

28 CARLTON AVE



Wanganui District Council
BCA QM System

Building Consent File – Front Cover

BCA T-33C page 1 of 1
v1 28/09/07

Building Consent File Content

Consent number: 3/1512

	Description	Date Placed	Comment & Reference
1	Consent Application	28-9-03	
2	Pre-Vet Checksheet		
3	Plans & Specifications	✓	
4	Geotech		
5	PIM : C/T : Consent Notes		
6	Regional Authority Consent (Dams)		
7	Fire Design		
8	DRU – NZFS		
9	Consultant Reports		
10	Producer Statements PS1, PS2, PS4		
11	Peer Review		
12	Relocate: Condition Reports		
13	Photos		
14	FIR		
15	Correspondence	✓	
16	Invoice		
17	Building Consent & Memorandum		
18	Amendment: Application & Approval		
19	NTF		
20	DBH Notification (Warnings etc)		
21	Alterations to Existing		
22	Sec. 72's		
23	Historic Places Trust		
24	Energy Work Certificates (Gas/Elect)		
25	Inspection Reports		
26	Warranties		
27			
28	site instruction	✓	
29			
30	ccc checkiist	✓	
31			
32			
33			
34			
35			
36			
37			
38	Application for C.C.C.	not supplied	
39	Code Compliance Certificate	14-12-07	
40			

LARGE PLANS HELD IN: (PLAN TUBE or FILE BOX?)

LARGE PLANS LOCATED IN: G18 FILE ROOM or BASEMENT

SWIM POOL



ENVIRONMENTAL SERVICES

WANGANUI DISTRICT COUNCIL

RECEIVED
WANGANUI DISTRICT COUNCIL

26 SEP 2003

APPLICATION for P.I.M/Building Consent

This application is for a: (tick the appropriate box)

- Project Information Memorandum - PIM (preliminary application for a Building Consent)
- Building Consent
- Alteration to Approved Plan

BC# 3/1512

(A) Owner

Name: DERROH M'EWEN
Mailing Address: 28 CARLTON AVE.
Phone: Fax:

(B) Designer

Name: GARY ANDER
Mailing Address: M.W.H.
Phone: Fax:

(C) Builder

Name: KEVIN FOSTER
Mailing Address: 22 HEREFORD ST
Phone: 344 2229 Fax: 344 2229

(D) Craftsman Plumber

(E) Registered Drainlayer TREUOR ONLEY

CONTACT PERSON i.e. A B C D E (Circle one)

Project

Description of PROJECT and USE: Swimming Pool
Reg 000.15

Project Location

Street Address/Rural No: 28 CARLTON AVE.

Durable Life of Project (i.e. 5, 15, 50+ years)

Value of Project Work

(include all labour & materials)

\$ 20 000.00 (Incl. GST)

Consent Fees to be paid by Kevin Foster

Code Compliance Certificate to be sent to? KEVIN FOSTER

FLOOR AREA OF PROJECT

New Residential Dwellings or
New Commercial Only m²

LEGAL DESCRIPTION

WDC Property No.
Valuation Roll No.
Lot(s) DP
Section Block
Survey District

Signed by (on behalf of) the applicant

Signature: [Signature]
Owner, builder, plumber, designer, agent
(circle one)

Date: 26 / 9 / 2003

FEES APPLICABLE (office use only)

Building Consent Application	\$
Building Consent Issue	\$
P.I.M	\$
Non-notified Appl. Fee	\$
Prepaid Crossing	\$
Prepaid Sewer Connection	\$
Prepaid Water Connection	\$
Stormwater Connection	\$
BIA Levy	\$
Additional Charges	\$
Total Fees (Incl. G.S.T)	\$

PTO

The information will be included in a Public Register of Consents issued which is available for public perusal under the Privacy Act 1993 section 54. This may result in receipt by the 'Owner' of trade advertising.

Project Details

The project involves the following

(tick each applicable box, if any, and attach two(2) copies of any relevant information)


- (1) Location in relation to legal boundaries and external dimensions of new, relocated or altered buildings
- (2) New provisions to be made for vehicular access and on-site parking, ie. a new crossing
- (3) Provisions to be made in building over or adjacent to any road or public place, ie. hoardings, signs
- (4) New provisions to be made for disposing of stormwater and wastewater
- (5) Precautions to be taken where building work is to take place over existing drains or sewers or in close proximity to wells or watermains
- (6) New connections to public utilities, ie. new drainage or water connections
- (7) Provisions to be made for any demolition work ie. the protection of the public, suppression of dust, disposal of debris, disconnection from public utilities and suppression of noise
- (8) Any cultural heritage significance of the building or building site, including whether it is on a marae

Project Documents (provided with this application)

- Plans and specifications
- (22) Producer Statements (ie. truss design, design review) - specify:
- (23) Other Documents - specify:

Inspections

- (26) By Wanganui District Council
- (27) Other - specify (ie. Design Engineer):

For office use only							
Unit	Checks				Inspections No.	Approved	
	Initials	Date	Initials	Date		Initials	Date
Administration	W	30/9/03					
Planning	C.L.	30/9/03				C.L.	30/9/03
Fire Design							
Building	DA	1/10/03				DA	3/10/03
Drainage							
Water							
Structural							
Plumbing/Drainage	DA	1/10/03				DA	3/10/03
Roading							
Health							
Dangerous Goods							
Approved for issue of PIM/Building Consent							
District Building Controller: 						Date: 6 OCT 2003	

