

Appendix C

Design Conditions Flood Maps

C1 – Flood Level Change (Afflux) 39% AEP

C2 – Flood Level Change (Afflux) 10% AEP

C3 – Flood Level Change (Afflux) 1% AEP

C4 – Flood Level Change (Afflux) 1% AEP with climate change

C5 – Flood Velocity Change 39% AEP

C6 – Flood Velocity Change 10% AEP

C7 – Flood Velocity Change 1% AEP

C8 – Flood Velocity Change 1% AEP with climate change

C9 – Flood Duration Change 39% AEP

C10 – Flood Duration Change 10% AEP

C11 – Flood Duration Change 1% AEP

C12 – Flood Duration Change 1% AEP with climate change





Legend

- Rail Alignment
- Newell Hwy Upgrade
- Road Crossings
- Culverts
- Existing Bridges
- Property Boundaries
- Velocity $\leq 1\text{m/s}$

Percentage Change in Velocity:

- $\leq -20\%$
- $-20 - 20\%$
- $> 20\%$

For Information Only

	<p>1:25,000</p>		Date: 15/10/2018	<p>Inland Rail - Parkes to Narromine IFC - Cross Drainage Flood Impact Assessment Results</p> <p>Figure DE10VC1 10% AEP Percentage Change In Velocity - CH 450.00</p>
	<p>Coordinate system: GDA 1994 MGA Zone 55 Inset Aerial Source: NSW Six Map Scale ratio correct when printed at A3</p>		<p>Rev: A - For Information Only</p>	



Legend

- Rail Alignment
- Newell Hwy Upgrade
- Road Crossings
- Culverts
- Existing Bridges
- Property Boundaries
- Velocity <= 1m/s



Percentage Change in Velocity:

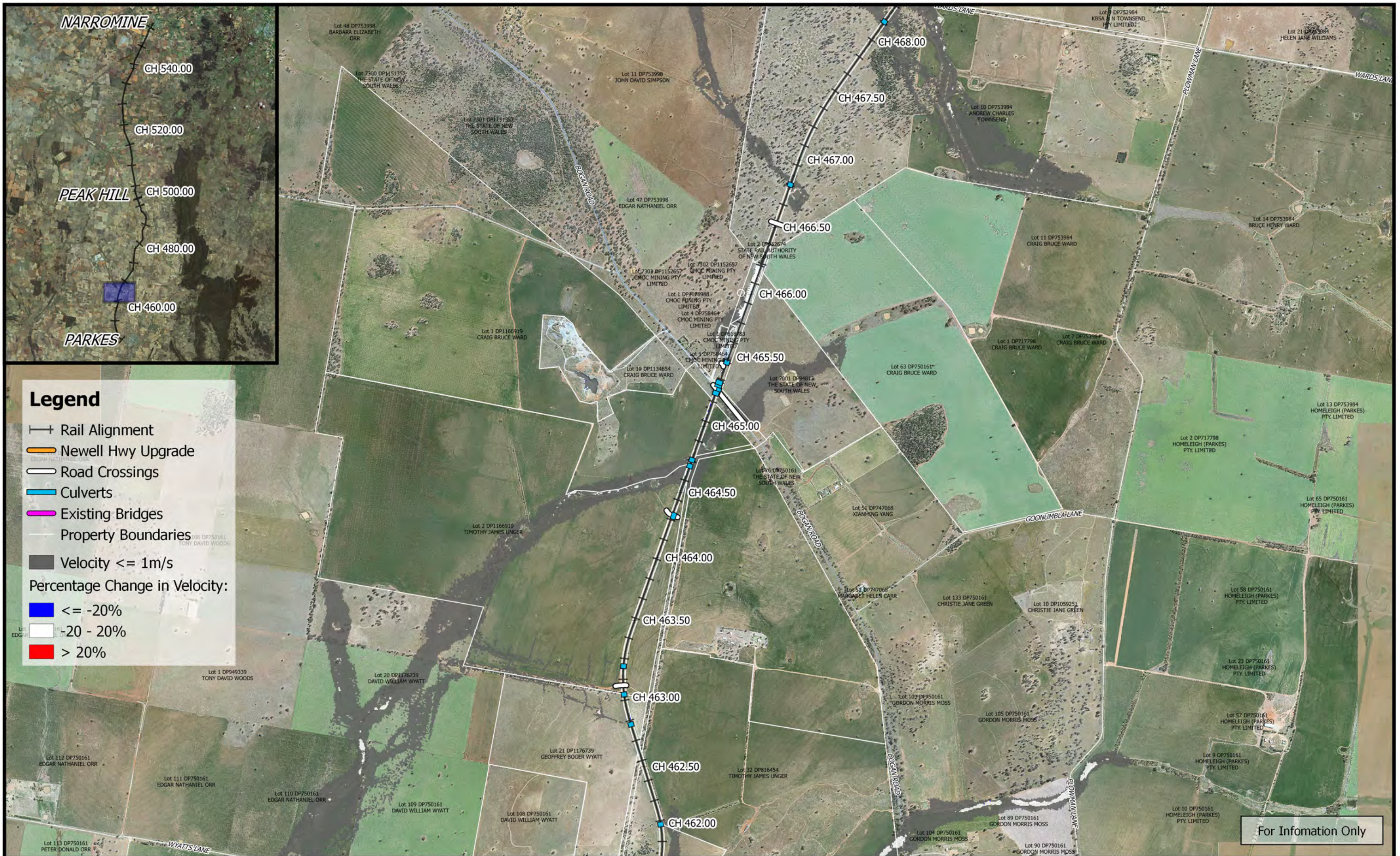
- <= -20%
- 20 - 20%
- > 20%

For Information Only

	 1:25,000		Date: 15/10/2018	<p style="text-align: center;">Inland Rail - Parkes to Narromine</p> <p style="text-align: center;">IFC - Cross Drainage Flood Impact Assessment Results</p> <p style="text-align: center;">Figure DE10VC2</p> <p style="text-align: center;">10% AEP Percentage Change In Velocity - CH 455.00</p>	
	Coordinate system: GDA 1994 MGA Zone 55 Inset Aerial Source: NSW Six Map Scale ratio correct when printed at A3		Rev: A - For Information Only		
			Prepared By: YeohM		



	0 250 500 750 1000 m 1:25,000 Coordinate system: GDA 1994 MGA Zone 55 Inset Aerial Source: NSW Six Map Scale ratio correct when printed at A3		Date: 15/10/2018	Inland Rail - Parkes to Narromine IFC - Cross Drainage Flood Impact Assessment Results Figure DE10VC3 10% AEP Percentage Change In Velocity - CH 460.00
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			Prepared By: YeohM	



Legend

- Rail Alignment
- Newell Hwy Upgrade
- Road Crossings
- Culverts
- Existing Bridges
- Property Boundaries
- Velocity $\leq 1\text{m/s}$

Percentage Change in Velocity:

