

17<sup>th</sup> October 2017

Darren & Beona Wrigley

To the General Manager,

We object to Application for the planning permit  
DA NO: DA0490/2017. We have engaged JMG engineers &  
Planners and will forward this information on to you.

Darren Wrigley

FILE No.	DA0490/2017			
EO	OID	✓	Box	✓
RCVD 19 OCT 2017 LCC				
Doc No.				
Action Officer:	Noted	Replied		
C. WRANKMORE				

EX COPY I MORE

Darren Wrigley

**Application details**

DA NO: DA0490/2017  
 APPLICANT: LC Kettle  
 LOCATION: 27 Benvenue Road  
 ST LEONARDS  
 PROPOSAL: Residential - single dwelling;  
 construction of retaining wall  
 on boundary (retrospective)  
 CONTACT: Iain More  
 Ph: (03) 6323 3000  
 DATE OF NOTICE: 07/10/2017

**Notice of application for a Planning Permit**

The Launceston City Council has received an application to use or develop land at the address specified on this card.

Plans and documents can be inspected at the Council's Customer Service Centre, Monday to Friday from 8.30am to 5.00pm or on Council's website at <https://onlineservice.launceston.tas.gov.au> until 23/10/2017.

Written representations to the General Manager may be made during this time to PO Box 396, LAUNCESTON TAS 7250 or by email to [contactus@launceston.tas.gov.au](mailto:contactus@launceston.tas.gov.au). However, the full content of your submission may be included in the report (available for public access) if the application is presented at a Council meeting for consideration. It is therefore the responsibility of the author of the representation to ensure that what is written is factual, fair and reasonable and not defamatory against any person. Please provide day time phone contact details with representations.

Before deciding on the application the Council must consider any written comments it receives. An appeal can be made against the Council's decision, but only if the representation is lodged before the specified closing date.

*This is a notice under section 57(3) of the Land Use Planning and Approvals Act 1993.*

FILE No.	DA0490/2017		
EO	OD	Box	
		✓	✓
RCVD	20 OCT 2017	LCC	
Doc No.			
Action Officer	Notari	Replied	
C. WRANKMOREL			

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JMG Ref: J172256CL  
Client Ref:

19<sup>th</sup> October, 2017

Darren & Leanna Wrigley

Dear Darren & Leanna,

**RE: Development Application DA0490/2017 (City of Launceston) for 27 Benvenue Road, St Leonards**

As requested, we provide the following technical advice in relation to the above development application which is currently advertised with the City of Launceston. It is our understanding that the development application is a retrospective application for the construction of a boundary retaining wall as detailed in the Brierley Consulting Engineers drawings, Project No. 1703L Drawings S01-S02 Rev. B, between and 27 Benvenue Road.

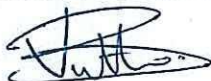
In our opinion, the application does not cover the full extent of structural works undertaken at the 27 Benvenue Road property, specifically the satisfactory support of the concrete driveway adjacent to the boundary wall. The development application drawings show the retaining wall terminating at the south eastern corner of the dwelling, refer attached SK01, leaving the remainder of the concrete driveway to be retained by the boundary wall.

We believe, as stated in our previously supplied report to you (dated July 2017 and attached to this letter), that the section of driveway adjacent to the boundary wall is likely loading this wall, which would not have been designed to retain such loads. We believe the loads transferred to the boundary wall from this driveway above are also likely to have caused the cracking damage to your dwelling as noted in our July 2017 report.

We believe, from a structural perspective, that the retaining wall shown on the development application, should be extended to retain the full extent of the concrete driveway, as shown on the attached sketch SK01, so as not to load the boundary wall.

We also note, as per our attached report, that there appears to be sub-floor ventilation on the boundary wall that has been covered by the 27 Benvenue Road driveway works.