Development Checksheet

Residential

Property Address: <i>28 Carlton Avenue.</i>						
Project: <i>Swimming pool.</i>				Site Area: <i>1140m²</i>		
	<i>✓</i> Operative Plan			Proposed Plan <i>Residential</i>		
Rule	Required	Provided	O.K.	Required	Provided	O.K.
Coverage						
Maximum Height						
9m x 9m Triangle						
Front Boundary						
Side Boundary						
Side Boundary						
Rear Boundary						
Separation of Units						
Outdoor Living						
Storage						
Parking				APPROVED		
Access				3 / 15 12		
Dimensions/ Easements				<u>Consent No.</u>		

Comments:

*In ground swimming pool - complies with planning
Planning Approved.*

C.C.



TOTAL INSPECTION TIME REPORT

Building Consent Number BC3/1512

Total Estimated Inspection Time	105
Total Actual Inspection Time	0
Inspection Time Difference	105
At BC Issue Time to be charged.	
At Completion Positive amount = time to be credited	
Negative amount = time to be charged	

Signed for and on behalf of the Wanganui District Council

65

SWIMMING POOLS : FENCING CHECKSHEET

Property Address: 28 CARLTON

Inspected By: [Signature]

Date of Inspection: 10/12/07

Is the "immediate" pool area fenced? (This area is defined as that which is used for the pool activity only, e.g. excludes gardens, clotheslines, sheds etc).	Yes ✓	No	
Is the fence height at least 1.2 metres above ground on the outside of the fence?	Yes ✓	No	'Actual' 1.8mm
Is there 100mm or less clearance from ground to bottom of the fence?	Yes ✓	No	'Actual' 25mm
Is the fence 1.8metres high, for fences made of netting or similar, and the openings are more than 10mm across? (No openings in the material may be more than 50mm in any direction).	Yes	No N/A	'Actual'mm 'Hole size'mm
Vertical palings, rods, etc not more than 100mm apart?	Yes ✓	No	'Actual' Battedmm
Horizontal members 900mm or more apart?	Yes ✓	No	'Actual' 900mm
Gates or doors open outwards from pools?	Yes ✓	No	
Gates or doors close and latch automatically? (From a stationary position 150mm from the fully closed position).	Yes ✓	No	
Is the latch control at 1.5metres off the ground if latch on outside, Or at least 1.2metres off the ground if latch is on inside of gate?	Yes ✓ Yes ✓	No No	'Actual'mm 'Actual' 145mm
Are child-proof locks fitted to doors giving direct access from the house to the pool area?	Yes ✓	No	

Comments:

Dual Latches @ on garage access door @ 1.7m & closer £1.1m

Wanganui District Council

Building a better community with the people of the Wanganui District



101 Guyton Street
P O Box 637, Wanganui
Phone: (06) 349 0001
Fax: (06) 349 0000
Email: wdc@wanganui.govt.nz
Web: www.wanganui.govt.nz

1 October 2003

**Mr KW Foster
22 Hereford St
WANGANUI 5001**

Dear Kevin:

1st Request for further information on Application.

Project Number: BC3/1512
Project Location: 28 Carlton Ave WANGANUI 5001
Project Description: Construct inground concrete swimming pool (Pool rego no:00015)

The documentation supplied for the above project has been reviewed and raises the following comments:

- 1. Please show position of fencing and access gate. (Dave Hall - Building Control Officer)**
- 2. Show where nearest gully trap and hose tap are. (Dave Hall - Building Control Officer)**

We have placed this application on hold until we receive your advice regarding the above comments, and the issues raised have been resolved. If you have any queries please contact this office and quote Project Number BC3/1512

Yours sincerely

Garry Edlin
Customer Services Technical Officer

RECEIVED
WANGANUI DISTRICT COUNCIL

24 JUL 2006

Deborah McEwen
28 Carlton Avenue
Wanganui

20th July 2006

Gina Wroe
Wanganui District Council
PO Box 637
WANGANUI

BC 3/1512

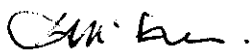
Dear Gina

I am writing this letter as requested to apply for a six month extension on my building consent. Due to unforeseen circumstances there have been delays out of my control. Firstly we had to wait a long time for the plumbers and concrete layers to do the work. It took over a year for Keenan concrete to actually arrive and finish the driveway. It has been very frustrating and all they other workpeople have taken months to complete their work this is why it has dragged on.

Also I have just had a baby and have had medical complications, I am awaiting hip surgery so I am unable to work so the finished work around the pool has not been completed. We will endeavour to get this done over the next six months and finally complete the work. This will have to be done when the weather is fine and a contractor is free to do the work.

I look forward to hearing from you soon.

Yours truly,



Deborah McEwen



13 June 2007

Our reference: 2/70/2C/BT:GW
Extension request

If calling contact: Barry Thomas

Deborah McEwen
28 Carlton Ave
WANGANUI

Dear Deborah,

Thank you for your prompt response in regard to your pool sign off.

Your request for an extension to your Building Consent has been lodged on your file and diaried forward 6 months for a re-inspection.

