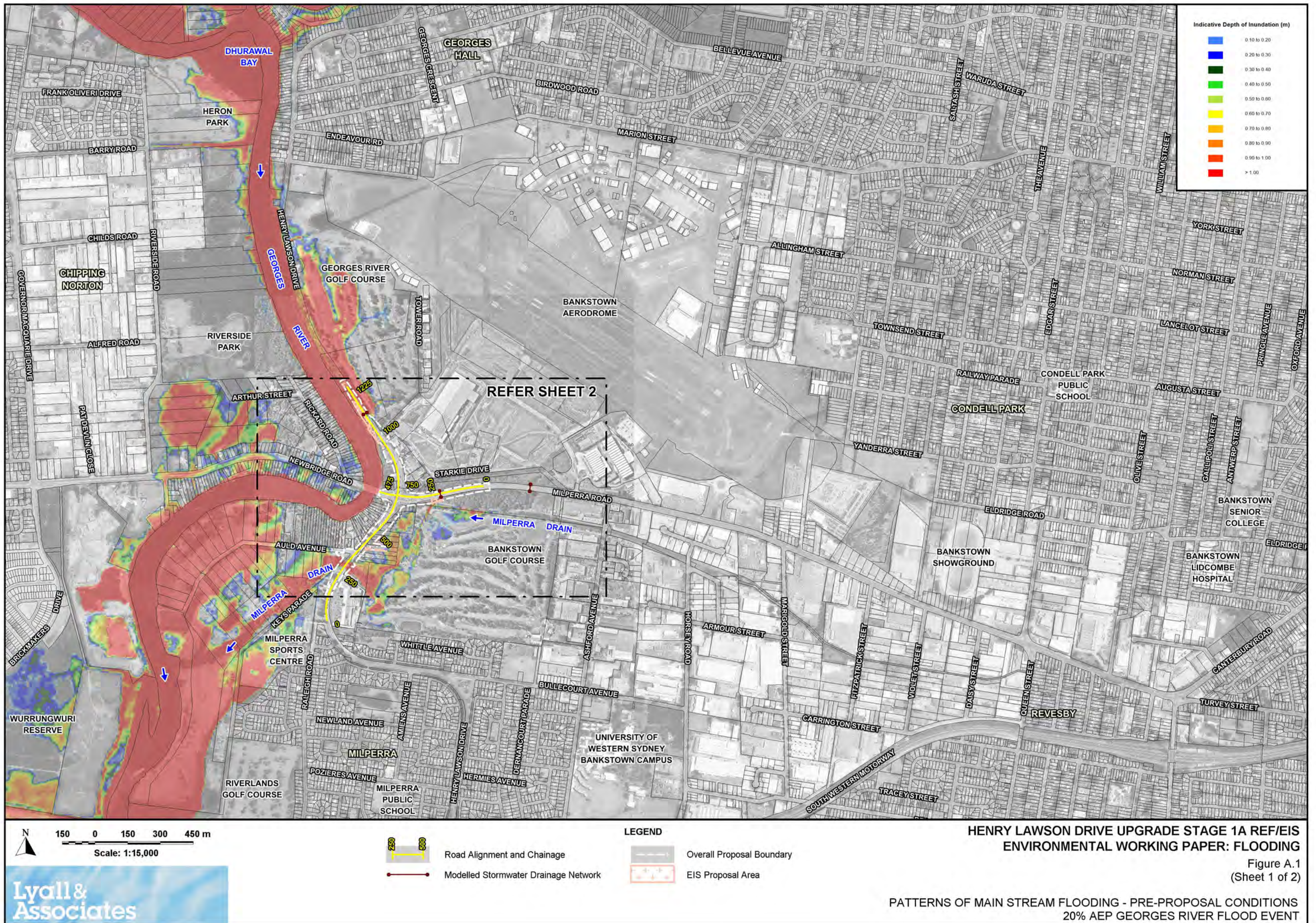
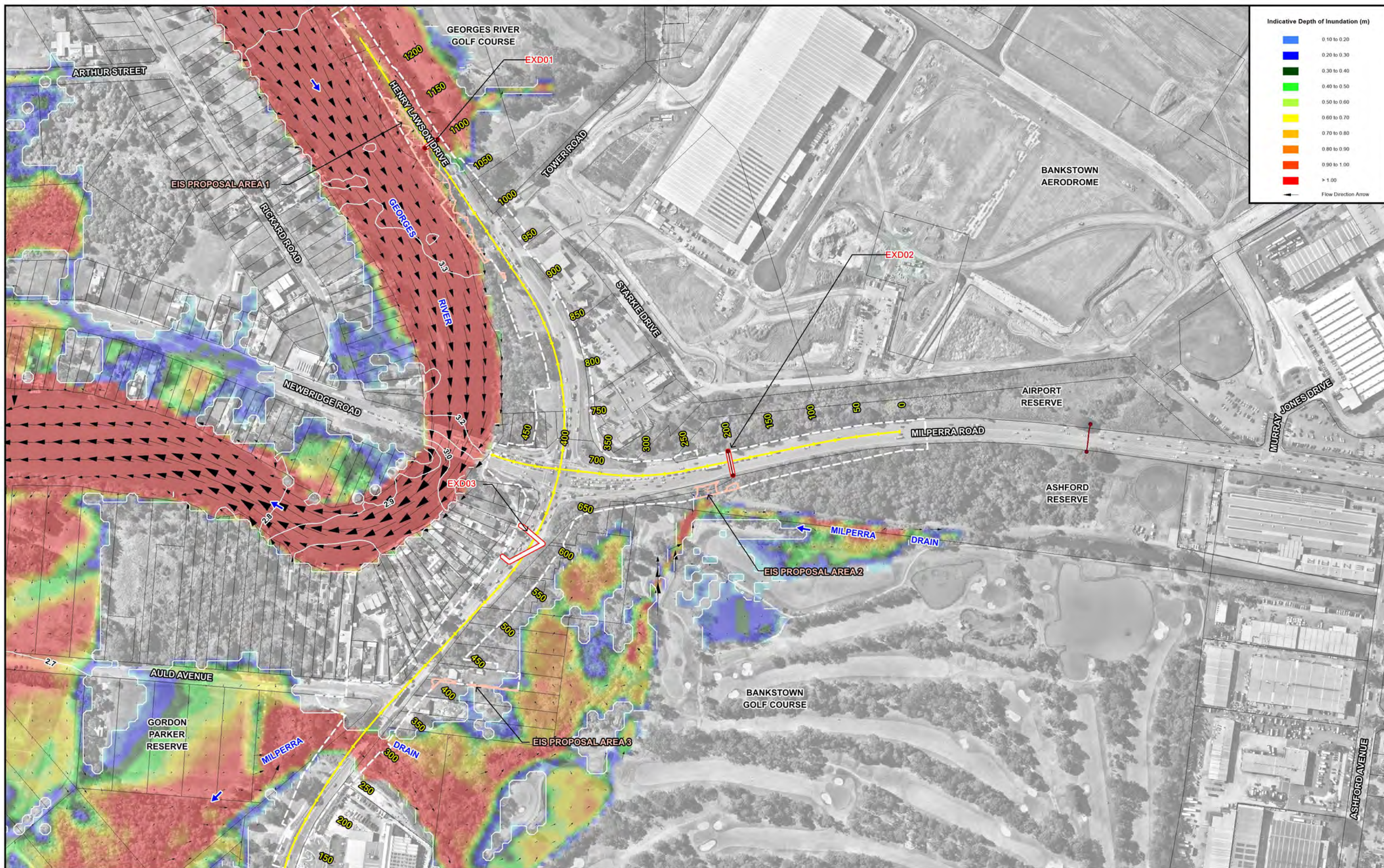


ANNEXURE A
ADDITIONAL FIGURES SHOWING FLOOD MODEL RESULTS





Indicative Depth of Inundation (m)

0.10 to 0.20
0.20 to 0.30
0.30 to 0.40
0.40 to 0.50
0.50 to 0.60
0.60 to 0.70
0.70 to 0.80
0.80 to 0.90
0.90 to 1.00
> 1.00

Flow Direction Arrow

N
40 0 40 80 120 m
Scale: 1:4,000

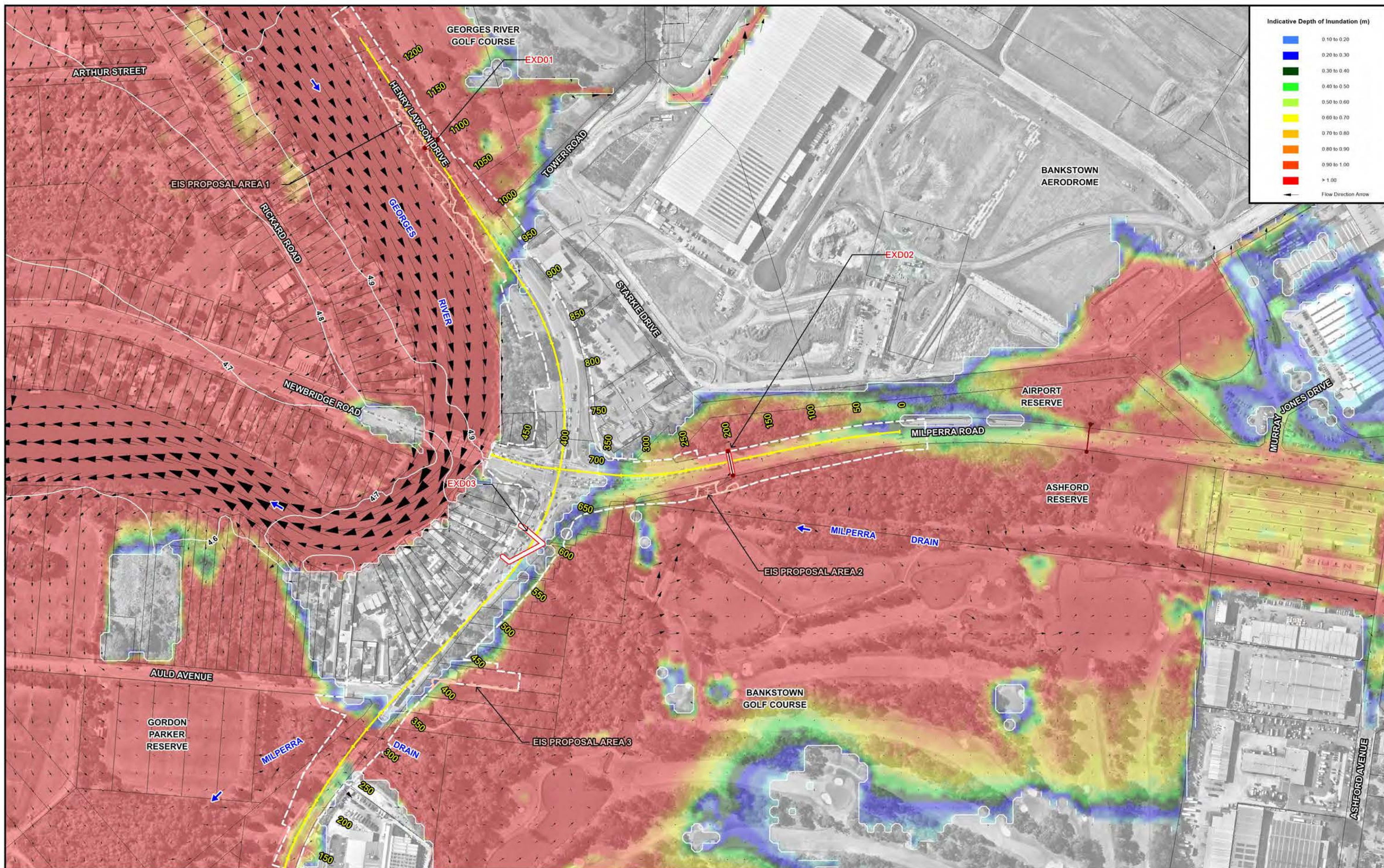
Lyall & Associates

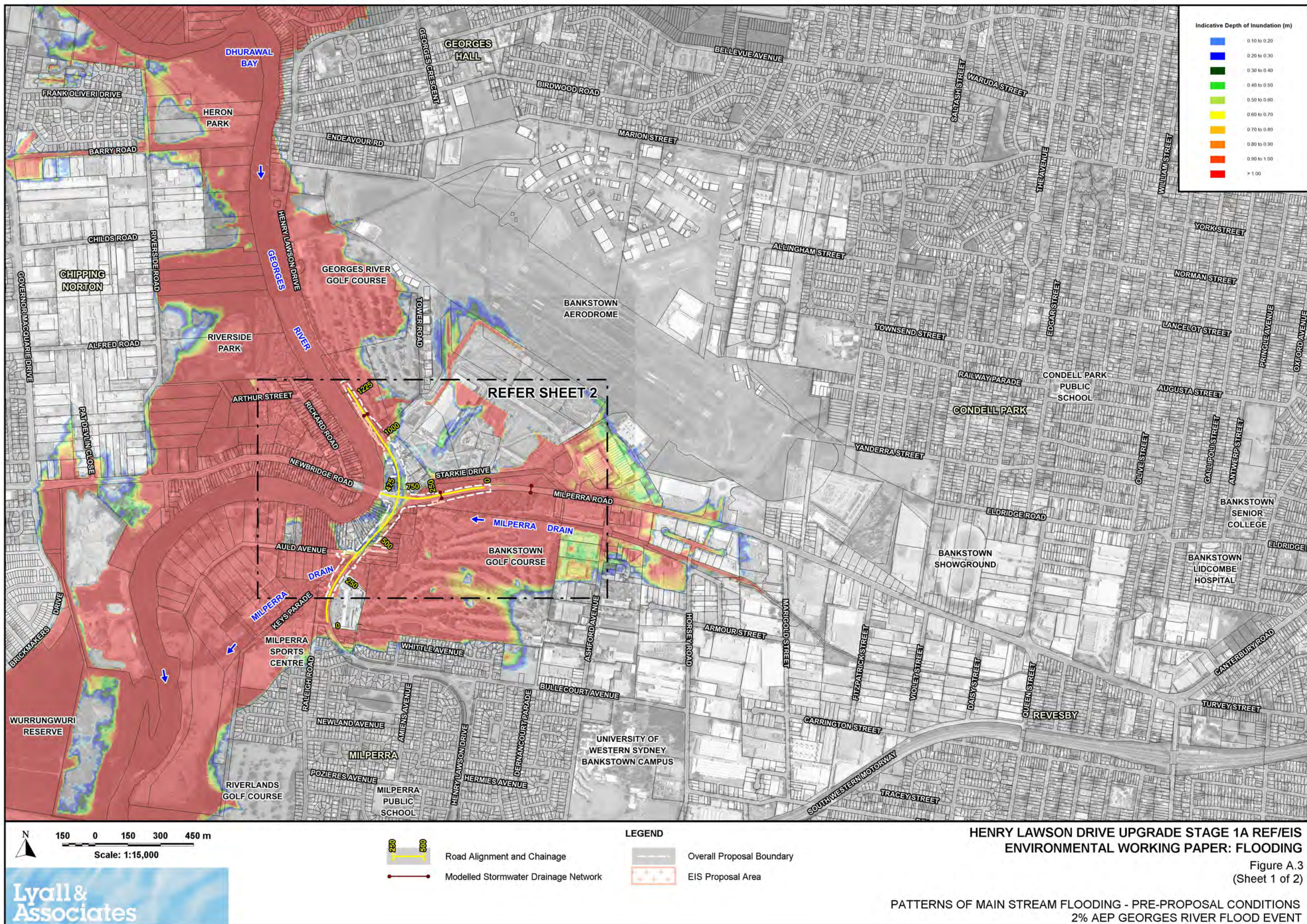
- LEGEND**
- Road Alignment and Chainage
 - Modelled Stormwater Drainage Network
 - Water Surface Elevation Contours (m AHD)
 - Overall Proposal Boundary
 - EIS Proposal Area
 - Existing Transverse Drainage Structure and Identifier

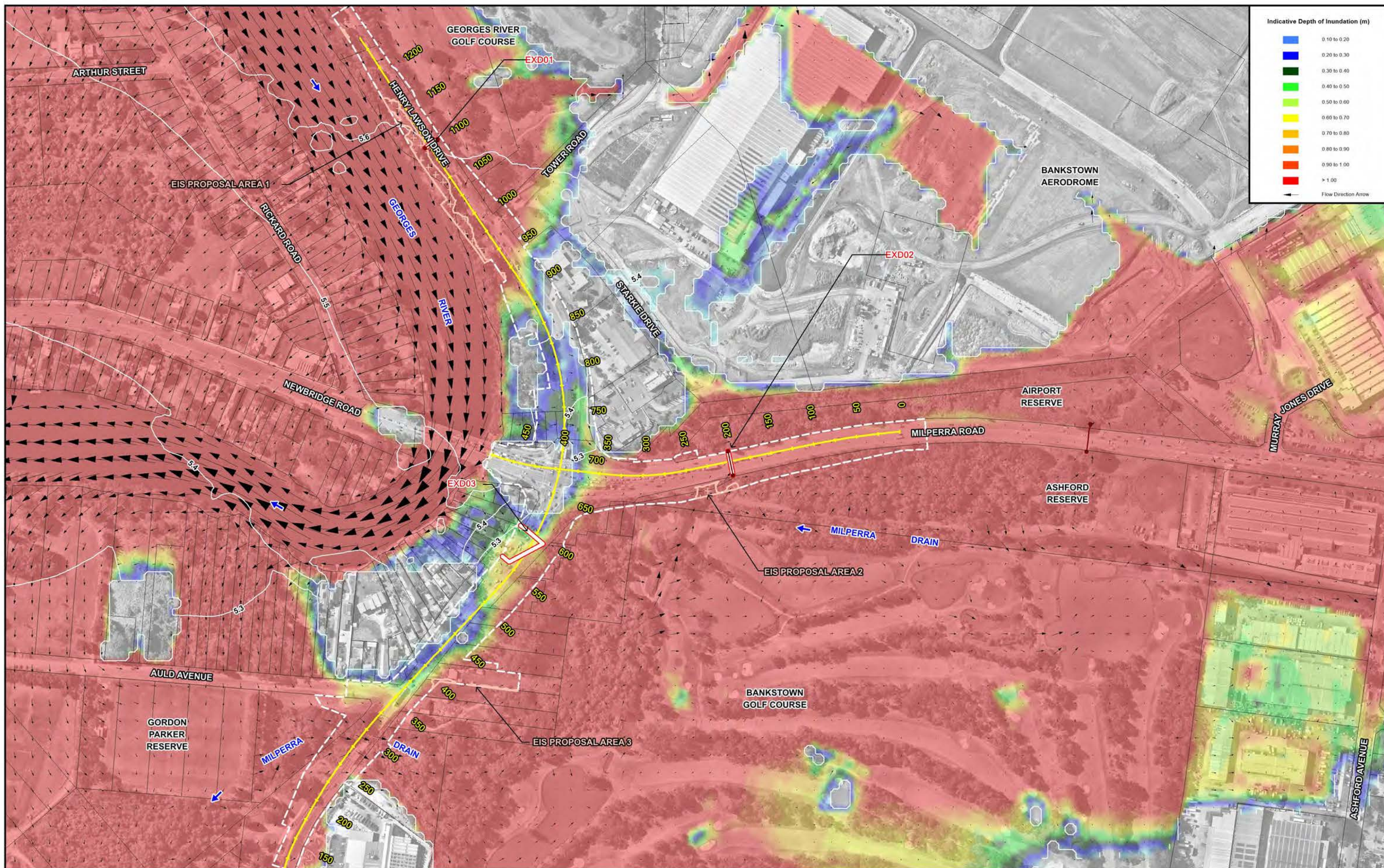
**HENRY LAWSON DRIVE UPGRADE STAGE 1A REF/EIS
ENVIRONMENTAL WORKING PAPER: FLOODING**

