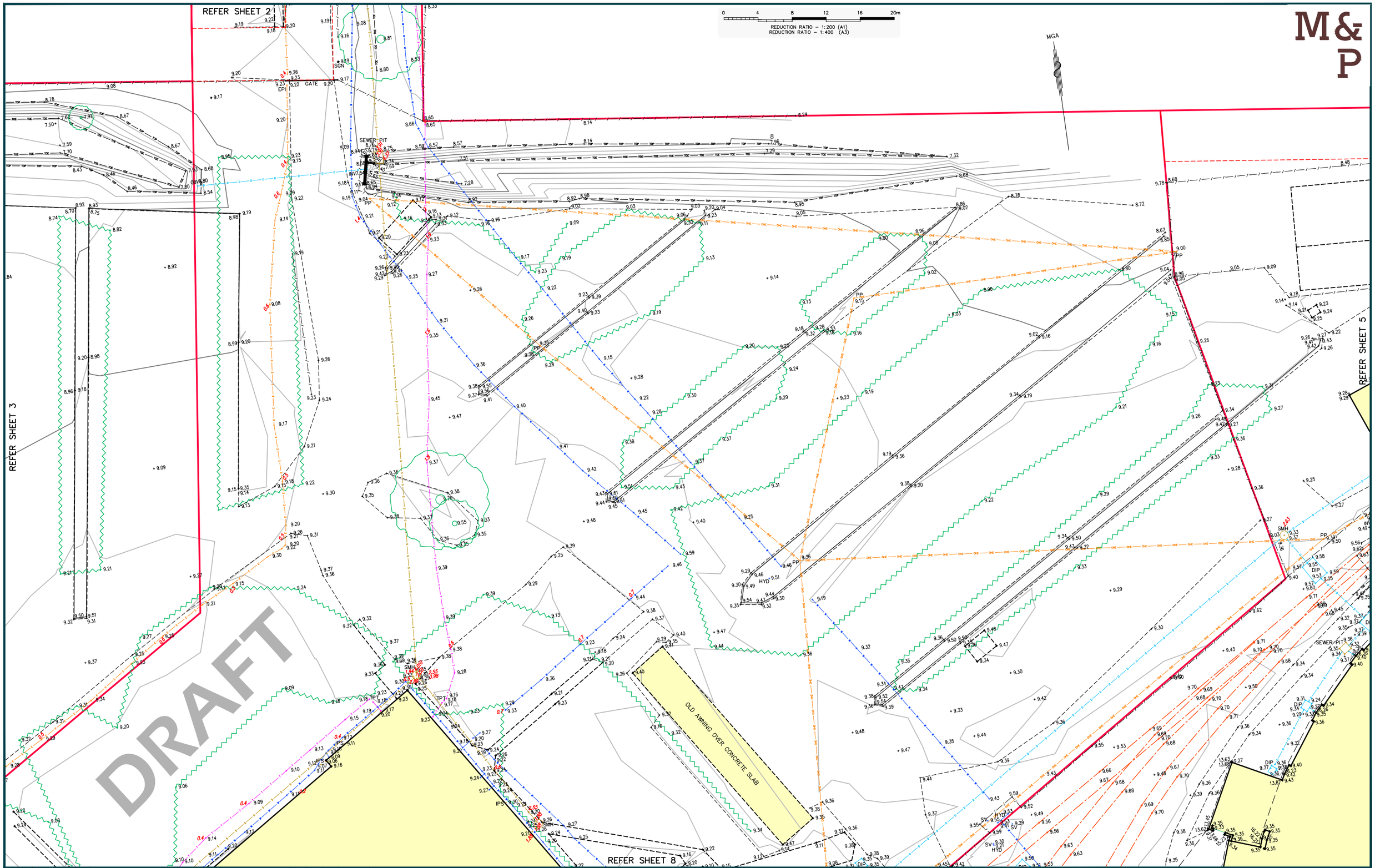
BROADMEADOW LOCOMOTIVE PRECINCT, 35 CAMERON STREET, BROADMEADOW

CAD File: 220240B | Ref No: 22/0240 | Date: 05/08/2022

Sheet No. 3 / 16

Revision •



M&P

REVISIONS						
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No	REVISION		SVY	DFT	CHK	DATE

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ISO 9001 Quality Management NEWCASTLE FS 559134 · ISO 14001 Environmental Management EMS 709938 · ISO 45001 Occupational Health and Safety Management OHS 709944

Surveyed	Drafted	Checked
M&P	MAK	DS

REGISTERED SURVEYOR

@A1 : 1:200 @A3 : 1:400	Original Size
DO NOT SCALE	A1

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BROADMEADOW LOCOMOTIVE PRECINCT, 35 CAMERON STREET, BROADMEADOW

CAD File: 220240B | Ref No: 22/0240 | Date: 05/08/2022

Sheet No. 4/16

Revision .

0 4 8 12 16 20m

REDUCTION RATIO – 1:200 (A1)
REDUCTION RATIO – 1:400 (A3)

M&P

MGA

GAS TANK

GAS TANK

FORMER EFFLUENT TREATMENT PLANT

APPROXIMATE OUTLINE OF TANKS (NOT SURVEYED)

GATE

GATE

AWNING

AWNING

FUEL STORAGE AREA

FORMER FUEL PUMP BUILDING

FORMER FLAMMABLE LIQUIDS STORE

MAINTENANCE BAY

SEPTIC TANK

SEWER PIT

REFER SHEET 4

REFER SHEET 6

REFER SHEET 9

DRAFT

REVISIONS						
.	.		.	.	.	xx.xx.21
No	REVISION		SVY	DFT	CHK	DATE

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Surveyed	Drafted	Checked
M&P	MAK	DS

REGISTERED SURVEYOR

@A1 : 1:200 @A3 : 1:400	Original Size
DO NOT SCALE	A1

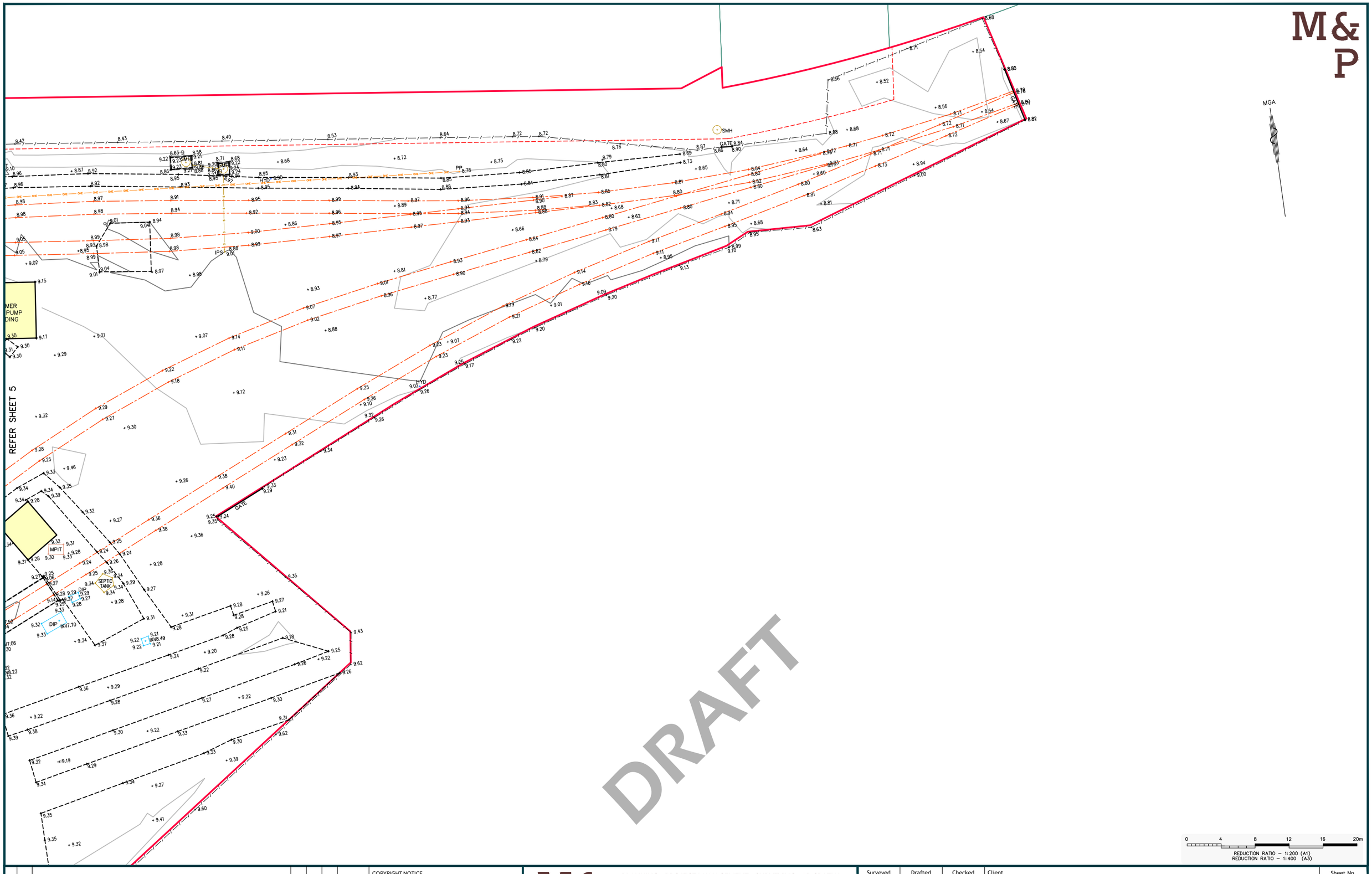
Client: TRANSPORT FOR NSW

Title: DETAIL SURVEY OFLOT 26 DP 1147480, LOTS 13-16 DP 1231619 & LOT 49 & 57 SEC A DP 4020
BROADMEADOW LOCOMOTIVE PRECINCT, 35 CAMERON STREET, BROADMEADOW

CAD File: 220240B | Ref No: 22/0240 | Date: 05/08/2022

Sheet No. 5/16

Revision .



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No	REVISION		SVY	DFT	CHK	DATE

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Surveyed	Drafted	Checked
M&P	MAK	DS

REGISTERED SURVEYOR

@A1 : 1:200 @A3 : 1:400	Original Size
DO NOT SCALE	A1

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BROADMEADOW LOCOMOTIVE PRECINCT, 35 CAMERON STREET, BROADMEADOW

CAD File: 220240B | Ref No: 22/0240 | Date: 05/08/2022

Sheet No. 6/16

Revision •

REFER SHEET 3

REFER SHEET 8

REFER SHEET 10

DRAFT

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0 4 8 12 16 20m

REDUCTION RATIO – 1:200 (A1)
REDUCTION RATIO – 1:400 (A3)

REVISIONS						
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No	REVISION	SVY	DFT	CHK	DATE	

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Surveyed	Drafted	Checked
M&P	MAK	DS

REGISTERED SURVEYOR

@A1 : 1:200	Original Size
@A3 : 1:400	A1
DO NOT SCALE	

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BROADMEADOW LOCOMOTIVE PRECINCT, 35 CAMERON STREET, BROADMEADOW

CAD File: 220240B | Ref No: 22/0240 | Date: 05/08/2022

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Revision •

REFER SHEET 4

REFER SHEET 7

REFER SHEET 9

REFER SHEET 11

2 STOREY
BRICK BUILDING

BRICK
BUILDING

WEATHERBOARD
BUILDING

SWITCHYARD

2 STOREY GALVANISED
IRON BUILDING

GALVANISED
IRON BUILDING

CONCRETE SLAB

MGA

DRAFT

0 4 8 12 16 20m

REDUCTION RATIO – 1:200 (A1)
REDUCTION RATIO – 1:400 (A3)

REVISIONS						
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No	REVISION		SVY	DFT	CHK	DATE

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NEWCASTLE SYDNEY GUNNEDAH MUSWELLBROOK

NEWCASTLE FS 559134 EMS 709938 OHS 709944

Surveyed	Drafted	Checked
M&P	MAK	DS

REGISTERED SURVEYOR

@A1 : 1:200
@A3 : 1:400

DO NOT SCALE

Original Size
A1

Client: TRANSPORT FOR NSW

Title: DETAIL SURVEY OFLOT 26 DP 1147480, LOTS 13-16 DP 1231619 &
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BROADMEADOW LOCOMOTIVE PRECINCT, 35 CAMERON STREET, BROADMEADOW

CAD File: 220240B | Ref No: 22/0240 | Date: 05/08/2022

Sheet No. 8 / 16

Revision .

REFER SHEET 5

REFER SHEET 8

MAINTENANCE BAY

GATE

GATE

MGA

OREY GALVANISED
RON BUILDING

DRAFT

0 4 8 12 16 20m

REDUCTION RATIO – 1:200 (A1)
REDUCTION RATIO – 1:400 (A3)

REVISIONS

No	REVISION	SVY	DFT	CHK	DATE
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Surveyed	Drafted	Checked
M&P	MAK	DS

REGISTERED SURVEYOR

@A1 : 1:200
@A3 : 1:400

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Original Size: A1

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BROADMEADOW LOCOMOTIVE PRECINCT, 35 CAMERON STREET, BROADMEADOW

CAD File: 220240B | Ref No: 22/0240 | Date: 05/08/2022

Sheet No. 9/16

Revision •

REFER SHEET 7

REFER SHEET 11

REFER INSET 'A' SHEET 13

REFER SHEET 12

AREA NOT SURVEYED (HEAVILY VEGETATED)

MGA

DRAFT

0 4 8 12 16 20m

REDUCTION RATIO – 1:200 (A1)
REDUCTION RATIO – 1:400 (A3)

REVISIONS						
No	REVISION	SVY	DFT	CHK	DATE	
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Surveyed	Drafted	Checked
M&P	MAK	DS

REGISTERED SURVEYOR

@A1 : 1:200
@A3 : 1:400

DO NOT SCALE

Original Size: A1

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BROADMEADOW LOCOMOTIVE PRECINCT, 35 CAMERON STREET, BROADMEADOW

CAD File: 220240B | Ref No: 22/0240 | Date: 05/08/2022

Sheet No.: 10 /16

Revision: •

REFER SHEET 8

REFER SHEET 10

REFER SHEET 13

AREA NOT SURVEYED (HEAVILY VEGETATED)

GALVANISED IRON BUILDING

SEPTIC TANK

SUMP PUMP

SEWER PIT

SMH

DIP

EPI

PP

LP

PLP

MGA

DRAFT

0 4 8 12 16 20m

REDUCTION RATIO – 1:200 (A1)
REDUCTION RATIO – 1:400 (A3)

REVISIONS						
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No	REVISION	SVY	DFT	CHK	DATE	

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NEWCASTLE FS 559134 EMS 709938 OHS 709944

NEWCASTLE SYDNEY GUNNEDAH MUSWELLBROOK

Surveyed	Drafted	Checked
M&P	MAK	DS

REGISTERED SURVEYOR

@A1 : 1:200 @A3 : 1:400	Original Size
DO NOT SCALE	A1

Client: TRANSPORT FOR NSW

Title: DETAIL SURVEY OFLOT 26 DP 1147480, LOTS 13-16 DP 1231619 & LOT 49 & 57 SEC A DP 4020
BROADMEADOW LOCOMOTIVE PRECINCT, 35 CAMERON STREET, BROADMEADOW

CAD File: 220240B | Ref No: 22/0240 | Date: 05/08/2022

Sheet No. 11/16

Revision •

REFER INSET 'A' SHEET 13

REFER SHEET 10

REFER SHEET 13

REFER SHEET 14

DRAFT

M&P

MGA

AREA NOT SURVEYED DUE TO UNSTABLE TERRAIN.

2 STOREY GALVANISED IRON BUILDING

0 4 8 12 16 20m

REDUCTION RATIO – 1:200 (A1)
REDUCTION RATIO – 1:400 (A3)

REVISIONS

No	REVISION	SVY	DFT	CHK	DATE
.	.	.	.	.	xx.xx.21

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NEWCASTLE SYDNEY GUNNEDAH MUSWELLBROOK

Surveyed	Drafted	Checked
M&P	MAK	DS

REGISTERED SURVEYOR

@A1 : 1:200
@A3 : 1:400

DO NOT SCALE

Original Size: A1

Client: TRANSPORT FOR NSW

Title: DETAIL SURVEY OFLOT 26 DP 1147480, LOTS 13-16 DP 1231619 & LOT 49 & 57 SEC A DP 4020
BROADMEADOW LOCOMOTIVE PRECINCT, 35 CAMERON STREET, BROADMEADOW

CAD File: 220240B | Ref No: 22/0240 | Date: 05/08/2022

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Revision •

REFER SHEET 11

REFER SHEET 12

IRON BUILDING

MGA

INSET 'A'
SCALE – 1:200

INSET 'B'
SCALE – 1:200

REFER SHEET 14

DRAFT

0 4 8 12 16 20m
REDUCTION RATIO – 1:200 (A1)
REDUCTION RATIO – 1:400 (A3)

REVISIONS						
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No	REVISION		SVY	DFT	CHK	DATE

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NEWCASTLE SYDNEY GUNNEDAH MUSWELLBROOK

Surveyed	Drafted	Checked
M&P	MAK	DS

REGISTERED SURVEYOR

@A1 : 1:200
@A3 : 1:400

DO NOT SCALE

Original Size: A1

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Title: DETAIL SURVEY OFLOT 26 DP 1147480, LOTS 13-16 DP 1231619 & LOT 49 & 57 SEC A DP 4020
BROADMEADOW LOCOMOTIVE PRECINCT, 35 CAMERON STREET, BROADMEADOW

CAD File: 220240B | Ref No: 22/0240 | Date: 05/08/2022

Sheet No. 13 / 16

Revision •

REFER SHEET 12

REFER INSET 'B'
SHEET 13

BRICK WALL

REFER SHEET 15

MGA

DRAFT

0 4 8 12 16 20m
REDUCTION RATIO – 1:200 (A1)
REDUCTION RATIO – 1:400 (A3)

REVISIONS						
No	REVISION	SVY	DFT	CHK	DATE	
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NEWCASTLE SYDNEY GUNNEDAH MUSWELLBROOK

Surveyed	Drafted	Checked
M&P	MAK	DS

REGISTERED SURVEYOR

@A1 : 1:200 @A3 : 1:400	Original Size
DO NOT SCALE	A1

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CAD File: 220240B | Ref No: 22/0240 | Date: 05/08/2022

Sheet No. 14 /16

Revision •

REFER SHEET 14

REFER SHEET 16

GATE

MGA

DRAFT

0 4 8 12 16 20m

REDUCTION RATIO – 1:200 (A1)
REDUCTION RATIO – 1:400 (A3)

REVISIONS						
.	.	.	.	.	.	xx.xx.21
No	REVISION	SVY	DFT	CHK	DATE	

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NEWCASTLE SYDNEY GUNNEDAH MUSWELLBROOK

Surveyed	Drafted	Checked
M&P	MAK	DS

REGISTERED SURVEYOR

@A1 : 1:200 @A3 : 1:400	Original Size
DO NOT SCALE	A1

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CAD File: 220240B | Ref No: 22/0240 | Date: 05/08/2022

Sheet No. 15 /16

Revision •

REFER SHEET 15

REFER INSET 'C'

DRAFT

INSET 'C'
SCALE – 1:200

0 4 8 12 16 20m
REDUCTION RATIO – 1:200 (A1)
REDUCTION RATIO – 1:400 (A3)

REVISIONS						
No	REVISION	SVY	DFT	CHK	DATE
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Surveyed	Drafted	Checked
M&P	MAK	DS

REGISTERED SURVEYOR

@A1 : 1:200 @A3 : 1:400	Original Size
DO NOT SCALE	A1

Client: TRANSPORT FOR NSW

Title: DETAIL SURVEY OFLOT 26 DP 1147480, LOTS 13-16 DP 1231619 & LOT 49 & 57 SEC A DP 4020
BROADMEADOW LOCOMOTIVE PRECINCT, 35 CAMERON STREET, BROADMEADOW

CAD File: 220240B | Ref No: 22/0240 | Date: 05/08/2022

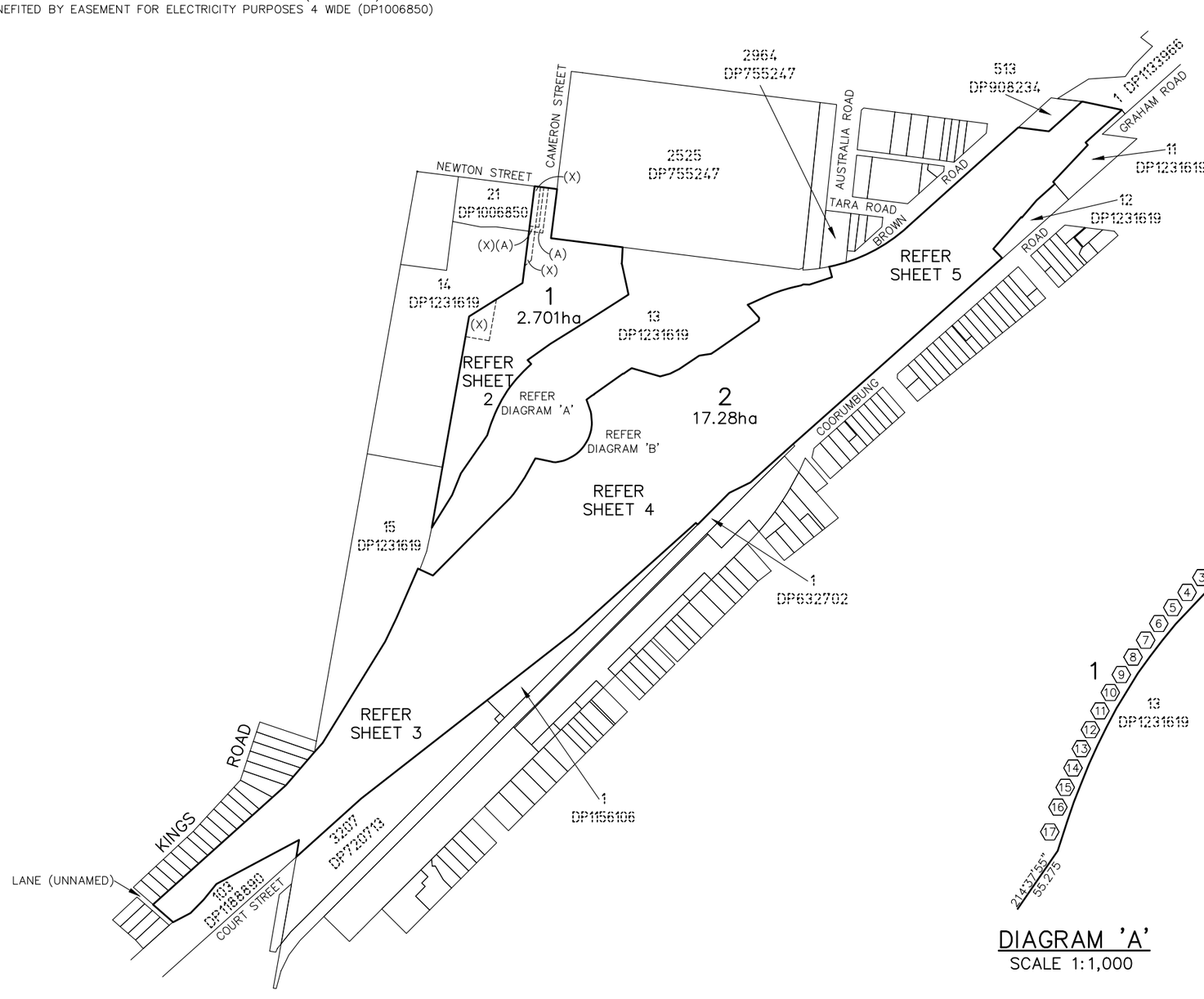
Sheet No. 16 /16

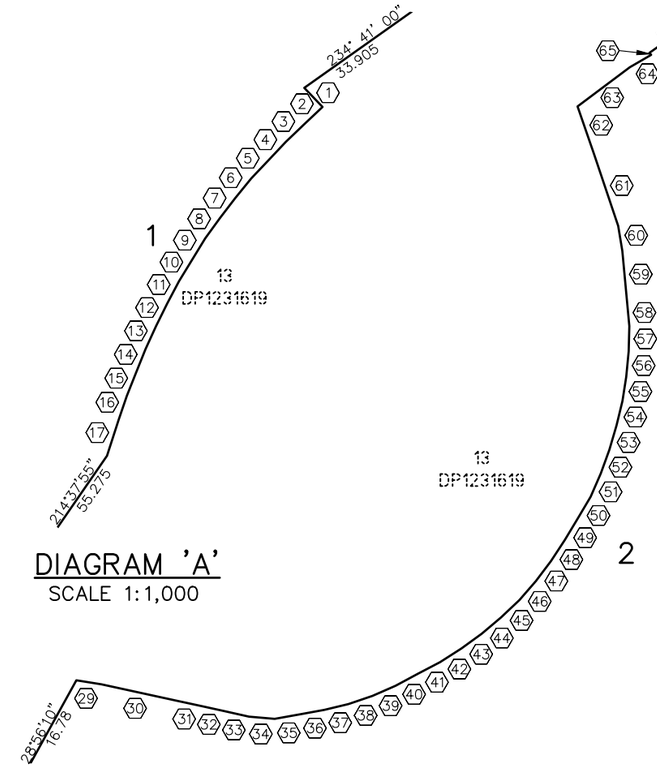
Revision •

SCHEDULE OF SHORT LINES

LINE	BEARING	DISTANCE
1	136°02'00"	6.465
2	226°32'30"	6.225
3	226°14'10"	6.195
4	223°21'20"	6.125
5	223°30'20"	6.16
6	219°07'20"	6.165
7	217°27'35"	6.17
8	216°03'10"	6.16
9	211°32'50"	6.125
10	211°28'35"	6.14
11	207°40'40"	6.17
12	206°15'05"	6.18
13	204°43'05"	6.16
14	201°51'45"	6.12
15	201°48'00"	6.195
16	198°48'00"	6.175
17	197°56'05"	9.265
29	99°16'05"	3.1
30	102°13'50"	9.24
31	102°17'05"	3.095
32	102°25'50"	3.105
33	102°34'50"	3.03
34	94°59'30"	3.155
35	79°51'05"	3.07
36	79°33'10"	3.09
37	76°32'05"	3.055
38	71°20'10"	3.1
39	66°10'	3.09
40	61°59'00"	3.085
41	62°07'15"	3.08
42	57°22'30"	3.09
43	54°11'45"	3.08
44	49°44'10"	3.085
45	46°30'30"	3.09
46	41°01'50"	3.045
47	37°11'35"	3.08
48	33°11'50"	3.095
49	31°06'25"	3.075
50	30°45'40"	3.09
51	23°26'25"	3.095
52	19°59'30"	3.08
53	16°32'30"	3.085
54	13°37'	3.09
55	8°49'05"	2.995
56	5°30'30"	3.14
57	1°23'30"	3.085
58	354°39'20"	3.06
59	354°40'05"	6.165
60	350°35'30"	3.11
61	341°22'20"	9.21
62	340°58'50"	6.205
63	53°06'35"	8
64	60°07'30"	3.005
65	318°10'20"	0.335