Yours faithfully  
**JOHNSTONE McGEE & GANDY PTY LTD**

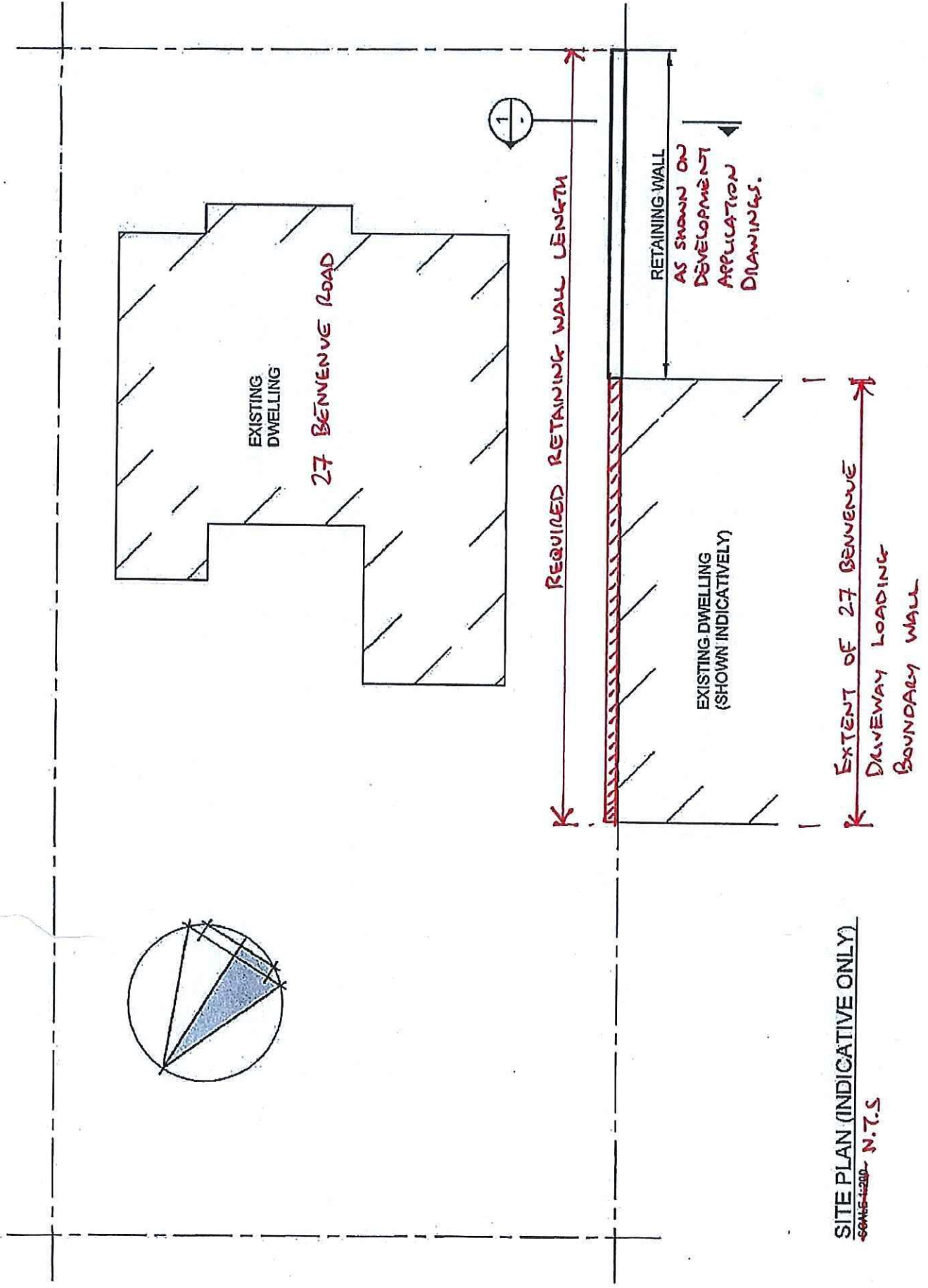


**Vincent Butler**  
**CIVIL/STRUCTURAL ENGINEER**

Encl.

- Sketch SK01
- *JMG Report for Darren & Leanna Wrigley* -

18/10/2017 VB



RETAINING WALL AS SHOWN ON DEVELOPMENT APPLICATION DRAWINGS.

EXISTING DWELLING (SHOWN INDICATIVELY)

EXTENT OF 27 BENVENUE DRIVEWAY LOADING BOUNDARY WALL

SITE PLAN (INDICATIVE ONLY)

SCALE 1:200 N.T.S

Skol

# REPORT

For DARREN & LEEANA WRIGLEY

July 2017



**Engineers & Planners**  
*Your Vision is Our Mission*

## TABLE OF CONTENTS

1.	Introduction.....	4
2.	Site visit observations .....	4
3.	Other observations .....	5
4.	Conclusion.....	6
5.	Recommendations .....	6

Appendix A - Photographs

Appendix B - Sketch of floor plan and damage observed

Appendix C - Protek Report

their house below. In total the retained height (27 Benvenue Road driveway retained by the [redacted] house structure) is believed to be approximately 1 m.

No noticeable cracking of internal wall linings was observed during the inspection, although Mr. Wrigley has since communicated that he has found hairline cracks in plastered walls in the lounge room and bathroom. A very general check of floor levels occurred using a 1.2m builder's level. The floor, in the few areas checked was noted to be reasonably level over a 1.2 m builder's level, with the exception of the entrance hallway (see Photo 22 in Appendix A), however there were no concerning obvious trends in floor levels observed. A complete floor level survey would need to occur to accurately confirm floor levels.

The house was observed to have some external cracking in the brickwork at three locations. Cracks in these locations were measured. The largest crack was approximately 2 mm wide, but otherwise the cracks were generally less than 1.00 mm (refer Photos 10-15 & 21 in Appendix A and Appendix B for locations).

During inspection of the sub-floor area, it was noted that sub-floor ventilation on the boundary wall has been covered as part of the construction works at 27 Benvenue Road (refer Photo 20 in Appendix A). It was also noted that a block retaining wall within the sub-floor storage area showed signs of movement (see Photo 17 in Appendix A).

The driveway retaining wall (which was constructed at the same time as the concrete driveway) appeared wet at the time of the inspection (refer Photo 4 in Appendix A), however it could not be determined whether this was due to recent rainfall or inadequate drainage behind the wall. Mortar in the block wall was observed to be patchy in some locations and on scratching appeared sandy and was easily removed. Not knowing the construction details of this wall (steel reinforcing details, footing dimension and backfilling etc.), no comment can be made at this stage on the structural adequacy of the retaining wall.

Mr. & Mrs. Wrigley supplied the attached (refer Appendix C) *Protek* report *Structural Survey (Boundary Wall)*, including drawing 5269-0001. This drawing shows the assumed existing situation and also a proposed engineered retaining wall solution. We generally concur with the *Protek* drawing and report, other than that no engaged piers along the boundary wall were noted and that floor joists not bearers were present in the location shown, with these being supported in a recess in the inside skin of brickwork (refer Photo 19 in Appendix A).

### 3. Other observations

Following the site visit Mr. Wrigley also provided some printed photos of further cracking he had noticed at the top of the north-east boundary wall (viewed from the roof of the house). This cracking, from the photos provided, is estimated at approximately 1 mm maximum width.