Your interim measures to ensure safety and restricted access to your pool area have been noted.

Yours Sincerely

Barry Thomas
Building Control Officer

0-32-673

DISTRIBUTION:	Barry Thomas
11 JUN 2007	
FILE No.	54-08-004
FOLIO	

Deborah McEwen
28 Carlton Avenue
Wanganui

6th June 2007

Barry Thomas
Wanganui District Council
PO Box 637
Wanganui

Dear Barry

We would like to request a six month extension on our permit to complete the area around the pool. I will be having an operation next week and will be out of work for approximately three months.

We have made improvements to make the area safe. The doors of the garage will be boarded up to prevent access from the garage to the pool. All other access will be locked and will be childproof.

Yours sincerely



Deborah McEwen

101 Guyton Street
P O Box 637, Wanganui
Phone: (06) 349 0001
Fax: (06) 349 0536
Email: wdc@wanganui.govt.nz
Web: www.wanganui.govt.nz



5 June 2007

**Miss Deborah A McEwen
28 Carlton Ave
WANGANUI 5001**

Dear Sir or Madam:

Application Number: BC3/1512
Location: 28 Carlton Ave WANGANUI 5001
Description: Construct inground concrete swimming pool (Pool rego no:00015)

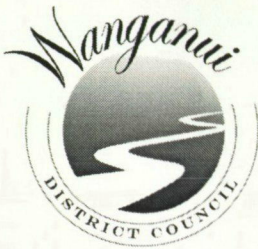
It was noted a final inspection was completed on the 2nd May 2007 and you were to apply for an extension in writing setting out interim safety measures in which we still haven't received yet.

As you have not contacted Wanganui District Council regarding this matter, a Notice to Fix will be issued for the remedial work.

Yours sincerely

A handwritten signature in black ink, appearing to read "Gina Wroe".

Gina Wroe
Building Support Officer



Inspections Record For Building Consent Number BC3/1512

<i>Inspection</i>	<i>When to Request</i>	<i>Date</i>	<i>Inspector</i>	<i>Complies with Code</i>	<i>Reinspect</i>	<i>Notes</i>
CONCRETE SLAB INSPECTION	Prior to placing Concrete	30/10/2003	PaulM	YES	NO	AOK
CONCRETE MASONRY INSPECTION	Before grouting	06/11/2003	PaulM	YES	NO	D12 elbows to be placed to bond bondbeam to vertical rods.
FINAL BUILDING INSPECTION	On Completion	02/05/2007	Barry Thomas	NO	YES	see site instruction note # 0477 gate rqd to be self closing & latching, french doors @ dwelling to be self latching & have dead bolting to both leaves, doors @ garage non compliant and rqd to be self latching and latch @ 1500 high, also bench adjacent garage door to have end wall to prevent climbing access to door latch. Owner to apply for an extension in writing setting out interim safety measures taken such as preventing use of garage doors by some means etc
OTHER INSPECTION		21/06/2005	Peter Tantrum			spoke to owner about this consent should be completed at xmas
ADDITIONAL INFORMATION		24/07/2006	Gina Wroe			received letter from Deborah McEwen today asking for 6 month extension, pool to be completed by then.
TELEPHONE CONVERSATION (NO INSPECTION)		06/06/2007	Barry Thomas	NO	YES	with owner (Debra) 3487565 - re my requests @ final inspection done on 2/5/07 - She is unable to afford to get the work done and is to supply a written request to extend the consent and to outline the interim measures taken to ensure safety (nb: this will include restricting access to the pool area such as the permanent 'locking' of doors to the garage etc etc)

Monday
 10th Dec

9.00am



INSPECTION RECORD

This record, together with the Building Consent and approved plans, is to remain on the construction site at all times.

Project Location	TO BOOK AN INSPECTION PLEASE PHONE WDC BUILDING CONTROL		BC3/1512
28 Carlton Ave WANGANUI 5001	ON 349 0001 AND QUOTE THE FOLLOWING APPLICATION NUMBER:		
Applicant	Description of Work		
Mr KW Foster 22 Hereford St WANGANUI 5001	Construct inground concrete swimming pool (Pool rego no:00015)		
Builder	Plumber	Drainlayer	
Mr KW Foster 22 Hereford St WANGANUI 5001	No associations of type Plumber are linked to this application	Mr TTT Olney 26 Burns St WANGANUI 5001	

SUMMARY OF CONDITIONS

Building Consent Number BC3/1512

PIM Conditions

Code	Condition
	All work on the project must comply with the requirements of the NZ Building Code.
	A PIM only document is not an approval to build. A Building Consent is required before building work commences.
	W.D.C will follow up on building work not completed within two years of building consent issue.
	A Building Consent lapses and is of no effect if the building work has not been started within 12 months of the date of issue.
	If the building is public premises it may not be occupied until either a code compliance certificate or certificate for public use has been issued.
	Please note [Electrical, and Gasfitting subtrades do not form part of the building consent inspection process. However, Council is required to receive 'Energy Certificates' from both of these trades before issue of a Code Compliance Certificate].

Building Consent Conditions

Code	Condition
BCsmokes	Smoke alarms are to be installed in accordance with 'F7' of the New Zealand Building Code. New smoke alarms must incorporate a 'hush' facility.

