

BUILDING AND DEVELOPMENT TRIBUNAL - DECISION

Assessment Manager: Livingstone Shire Council**Site Address:** 2 Yearsley Grove, Yeppoon 4703

Nature of Appeal

Appeal under section 4.2.13. of the Integrated Planning Act 1997 against the decision of the Livingstone Shire Council to issue an Enforcement Notice pursuant to section 22 of the Building Act 1975 in respect to a retaining wall, requiring the following to be done:-

- (1) Carry out such works as necessary to render the wall structurally adequate;
- (2) Supply Council with certification that the wall is structurally adequate from a Queensland Registered Structural Engineer within 30 days of the date of this notice.

The retaining wall is erected on land described as Lot 29 on RP835077 and situated at 2 Yearsley Grove, Yeppoon.

Date and Place of Hearing: 16th May, 2001.**Tribunal:** G Grogan

Present:	G Grogan	Referee
	The Applicants	
	S. Burhman	Development Supervisor (Livingstone Shire Council)
	K Hodby	Building Certifier (Livingstone Shire Council)
	J Mills	Builder (GJ Gardner)
	G Bigg	Engineer (Brown & Root)

Decision

In accordance with section 4.2.34. of the Integrated Planning Act 1997, I hereby **set aside** the decision of the Livingstone Shire Council to issue an Enforcement Notice dated 21 March 2001, File Reference 70/001/0001(L#127) LH:sld. The notice to which the appeal relates shall be of no further effect.

Recommendation for further action by Council

I further recommend the Council should-

1. determine the natural ground line at the boundary between Lots 28 and 29; and
2. determine the extent of the cut that should be retained by the applicants. The retaining wall should be structurally adequate to retain the cut; and
3. determine the fill that should be retained by the adjoining property owner without impacting on the retaining wall.

Material Considered

(1) *Interview with the adjoining owner of number 4 Yearsley Grove.*

The adjoining owner outlined the history of the dispute and included comments about her allowing soil to be added to the ground level at the boundary line.

The adjoining owner raised the issue of subsoil drainage (usually placed behind a retaining wall) and overland stormwater flow.

The adjoining owner stated that the retaining wall was not in accordance with the Council approval and that the structure encroached upon her property by 64mm as shown on an identification survey plan and it was therefore not a dividing fence.

I advised the adjoining owner that it was common for amendments to building details to be made during construction and that some minor amendments did not require a formal amendment to the approval. For minor amendments it is sufficient to document the changes (if satisfactory) or require rectification of those changes that are deemed to be inadequate. I noted that this was especially common with standard engineering designs that allowed design choices to suit a particular set of circumstances.

(2) *Hearing at No 2 Yearsley Grove.*

I opened the hearing and inspected the retaining wall/ fence the subject of the appeal and enforcement notice. I took the opportunity to look at the wall/ fence from both properties (Lot 28 and Lot 29) to gauge an overall perspective of cut and fill to both properties.

The applicant advised he and his wife had built the retaining wall/fence along the boundary line (essentially within Lot 28) at their expense and to satisfy their requirement to retain the cut (excavation) made at the boundary. They were prepared to retain any cut to natural ground line and allow for the low fence on top of the retaining wall.

Representatives for Livingstone Shire Council advised their concerns were with structural adequacy, lack of drainage and the structure built otherwise than in accordance with the approved plan.

(3) *Appeal documentation submitted by the applicants*

(4) *Submission by the applicant at the hearing*

The applicant submitted a 'proposal for solution' and a side elevation of wall sections 1, 2 and 3 which form the highest part of the structure. Essentially the solution required all parties to rely on the bottom line of render to the adjoining owner's side of the wall as being the natural ground line. This and the indicative ground line on the wall could be viewed as biased, but may assist in evaluation of ground levels. The proposal by the applicants to take responsibility for their excavation at the boundary, including structural adequacy for the retention of the excavation, indicates their intention to cooperate in this matter.

(5) *Reference to Legislation*

Reference was made to the Integrated Planning Act 1997, Building Act 1975 and the Standard Building Regulation 1993.