It appears from observing Google street view footage (2010) that the previous 27 Benvenue Road driveway was an unsealed gravel and earth driveway, which appeared to already be retained by the [redacted] property wall, but to a lesser extent. The construction of the new concrete driveway has resulted in the [redacted] property wall retaining approximately 1.0 m of fill, including the concrete driveway pavement and associated surcharge loads.

The house is noted to be located within the 'medium landslip hazard band' on State Government 'Hazard Planning Maps', accessed online via *ListMap*. This map notes that "the area has known landslide features, or is within a landslide susceptibility zone, or has legislated controls to limit disturbance of adjacent unstable areas." A site specific landslip analysis is beyond the scope of this report, however no obvious distress due to landslip was noted at the time of the site visit.

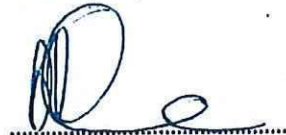
2. Confirm 27 Benvenue Road driveway construction by way of Council records, investigation by a suitably qualified Engineer or proof of construction by other means. Noting that the driveway should have been designed and built, if permitted by Council, so that no load is transferred to the neighbouring property and also so as not to affect any existing sub-floor ventilation.
3. If it is confirmed that the driveway has been constructed as per *Protek* drawing in Appendix C, we recommend that the driveway construction should be removed. If the driveway structure is to be rebuilt in an acceptable fashion, it should be constructed so as to satisfy the *Building Code of Australia* and the relevant *Building Regulations*. We recommend that the design be prepared by a suitably qualified Engineer.
4. Should repair works to the noted damage at \_\_\_\_\_ be required, we suggest that making good to the cracking be by re-pointing brickwork or where cracking has occurred within the brick by injection of an approved filler.

Signed



Vincent Butler  
Civil/Structural Engineer

Endorsed by:



Dale Luck  
Senior Civil Engineer





Photo 1 - Photo looking north west along the property boundary. on the left, 27 Benvenue Road on the right - note new concrete driveway and carport.



Photo 2 - Photo looking north from driveway. Note concrete block driveway retaining wall for 27 Benvenue Road.



Photo 5 - Photo showing intersection of boundary retaining wall and brick wall. Note concrete works performed as part of construction works for 27 Benvenue Road.

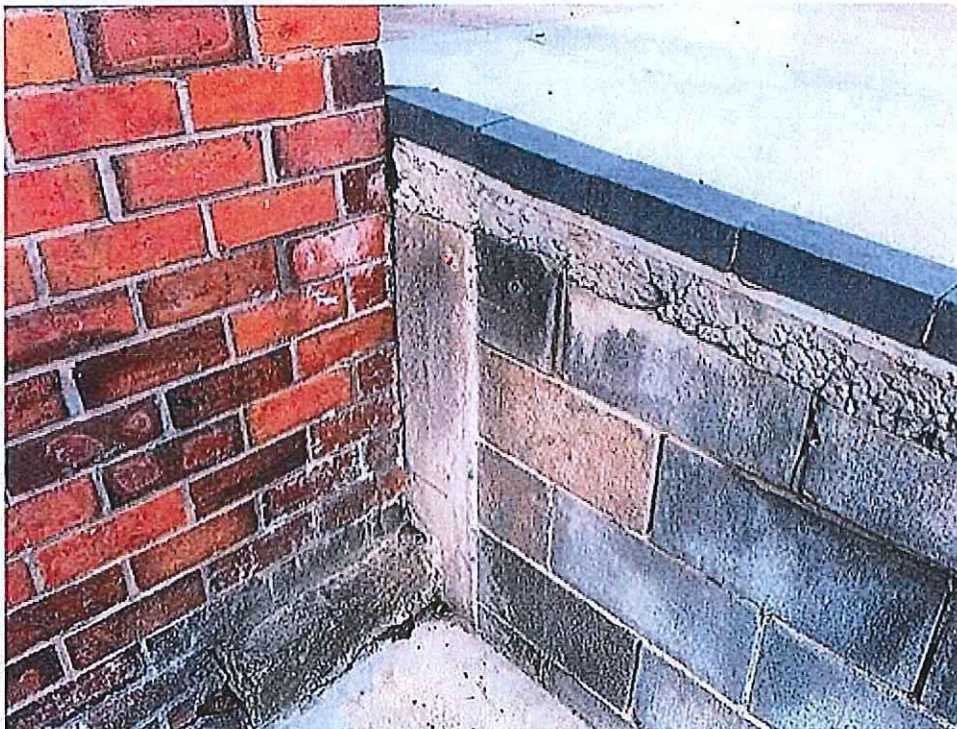


Photo 6 - Photo showing intersection of boundary retaining wall and brick wall. Note concrete works performed as part of construction works for 27 Benvenue Road.



Photo 9 - Photo looking south east along property boundary retaining wall. Note paved kerb against boundary wall.