(A) EASEMENT FOR RIGHT OF ACCESS 5.5 AND 6.2 WIDE (DP1006850)
(X) BENEFITED BY EASEMENT FOR ELECTRICITY PURPOSES 4 WIDE (DP1006850)





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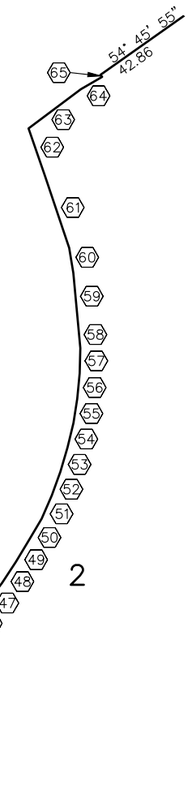

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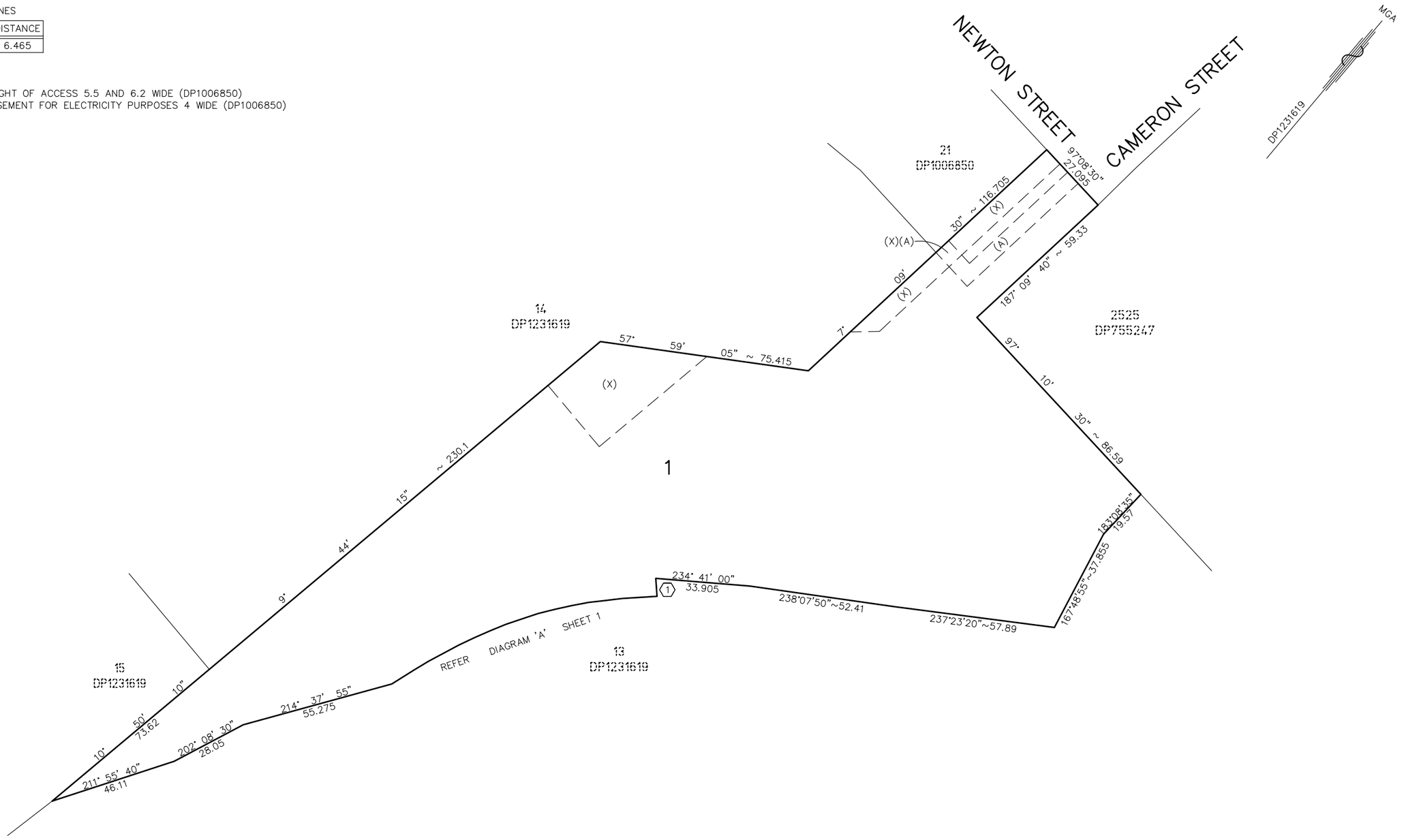
SURVEYOR Name: DAVID LUKE SULLIVAN MONTEATH & POWYS PTY LTD Date: 05/08/2022 Reference: 220240DPA 2022 M7100 (364) COMP	PLAN OF SUBDIVISION OF LOT 16 DP1231619	LGA: NEWCASTLE Locality: BROADMEADOW Reduction Ratio: 1:4,000 Lengths are in metres.	REGISTERED	DP

220240DPA

SCHEDULE OF SHORT LINES

LINE	BEARING	DISTANCE
1	136°02'00"	6.465

(A) EASEMENT FOR RIGHT OF ACCESS 5.5 AND 6.2 WIDE (DP1006850)
(X) BENEFITED BY EASEMENT FOR ELECTRICITY PURPOSES 4 WIDE (DP1006850)



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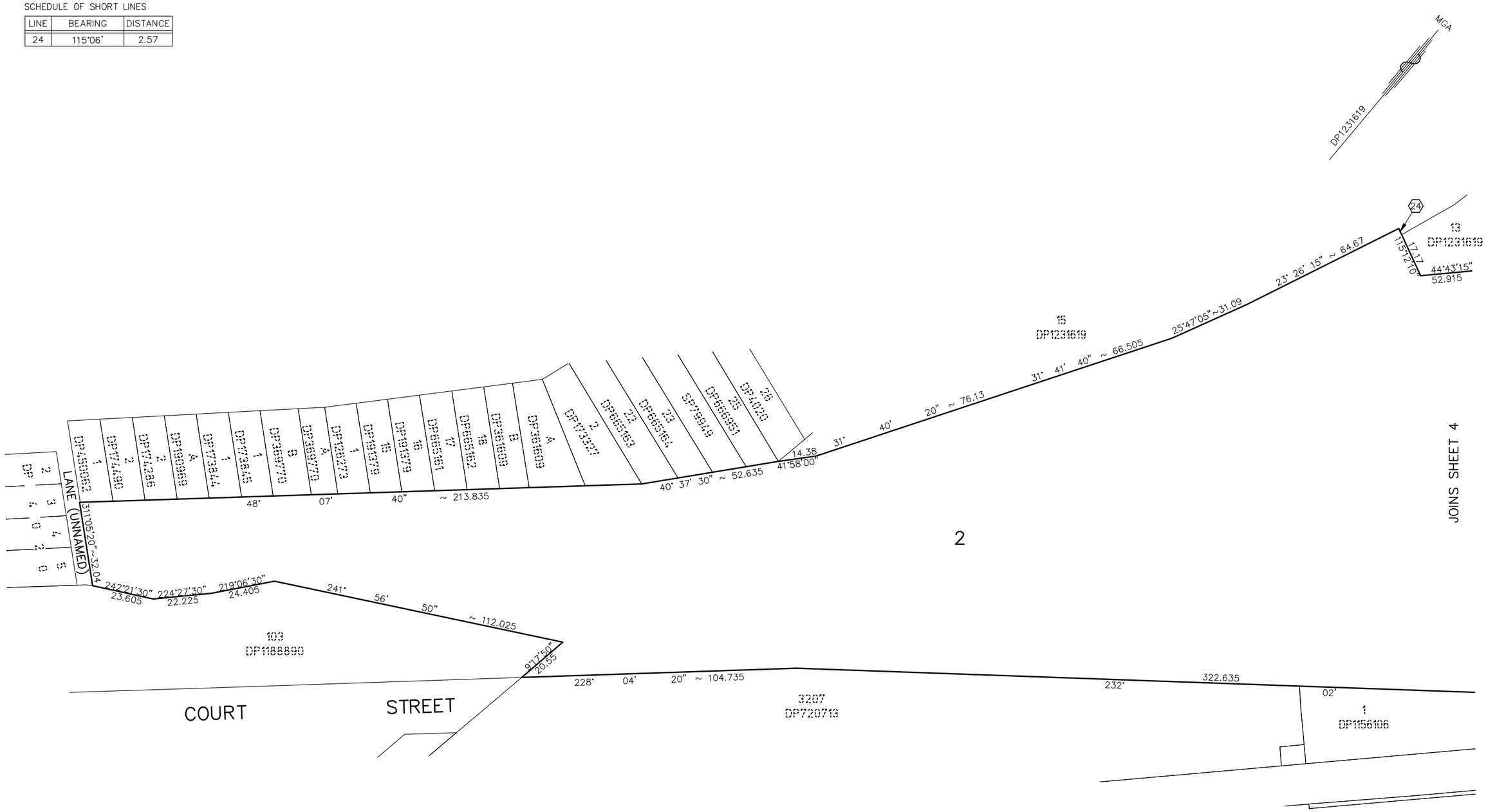
220240DPA

SCHEDULE OF SHORT LINES

LINE	BEARING	DISTANCE
24	115°06'	2.57



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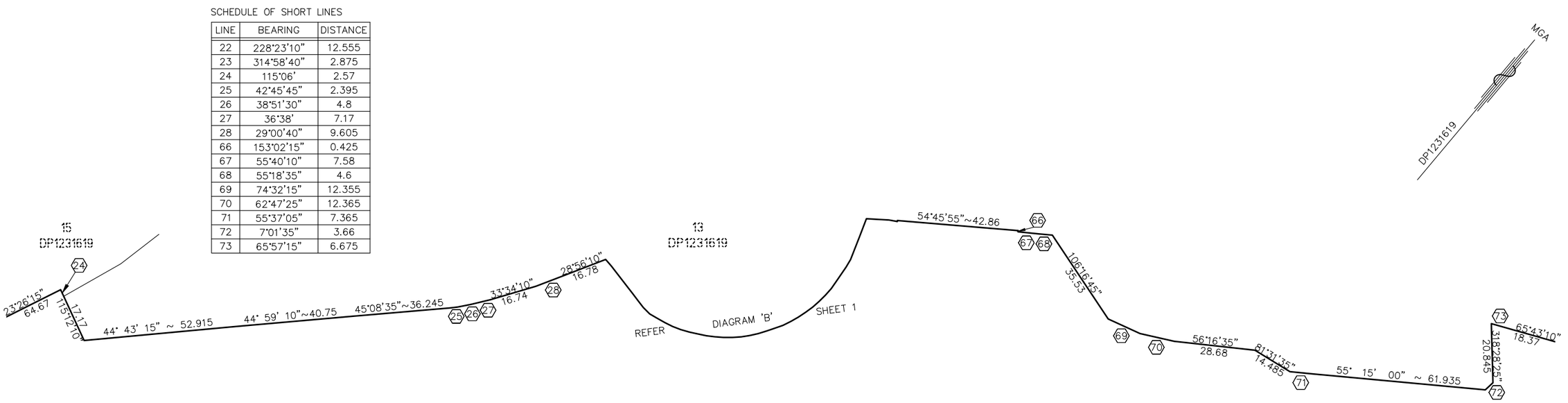
220240DPA

SCHEDULE OF SHORT LINES

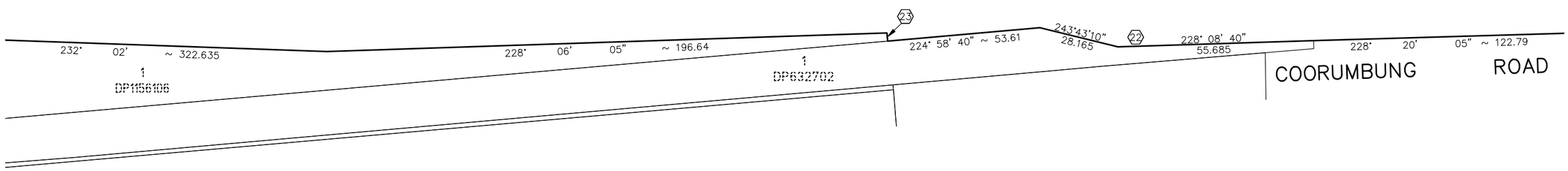
LINE	BEARING	DISTANCE
22	228°23'10"	12.555
23	314°58'40"	2.875
24	115°06'	2.57
25	42°45'45"	2.395
26	38°51'30"	4.8
27	36°38'	7.17
28	29°00'40"	9.605
66	153°02'15"	0.425
67	55°40'10"	7.58
68	55°18'35"	4.6
69	74°32'15"	12.355
70	62°47'25"	12.365
71	55°37'05"	7.365
72	7°01'35"	3.66
73	65°57'15"	6.675



JOINS SHEET 3

2

JOINS SHEET 5



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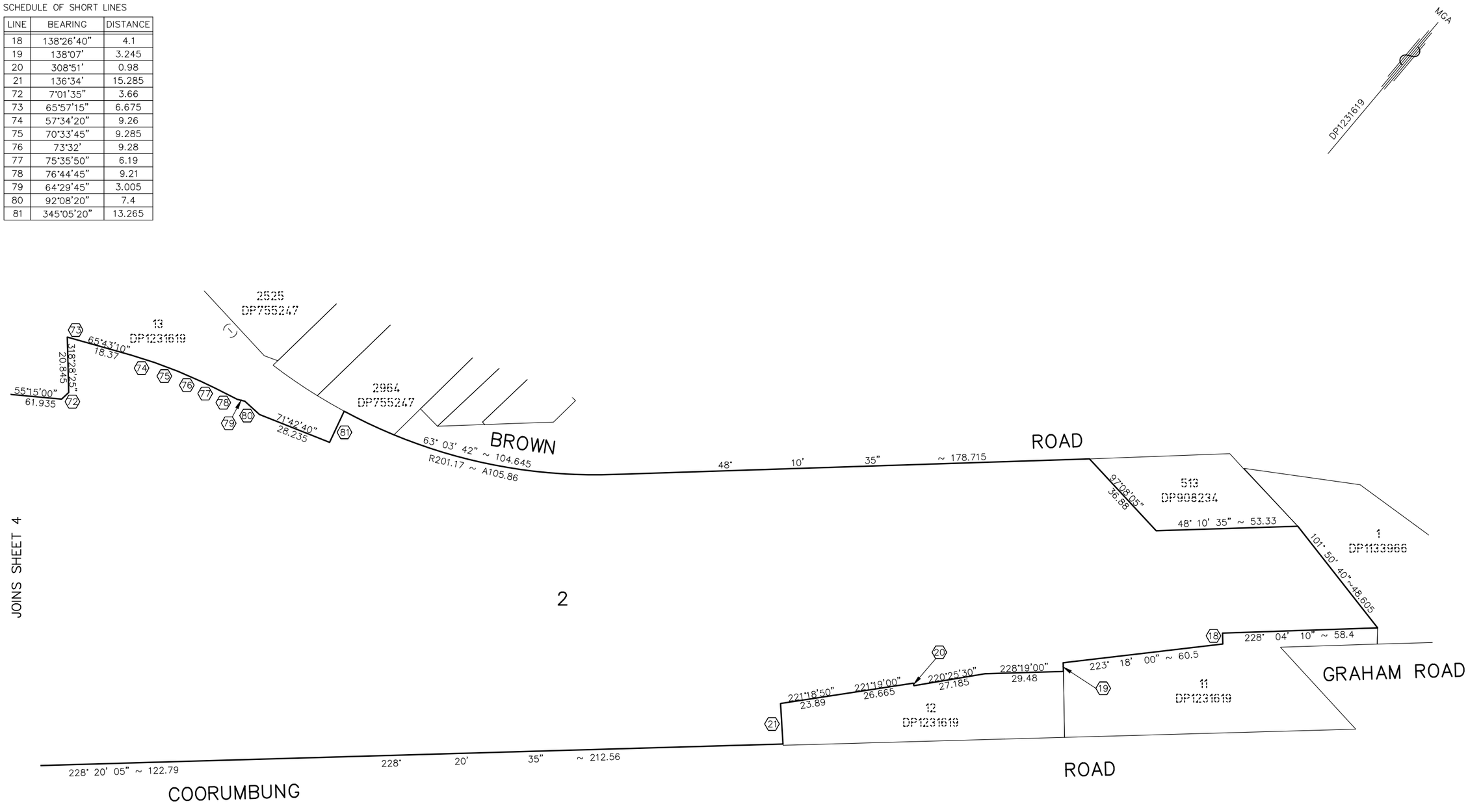
SURVEYOR Name: DAVID LUKE SULLIVAN MONTEATH & POWYS PTY LTD Date: 05/08/2022 Reference: 220240DPA 2022 M7100 (364) COMP	PLAN OF SUBDIVISION OF LOT 16 DP1231619	LGA: NEWCASTLE Locality: BROADMEADOW Reduction Ratio: 1:1,000 Lengths are in metres.	REGISTERED	DP

SCHEDULE OF SHORT LINES

LINE	BEARING	DISTANCE
18	138°26'40"	4.1
19	138°07'	3.245
20	308°51'	0.98
21	136°34'	15.285
72	7°01'35"	3.66
73	65°57'15"	6.675
74	57°34'20"	9.26
75	70°33'45"	9.285
76	73°32'	9.28
77	75°35'50"	6.19
78	76°44'45"	9.21
79	64°29'45"	3.005
80	92°08'20"	7.4
81	345°05'20"	13.265



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SURVEYOR Name: DAVID LUKE SULLIVAN MONTEATH & POWYS PTY LTD Date: 05/08/2022 Reference: 220240DPA 2022 M7100 (364) COMP	PLAN OF SUBDIVISION OF LOT 16 DP1231619	LGA: NEWCASTLE Locality: BROADMEADOW Reduction Ratio: 1:1,000 Lengths are in metres.	REGISTERED	DP

Subdivision of Lot 16 – Broadmeadow

Non-Aboriginal Statement of Heritage Impact

Report to Transport for NSW
October 2022

artefact

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Document history and status

Revision	Date issued	Reviewed by	Approved by	Date approved	Revision type
1	26/08/2022	Scott MacArthur		26/08/2022	Draft
2	02/09/2022	Alex Gaffikin		02/09/2022	Final
3	07/09/2022	Alex Gaffikin		07/09/2022	Final – minor change
4	27/10/2022	Alex Gaffikin		27/10/2022	Final – approval pathway

Project name:	Subdivision of Lot 16 – Broadmeadow
Author:	Jess Mauger, Scott MacArthur and Jenny Winnett
Project manager:	Alex Gaffikin
Project number:	N/A
Name of organisation:	Transport for NSW
Document version:	4

EXECUTIVE SUMMARY

Artefact Heritage Services Pty Ltd (Artefact) have been engaged by Transport for NSW (TfNSW) (the client) to produce a non-Aboriginal heritage Statement of Heritage Impact (SOHI) for the subdivision of part of Lot 16/DP1213619 (the study area) from the rail corridor land zoning within the suburb of Broadmeadow in the Newcastle Local Government Area (LGA).

The study area forms part of the wider Broadmeadow Locomotive Depot Precinct, which is owned by the Transport Asset Holding Entity (TAHE). TfNSW propose to subdivide a small part of Lot 16/DP1213619 from the larger part of the Lot which forms the active rail corridor. This land proposed for subdivision is currently identified as the active rail corridor, despite being a largely unused Lot, therefore any requirements to carry out activities on this land requires compliance with rail corridor standard operating procedures and approvals. To assist in the efficiency of maintenance activities and future potential uses of this land, TfNSW have proposed to subdivide this land from Lot 16/DP1213619. Given this part of Lot 16/DP1213619 comprises both State Heritage Register (SHR) as well as other statutory heritage listings, TfNSW require a heritage impact statement to support the subdivision process.

Overview of findings

- The proposed subdivision of the northern part of Lot16/DP1213619 would not result in any direct or indirect physical or visual impacts on any of the relevant heritage listings within the study area.
- It is noted that the proposal would see a detachment from the historic link between the study area and the rail corridor however the elements within the study area are generally of Little to no heritage significance and do not add exceptional value to the wider Broadmeadow Railway Locomotive Depot Precinct. Therefore, the subdivision would not cause any unacceptable impacts to the former Administration Area (the study area).
- The study area has been assessed as having generally low potential to contain locally significant archaeological remains, including ‘relics’ as protected by the NSW *Heritage Act*, associated with:
    - Phase 1: the illegal occupation of the Newcastle Pasturage Reserve by miners and their families
    - Phase 2: the Hartley Vale Colliery and associated rail network.

Approval pathway

The subdivision proposal will require Development Application approval from Newcastle City Council and a Section 60 application approval from Heritage NSW. To ensure that there is an integrated assessment of the proposal, the recommended method of assessment is therefore via the Integrated Development Application (IDA) Referral process.

Recommendations and mitigation measures

General Recommendations

- All future works are to be undertaken in accordance with the principles and objectives of the *Burra Charter: the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance* (the Burra Charter).

Pre-subdivision

- It is recommended that a Photographic Archival Recording (PAR) should be undertaken of all accessible historic elements within this Lot for future record keeping. This PAR should be undertaken in accordance with the Heritage Council of NSW guidelines *Photographic Recording of Heritage Items using Film or Digital capture* (Revised 2006). The PAR would need to focus on:
- The area within the SHR curtilage, and
- Areas covered by the LEP such as:
    - The former administrative buildings (such as the larger 1960s building and the smaller 1990s building)
    - Any extant structures (such as the bike shed)
    - Landscaped and hardstand areas (such as the car park, entrance and driveway)
    - Sight-lines to and from the former Administration Area and the Locomotive Depot to capture the historic relationship between the two areas.

Post-subdivision

- Currently no activities, works or development of any kind is proposed for this Lot. However in future, if any works are undertaken within this Lot, heritage review by a suitably qualified heritage consultant and assessment of the proposed works is required before works can commence.
- Any future works should be assessed by a suitably qualified archaeologist to refine the assessment of archaeological potential and significance provided in this document. The easternmost portion of the Lot is currently under SHR planning instruments. In this circumstance and dependent upon the archaeological impact of any future proposed works within the study area, it may be necessary to apply to Heritage NSW for either an excavation permit under Section 60 or an Exemption under Section 57(2) of the *Heritage Act 1977*. The remainder of the Lot - dependent upon the archaeological impact- may necessitate an application to Heritage NSW for either an excavation permit under Section 140 or an Exception Notification under Section 139(4) of the *Heritage Act 1977*.

CONTENTS

FIGURES

TABLES

1.0 INTRODUCTION

1.1 Project background

Artefact Heritage Services Pty Ltd (Artefact) have been engaged by Transport for NSW (TfNSW) (the client) to produce a non-Aboriginal heritage Statement of Heritage Impact (SOHI) for the subdivision of part of Lot 16/DP1213619 (the study area) from the rail corridor land zoning within the suburb of Broadmeadow in the Newcastle Local Government Area (LGA).

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Artefact has been engaged to provide non-Aboriginal heritage advice in the form of a SOHI to assess the relevant heritage impacts associated with the proposed subdivision, and to support the relevant approvals for this proposed subdivision.

1.2 Study area location

The Broadmeadow Locomotive Depot Precinct (including the study area) is owned by TAHE and is located at the southern end of the Broadmeadow Catalyst Area within the Newcastle Local Government Area (LGA). The study area comprises the area between Newtown Street and the southern boundary of Hunter School of Performing Arts High School to the north, and the Broadmeadow Maintenance Facility to the south-east.

The study area Lot 16 /DP1213619. The study area is shown in Figure 1 below.

1.3 Methodology

The following report includes a summary of the history of the site, the relevant heritage register results, heritage values and the identification of non-Aboriginal heritage impacts, as well as recommendations for future stages of the proposal.

This report was informed by a review of the following existing documentation for the Broadmeadow Locomotive Depot:

- A review of background literature and databases including the SHR, LEPs, DCPs and any documentation related to State Significant Projects
- Review of any existing relevant reports and heritage studies
- Review of historical records, database searches and background for the area including review of aerial photography and land use to determine disturbance and potential for additional historical archaeological sites or values, based on existing documentation easily available in existing reports and studies

- Review the existing heritage inventory sheets and Statement of Significance.