Figure A.1
(Sheet 2 of 2)

**PATTERNS OF MAIN STREAM FLOODING - PRE-PROPOSAL CONDITIONS
20% AEP GEORGES RIVER FLOOD EVENT**







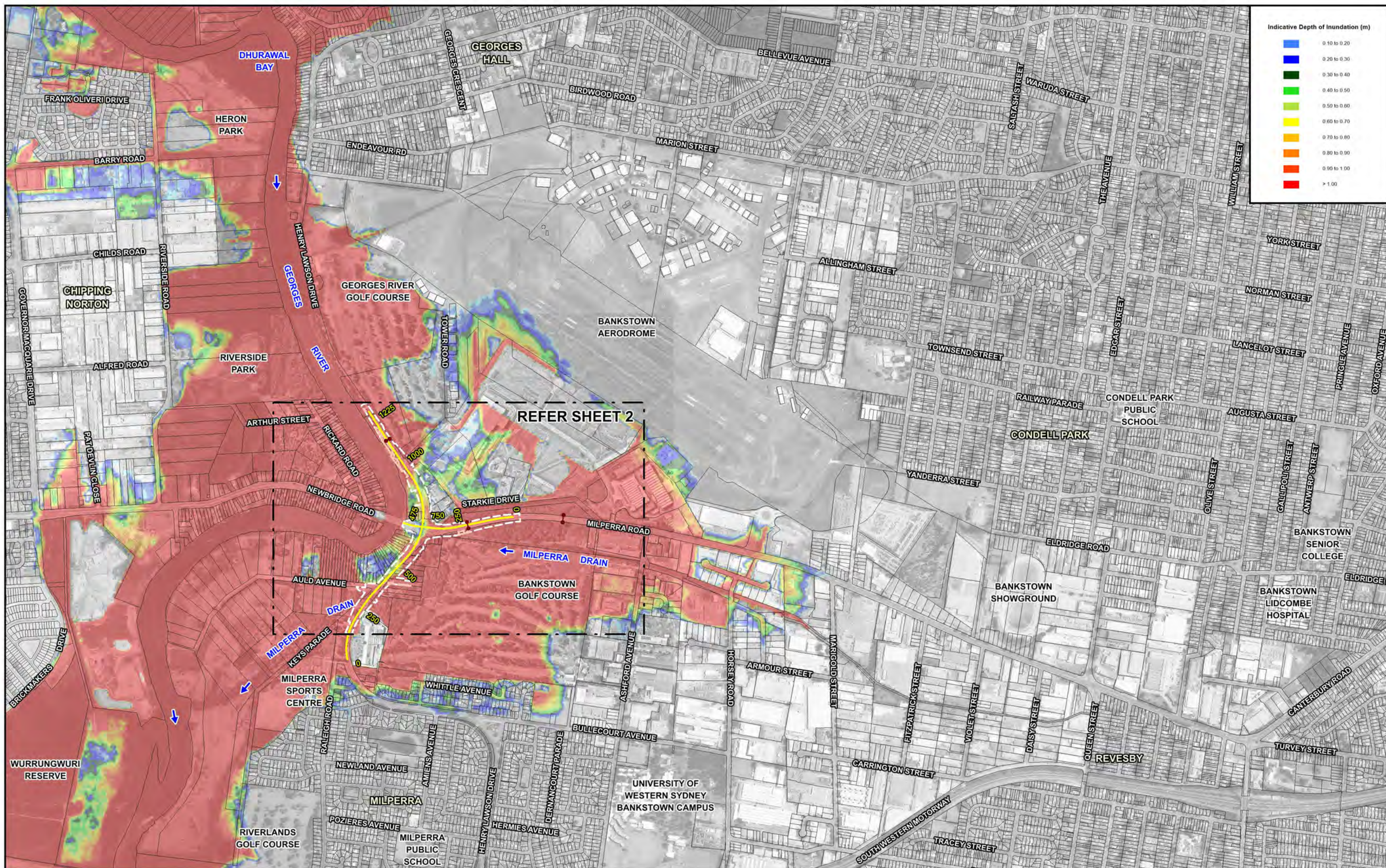
HENRY LAWSON DRIVE UPGRADE STAGE 1A REF/EIS ENVIRONMENTAL WORKING PAPER: FLOODING

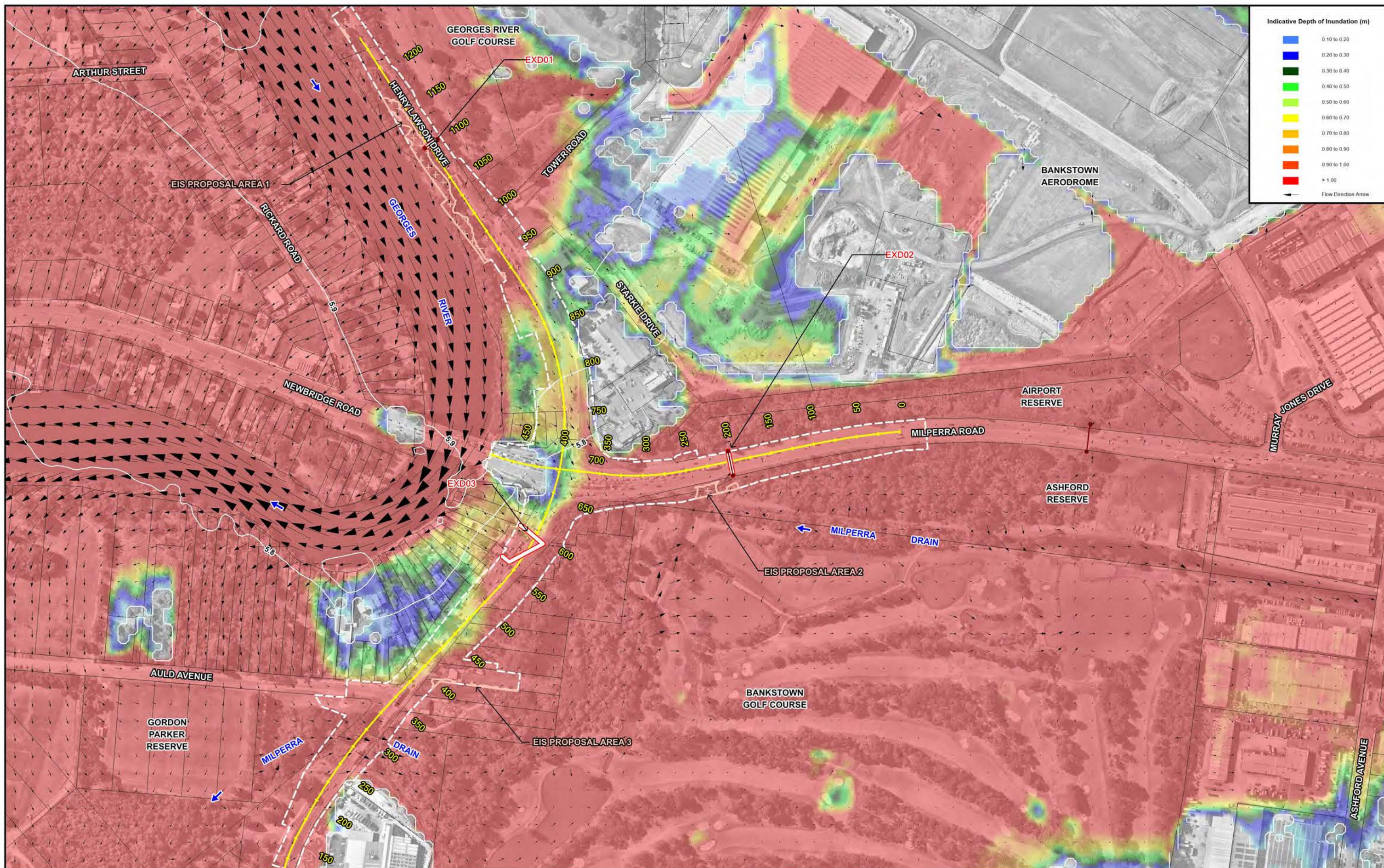
Figure A.3
(Sheet 2 of 2)

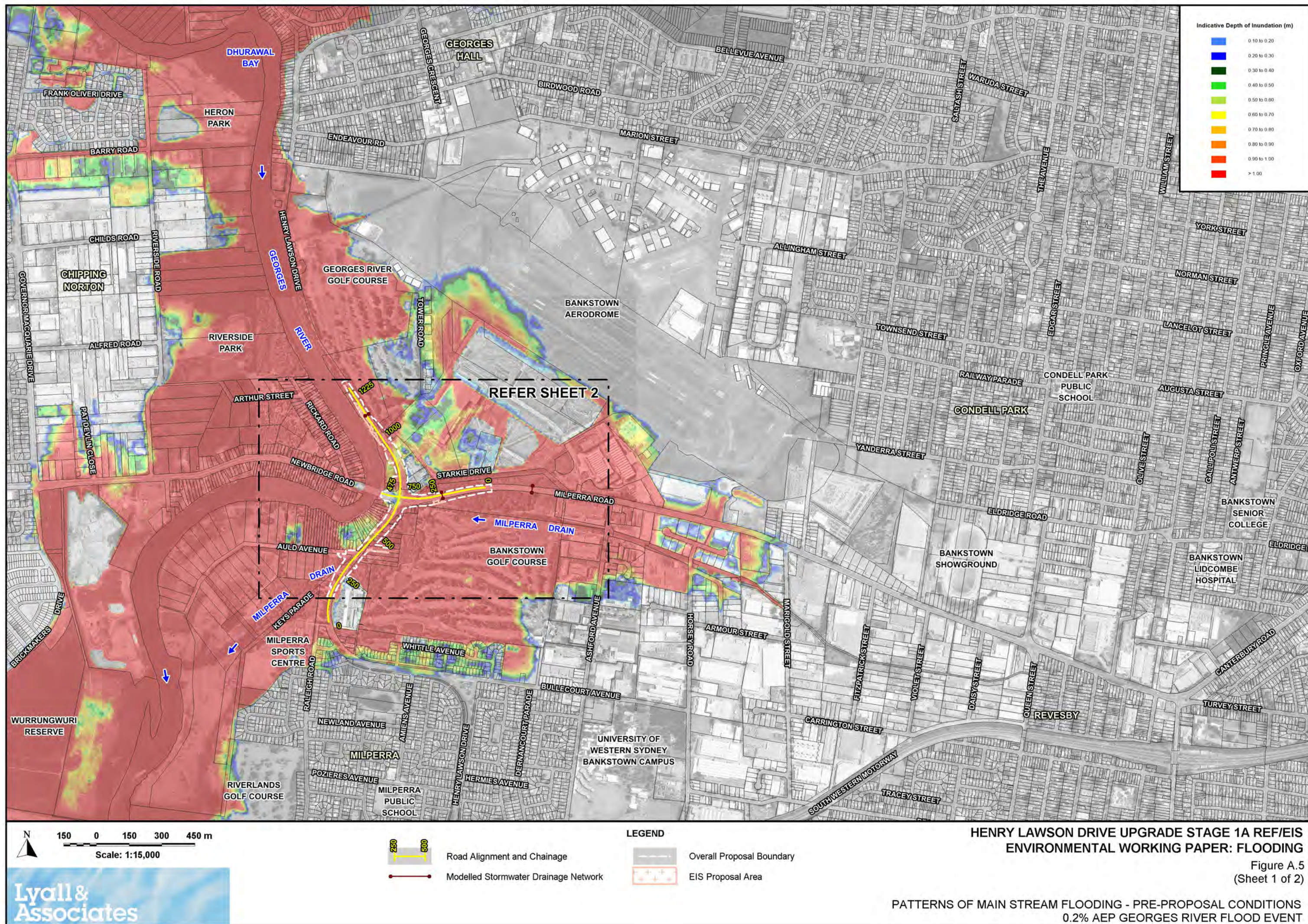
PATTERNS OF MAIN STREAM FLOODING - PRE-PROPOSAL CONDITIONS
2% AEP GEORGES RIVER FLOOD EVENT

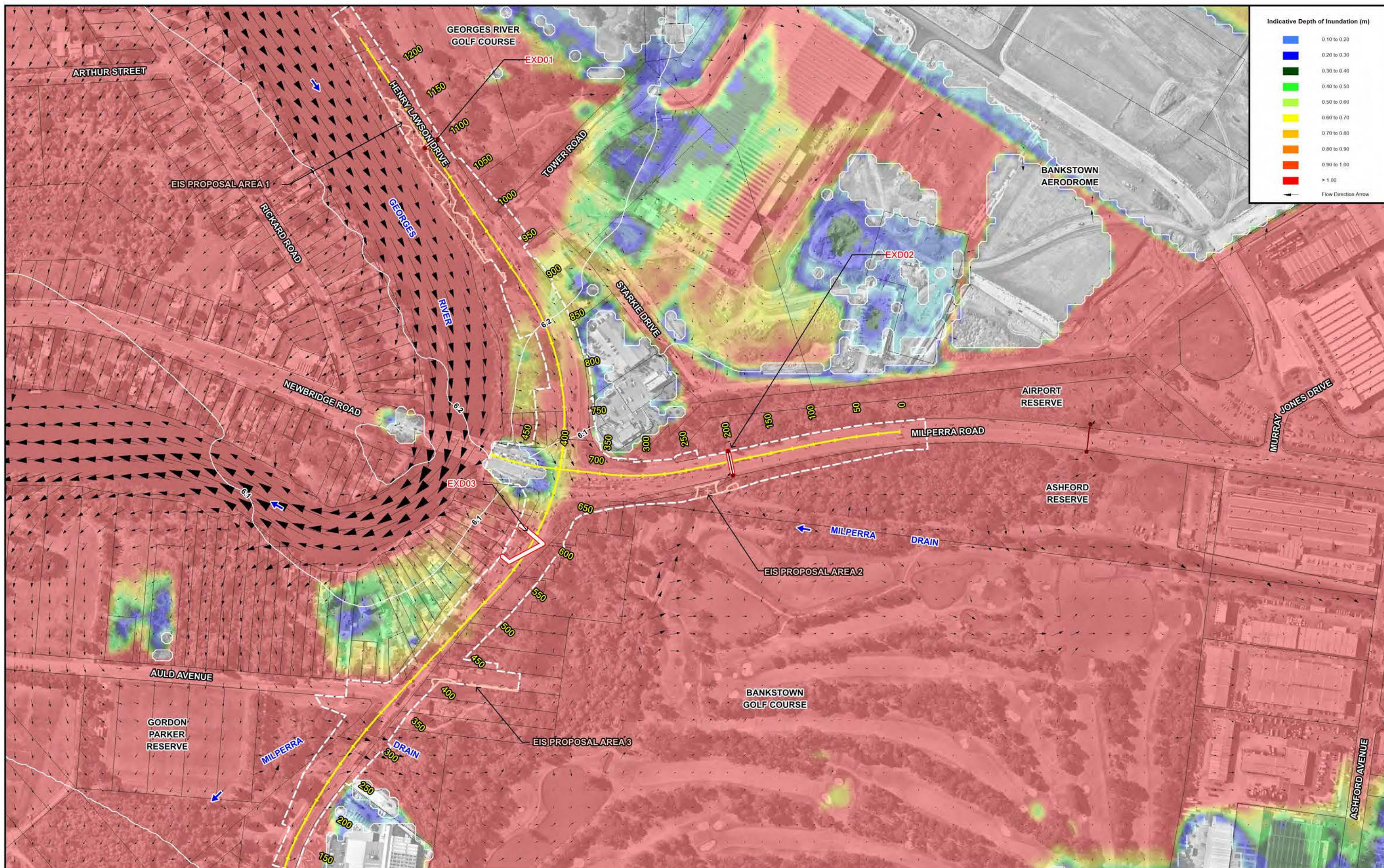
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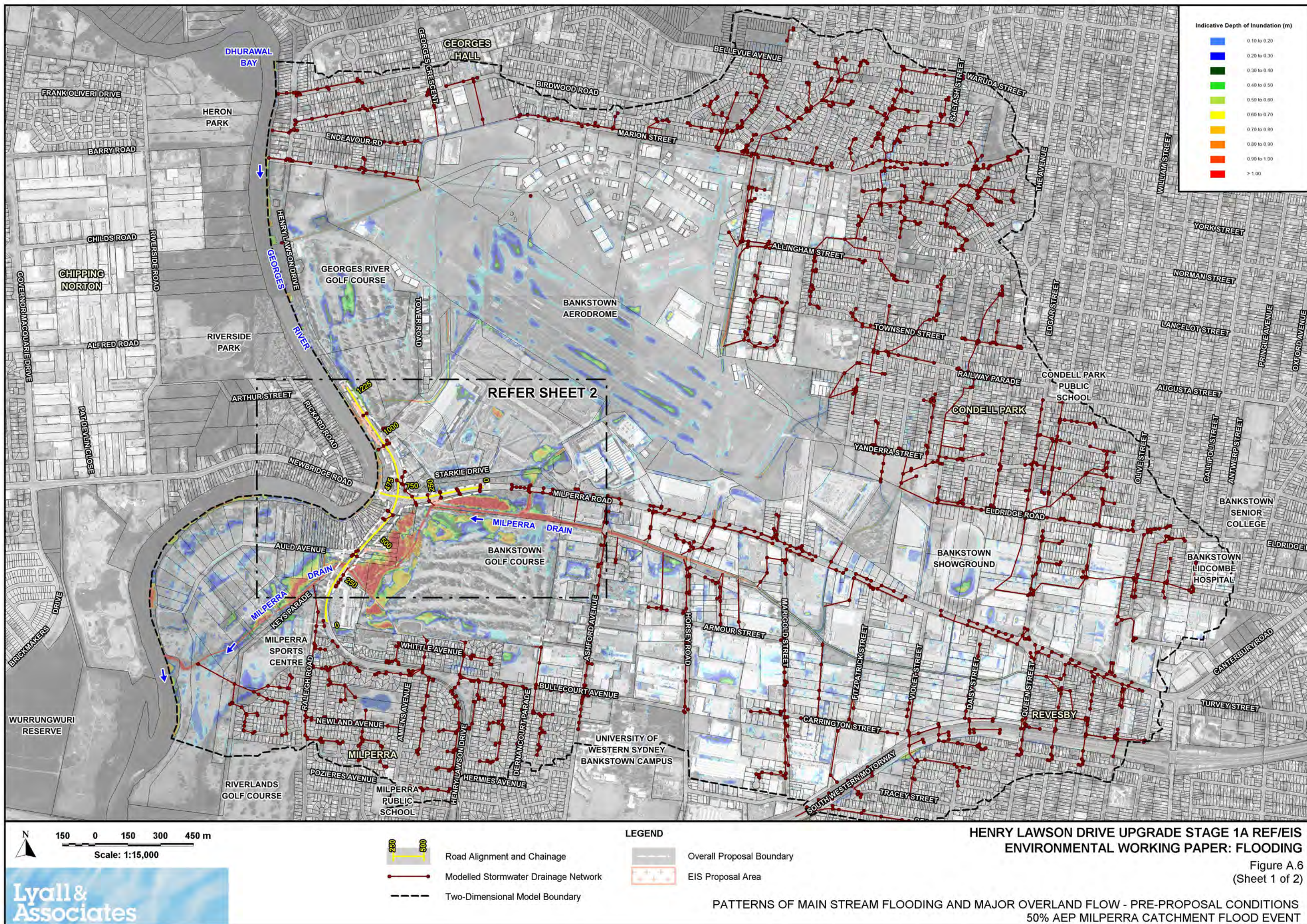
Lyll & Associates