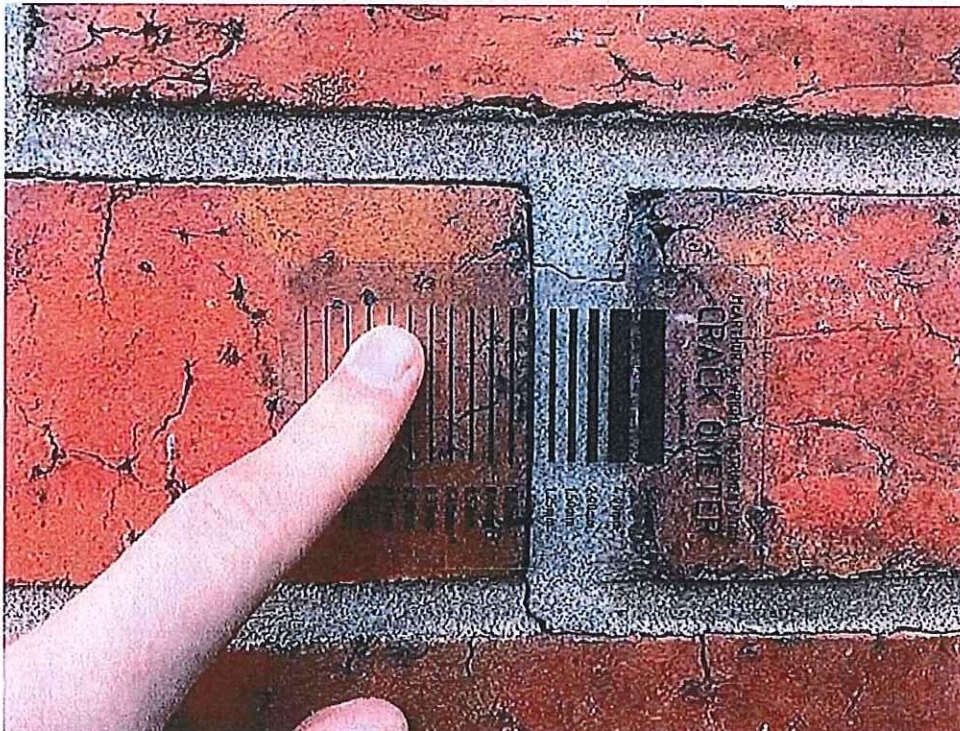


Photo 10 - Example of 'fresh' cracking to south east (front) wall, note location in Appendix B - crack width noted as 1.0 mm.



Photo 14 - General view of south west face at location of crack shown in Photo 13 and movement to timber cladding.

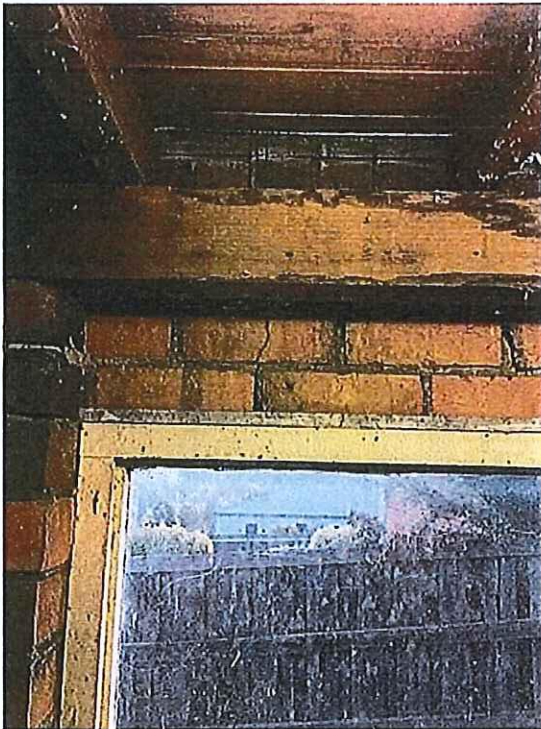


Photo 15 - Internal view of Photo 14. Note crack.

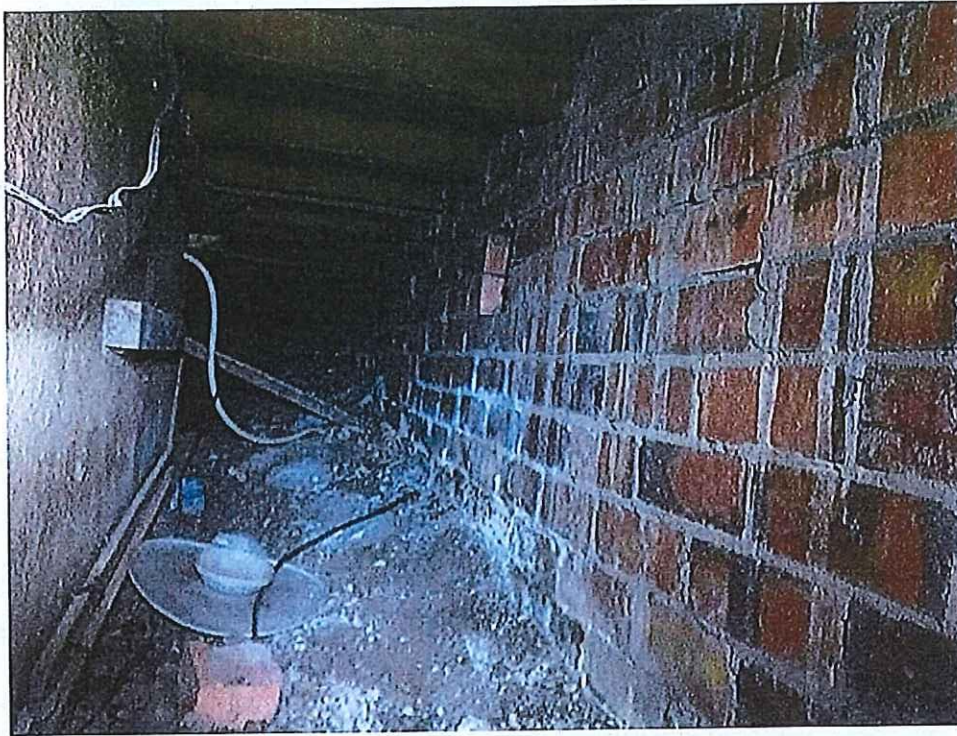


Photo 19 - Subfloor area looking north east along boundary wall (neighbouring concrete drive constructed to right of photo against this wall)

