

The Importance of Adequate Development Compliance from an Asset Managers Perspective



Problems Facing Asset Managers

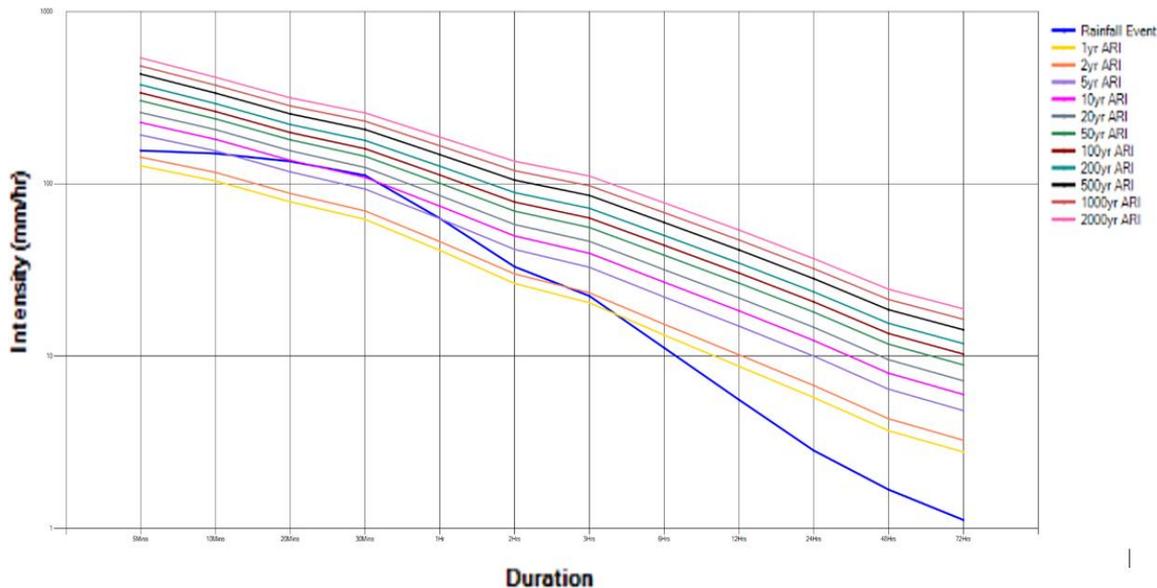
- Increasing population = increased developments
- Sunshine Coast Council (SCC) received \$64M stormwater assets in 2017 (\$32M in 2016)
- \$1.3B worth of stormwater assets
- Stormwater assets prove difficult to identify faults during development
- Numerous complaints regarding recent off-maintenance assets
- Operational, maintenance and capital budget considerations
- Prioritising capital works (failing assets vs requests for upgrades)