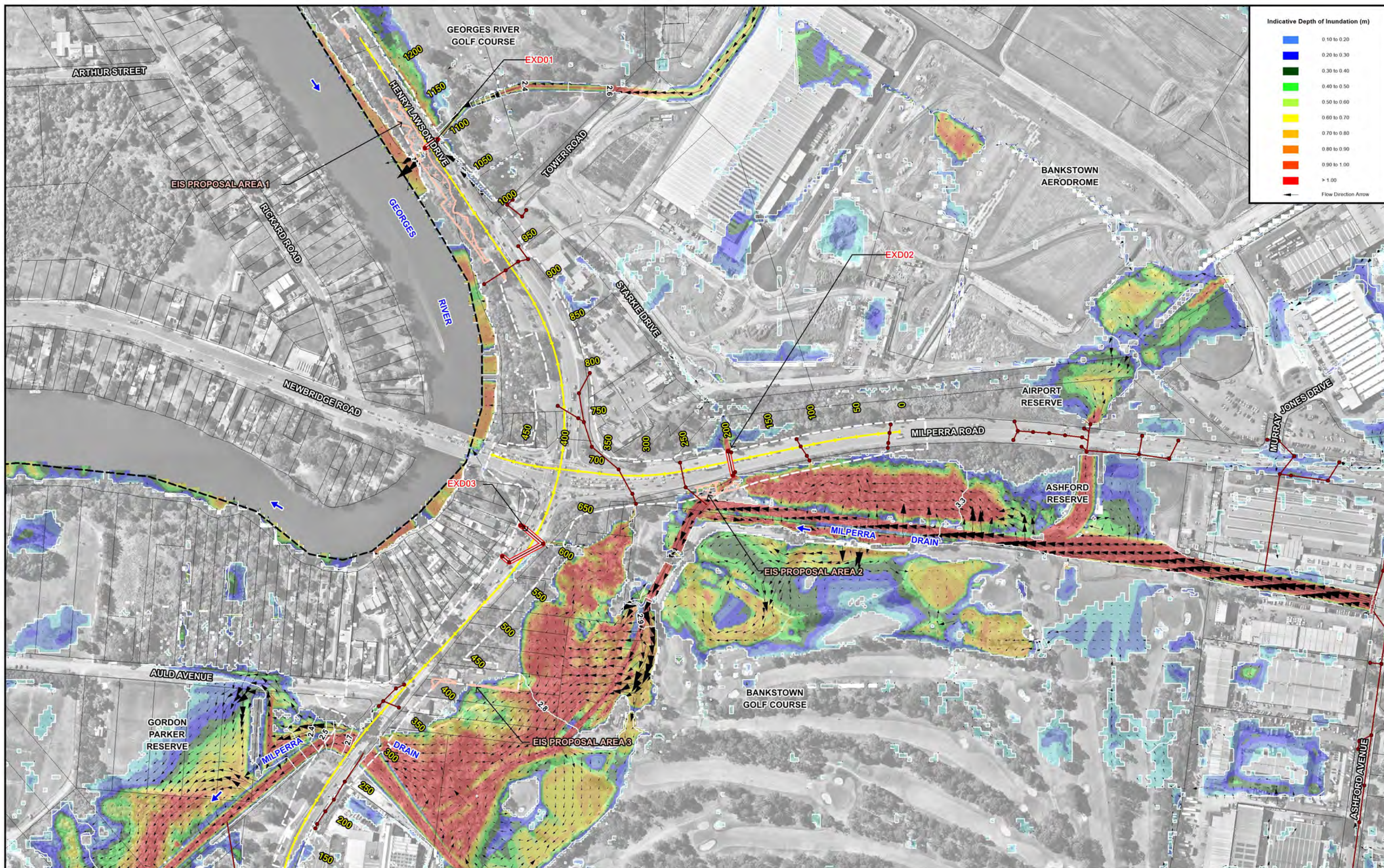












Scale: 1:4,000

0 40 80 120 m

Lyall & Associates

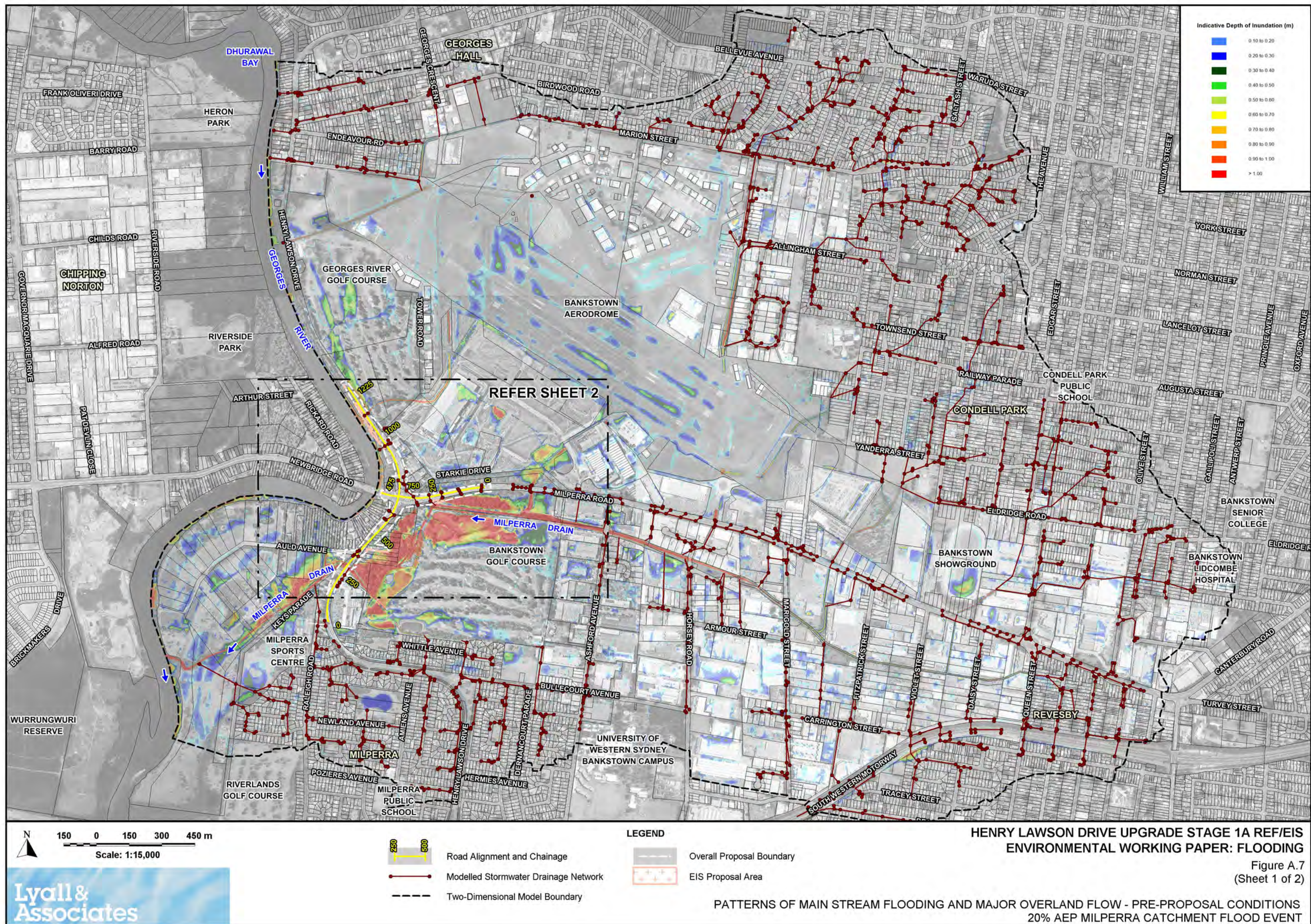
LEGEND

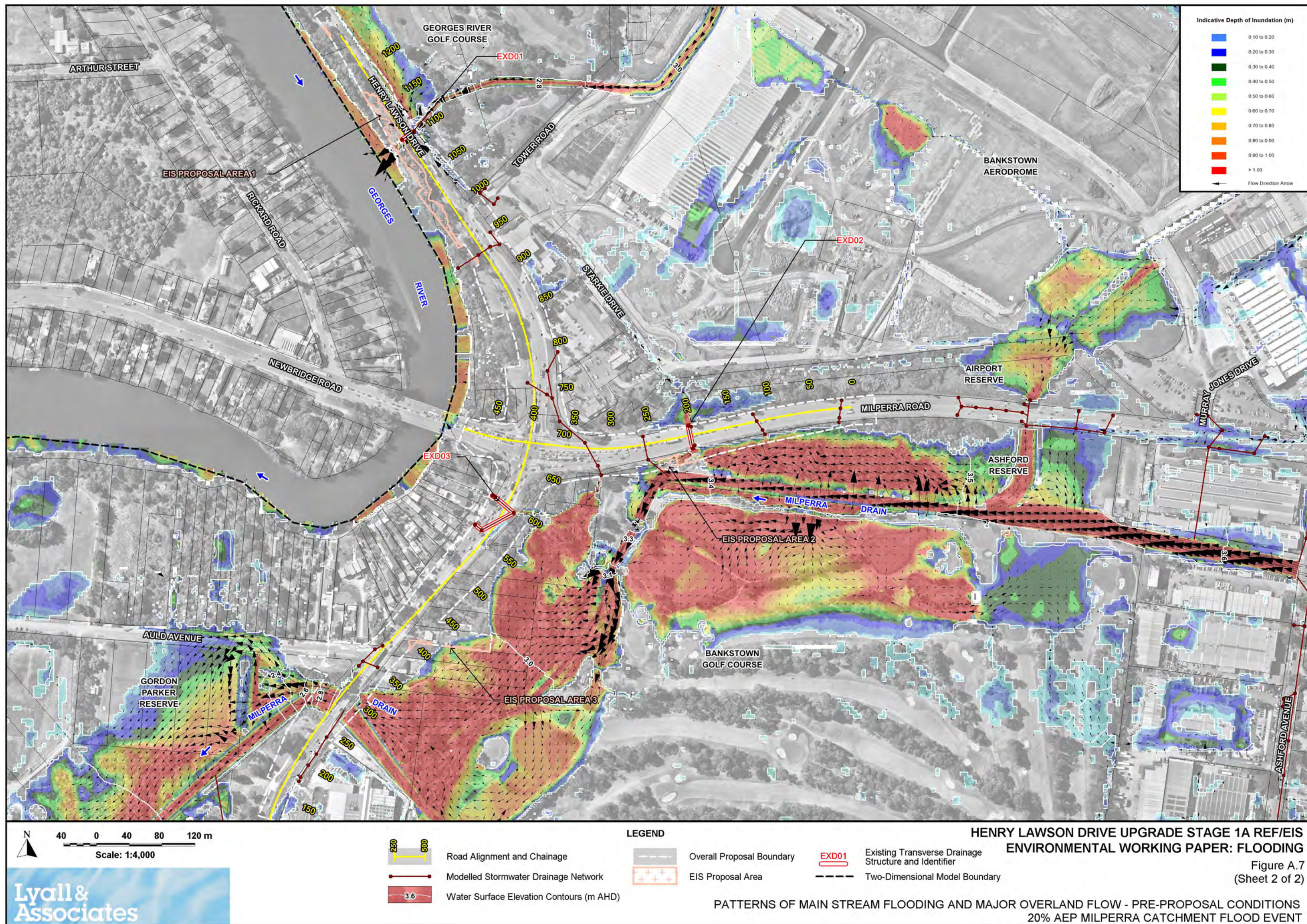
- Road Alignment and Chainage
- Modelled Stormwater Drainage Network
- Water Surface Elevation Contours (m AHD)
- Overall Proposal Boundary
- EIS Proposal Area

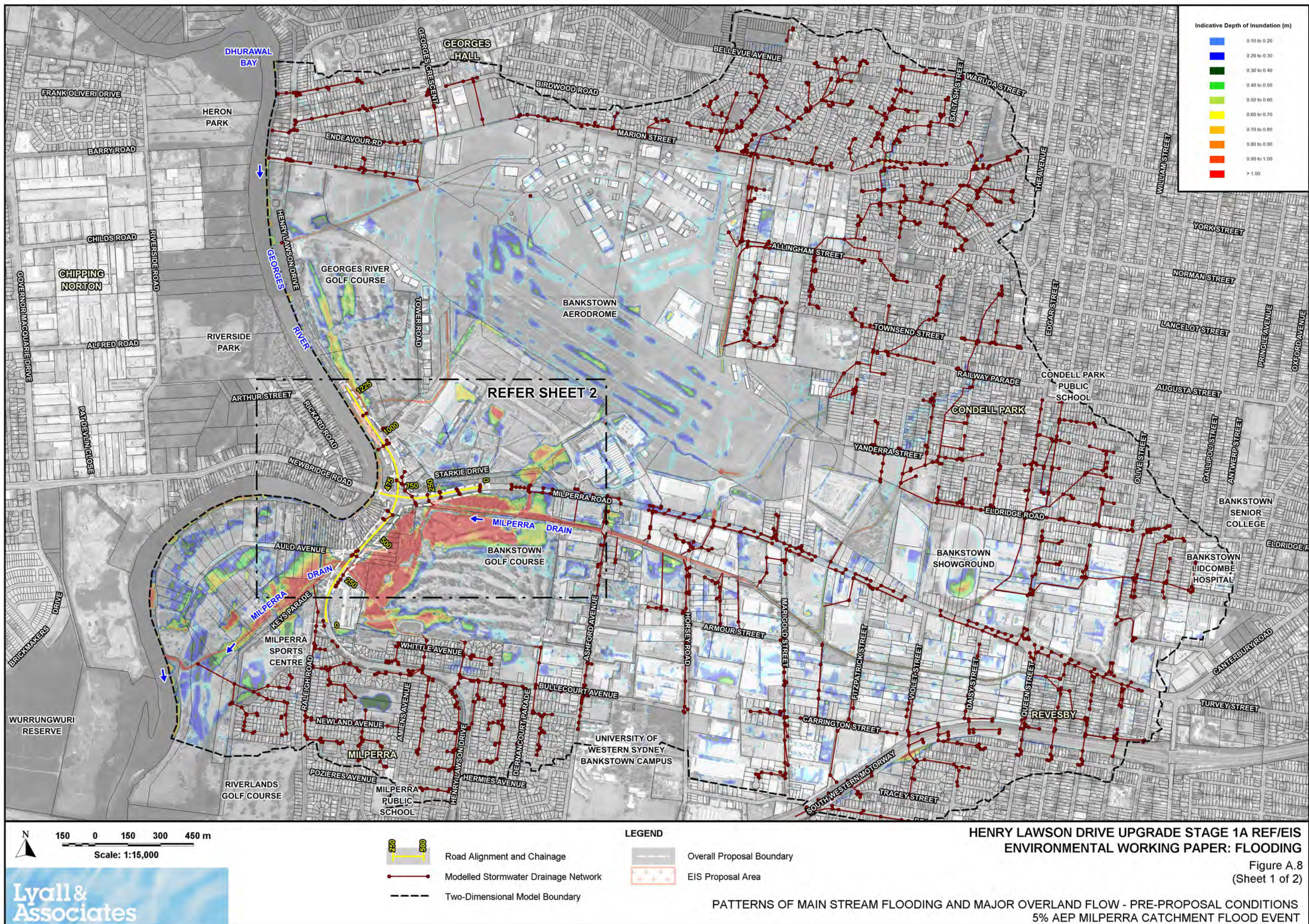
HENRY LAWSON DRIVE UPGRADE STAGE 1A REF/EIS ENVIRONMENTAL WORKING PAPER: FLOODING