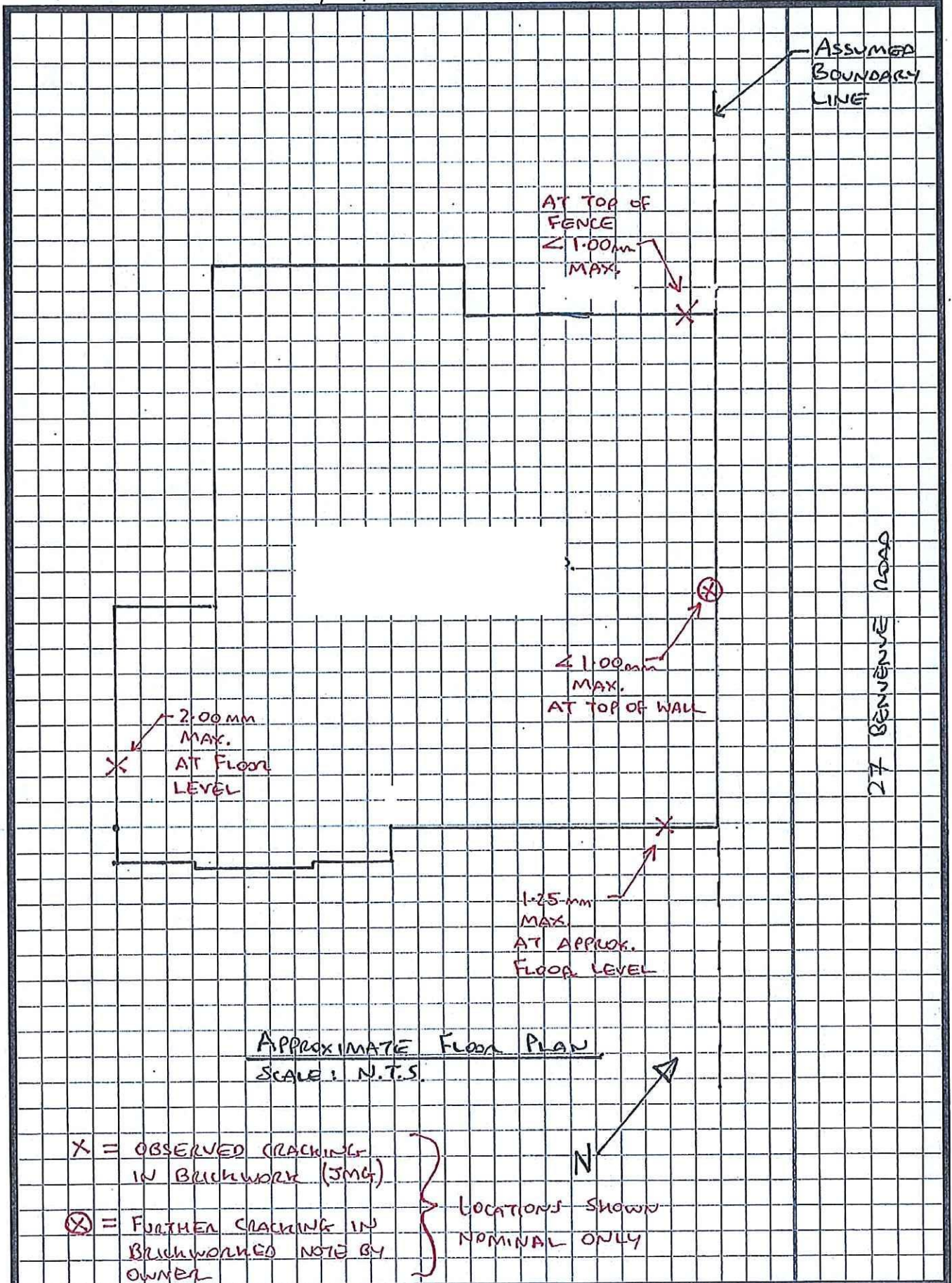


Photo 20 - Sub-floor ventilation on north east boundary wall which has been blocked by construction of neighbouring driveway.



Photo 23 - Photo in kitchen/dining area - slight movement noted between flooring and window

Project.....  
 Subject FLOOR PLAN SHOWING DAMAGE LOCATIONS - APPENDIX B  
 Made by VB Date 03/07/17 Project No. J172256 CL Sheet No. 01





# Structural Survey (Boundary Wall)

Project No. 5269-0001

Prepared by Philip G Connors (CC103E)

Date: 15.12.2016



## 1 Basis of report

This report is commissioned by Darren Wrigley and is to provide summary of the statutory process normally required for the construction of a structure up against a boundary wall and in particular, to comment on the possible or likely detrimental effects of such structure if not correctly designed for that purpose.

I am also requested to provide recommendations for remedial works (if any) and indicative costs to rectify those defects.

## 2 Background

The premise was inspected on the afternoon on the 29.11.2016 by Philip Connors. Mr Wrigley ("the owner") was present during the inspection and provided anecdotal information about the construction process and issues relating to the adjoining driveway and carport since the time of construction. Relevant information is as follows;

- (Date) building works commenced.
- (23/10/2012) Completion certificate issued by Launceston City Council for Carport
- (Date) first movement in the dwelling cracking noted – approximately 1 month ago in the beginning of November.
- (21/11/2016) first complaint made to Launceston City Council –
- (01/12/2016) Date of response to complaint

### 2.1 Documents relating to this complaint

- (21/11/2016) – telephone call to LCC complaint sent to Launceston City Council (See Appendix B1)
- (01/12/2016) – Date of formal response from Compliance Officer of the Launceston City Council (See Appendix B2).

### 2.2 Building Surveyor

I am advised that the Launceston City Council Building Surveyor was engaged to certify and inspect this construction.