Case Study

Property damage believed to be caused by
insufficient drainage infrastructure

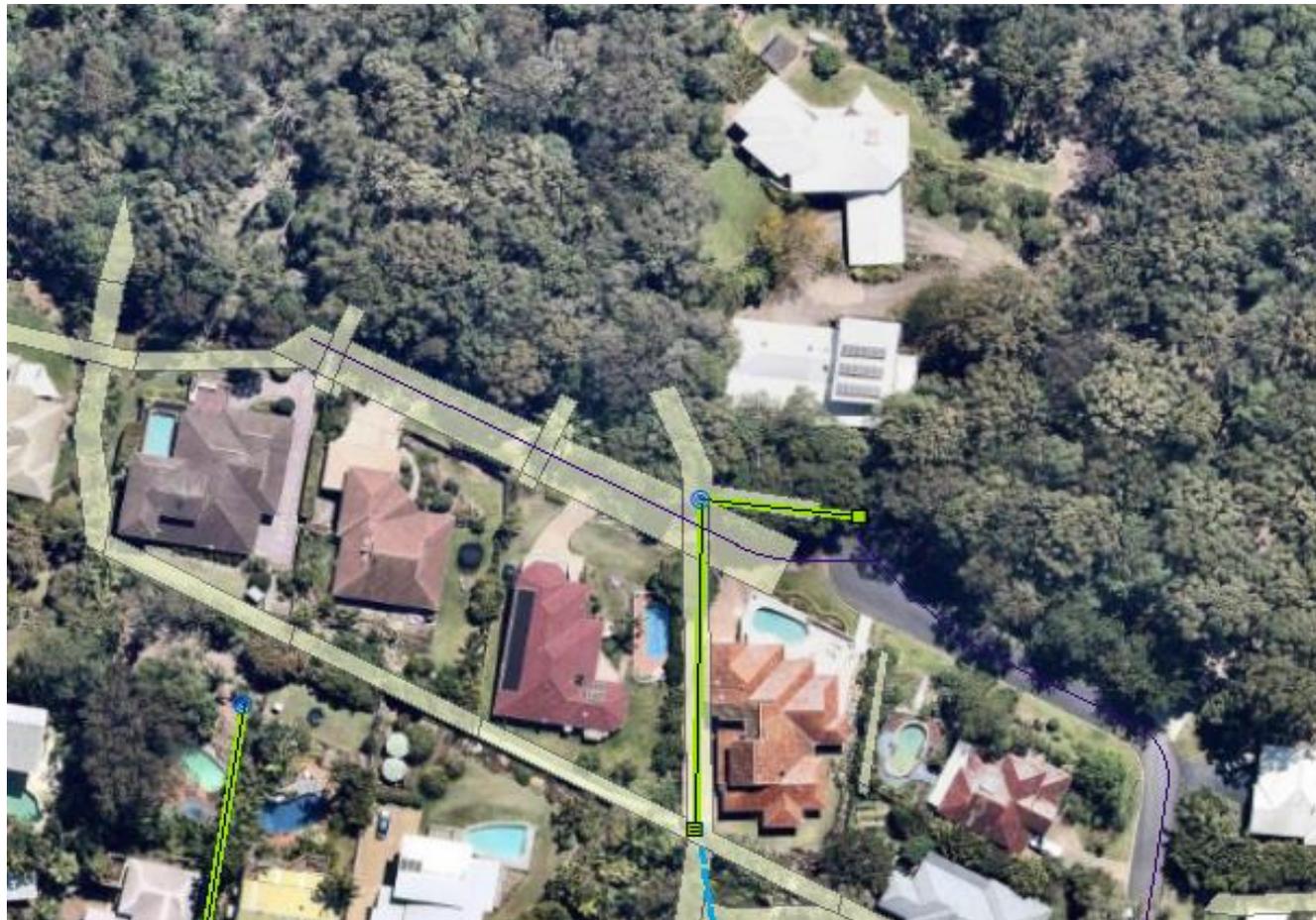
Situation

- The Sunshine Coast experienced constant rain early December 2017
- >100 complaints in December regarding drainage



