Te Kaunihera o Te Hiku o te Ika
Far North District Council

Office Use Only
Application Number:

Application for resource consent or fast-track resource consent

(Or Associated Consent Pursuant to the Resource Management Act 1991 (RMA)) (If applying for a Resource Consent pursuant to Section 87AAC or 88 of the RMA, this form can be used to satisfy the requirements of Schedule 4). Prior to, and during, completion of this application form, please refer to Resource Consent Guidance Notes and Schedule of Fees and Charges — both available on the Council's web page.

1. Pre-Lodgement Meeting

Have you met with a council Resource Consent representative to discuss this application prior to lodgement? (✔) **Yes** ( ) **No**

2. Type of Consent being applied for

(more than one circle can be ticked):

(✔) **Land Use**
( ) **Fast Track Land Use***
(✔) **Subdivision**
( ) **Consent under National Environmental Standard**
(e.g. Assessing and Managing Contaminants in Soil)
( ) **Other (please specify)** _____

( ) **Discharge**
( ) **Change of Consent Notice (s.221(3))**
( ) **Extension of time (s.125)**

The fast track is for simple land use consents and is restricted to consents with a controlled activity status.

3. Would you like to opt out of the Fast Track Process?

( ) **Yes** (✔) **No**

4. Consultation

Have you consulted with Iwi/Hapū? ( ) **Yes** (✔) **No**

If yes, which groups have you consulted with? All landuse Consented a/Ready approved

Who else have you consulted with? N/A - RC 2220673 a/Ready approved.

For any questions or information regarding iwi/hapū consultation, please contact Te Hono at Far North District Council ***tehonosupport@fndc.govt.nz***

5. Applicant Details

Name/s: Fox farms Limited.

Email: [redacted]

Phone number:

Postal address:
(or alternative method of service under section 352 of the act)

6. Address for Correspondence

Name and address for service and correspondence (if using an Agent write their details here)

Name/s: M & F Fox

Email: [redacted]

Phone number:

Postal address:
(or alternative method of service under section 352 of the act)

**** All correspondence will be sent by email in the first instance. Please advise us if you would prefer an alternative means of communication.***

7. Details of Property Owner/s and Occupier/s

Name and Address of the Owner/Occupiers of the land to which this application relates (where there are multiple owners or occupiers please list on a separate sheet if required)

Name/s: West Coast farms Limited, & Ministry of Education (Lessee)

Property Address/ Location: 32 & 20 Wireless Rd Kaitaia.

Postcode 0482.

8. Application Site Details

Location and/or property street address of the proposed activity:

Name/s:

Site Address/ Location: 32 & 20 Wineless Road Kaitaia.

Postcode 0482

Legal Description: Lot 1 DP 203524 **Val Number:**

Certificate of title:

Please remember to attach a copy of your Certificate of Title to the application, along with relevant consent notices and/or easements and encumbrances (search copy must be less than 6 months old)

Site visit requirements:

Is there a locked gate or security system restricting access by Council staff? ☑ **Yes** ○ **No**

Is there a dog on the property? ☑ **Yes** ○ **No**

Please provide details of any other entry restrictions that Council staff should be aware of, e.g. health and safety, caretaker's details. This is important to avoid a wasted trip and having to re-arrange a second visit.

Please Contact applicant to arrange site visit.
No access to the School or School House allowed.
Access to the farm to be arranged with F Foy.

9. Description of the Proposal:

Please enter a brief description of the proposal here. Please refer to Chapter 4 of the District Plan, and Guidance Notes, for further details of information requirements.

As per AEE.
Combined Subdivision & Landuse Consent, to undertake a non-complying Boundary adjustment in the Rural production Zone.

If this is an application for a change or Cancellation of Consent Notice conditions (s.221(3)), please quote relevant existing Resource Consents and Consent Notice identifiers and provide details of the change(s), with reasons for requesting them.