- $\leq -20\%$
- $-20 - 20\%$
- $> 20\%$

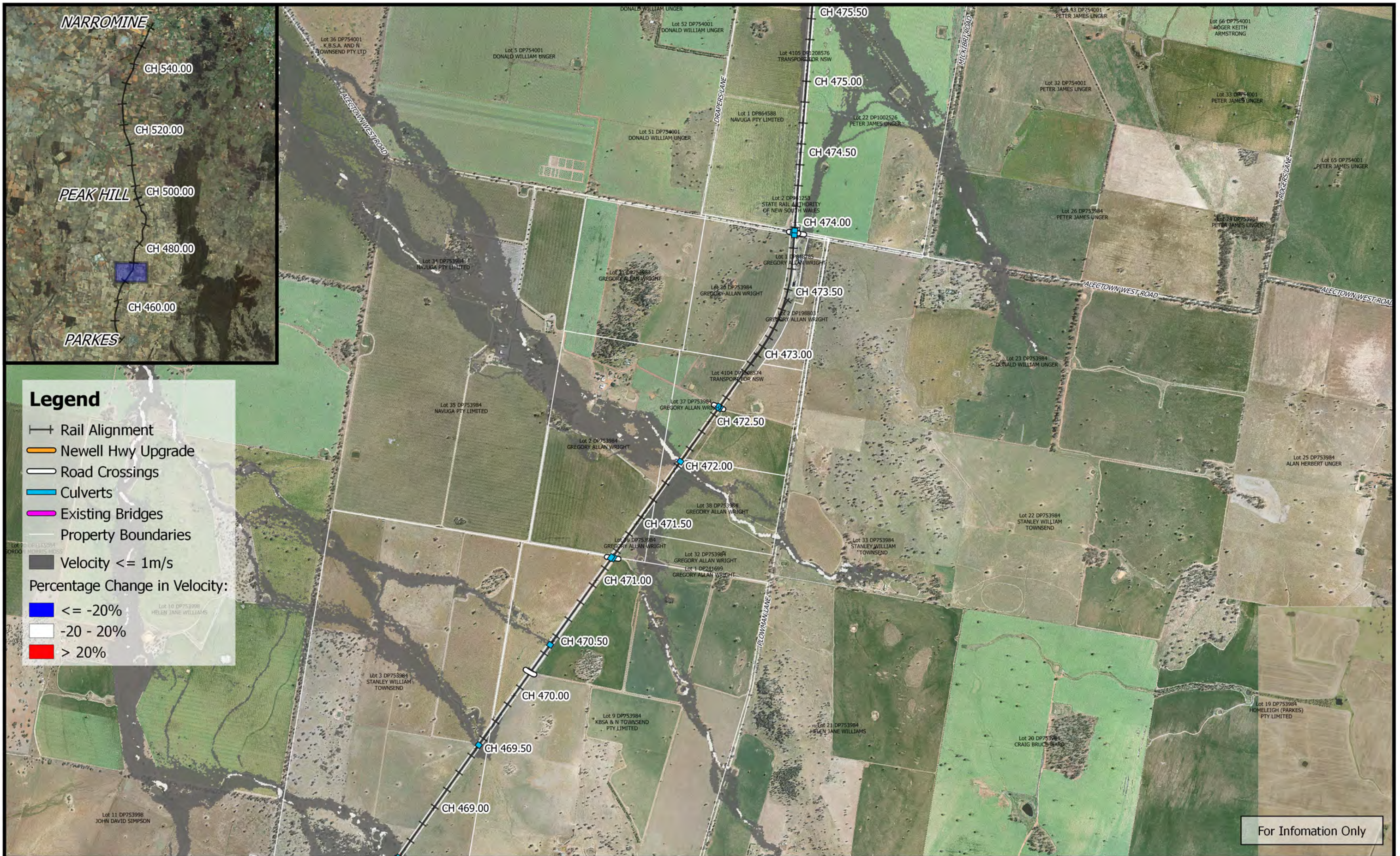
For Information Only


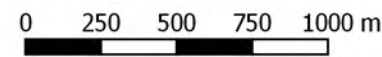

	<p>0 250 500 750 1000 m</p> <p>1:25,000</p>	 	Date: 15/10/2018	<p>Inland Rail - Parkes to Narromine</p> <p>IFC - Cross Drainage Flood Impact Assessment Results</p> <p>Figure DE10VC4</p> <p><i>10% AEP Percentage Change In Velocity - CH 465.00</i></p>
	<p>Coordinate system: GDA 1994 MGA Zone 55</p> <p>Inset Aerial Source: NSW Six Map</p> <p>Scale ratio correct when printed at A3</p>		<p>Rev: A - For Information Only</p>	

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			Date: 15/10/2018	Inland Rail - Parkes to Narromine IFC - Cross Drainage Flood Impact Assessment Results Figure DE10VC5 <i>10% AEP Percentage Change In Velocity - CH 470.00</i>
	1:25,000		Rev: A - For Information Only	
	Coordinate system: GDA 1994 MGA Zone 55 Inset Aerial Source: NSW Six Map Scale ratio correct when printed at A3		Prepared By: YeohM	



	 1:25,000		Date: 15/10/2018	Inland Rail - Parkes to Narromine IFC - Cross Drainage Flood Impact Assessment Results Figure DE10VC6 <i>10% AEP Percentage Change In Velocity - CH 472.00</i>
	Coordinate system: GDA 1994 MGA Zone 55 Inset Aerial Source: NSW Six Map Scale ratio correct when printed at A3		Rev: A - For Information Only	
	Prepared By: YeohM			