TARDIS rainfall station Intensity Frequency Duration (IFD) chart

Site Layout



- Easement
- Pipe
- CatchPit
- Stormwater End Structure
- Stormwater Open Drain

Customer's Concerns



Slope of Road



Cul de sac



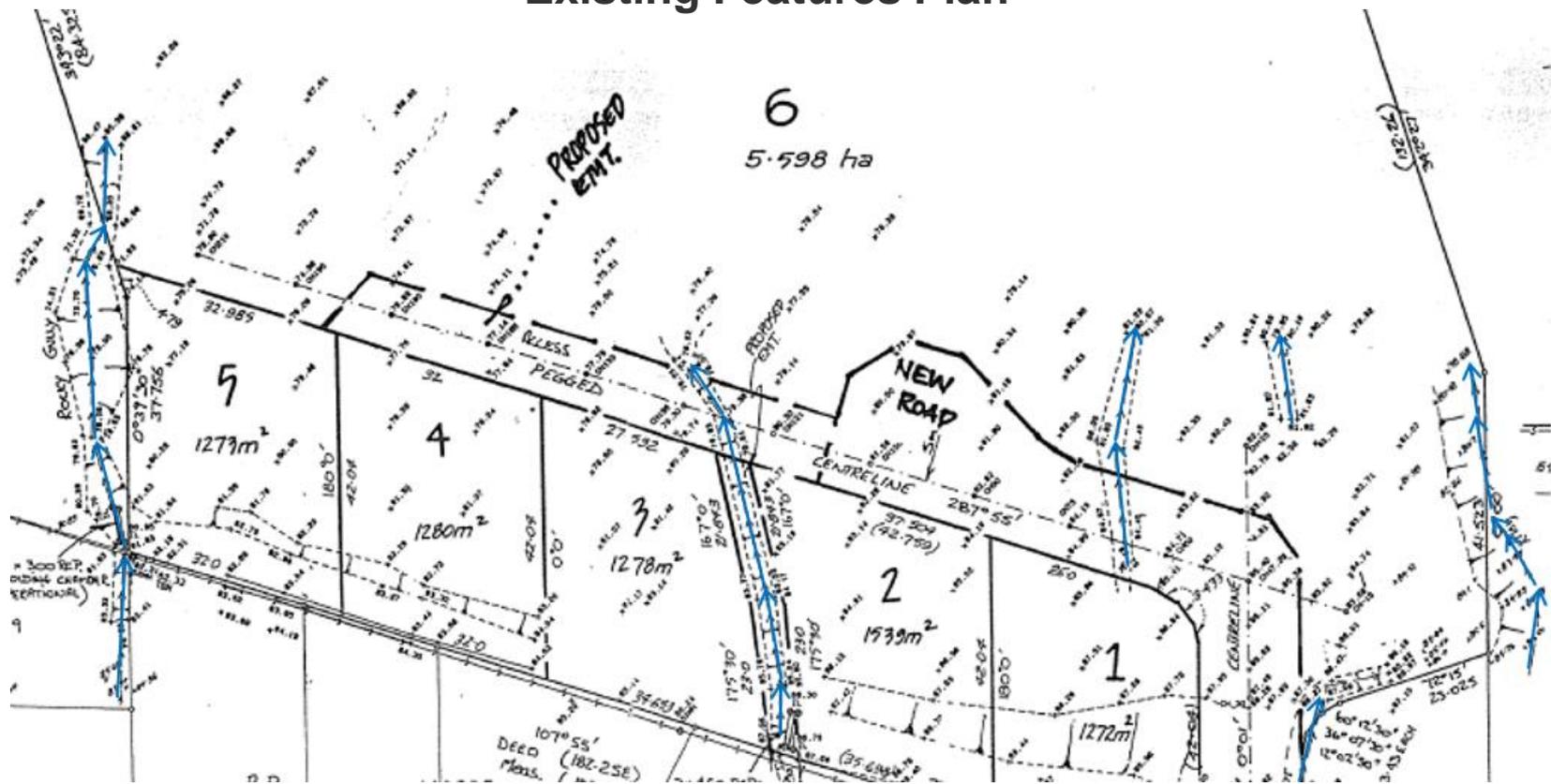
Shared Driveway



Outcome of Site Investigation



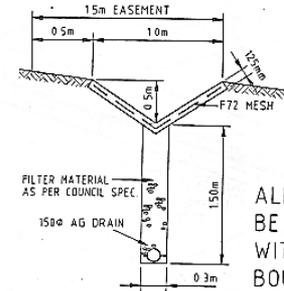
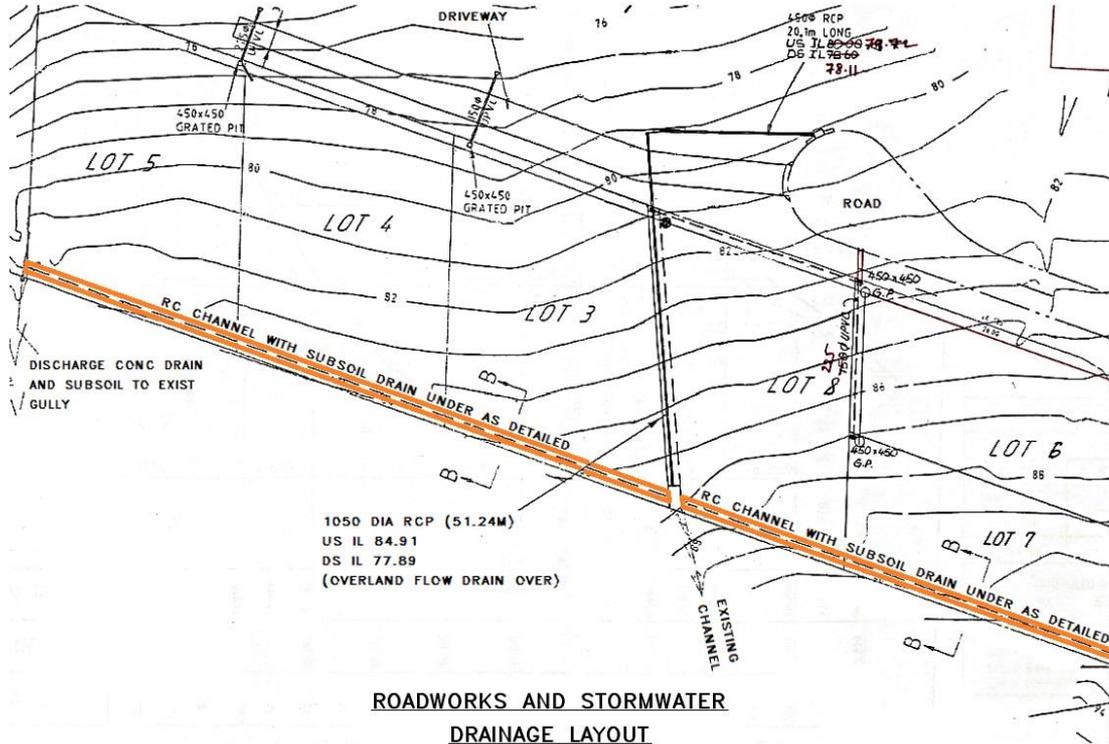
Existing Features Plan



With reference to your letter dated I wish to advise that Condition has now been deleted from Permit to Subdivide

However, if problems arise with discharge of stormwater in future Council may require the applicant to provide the relevant stormwater easement without the costs of compensation being incurred by Council.

As Constructed Civil Works Plan



ALL DRAINS TO BE CONSTRUCTED WITHIN EASEMENT BOUNDARIES

DRAIN SECTION 'B - B'

SCALE 1:20
SURFACE CONC DRAIN WITH
SUBSOIL DRAIN UNDER

ROADWORKS AND STORMWATER DRAINAGE LAYOUT

Desktop investigation

- Current subdivision application with drainage conditions
- Historical complaints from customer and surrounding properties
- Aerial imagery doesn't show evidence of "concrete v-drain"
- Street View demonstrates condition of driveway prior to storm event



Sunshine Coast Council 2000 aerial image (Sunshine Coast Council, 2018)



Google Street view image of customer's driveway (Google Maps, 2018)

Outcome of Investigation

- Customers are original developers
- Shared driveway had no reinforcing and damaged
- Main driveway had no freeboard and in poor condition
- Unknown whether inter-allotment concrete v-drain was installed during development. (Council has since completed rectification works)