I have not been provided with and copy of the approved plans or Form 11 (Certificate of Compliance) and therefore cannot comment on their relevance or otherwise.

## 3 Observation

### 3.1 General

The dwelling would have been constructed circa 1950 or thereabouts.

Construction is generally double brick boundary wall to the eastern boundary (top of the site) and engaged pier up to 1<sup>st</sup> floor level. Floors are timber and roof is custom orb roofing over a gable roof.

The sub-floor area has been partially excavated sometime in the past to provide a storage room in the front south eastern corner of the building (See photo 8). A garage is also included under as well as a storage area that runs along the western lower side of the dwelling. Brick piers are used to support the floor in this subfloor area.

The following includes general observations of the property.

INSPECTION DETAIL	
PHOTO #	COMMENT
Photo 1 – fine horizontal cracking noted to the brickwork	The owner has been in this home for approximately 15 years is in the process of renovation and is very particular about his property. Consequently, any change to the structural integrity of the dwelling do not go un-noticed.

**Penalty:**

Fine not exceeding 20 penalty units.

(2) A builder is required to carry out protection work in accordance with Schedule 3.

(3) A building surveyor may require additional protection work to be carried out.

**1. Owners are required to carry out protection work in the following circumstances:**

- (a) if a party wall is to be made good, underpinned or repaired;
- (b) if a party wall is to be pulled down or built;
- (c) in the case of buildings connected by arches, or communications over public ways or over passages belonging to another person, if there is a need to rebuild or repair to conform with existing standards;
- (d) when a retaining wall requiring a building permit is to be built on the boundary of two or more properties;
- (e) when trenching for any purpose is required through property other than the owner's;
- (f) when cutting away any footings or chimney breasts, jambs or flues or other projections from any party wall or external wall in order to erect an external wall against that party or external wall;**
- (g) if the owner intends to raise a party fence wall or pull it down and rebuild it as a party wall;
- (h) if the building owner intends to cut away or take down such part of any wall or building of an adjoining owner as may be necessary, in consequence of that wall's or building's overhanging or encroachment upon the ground of the building owner, in order to erect an upright wall against it on condition of making good any damage sustained by the wall or building by reason of such cutting away or taking down;
- (i) if the building owner intends to erect, or excavate to a level below that of the adjoining owner's footings, along the title boundary or within 3 metres of a building belonging to an adjoining owner.**

As can be seen in this highlighted section, there is an obligation on the person undertaking the building works to undertake protection works where excavation or erection of a structure within 3m of the neighbours property to notify them of those works and how the neighbours property is to be protected

This notification process is described in the Building Act 2000 ("The Act") as follows;

**Division 2 - Protection of adjoining properties**

**121. Notice of proposed building work**

(1) An owner who is required by the Building Regulations to carry out protection work must notify the adjoining owner and the building surveyor of the proposed building work and the proposed protection work.

- (b) the nature of the agent's duties; and
- (c) any fees to be paid to the agent by the adjoining owner; and
- (d) any other terms and conditions of the appointment.

(4) The Minister is to notify the owner of the appointment of the agent.

#### 122. Absent or incapable owner

(1) If the adjoining owner is unable to be found or is incapable of acting in the matter, the owner may apply to the Minister for the appointment of a person to act as an agent for the adjoining owner during the adjoining owner's absence or incapacity.

(2) The application is to –

- (a) be in writing; and
- (b) specify –
  - (i) the circumstances of the case; and
  - (ii) the grounds of the application.

#### 123. Appointment of agent for adjoining owner

(1) If the Minister is satisfied that the adjoining owner is unable to be found or is incapable of acting in the matter, the Minister may appoint a suitable person to act as the agent of the adjoining owner for the purpose of this Division.

(2) The appointment of an agent is subject to any terms and conditions relating to the duties and the payment of fees and any other matters the Minister considers appropriate.

(3) The Minister is to notify an agent in writing of –

- (a) the appointment; and
- (b) the nature of the agent's duties; and
- (c) any fees to be paid to the agent by the adjoining owner; and
- (d) any other terms and conditions of the appointment.

(4) The Minister is to notify the owner of the appointment of the agent.

#### 122. Absent or incapable owner

(1) If the adjoining owner is unable to be found or is incapable of acting in the matter, the owner may apply to the Minister for the appointment of a person to act as an agent for the adjoining owner during the adjoining owner's absence or incapacity.

(2) The application is to –

(1) If an adjoining owner notifies the owner that he or she disagrees with the proposed protection work, the owner must –

- (a) refer the matter to a building surveyor; and
- (b) notify the adjoining owner of the referral.

(2) On receiving the referral, the building surveyor is to –

- (a) examine the proposal for protection work; and
- (b) determine if the proposed protection work is appropriate.

(3) The building surveyor may make any inquiries and require any additional information to be provided by the owner or adjoining owner in order to make the determination.

(4) The building surveyor is to provide a copy of any additional information provided by a person under subsection (3) to the other person.

(5) The building surveyor is to give the owner and the adjoining owner notice in writing of his or her determination.

(6) The building surveyor is not required to give any person a hearing.

#### 127. Work not to be carried out in certain cases

An owner must not carry out any building work until –

- (a) the adjoining owner agrees or is taken to have agreed to the proposed protection work; or
- (b) in the case of a disagreement, a building surveyor determines that the proposed protection work is appropriate; or
- (c) in the case of an appeal in relation to the proposed protection work, the appeal is determined by the Appeal Tribunal.

Penalty:

In the case of –

- (a) a natural person, a fine not exceeding 100 penalty units; or
- (b) a body corporate, a fine not exceeding 500 penalty units.