Legend

- Rail Alignment
- Newell Hwy Upgrade
- Road Crossings
- Culverts
- Existing Bridges
- Property Boundaries
- Velocity <= 1m/s

Percentage Change in Velocity:

- <= -20%
- 20 - 20%
- > 20%

For Information Only

	<p>0 250 500 750 1000 m</p> <p>1:25,000</p>	<p>M MOTT MACDONALD</p>	Date: 15/10/2018	<p>Inland Rail - Parkes to Narromine IFC - Cross Drainage Flood Impact Assessment Results</p>
	<p>Coordinate system: GDA 1994 MGA Zone 55 Inset Aerial Source: NSW Six Map Scale ratio correct when printed at A3</p>		<p>Rev: A - For Information Only</p>	
			Prepared By: YeohM	



Legend

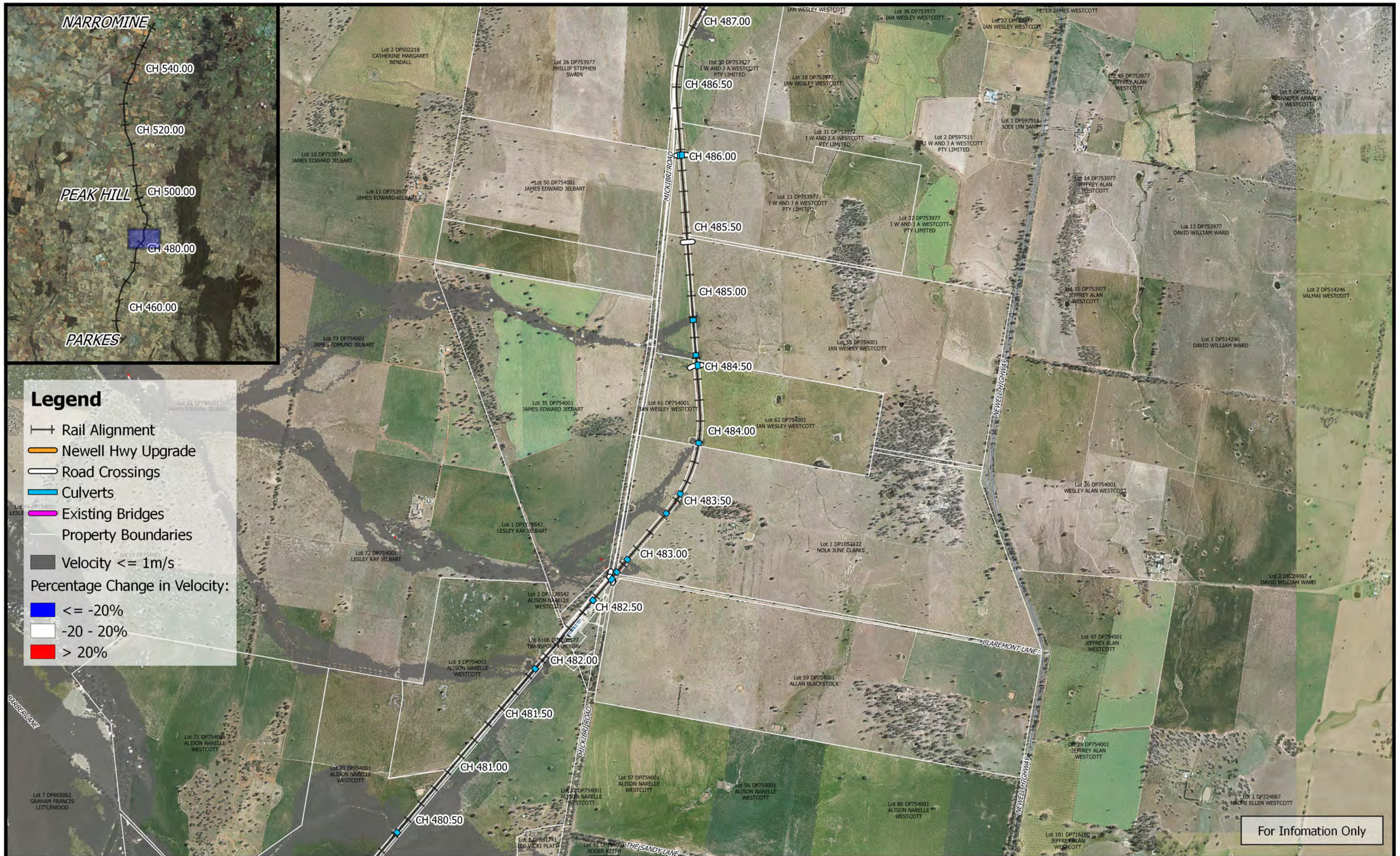
- Rail Alignment
- Newell Hwy Upgrade
- Road Crossings
- Culverts
- Existing Bridges
- Property Boundaries
- Velocity <= 1m/s