1.4 Limitations

This report was informed by a desktop study and visual inspection in order to provide advice on non-Aboriginal heritage and archaeology only. This report does not fulfil the requirements of a conservation management plan.

A Conservation Management Plan (CMP) has not been reviewed or used to inform the report, as no CMP exists for the site.

1.5 Authorship

This report was prepared by Jessica Mauger (Senior Heritage Consultant) and Jenny Winnett (Principal) and was reviewed Scott MacArthur (Principal).

1.6 Acknowledgements

Artefact would like to thank John Rodham, a volunteer at the Broadmeadow Locomotive Depot, who kindly lent his time and expertise to the members of Artefact during the site visit in July 2022.

Figure 1: The study area (Source: Artefact, 2022).

2.0 LEGISLATIVE CONTEXT

2.1 Overview

This section discusses the heritage management framework, notably legislative and policy context, applicable to the proposed subdivision.

2.2 Identification of heritage listed items

Heritage listed items were identified through a search of relevant state and federal statutory and non-statutory heritage registers:

- Commonwealth Heritage List (CHL)
- National Heritage List (NHL)
- State Heritage Register (SHR)
- Section 170 Heritage and Conservation Registers
- NSW State Heritage Inventory database
- Newcastle Local Environmental Plan (LEP) (2012)
- Register of the National Estate (RNE)
- National Trust of Australia (NSW) register.

Items listed on these registers have been previously assessed against the NSW Heritage Assessment guidelines. Assessments of heritage significance as they appear in relevant heritage inventory sheets and documents, are provided in this assessment.

There are several items of legislation that are relevant to the current study area. A summary of the relevant Acts and the potential legislative implications are provided below.

2.3 Heritage Act 1977

The NSW *Heritage Act 1977* (Heritage Act) provides protection for items of 'environmental heritage' in NSW. 'Environmental heritage' includes places, buildings, works, relics, movable objects or precincts considered significant based on historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic values. Items considered to be significant to the State are listed on the SHR and cannot be demolished, altered, moved or damaged, or their significance altered without approval from the Heritage Council of NSW.

2.3.1 State Heritage Register

The SHR was established under Section 22 of the Heritage Act and is a list of places and objects of particular importance to the people of NSW, including archaeological sites. The SHR is administered by Heritage NSW, and includes a diverse range of over 1,500 items, in both private and public ownership. To be listed, an item must be deemed to be of heritage significance for the whole of NSW. For works to an SHR item, a Section 60 application must be prepared for works that are not exempt under Section 57(2) of the Heritage Act.

The following SHR items are located within or nearby to the study area:

- Broadmeadow Railway Locomotive Depot (SHR # 01100)

- Premiers and Railway Commissioners Rail Car Collection (SHR # 01650).

No additional items on the SHR are located adjacent to the study area.

2.3.2 Archaeological relics and works

The Heritage Act also provides protection for 'relics', which includes archaeological material or deposits. Section 4 (1) of the Heritage Act (as amended in 2009) defines a relic as:

> *"...any deposit, artefact, object or material evidence that:*
>
> *(a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and*
> *(b) is of State or local heritage significance"*

Sections 139 to 145 of the Heritage Act prevent the excavation or disturbance of land known or likely to contain relics, unless under an excavation permit. Section 139 (1) states:

A person must not disturb or excavate any land knowingly or having reasonable cause to suspect that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, damaged or destroyed unless the disturbance is carried out in accordance with an excavation permit.

Excavation permits are issued by the Heritage Council of NSW, or its Delegate, under Section 140 of the Heritage Act for relics not listed on the SHR or under Section 60 for impacts within SHR curtilages. An application for an excavation permit must be supported by an Archaeological Research Design (ARD) and Archaeological Assessment prepared in accordance with the NSW Heritage Division archaeological guidelines. Minor works that would have a minimal impact on archaeological relics may be granted an exception under Section 139 (4) or an exemption under Section 57 (2) of the Heritage Act. However, the proposal is subject to Part 5.2 (State significant infrastructure) provisions of the EP&A Act, and therefore excavation permits, or exemptions would not be required.

Items identified as 'works' do not trigger reporting obligations under the Heritage Act, unless they are associated with artefacts and/or assessed to be of State or local significance. Works generally include:

- Former road surfaces or pavement and kerbing.
- Railway infrastructure
- Former water supply (wells, cisterns, drains, pipes) and other service infrastructure, where there are no historical artefacts in association with the item.
- Building footings associated with former infrastructure facilities, where there are no historical artefacts in association with the item.

2.3.3 Conservation Management Plans

Under Section 38A of the Heritage Act, a Conservation Management Plan (CMP) should be prepared for items listed on the State Heritage Register. The CMP should identify the state heritage significance of the item, set out policies and strategies for the retention of its significance and be prepared in accordance with the guidelines outlined by the Heritage Council.

- No CMP is available for the study area or the heritage items adjacent to the study area.

2.3.4 Section 170 registers

Under the Heritage Act all government agencies are required to identify, conserve and manage heritage items in their ownership or control. Section 170 (s170) requires all government agencies to maintain a Heritage and Conservation Register that lists all heritage assets and an assessment of the significance of each asset. They must also ensure that all items inscribed on its list are maintained with due diligence in accordance with State Owned Heritage Management Principles approved by the Government on advice of the NSW Heritage Council. These principles serve to protect and conserve the heritage significance of items and are based on NSW heritage legislation and guidelines.

The study area partially intersects with an item listed on a Section 170 register, as follows:

- Broadmeadow Railway Locomotive Depot on the TAHE s170 register (SHI # 4801014).

The following items on the Transport Asset Holding Entity (TAHE) s170 register are in the vicinity of the study area:

- Broadmeadow Bala Road Railway Depot (SHI # 4803213)
- Broadmeadow Railway Station Group (SHI # 4801899).

2.4 Environmental Planning and Assessment Act 1979 (NSW)

The *Environmental Planning and Assessment Act 1979* (EP&A Act) establishes the framework for cultural heritage values to be formally assessed in the land use planning and development consent process. The EP&A Act requires that environmental impacts are considered prior to land development; this includes impacts on cultural heritage items and places as well as archaeological sites and deposits.

The EP&A Act also requires that local governments prepare planning instruments (such as Local Environmental Plans and Development Control Plans [DCPs]) in accordance with the EP&A Act to provide guidance on the level of environmental assessment required.

The Precinct falls within the boundaries of the Newcastle local government area (LGA). Schedule 5 of each of the *Newcastle Local Environmental Plan 2012* includes a list of items/sites of heritage significance within this LGA.

The following Newcastle LEP 2012 heritage items are located within the study area:

- Broadmeadow Locomotive Depot offices (LEP # I45)
- Broadmeadow Railway Locomotive Depot (LEP # I46).

The following Newcastle LEP 2012 heritage items are located adjacent to the study area:

- Broadmeadow Primary School (LEP # I53)
- Adamstown Railway Station (LEP # I16)

2.5 Non-Statutory Considerations

2.5.1 Register of the National Estate

The RNE is no longer a statutory list; however, it remains available as an archive.

The following RNE item is located adjacent to the study area:

- Locomotive Depot (including Roundhouse) (Place ID 100290)

There are no RNE items in the vicinity of the study area.

2.5.2 National Trust of Australia (NSW)

Listing on the National Trust Heritage Register does not impose statutory obligations and is more an indication of the heritage significance held by the community.

The following National Trust Heritage Register item is located adjacent to the study area:

- Locomotive Depot, including Roundhouse (ID 1286).

2.6 Summary of heritage listings

The study area is listed on the heritage registers as summarised in Table 1. The study area is located in close proximity to various heritage items. The curtilages of these items are illustrated in Figure 2 and Figure 3.

Table 1: Results of register searches for the study area and adjacent heritage items

Register	The study area	Other items
World Heritage List	Not listed	Not listed
National Heritage List	Not listed	Not listed
Commonwealth Heritage List	Not listed	Not listed
State Heritage Register	• Broadmeadow Railway Locomotive Depot (SHR # 01100) • Premiers and Railway Commissioners Rail Car Collection (SHR # 01650).	Not listed
Section 170 Registers (TAHE)	• Broadmeadow Railway Locomotive Depot (SHI # 4801014).	• Broadmeadow Bala Road Railway Depot on the TAHE s170 register (SHI # 4803213) • Broadmeadow Railway Station Group on the TAHE s170 register (SHI # 4801899).

Register	The study area	Other items
Newcastle LEP 2012	• Broadmeadow Locomotive Depot offices (LEP # I45) • Broadmeadow Railway Locomotive Depot (LEP # I46).	• Broadmeadow Primary School (LEP # I53) • Adamstown Railway Station (LEP # I16)
Register of the National Estate (RNE) (Non-Statutory)	Not listed	• Locomotive Depot (including Roundhouse) (Place ID 100290)
National Trust of Australia (NT) NSW Register (Non-Statutory)	Not listed	• Locomotive Depot, including Roundhouse (ID 1286).

Figure 2: SHR and LEP heritage curtilages within and in the vicinity of the study area (Source: Artefact, 2022).

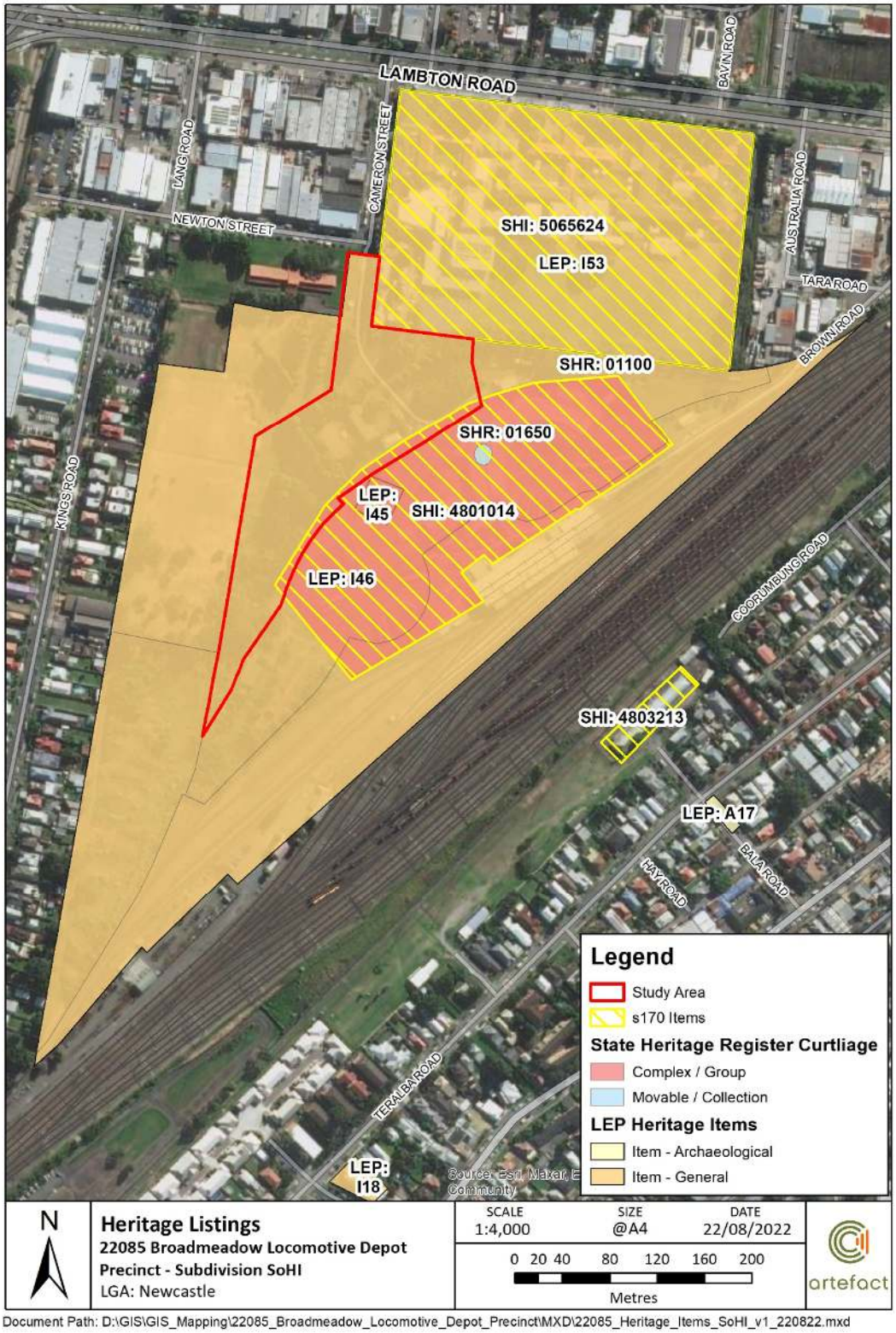


Figure 3: Section 170 heritage curtilages within and in the vicinity of the study area (Source: Artefact, 2022).

3.0 HISTORICAL BACKGROUND

3.1 Non-Aboriginal Settlement

Early European exploration of the Newcastle area commenced in 1797, when Lieutenant John Shortland accidentally came across what is now Newcastle during his pursuit of runaway convicts.[1] Shortland recorded that the river running through the area was good for coal and named it the Hunter River. Within a few years, exploitation of Newcastle coal by convict gangs was occurring at a relatively large scale. In 1799 a ship loaded with Newcastle coal was sent to Bengal, becoming NSW's first export. The first attempt at European settlement in Newcastle occurred in 1800, when Governor Phillip Gidley King established a convict settlement on the mouth of the Hunter River, roughly 5km east of the Precinct (Figure 4). This settlement, named 'King's Town' after the Governor King, was dissolved in 1802 after Irish convicts staged a mutiny.[2]

A second convict settlement – this time under military rule – was established by Governor King in 1804, named Newcastle.[3] The settlement was populated by convicts who had reoffended in the colony, including those involved in the Castle Hill convict uprising earlier in 1804. Convicts sent to Newcastle were subject to extreme conditions and many died in the coal or lime mining process. Conditions improved when Captain James Wallis took over command of the settlement in 1815, and the construction of buildings and roads throughout Newcastle began in earnest. By 1819, roughly 700 convicts lived in the Newcastle area, a number that grew to 1,000 by 1823.[4] Newcastle remained a convict settlement until 1823, when 90% of the convicts were dispersed to other labour camps. Since Newcastle was associated with violent convicts in the colonial mindset at the time, settlement of the by free settlers was slow for the next two decades.[5]

Figure 4. View of the Newcastle coast, 1808. King's Town to right. (Source: State Library of NSW).

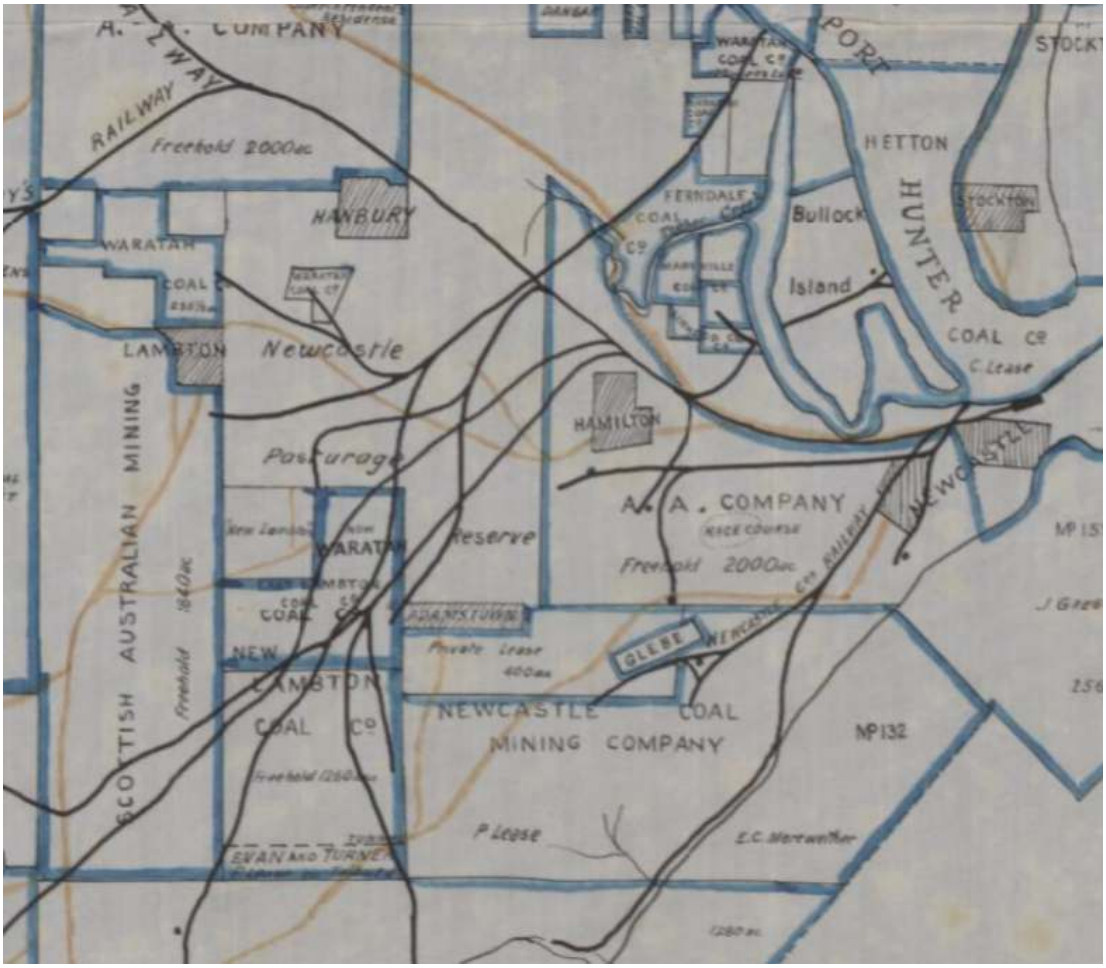
[1] McMartin, A. 2006. "Shortland, John (1769–1810)."
[2] Shaw, A.G.L., 2006. "King, Philip Gidley (1758–1808),"
[3] Ibid.
[4] Eklund, E. 2007: 130.
[5] Ibid.

3.1.1 Coal trade and railways

The need to transport coal drove the construction of the railway in the Hunter region. Original railways which served the burgeoning coal industry of the region were gravitational railways.[6] Figure 5 details the locations of the major coal mines across Newcastle. The Newcastle branch of the Main Northern Line opened in 1857 and stations at Hamilton and Wickham were established in 1872 and 1936 respectively.[7] Development of the railway connected Newcastle to greater NSW and cemented its role as a national and international coal trader. Newcastle remained a dominant urban centre until the depression of the 1890s.[8]

Private coal railways utilised by companies such as the Australian Agricultural Company (AACo), the Newcastle Wallsend Coal Company, the Merewether Estate and other mining interests all assisted the process of urban development by linking the mining villages on their estates by private coal railways to Newcastle. These private railways played an important role in transporting people to and from the mining villages around Newcastle, shaping Newcastle's development.[9]

Figure 5: Detail from the undated 'Map of the coal properties in Newcastle' showing the locations of major coal mines and the associated rail lines[10]



[6] Campbell *et al* 2009
[7] NSWrail.net 2016
[8] Suters Architects 1997
[9] Rowe & di Gravio 2002: 10
[10] 190_ 'Map of the coal properties in the Newcastle district' National Library of Australia MAP F 396

3.2 Nineteenth Century Broadmeadow

In the early-nineteenth century, Broadmeadow remained untouched by colonisation. The study area lay on a wide, swampy plain that came to be known as the “Broad Meadows" in the mid-nineteenth century. In 1831, roughly 2,000 acres of land in Newcastle and Hamilton – including the government coal mines – were granted to the Australian Agricultural Company.[11] The company’s ownership of this land prevented development, and Broadmeadow remained unchanged for the succeeding decade.

Land use of and around the study area appears to have commenced in the 1840s. Newspaper reported a well-attended horse-race at Broadmeadow in 1842, and an 1846 newspaper describes a “very excellent racecourse… a beautiful turf flat, rather more than a mile round” at Broadmeadow.[12] It is possible that the racecourse in question was located at the study area, which was officially designated a racecourse 50 years later. A newspaper report from 1849 records a man named Mr. Groves owning a “Broad Meadow Farm” roughly four miles from the town centre of Newcastle, indicating that agriculture was occurring around the study area at some level in the mid-nineteenth century.[13]

As much of the study area was originally part of the Newcastle Pasturage Reserve (see Section 3.1.4.1 for additional discussion), swampy, criss-crossed with colliery railways and polluted by industry, it did not develop until the early 20th century. A further drawback to settlement in the area was subsidence due to intensive coal mining, and buyers of Crown land within the study area in 1918 were warned: ‘Sale is restricted to the surface and to a depth of 100 feet below the surface.’

Drainage of the low-lying former pasturage occurred from the late 19th century. Prior to that, whenever there were heavy rains, many of the developing streets would flood and large portions of the area were unusable (Figure 6). The construction of drainage throughout Broadmeadow opened up large portions of land for settlement (Figure 7:).

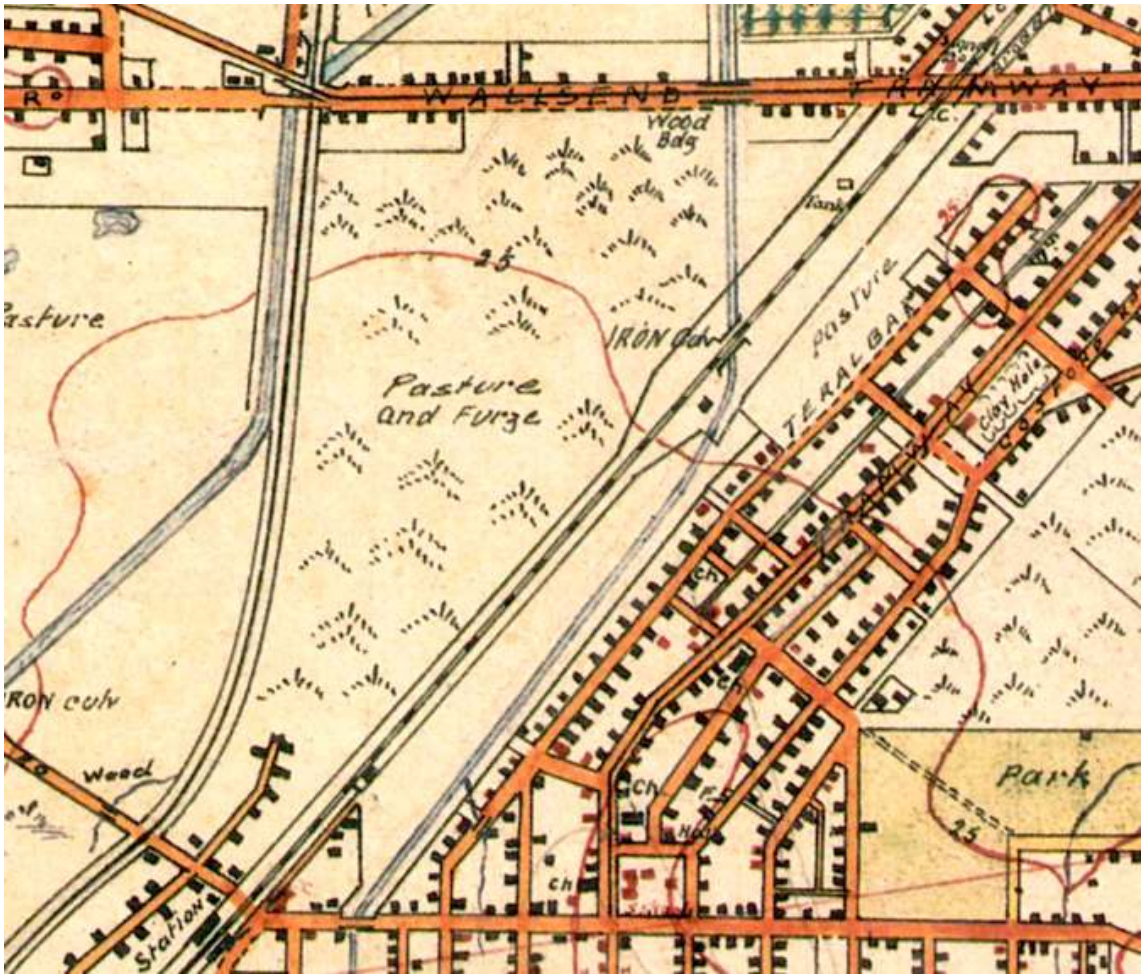
A plan from 1910 (Figure 8:) indicates that while residential and commercial development of the study area had commenced along Lambton and Broadmeadow Roads, the majority of the area was undeveloped pasture. The Hartley Vale Colliery rail easement is still present in the centre of the study area.

[11] University of Newcastle Special Collections, 2022. “The Australian Agricultural Company.”
[12] Sydney Morning Herald, 29 Dec 1842, pg. 2; Maitland Mercury and Hunter River General Advertiser, 19 Dec 1846, pg. 2.
[13] Maitland Mercury and Hunter River General Advertiser, 14 Nov 1849, pg. 2.

Figure 6: The Newcastle lowlands, 1897. Photo taken from intersection of Beaumont St and Glebe Rd looking north towards Hamilton. The study area is in the left background. University of Newcastle Cultural Collections.

Figure 7: Drain construction workers at Broadmeadow, NSW, 6 April 1900. University of Newcastle Cultural Collections.