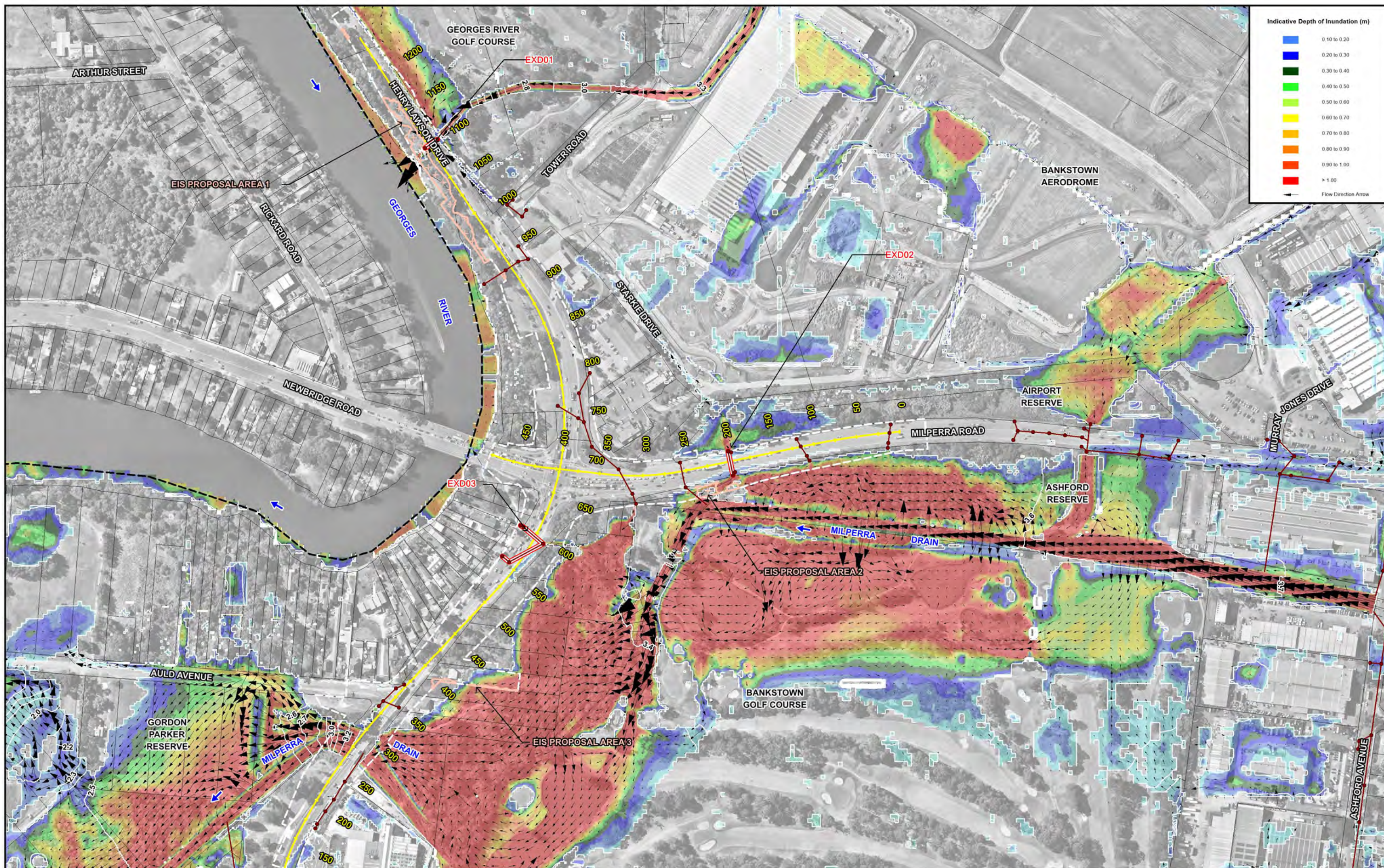
Figure A.6 (Sheet 2 of 2)

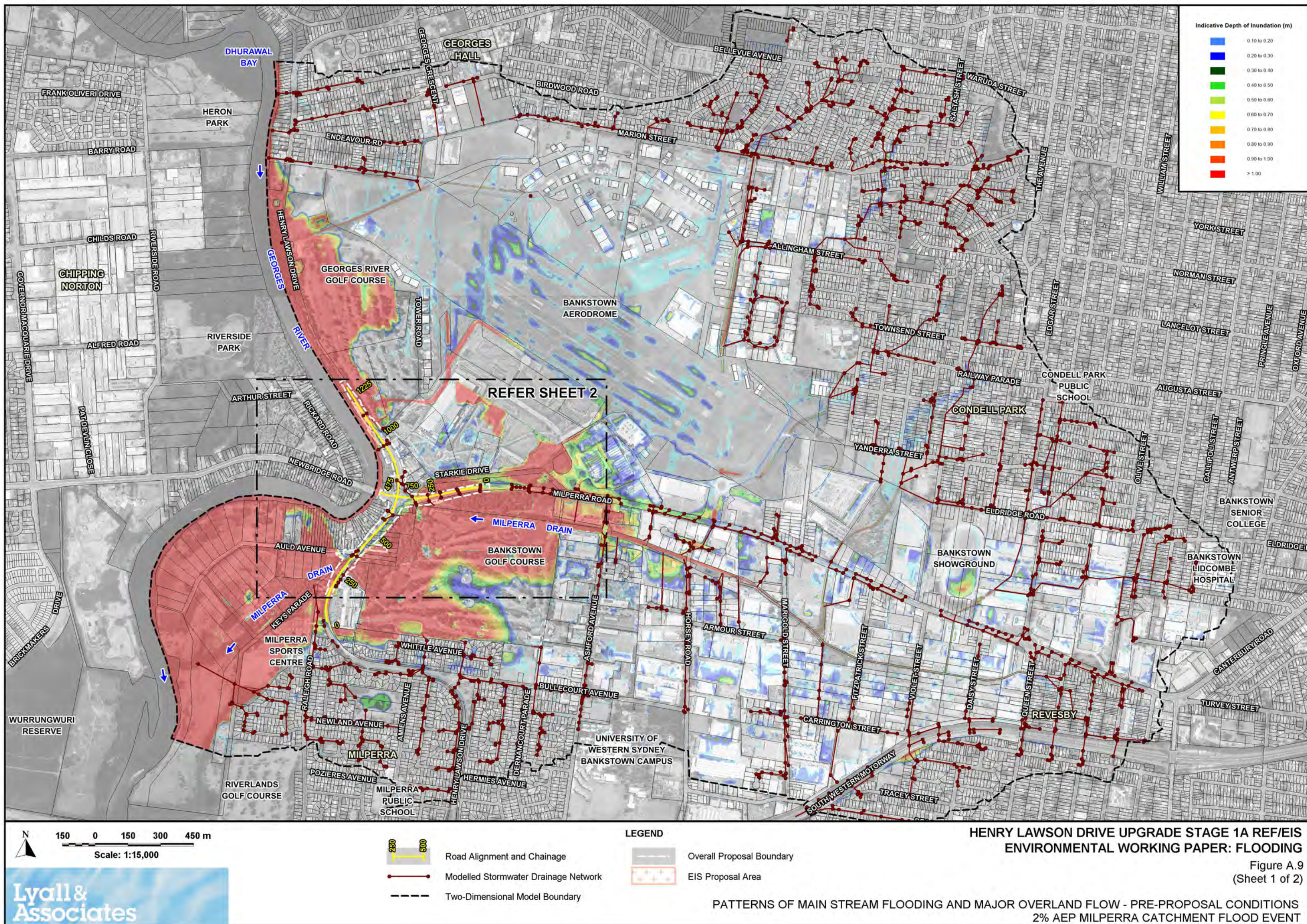
PATTERNS OF MAIN STREAM FLOODING AND MAJOR OVERLAND FLOW - PRE-PROPOSAL CONDITIONS 50% AEP MILPERRA CATCHMENT FLOOD EVENT

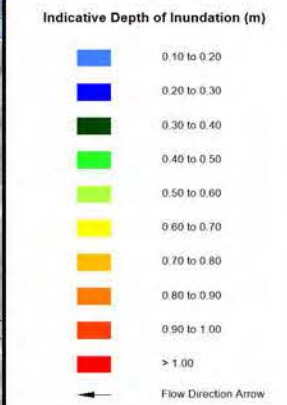
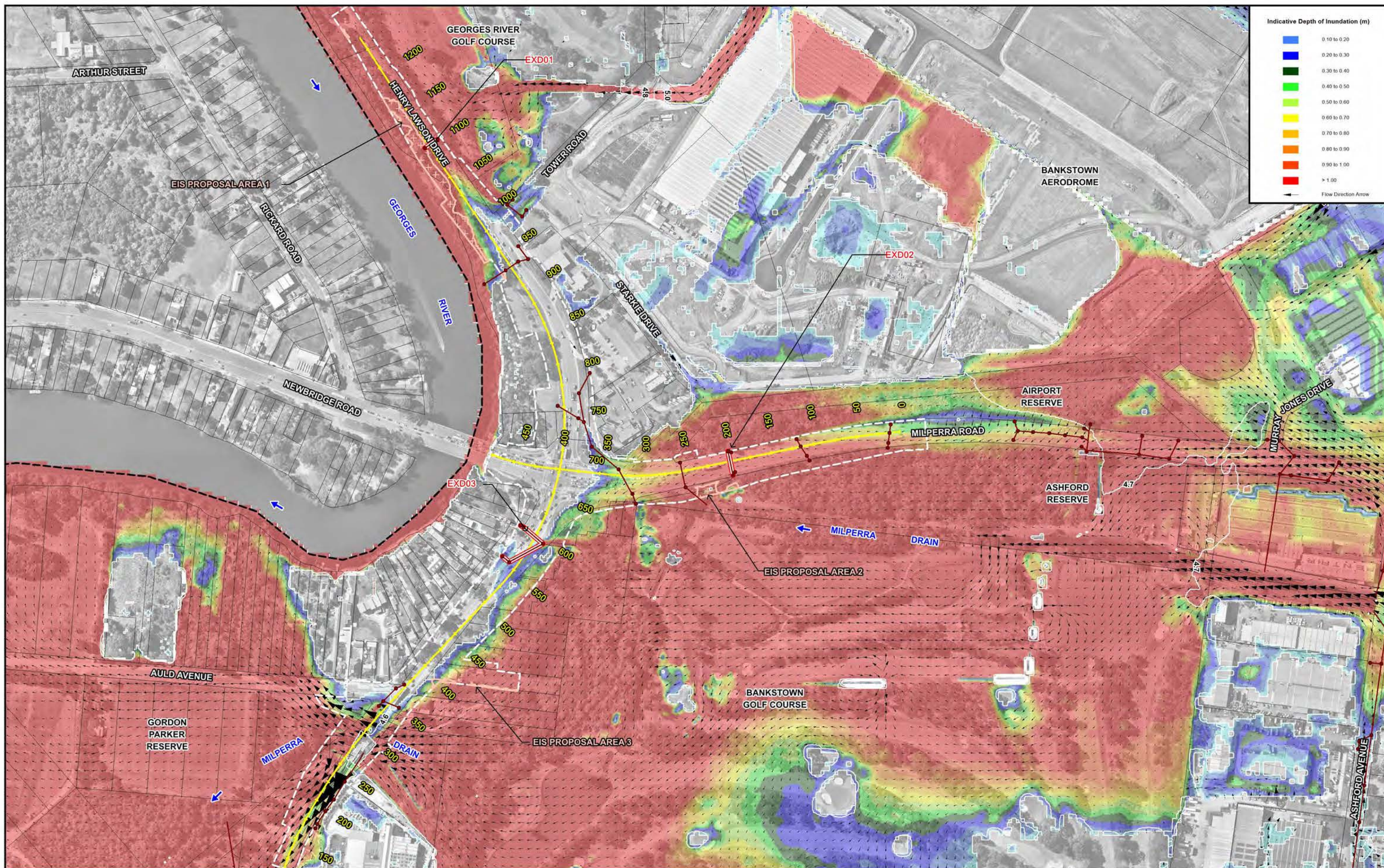












N

40 0 40 80 120 m

Scale: 1:4,000

Lyall & Associates

LEGEND

	Road Alignment and Chainage		Overall Proposal Boundary
	Modelled Stormwater Drainage Network		EIS Proposal Area
	Water Surface Elevation Contours (m AHD)		Existing Transverse Drainage Structure and Identifier
			Two-Dimensional Model Boundary

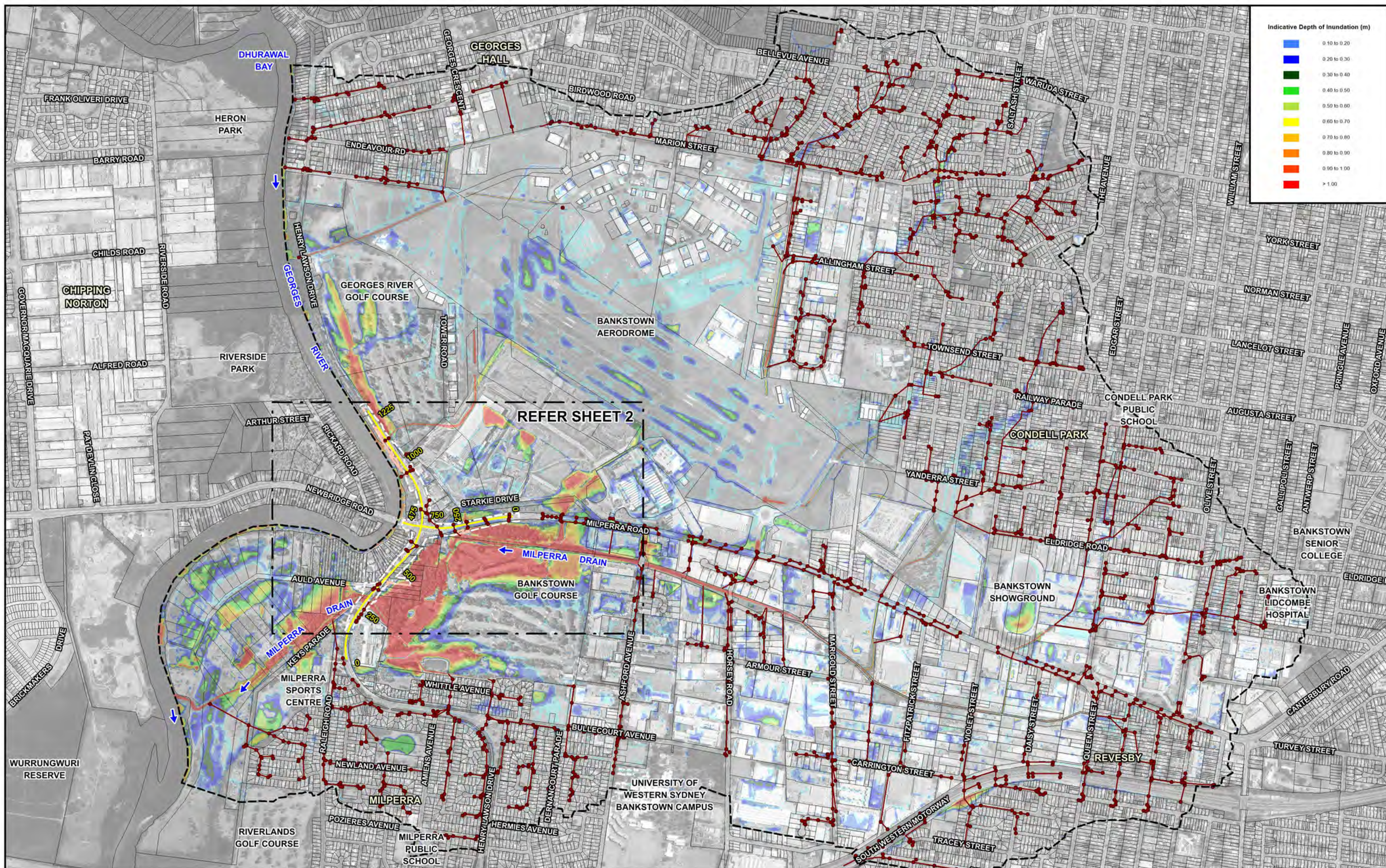
HENRY LAWSON DRIVE UPGRADE STAGE 1A REF/EIS

ENVIRONMENTAL WORKING PAPER: FLOODING

Figure A.9
(Sheet 2 of 2)