Percentage Change in Velocity:

- <= -20%
- 20 - 20%
- > 20%

For Information Only

			Date: 15/10/2018	<p style="text-align: center;">Inland Rail - Parkes to Narromine IFC - Cross Drainage Flood Impact Assessment Results</p> <p style="text-align: center;">Figure DE10VC8 <i>10% AEP Percentage Change In Velocity - CH 480.00</i></p>
	1:25,000		Rev: A - For Information Only	
	Coordinate system: GDA 1994 MGA Zone 55 Inset Aerial Source: NSW Six Map Scale ratio correct when printed at A3		Prepared By: YeohM	



	<p>0 250 500 750 1000 m</p> <p>1:25,000</p> <p>Coordinate system: GDA 1994 MGA Zone 55 Inset Aerial Source: NSW Six Map Scale ratio correct when printed at A3</p>		Date: 15/10/2018	<p>Inland Rail - Parkes to Narromine IFC - Cross Drainage Flood Impact Assessment Results</p> <p>Figure DE10VC9 10% AEP Percentage Change In Velocity - CH 485.00</p>
			Rev: A - For Information Only	
			Prepared By: YeohM	



Legend

- Rail Alignment
- Newell Hwy Upgrade
- Road Crossings
- Culverts
- Existing Bridges
- Property Boundaries
- Velocity <= 1m/s
- Percentage Change in Velocity:
 - <= -20%
 - 20 - 20%
 - > 20%

For Information Only

	<p>1:25,000</p>		Date: 15/10/2018	<p>Inland Rail - Parkes to Narromine IFC - Cross Drainage Flood Impact Assessment Results</p> <p>Figure DE10VC10 <i>10% AEP Percentage Change In Velocity - CH 490.00</i></p>
	Coordinate system: GDA 1994 MGA Zone 55 Inset Aerial Source: NSW Six Map Scale ratio correct when printed at A3		Rev: A - For Information Only	



Legend

- Rail Alignment
- Newell Hwy Upgrade
- Road Crossings
- Culverts
- Existing Bridges
- Property Boundaries
- Velocity <= 1m/s

Percentage Change in Velocity:

- <= -20%
- 20 - 20%
- > 20%

For Information Only

	<p>0 250 500 750 1000 m</p> <p>1:25,000</p> <p>Coordinate system: GDA 1994 MGA Zone 55 Inset Aerial Source: NSW Six Map Scale ratio correct when printed at A3</p>	<p>M M MOTT MACDONALD</p>	Date: 15/10/2018	<p>Inland Rail - Parkes to Narromine IFC - Cross Drainage Flood Impact Assessment Results</p> <p>Figure DE10VC11 <i>10% AEP Percentage Change In Velocity - CH 492.00</i></p>
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	Prepared By: YeohM			

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Legend

- Rail Alignment
- Newell Hwy Upgrade
- Road Crossings
- Culverts
- Existing Bridges
- Property Boundaries
- Velocity <= 1m/s

Percentage Change in Velocity:

- <= -20%
- 20 - 20%
- > 20%

For Information Only

	<p>0 250 500 750 1000 m</p> <p>1:25,000</p>		Date: 15/10/2018	<p>Inland Rail - Parkes to Narromine</p> <p>IFC - Cross Drainage Flood Impact Assessment Results</p> <p>Figure DE10VC12</p> <p><i>10% AEP Percentage Change In Velocity - CH 495.00</i></p>
	<p>Coordinate system: GDA 1994 MGA Zone 55 Inset Aerial Source: NSW Six Map Scale ratio correct when printed at A3</p>		<p>Rev: A - For Information Only</p>	



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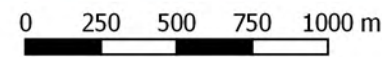

	<p>1:25,000</p> <p>Coordinate system: GDA 1994 MGA Zone 55 Inset Aerial Source: NSW Six Map Scale ratio correct when printed at A3</p>		Date: 15/10/2018	<p>Inland Rail - Parkes to Narromine IFC - Cross Drainage Flood Impact Assessment Results</p> <p>Figure DE10VC13 10% AEP Percentage Change In Velocity - CH 500.00</p>
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			Prepared By: YeohM	



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	<p>0 250 500 750 1000 m</p> <p>1:25,000</p> <p>Coordinate system: GDA 1994 MGA Zone 55 Inset Aerial Source: NSW Six Map Scale ratio correct when printed at A3</p>		Date: 15/10/2018	<p>Inland Rail - Parkes to Narromine IFC - Cross Drainage Flood Impact Assessment Results</p> <p>Figure DE10VC14 10% AEP Percentage Change In Velocity - CH 505.00</p>
			Rev: A - For Information Only	
			Prepared By: YeohM	



	 1:25,000 Coordinate system: GDA 1994 MGA Zone 55 Inset Aerial Source: NSW Six Map Scale ratio correct when printed at A3		Date: 15/10/2018 Rev: A - For Information Only Prepared By: YeohM	<p style="text-align: center;">Inland Rail - Parkes to Narromine IFC - Cross Drainage Flood Impact Assessment Results</p> <p style="text-align: center;">Figure DE10VC15 10% AEP Percentage Change In Velocity - CH 510.00</p>
	For Information Only			



Legend

- Rail Alignment
- Newell Hwy Upgrade
- Road Crossings
- Culverts
- Existing Bridges
- Property Boundaries
- Velocity $\leq 1\text{m/s}$

Percentage Change in Velocity:

- $\leq -20\%$
- $-20 - 20\%$
- $> 20\%$

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	 1:25,000	 	Date: 15/10/2018	Inland Rail - Parkes to Narromine IFC - Cross Drainage Flood Impact Assessment Results
	Coordinate system: GDA 1994 MGA Zone 55 Inset Aerial Source: NSW Six Map Scale ratio correct when printed at A3		Rev: A - For Information Only	
			Prepared By: YeohM	



Legend

- +— Rail Alignment
- Newell Hwy Upgrade
- Road Crossings
- Culverts
- Existing Bridges
- Property Boundaries
- Velocity <= 1m/s
- Percentage Change in Velocity:
- <= -20%
- -20 - 20%
- > 20%

For Information Only

	<p>1:25,000</p> <p>Coordinate system: GDA 1994 MGA Zone 55 Inset Aerial Source: NSW Six Map Scale ratio correct when printed at A3</p>		Date: 15/10/2018	<p>Inland Rail - Parkes to Narromine IFC - Cross Drainage Flood Impact Assessment Results</p> <p>Figure DE10VC17 <i>10% AEP Percentage Change In Velocity - CH 515.00</i></p>
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Legend

- Rail Alignment
- Newell Hwy Upgrade
- Road Crossings
- Culverts
- Existing Bridges
- Property Boundaries
- Velocity <= 1m/s

Percentage Change in Velocity:

- <= -20%
- 20 - 20%
- > 20%


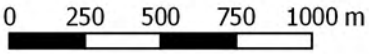

For Information Only

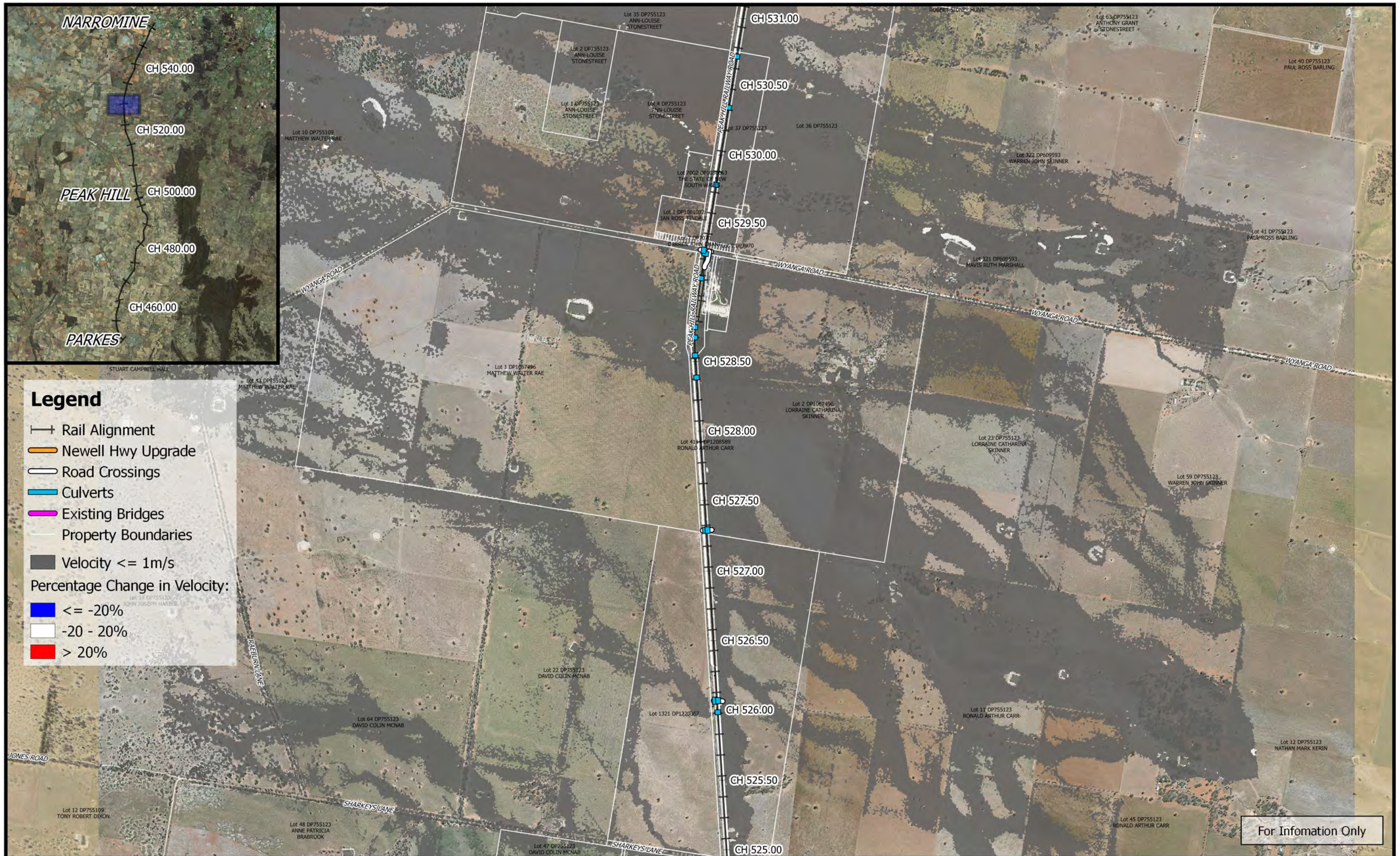
	<p>1:25,000</p>		Date: 15/10/2018	<p>Inland Rail - Parkes to Narromine IFC - Cross Drainage Flood Impact Assessment Results</p> <p>Figure DE10VC18 <i>10% AEP Percentage Change In Velocity - CH 520.00</i></p>	
	Coordinate system: GDA 1994 MGA Zone 55 Inset Aerial Source: NSW Six Map Scale ratio correct when printed at A3		Rev: A - For Information Only		
			Prepared By: YeohM		