Findings of Fact

- Livingstone Shire Council approved a new dwelling in 1997 for Lot 29, 2 Yearsley Grove, Yeppoon. This approval related to a two storey building with slab-on-ground lower level on a sloping site that was to be cut and filled. (No copy of the approved plan showing contours or extent of cut/fill was provided to the referee). An unstamped (i.e. no Livingstone Shire Council approval) site plan dated 28th April 1997 shows a basic cut/fill typical of average sloping sites and this included a note "retain cut by others, less than 1m" adjacent to the cut at the boundary between Lot 28 and Lot 29 on RP 835077.
- An application for a retaining wall/fence on the boundary between Lot 28 and Lot 29 was lodged with Livingstone Shire Council on 2nd September 1997 and subsequently approved on 12th September 1997. As is reasonably common, the application contained copies of standard engineer design retaining walls which allows a range of choices to suit the height of retained cut and fill, width of concrete block (series), size of reinforcement and base (footing) sizes.
- GJ Gardener built both dwellings (lot 28 and Lot 29) and the retaining wall. Lot 28 had cut/ fill with dwelling footings stepped to found in natural ground at the north east corner.
- The applicant attempted to contact the owner of Lot 28 at the time of construction of the retaining wall/fence to discuss this structure on their common boundary. No contact eventuated and Lot 28 was subsequently sold to the current adjoining owner.
- The retaining wall/fence was constructed in September/October 1997 at the expense of the applicants as owners of Lot 29.
- Tapsell Consulting Engineers inspected and authorised (i) the pouring of footings for the retaining wall/fence on 2nd September 1997 and (ii) the pouring of blockfill for the retaining wall/fence on 10th September 1997. The certificate notes the reinforcement as Y16 @ 400 crs and that the retaining wall/fence was constructed of 150 series blocks between 300 series piers instead of 200 series blocks between the piers. [The inspection certificate of 10th September 1997 was in error as it stated that it was a 200mm block wall.]
- The retaining wall/fence was completed and subsequently backfilled on about the end of October 1997.

- The highest point of finished ground on Lot 28 is at the retaining wall on the boundary and is well above anyone's interpretation of where natural ground level was before fill was placed against the wall.
- The investigation by Mark Hull, BE MIE Aust. RPEQ No. 1781 from Roadtest (on behalf of the adjoining owner) did not establish the existence of drainage and was of little relevance in determining cut or fill.
- The engineering analysis of the wall by Brown & Root (dated 7th December 2000) indicates that the wall is structurally adequate when only the "assumed" original soil level is considered in conjunction with wind loads. Engineering calculations by Brown and Root for structural adequacy of the wall retaining a maximum of 1.2 metres of cut was on the basis of no drainage ie. fully saturated soil. Wind loads on the fence portion of the wall had been taken into consideration.
- There are conflicting opinions by the owners of each property as to the extent of cut on Lot 29 and the extent of fill on Lot 28, at the boundary between both lots.
- Discussions and submissions indicate that the extent of cut and extent of fill has not been adequately determined by the Livingstone Shire Council.
- Livingstone Shire Council representatives stated that drainage was always required with retaining walls as it was a standard requirement. They also stated that the use of 150 series blocks instead of 200 series blocks required an amended plan. It was further indicated that due to previous problems with retaining walls between neighbours, the Building Certifier would check boundary clearance via a string line if there were any concerns over encroachment. [In this case the Livingstone Shire Council was not requested to carry out an inspection and so no check of encroachment was undertaken.]
- The approved plans do not show any drainage details and there are no comments or details on the approved engineers details. The conditions of approval do not require drainage.
- The dwelling on Lot 29 was approved and inspected by Rockhampton Building Services and a final inspection clearance was given by that organisation on 11/11/99. *[(Note 1) Rockhampton Building Services may not have fulfilled their responsibility at final inspection to ensure site preparation was satisfactory as per Schedule 8 of Standard Building Regulation, 1993. (Note 2) The applicant advised that landscaping of Lot 28 was undertaken in the first week of October 1999 and so Rockhampton Building Services would have been aware of the fill at the boundary and combined heights of excavation and/or fill.]*
- The final inspection of the retaining wall/fence was only carried out after Livingstone Shire Council had received a complaint about the adequacy of the wall. The Livingstone Shire Council had more concerns once the inadequacy of the structure was noted by engineers. Livingstone Shire Council representatives advised that the retaining wall/fence permit is separate to the dwelling permit and so they are viewed independently.
- There was an understanding by the applicants and Mr Mills (the builder) that both approvals had been finished at the time of issuing the final inspection certificate for the dwelling. This was not the case and Livingstone Shire Council representatives could not state that the applicants were advised to obtain a final for the retaining wall/fence.