PATTERNS OF MAIN STREAM FLOODING AND MAJOR OVERLAND FLOW - PRE-PROPOSAL CONDITIONS

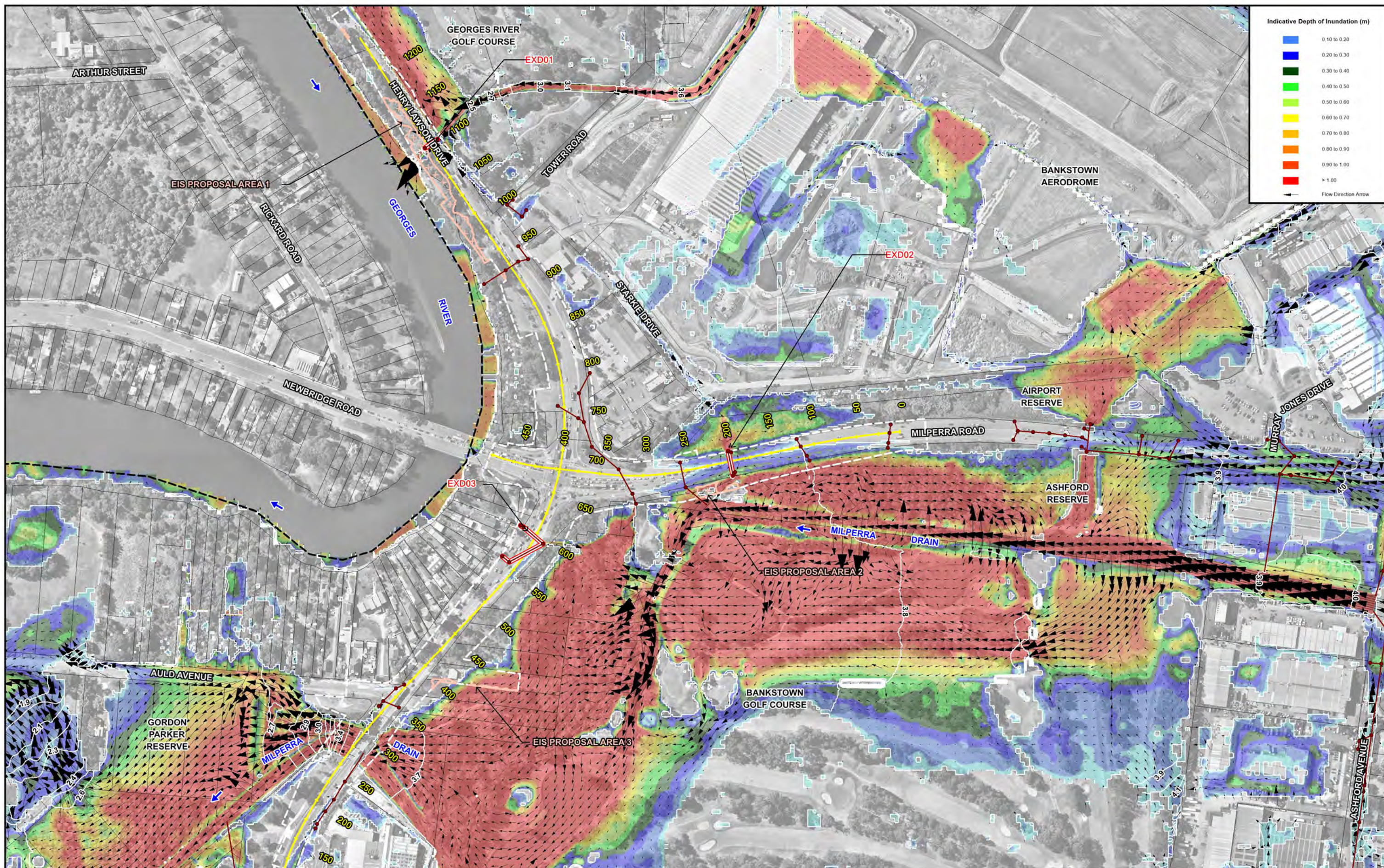
2% AEP MILPERRA CATCHMENT FLOOD EVENT



HENRY LAWSON DRIVE UPGRADE STAGE 1A REF/EIS ENVIRONMENTAL WORKING PAPER: FLOODING

Figure A.10
(Sheet 1 of 2)

PATTERNS OF MAIN STREAM FLOODING AND MAJOR OVERLAND FLOW - PRE-PROPOSAL CONDITIONS
1% AEP MILPERRA CATCHMENT FLOOD EVENT COINCIDENT WITH GEORGES RIVER MHWLS



LEGEND

- Road Alignment and Chainage
- Modelled Stormwater Drainage Network
- Water Surface Elevation Contours (m AHD)

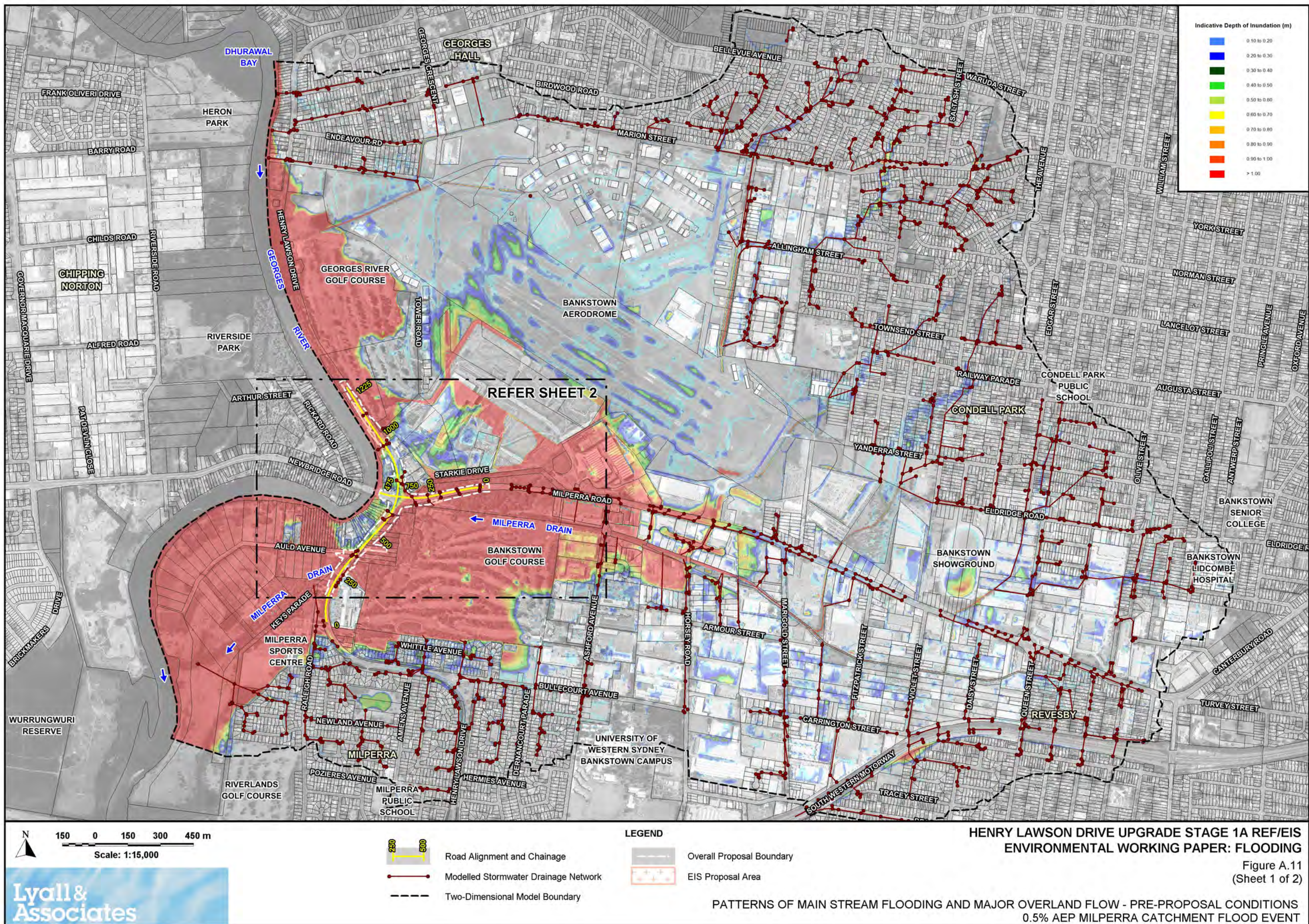
- Overall Proposal Boundary
- EIS Proposal Area

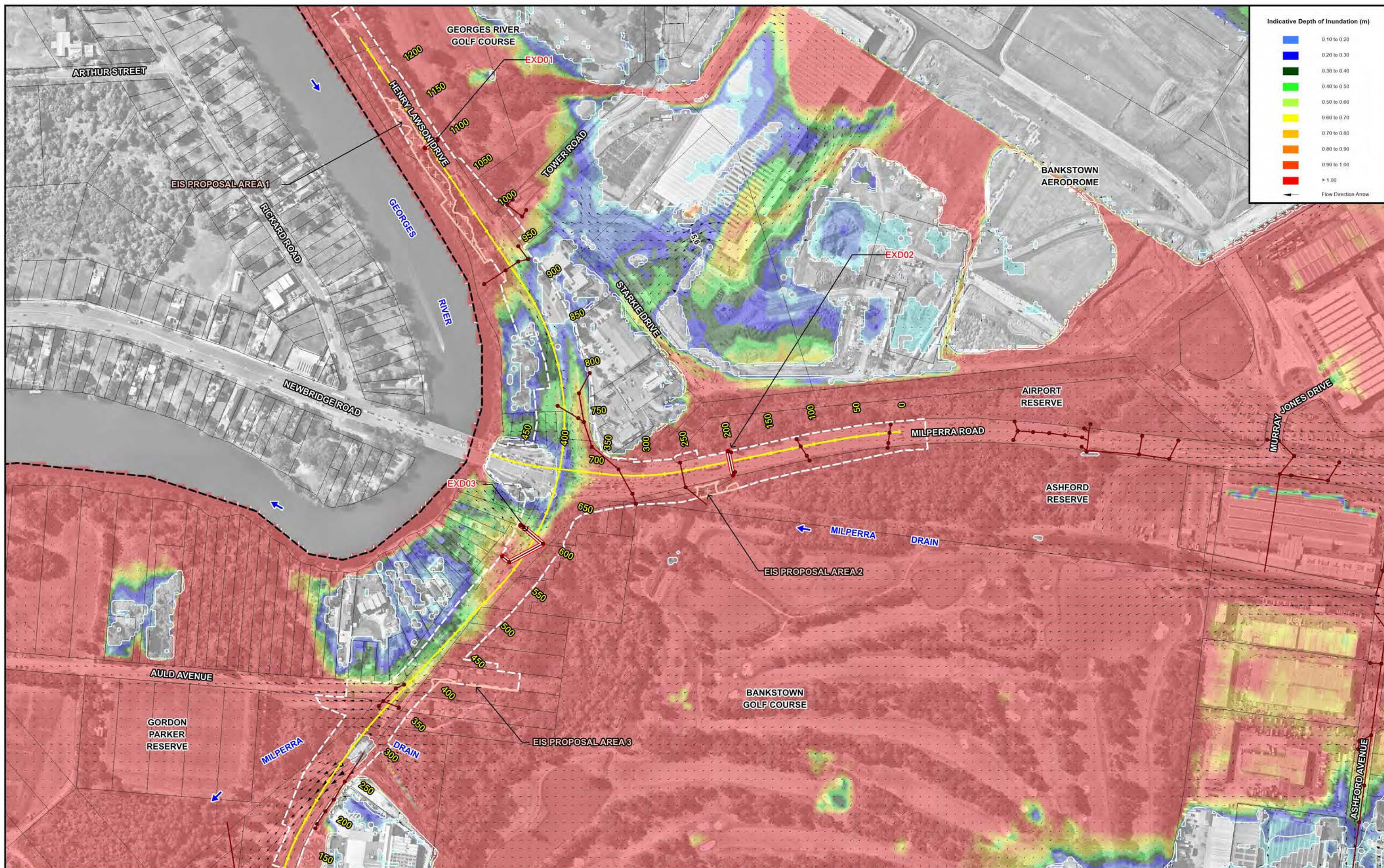
- EXD01 Existing Transverse Drainage Structure and Identifier
- Two-Dimensional Model Boundary

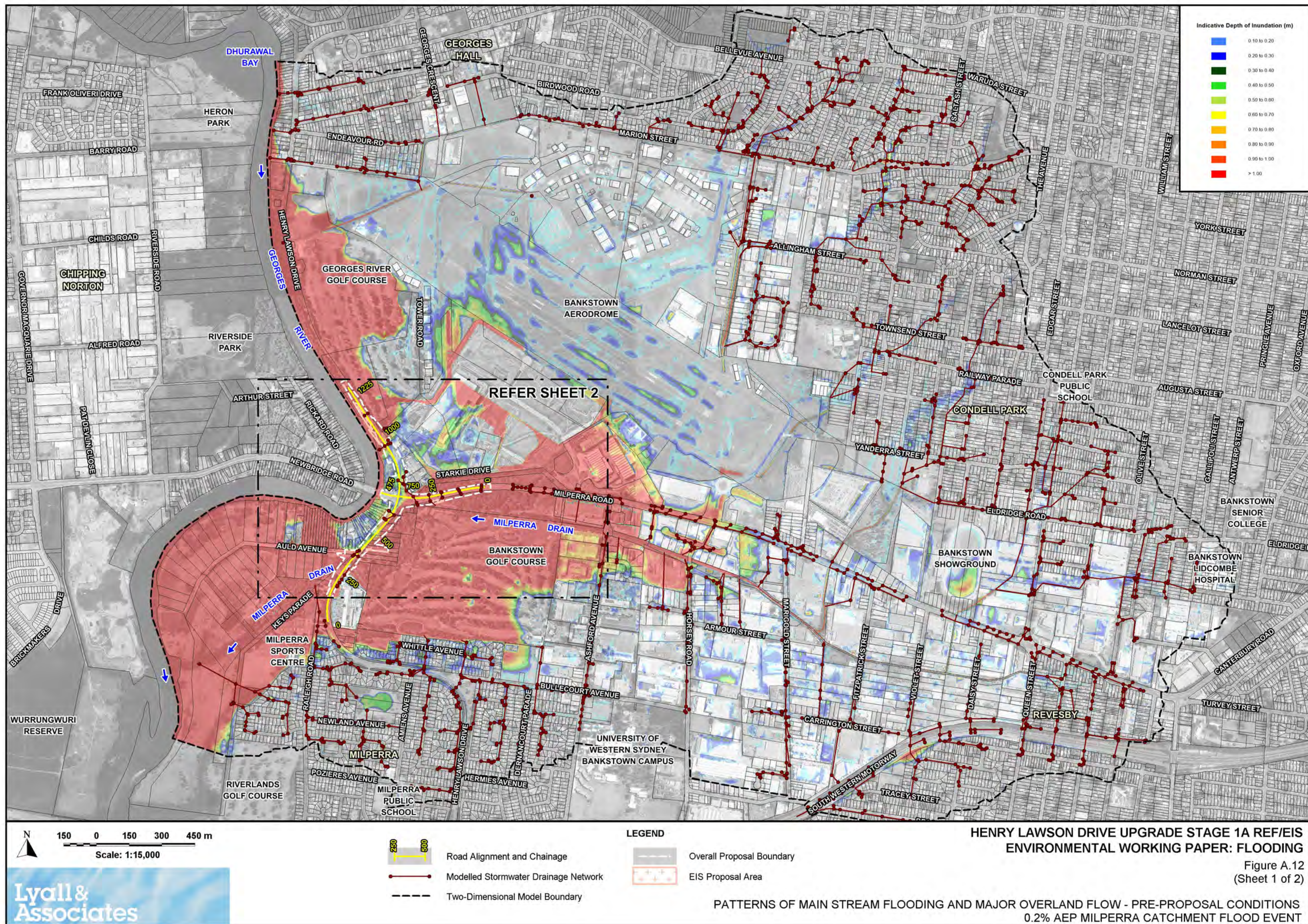
HENRY LAWSON DRIVE UPGRADE STAGE 1A REF/EIS ENVIRONMENTAL WORKING PAPER: FLOODING

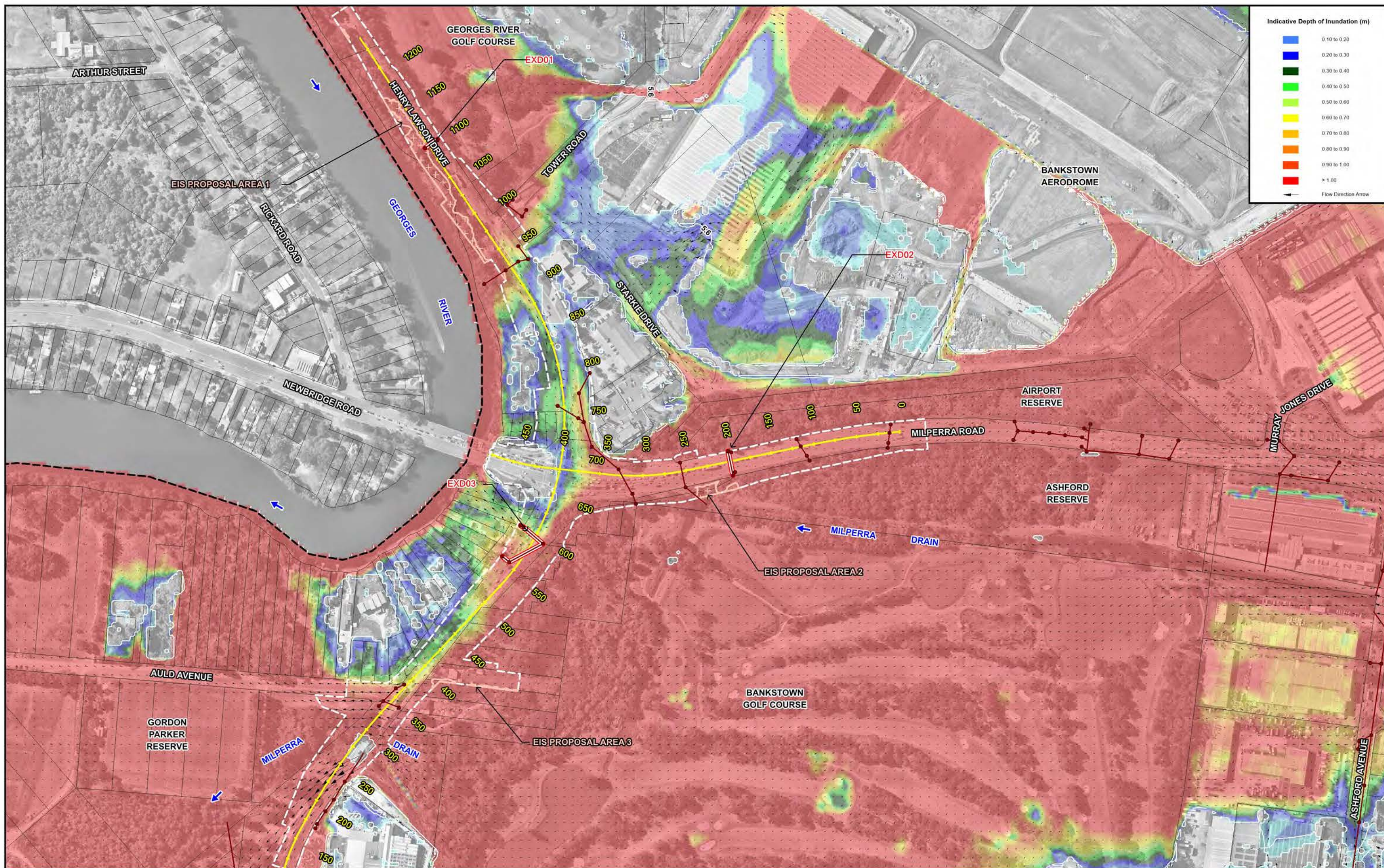
Figure A.10
(Sheet 2 of 2)

