

Acting General Manager & Councillors
Glamorgan Spring Bay Council
Triabunna TASMANIA 7190

SA 2020-09 Subdivision of 66 Alma Road into 11 lots

Representation to Glamorgan Spring Bay Council from

Dear Sir/Madam

We refer to the application above as advertised in the Mercury newspaper on 29th July 2020, and make this representation opposing the development as presented in the available documentation, mainly on the basis that it would put further unacceptable pressure on the already overloaded Alma Road and Holkham Court storm water system. The recent approval of the 54 Holkham Court subdivision will no doubt be similarly contribute to these issues. Further volumes will have serious consequences.

The proposed subdivision is also out of character from that which exists on the western side of Alma Road.

Our property, and that of several of our neighbours, has recently been subjected to flooding causing many thousands of dollars damage. The latest being on the 2nd April 2020. This has been due to the inadequate infrastructure in Holkham Court and beyond to the storm water outlet at Raspin's Beach. As a result we, along with our long suffering neighbours, are anxious try to ensure additional developments do not add to the existing problems.

The GSB Council commissioned a study to model existing and future conditions of storm water flows to establish an appropriate pattern of development and an infrastructure plan. This resulted in the "**Holkham Court Storm Water Assessment**" (**HCSWA**) (*Anna Wilson, Brighton Council – October 2018*). This report highlighted the serious flooding issues especially in the lower areas of the catchment. None of the recommendations of the report have been carried out to date.

We make the following observations relative to the published documents:

1. The proposal contains no mention of the above **HCSWA** and the issues it highlighted or the effect this proposal would have on the already overloaded storm water system in the area. The documents totally disregard the observations of this report and the effect on the downstream residents in Holkham Court. In addition, the data upon which the flows have been calculated (ARR 2016) are known to have a relative accuracy within +/- 50% of the true flow values, and in some of cases the error may be exceeded by a factor of two or more. This has been amply demonstrated during our many recent flood events in less than twenty years!
2. There appears to be a miscalculation on the provided subdivision plan which shows the storm water paths for blocks 1, 2, 4 & 5 emptying into the detention pond. It is believed the geological contours would require these unassisted flows to defy gravity!
3. As shown in the hydrology report, the additional run-off created by this proposal is substantial. The claimed flows are calculated to go from 41 L/sec undeveloped, to 110 L/sec developed for a 5% AEP which is an increase of around 168%! A similar escalation is apparent for flows in a 1% AEP event, shown as increasing from 61 L/sec to 164 L/sec developed (+168%). The detention pond is admitted to be of limited value to attenuate rain events lasting more than 10 minutes and will be virtually useless after 30 minutes. The increases shown would create considerable issues for down-stream residents.
4. Whilst it is not necessarily within the remit of the developer to consider downstream effects of their proposal and its increased flows on the infrastructure, **it is the Council's responsibility to do so**. This deliberation should include reference to all available information - not just that included by the proposer. The opinions, evidence and issues raised by local residents are of paramount importance. There are many storm water issues around the Orford area which have been exacerbated by unfortunate approval of improperly researched development proposals. We don't need another one.

5. Council should also be mindful of the scientifically accepted concept of sea level rise and its consequences. (Reference is made to the “*GSBC Corporate Adaption Plan of April 2012*”) Storm surge and tidal level dramatically influence the ability of storm water to escape to the sea at Raspin’s Beach regardless of the size of the culvert under the Tasman Highway. This problem cannot be solved by larger pipes and drainage ditches.
6. The photograph below shows Holkham Court during an event in January 2016, which graphically depicts the inadequacy of the Alma Road and Holkham Court storm water infrastructure. The “creek” into which the proposed subdivision storm water would flow, is just beyond the paling fence in the foreground and has been beyond capacity for many years. **The flows over the paddocks in the middle distance have inundated the area of the proposed subdivision, exactly as predicted in Figure 1 on page 6 of the “Holkham Court Stormwater Assessment”. These conditions are not 5% or 1% storm events being much more regular in spite of our long dry spells.**



7. The following photo was taken of the lower part of Holkham Court on the 2nd April 2020, after the maximum flows had subsided. There was severe damage to several of the homes on the right and also to the Caravan Park. Our driveway was washed away for the second time in four years. The engineers will say these events are 5% or once in twenty year floods, but this has now occurred three times in the last eleven years!