Wanganui District Council



3487565

Site Instruction Note

N° 0477

This record must remain with the approved building consent No.

Consent No. 3/15/2 Date 2-5-07 Inspector Barry Thomas

Address: 28 Carlton Ave

Directed to: Owner

Notice to Fix to be issued: (please circle) - Yes No

- * Gate r/d to be self closing/latching
- * French doors @ house r/d to be self latching and dead bolt to both leafs.
- * Safety/Security @ Garage doors opening into pool area non compliant.

ENTERED

FINAL BUILDING INSPECTION

Memo Type
Event ID
Status
Memo Ctr

see site instruction note # 0477
gate rqd to be self closing & latching, french doors @ dwelling to be self latching 7 have
dead bolting to both leaves, doors @ garage non compliant and rqd to be self latching and
latch @ 1500 high, also bench adjacent garage door to have end wall to prevent climb
access to door latch. Owner to apply for an extension in writing setting out interim safety
measures taken such as preventing use of garage doors by some means etc etc

Inspection Date

When to request

Est

Inspector

Act

COMPLIES WITH CODE

Reinspection Req?

Non-Chargable Time

Association
Consulting
Engineers of
New Zealand

New Zealand
Institute of
Architects

Institution
Professional
Engineers of
New Zealand

P.I.M. No
Building Regulation Clause(s)
Job No. 801/003873-02

PRODUCER STATEMENT - PS1 - DESIGN

(Guidance notes on the use of this form are printed on the reverse side)

ISSUED BY: Gary John Ander for MWH
(Suitably qualified Design Professional)

TO: Deborah McEwen
(Owner)

TO BE SUPPLIED TO: Wanganui District Council
(Territorial Authority)

IN RESPECT OF: Retaining Wall to Swimming Pool
(Description of Building Work)

AT: 28 Carlton Avenue, Wanganui
(Address)

APPROVED

3/15/12

Consent No.

LOT 6 DP 34322 SO

MWH has been engaged by K Foster
(Design Firm) (Owner/Developer/Contractor)

to provide Design services for swimming pool wall services in respect of the
(Extent of Engagement)

requirements of Clause(s) B1 Structure of the Building Regulations 1992 for

All Part only as specified Retaining wall
of the building work. The design has been prepared in accordance with B1/VM1
(verification method(s)/acceptable solution(s))

(respectively) of the approved documents issued by the Building Industry Authority and the work is described on
MWH (NZ)Limited drawings titled N/A
(Design Firm)

and numbered N/A and the specification and other documents according to which the
building is proposed to be constructed.

As an independent design professional covered by a current policy of Professional Indemnity Insurance to a
minimum value of \$200,000, **I BELIEVE ON REASONABLE GROUNDS** that subject to:

(i) the site verification of the following design assumptions 1) Minimum ultimate ground bearing strength of
300 kPa. 2) Ground water level below pool foundation. 3) House foundation to be no closer than 1.2m to
pool wall

and (ii) all proprietary products meeting the performance specification requirements, the drawings,
specifications, and other documents according to which the building is proposed to be constructed comply
with the relevant provisions of the building code.

Gary Ander
(Signature suitably qualified Design Professional)

Date 25 September 2003

BE (Hons), NZCE
(Professional Qualifications)

ERB/AERB Reg No. 167922

8 Bates Street, Wanganui
(Address)

Member ACENZ

IPENZ NZIA

This form to accompany Form 3 of the Building Regulations 1992 for the application of a Building Consent.

GUIDANCE ON USE OF PRODUCER STATEMENTS

This producer statement has been prepared by a combined task committee consisting of members of the New Zealand Institute of Architects, Institution of Professional Engineers New Zealand, Association of Consulting Engineers New Zealand and the Building Officials Institute of New Zealand.

Four producer statements are available and brief details on the purpose of each are as follows:

- Design:** Intended for use by the person responsible for the design in circumstances where the Territorial Authority will rely on the producer statement to issue a Building Consent.
- Design Review:** Intended for use by a suitably qualified independent design professional where the Territorial Authority does not undertake an internal review and relies on the independent design professional's review to issue the building consent.
- Construction:** Intended for the use by the contractor of the building works where the Territorial Authority requires a producer statement at the completion of construction.
- Construction Review:** Intended for use by the person required by the Building Consent to undertake construction monitoring of the building works in circumstances where the Territorial Authority will rely on the producer statement to issue a Code Compliance Certificate.

The producer statement system is intended to provide territorial authorities with reasonable grounds for the issuing of a Building Consent or Code Compliance Certificate without having to duplicate design or construction checking by others.

The following criteria are recommended to Territorial Authorities with respect to the use of the producer statements.

Definition of Suitably Qualified Design Professional

A suitably qualified design professional should have recognised qualifications and experience for the work undertaken and should be either:

- (i) an active member of the Association of Consulting Engineers of New Zealand (ACENZ) or;
- (ii) a corporate member of the Institution of Professional Engineers of New Zealand (IPENZ) having a current policy of Professional Indemnity Insurance for a sum not less than \$200,000 or;
- (iii) a member of the New Zealand Institute of Architects (NZIA) having a current policy of Professional Indemnity Insurance for a sum of not less than \$200,000.