Figure 8: Detail from 1910 plan with study area in red[14]



3.2.1 The Newcastle Pasturage Reserve

In 1850, the study area fell under the newly established Newcastle Pasturage Reserve. Known as the 'Commonage' in the nineteenth century, this publicly owned reserve encompassed 1,600-acres of land between Adamstown in Waratah, including the study area and the entire suburb of Broadmeadow.[15]

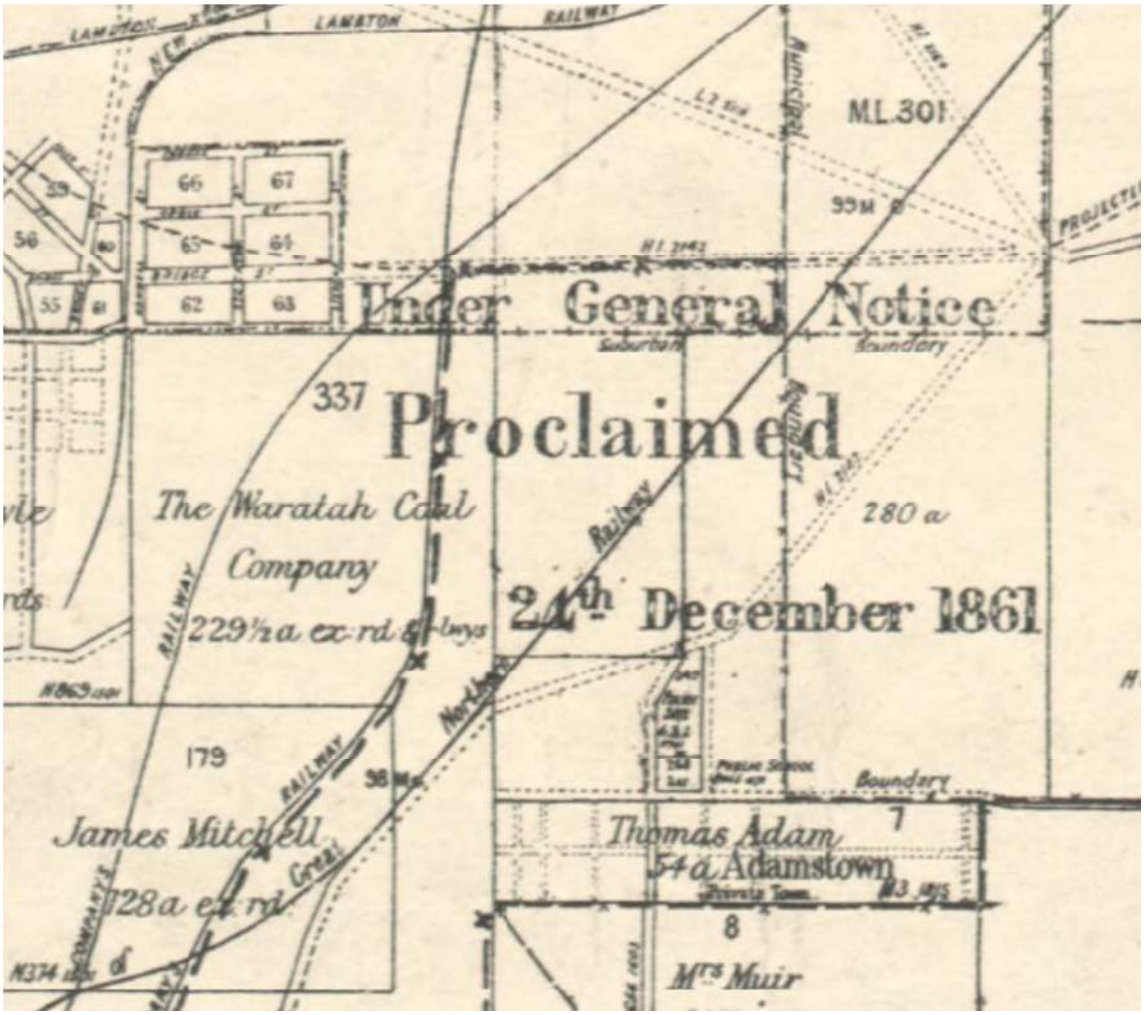
Initially intended as public cattle-grazing land, the reserve quickly became home to poor mining families. Throughout the 1880s hundreds of miners and their families squatted on the common to avoid paying rent and rates and remain in close proximity to their places of work. By 1887 the common had a population of 4486.[16] The dwellings were variously described as being constructed of wood or sundried brick, and being located on flat, but waterlogged, ground. In 1885 a reporter for The Sydney Mail stated that the area was barren and devoid of vegetation, and that much of the area had subsided due to being undermined by the collieries and was unsafe for settlement.[17]

[14] Barrett, Lc Cpl A. Map of the Country around Newcastle N.S.W. 1910
[15] Sydney Morning Herald, 10 June 1889, pg. 4.
[16] Docherty, J. C. *The Second City: Social and Urban Change in Newcastle, New South Wales, 1900 – c.1929*, Australian National University 1977 p.145
[17] 'The Newcastle Pasturage Reserve' in The Sydney Mail and New South Wales Advertiser 1 August 1885, accessed via trove.nla.giv.au

By the late 19th century the issue of the common settlement was a political one, with the community stating that they were forced to squat on the common for lack of alternative dwelling space in the vicinity of the collieries where they worked. Many of the families requested that their informal land holdings be given formal recognition by the government. In 1889 the government passed legislation allowing miners who had settled on the reserve prior to January 1888 to purchase their land. By 1900, 226 acres had been purchased by small landholders, 40 acres were purchased by the Waratah Coal Company and the Railway Department acquired 64.4 acres for its Broadmeadow locomotive depot.[18]

Residential and commercial development in Broadmeadow began in the 1890s with these mining families. The Broadmeadow Railway Station was constructed in 1886 immediately north of the study area, and development at Broadmeadow became focused around the station. When Hamilton was incorporated as a municipality in 1901, Broadmeadow was officially recognised as a suburb.

Figure 9. Parish of Newcastle map, 1886 (Source: National Library of Australia).



[18] Docherty, J.C. 1977 p.145

3.2.1.1 James and Alexander Brown's Collieries

James Brown (1816-1894) and Alexander Brown (1827-1877), colliery proprietors and merchants, were born in Lanarkshire, Scotland. In 1843 James leased eighty acres (32 ha) of land at Four Mile Creek, near East Maitland, and assisted by his brothers John (1823-1846) and Alexander (b.26 June 1827) began to mine outcropping coal for sale in Maitland and Morpeth.[19] This land was reserved by the Crown in agreement with AACo, although the company tolerated small-scale mining for local use. However, when the Hunter River Steam Navigation Co. accepted Brown's tender to supply 4000 tonnes of coal a year at a lower price than they had been paying the AACo, the company took action. The Brown's argued the Government's agreement with the AACo was illegal, but lost, and the subsequent court ruling meant that the Brown's were forced to leave their lease at short notice.[20]

James and Alexander, however, continued to mine coal in the East Maitland area, in partnership with John Eales, whose land grant predated the agreement with the AACo. In 1852 the brothers moved to Newcastle to develop a new mine in Minmi and develop their shipping interests.

In 1861 the brothers commenced development of a new colliery near present-day Broadmeadow which became known as the Hartley Vale Colliery. The colliery was ready for production by 1864, however, as the Browns were unable obtain permission to cross the Scottish Australian Mining rail line, the mine was unable to be worked. Instead, the Browns developed additional collieries adjoining the property, which became known as the New Lambton coal pits. In 1867 an act of parliament, the *Hartley Vale Railway Act*, was passed, allowing the Browns to complete their railway. By 1868 the Browns were the largest coal producers in the colony.

The New Lambton coal pits were described by G. H. Kingswell as follows:

> *In the year 1867 Messrs. J. and A. Brown commenced to work coal from the New Lambton Estate, which at resent is the freehold property of Messrs. George R. Dibbs and, and Alexander brown, M's. P. It consists of 1225 acres, and is bounded on the north and east by the Commonage, on the south by the Waratah Coal Company's land, while the estate of the Scottish Australian Mining Company forms the western boundary.*[21]

In 1873 James sold his share of the company to George Dibbs. The new company, comprising Alexander Brown and George Dibbs, sunk a second shaft south of the original colliery (assumed to be 'Brown's shaft' or 'C Pit' (marked on Figure 10 and Figure 11). According to Kingswell, the output of both mines was good, however, due to the inferior quality of the coal, the colliery was abandoned. The company then moved on to the B, or New Lambton Pit in 1870.[22] The B Pit later became known as the 'Old Dog and Rat Pit', and was Hartley Vale railway via a tunnel underneath the Lambton railway.

[19] Turner, J. W. 'James Brown' Australian Dictionary of Biography Vol. 3, 1969
[20] Turner, J. W. 1969
[21] Kingswell, G. H. *The Coal Mines of Newcastle NSW*, 1890
[22] Kingswell, G. H. 1890

Figure 10: Detail from the 1867 'Plan of the Hartley Vale Railway' showing the holdings of James and Alexander Brown, with the approximate location of the study area in red[23]

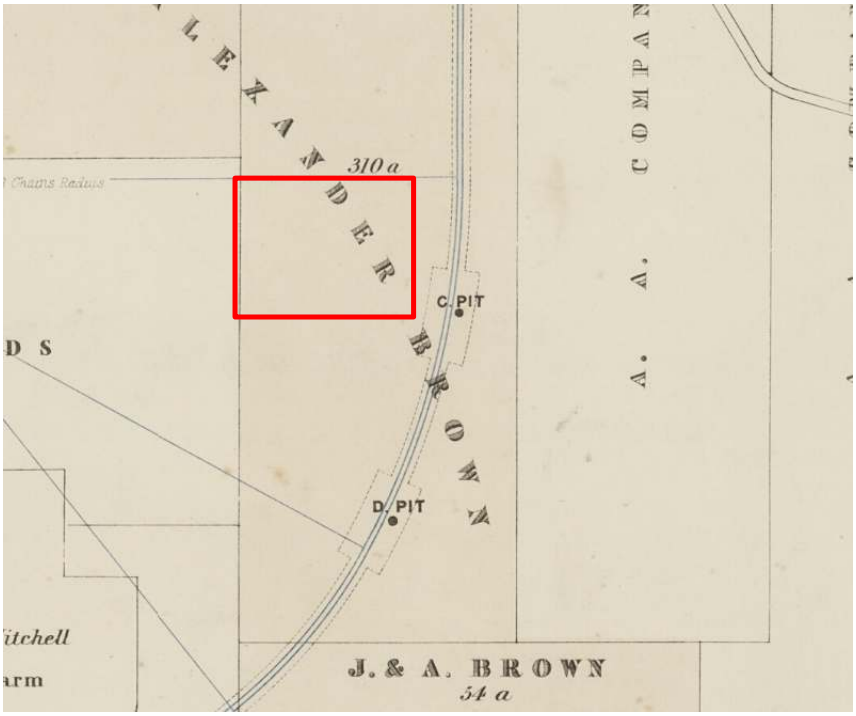
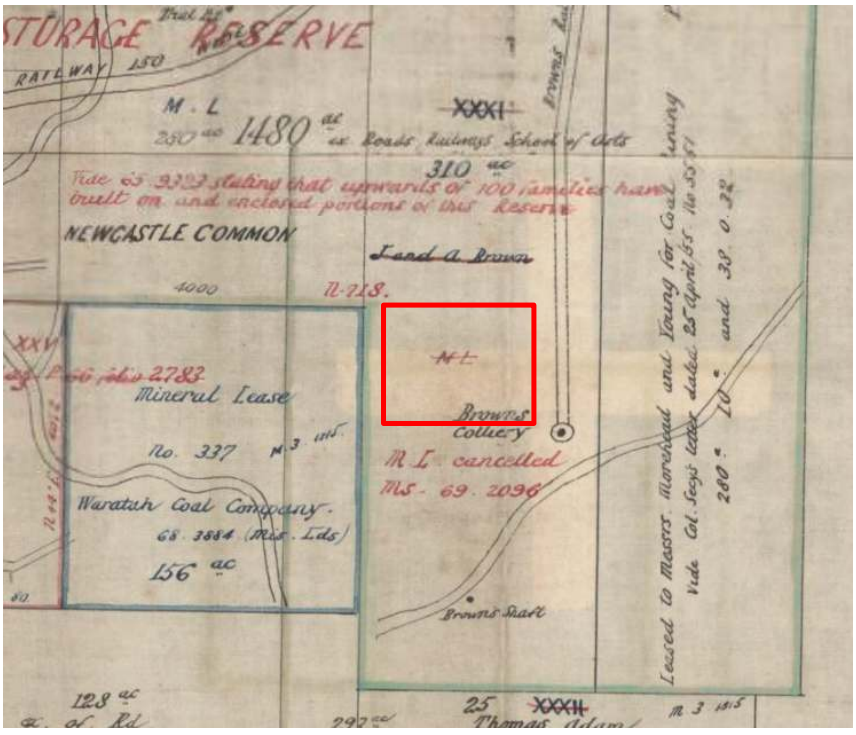


Figure 11: 1873 'Map of the Waratah Coal Company Blocks' showing the holding of James and Alexander Brown, with the study area in red[24]



[23] 1867 'Plan of the Hartley Vale Railway' State Library of NSW Z/ M2/ 812.179/ Hartley Vale/ 1867/1
[24] 1873 'Map of the Waratah Coal Company Blocks' National Library of Australia MAP F 82

3.2.2 Broadmeadow Locomotive Depot

In 1857, a railway line had been established between Newcastle and East Maitland, marking the first segment of what would become the 'Great Northern Railway.' Over the next twenty years, the line was extended from Newcastle to Tamworth, crossing through Broadmeadow at the south-eastern boundary of the study area. Throughout the 1880s, the line was progressively constructed south to Sydney, connecting the two major cities of early NSW. With Newcastle forming the nexus of this railway line, the need for a locomotive servicing depot became quickly apparent. From 1874, the Honeysuckle Point Railway Workshops in Newcastle proper were the region's main service depot. The Honeysuckle Point depot ran out of room to accommodate the growing fleet by the late 1880s, and the Hamilton Depot was constructed in 1891 as the new regional depot.

The study area was at this time reserved for use as a racecourse. It is possible that the site was used in an unofficial capacity for racing and other recreational activities from the 1840s – newspapers reported a racecourse in the general area at the time, as supported by parish maps (Figure 12 & Figure 13). A parish map from 1912 notes that the study area had been 'required for railway purposes' (Figure 14), however, by 1914 the study area was leased by a man named William C. Krempin. Krempin served as a local railway worker and gatekeeper for 40 years and had the misfortune of losing his leg after being hit by a train when he was a teenager.[25] It is unknown whether Krempin constructed any permanent structures during his brief ownership of the site.

Plans for a larger regional depot at Broadmeadow were in development by early 1920, although the closure of the Hamilton Depot in favour of Broadmeadow did not win universal support. At a council meeting in May 1920, one alderman argued that "if Broadmeadow became the changing station, Newcastle would become a suburb of Hamilton… they should maintain that which they have, otherwise the city would lose prestige." Nevertheless, planning for the depot continued and in 1922 the study area was resumed by the state for the railway depot.[26]

[25] Newcastle Morning Herald and Miners' Advocate, 1 Jun 1935, pg. 4.
[26] Government Gazette of the State of New South Wales, 26 May 1922, pg. 2980.

Figure 12. Paris of Newcastle map, c. 1890s (Source: Australian National University Archives).

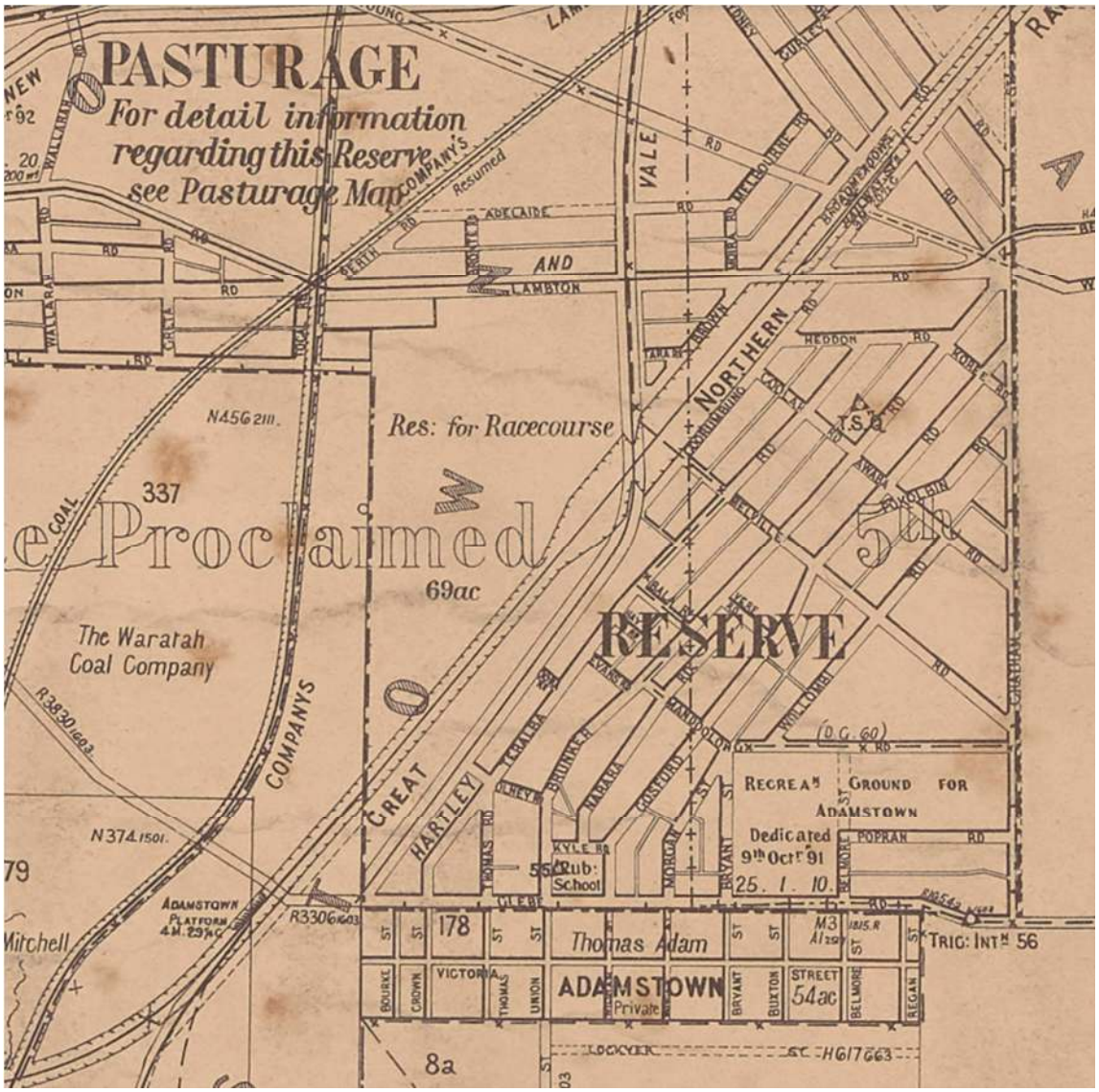


Figure 13. Parish of Newcastle map, 1889. (Source: Historic Land Records Viewer).

Figure 14. Parish of Newcastle map, 1912 (Source: Historic Land Records Viewer).

1924-1927: Opening of the Broadmeadow Locomotive Depot

The Broadmeadow Locomotive Depot was officially opened in 1924, replacing the now-obsolete Hamilton Depot. The first configuration of the Broadmeadow Locomotive Depot featured a single roundhouse (Roundhouse No. 1) that contained a 75-foot turntable.

With half of the tracks and service pits uncovered, railway workers were often exposed to extreme heat or rain. In fact, Roundhouse No. 1 was never intended to be a half roundhouse, and railway workers soon became disgruntled with their poor work conditions.

The first configuration of the depot also included:

- A large, elevated coal stage (Figure 16)
- A 61m long coal bunker and ramp, and a bridge across the bunker ramp

- A large locomotive inspection pit
- Two elevated water tanks
- Sand bins, a furnace, and two de-ashing pits
- Marshalling yard, machine shop, and multiple workshops
- Two concrete clerks offices (Figure 17)
- Meal room, locker rooms, wash rooms
- Barracks/rest house for locomotive crew and drivers (on the west side of the tracks)[27]

The barracks constructed at the depot for locomotive crew and drivers contained a dining room, kitchen, bathrooms, and 20 bedrooms with two beds each. One newspaper called it “the finest of the many of its kind in the State.”[28]

In July 1926, a second turntable (Turntable No. 2) was constructed at the depot north-east of Turntable No. 2. Like Turntable No. 1, this turntable was 75-feet in diameter and contained 42 roads (Figure 15). However, this new turntable would not be covered by a roundhouse for at least twenty years, leaving workers exposed to the elements. Further minor upgrades occurred in 1926-7, when the washout pipelines were extended to the new turntable. Plans from 1927 indicate that a range of additional infrastructure was added to the site during these upgrades, including an air compressor, half-tonne jib crane, hydro-pneumatic jack for the drop-pit, three 9" water columns, a hot water wash-out plant, and three 30,000-50,000-gallon tanks.[29]

Figure 15. Turntable No. 2, pre-1948 (Source: Greg and Sylvia Ray Collection, Rediscovered Newcastle group).

[27] State Heritage Inventory, 1999. “Broadmeadow Locomotive Depot.”; Doring & Browne, 2006: 32-35.
[28] Newcastle Sun, 3 Nov 1924, pg. 6
[29] Ibid, 36.

Figure 16. Coal stage, n.d. (Source: Greg and Sylvia Ray Collection, Rediscovered Newcastle group).

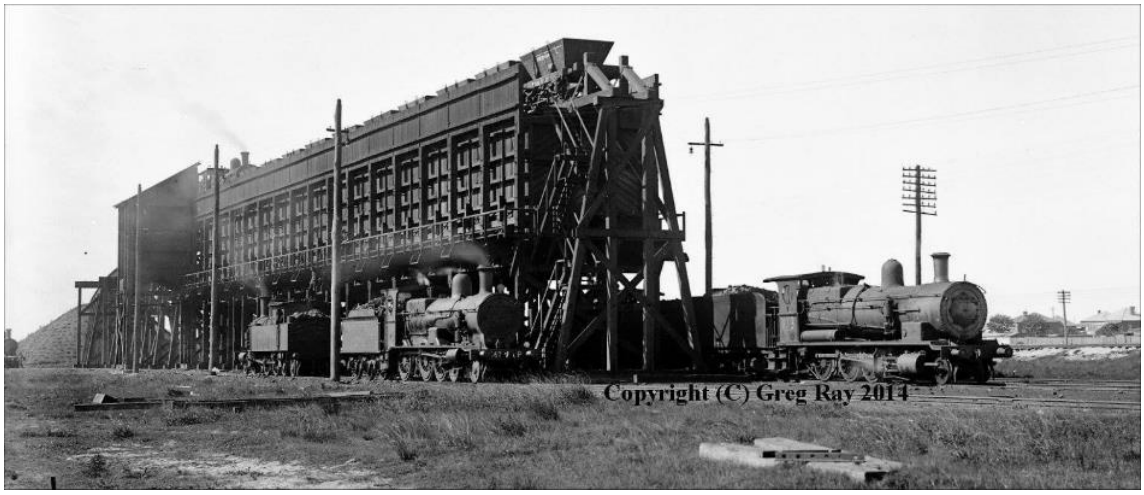
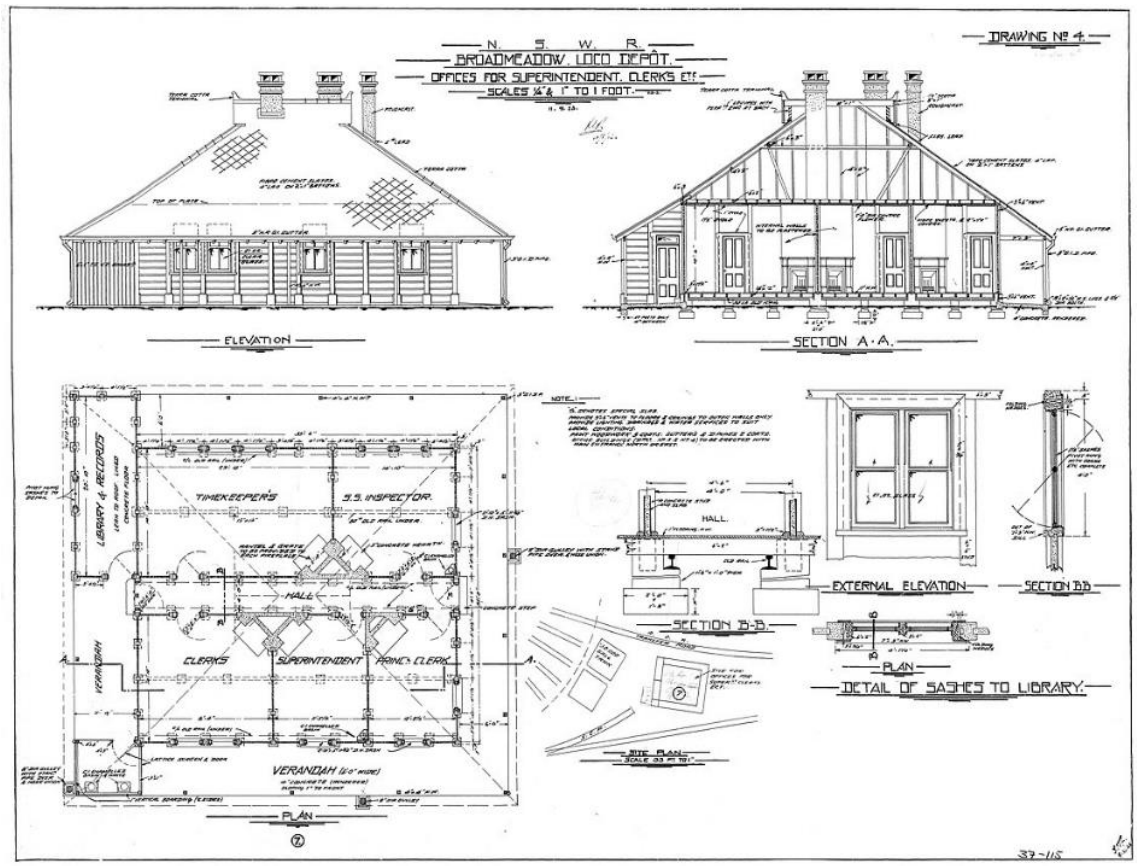


Figure 17. Plans for Clerk's Office, 1923. (Source: NSWGR).