Reasons for the Decision

- As structural inadequacy is the main basis of Livingstone Shire Council issuing the Enforcement Notice as regards this retaining wall/fence on the boundary of Lot 28 and Lot 29, it is incumbent upon them to have made sufficient investigation as to the legislative responsibilities of each property owner. The investigation would need to establish the responsibility of the applicants as owners of lot 29 to support the excavation they caused to be made at the boundary to facilitate the erection of their dwelling. Similarly, the responsibility of the adjoining owner of Lot 28 to support the fill that she caused to be placed at the boundary to facilitate landscaping and access along the northern side of her property and dwelling, needs to be established.
- The Livingstone Shire Council must determine the natural ground surface at the boundary line between Lot 28 and Lot 29 and from this, determine the extent of cut performed on behalf of the applicants as well as the extent of fill placed on behalf of the adjoining owner.

In order to establish such Natural Ground Surface, the Livingstone Shire Council can rely on “as-constructed” details of finished contours for these lots, generally required as part of the final approval. No doubt the “as-constructed” levels are indicative only and these need to be viewed in conjunction with contour plans for each lot submitted as part of the approval process for each dwelling.

- Discussion indicated that the adjoining owner was going to rely on a structure built approximately on the boundary line (by the neighbour at number 2 Yearsley Grove) to retain fill (topsoil/soil) that she had arranged to be placed on her property at that boundary. The design check by Brown & Root notes current level of retained soil as 1740mm on the property of the adjoining owner. This is clearly in excess of the 1400mm indicated on the approved plan for the retaining wall/fence. The approval indicates that the length of the retaining wall part of the structure is 16m and that retained fill runs basically with an even fall from a height of 1400mm to zero. It is also noted that the highest point of fill is not at the rear of the properties where the excavation by the applicant is deepest.
- The retaining wall/fence approval included a set of engineering solutions to suit a range of retaining wall heights and block sizes. As is common, the most likely choice for a particular situation was marked. For the subject application the approximate height of cut earth to be retained was shown on a sectional elevation with a note stating 1.4m maximum height of retention. No doubt the section of wall above the retained earth cut was the fence part of the application.

The interpretation that the structure was not constructed in accordance with the approval is in my opinion not consistent with the approval as a whole. The interpretation relies on the hand written notes of proposed block types on the page showing the sectional elevation of the structure as well as typical sections highlighted. This narrow interpretation fails to consider that the engineer's details forming the approval include a 150 series wall suitable of retaining fill to a maximum height of 1.2m. The approved plans do not include details or notes requiring the placement of subsoil drainage behind the wall.

- The matter of subsoil drainage is considered critical in most retaining wall designs. However, the effectiveness of the drainage is often very poor due to general lack of care in construction, lack of adequate fall or discharge point for the drainage, type of soil being retained or type of backfill. In this particular situation the ground falls to the street and parallel to the retaining wall. Depending on the soil structure of the natural ground, or fill placed during subdivision earthworks, subsurface water could seep towards the street and relieve most water pressure on the retaining wall.
- Reference to the design check by Brown & Root shows that they have based calculations on a mass of soil being retained equivalent to a saturated soil. This relates to having no drainage behind the wall.
- If the wall (at the time it was constructed) only supported a maximum of 1.2m fill and the backfill was of reducing height so that surface water and subsoil seepage was towards Yearsley Grove, then it would most likely, in my opinion, be structurally adequate.

It is advised that this Tribunal has no responsibility or authority to make comment on the civil matters of encroachment into another property.

Gerard Grogan
Building and Development
Tribunal Referee
Date: 31 July 2001

Appeal Rights

Section 4.1.37. of the Integrated Planning Act 1997 provides that a party to a proceeding decided by a Tribunal may appeal to the Planning and Environment Court against the Tribunal's decision, but only on the ground:

- (a) of error or mistake in law on the part of the Tribunal or
- (b) that the Tribunal had no jurisdiction to make the decision or exceeded its jurisdiction in making the decision.

The appeal must be started within 20 business days after the day notice of the Tribunal's decision is given to the party.

Enquiries

All correspondence should be addressed to:

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