- Customer experiencing stormwater problems where easement was originally conditioned
- Customers have current development application with drainage conditions
- Customer advised council will not undertake drainage improvement works
- All information regarding investigation has been recorded against the property

Lessons Learnt

- Don't make default assumptions; channel your inner 'forensic analyst'
- Background research and scrutiny of original development information can answer questions
- Develop asset managers with knowledge and skills to not only manage assets but to apply other specialist skills
- Asset managers should have an understanding of development process so they can understand why decisions were made, what was involved, what were the prevailing design standard and what complaints or enquiries were made
- Store details regarding the process and findings of an investigation

Future Improvement

- Close the gap in handover process of contributed assets between development team and asset managers.
- Improve ADAC processes so mapping matches the as-built plans. This will possibly save time and/or eliminate the need to find and review original development information
- Consider the creation of an incident register. This will become a single point of truth for asset managers to either refer to or check for follow-up actions/conclusions



**Thank you &
Questions?**





References

Google Maps. (2018). *Google Maps*. Viewed 19 September 2018.
<<https://www.google.com.au/maps>>

Sunshine Coast Council. (2018). *Sunshine Coast Mapping – MyMaps*. Viewed 19 September 2018.
<<http://maps.sunshinecoast.qld.gov.au/maplet/?config=config/mymaps/myplace/undergroundservices.xml>>