1930s-1940s: Upgrades and new equipment

Various additions and changes were made to the depot in the succeeding decade. In 1930, a 70-tonne Craven-brand wrecking crane was provided to the depot (Figure 18 & Figure 19). A local map of Newcastle and surrounding areas from 1936 shows the layout of the depot at the time (Figure 20). The coal bunker and furnace lie south of Roundhouse No. 1, Turntable No. 2 sits north-east, and the stores, offices, and workshops are situated between the turntables. Turntable No. 2 remains uncovered at this time.

By the mid-1930s, the Broadmeadow Locomotive Depot saw 115 locomotives per day and was the largest and busiest depot in the state.[30] One newspaper reported that "Broadmeadow's mileage was made up of 181,632 in passenger service, 4650 for mixed trains, 78,417 freight trains, 25,055 for shunting, and 11,416 for departmental requirements."[31] In 1938, land was resumed on the eastern end of the main tracks for the purpose of building a guard's rest house.[32]

Few notable changes to the depot occurred until the mid-1940s, when upgrades to the Newcastle railway system worth $580,000 commenced.[33] The District Locomotive Engineer's Office was extended in 1945 and an additional cafeteria and washing facilities were also added for staff (Figure 21). The remainder of the 1940s was marked by coal and locomotive shortages throughout the country, which meant that older rolling stock had to be re-used and repair work at the depot increased.[34]

[30] Newcastle Sun, 3 May 1934, pg. 11.
[31] Ibid.
[32] Doring & Browne, 2006: 41.
[33] Newcastle Sun, 27 Feb 1946, pg. 3.
[34] Doring & Browne, 2006: 47.

Figure 18. Craven crane at Broadmeadow Loco Depot, 1953 (Source: Greg and Sylvia Ray Collections, Rediscovered Newcastle group).

Figure 19. Craven crane at the depot, 1955. (Source: State Archives NSW).

Figure 20. Excerpt of map of Newcastle and district showing layout of the Broadmeadow Locomotive Depot, c. 1936. (Source: National Library of Australia).

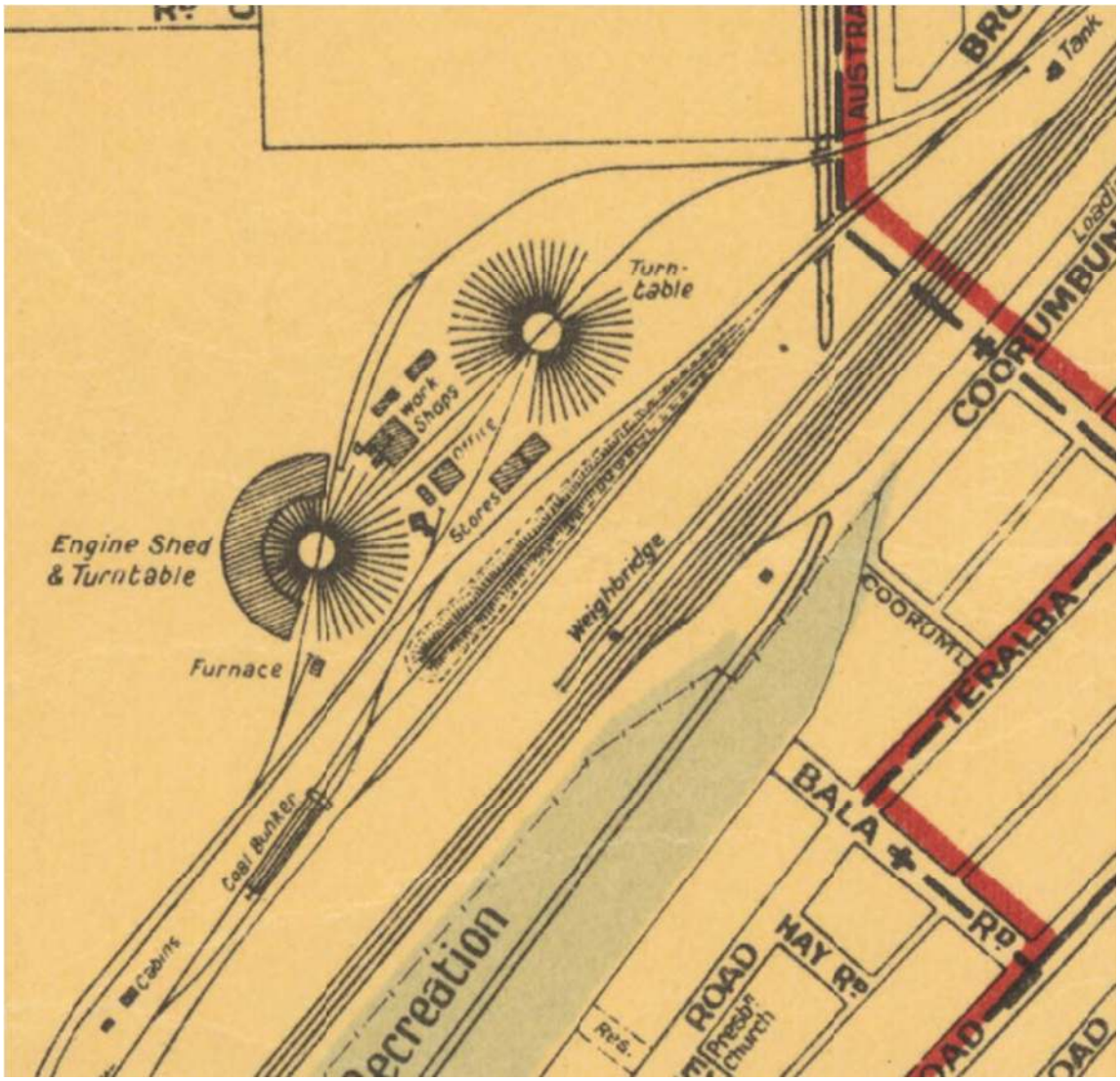
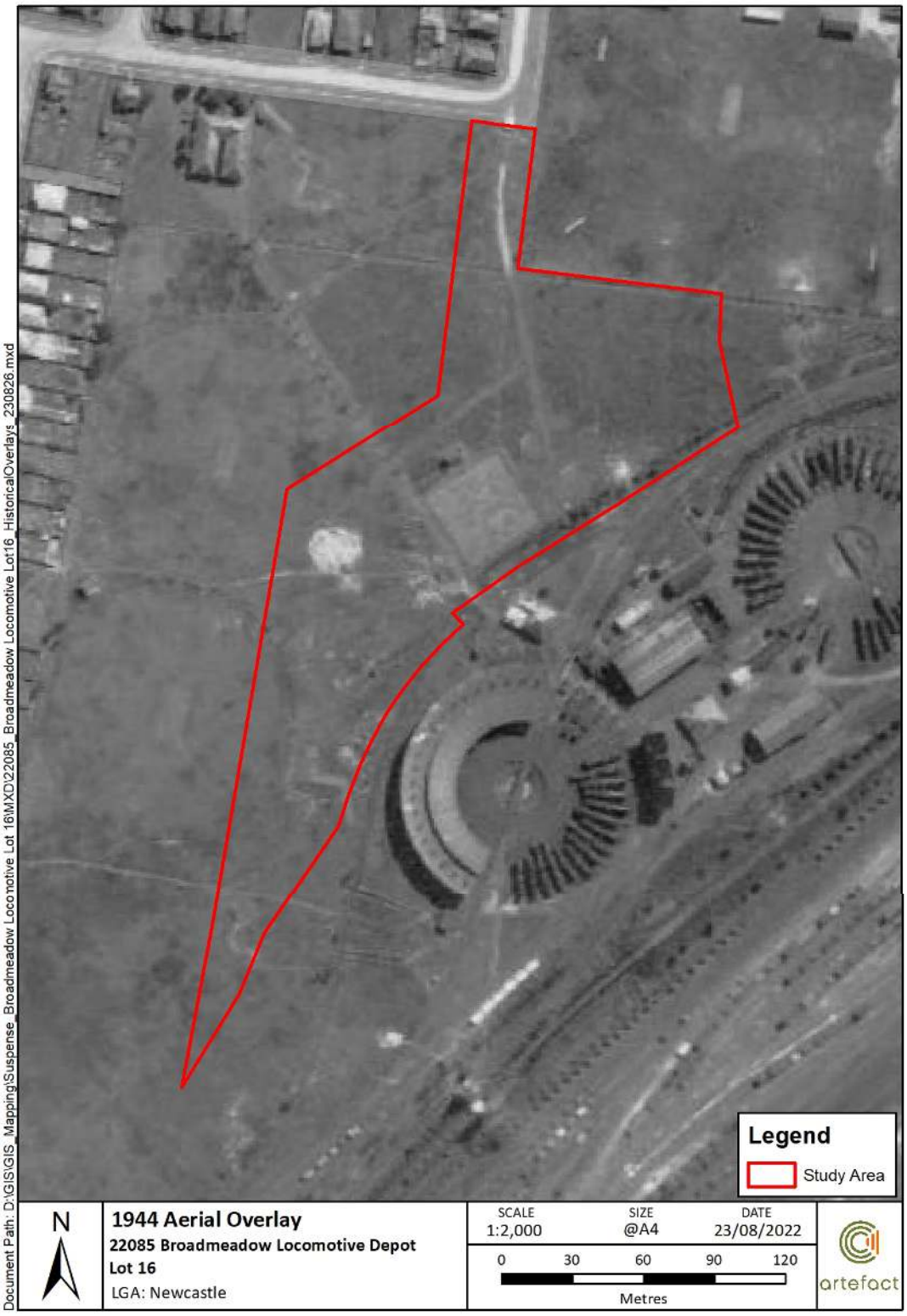


Figure 21. Aerial view 1944, showing minimal development in the study area (Source: Artefact 2022).



1950s-1960s: Roundhouse No. 2 and new upgrades

Construction of Roundhouse No. 2 (housing Turntable No. 2) appears to have commenced in 1947-8. Sources vary on the year of the Roundhouse's completion; however, it was likely completed sometime between 1949 and 1950 (Figure 22).[35] During the course of construction, Turntable No. 2 was replaced by a 105-foot turntable, built to accommodate the growing size of the new 58-class rolling stock.

Newspapers reported that 1950 was the depot's busiest year since its opening in 1924, with 140 locomotives passing through each day.[36] Various improvements to the depot were made throughout the 1950s, but no major changes were made to the configuration of the yard. As the usage of steam locomotive continued to decline in the late 1950s and into the 1960s, upgrades were made at the depot to accommodate the servicing of the new diesel-electric fleet.[37] Most of the steam servicing facilities were removed, and the bays of the turntables were modified.[38] By 1965 a drive-in, underfloor lathe was being.[39] Comparison of aerial imagery from 1953-1966 shows increased development north of the roundhouses, likely as a result of this change (Figure 23 & Figure 24).

Conditions for workers at the Broadmeadow Locomotive Depot remained poor, and workers formed the Broadmeadow Loco Depot Combined Union sometime in the 1950s. In 1958, the union complained of the amenities available to workers at the depot, and in 1959 it sent a deputation to two members of the legislative assembly demanding better pay.[40] While departing in a train after a visit to Newcastle in 1960, the Railway Commissioner was met with a disgruntled crowd of 150 workers from the Broadmeadow Locomotive Depot.[41] In 1962, during a massive national wave of railway strikes, railway workers throughout Newcastle walked off the job, demanding better pay, conditions, and a 35-hour working week (Figure 25).[42]

[35] State Heritage Inventory, 1999. "Broadmeadow Locomotive Depot"; Doring & Browne, 2006: 50; Newcastle Morning Herald and Miners' Advocate, 10 Jan 1950, pg. 3.
[36] Newcastle Morning Herald and Miners' Advocate, 10 Jan 1950, pg. 3.
[37] Doring & Browne, 2006: 53.
[38] State Heritage Inventory, 1999. "Broadmeadow Locomotive Depot."
[39] Doring & Browne, 2006: 53.
[40] Ibid; Tribune, 14 Oct 1959, pg. 12.
[41] Tribune, 7 Sept 1960, pg. 12.
[42] Tribune, 26 Sept 1962, pg. 1.

Figure 22. Workers constructing Roundhouse No. 2, January 1950 (Source: Newcastle Morning Herald and Miners' Advocate, 1950).

BUILDING A NEWER LOCO YARD

● Messrs. N. O'Connor, F. Callaghan, J. Stair, J. Thompson and J. Clifford at work yesterday at Broadmeadow Loco. Yards, where a new running shed is being built.

motives. A new electric three-point bearing turntable at the shed will be large enough to accommodate the heavy 58-class engines being built.

With increased railway traffic and

Figure 23. Aerial view 1954, showing more development in the study area, including a former Administration Block and sheds, which are no longer extant (Source: Artefact 2022).

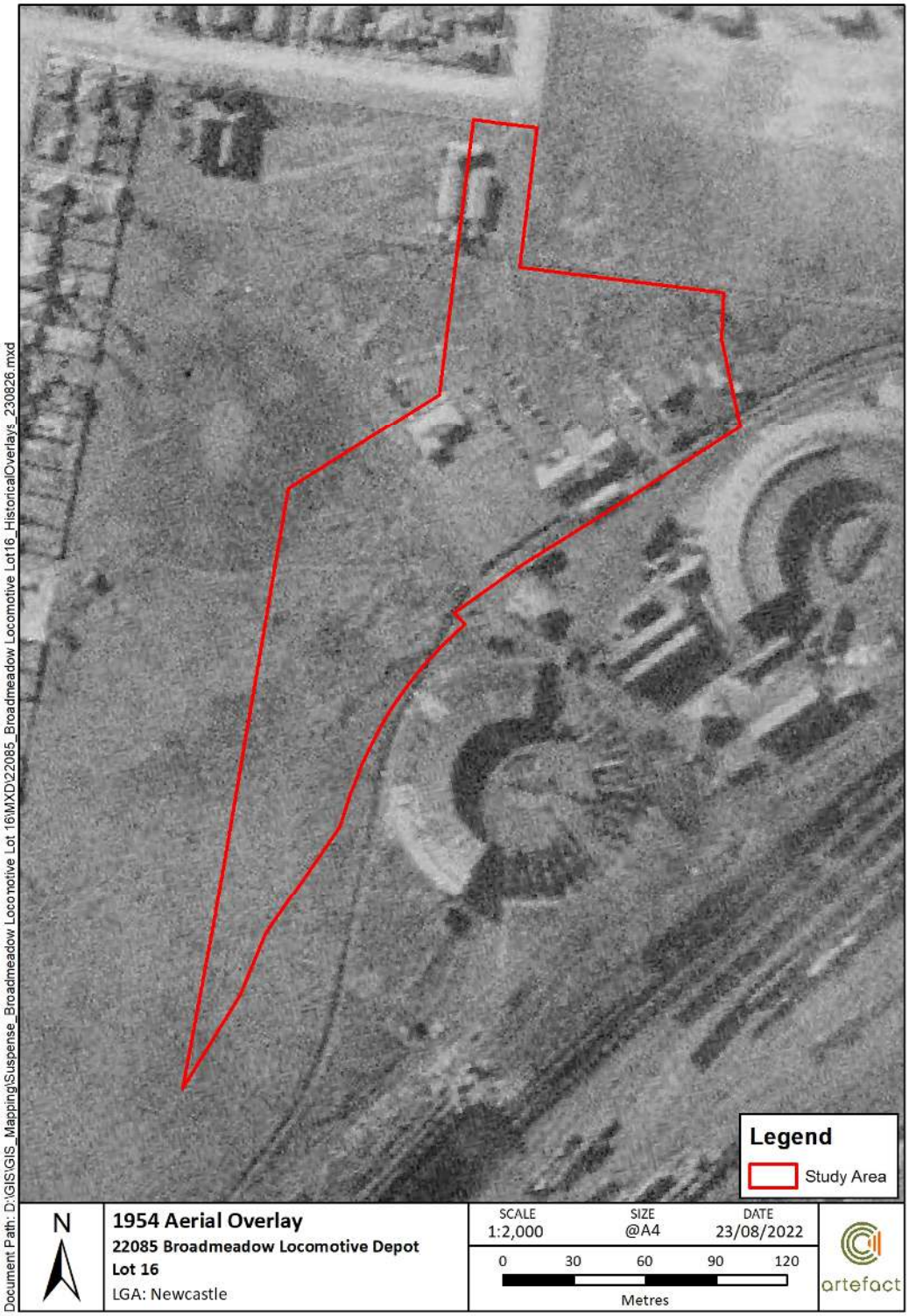


Figure 24. Aerial view 1966, showing increasing development in the study area, including the current Administration Building alongside former buildings no longer extant (Source: NSW Spatial Service).

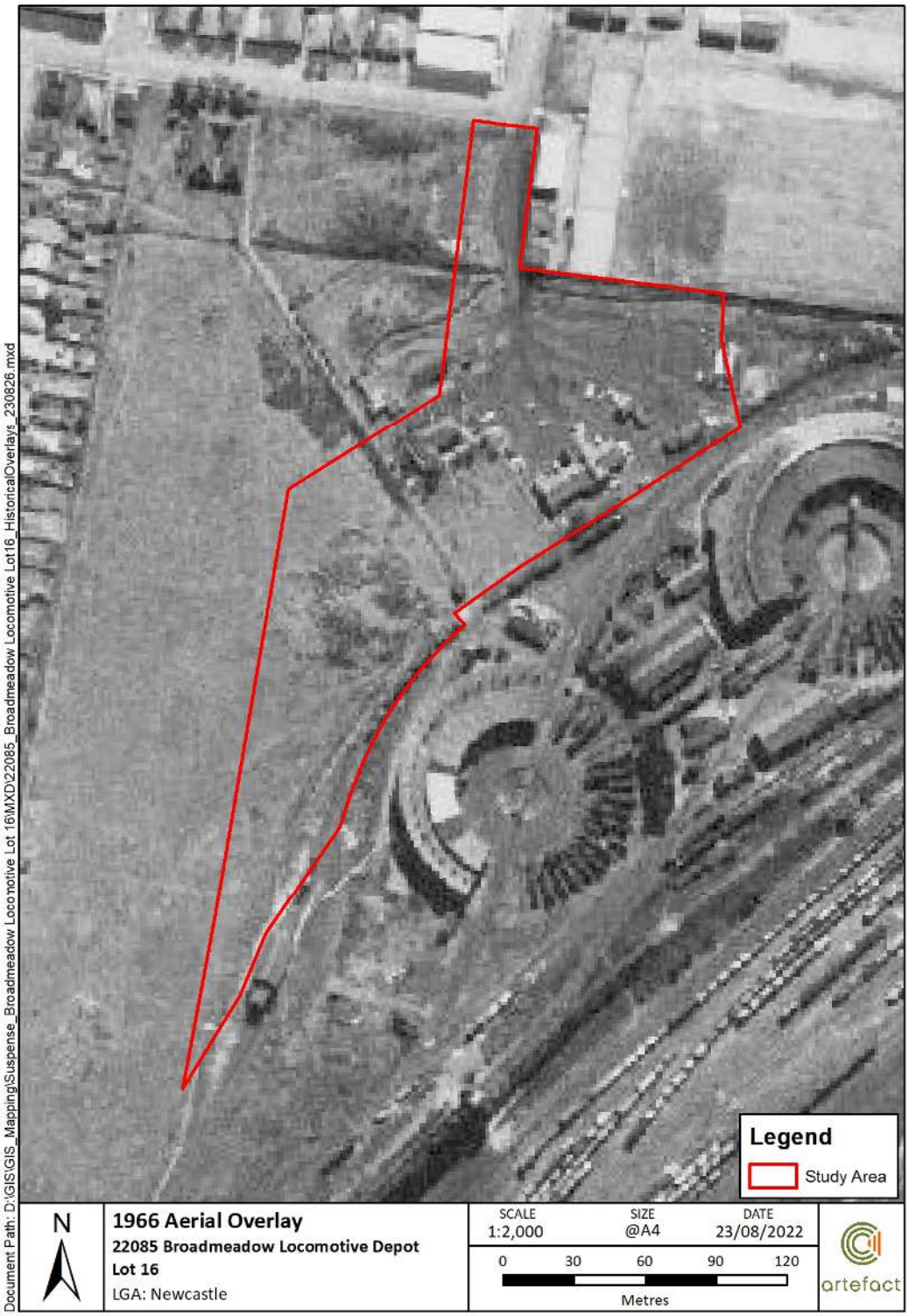
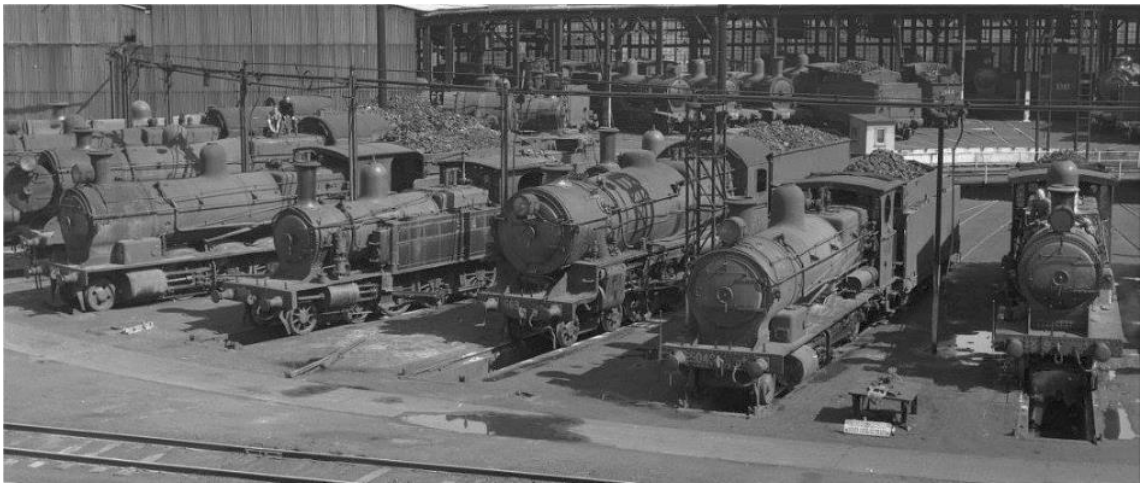


Figure 25. Broadmeadow Loco Depot during 1962 rail strike with all turntable bays full (Greg and Sylvia Ray Collections, Rediscovered Newcastle group).



1970s-present: End of the steam era

In 1974, the electrification of the Newcastle-Gosford line would begin. Structural changes to the depot itself in the 1970s were minimum. Various upgrades to the onsite rest houses and offices took place from 1970-72, and four massive sand tanks, each 24-tonnes in weight, were built for the purpose of resanding locomotives (Figure 26). The replacement of steam facilities with diesel services continued until the end of the decade.

Electrification of the Sydney-Newcastle line began in 1982. Between 1980 and 1987, a heavy wagon workshop operated out of Roundhouse No. 1. The large 1924 coal stage (Figure 16) was removed in 1984, and construction began in 1986 on new motel-style accommodation for drivers and guards, built to replace the two separated barracks.[43] In 1977, modifications were made to tracks 18-21 of roundhouse No. 2, and in 1979 the two original de-ashing pits were filled. Plans to significantly upgrade the depot had been raised periodically from 1977 to 1987, but construction never took place. Construction on a new maintenance centre and rail car shed, however, did commence in 1987.[44] The original drop pits and inspection pits were filled in 1988 and in 1990, Roundhouse No. 1 was demolished, leaving exposed the turntable and stabling ring (Figure 27 & Figure 28). Four years later, the Broadmeadow Locomotive Depot itself was shut down.

[43] Doring and Browne, 2006: 59.
[44] Ibid, 60.

Figure 26. Aerial view 1976, showing the existing arrangement of the study area (Source: NSW Spatial Service).

Figure 27. Aerial view of study area in 1990, prior to demolition of Roundhouse No. 1 (Source: NSW Spatial Service).

