QUEENSLAND FLOODS COMMISSION OF INQUIRY

STATEMENT OF JOHN JAMES KERSNOVSKI

I, John James Kersnovski, Director of Infrastructure, South Burnett Regional Council make the following statement under oath as required by the Commissioner of Inquiry:

Details of any council infrastructure that was affected in the period of 1 December 2010 and 31 January 2011.

1. The flooding events of December 2010 & January 2011 resulted in considerable damage to South Burnett Regional Council infrastructure, detailed as follows:

Roads, Bridges and Culvert Infrastructure

A total of \$144.5 million was estimated in March 2011 as the cost of repairs to roads, bridge and culverts across the region.

A total of \$5.6 million was spent to 22 May 2011 in undertaking emergency works repairs to roads across the region.

Since this time detailed assessments have been completed and the Restoration Applications prepared and a more accurate estimate of damage is in the order of \$120 Million.

The road defects are as follows:

Bridge defects	17
Culvert defects	2,745
Floodway defects	97
Road defects	2,413
Total defects	5,272

Of these 5272 defects, 2100 are rated as significant.

It should be noted that ongoing damage is occurring to a number of roads in the South Burnett region as a result of moisture from the initial road inundation moving through the soil profile and causing pavement failures.

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Page 1 ۵ Reg.No.: 108766

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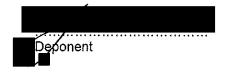
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Water Supply & Waste Water Infrastructure

Infrastructure	Estimate of cost of reconstructing or repair in \$ value
Railway Lane Nanango (sewer collapse)	158,000
George Street Nanango (sewer collapse)	175,000
River Road East Kingaroy (sewer collapse)	500,000
River Road West (sewer collapse)	523,000
Blackbutt (sewer collapse)	15,000
Haley to McKenzie Street (sewer collapse)	350,000
Murgon water supply pumps	130,000
Wondai Water supply pumps	75,000
Nanango WW TP (replace aerators & cabling)	115,000
Gordonbrook Dam (destratifiers repairs)	20,000
Kingaroy WWTP (replace equipment and irrigators)	10,000
Total	\$2,071,000

Parks & Reserves Infrastructure

Infrastructure	Estimate of cost of reconstructing or repair in \$
Memorial Park Kingaroy	value 34,500
Nanango Cycle Way	1,281.500
Butter Factory Park Nanango	109,396
Ficks Crossing (parks and equipment)	358,961



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Page 2

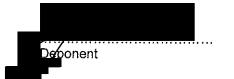
Total	\$1,990,459
Blackbutt to Linville Rail Trail	100,000
Gordonbrook Access Road	10,000
Booie Nature Reserve	1,500
Nanango Nature Reserve	1,500
Nanango Football Grounds	20,986
Nanango Soccer Grounds	24,870
Nanango Dog Off Leash Area	10,608
Nanango Civic Pool	2,188
Old Railway Bridge Nanango	2,310
Mt Stanley Park Nanango	1,540
Bjelke Petersen Dam Park	15,000
Pioneer Park Nanango	15,600

Other Infrastructure

Infrastructure	Estimate of cost of reconstructing or repair in \$ value 10,000
Nanango Cemetery	
Kingaroy Landfill	8,000
Wondai Landfill	1,500
Total	\$19,500

Page 3

TOTAL ESTIMATED DAMAGE TO ALL INFRASTRUCTURE: \$124 Million



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Details of any flood mitigation infrastructure (for example flood detention basins, storm water culverts, back flood devices) in the council's area including a description of the maintenance programs for such infrastructure.

- 2. As I have only been in this position for just over 12 months I have had to rely on file documentation and advice from existing and previous staff as to flood mitigation infrastructure across the region.
- 3. There is no specific flood mitigation infrastructure in the former shire areas of Murgon, Wondai and Nanango.
- 4. Flood Mitigation infrastructure was constructed by the Kingaroy Shire Council in the 1980s in the lower part of Kingaroy township and then in the 1990s to alleviate flooding in the western and northern sections of the town.

Details of these structures are as follows:

(i) Kingaroy Mitigation and Underground Drainage Scheme (completed 1985);

The Kingaroy Flood Mitigation Scheme consists of:

- a major open channel between Kingaroy Street and the Bunya Highway/Youngman Street,
- two major culvert crossings of the channel at Kingaroy Street and River Road
- > a major sewer siphon system to allow sewerage to pass from the eastern to western sides of the channel in River Road.