Design Build Contracts

If the design professional is engaged by the contractor, the territorial authority should satisfy itself that it is appropriate for the territorial authority to rely upon a producer statement from the design professional.

Consulting Services during Construction Phase

There are several levels of service which a design professional may provide during the construction phase of a project. The territorial authority is encouraged to require that the service to be provided by the design professional is appropriate for the project concerned.

Requirement to Provide Producer Statement

Territorial authorities should ensure that the applicant is aware of any circumstances in which there may be a requirement for producer statements for the construction phase of building work at the time the building consent is issued as no design professional should be expected to provide a producer statement unless such a requirement forms part of the design professional's engagement.

Attached Particulars

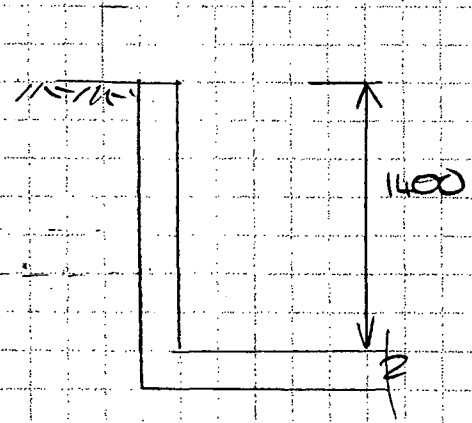
Attached particulars referred to in this producer statement refer to supplementary information appended to the producer statement.



Brief:

Design swimming pool wall
 Maximum Depth 1.4 m
 Retaining soil to one side of wall.

APPROVED
 3/15/12
 Consent No.



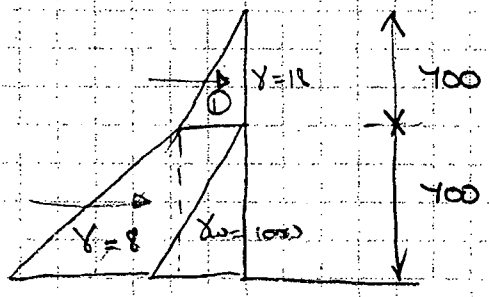
Soil properties

btcc $\gamma_s = 18 \text{ kN/m}^3$
 $\phi = 25^\circ$
 $k_0 = 1 - \sin 25^\circ = 0.58$

1. Load Case 1

Assume no water in pool

Allow for water pressure to midheight say to soil side



$$P = \frac{1}{2} \times 0.58 \times 18 \times 0.7^2 + 0.58 \times 18 \times 0.7 + \frac{1}{2} \times 0.58 \times 8 \times 0.7 + \frac{1}{2} \times 10 \times 0.7^2$$

$$= 2.6 + 5.1 + 1.6 + 2.45 = 11.75 \text{ kN/m}$$

$$M = 2.6 \times \left(\frac{0.7+0.7}{3}\right) + 5.1 \times \frac{0.7}{2} + (1.6+2.45) \times \frac{0.7}{2} = 5.16 \text{ kN-m}$$



$$M^* = 1.6 \times 5.16$$

$$= \underline{8.27 \text{ kN-m/m}}$$

$$P^* = 1.6 \times 11.75$$

$$= \underline{18.8 \text{ kN/m}}$$

APPROVED

3/15/12

Consent No.

2. Load Case 2

Assume water in pool to 1.4 m

Soil height to outside = 10 m

$$P^* = \frac{1}{2} \times 10 \times 1.4^2 \times \frac{1}{3} - \frac{1}{2} \times \frac{1}{3} \times 18 \times 1.0^2$$

$$= 10.7 \text{ kN/m}$$

$$M^* = 13.72 \times \frac{1.4}{3} - 3 \times \frac{1.0}{3}$$

$$= \underline{5.4 \text{ kN-m/m}} \quad \text{not critical!}$$

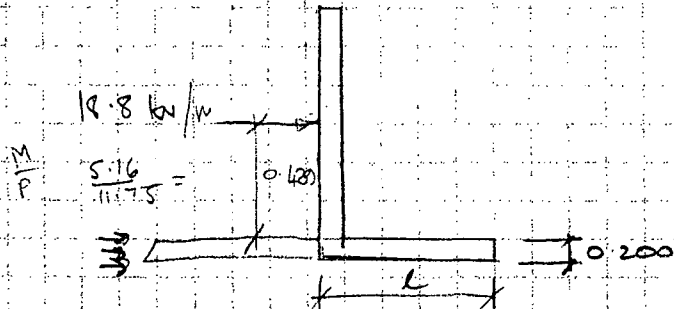
Use 4D16 @ 400 c/s. $A_s = 503 \text{ mm}^2/\text{m}$

$$\phi M_u = 0.8 \times 503 \times \left(0.1 - \frac{503 \times 430}{2 \times 0.85 \times 4 \times 10^6} \right)$$

$$= 11.8 \text{ kN-m} > 8.27 \text{ kN-m OK}$$

Check Overturning

D16s - 400 c/s centrally placed



APPROVED

3/15/12

Consent No.

