

Fact Sheet

Gin Gin Local Drainage Upgrades – Proposed Elliott St Drainage Works

Description of existing issue

As indicated by the results of the local flooding assessment contained in the Kolan River and Gin Gin Creek Flood Study (GHD, 2014), properties on Elliott Street between Campbell Street and Mill Street have the potential to experience overland flow flooding following very intense rainfall.

A steep, largely undeveloped catchment conveys surface runoff to the existing 1.2 m diameter pipe under the irrigation channel near the corner of Elliott Street and Mill Street. When this flow exceeds the capacity of the existing table drain on the northern side of Elliott Street, it overtops Elliott Street and enters private property on the southern side of the road as overland flow.

In the 1% AEP flood event, this overland flow has a maximum depth of 0.6 m (average depth of approximately 0.5 m), and a maximum velocity of 1.1 m/s (average velocity of approximately 0.6 – 0.7 m/s). The flooding within these private properties is classified as “low hazard” with respect to the QRA flood hazard categories outlined in the Kolan River and Gin Gin Creek Flood Study (GHD 2014).

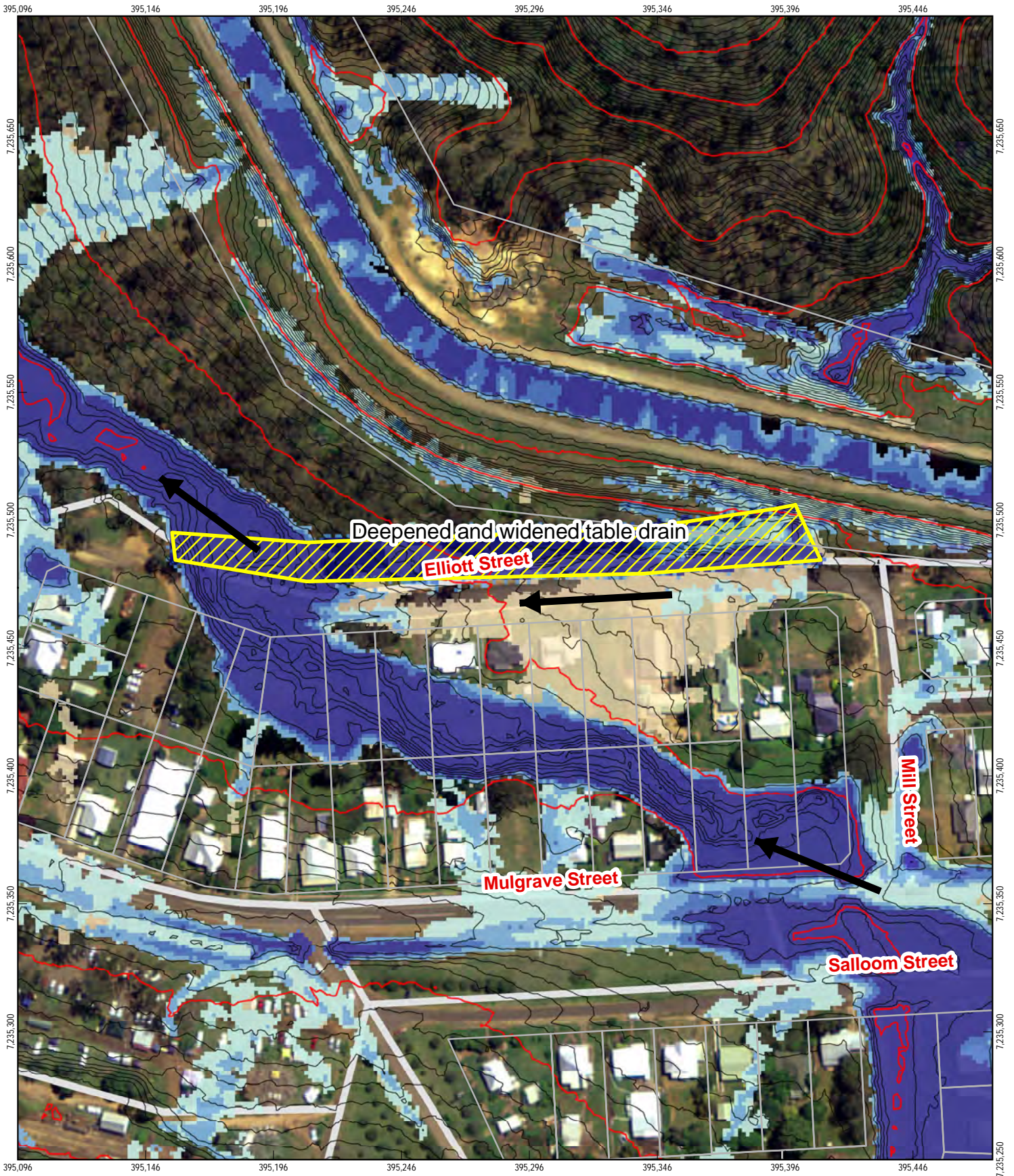
Proposed drainage improvements

The conceptual upgrade shown on the following page indicates the approximate extent of a deepened and widened table drain on the northern side of Elliott Street. The upgraded drain has a depth of approximately 1 to 1.5 m and a width of approximately 10 m. The conceptual design includes batter slopes of 1 in 3, but this will need to be confirmed during detailed design with due consideration given to bank stability. Scour protection works will need to be constructed at the outlet of the existing 1.2 m diameter stormwater pipe, and where the proposed drain joins the existing waterway to the west.

Where to from here?

A component of the Floodplain Risk Management Study is to highlight drainage investigation areas for Council consideration. This local drainage area will be reviewed as part of Councils future capital works program for major drainage upgrades. Part of this review includes a merit based assessment and prioritisation against other drainage projects in the region for Council to consider in future budgets. Further detailed design work would then be required to refine and optimise any upgrade.





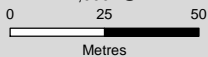
LEGEND

- Road
- Contour
- Index Contour
- Flow Direction
- Property Boundary
- Proposed Drainage
- Upgrade
- Pre-Upgrade 1% AEP Overland Flow Extent (60-Minute Duration)

Post-Upgrade 1% AEP Overland Flow Extent (60-Minute Duration)

- 0 - 0.1
- 0.1 - 0.2
- 0.2 - 0.3
- > 0.3

1:2,000 @A4



Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56



Bundaberg Regional Council
Kolan River and Gin Gin Creek
Floodplain Risk Management Study

Job Number | 41-27710
Revision | A
Date | 15 Jul 2014

**Proposed Elliott Street
Drainage Works**