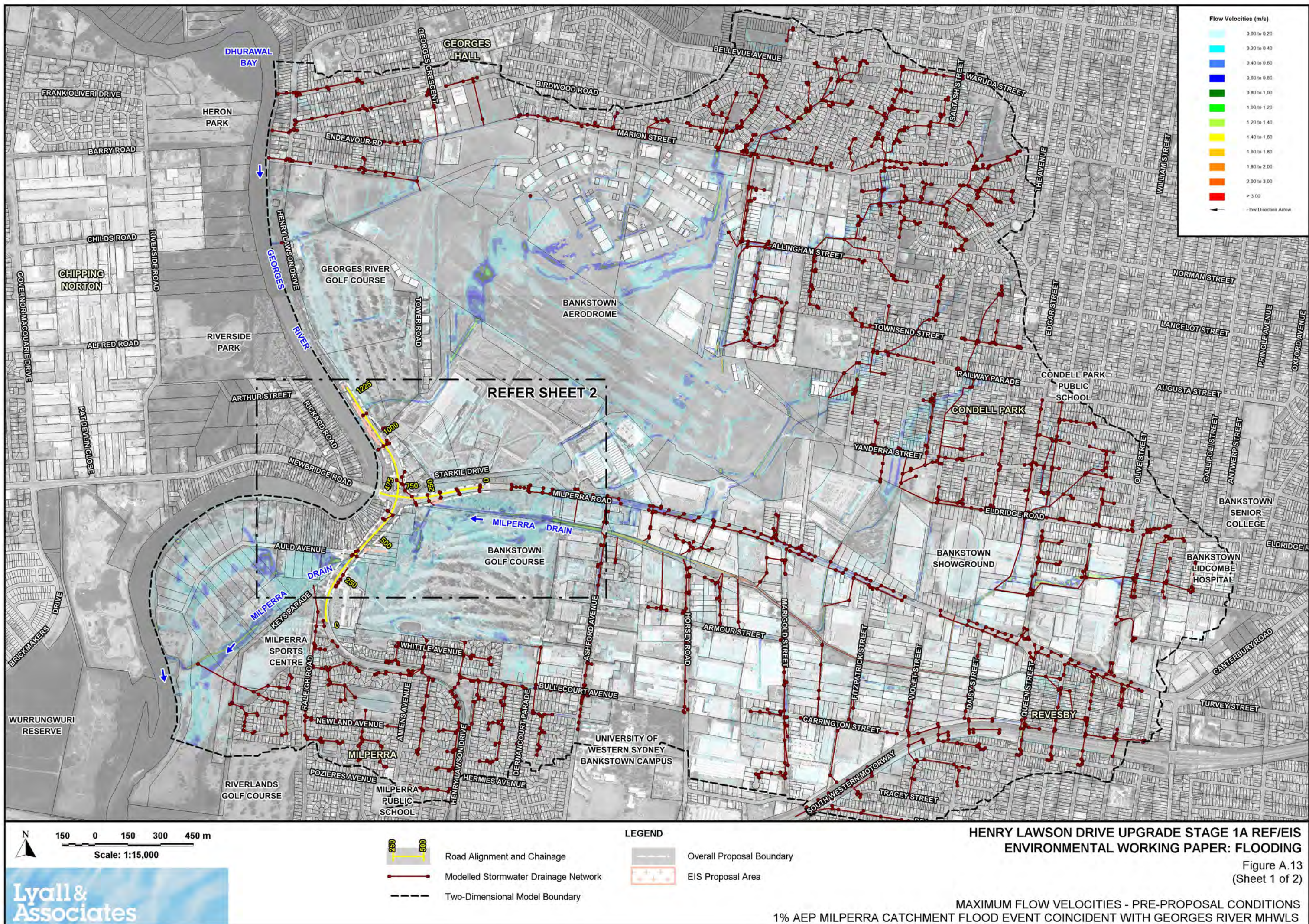
PATTERNS OF MAIN STREAM FLOODING AND MAJOR OVERLAND FLOW - PRE-PROPOSAL CONDITIONS
1% AEP MILPERRA CATCHMENT FLOOD EVENT COINCIDENT WITH GEORGES RIVER MHWLS

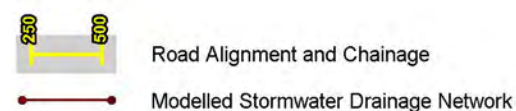
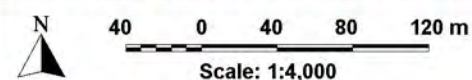
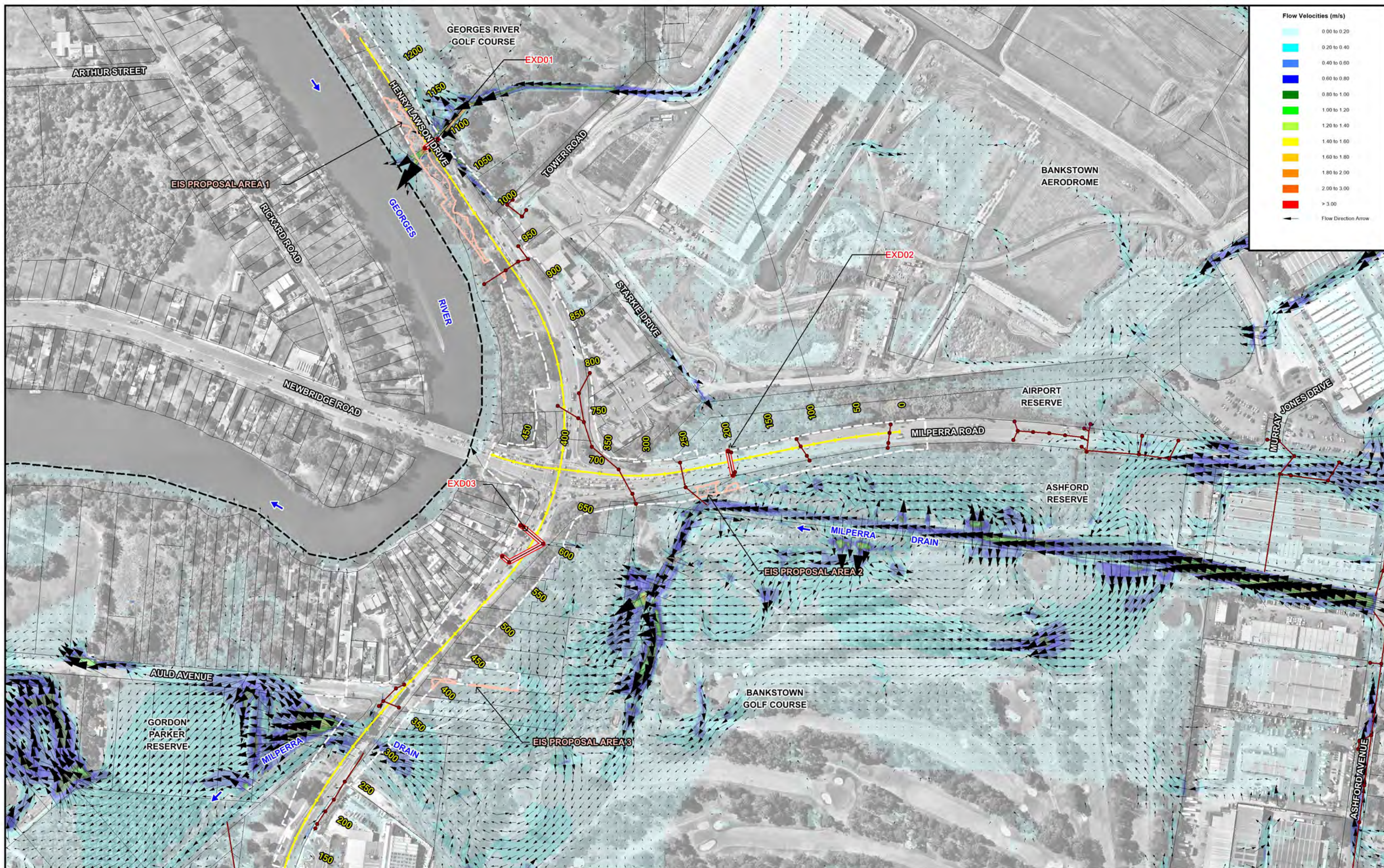








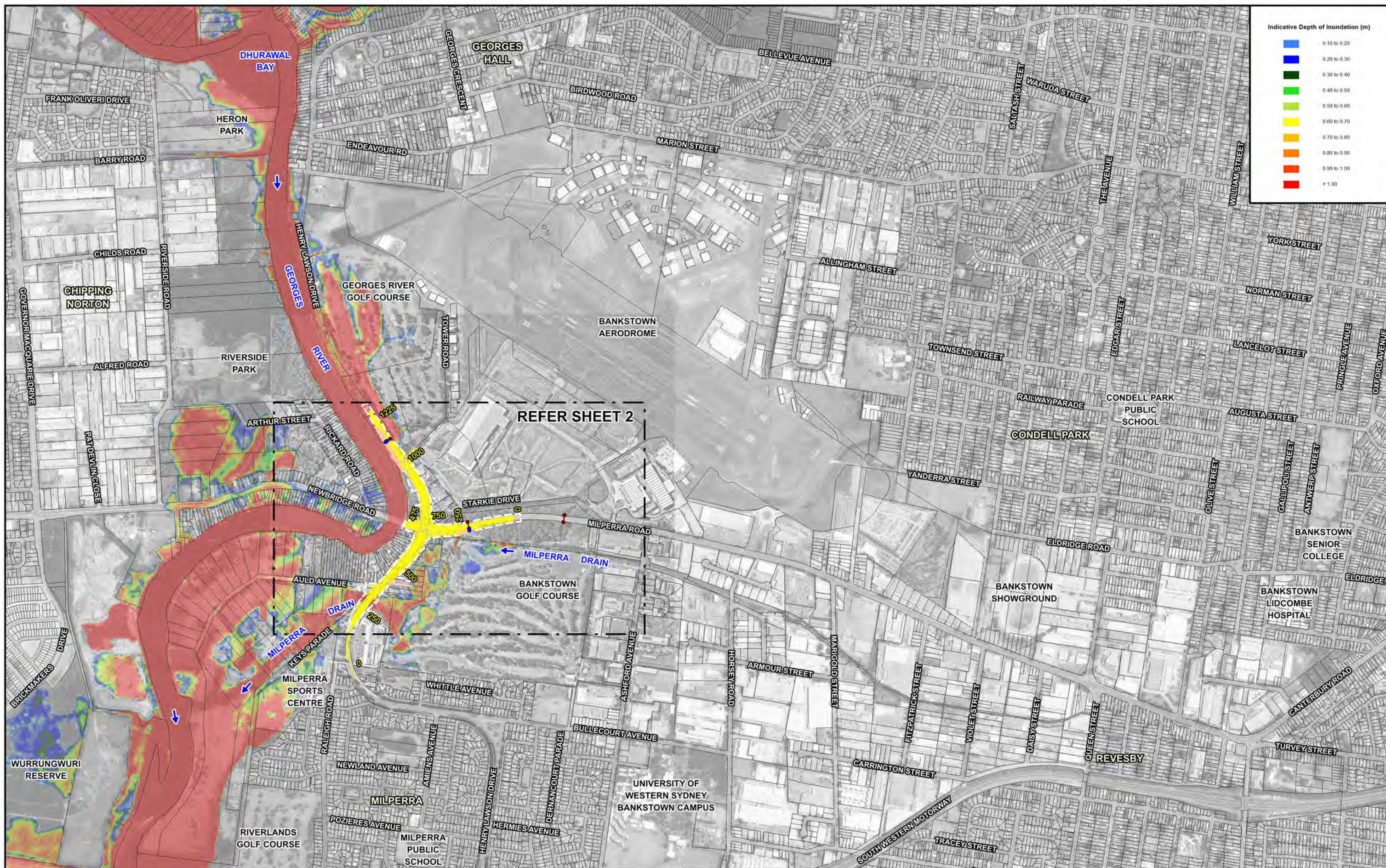


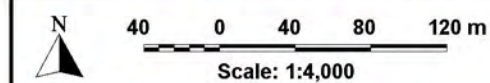
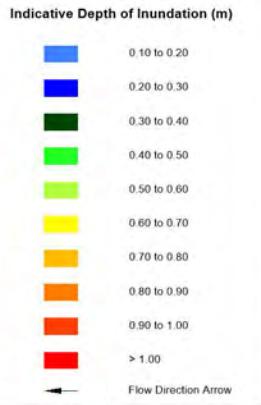


HENRY LAWSON DRIVE UPGRADE STAGE 1A REF/EIS ENVIRONMENTAL WORKING PAPER: FLOODING

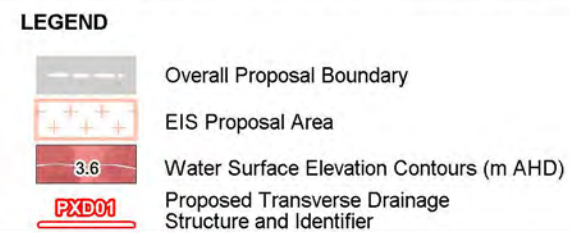
Figure A.13
(Sheet 2 of 2)

MAXIMUM FLOW VELOCITIES - PRE-PROPOSAL CONDITIONS
1% AEP MILPERRA CATCHMENT FLOOD EVENT COINCIDENT WITH GEORGES RIVER MHWLS





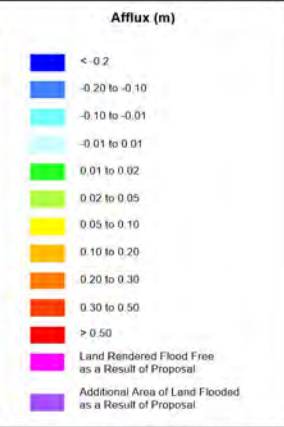
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Figure A.14
(Sheet 2 of 2)

PATTERNS OF MAIN STREAM FLOODING - OPERATIONAL CONDITIONS
20% AEP GEORGES RIVER FLOOD EVENT



Scale: 1:15,000

150 0 150 300 450 m

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LEGEND

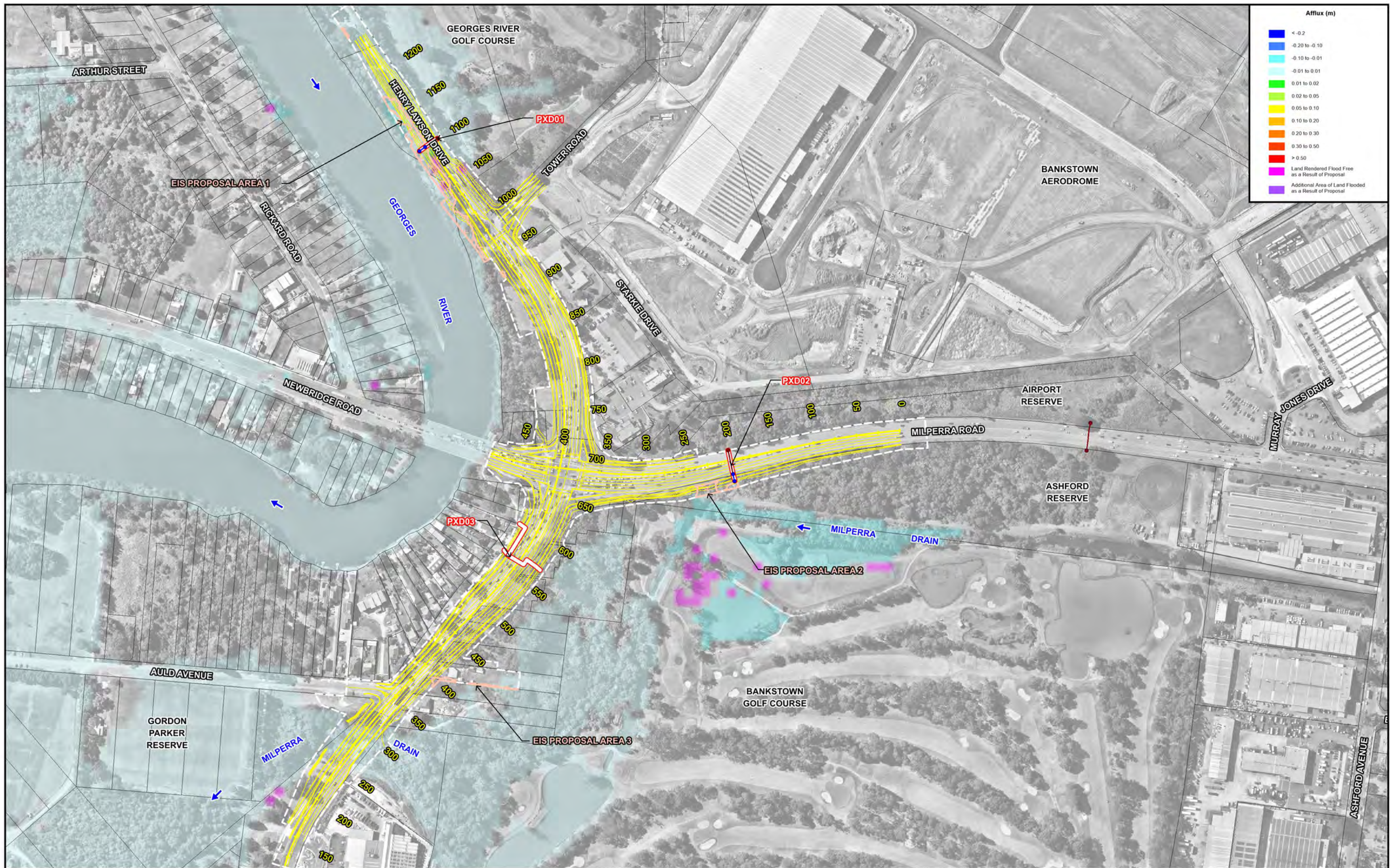
- Road Alignment and Chainage
- Road Design Strings
- Existing Stormwater Drainage Network
- Proposed Stormwater Drainage Network
- Overall Proposal Boundary
- EIS Proposal Area