Need to add bottom section

$$\text{Take } p = 0.9 \times 10 + 0.7 \times 0.5 \times 18 + 0.2 \times 8 \times 0.59$$

$$= 20.5 \text{ kPa}$$

$$M_{\text{st}} = 18.8 \times (0.430 + 0.20) + \left(\frac{20.5 \times 0.2^2}{2} \right) \times 16$$

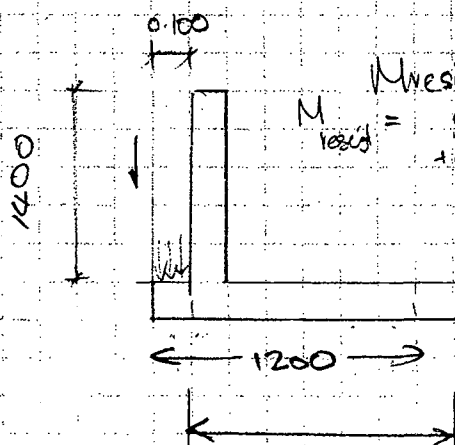
$$= 12.7 \text{ kN-m}$$

$$M_{\text{resist}} = \left(1.4 \times 0.2 \times 22 \times (l - 0.1) + \frac{l^2 \times 0.2 \times 24}{2} \right) \times 0.9$$

$$\text{For } R = 1.0$$

$$M_{\text{resist}} = 7.2 \text{ kN-m/m} - \text{too low}$$

Put 100 mm Footing on pool - $F_y l = 1.200 \text{ m}$

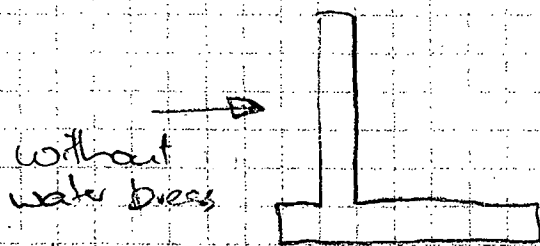


$$M_{\text{resist}} = 0.1 \times 18 \times 1.2 \times 1.150 + 14 \times 0.200 \times 22 \times 1.0$$

$$+ 0.2 \times \frac{1.2^2 \times 24}{2} = 12.5 \text{ kN-m/m}$$



Need to include soil friction



$P' = 2.6 + 5.1 + 1.6$ (page 1)
 $= 9.3 \text{ kN}$

take $\phi_{\text{friction}} = 17^\circ$

$9.3 \tan 17^\circ = 2.8 \text{ kN}$

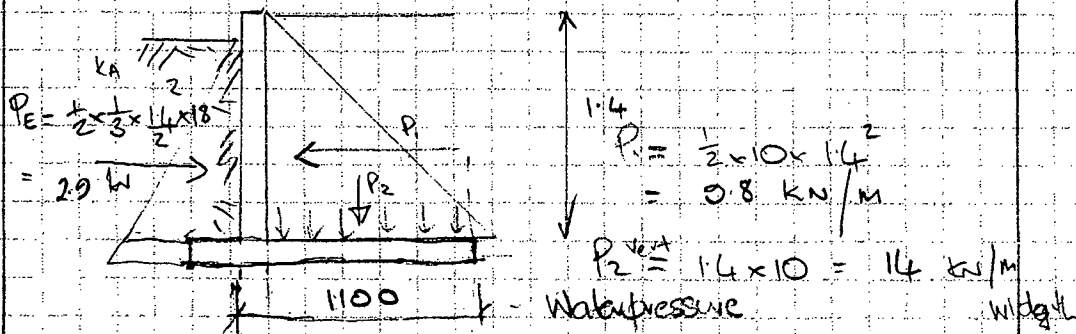
$M_{\text{rest}} = 12.5 + 2.8 \times 1.2$

$= 15.86 \text{ kN-m} \approx M_{\text{OT}}$

$\times 0.9 = 14.3 \text{ kN-m}$

OK

Check Filled Pool



Check O/T

$M_{\text{OT}} = 2.8 \times \left(\frac{1.4 + 0.2}{3} \right) = 6.53 \text{ kN-m/m}$

$M_{\text{resist}} = 14 \times \left(\frac{0.9 + 0.3}{2} \right)$

$= 10.5 \text{ kN-m} > 6.53 \text{ kN-m}$
OK

APPROVED

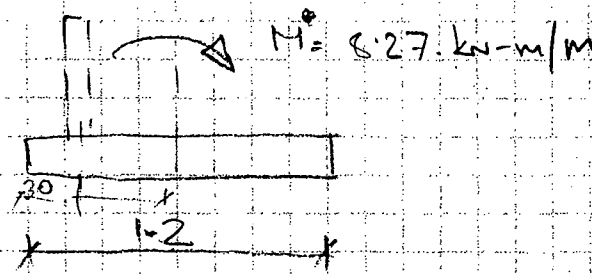
3/15/12

Consent No.