It is recommended that Councillors come to the area, view the problems for themselves, and discuss the issues with affected ratepayers (voters) rather than make cursory desk top decisions purely based on the biased information provided by the developer.

Yours sincerely

31st July 2020

RECEIVED
11 AUG 2020

BY:

11/8/20

THE ACTING GENERAL MANAGER
G.S.B.C

RE: SA 2020/009 66 ALMA RS.

I WISH TO LODGE A REPRESENTATION OF OBJECTION TO
THE ABOVE DEVELOPMENT APPLICATION ON THE FOLLOWING GROUNDS.

1. THE EXTENDED SIZE OF THE CREEK WITHIN THE SUBDIVISION WILL ALLOW A GREATER FLOW TO EXIT AT THE BOUNDARY INTO A POORLY DEFINED, SHALLOW AND NARROW CHANNEL CAUSING WATER TO IMPACT AT AN INCREASED LEVEL AND SPEED INTO MY PROPERTY.
2. STORMWATER DRAINAGE FROM LOTS 1-4 AND EVEN LOT 5 IS EXPECTED TO DEFY GRAVITY AND RUN UPHILL TO THE CREEK
3. THE HYDROLOGY AND STORMWATER DRAINAGE DESIGN IS FLAWED, WITH THE FIGURES QUOTED NOT IN LINE WITH THOSE EXPERIENCED ON THE LAST MAJOR RAIN EVENT (2ND APRIL 2020) WHERE WE RECEIVED 65MM BETWEEN 10:00 AM AND 3 PM AND THEN 50MM BETWEEN 3 PM AND 8 PM. AT THIS TIME IT WAS EVIDENT THAT SEVERE FLOODING WAS OCCURRING. ON 4TH AUGUST WE RECEIVED 18MM BETWEEN 5 PM - 9 PM AND THEN A FURTHER 44MM BETWEEN 9 PM - 7 AM ON 5TH AUGUST. THE EVENT OF 2ND APRIL CAUSED OVER \$20,000 DAMAGE TO MY PROPERTY (NOT ALL COVERED BY INSURANCE) AND ON 4TH AND 5TH AUGUST ABOUT \$500-00 DAMAGE NOT COVERED BY INSURANCE.

SINCE 2009 I HAVE BEEN AFFECTED BY AT LEAST 6
FLOOD EVENTS. ANY ADDITIONAL STORMWATER FLOW WILL
OBVIOUSLY IMPACT MY PROPERTY ON A MORE REGULAR BASIS.

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4. SECTION 3.2 (3) OF STORMWATER DESIGN REPORT SUGGESTS A DETENTION / STORAGE INFILTRATION POND WITH A SURFACE AREA OF 100 M² — THIS WILL HOLD ONLY 27000 LITRES OF STORMWATER FROM THE 11 LOTS AT AN AVERAGE OF LESS THAN 2500 LITRES PER LOT. THIS IS A GROSS UNDERESTIMATION AND THERE IS NO MENTION OF STORAGE TANKS REQUIRED FOR EACH PROPERTY.
5. THIS IS AN INAPPROPRIATE DEVELOPMENT AT THIS STAGE AS COUNCIL HAS RECENTLY COMMISSIONED A STORMWATER MANAGEMENT PLAN WHICH IS ONLY IN THE EARLY STAGES AND NO DECISION SHOULD BE MADE ON THIS DEVELOPMENT UNTIL THE REPORT IS COMPLETED AND PRESENTED TO COUNCIL.
6. COUNCIL HAS AN OBLIGATION TO PROVIDE SUITABLE INFRASTRUCTURE TO ENABLE ITS RATEPAYERS TO ENJOY THE AMENITY OF THEIR PROPERTIES WITHOUT FEAR OF BEING IMPACTED BY STORMWATER FROM INAPPROPRIATE OPEN DRAINS AND CULVERTS
7. IT IS ESSENTIAL THAT COUNCIL ENSURES THAT AN INDEPENDANT HYDROLOGIST ASSESSES FIGURES QUOTED BY ROSS CUMMIN ENGINEERING IN THE DEVELOPMENT APPLICATION — REMEMBER IS WORKING FOR THE DEVELOPER.