#### 128. Inspection of plans

If a notice of proposed building work is issued, a building surveyor is to make available for inspection to an adjoining owner, on request, any drawings and specifications of the proposed building work that are in his or her possession or control.

#### 130. Protection work

near the window on this front elevation.	
Photo 8 – typical construction in the rooms under the dwelling adjacent to the front south eastern corner where fine cracking has been noted.	It must be noted that this area under the dwelling has been excavated at some time in the past and would not have originally been in this form. As to whether this excavation has increased, the likelihood of movement in this corner of the building is unknown. This is not important in this instance as it is clear that we need to concentrate on the approval and notification of protection works rather than the cracks now present in the building.
Photo 9 – view looking south along the boundary wall and showing the carport of the neighbouring property	See note 3 above

#### 4 Summary

The principles that must/should have been observed in this instance are summarised as follows;

1. The designer must have enough experience in design of structures abutting neighbouring properties to correctly detail the design drawings to include retaining walls so that no reliance is made on the neighbour's boundary wall retaining fill against his wall.
2. The Building Surveyor is not to certify Likely Compliance with the National Construction Code (NCC) where it is proposed to use a neighbour's boundary wall as a retaining wall for adjoining structures.
3. The owner has an obligation to follow the statutory processes contained within the *Building Act 2000* and *Building Regulations 2004* to ensure that the rights and property of the neighbour are protected.

I do not believe that this is a civil matter as suggested in the correspondence provided by Launceston City Council (See Appendix B). Rather, I believe that an error has been made at the time of assessment and certification of the building plans and during the inspection process that has allowed a structure to be constructed against the neighbouring property boundary wall.

Furthermore, I believe that rectification works must include the following remedial works;

1. Partial removal of the existing concrete driveway;
2. Provision of detailed engineering drawings detailing a suitable retaining wall structure to retain fill under the driveway and to ensure ground water that may build up behind the retaining wall is directed to storm water and away from the neighbouring property.
3. Detail of how the existing concrete slab is to be re-supported onto the new retaining wall and detail of how the concrete slab forming the driveway/carport slab is to be separated from the boundary wall brickwork.

A suggested detail is provided to assist in understanding how I would envisage this matter to be resolved (See Appendix D).

Philip G Connors

Date:



Photo 7 – horizontal cracking extends back to near the window on this front elevation.



Photo 8 – typical construction in the rooms under the dwelling adjacent to the front south eastern corner where fine cracking has been noted.



Photo 9 – view looking south along the boundary wall and showing the carport of the neighbouring property

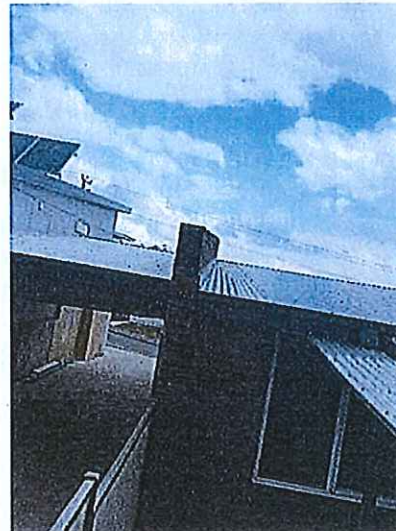


Photo 9 – alternative view of photo 10

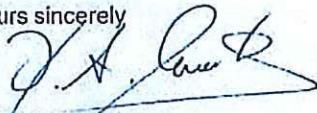
**Conclusions:**

- It is more likely that the foundations of number [redacted] have been affected by a change in moisture content since the adjoining ground surface has been covered up. Only more extensive investigation and expert analysis of the results will either confirm or dismiss this possibility.
- The carport (including its footings) on 27 Benvenue Road and the boundary retaining wall adjacent to the Western boundary were constructed in accordance with approved plans certified by the Council's Building Surveyor.
- No permit was required for the driveway construction.

It is not the role of the City of Launceston to mediate in civil matters such as this and therefore no further involvement is desired.

I trust that the above information meets your requirements.