Check Bearing

Load Case 1



APPROVED

3/15/12

Page 2

Consent No.

$$M = 8.27 - 0.9 \times 0.2 \times 1.4 \times 22 \times 0.4$$

$$- 0.9 \times 1.8 \times 1.4 \times 0.55$$

$$= 4.8 \text{ kN-m}$$

$$W_{gt} = 0.9 \times (0.2 \times 1.4 \times 22 + 1.4 \times 0.2 \times 26)$$

$$= 11.6 \text{ kN}$$

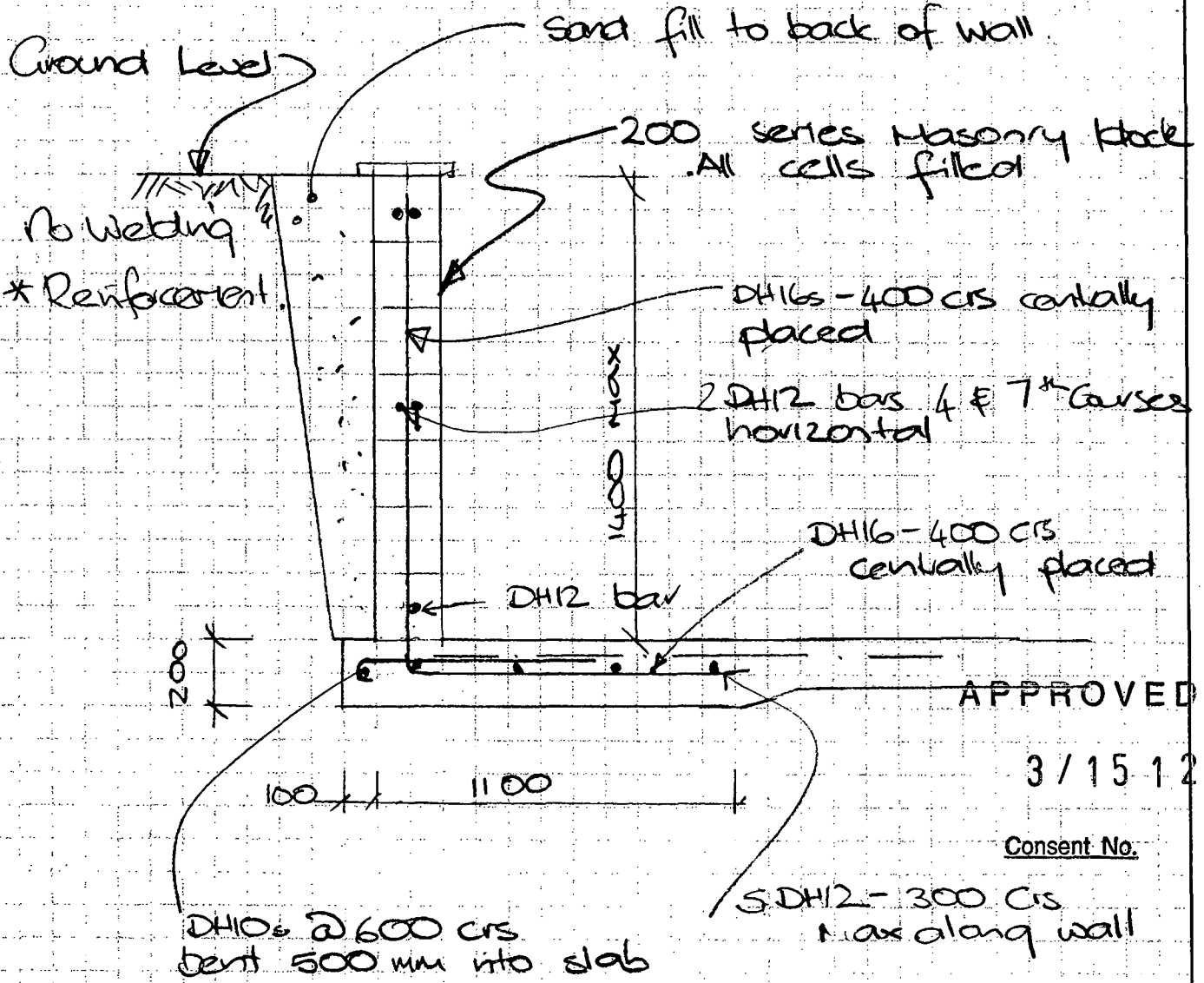
$$e = \frac{4.8}{11.6}$$

$$= 0.41 \text{ m}$$

$$q = \frac{11.6}{2 \times 0.2}$$

$$= 29 \text{ kPa OK}$$

0.2, 0.2



APPROVED

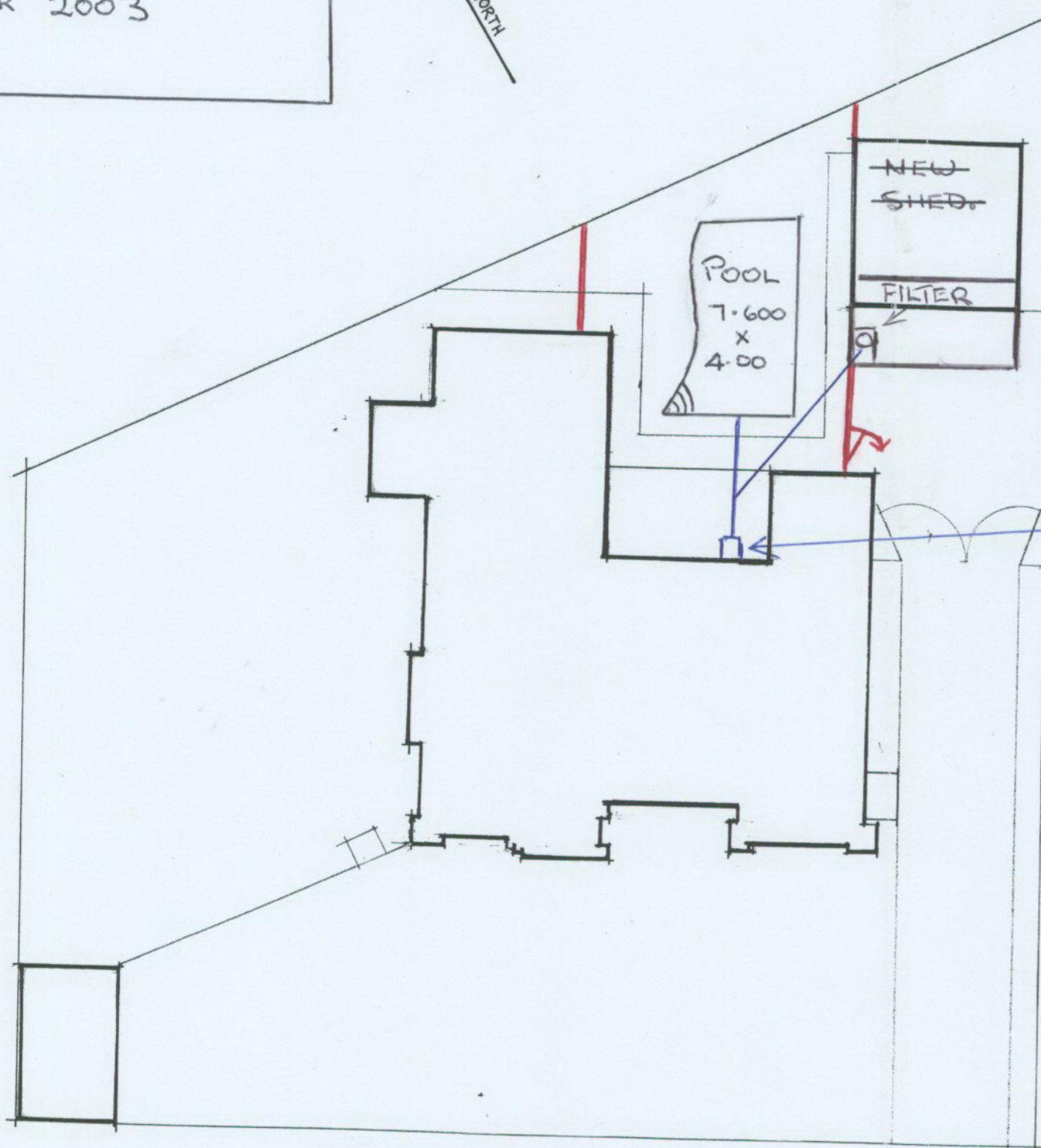
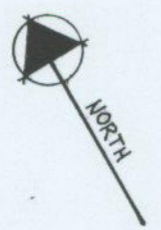
3/15/12

Consent No.

- * Ground strength to have minimum ultimate bearing 300 KPa
- * Design only applies for ground water level below pool foundation level
- * Design does not call for expansive soils

$$0.008 A_g \quad 0.008 \times 750^2 \times \frac{\pi}{4} = 3534$$

PROPOSED Swimming Pool
 DEBORAH M EWEN
 28 CARLTON AVE.
 WANGANUI
 LOT 6 D.P. 34322.
 SEPTEMBER 2003



- ① FENCING TO WDC BY LAWS.
- ② ALL OPENINGS TO THE POOL AREA FROM THE DWELLING TO HAVE COMPLYING CHILD PROOF LOCKS FITTED.
- ③ FILLING POOL THROUGH A NON RETURN VALVE SYSTEM.