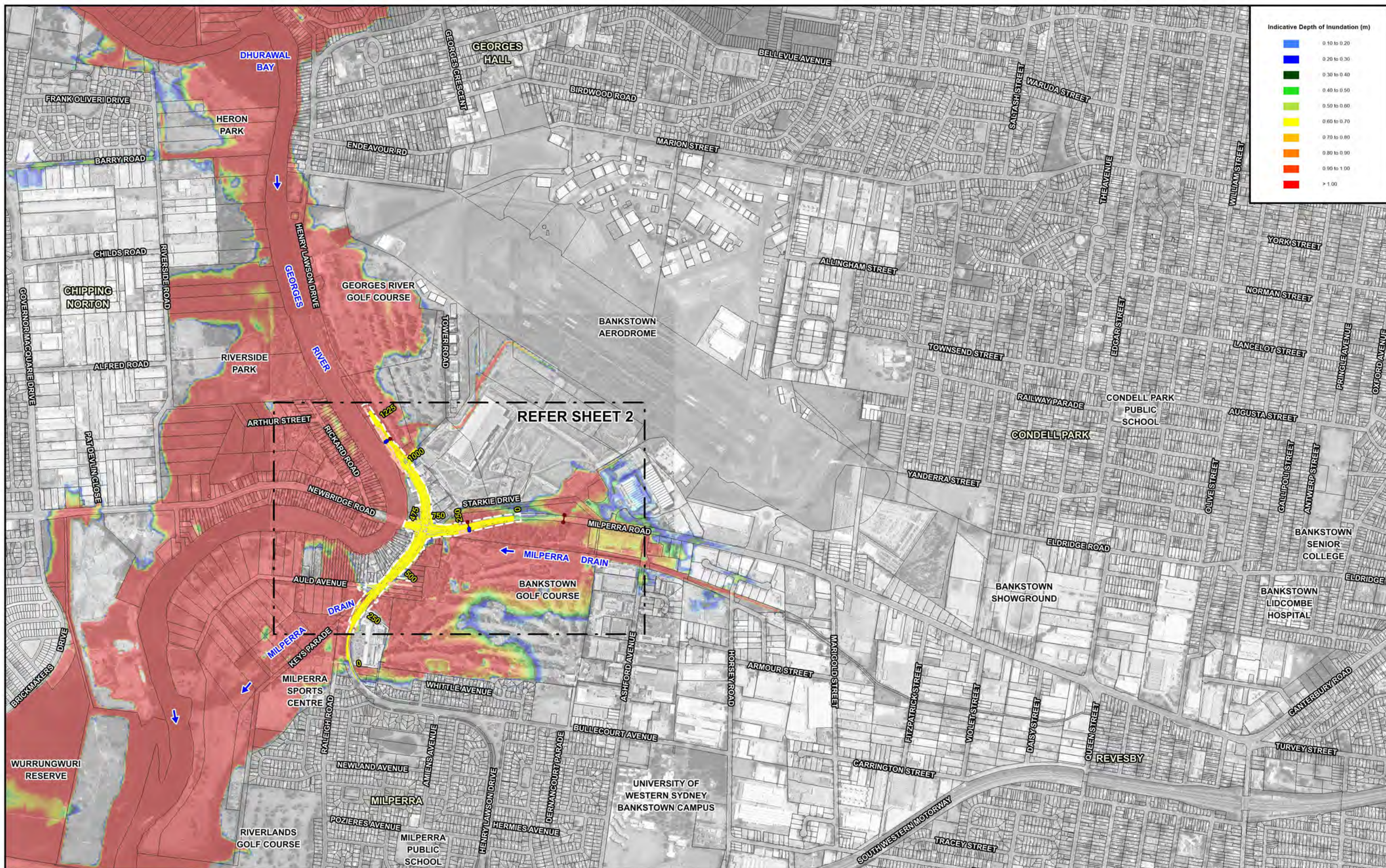
HENRY LAWSON DRIVE UPGRADE STAGE 1A REF/EIS

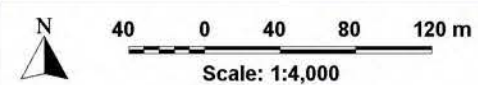
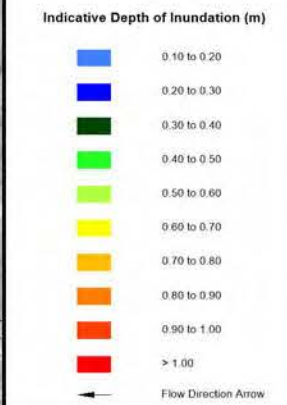
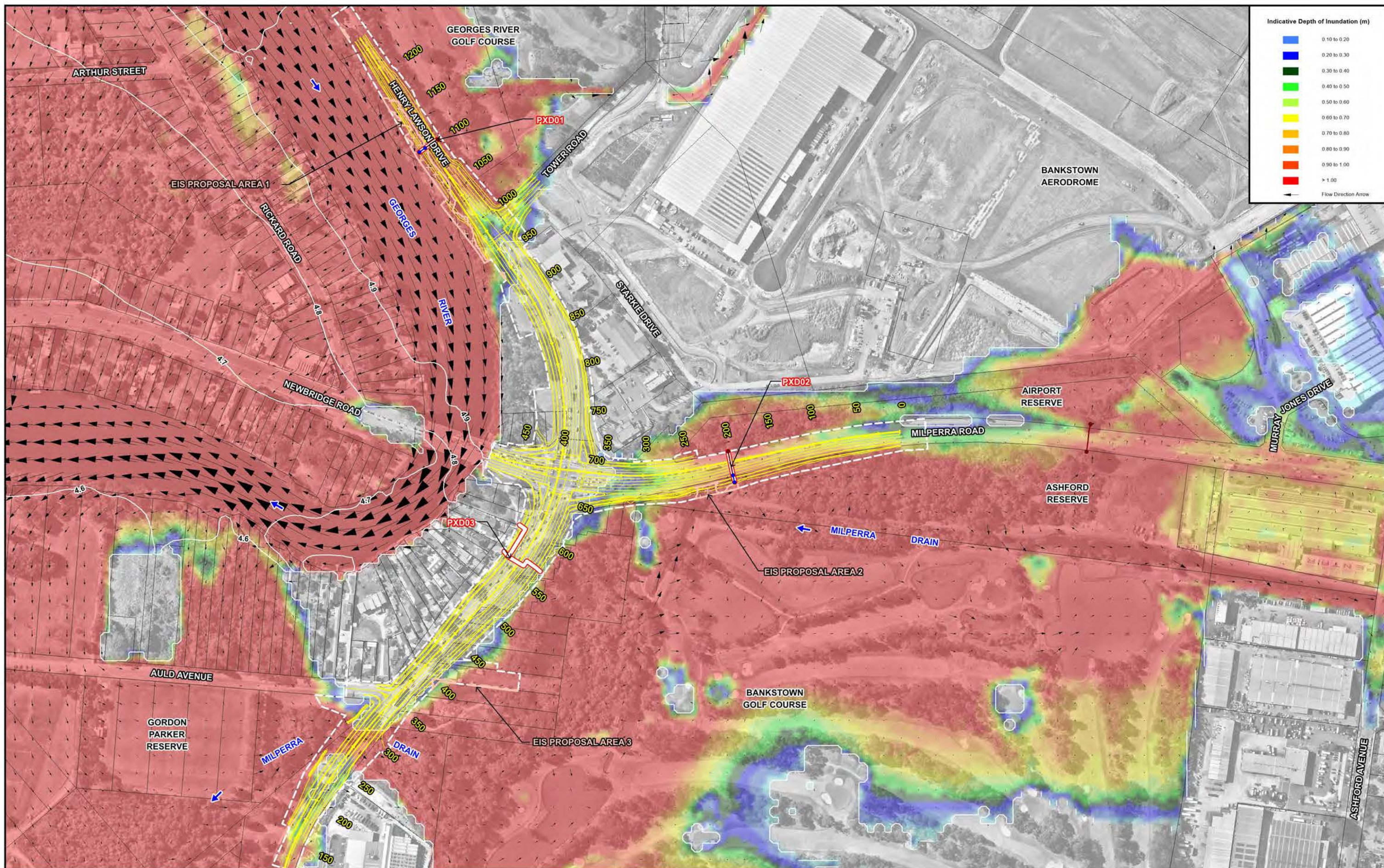
ENVIRONMENTAL WORKING PAPER: FLOODING

Figure A.15
(Sheet 1 of 2)

IMPACT OF PROJECT OPERATION ON FLOOD BEHAVIOUR
20% AEP GEORGES RIVER FLOOD EVENT







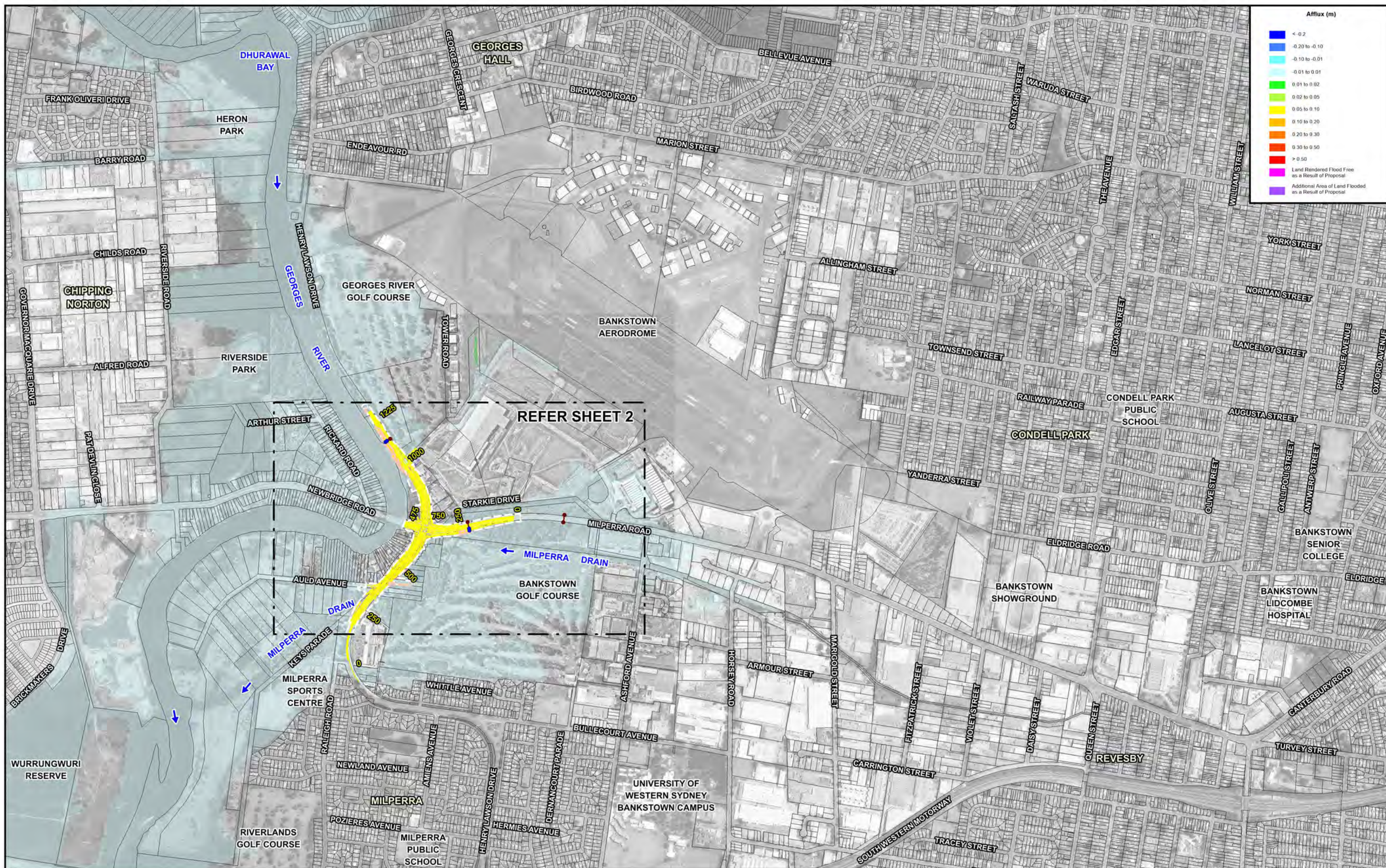
- Road Alignment and Chainage
- Road Design Strings
- Modelled Existing Stormwater Drainage Network to Remain
- Modelled Proposed Stormwater Drainage Network

- LEGEND
- Overall Proposal Boundary
 - EIS Proposal Area
 - Water Surface Elevation Contours (m AHD)
 - Proposed Transverse Drainage Structure and Identifier

**HENRY LAWSON DRIVE UPGRADE STAGE 1A REF/EIS
ENVIRONMENTAL WORKING PAPER: FLOODING**

Figure A.16
(Sheet 2 of 2)

**PATTERNS OF MAIN STREAM FLOODING - OPERATIONAL CONDITIONS
5% AEP GEORGES RIVER FLOOD EVENT**



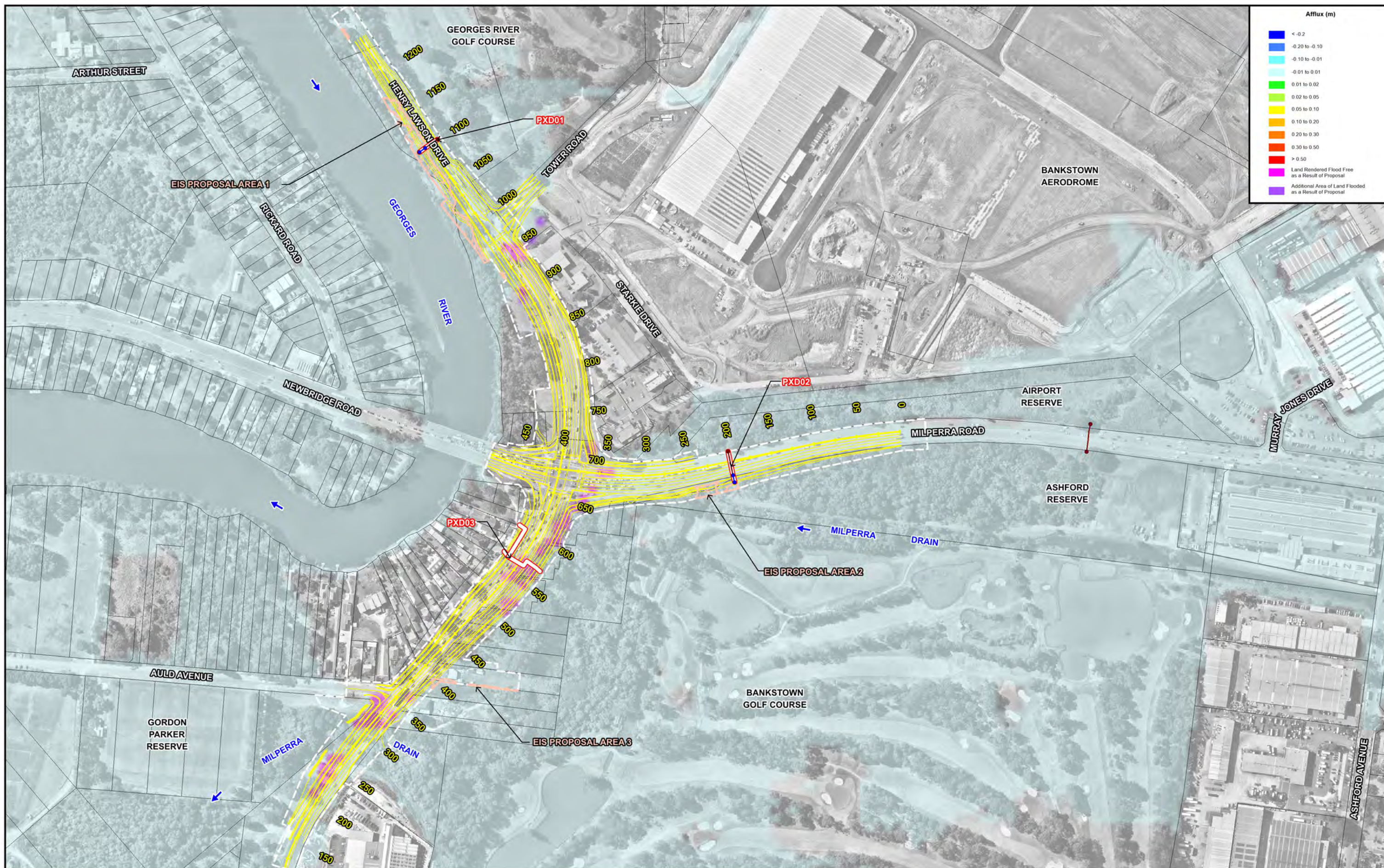
HENRY LAWSON DRIVE UPGRADE STAGE 1A REF/EIS ENVIRONMENTAL WORKING PAPER: FLOODING