12 August 2020

The General Manager
Glamorgan/Spring Bay Council
PO Box 6
TRIABUNNA TAS 7190

Dear General Manager

REPRESENTATION

PROPOSED DEVELOPMENT APPLICATION – SUBDIVISION 11 Lots
AMNS Pty Ltd, Nick Griggs & Co, RA66 Alma Road, Orford.

We make the following representation with regard to the proposed application for a subdivision development at RA66 Alma Road Orford SA 2020/09.

During the 29 years we have owned our properties in Holkham Court Orford we have experienced 9 flooding events in and around the creek and culvert that passes under Holkham Court. These flooding events have caused flooding of various intensities to our properties and others in Holkham Court, the worst being in January 2016 and April 2020.

The Council has been aware of the flooding for many years but has always been reluctant to take any action to fix the problem, over the years we have been ignored, told that there are insufficient funds and been promised action that has never been forthcoming.

Meanwhile the flooding intensifies to what has been the worst to date – 2 April 2020.

It is obvious that the flow of stormwater has increased over the years due mainly to the increased unregulated development in the catchment area and more frequent flood events. The development of the area has gone ahead without any consideration to the effects of tree felling and general ground clearing which has caused water runoff to increase and accelerate, causing flash flooding in the lower regions of the catchment area.

We request that:

1. the existing culvert be upgraded to a table drain of suitable dimensions to handle existing and projected stormwater flows;
2. the creek be modified to carry current and future stormwater flows and be maintained on a regular basis; and
3. approval of the above subdivision application be deferred until the existing stormwater infrastructure is upgraded to accommodate current flows and any increases that may result if the subdivision proceeds.

Please refer to attachments showing April 2020 flooding (including debris removed and our previous representation re the subdivision.

Yours sincerely

2 December 2019

The General Manager
Glamorgan/Spring Bay Council
PO Box 6
TRIABUNNA TAS 7190

Dear Sir

REPRESENTATION

**PROPOSED DEVELOPMENT APPLICATION – SUBDIVISION 13 Lots pus Balance
AMNS Pty Ltd, Nick Griggs & Co, RA66 Alma Road, Orford.**

We make the following representation with regard to the proposed application for a subdivision development at RA66 Alma Road Orford SA 2019/024.

We believe that approval of the above subdivision application should be deferred until the existing stormwater infrastructure is upgraded to accommodate current flows and any increases that may result if the subdivision proceeds.

We base this belief on the following:

1. Flooding in Holkham Court

We purchased

During this time we have experienced many flooding events in and around the creek and culvert that passes under Holkham Court. These events have caused water to flow onto the road and overflow into Holkham Court and other properties in the street and the catchment area.

We experienced flooding and or the results of the flooding on the following dates:

December 27 to 29, 1993 - Total rainfall 115.2mm

Road flooded and driveway washed away Holkham Court.

January 29 to 30, 1995 – Total rainfall 106.0mm
Road flooded and driveway washed away Holkham Court.

December 18 to 20, 1995 – Total rainfall 134.4mm
Road flooded and driveway washed away Holkham Court.

January 25 and 26, 1996 – Total rainfall 99.6mm
Road flooded and driveway washed away Holkham Court.

November 23 to 29, 2001 – Total rainfall 101.6mm
Road flooded and driveway washed away olkham Court.