10. Would you like to request Public Notification?

○ **Yes** ☑ **No**

11. Other Consent required/being applied for under different legislation

(more than one circle can be ticked):

N/A.

- ◯ **Building Consent** Enter BC ref # here (if known)
- ◯ **Regional Council Consent (ref # if known)** Ref # here (if known)
- ◯ **National Environmental Standard consent** Consent here (if known)
- ◯ **Other (please specify)** Specify 'other' here

12. National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health:

The site and proposal may be subject to the above NES. In order to determine whether regard needs to be had to the NES please answer the following:

Is the piece of land currently being used or has it historically ever been used for an activity or industry on the Hazardous Industries and Activities List (HAIL) ◯ **Yes** ✓ **No** ◯ **Don't know**

Is the proposed activity an activity covered by the NES? Please tick if any of the following apply to your proposal, as the NESCS may apply as a result. ◯ **Yes** ✓ **No** ◯ **Don't know**

- ◯ **Subdividing land**
- ◯ **Changing the use of a piece of land**
- ◯ **Disturbing, removing or sampling soil**
- ◯ **Removing or replacing a fuel storage system**

13. Assessment of Environmental Effects:

Every application for resource consent must be accompanied by an Assessment of Environmental Effects (AEE). This is a requirement of Schedule 4 of the Resource Management Act 1991 and an application can be rejected if an adequate AEE is not provided. The information in an AEE must be specified in sufficient detail to satisfy the purpose for which it is required. Your AEE may include additional information such as Written Approvals from adjoining property owners, or affected parties.

Your AEE is attached to this application ✓ **Yes**

13. Draft Conditions:

Do you wish to see the draft conditions prior to the release of the resource consent decision? ✓ **Yes** ◯ **No**

If yes, do you agree to extend the processing timeframe pursuant to Section 37 of the Resource Management Act by 5 working days? ✓ **Yes** ◯ **No**

14. Billing Details:

This identifies the person or entity that will be responsible for paying any invoices or receiving any refunds associated with processing this resource consent. Please also refer to Council's Fees and Charges Schedule.

Name/s: (please write in full) Foy Farms Limited

Email: [redacted]

Phone number: [redacted]

Postal address:
(or alternative method of service under section 352 of the act) [redacted]

Fees Information
An instalment fee for processing this application is payable at the time of lodgement and must accompany your application in order for it to be lodged. Please note that if the instalment fee is insufficient to cover the actual and reasonable costs of work undertaken to process the application you will be required to pay any additional costs. Invoiced amounts are payable by the 20th of the month following invoice date. You may also be required to make additional payments if your application requires notification.

Declaration concerning Payment of Fees
I/we understand that the Council may charge me/us for all costs actually and reasonably incurred in processing this application. Subject to my/our rights under Sections 357B and 358 of the RMA, to object to any costs, I/we undertake to pay all and future processing costs incurred by the Council. Without limiting the Far North District Council's legal rights if any steps (including the use of debt collection agencies) are necessary to recover unpaid processing costs I/we agree to pay all costs of recovering those processing costs. If this application is made on behalf of a trust (private or family), a society (incorporated or unincorporated) or a company in signing this application I/we are binding the trust, society or company to pay all the above costs and guaranteeing to pay all the above costs in my/our personal capacity.

Name: (please write in full) Felicity & Michael Foy

Signature: [redacted]
(signature of bill payer)

MANDATORY

Date 30/01/2025

15. Important Information:

Note to applicant
You must include all information required by this form. The information must be specified in sufficient detail to satisfy the purpose for which it is required.
You may apply for 2 or more resource consents that are needed for the same activity on the same form.
You must pay the charge payable to the consent authority for the resource consent application under the Resource Management Act 1991.

Fast-track application
Under the fast-track resource consent process, notice of the decision must be given within 10 working days after the date the application was first lodged with the authority, unless the applicant opts out of that process at the time of lodgement. A fast-track application may cease to be a fast-track application under section 87AAC(2) of the RMA.