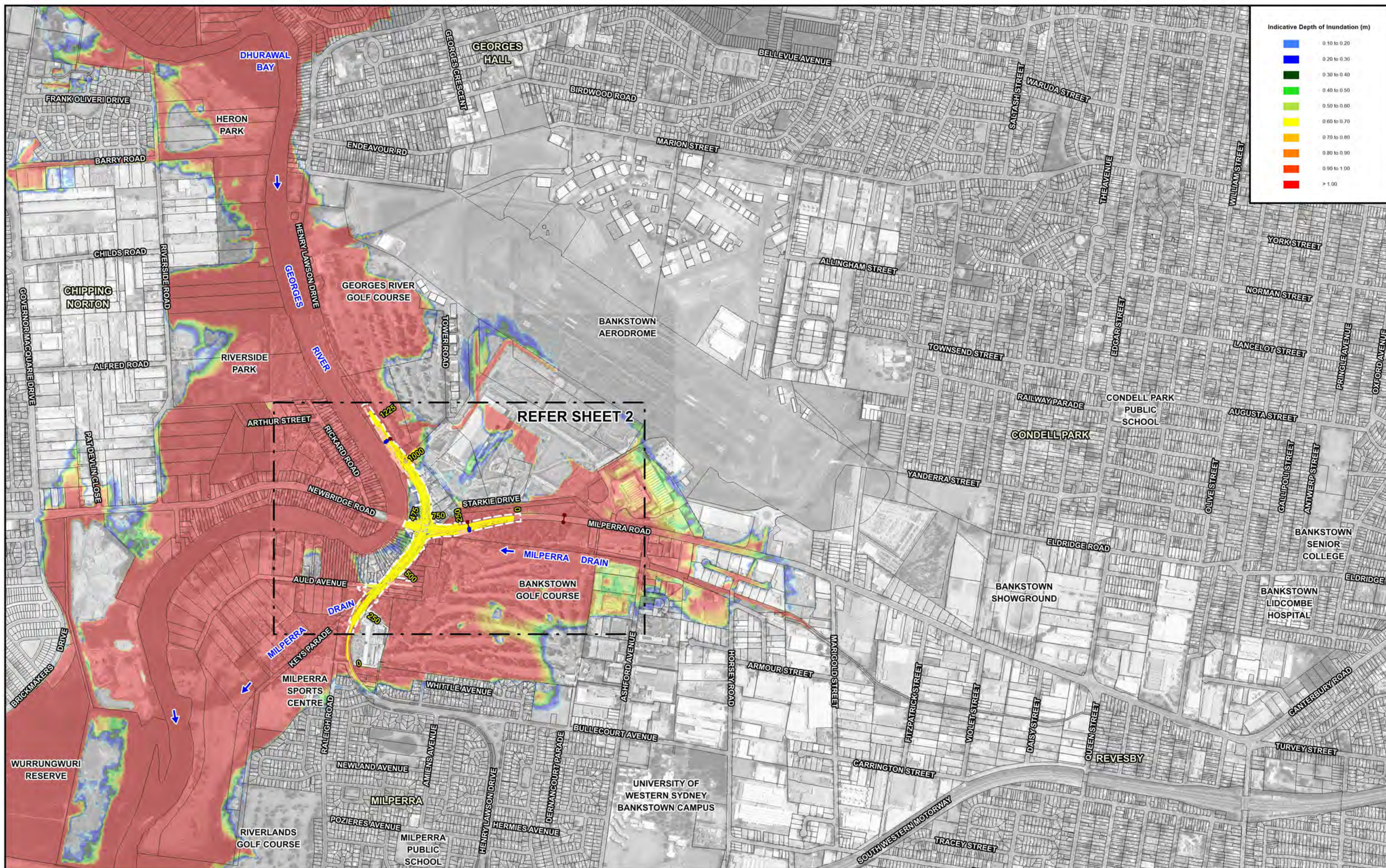
Figure A.17
(Sheet 1 of 2)

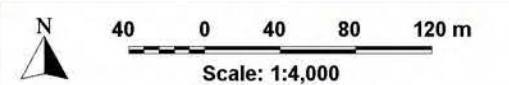
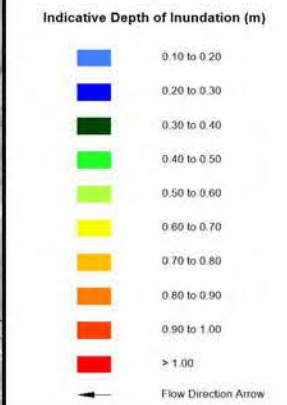
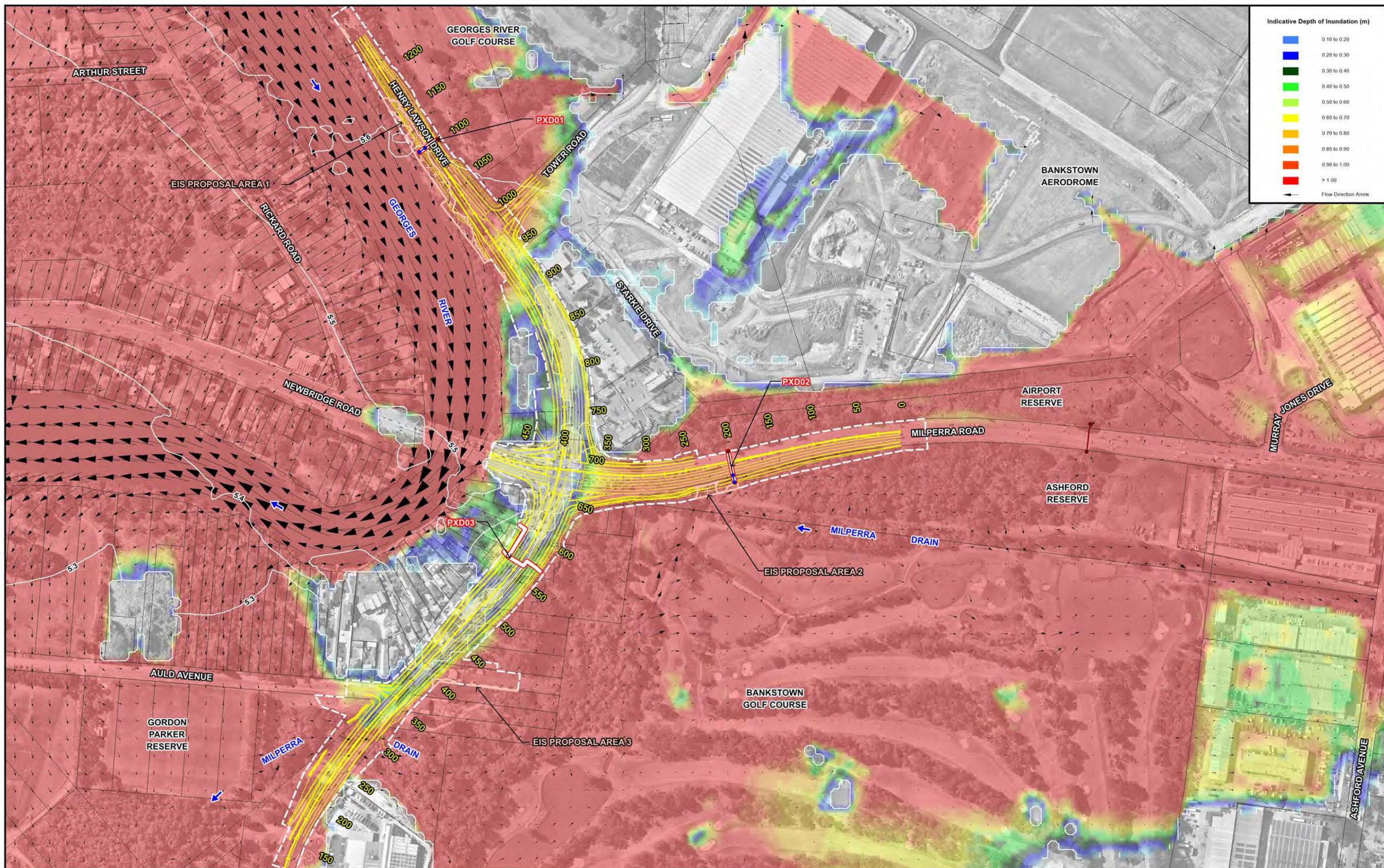
IMPACT OF PROJECT OPERATION ON FLOOD BEHAVIOUR
5% AEP GEORGES RIVER FLOOD EVENT

Scale: 1:15,000

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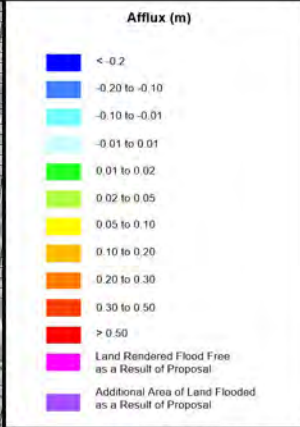
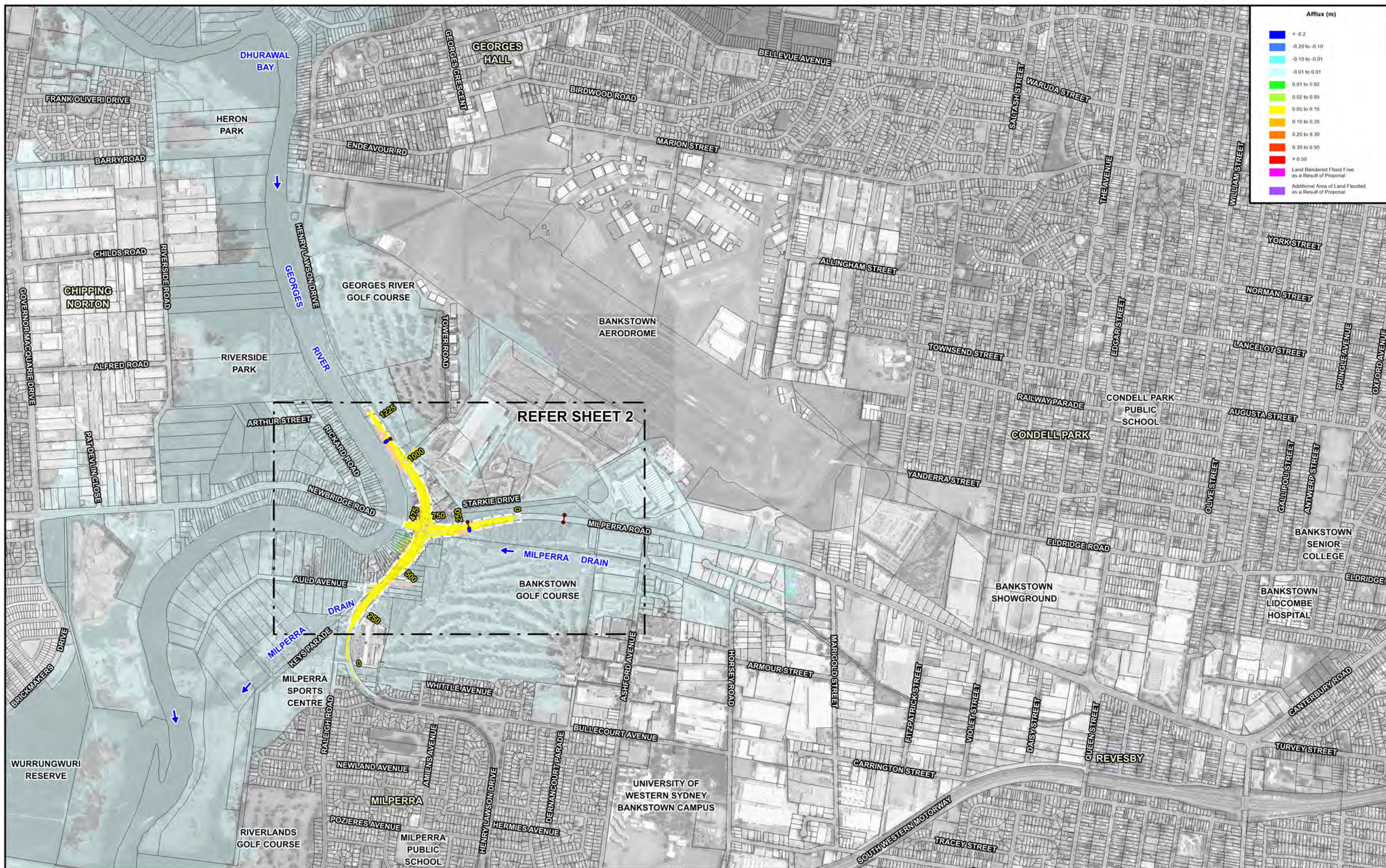
- Road Alignment and Chainage
- Road Design Strings
- Modelled Existing Stormwater Drainage Network to Remain
- Modelled Proposed Stormwater Drainage Network

- LEGEND**
- Overall Proposal Boundary
 - EIS Proposal Area
 - Water Surface Elevation Contours (m AHD)
 - Proposed Transverse Drainage Structure and Identifier

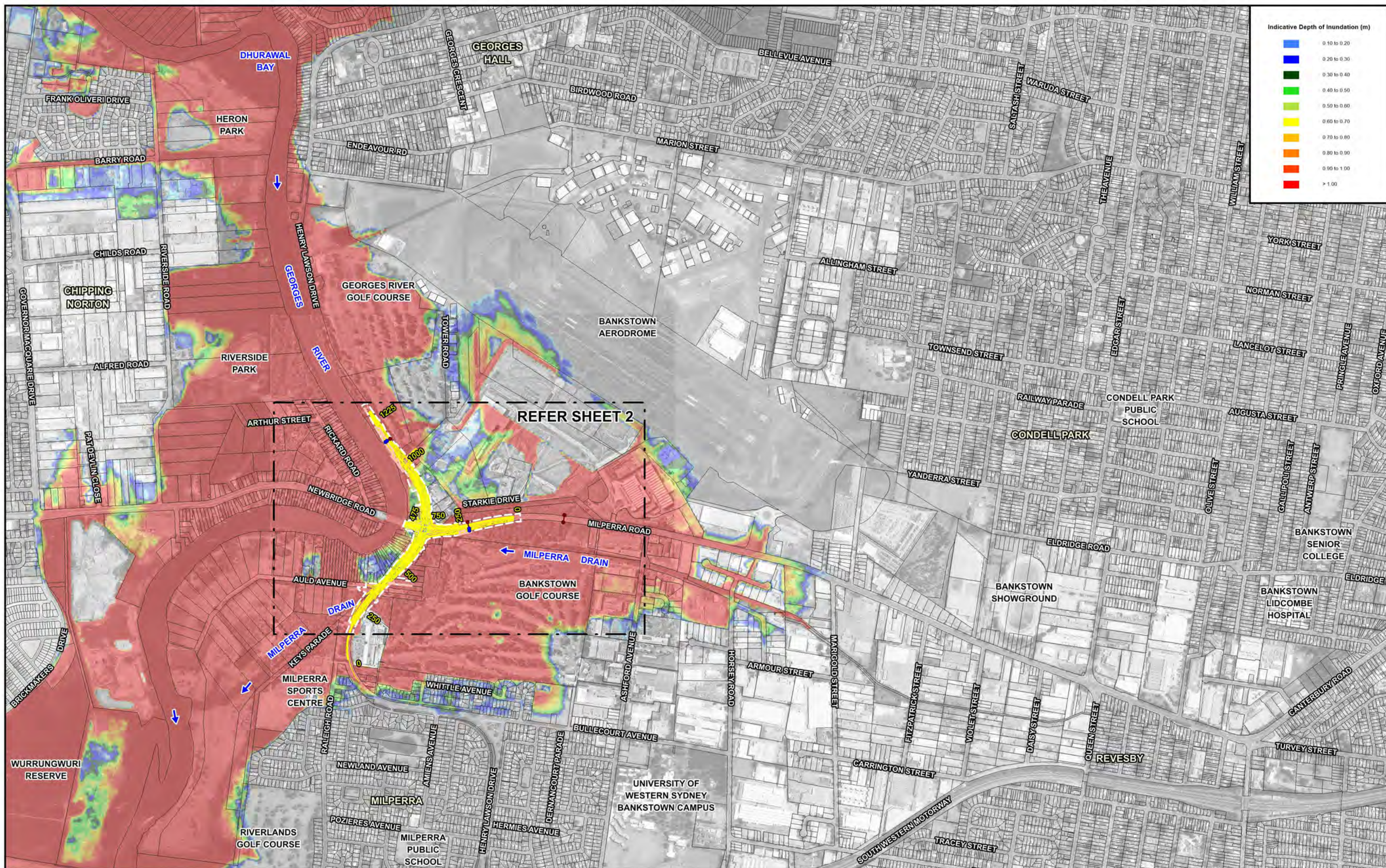
**HENRY LAWSON DRIVE UPGRADE STAGE 1A REF/EIS
ENVIRONMENTAL WORKING PAPER: FLOODING**

Figure A.18
(Sheet 2 of 2)

**PATTERNS OF MAIN STREAM FLOODING - OPERATIONAL CONDITIONS
2% AEP GEORGES RIVER FLOOD EVENT**







HENRY LAWSON DRIVE UPGRADE STAGE 1A REF/EIS ENVIRONMENTAL WORKING PAPER: FLOODING

Figure A.20
(Sheet 1 of 2)

PATTERNS OF MAIN STREAM FLOODING - OPERATIONAL CONDITIONS
0.5% AEP GEORGES RIVER FLOOD EVENT