August 22 to 25, 2003 – Total rainfall 79.4mm
Road flooded and driveway washed away Holkham Court.

January 27 to 31, 2016 – Total rainfall 217.9mm
Road flooded and driveway washed away Holkham Court.

June 5 to 8, 2016 – Total rainfall 154.2mm
Road flooded. No photo available because it was 3 am in the morning.

These rainfall figures were accessed from BOM and our own readings.

These figures show that:

- Rainfall figures differ significantly on these dates which indicate that heavy rainfall over relatively short periods is a major contributor to the flooding. These heavy rainfalls are often a series of thunderstorms.
- It is obvious from the dates and rainfall data detailed above that flooding in the area is not a 1 in 20 year occurrence but more like a 1 in 4 year event.
- That the stormwater infrastructure in the area is inadequate and has been so for at least 26 years.
- The main cause of flooding is the size of the 2 pipes in the central culvert under the road which together measure 900mm. These pipes are incapable of handling the stormwater flow during sustained heavy rainfall.
- Any increase in the runoff from the subdivision will increase the intensity of any flooding. If the climate change estimate of a 30% increase in stormwater runoff eventuates there will be major flooding in Holkham Court.

- Damage caused and the extent of the flooding is illustrated in the attached photos (3). Please refer to previous representations for additional photos.
- On several occasions floodwater has overflowed from the end of the driveway threatening to enter our house.

2. Holkham Court Stormwater Assessment

The Brighton Council prepared this assessment following a request by the Glamorgan/Spring Bay Council. The assessment report identifies, among other things, the following:

- That all issues raised by increased development are already occurring due to inappropriate infrastructure.
- The Holkham Court Central Culvert is undersized for the location. Forces water onto the road. This then flows along the road east to the turning circle and flows over the road into private property Holkham Court.
- Recommends an increase in the size of the Central Holkham Court Culvert.

This assessment alone indicates that the existing stormwater infrastructure in Holkham Court is inadequate and should in itself be evidence that the subdivision should be deferred until the problems identified are fixed.

3. Subdivision Application

Proposed Stormwater Layout

Stormwater Layout notes prepared by Ross Cumming Engineering in support of subdivision Development Application.

Note 4 (from the Stormwater Layout notes) indicates that the creek will be piped under the new road with a DN750 system which will discharge into DN900 pipe before it is in turn discharged back into the existing creek. It is presumed that this proposed system will accommodate AEP 5% and 1% storms. The design is based on the probability of flows which are not specific to the area.

Information provided in **Item 1** (Flooding in Holkham Court) above indicates that flooding occurs on average every 4 years. When flooding occurs the 900mm capacity culvert under Holkham Court is unable to handle the flow and it follows that the proposed pipe system of DN750 and DN900 through the subdivision will also be incapable of handling the flow.

The volume of water in times of flooding will cause water to overflow at the entrance to the proposed subdivision and run into lots 1 to 6. If the flow is restricted to 750mm at the headwall in Alma Road it may cause flooding in Alma Road and flow into Holkham Court.

The Glamorgan/Spring Bay Council Corporate Adaption Plan April 2012 projects an increase in stormwater runoff of 30% in the 21st century due to climate change, any increase of this magnitude will have a major effect on the frequency and intensity of flooding in this area.

Summary

- **That the existing culvert be upgraded to a table drain of suitable dimensions to handle existing and projected stormwater flows.**
- **That the creek be modified to carry current and future stormwater flows and be maintained on a regular basis.**
- **That the Holkham Court Stormwater Assessment Plan be implemented by the Council as a matter of urgency.**
- **That approval of the above subdivision application be deferred until the existing stormwater infrastructure is upgraded to accommodate current flows and any increases that may result if the subdivision proceeds.**
- **Approval of this subdivision without regard to the safety of properties and wellbeing of residents in the area would be both irresponsible and insensitive.**

Yours sincerely