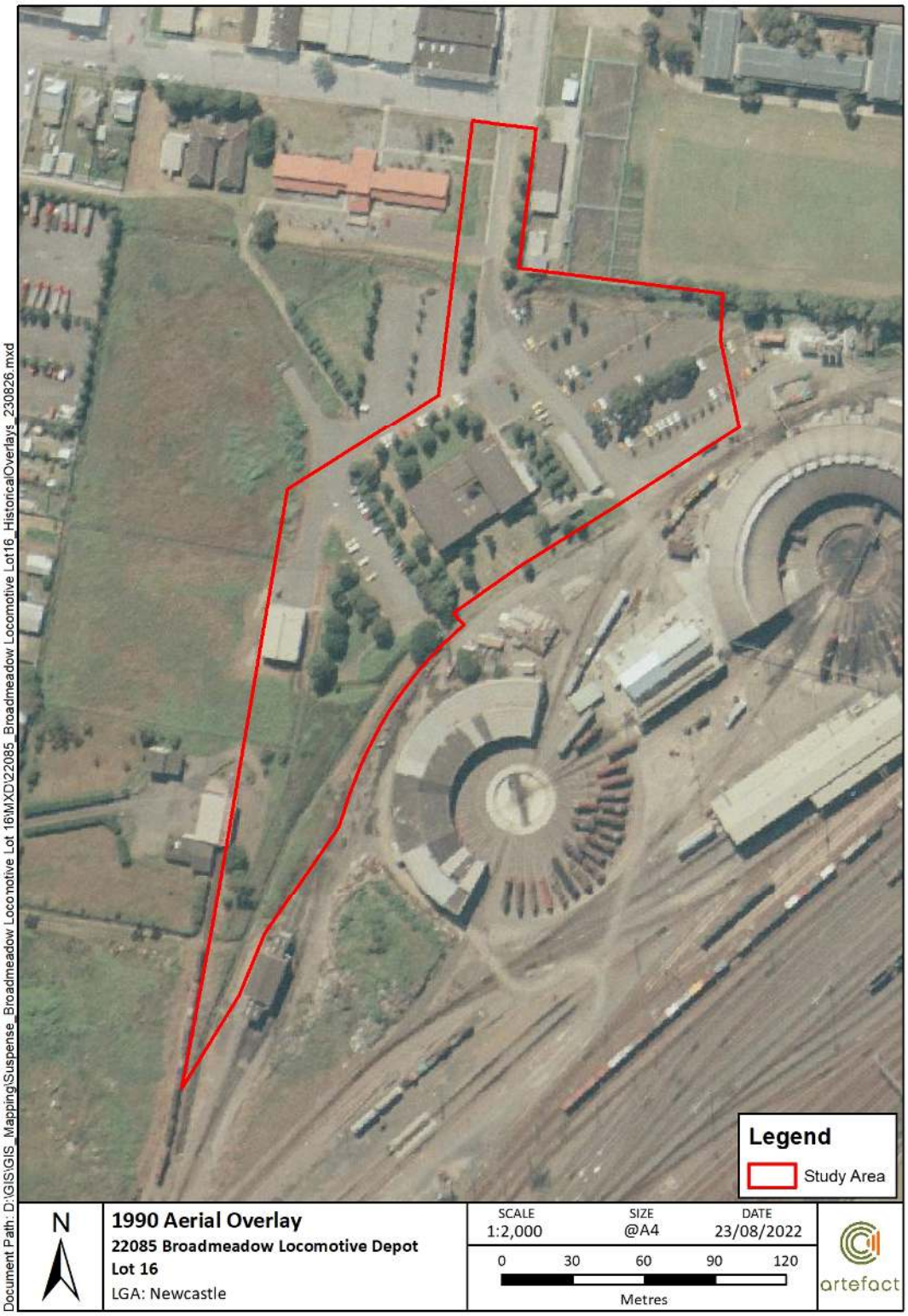


Figure 28. Aerial view of study area, 1993, Roundhouse No. 1 removed (Source: NSW Spatial Service).

3.3 Chronology/Timeline

Date	Event
1850-1894	Precinct part of Newcastle Pasturage Reserve (or “Commonage”)
August 1887	Broadmeadow Railway Station opens
1914-1922	Precinct owned by William C. Krempin
1918	Lambton Road Underbridge opened
1920-1924	Planning and construction stage of Broadmeadow Locomotive Depot
26 May 1922	Land resumed for Locomotive Depot
March 1924	Broadmeadow Locomotive Depot opens. Depot includes 42-road Turntable No. 1 and Roundhouse No. 1. Other structures included: • Elevated coal stage • Coal bunker and ramp, and a bridge across the bunker ramp • A large locomotive inspection pit • Two elevated water tanks • Sand bins, a furnace, and two de-ashing pits • Machine shop and multiple workshops • Two concrete offices • Meal room, locker rooms, and wash rooms • Barracks/rest house for locomotive crew and drivers • Barracks for traffic control branch staff
1925	Construction of Roundhouse No. 2 roundhouse and Turntable No. 2 approved
July 1926	Construction of Turntable No. 2
1926-1927	Washout pipeline connected to new turntable, addition of an air compressor, half-tonne jib crane, hydro-pneumatic jack for the drop-pit, three 9" water columns, a hot water wash-out plant, and three 30,000-50,000-gallon tanks.
1930	70-tonne Craven-brand wrecking crane provided to depot
1937	Concrete floor and jacking strips laid down at Roundhouse No. 1 New lines laid down to depot during upgrading of the Broadmeadow railway station and signal box.
1938	Land resumed east of the main tracks for the guard’s rest house
1946	District Locomotive Engineer's Office was extended
1947	New cafeteria and washing facilities for staff
1948	Refuelling shed constructed Construction begins on Roundhouse No. 2 Original Turntable No. 2 replaced with new 105-foot turntable
1949-1950	Roundhouse No. 2 completed Electric power drive added to both turntables
1962	Mass railway strike throughout Newcastle
1970-1972	Upgrades to houses and offices
1972	Four sand tanks installed

Date	Event
1977	Modifications to tracks 18-21 of Roundhouse No. 2
1979	Two original de-ashing pits filled
1982	Electrification of the Sydney-Newcastle line
1984	Original coal stage removed
1986	New motel-style accommodation for drivers and guards
1988	Original drop pits and inspection pit filled
1990	Roundhouse No. 1 was demolished
1994	Closure of Broadmeadow Locomotive Depot
2009	Rolling stock from Thirlmere relocated to Broadmeadow for storage, conducted by the then Office of Rail Heritage
2012	In October 2012, the residual railway land approved for disposal (outside the Broadmeadow Locomotive Precinct)
2017	Broadmeadow No. 2 Roundhouse roof repaired

4.0 PHYSICAL CONTEXT

4.1 Site Inspection

A site inspection was conducted on foot by Elanor Pitt (Heritage Consultant), Jessica Mauger (Senior Heritage Consultant) and Jenny Winnett (Principal) of Artefact Heritage on 28 July 2022, accompanied by John Rodham, a current volunteer at the Broadmeadow Locomotive Depot.

The aim of the site inspection was to gain a preliminary understanding of the context and views of the study area, identify areas of potential historical and Aboriginal archaeological remains, and to assess the nature of, and potential impacts to, any built heritage items located within, or in the vicinity of, the study area.

4.1.1 Context

The study area comprises the northern plot of Lot 16/DP1213619 which consists of the main driveway leading into the Broadmeadow Maintenance Facility and former Administration Area, an extensive car park area, the former Administration block constructed in 1967, a small office building and bike shed, mature vegetation and lawned areas, and areas of stock piling associated with the rail corridor.

The study area comprises the area between the end of Newtown and Cameron Street and the southern boundary of Hunter School of Performing Arts High School to the north, and the Broadmeadow Maintenance Facility to the south-east. The study area is currently zoned as 'IN2 Light Industrial' land usage on the Newcastle LEP.

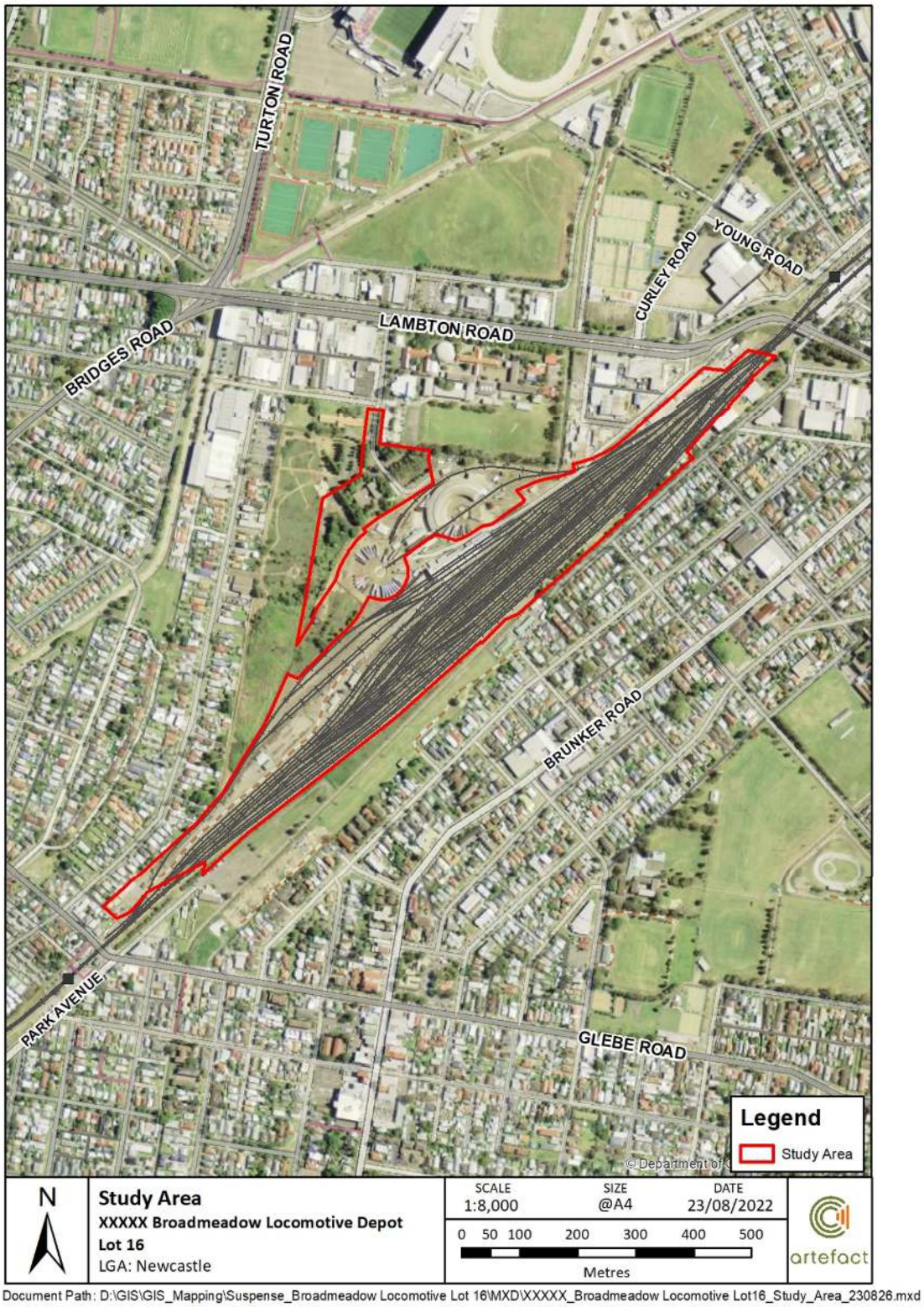
The study area is shown in Figure 1 and in Figure 29.

4.1.2 The Precinct

The study area comprises one of the five areas of the Broadmeadow Locomotive Depot Precinct, namely the Administration Area (E).

A brief description of the area and elements are provided in Section 4.1.3 below.

Figure 29: Map showing Lot 16/DP1213619. Source: Artefact, 2022.



4.1.3 Area E – The Administration Area

The following description has been extracted and adapted from the *Draft Heritage Assessment and Opportunity and Constraints Study: Transit Orientated Development Broadmeadow* prepared by Urbis in 2018.

The Administration area is located to the north-west of the two turntables. The area is largely vacant except for the 1967 SRA Broadmeadow Administrative Office, a smaller office building, bike shed and the staff car park.[45]

The Administration block was constructed in 1967 on the site formerly occupied by a bowling green and several small offices (constructed c. 1948). The 1967 building is a 'flat roofed, two-storey brick, glass and reinforced concrete building. The architect was Lipson Kaad & Fotheringham. Originally the upper floor was occupied by the main administration offices for the depot while the ground floor housed facilities for tradesmen and train crew including showers, bathrooms and break spaces. The building is now vacant and in a dilapidated condition and has reportedly had asbestos removed. [46] The building was not accessed internally due to the presence of hazardous materials.

The small brick structure located about 12 m south-east of the Administration block is currently used by Transport Heritage NSW as a site office. The internal facilities include a kitchen, bathroom and office spaces. The bike shed located about 20 m east of the Administration Block is a timber and steel structure used previously by staff to store bikes.[47] The bike shed appears to have been constructed around a similar time to the Administration Block, appearing in the 1974 historic aerial imagery, however the small brick office building was constructed later in the early 1980s, appearing in the 1990 historic aerial imagery.

Photographs of the study area are provided below, see Figure 30 to Figure 41. All photographs were taken by Artefact consultants in July 2022.

[45] Urbis, 2018. *Draft Heritage Assessment and Opportunity and Constraints Study: Transit Orientated Development Broadmeadow*. Prepared for Transport for NSW (TfNSW). Pp. 21 – 22.
[46] Urbis, 2018. *Draft Heritage Assessment and Opportunity and Constraints Study: Transit Orientated Development Broadmeadow*. Prepared for Transport for NSW (TfNSW). Pp. 21 – 22.
[47] Urbis, 2018. *Draft Heritage Assessment and Opportunity and Constraints Study: Transit Orientated Development Broadmeadow*. Prepared for Transport for NSW (TfNSW). Pp. 21 – 22.

Figure 30. View of stock piled concrete sleepers within the study area, facing north (Source: Artefact 2022).

Figure 31. View of stock piled concrete sleepers within the study area, facing west (Source: Artefact 2022).

Figure 32. View of the former Administration Block, facing north-west (Source: Artefact 2022).

Figure 33. View of the former Administration Block, facing north (Source: Artefact 2022).

Figure 34. View of the small brick office building with the Administration Block in the background, facing north-west (Source: Artefact 2022).

Figure 35. View of the small brick office building with the Broadmeadow Maintenance Facility in the background, facing south-east (Source: Artefact 2022).

Figure 36.View of the bike shed, facing north-east (Source: Artefact 2022).

Figure 37. View of inside the bike shed, facing south-east (Source: Artefact 2022).

Figure 38. View of part of the landscaped area to the south of the Administration Block, facing south (Source: Artefact 2022).

Figure 39. Example drain or pit to the south of the Administration Block, facing south (Source: Artefact 2022).

Figure 40. View of the car park area to the north of the Administration block, facing north-west. (Source: Artefact 2022)

Figure 41. View of the car park area to the north of the Administration block, facing north-west. (Source: Artefact 2022)

5.0 NON-ABORIGINAL HERITAGE SIGNIFICANCE

5.1 Methodology

5.1.1 Significance criteria

Determining the significance of potential heritage items or a potential archaeological resource is undertaken by utilising a system of assessment centred on the *Burra Charter* (Australia ICOMOS 2013). The principles of the charter are relevant to the assessment, conservation and management of sites and relics. The assessment of heritage significance is outlined through legislation in the *Heritage Act* and implemented through the *NSW Heritage Manual*, the *Archaeological Assessment Guidelines*[48] and the document *Assessing Significance for Historical Archaeological Sites and 'Relics'*.[49]

If an item meets one of the seven heritage criteria and retains the integrity of its key attributes, it can be considered to have heritage significance (see Table 2). The significance of an item or potential archaeological site can then be assessed as being of local or State significance. If a potential archaeological resource does not reach the local or state significance threshold, then it is not classified as a relic under the *Heritage Act*.

'State heritage significance', in relation to a place, building, work, relic, moveable object or precinct, means significance to the State in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item.

'Local heritage significance', in relation to a place, building, work, relic, moveable object or precinct, means significance to an area in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item.[50]

Table 2. NSW heritage assessment criteria

Criteria	Description
A – Historical Significance	An item is important in the course or pattern of the local area's cultural or natural history.
B – Associative Significance	An item has strong or special associations with the life or works of a person, or group of persons, of importance in the local area's cultural or natural history.
C – Aesthetic or Technical Significance	An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in the local area.
D – Social Significance	An item has strong or special association with a particular community or cultural group in the local area for social, cultural or spiritual reasons.
E – Research Potential	An item has potential to yield information that will contribute to an understanding of the local area's cultural or natural history.
F – Rarity	An item possesses uncommon, rare or endangered aspects of the local area's cultural or natural history.

[48] NSW Heritage Office 1996, 25-27.
[49] NSW Heritage Branch 2009.
[50] This section is an extract based on the Heritage Office Assessing Significance for Historical Archaeological Sites and Relics 2009:6.

Criteria	Description
G – Representativeness	An item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places of cultural or natural environments (or the cultural or natural history of the local area).

5.1.2 Element grading

Individual areas and elements of a heritage item/place can be assessed and a grading of significance applied. Such a detailed assessment is provided to enable decisions on the future conservation and development of the place.

Five standard grades of cultural significance are used in NSW to determine the relative significance of elements and areas of a place. These categories have been developed based on *Assessing Heritage Significance*,[51] prepared by the NSW Heritage Office (Table 3).

Table 3: Standard grades of cultural significance

Id.	Grading	Justification	Status
E	**Exceptional**	Where an individual space, element, tree or shrub is assessed as making a rare or outstanding contribution to the overall significance of the place. Spaces, elements or fabric exhibit a high degree of intactness and quality. Minor alterations or degradation may be evident, but does not detract from the overall significance of the place. Demolition/removal of the element would diminish the heritage significance of the place.	Fulfils criteria for local or state listings.
H	**High**	Where an individual space, element, tree or shrub is assessed as making considerable contribution to the overall significance of the place. Spaces, elements or fabric exhibit a considerable degree of intactness and were originally of substantial quality. Considerable alteration may have been undertaken, which may alter the presentation and completeness, but does not detract substantially from the overall significance of the place. Demolition/removal of the element would diminish the heritage significance of the place.	Fulfils criteria for local or state listings.
M	**Moderate**	Where an individual space, element, tree or shrub is assessed as making a moderate contribution to the overall significance of the place. Original spaces, elements or fabric may exhibit considerable alteration and/or degradation which detracts from the overall significance of the place. Original space, elements or fabric which were of some intrinsic quality, but are relatively intact may be included. Elements with little heritage value but contribute to the overall cumulative significance of the place may also be included. New elements of high-quality design and aesthetic value may be considered to contribute to the significance of the place. Demolition/removal of the element may diminish the heritage significance of the place. Elements or spaces can be altered or adaptively reused.	Fulfils criteria for local or state listings.

[51] NSW Heritage Office, *Assessing Heritage Significance*, 2001

Id.	Grading	Justification	Status
L	**Little**	Where an individual space, element, tree or shrub is assessed as making a minor contribution to the overall significance of the place, particularly compared with other elements. Original elements may exhibit extensive alterations or degradations which impact their significance and ability to interpret. New elements of little intrinsic quality or aesthetic value may be considered in this category. Demolition/removal of the element would not diminish the heritage significance of the place. Elements or spaces can be altered or adaptively reused.	Does not fulfil criteria for local or state listings.
I	**Intrusive**	Where an individual space, element, tree or shrub is assessed as detracting from the appreciation and overall significance of a place. The element may be adversely affecting or obscuring other significant areas, elements or items. Demolition/removal of the element is recommended.	Does not fulfil criteria for local or state listings.

5.2 Broadmeadow Railway Locomotive Depot (SHR # 01100)

The following section outlines the assessed significance of the study area. The following heritage assessment also applies to all the heritage listings which intersect with the study area i.e.:

- Broadmeadow Railway Locomotive Depot (SHR #01100)
- Broadmeadow Railway Locomotive Depot (S170 # 4801014).
- Broadmeadow Locomotive Depot offices (LEP # I45)
- Broadmeadow Railway Locomotive Depot (LEP # I46)

All information has been extracted directly from the State Heritage Inventory form for SHR #01100.

5.2.1 Significance assessment

Table 4. Heritage significance assessment

Criteria	Discussion
A) Historical Significance	*The Broadmeadow Locomotive Depot has state heritage significance under this criterion. Along with nearby Cardiff Locomotive Workshops, Broadmeadow Depot demonstrates the increasing demand on the NSW rail system and its capacity for building and servicing rolling stock in the early to mid-twentieth century. Broadmeadow Depot was the main servicing hub for steam locomotives in the northern part of NSW during this time, having replaced Hamilton Depot in this function. It was the last depot in NSW to run regular steam train services.* *The extensive site contains a range of buildings and works that demonstrate the operation of the site and the changing technology from steam to diesel over a period of 80 years. In particular the roundhouses demonstrate the shift from the English model of using through houses for locomotive maintenance, to the American practice of using roundhouses. Although a number of elements of the depot have been removed the site is still able to demonstrate its significance under this criterion through the grouping of the turntables, 1948 roundhouse, cleaning depot, in and out roads, offices and accommodation. The site physically demonstrates a former age of locomotive servicing that no longer occurs. The 1980s Endeavour Centre, where trains are currently cleaned and serviced continues the historic use of the site for this purpose although its construction has impinged on the radial roads of the #2 roundhouse, impacting on its ability to operate as it was intended.* *The railways were, for many years, the largest employer in NSW, with staff in all corners of the state working 24 hours a day 7 days a week. The Broadmeadow depot had a significant impact on the local economy, particularly in its heyday.*
B) Associative Significance	*N/A*
C) Aesthetic Significance	*Broadmeadow Locomotive Depot has state significance under this criterion. This significance is centred on the 1948 roundhouse and turntable. The architectural features and fabric remain largely intact and have a patina of age and use that provide a strong sense of place. The scale of the building creates a dramatic industrial space that reflects the scale of the servicing operation that took place on the site.* *The former Chief Engineer's office is a good example of an early 20th century drop concrete slab building, typical of numerous buildings constructed using this technique across the rail network.*
D) Social Significance	*The place has the potential to contribute to the local community's sense of place and can provide a connection to the local community's history. The site is likely to have a high degree of social value for former staff and their families.*

Criteria	Discussion
E) Research Potential	*The Broadmeadow Locomotive Depot has local heritage significance under this criterion. The site has low/moderate archaeological research potential. Remains of now demolished buildings and works have the potential to add some knowledge about the operation of the site and to add to its interpretability.*
F) Rarity	*The Broadmeadow # 2 roundhouse is relatively rare in NSW. Steam locomotives were the principal form of railway motive power in New South Wales for approximately 110 years (1855-1965). As such, steam locomotive servicing facilities incorporating engine sheds or roundhouses, were established at approximately 145 sites in the state. It is estimated that approximately 120 engine sheds were built in the state and in addition, that 25 roundhouse were also built, all these buildings being part of locomotive servicing arrangements. Only seven roundhouses (or part roundhouses) are extant. The Broadmeadow # 2 roundhouse and turntable are one of the largest remaining. The oldest remaining is at Valley Heights.* *The rarity value of the Broadmeadow complex is increased by the fact there were two roundhouses on the same site and that both turntables survive. It is still able to demonstrate this intensive former use despite the loss of the superstructure of the 1924 roundhouse and the encroachment of the Endeavour Centre on the radial roads of the 1948 roundhouse. It is the only railway complex in NSW to retain two side by side turntables and both are in working order. The rarity value of the group as a whole is further enhanced by the original Resident Engineer's office.*
G) Representativeness	*The Broadmeadow roundhouse represents a class of industrial building, which were once common in the state but there are relatively few remaining examples of this type of structure. The roundhouse conforms to the standard roundhouse design also seen at Casino, Cowra, Muswellbrook and Temora. The Broadmeadow roundhouse #2 remains intact and following conservation works will be operational and in good condition. It is a good example of its type.*

5.2.2 Statement of Significance

This Statement of Significance has been extracted directly from the State Heritage Inventory form for SHR item #01100.

> *The Broadmeadow Locomotive Depot has state heritage significance. Broadmeadow Depot was the main servicing hub for steam locomotives in the northern part of NSW during this time, having replaced Hamilton Depot in this function, and was the last depot in NSW to run regular steam train services.*
>
> *The extensive site contains a range of buildings and works that demonstrate the operation of the site and the changing technology from steam to diesel over a period of 80 years. In particular the roundhouses demonstrate the shift after 1890 from the English model of using through-houses for locomotive maintenance, to the American practice of using roundhouses. Although a number of elements of the depot have been removed, the site is still able to demonstrate its significance through the grouping of the turntables, 1948 roundhouse, in and out roads and District Engineer's office. The site physically demonstrates a former age of locomotive servicing that no longer occurs.*
>
> *The Broadmeadow number 2 roundhouse is relatively rare in NSW. Although a number of roundhouses were built throughout the state, only seven roundhouses (or part roundhouses) are extant, and the Broadmeadow number 2 roundhouse and turntable are one of the largest remaining in NSW. The rarity value of the Broadmeadow complex is increased by the fact there were two roundhouses on the same site and that both turntables survive. It is still able to demonstrate this*

intensive use despite the loss of the superstructure of the 1924 roundhouse and the encroachment of the Endeavour Centre on the radial roads of the 1948 roundhouse. It is the only railway complex in NSW to retain two side by side turntables and both are in working order.

5.3 Individual Items within the study area

Individual areas and elements of the study area have been assessed in accordance with the grades in Table 3 and a grade of significance has been assigned, as well as the status (the threshold of significance), as provided in Table 5 below. These gradings are given in relation to their value within the wider Broadmeadow Locomotive Depot Precinct.