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	 1:25,000 Coordinate system: GDA 1994 MGA Zone 55 Inset Aerial Source: NSW Six Map Scale ratio correct when printed at A3		Date: 15/10/2018	Inland Rail - Parkes to Narromine IFC - Cross Drainage Flood Impact Assessment Results Figure DE10VC19 <i>10% AEP Percentage Change In Velocity - CH 525.00</i>
			Rev: A - For Information Only	
			Prepared By: YeohM	



Legend

- Rail Alignment
- Newell Hwy Upgrade
- Road Crossings
- Culverts
- Existing Bridges
- Property Boundaries
- Velocity $\le 1\text{m/s}$
- Percentage Change in Velocity:
 - $\le -20\%$
 - $-20 - 20\%$
 - $> 20\%$

	<p>1:25,000</p>		Date: 15/10/2018	<p>Inland Rail - Parkes to Narromine IFC - Cross Drainage Flood Impact Assessment Results</p>
	Coordinate system: GDA 1994 MGA Zone 55 Inset Aerial Source: NSW Six Map Scale ratio correct when printed at A3		Rev: A - For Information Only	
			Prepared By: YeohM	



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	<p>0 250 500 750 1000 m</p> <p>1:25,000</p> <p>Coordinate system: GDA 1994 MGA Zone 55 Inset Aerial Source: NSW Six Map Scale ratio correct when printed at A3</p>		<p>Date: 15/10/2018</p>	<p>Inland Rail - Parkes to Narromine IFC - Cross Drainage Flood Impact Assessment Results</p> <p>Figure DE10VC21 10% AEP Percentage Change In Velocity - CH 533.00</p>
			<p>Rev: A - For Information Only</p>	
			<p>Prepared By: YeohM</p>	



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	<p>0 250 500 750 1000 m</p> <p>1:25,000</p> <p>Coordinate system: GDA 1994 MGA Zone 55 Inset Aerial Source: NSW Six Map Scale ratio correct when printed at A3</p>		Date: 15/10/2018	<p align="center">Inland Rail - Parkes to Narromine IFC - Cross Drainage Flood Impact Assessment Results</p> <p align="right">Figure DE10VC22 <i>10% AEP Percentage Change In Velocity - CH 535.00</i></p>
			Rev: A - For Information Only	
			Prepared By: YeohM	



Legend

- Rail Alignment
- Newell Hwy Upgrade
- Road Crossings
- Culverts
- Existing Bridges
- Property Boundaries
- Velocity $\le 1\text{m/s}$

Percentage Change in Velocity:


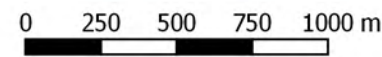

- $\le -20\%$
- $-20 - 20\%$
- $> 20\%$

For Information Only

	 1:25,000		Date: 15/10/2018	Inland Rail - Parkes to Narromine IFC - Cross Drainage Flood Impact Assessment Results Figure DE10VC23 <i>10% AEP Percentage Change In Velocity - CH 540.00</i>
	Rev: A - For Information Only			
	Prepared By: YeohM			


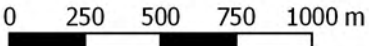



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	 1:25,000 Coordinate system: GDA 1994 MGA Zone 55 Inset Aerial Source: NSW Six Map Scale ratio correct when printed at A3		Date: 15/10/2018 Rev: A - For Information Only Prepared By: YeohM	<p align="center">Inland Rail - Parkes to Narromine IFC - Cross Drainage Flood Impact Assessment Results</p> <p align="center">Figure DE10VC24 10% AEP Percentage Change In Velocity - CH 545.00</p>
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	 1:25,000 Coordinate system: GDA 1994 MGA Zone 55 Inset Aerial Source: NSW Six Map Scale ratio correct when printed at A3		Date: 15/10/2018 Rev: A - For Information Only Prepared By: YeohM	<p align="center">Inland Rail - Parkes to Narromine IFC - Cross Drainage Flood Impact Assessment Results</p> <p align="center">Figure DE10VC25 10% AEP Percentage Change In Velocity - CH 550.00</p>
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