Yours sincerely

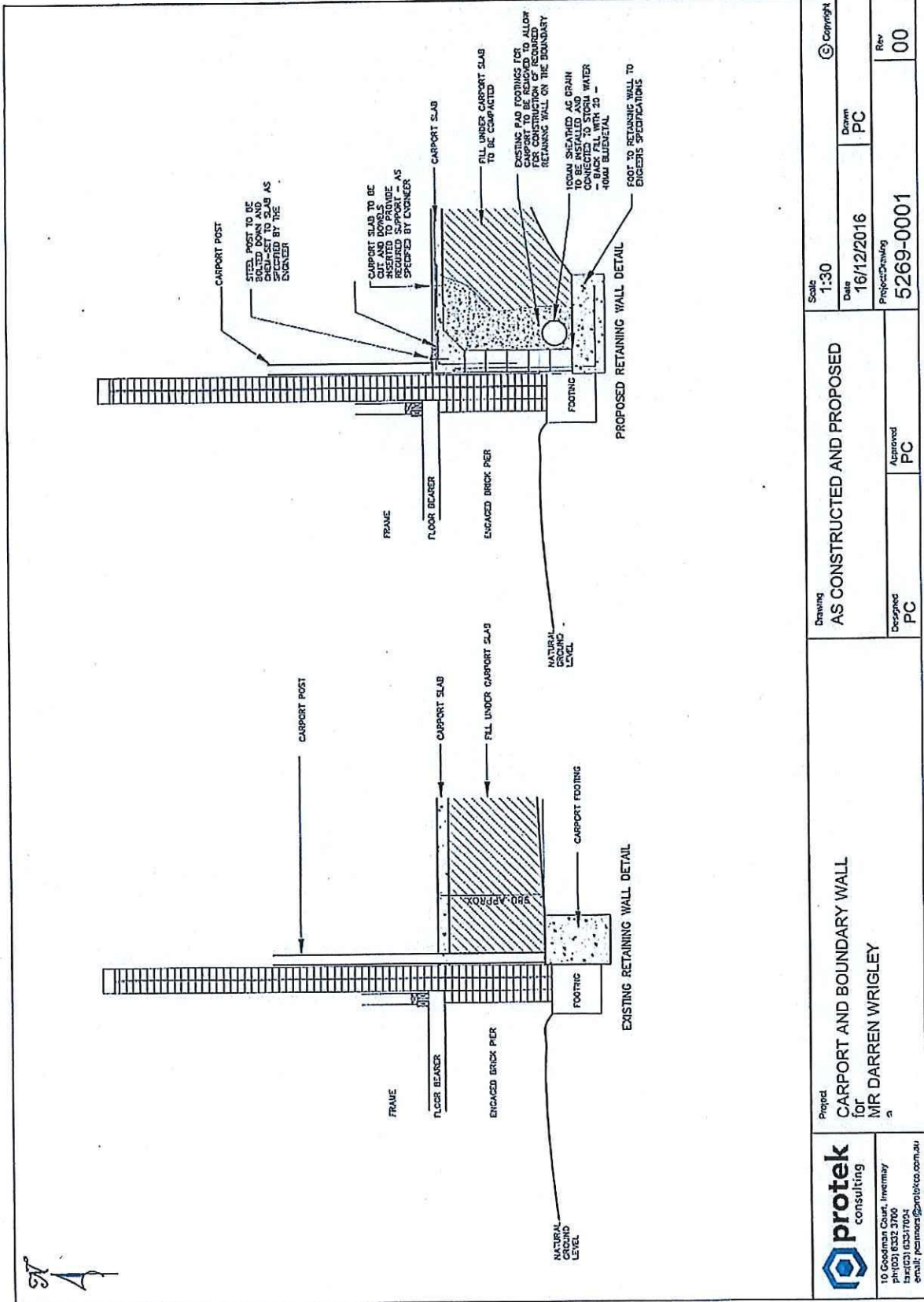



**John A Eyerts**  
**BUILDING COMPLIANCE COORDINATOR**



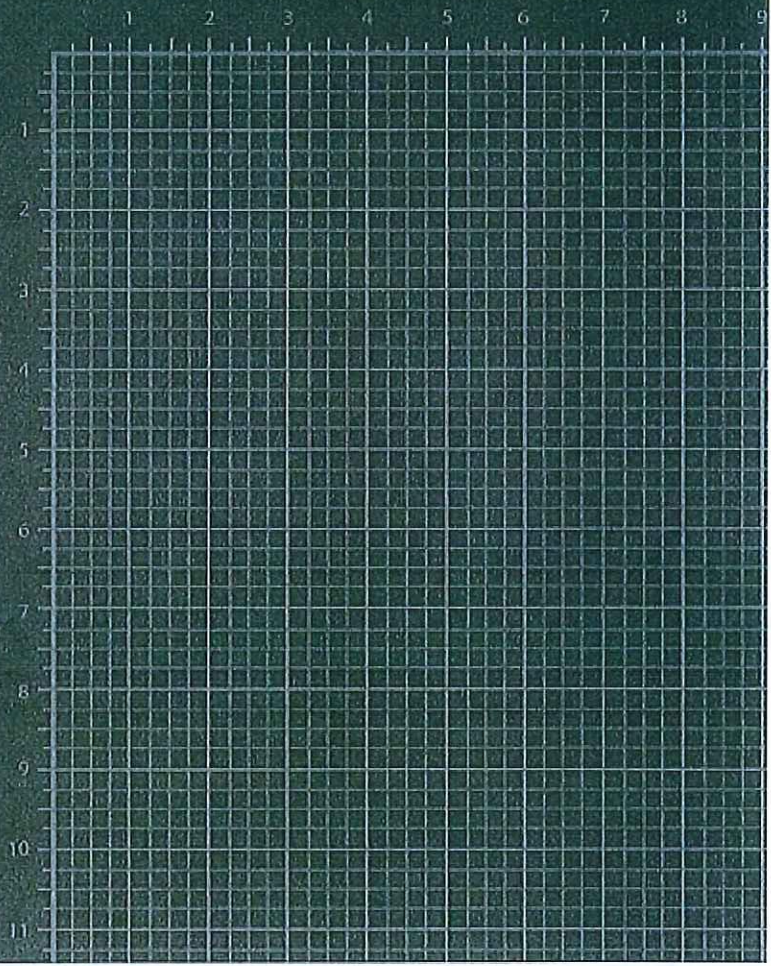
**Photo #1 - Carport and concrete driveway at 27 Benvenue Road.**

Appendix C - proposed remedial works



 10 Goodman Court, Invermay ph:(03) 6332 3700 fax:(03) 6332 7004 email: pc@protek.co.nz	Project <b>CARPORT AND BOUNDARY WALL</b> for <b>MR DARREN WRIGLEY</b>		Drawing <b>AS CONSTRUCTED AND PROPOSED</b>	Scale 1:30	Copyright ©
	Designed PC	Approved PC	Date 16/12/2016	Down PC	Project/Drawing 5269-0001





**Johnstone McGee and Gandy Pty Ltd**

incorporating Dale P Luck & Associates  
(trading as JMG Engineers and Planners)

ABN 76 473 834 852 ACN 009 547 139



**Engineers & Planners**  
*Your Vision is Our Mission*