- ④ EMPTYING POOL THROUGH SEWER SAME WITH BACK WASHING OF FILTRATION.
- ⑤ FILTRATION TO BE HOUSED IN MOTOR SHED.
- ⑥ ALL FILTRATION TO A PRESSURE PIPE CLASS 12 A.S. 1477.

PLAN DETAILS

- POOL FENCE + GATE
- WASTE
- GULLY TRAP + TAP

28 CARLTON AVE.

SCALE 1:20

APPROVED
 3/15/12
 Consent No.



CODE COMPLIANCE CERTIFICATE NUMBER BC3/1512

Section 43(3), Building Act 1991

**Miss DA McEwen
28 Carlton Ave
WANGANUI 5001**

**Building Consent
No:** BC3/1512

Issue Date: 14/12/07

Project Location	Assessment Number/Legal Description
28 Carlton Ave WANGANUI 5001	LOT 6 DP 34322 0.1140 Ha
Type of Work	Description of Work
Pool	Construct inground concrete swimming pool (Pool rego no:00015)
Intended Life	Estimated Value
50 years	\$20000.00

This is a final Code Compliance Certificate issued in respect of all of the building work under the above Building Consent.

Signed for and on behalf of the Wanganui District Council:

A handwritten signature in black ink, appearing to read 'A J Jamieson'.

**A J Jamieson
Team Leader Building Services
Environmental Services Business Unit**

Date: 14 December, 2007



END OF BUILDING CONSENT FILE

BC No. 3/1512