The channel was designed to cater for Q10 flood/stormwater flows and this was based on previously recorded damage estimates and the funding capacity of the Kingaroy Shire Council when the infrastructure was constructed. However, the decision in the design stage to include a larger than normal freeboard in the channel means that the capacity of the scheme is estimated to be in the order of Q50 immunity.

The Underground Drainage Scheme included systems in Oliver Street, Youngman Street, Glendon Street and Kingaroy Street. Copies of the two planning reports for this project are attached.

(ii) Kingaroy North Drainage Scheme:

The Kingaroy North Drainage Strategy Report was completed in 1997.

The Kingaroy Shire Council adopted the report for planning purposes and three of the recommended items were undertaken ie

- the upgraded open channel between Belle Street and Haly Street
- the upgraded Haly Street culvert
- the Haly Street Underground Drainage System

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Page 4

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- In addition to the Flood Mitigation Infrastructure in the Kingaroy township there are a 5. considerable number of small stormwater drainage systems that have been constructed as part of subdivision developments over the last thirty years.
- 6. The town of Kingaroy is covered by two stormwater catchments and this is accounted for in the flood mitigation infrastructure that has been constructed. As further developments occur, stormwater drainage infrastructure will be constructed and any modifications to existing downstream infrastructure undertaken.
- 7. It should be noted that there are two stormwater detention basins included in the stormwater drainage systems for the Hillview Estate development in the northern section of Kingaroy. These detention basins have a design capacity of Q100. They are not considered to be flood mitigation infrastructure but rather as controlling stormwater flows from the development. In view of the rainfall events that occurred in December 2010 and January 2011 and particularly the fact that greater than Q100 events do occur, investigations as to either increasing the capacity of the basins or providing upgraded overland flow paths away from residential areas to accommodate greater than Q100 flood/storm events are being undertaken.

A copy of the Kingaroy North Drainage strategy Report April 1997 is provided.

Details of the storm water design capacity and urban run-off capacity, sewerage design capacity and the most recent review of these capacities including details of any plans to upgrade.

Stormwater Drainage

- All stormwater drainage infrastructure installed over the last 3 years or currently being planned 8. has been designed in accordance with the Queensland Urban Drainage Manual Volumes 1 & 2 (2nd Edition) the AUSTROADS Guide to Road Design (Part 5) Drainage Design and the Queensland Urban Road Design Volume 2. This is in accordance with the standards set out in the existing Murgon, Kingaroy, Wondai and Nanango Planning Schemes.
- 9. Stormwater drainage infrastructure constructed prior to the amalgamation of the Murgon, Wondai, Kingaroy and Nanango Shires and the implementation of the planning schemes for all four shires was generally in accordance with design standards recognised within Local Government at the time. This was as indicated above as the Queensland Urban Drainage Manual, AUSTROADS Standards and Department of Transport and Main Roads Standards.
- 10. It should be noted that design standards have changed considerably in the last thirty years and in particular in the estimation of stormwater run-off. It is noted recent changes to the estimating of stormwater runoff has meant that the design capacity of infrastructure is now less than originally estimated.

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- General Road Standards in the 1970s included: 11.
 - Crossroad Drainage Q2 Storm Event
 - Main Roads Major Culvert Design Q50 Storm Event

Page 5 Reg.No.: 108768 Solicitor / Justice of the Peace / Commissioner for Declarations

Water and Waste Water

- 12. Current standards used in the design of water and waste water infrastructure are the Water Services Association of Australia Codes, including:-
 - > Water Supply Code of Australia 2002
 - Sewerage Pumping Station Code of Australia 2005
 - Sewerage Code of Australia (2002)
- 13. Prior to the use of WSAA Codes, the Planning Guidelines for Water Supply and Sewerage (March 2005) provided by the Queensland Department of Natural Resource Management were used.
- 14. The Planning and Design of Sewerage Services Volume 1 & 2 (October 1991) by the Queensland Water Resources Commission/Department of Primary Industries were used prior to 2005.
- 15. In addition to all of the above, Council has previously and continues to use the Institute of Public Works Engineering Australia Standard Plans for specifying works for roads, water and waste water infrastructure.

Sworn by John James Kersnovski at presence of:	NANANGO	this /61/ day of September 2011 in the
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