Table 5: Grading of items of cultural significance

Built Heritage Item (Date constructed)	Location/Description	Preliminary Assessment	Significance Grading	Status
SRA Administration Office Block (1967)	A two-storey brick and reinforced concrete building with a flat roof and glazed clerestory windows, located to the north-east of the turntables	The Administration Block was constructed during a peak period of the Broadmeadow Locomotive Depot's history, and likely housed the railway engineers and administrative officers. This building has Little heritage value to the overall Broadmeadow Locomotive Depot Precinct.	Little	Nil
TfNSW Office (early 1980s)	Corrugated steel hipped roofed rectilinear brick one-storey building with a front veranda on a concrete pad, located to the south-east of the SRA Administration Office Block	This building was likely constructed in the early 1980s during the period when the Broadmeadow Locomotive Depot began to slowly become redundant, therefore this building is unlikely to have any heritage value.	Neutral	Nil
Bike shed (late 1960s or early 1970s)	Timber-framed gabled structure on concrete pad with corrugated steel roofing and cladding, located to the east of the SRA Administration Office Block	This bike shed is an unusual element within the wider Broadmeadow Locomotive Depot Precinct however it is unlikely to enhance the significance of the area and as such is unlikely to have any heritage value.	Neutral	Nil
Trees and grassed areas (late 1960s)	The trees are mostly plantings dating to the second half of the 20th century and are generally contained to the north-western end of the Precinct	The landscaping around the Administration Area is generally open, shaded and neat. It is in keeping with the mid-20th Century development of this area and adds some aesthetic value to a very industrial and utilitarian area. This landscaping has Little heritage value to the overall Broadmeadow Locomotive Depot Precinct.	Little	Nil

6.0 NON-ABORIGINAL ARCHAEOLOGICAL ASSESSMENT

6.1 Methodology

Historical archaeological potential is assessed by identifying former land uses and associated features through historical research and evaluating whether subsequent actions (either natural or human) may have impacted on evidence for these former land uses.

Consideration of archaeological research potential is required when undertaking a significance assessment of an historical archaeological site. The following assessment uses the guidelines prepared by Heritage NSW (formerly NSW Heritage Division): *Assessing Significance for Historical Archaeological Sites and 'Relics'* (2009).

The identified levels of archaeological potential referred to in this assessment are based on the following definitions:

Table 6: Grades of archaeological potential

Assessed Potential	Definition
Nil Potential	Where there is no evidence of historical development or use, or where previous impacts such as deep basement structures would have removed all archaeological potential.
Nil to Low Potential	Where there has only been low intensity historical activity, such as land clearance or informal land use, with little to no archaeological 'signature' expected; or where previous impacts were extensive, such as large-scale bulk excavation which would leave isolated and highly fragmented deposits.
Low Potential	Where research has indicated little historical development, or where there have been substantial previous impacts which may not have removed deeper subsurface remains entirely.
Moderate Potential	Where analysis has demonstrated known historical development with some previous impacts, but where it is likely that archaeological remains would survive with localised truncation and disturbance.
High Potential	Where there is evidence of multiple phases of historic development and structures, with minimal or localised twentieth-century development impacts, and where it is likely that archaeological resources would remain intact.

6.1.1.1 Protection of 'relics'

The NSW Heritage Act provides additional protection for archaeological remains through the operation of the 'relics' provisions. The primary aim of an archaeological significance assessment is to identify whether an archaeological resource, deposit, site or feature is of cultural value and therefore, considered to be a 'relic'.[52] Historical archaeological sites typically contain a range of different elements as vestiges and remnants of the past. Such sites will include 'relics' of significance in the form of deposits, artefacts, objects and usually also other material evidence from demolished buildings, works or former structures which provide evidence of prior occupations but may not be 'relics'.[53]

[52] Office of Environment and Heritage (OEH) (former), Heritage Division, 2009. Assessing Significance for Archaeological Sites and 'Relics', 4.
[53] Office of Environment and Heritage (OEH) (former), Heritage Division, 2009. *Assessing Significance for Archaeological Sites and 'Relics'*, 7.

6.2 Land use summary

A summary of historical phases has been included in Table 7.

Table 7: Overview of land-use phasing

Section	Phase	Date	Discussion
1	Newcastle Pasturage Reserve	1849 - 1894	The study area was originally part of the Newcastle pasturage reserve/common. Many people lived on the common during this period, in makeshift structures. It is unclear if the current study area was also utilised for this purpose.
2	Hartley Vale Colliery	1861 – c.1880	C pit was worked to the east of the subject site for only approximately 4-5 years. The colliery railway line passed from south to north to the east of the study area. It is unlikely additional land clearance or improvements occurred during this phase.
3	Broadmeadow Locomotive Depot	1920 onwards	c.1948 bowling green, offices, sheds (demolished) 1967 DSRA Broadmeadow Administrative Office (extant)

6.3 Discussion of previous disturbance

While the history of the study area could have produced a range of archaeological evidence related to former activities and phases, the likelihood of such evidence surviving to the present is influenced by a range of factors. These factors include the durability of the material evidence and subsequent impacts such as demolition and construction.

Available historical sources provide evidence for early mine workings and rail lines associated with the Newcastle pasturage Reserve, the Hartley Vale Colliery and the Broadmeadow locomotive depot. Previous impacts identified within the study area include:

- Vegetation clearance
- Construction, demolition and modification of buildings
- Landscaping for the bowling green, carparking, roads gardens and tree plantings
- Construction of substantial drainage systems

Overall, the majority of the structures introduced to the study areas in the first half of the 20th century appear to be light-weight residential. Although it is unclear at this stage of investigation, these are unlikely to have resulted in substantial impact to underlaying stratigraphy. The exception to this is the Administrative Office and adjoining carparking areas, which are likely to have required substantial excavation and levelling works.

Numerous service corridors are likely to be located throughout the study area. Services may range from electrical conduits, telecommunications wiring, water and sewerage services, and a large network of stormwater drainage services throughout the site due to historical drainage issues. The installation of these services would have involved ground disturbing works that would have impacted archaeological remains across the study area to varying degrees.

6.4 Assessment of historical archaeological potential

Potential archaeological evidence is discussed in Table 8 within the phases identified in the previous section. In some instances, archaeological remains may span multiple phases. The following assessment includes identification of potential archaeological evidence associated with each phase.

Table 8: Summary of historical archaeological potential

Item	Phase	Discussion and potential remains	Potential
Newcastle Pasturage Reserve	1	Evidence of squatters housing in the form of postholes, stone footings, earthen platforms, rubbish pits, cesspits, discarded artefacts.	Low
Hartley Vale Colliery	2	No structures associated with the operation of the colliery are known to have been located within the study area. The study area has limited potential to contain evidence associated with peripheral works within the colliery i.e. road/rail construction, and/or undocumented/exploratory mine workings (adits, shafts, entrances).	Low
Broadmeadow Locomotive Depot	3	Evidence of 20th century buildings associated with the operation of the former bowling club and Locomotive depot in the form of brick footings, concrete slab platforms/flooring, retaining walls and/or road surfaces.	Moderate

6.4.1 Summary of historical archaeological potential

This assessment of archaeological potential is based on readily available information including photographic evidence and the site inspection. The identified historical archaeological resource has extremely limited potential to provide material evidence of *ad hoc* occupation of the Newcastle Pasturage Reserve. There is no historical evince of the locations people were illegally occupying and the buildings are likely to have been of lightweight construction as a result. Archaeological evidence is unlikely to survive.

The study area has limited potential to contain archaeological evidence associated with 19th century coal mining practices in general, or the Hartley Vale Colliery specifically., The colliery was in operation for a limited period due to the inferior quality of the coal extracted from ‘C Pit’ and it is unlikely to have been associate with substantial construction of infrastructure.

Overall, although the study area has been subject to relatively little development since the closure of the coal mines in the late 19th century, very little activity appears to have taken place within the study area during historical phases 1 and 2.

There is greater potential for an archaeological resource associated with phase 3 to be present to the robust nature of 20th century building materials and techniques. However, the ability of remains associated with this phase of use is unlikely to contribute to research agendas and provide useful information on the development of the study area. The significance of potential remains is discussed further in Section 6.5.

6.5 Assessment of historical archaeological significance

The NSW Heritage Manual guidelines provide the framework for the following significance assessment of archaeological remains. These guidelines incorporate aspects of cultural heritage value identified in the Burra Charter. The Heritage Branch (now Heritage NSW) has also issued the guidelines, *Assessing Significance for Historical Archaeological Sites and 'Relics'*. The assessment of historical archaeological sites requires a specialised framework in order to consider the range of values of archaeological site.

The most widely used framework is that developed by Bickford and Sullivan and comprises three key questions which can be used as a guide for assessing the significance of an archaeological site:

- *Can the site contribute knowledge that no other resource can?*
- *Can the site contribute knowledge that no other site can?*
- *Is this knowledge relevant to general question about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?*

The emphasis of this framework is on the need for archaeological research to add to the knowledge of the past in a useful way, rather than merely duplicating known information or information that might be more readily available from other sources such as documentary records or oral history. As a result, archaeological significance has usually been addressed in terms of Criterion (e) of the NSW Heritage assessment criteria that is '*the potential to yield information*…'.

An assessment of the significance of the potential remains is included below in Table 9.

Table 9. Assessment of Archaeological Significance against the NSW Heritage Act criteria

Criterion	Discussion
A) Historical: an item is important in the course, or pattern, of NSW's cultural or natural history (or the local area)	Phase 1: Archaeological remains associated with the Newcastle Pasturage Reserve, and the individuals that lived within it, if intact, may reach the local significance threshold. Phase 2: The private coal mining companies of the later 19th century broke the monopoly of the AACo and were integral in developing the outer suburbs of Newcastle. Archaeological remains associated with Phase 2, if intact, may have significance at a local level. Phase 3: Archaeological remains associated with earlier phases of the Locomotive Depot administrative area are unlikely to reach the local significance threshold under this criterion
B) Associative: an item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history (or the local area)	Phase 1: The study area has low potential to contain an archaeological resource associated with mine workers and their families illegally squatting on the pasturage reserve. Should a considerably intact archaeological resource be identified, it may reach the local significance threshold under this criterion. Phase 2: The study area has generally low potential to contain an archaeological resource associated with the Brown brothers and other individuals associated with early coal mining in Newcastle. The site has low potential to contain undocumented structural evidence of the Hartley Vale

Criterion	Discussion
	Railway. However, archaeological remains are unlikely to be able to be associated directly with the brothers. Phase 3: Archaeological remains associated with earlier phases of the Locomotive Depot are unlikely to reach the local significance threshold under this criterion.
C) Aesthetic or Technical: an item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area)	The potential archaeological remains within the study area have little potential for aesthetic significance. Although it is recognised that exposed *in situ* archaeological remains may have distinctive/attractive visual qualities and have visual characteristics with potential to connect communities and individuals to the past in a tangible way, the potential archaeological remains at the study area are likely to be ephemeral. The potential archaeological resource is unlikely to meet the local significance threshold under this criterion.
D) Social: an item has strong or special association with a particular community or cultural group in NSW for social, cultural or spiritual reasons (or the local area)	The study area bears testament to the long history of European association, settlement and landscape modification in Newcastle. The site has the potential to contribute to the local community's sense of place and provide a connection to the history of Newcastle. This connection is unlikely to be a strong one, however, due to the limited potential survivability of the resource. The potential archaeological resource is unlikely to meet the local significance threshold under this criterion.
E) Research Potential: an item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the local area)	Phase 1 and Phase 2: Colliery remains are likely to lie outside the study area, and the potential for undocumented remains is low. Similarly, it is unlikely the study area would contain a considerably intact archaeological resource associated with miners squatting on the pasturage reserve. The physical survival of archaeological remains of undocumented buildings and structures would have the ability to demonstrate the layout of the colliery site, and potentially provide some insight into the working lives of miners and their families. If unexpectedly intact or legible remains associated with Phase 1 or 2 were identified, they may reach the local significance threshold under this criterion through their ability to contribute to our understanding of this unique use of Crown land during the early development of Newcastle. Phase 3: Archaeological remains associated with this phase are unlikely to reach the local significance threshold under this criterion.
F) Rarity: an item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the local area)	Phase 1: An intact archaeological resource associated with occupants of the pasturage reserve would be unique and rare. Should an intact archaeological resource associated with Phase 1 survive within the study area, it may have significance at a local level. Phase 2: Newcastle is unique in New South Wales for its role in coal mining from 1801 onwards. Private coal enterprises such as Hartley Vale were also unusual in their adoption of technology, including rail inclines, steam engines and engineering works. Overall, there is low potential for the area to contain a significant archaeological resource associated with colliery use, however, should such a resource exist, and should it be intact and legible, it may have significance at a local level. Phase 3: Archaeological remains associated with this phase are unlikely to reach the local significance threshold under this criterion.

Criterion	Discussion
G) Representativeness: an item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places or cultural or natural environments (or the local area)	Phase 1: Archaeological remains associated with this phase are unlikely to reach the local significance threshold under this criterion. Phase 2: The Newcastle collieries were unique in many respects, but its preferred use of advanced technology for mining set the pattern for the later development of collieries in the Hunter Valley and NSW. Overall, there is low potential for the area to contain a significant archaeological resource associated with the Hartley Vale colliery, however, should such a resource exist, and should it be intact and legible, it may have significance at a local level. Phase 3: Archaeological remains associated with this phase are unlikely to reach the local significance threshold under this criterion.

6.6 Summary statement of archaeological significance

In summary, an archaeological resource within the study area that could meet the local significance threshold would include:

- Intact and substantial archaeological remains associated with the illegal occupation of the Newcastle pasturage Reserve (Phase 1) including postholes, artefact bearing deposits, rubbish pits, footings and other structural remains (Criteria a, b, e and f)
- Intact and substantial archaeological remains associated with previously undocumented evidence of the Hartley Vale Colliery (phase 2) such as footings, evidence of undocumented rail lines and/or mine workings (criteria a, e, f and g).

Remains associated with the later 20th century development of the Broadmeadow Locomotive Depot are unlikely to have research potential or archaeological significance. These archaeological features would not meet the threshold for local significance.

7.0 HERITAGE IMPACT ASSESSMENT

7.1 Introduction

The objective of a Statement of Heritage Impact (SOHI) is to evaluate and explain how a proposed development or other change will affect the heritage values of a place. A SOHI should also address how the heritage values of a place can be retained, the impacts minimised or avoided, or be enhanced by the proposal. This assessment has been prepared using the *Statements of Heritage Impact* 2002,[54] prepared by the NSW Heritage Office, contained within the NSW Heritage Manual, as a guideline.

It is noted that there is currently no existing Conservation Management Plan (CMP) for the Broadmeadow Locomotive Depot Precinct.

7.2 Methodology

Specific terminology and corresponding definitions are used in this assessment to consistently identify the magnitude of the project's impacts on heritage items or archaeological remains. The terminology and definitions are based on those contained in guidelines produced by the International Council on Monuments and Sites (ICOMOS)[55] and the Heritage Council of NSW[56] and are shown in the following table.

Table 10: Terminology for assessing the magnitude of heritage impact

Grading	Definition
Major adverse	Actions that would have a severe, long-term and possibly irreversible impact on a heritage item. Actions in this category would include partial or complete demolition of a heritage item or addition of new structures in its vicinity that destroy the visual setting of the item. These actions cannot be fully mitigated.
Moderate adverse	Actions that would have an adverse impact on a heritage item. Actions in this category would include removal of an important part of a heritage item's setting or temporary removal of significant elements or fabric. The impact of these actions could be reduced through appropriate mitigation measures.
Minor adverse	Actions that would have a minor adverse impact on a heritage item. This may be the result of the action affecting only a small part of the place or a distant/small part of the setting of a heritage place. The action may also be temporary and/or reversible.
Little or no	Actions that are so minor that the heritage impact is considered negligible.
Minor positive	Actions that would bring a minor benefit to a heritage item, such as an improvement in the item's visual setting.
Moderate positive	Actions that would bring a moderate benefit to a heritage item, such as removal of intrusive elements or fabric or a substantial improvement to the item's visual setting.

54 NSW Heritage Office 2002
55 Including the document Guidance on Heritage Impact Assessments for Cultural World Heritage Properties, ICOMOS, January 2011.
56 https://www.environment.nsw.gov.au/resources/heritagebranch/heritage/material-threshold-policy.pdf

This assessment also provides further gradings of impacts in the form of direct, potential direct, indirect and archaeological impacts. Each type of impact is described in Table 11.

Table 11: Terminology of heritage impact types

Impact	Definition
Direct	Impacts resulting from works located within the curtilage boundaries of the heritage item.
Potential direct	Impacts resulting from increased noise, vibrations and construction works located outside the curtilage boundaries of the heritage item.
Indirect	Impact to views, vistas and setting of the heritage item resulting from proposed works outside the curtilage boundaries of the heritage item.
Archaeological	Impacts to potential archaeological remains located within the curtilage boundaries of the heritage item.

7.3 The Proposal

TfNSW propose to subdivide a part of Lot 16/DP1213619 from the larger part of the Lot which forms the active rail corridor. This land proposed for subdivision is currently identified as the active rail corridor and therefore any requirements to carry out activities on this land requires compliance with rail corridor standard operating procedures and approvals. TfNSW have identified that this part of Lot 16 is only used to house Transport Heritage's office space, for parking staff vehicles, general stockpiling and for access in and out of the Broadmeadow Maintenance Facility.

To assist in the efficiency of maintenance activities and future potential uses of this land without the need to comply with rail corridor safety procedures and relevant approvals, TfNSW have proposed to subdivide this particular part of Lot 16/DP1213619 from the area which is in fact the active rail corridor.

7.4 Statement of Heritage Impact

This section assesses the potential direct impacts of the proposed development on the heritage items within the study area based on the questions included in the Heritage NSW guideline *Statements of Heritage Impact*.

Table 12: Statement of heritage impact

Impact	Discussion
What aspects of the proposal respect or enhance the heritage significance of the study area?	The proposal is to subdivide the northern part of Lot 16 from rail corridor land in order to facilitate more efficient future works on this land. The subdivision would not see adverse impacts to non-Aboriginal (built) heritage values as the subdivision would only change the land zoning of the Lot and would not alter or change the heritage curtilages or any significant elements within this site.
What aspects of the proposal could have a detrimental impact on the heritage significance of the study area?	The proposal would not detrimentally impact the significance of the relevant listings within the site, which are associated with the rail corridor and the Broadmeadow Locomotive Depot Precinct. Separating this land results in a minor impact to the heritage listings within the study area by removing the historic link to the rail corridor. Subdividing from rail land would also see the level of protection afforded by the rail corridor rescinded for this particular part of the Lot. However, it is noted that majority of the extant non-Aboriginal (built) elements within the study area have Little to no heritage value to the wider Broadmeadow Locomotive Depot Precinct, and do not necessarily enhance the significance of the wider Precinct in an exceptional way. The subdivision would also see the heritage listings remain in place and this Lot would remain within the relevant curtilages for the Precinct. Therefore any impacts associated with its separation for the rail corridor become redundant.
Have more sympathetic options been considered and discounted?	No alternatives were considered as it was not deemed relevant to consider different options for a subdivision.
Demolition of a building or structure	
Have all options for retention and adaptive re-use been explored?	N/A – There is no intention to demolish or develop this land, the proposal is for subdivision from the rail corridor only.
Can all of the significant elements of the heritage item be kept, and any new development be located elsewhere on the site?	N/A – There is no intention to demolish or develop this land, the proposal is for subdivision from the rail corridor only.
Is demolition essential at this time or can it be postponed in case future circumstances make its retention and conservation more feasible?	N/A – There is no intention to demolish or develop this land, the proposal is for subdivision from the rail corridor only.

Impact	Discussion
Has the advice of a heritage consultant been sought? Have the consultant's recommendations been implemented? If not, why not?	Yes, this heritage impact assessment has been prepared by Artefact Heritage Services and any recommendations from this report would be implemented by TfNSW.
Major additions	
How is the impact of the addition on the heritage significance of the item to be minimised?	N/A – There is no intention to demolish or develop this land, the proposal is for subdivision from the rail corridor only.
Can the additional area be located within an existing structure? If not, why not?	N/A – There is no intention to demolish or develop this land, the proposal is for subdivision from the rail corridor only.
Will the additions tend to visually dominate the heritage item?	N/A – There is no intention to demolish or develop this land, the proposal is for subdivision from the rail corridor only.
Are the additions sited on any known, or potentially significant archaeological deposits? If so, have alternative positions for the additions been considered?	N/A – There is no intention to demolish or develop this land, the proposal is for subdivision from the rail corridor only.
Are the additions sympathetic to the heritage item	N/A – There is no intention to demolish or develop this land, the proposal is for subdivision from the rail corridor only.
New development adjacent to a heritage item	
How is the impact of the new development on the heritage significance of the item or area to be minimised?	N/A – There is no intention to demolish or develop this land, the proposal is for subdivision from the rail corridor only.
Why is the new development required to be adjacent to a heritage item?	N/A – There is no intention to demolish or develop this land, the proposal is for subdivision from the rail corridor only.
How does the curtilage allowed around the heritage item contribute to the retention of its heritage significance?	Currently this part of Lot 16 sits within a number of heritage listings, mainly LEP listings for the Broadmeadow Locomotive Depot. Whilst this former Administrative Area is historically linked to the wider Locomotive Depot Precinct, is has been assessed has having Little to no heritage significance to the State and Local heritage values of the area. These heritage curtilages offer protection for these former Administrative Area elements.
How does the new development affect views to, and from, the heritage item? What has been done to minimise negative effects?	N/A – There is no intention to demolish or develop this land, the proposal is for subdivision from the rail corridor only.

Impact	Discussion
Is the development sited on any known, or potentially significant archaeological deposits? If so, have alternative sites been considered? Why were they rejected?	N/A – There is no intention to demolish or develop this land, the proposal is for subdivision from the rail corridor only.
Is the new development sympathetic to the heritage item? In what way (e.g. form, siting, proportions, design)?	N/A – There is no intention to demolish or develop this land, the proposal is for subdivision from the rail corridor only.
Will the additions visually dominate the heritage item? How has this been minimised?	N/A – There is no intention to demolish or develop this land, the proposal is for subdivision from the rail corridor only.
Will the public, and users of the item, still be able to view and appreciate its significance?	N/A – There is no intention to demolish or develop this land, the proposal is for subdivision from the rail corridor only.
Subdivision of a heritage item	
How is the proposed curtilage allowed around the heritage item appropriate?	The proposal is to subdivide part of the Lot and would not change or affect the existing heritage curtilage around the heritage items.
Could future development that results from this subdivision compromise the significance of the heritage item? How has this been minimised?	Whilst there is no intention to develop this land, any future development could potentially impact the local heritage values and the State heritage values assessed on this site. Any future development could minimise impacts by preparing and implementing a Conservation Management Plan for the site, avoiding the areas identified of Exceptional and High significance in the SHR, preparing and implementing a Heritage Interpretation Plan for the site and adhering to the NSW Heritage Council Guidelines for development in heritage environments such as *Design in Context: Guidelines for Infill Development in the Historic Environment* (2005). All future development must engage an appropriately experience heritage specialist to provide advice and assessment for any proposed works on this site.

Impact	Discussion
Could future development that results from this subdivision affect views to, and from, the heritage item? How are negative impacts to be minimised?	Whilst there is no intention to develop this land, any future development could potentially impact significant views to and from the nearby heritage items. However, it is noted that there are limited significant views to and from the Locomotive Depot. Any future development could minimise impacts to views and vistas by preparing and implementing a Conservation Management Plan for the site, avoiding the areas identified of Exceptional and High significance in the SHR, preparing and implementing a Heritage Interpretation Plan for the site and adhering to the NSW Heritage Council Guidelines for development in heritage environments such as *Design in Context: Guidelines for Infill Development in the Historic Environment* (2005). Any future development could also minimise potential impacts to views and vistas by limiting high density structures on the rail corridor side of the Locomotive Depot to conserve the historic view between the Depot and the corridor. All future development must engage an appropriately experience heritage specialist to provide advice and assessment for any proposed works on this site.

7.5 Direct (physical) heritage impacts

The subdivision of the northern part of Lot 16 would not result in any direct physical impacts to the relevant listings within or nearby to the study area.

7.6 Potential direct and indirect (physical) heritage impacts

The subdivision of the northern part of Lot 16 would not result in any potential direct or indirect physical impacts to the relevant listings within or nearby to the study area.

7.7 Direct and Indirect (visual) heritage impacts

The subdivision of the northern part of Lot 16 would not result in any direct or indirect visual impacts to the relevant listings within or nearby to the study area.

7.8 Cumulative impacts

The proposal would not result in adverse cumulative impacts the significance of the relevant listings within the site, which are associated with the historic development of the rail corridor and the Broadmeadow Locomotive Depot Precinct.

Whilst the subdivision would remove the historic link to the rail corridor, it is noted that majority of the extant built elements within the study area have Little to no heritage value to the wider Broadmeadow Locomotive Depot Precinct. This part of the wider Precinct has also seen a number of different phases of development, which have all but removed any links to possibly significant built heritage elements. Further to this, the subdivision would see the heritage listings remain in place which would continue to offer statutory protection to the former Administrative Area, despite its relatively low heritage significance. Therefore, there would be no cumulative impacts as a result of the subdivision.

7.9 Impacts to potential historical archaeological resources

The study area has been assessed as having generally low potential to contain locally significant archaeological remains, including 'relics' as protected by the NSW *Heritage Act*, associated with:

- Phase 1: the illegal occupation of the Newcastle Pasturage Reserve by miners and their families
- Phase 2: the Hartley Vale Colliery and associated rail network.

The subdivision of the northern part of Lot 16 would not result in any direct physical impacts to potential archaeological resources.

8.0 CONCLUSION

8.1 Conclusion

This report concludes the following:

- The proposed subdivision of the northern part of Lot16/DP1213619 would not result in any direct or indirect physical or visual impacts on any of the relevant heritage listings within the study area.
- It is noted that the proposal would see a detachment from the historic link between the study area and the rail corridor however the elements within the study area are generally of Little to no heritage significance and do not add exceptional value to the wider Broadmeadow Railway Locomotive Depot Precinct. Therefore, the subdivision would not cause any unacceptable impacts to the former Administration Area (the study area).
- The study area has been assessed as having generally low potential to contain locally significant archaeological remains, including 'relics' as protected by the NSW *Heritage Act*, associated with:
    - Phase 1: the illegal occupation of the Newcastle Pasturage Reserve by miners and their families
    - Phase 2: the Hartley Vale Colliery and associated rail network.

8.2 Recommendations and mitigation measures

8.2.1 General Recommendations

The following management guidelines should be followed for all aspects of the proposed works:

- All future works are to be undertaken in accordance with the principles and objectives of the *Burra Charter: the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance* (the Burra Charter).

8.2.2 Pre-subdivision

- It is recommended that a Photographic Archival Recording (PAR) should be undertaken of all accessible historic elements within this Lot for future record keeping. This PAR should be undertaken in accordance with the Heritage Council of NSW guidelines *Photographic Recording of Heritage Items using Film or Digital capture* (Revised 2006). The PAR would need to focus on:
- The area within the SHR curtilage, and
- Areas covered by the LEP such as:
    - The former administrative buildings (such as the larger 1960s building and the smaller 1990s building)
    - Any extant structures (such as the bike shed)

- Landscaped and hardstand areas (such as the car park, entrance and driveway)
- Sight-lines to and from the former Administration Area and the Locomotive Depot to capture the historic relationship between the two areas.

8.2.3 Post-subdivision

- Currently no activities, works or development of any kind is proposed for this Lot. However in future, if any works are undertaken within this Lot, heritage review by a suitably qualified heritage consultant and assessment of the proposed works is required before works can commence.
- Any future works should be assessed by a suitably qualified archaeologist to refine the assessment of archaeological potential and significance provided in this document. The easternmost portion of the Lot is currently under SHR planning instruments. In this circumstance and dependent upon the archaeological impact of any future proposed works within the study area, it may be necessary to apply to Heritage NSW for either an excavation permit under Section 60 or an Exemption under Section 57(2) of the *Heritage Act 1977*. The remainder of the Lot - dependent upon the archaeological impact- may necessitate an application to Heritage NSW for either an excavation permit under Section 140 or an Exception Notification under Section 139(4) of the *Heritage Act 1977*.

8.3 Heritage approval

The subdivision proposal will require Development Application (DA) approval from Newcastle City Council and a Section 60 application approval from Heritage NSW. To ensure that there is an integrated assessment of the proposal, the recommended method of assessment is therefore via the Integrated Development Application (IDA) Referral process.

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URBIS

STATEMENT OF ENVIRONMENTAL EFFECTS | BROADMEADOW LOCOMOTIVE SUBDIVISION

Prepared for
TFNSW
2 November 2022

URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

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Project Code	P0039919
Report Number	Draft V01 20092022
	FINAL 02112022

Urbis acknowledges the important contribution that Aboriginal and Torres Strait Islander people make in creating a strong and vibrant Australian society.

We acknowledge, in each of our offices, the Traditional Owners on whose land we stand.

CONTENTS

FIGURES

1. INTRODUCTION

This Statement of Environmental Effects (SEE) has been prepared on for Transport for NSW (TfNSW) on behalf of Transport Asset Holding Entity (TAHE) in support of a Crown Development Application (DA) for a subdivision within the Broadmeadow Locomotive precinct, at 35 Cameron Street, Broadmeadow (the site).

The relevant lot within the site that is the subject of this application is Lot 16 in DP 1231619. Part of Lot 16 in DP1213619 forms the active rail corridor. A separate piece of land within the site away from the active rail corridor is also identified as Lot 16 DP1213619. TfNSW therefore propose to excise this piece of land from the larger Lot 16 DP 1213619 and create a new lot. A separate part of lot 16 DP1213619 is situated clear of the rail corridor part. It is proposed to subdivide the two part lots into individual lots.

1.1. CROWN DEVELOPMENT APPLICATION STATUS

Part 4 Division 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) allows for DAs to be made by, or on behalf of the Crown. Clause 294 of the *Environmental Planning and Assessment Regulation 2021* (Regulations) prescribes that a public authority is the Crown for the purposes of Part 4 Division 4 of the EP&A Act. TfNSW is a public authority and is therefore a Crown authority for the purposes of this DA and Clause 4.33 of the EP&A Act.

This SEE is structured as follows:

- **Section 2 – Site Context:** identifies the site and describes the existing development and local context.
- **Section 3 – Proposed Development:** provides a detailed description of the proposal.
- **Section 4 – Statutory Context:** provides a detailed assessment of the State and local environmental planning instruments and plans relevant to the site and development.
- **Section 5 – Assessment of Key Issues:** identifies the potential impacts arising from the proposal and recommends measures to mitigate, minimise or manage these impacts.
- **Section 6 – Section 4.15 Assessment:** provides an assessment of the proposal against the matters of consideration listed in section 4.15 of the EP&A Act.
- **Section 7 – Conclusion:** provides an overview of the development assessment outcomes and recommended determination of the DA.

This report should be read in conjunction with the supporting documentation listed in **Table 1**.

Table 1 Supporting Documentation

Document Title	Consultant
Survey Plan	Monteath & Powys Pty Ltd
Plan of Subdivision	Monteath & Powys Pty Ltd
Non-Aboriginal Statement of Heritage Impact	Artefact
Land Registry Services Letter	David Sullivan, Monteath Powys Pty Ltd

2. SITE CONTEXT

2.1. SITE DESCRIPTION

The site is located at 35 Cameron Street, Broadmeadow. The legal description of the site is:

- Lots 13, 14, 15,16 in DP 1231619
- Lot 26 in DP 1147480,
- Lot 49/A/DP4020
- Lot 57/A/DP4020

The site is approximately 13 hectares (ha) and is located 3.5km west of the Newcastle Central Business District (CBD), 850m to the north of Adamstown Station and 900m to the south of Broadmeadow Station, immediately adjacent to the main Newcastle Rail Line and Broadmeadow Maintenance Centre.

The site incorporates a number of State and locally listed heritage items, including the Broadmeadow Railway Locomotive Depot (local item no. I46 and State item no. 01100) and the Premiers and Railway Commissioners Rail Car Collection (State Item no. 01650). The site also partially intersects with an item listed on a Section 170 register, Broadmeadow Railway Locomotive Depot on the TAHE s170 register (SHI no. 4801014). The following items on the Transport Asset Holding Entity (TAHE) s170 register are in the vicinity of the study area:

- Broadmeadow Bala Road Railway Depot (SHI # 4803213)
- Broadmeadow Railway Station Group (SHI # 4801899).

The following Newcastle LEP 2012 heritage items are located within the study area:

- Broadmeadow Locomotive Depot offices (LEP # I45)
- Broadmeadow Railway Locomotive Depot (LEP # I46).

The following Newcastle LEP 2012 heritage items are located adjacent to the study area:

- Broadmeadow Primary School (LEP # I53)
- Adamstown Railway Station (LEP # I16)

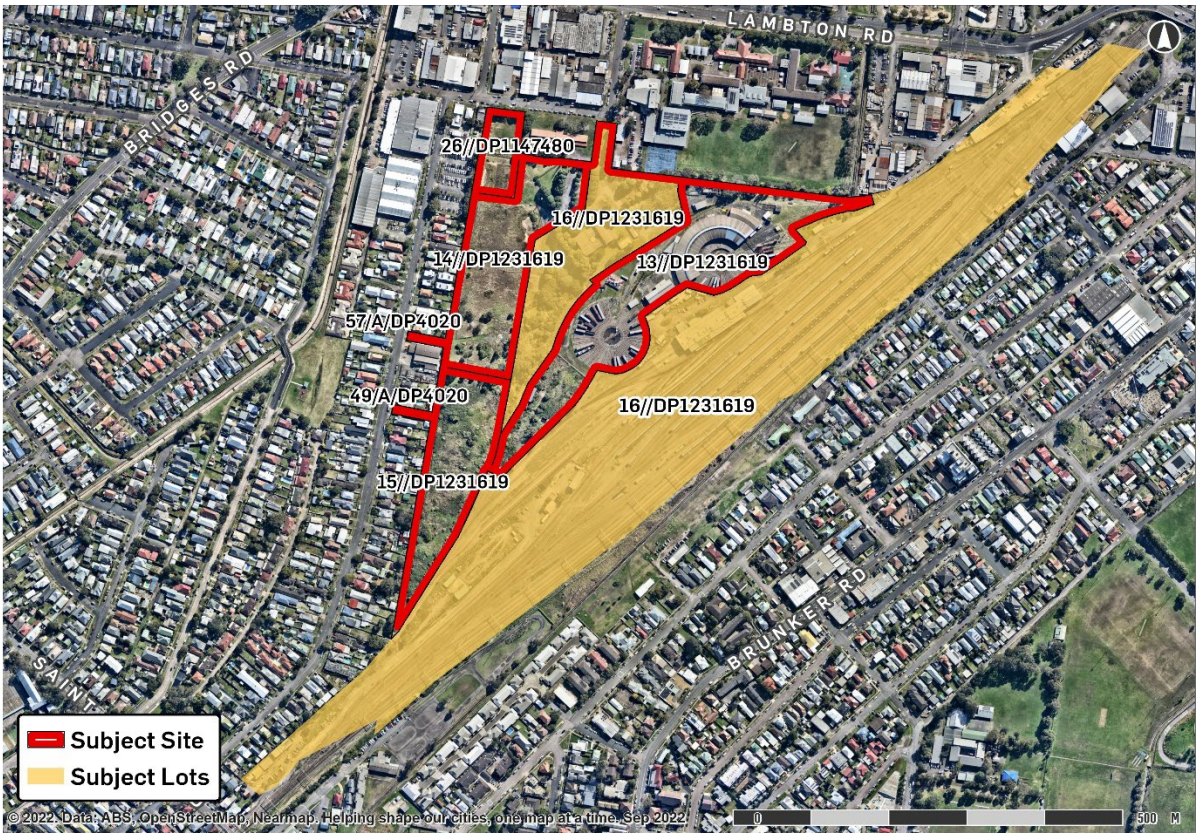
Surrounding land uses include low density residential development to the west, the Hunter School of Performing Arts to the north, and the rail line and Broadmeadow Maintenance Facility to the east. The location of the site is shown below in Figure 1.

The relevant lot within the site that is the subject of this application is Lot 16 in DP 1231619. A plan showing the existing lots that make up the site is included at Figure 2. This shows that Lot 16 DP 123619 consists of two separate land parcels. The smaller land parcel (the subject of this subdivision application) has frontage to Cameron Street. An internal road provides access from here to the rest of the site. The existing smaller Lot 16 is currently subject to an easement for access that benefits Lot 21 in DP1006850, the adjacent lot to the west. The existing smaller Lot 16 is also benefited by an easement for electricity purposes. These easements will remain and be transferred to the title of the new Lot ‘1’.

Figure 1 The site and surrounding context

Source: Urbis

Figure 2 Existing Lots



Source: Urbis

3. PROPOSED SUBDIVISION

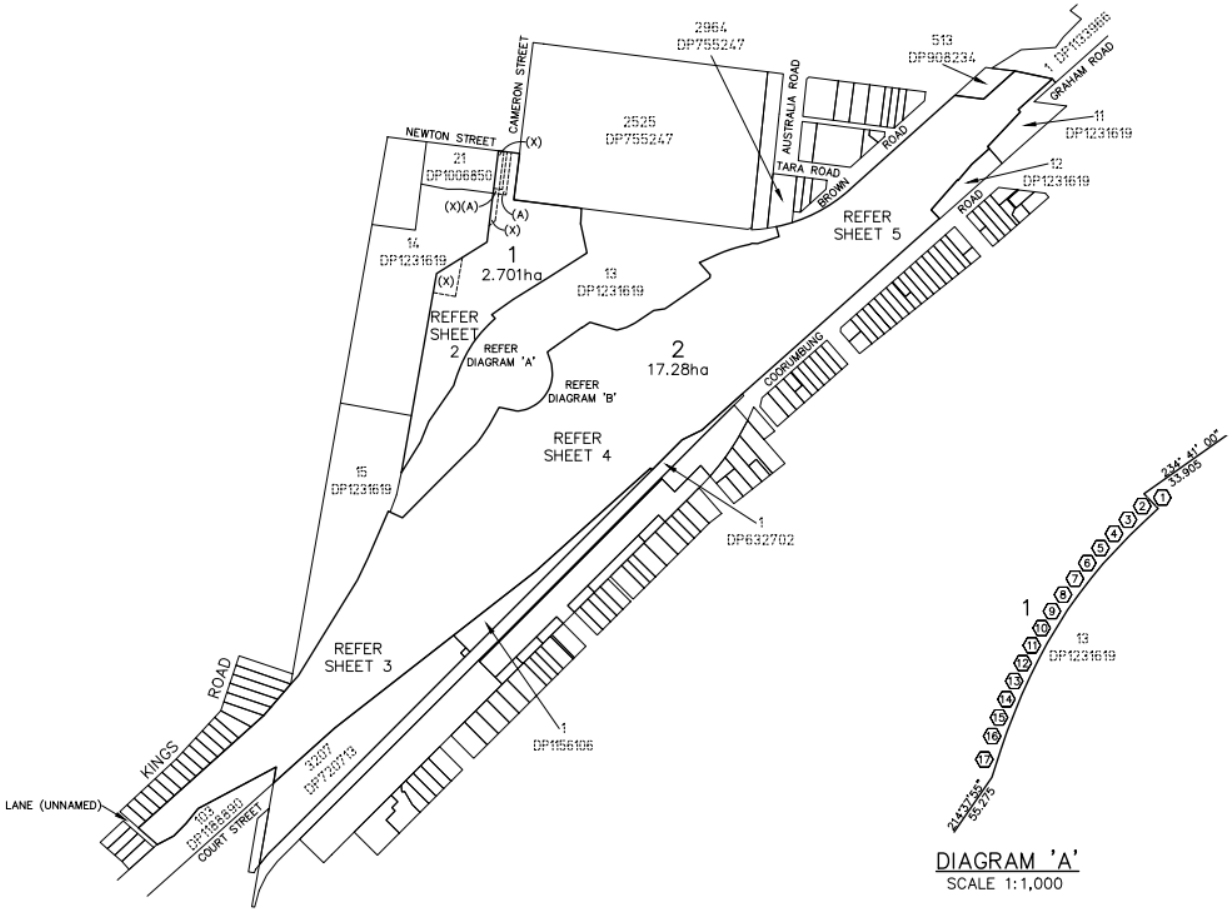
3.1. PROJECT NEED

The land proposed for the subdivision is severed by Lot 13 which separates one part of Lot 16 from the active rail corridor. It is proposed to subdivide the two parts of lot 16 to form separate lots, with separate lots created over each former part.

3.2. PROJECT DESCRIPTION

The proposal seeks consent to subdivide the smaller lot from Lot 16 in DP1213619 and create a new Lot, as shown in Figure 3 below. The existing boundary will not move but the lot will have a new legal description. The proposed new lot '1' with a size of 2.70ha is shown in Figure 3 below.

Figure 3 Proposed plan of subdivision



3.3. SERVICING

A survey plan has been prepared to support this DA showing that the proposed new Lot 1 is currently served by water, sewer, power and telecommunications services. There will be no change to existing services provision as part of this application.

3.4. STORMWATER

There will be no changes to the existing drainage stormwater arrangement because of this application.

4. STATUTORY CONTEXT

4.1. ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

Part 4 Division 4.6 of the *Environmental Planning & Assessment Act 1979* (EP&A Act) allows for DAs to be made by, or on behalf of the Crown.

Clause 294 of the *Environmental Planning & Assessment Regulation 2000* (Regulations) prescribes that a public authority is the Crown for the purposes of Part 4 Division 4.6 of the EP&A Act. As detailed at Section 1.1 of this SEE, TfNSW and TAHE are public authorities and therefore Crown authorities for the purposes of the DA.

Section 4.33 of the EP&A Act sets out specific provisions relating to the determination of Crown DAs. It states:

(1) A consent authority (other than the Minister) must not:

(a) refuse its consent to a Crown development application, except with the approval of the Minister, or

(b) impose a condition on its consent to a Crown development application, except with the approval of the applicant or the Minister.

On this basis, the consent authority has no power to issue a refusal or issue an approval subject to conditions of consent to which the Minister for Transport does not agree. The limitation on the power to impose a condition of consent extends to the consent authority's ability to require contributions to be paid, including contributions pursuant to Section 7.11 and 7.12.

4.2. HERITAGE ACT 1977

The *NSW Heritage Act 1977* (Heritage Act) ensures cultural heritage in NSW is adequately identified and conserved. Items of significance to the State of NSW are listed on the NSW State Heritage Register (SHR) under the Heritage Act.

The part of the site proposed to be subdivided is within the curtilage of the Broadmeadow Railway Locomotive Depot - State Heritage item 01100.

As the proposed development includes works on a site that contains a State Heritage item the proposal has been considered under clause 57 and 58 of the Heritage Act 1977. A Statement of Heritage Impact (SOHI) prepared by Artefact supporting this proposal is included with this application. Under Section 60 of the Heritage Act approval is required for any works to a State Heritage item.

4.2.1. Integrated Development

The proposed development is classified as Integrated Development under the provisions of clause 4.46 of the EP&A Act.

Pursuant to section 4.47 (2) of the EP&A Act, before granting development consent to 'Integrated Development', the consent authority must obtain from Heritage NSW the general terms of any approval proposed to be granted by the approval body in relation to the development.

4.3. STATE ENVIRONMENTAL PLANNING POLICY (RESILIENCE AND HAZARDS) 2021

State Environmental Planning Policy (Resilience and Hazards) 2021 provides a state-wide planning approach for the remediation of land and aims to promote the remediation of contaminated land to reduce the risk of harm to human health and the environment.

This application is solely for subdivision. No change of use or physical works are proposed. The site is suitable in its current state and a contamination investigation has not been provided.

4.4. NEWCASTLE LOCAL ENVIRONMENTAL PLAN 2012

Newcastle Local Environmental Plan 2012 (the LEP) is the primary environmental planning instrument applying to the site and the proposed development.

The site is zoned IN2 Light industrial in accordance with the LEP. The proposed development is consistent with the zone objectives as outlined below:

- *To provide a wide range of light industrial, warehouse and related land uses.*
- *To encourage employment opportunities and to support the viability of centres.*
- *To minimise any adverse effect of industry on other land uses.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of workers in the area.*
- *To support and protect industrial land for industrial uses.*

The proposed development is defined as 'subdivision' in accordance with the LEP 'definition' and this is permitted with development consent in the IN2 zone.

Table 2 assesses the compliance of the proposed development with other relevant clauses in the LEP.

Table 2 LEP Compliance Table

Clause	Provision	Proposed	Complies
Clause 4.1 – Minimum Subdivision Lot Size	1000sqm	2700sqm	Yes.
Clause 4.3 – Height of Building	No maximum height of building control	No physical works are proposed.	N/A
Clause 4.4 – Floor Space Ratio	No maximum floor space ratio.	No physical works are proposed.	N/A
Clause 5.10 – Heritage Conservation	The site includes the following State and locally listed heritage items: ▪ Broadmeadow Railway Locomotive Depot (SHR # 01100) ▪ Premiers and Railway Commissioners Rail Car Collection (SHR # 01650) ▪ Broadmeadow Locomotive Depot offices (local, No. I45) ▪ Broadmeadow Railway Locomotive Depot (local, No. I46). No physical works are proposed as this proposal is solely for subdivision. A SOHI prepared by Artefact accompanies this proposal and confirms that the proposal will have a negligible impact on the existing heritage items.		Yes.

Based on the above, it is considered that the proposal complies with the relevant provisions within the LEP.

4.5. NEWCASTLE DEVELOPMENT CONTROL PLAN 2012

Newcastle Development Control Plan 2012 (the DCP) provides detailed planning controls relevant to the site and the proposal. An assessment against the relevant controls is provided in the table below.

Table 3 DCP Compliance Table

Clause	Proposed	Complies
3.01.02 Subdivision design (B) Services		
Essential services are provided to each lot, including the delivery of: *a) satisfactory supply of water* *b) electricity* *c) communications* *d) the sustainable management of sewage.* *The provision of reticulated natural gas and broadband internet are highly desirable.*	The existing lot has sewer, water, power and telecommunications supply and there will be no change to the existing servicing arrangements.	Yes
All services are provided underground. Where overhead electricity wiring exists in established areas, Council may vary this standard to provide for reasonable connection to the existing system.	There are no physical works proposed as part of this application and no change to existing services arrangements. It is noted that existing power supply is via overhead wiring. This supplies the broader site with power and undergrounding of this service would not be practicable as part of this application.	Yes.
The location of utility services does not adversely affect the viability of significant vegetation and waterways.	There is no change proposed to the location of utility services. They do not adversely impact the viability of significant vegetation and waterways.	Yes.
Adequate buffers are maintained between utilities and houses to protect residential amenity and health.	This application does not propose any changes to existing servicing or land use. Adequate buffers will be maintained between existing utilities and nearby residential development.	Yes.
3.01.03 Lot layouts, sizes and dimensions		
Refer to Newcastle Local Environmental Plan 2012 for minimum subdivision lot size in industrial zones.	The minimum lot size pursuant to the Newcastle LEP 2012 is 1000sqm. The proposed lot will	Yes.

Clause	Proposed	Complies
	be 2700sqm, thus maintaining a high level of compliance.	
Lots have a minimum frontage of 25m.	The proposed lot has a minimum front of 25m.	Yes.
Lots are rectangular in shape.	The lot will not be rectangular in shape however this is considered appropriate given the existing surrounding lot layouts are irregular, given the industrial nature of the site. As mentioned above, it is an existing arrangement.	Yes.
The design of the subdivision allows for the largest vehicles anticipated to require access to the subdivision, which will typically be semi-trailers and B-Double trucks.	Not relevant as the proposal is not part of a residential subdivision. The existing lot configuration and access arrangements are retained.	N/A
Lot size to allow trucks to manoeuvre on-site without reversing onto or off the lot.	Onsite the existing lot configuration and access arrangements are to be retained. There is space for truck manoeuvring within the wider site.	Yes.

Based on the above, it is considered that the proposal complies with the relevant provisions within the DCP.

5. SECTION 4.15 ASSESSMENT

The proposed development has been assessed in accordance with the relevant matters for consideration listed in section 4.15 of the EP&A Act.

5.1. ENVIRONMENTAL PLANNING INSTRUMENTS

The proposed development has been assessed in accordance with the relevant State and local environmental planning instruments in **Section 4**.

The assessment concludes that the proposal complies with the relevant provisions within the relevant instruments.

5.2. DRAFT ENVIRONMENTAL PLANNING INSTRUMENTS

No draft environmental planning instruments are relevant to this proposal.

5.3. DEVELOPMENT CONTROL PLAN

Newcastle Development Control Plan 2012 provides detailed planning controls relevant to the site and the proposal. An assessment against the relevant controls is provided in **Section 4.3.**

The assessment concludes the proposal complies with the relevant provisions within the DCP.

5.4. PLANNING AGREEMENT

No planning agreements are relevant to this proposal.

5.5. REGULATIONS

This application has been prepared in accordance with the relevant provisions of the *Environmental Planning and Assessment Regulations 2021*.

5.6. LIKELY IMPACTS OF THE PROPOSAL

The proposed development has been assessed considering the potential environmental, economic and social impacts as outlined below:

Heritage:

- As confirmed in the SOHI, the proposed subdivision of the northern part of Lot 16 in DP 1213619 would not result in any direct or indirect physical or visual impacts on any of the relevant heritage listings onsite.
- The proposal would see a detachment from the historic link between the study area and the rail corridor. However, the elements within the study area are generally of little to no heritage significance and do not add exceptional value to the wider Broadmeadow Railway Locomotive Depot Precinct. Therefore, the subdivision would not cause any unacceptable impacts to the site.
- Given the minor nature of the proposal, it is considered the impacts from a heritage perspective to be negligible.

Natural Environment:

- No physical works are proposed under this application.
- The proposal does not include ground disturbance and will have no impacts on vegetation or existing fauna onsite

Social:

- The proposal does not include any changes to access or traffic arrangements.

- The proposal does not include physical works and will not have any impacts on existing heritage items onsite.

Economic:

- The proposal will not have any negative economic impacts.

5.7. SUITABILITY OF THE SITE

The site is considered highly suitable for the proposed development for the following reasons:

- The proposal complies with the relevant zoning and objectives onsite.
- The proposal provides a high level of compliance with the State and local environmental planning instruments.
- The proposal will enable TfNSW to use the site more efficiently as the new lot will no longer be deemed to be part of the active rail corridor.

5.8. SUBMISSIONS

It is acknowledged that submissions arising from the public notification of this application will need to be assessed by Council.

5.9. PUBLIC INTEREST

The proposed development is considered to be in the public interest, as the proposal accords with the principles and objectives of all relevant planning controls, and it has been demonstrated no social, environmental or economic impacts will result from the proposal.

6. CONCLUSION

The proposed subdivision has been assessed in accordance with section 4.15 of the EP&A Act and is considered appropriate for the site and the locality:

- *The proposal complies with the relevant zoning and objectives onsite.*
- *The proposal provides a high level of compliance with the State and local environmental planning instruments.*
- *The proposed subdivision would not result in any direct or indirect physical or visual impacts on any of the relevant heritage listings onsite.*
- *The proposed development is considered to be in the public interest, as the proposal accords with the principles and objectives of all relevant planning controls.*

Having considered all relevant matters, we conclude that the proposed development is appropriate for the site and approval is recommended.

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APPENDIX A SURVEY PLAN

APPENDIX B PLAN OF SUBDIVISION

APPENDIX C NON-ABORIGINAL STATEMENT OF HERITAGE IMPACT

APPENDIX D LAND REGISTRY SERVICES LETTER

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