Privacy Information:
Once this application is lodged with the Council it becomes public information. Please advise Council if there is sensitive information in the proposal. The information you have provided on this form is required so that your application for consent pursuant to the Resource Management Act 1991 can be processed under that Act. The information will be stored on a public register and held by the Far North District Council. The details of your application may also be made available to the public on the Council's website, www.fndc.govt.nz. These details are collected to inform the general public and community groups about all consents which have been issued through the Far North District Council.

15. Important information continued...

Declaration

The information I have supplied with this application is true and complete to the best of my knowledge.

Name: (please write in full) [redacted] Michael Fay

Signature: [redacted] Date 30/01/2025.

...n is made by electronic means

Checklist (please tick if information is provided)

- [x] Payment (cheques payable to Far North District Council)
- [x] A current Certificate of Title (Search Copy not more than 6 months old)
- [ ] Details of your consultation with Iwi and hapū N/A.
- [x] Copies of any listed encumbrances, easements and/or consent notices relevant to the application
- [x] Applicant / Agent / Property Owner / Bill Payer details provided
- [x] Location of property and description of proposal
- [x] Assessment of Environmental Effects
- [x] Written Approvals / correspondence from consulted parties N/A.
- [x] Reports from technical experts (if required)
- [ ] Copies of other relevant consents associated with this application
- [x] Location and Site plans (land use) AND/OR
- [x] Location and Scheme Plan (subdivision)
- [x] Elevations / Floor plans
- [x] Topographical / contour plans

Please refer to Chapter 4 of the District Plan for details of the information that must be provided with an application. Please also refer to the RC Checklist available on the Council's website. This contains more helpful hints as to what information needs to be shown on plans.

Combined Subdivision and Landuse consent for Foy Farms Limited,

32 Wireless Road, Kaitaia, RD2 0482

Date 30/01/2025

Please find attached an application form and a report of the Assessment of Environmental Effects in support of the combined subdivision (by way of boundary adjustment) and landuse consent application.

The Report on the Assessment of Environmental Effects indicates the potential and actual effects of the proposal on the environment.

The application has been assessed as a Non-Complying Subdivision (by way of boundary adjustment) and Discretionary Landuse Activity under the Far North Operative District Plan. The overall activity status of the application is Non-Complying.

Please contact me if you have any further queries.

Yours Truly,
Foy Farms Limited
M & F Foy

Attachments:

1. Application for Combined Subdivision and Landuse Resource Consent
2. Report on the Assessment of the Environmental Effects of the proposal
3. Certificate of Titles, Building line restriction & Consent Notices
4. Scheme Plan for Subdivision
5. Approved Landuse for Te Kura Kaupapa Maori O Tututarakihi, RC 2220673
6. Approved stormwater and Geotech report (attenuation back to pre-development levels) under RC 2220673
7. Site coverage Table for Lot 1 (an excerpt from the stormwater report), showing the impermeable surface calculations for Lot 1
8. The existing Te Kura Kaupapa Māori o Tūtūtarakihi site plans and school layout, that will be wholly contained within proposed Lot 1 (being the leased area to the Ministry of Education).
9. Approved Decision and Section 95 report under RC 2220673 for the landuse activities within proposed Lot 1

Assessment of Environment Effects Report:

1.0 Description of the Proposed Subdivision and Landuse Activities:

1.1 Subdivision

The proposal is to undertake a non-complying boundary adjustment subdivision of Lot 1 DP 203524. The proposal will result in the smaller allotment being 8233m2, which will contain an existing consented kura (school), approved under RC 2220673 and an existing dwelling that is legally established and located at 20 wireless rd. The balance lot that proposed to be 21.57Ha will be amalgamated by way of boundary adjustment subdivision with the adjacent paddock, being PT OLC 214, to continue to be utilised as part of a large operational dairy farm that will continue to be utilised for farming purposes. The adjacent title of which the amalgamation will be undertaken with (PT OLC 214) is 22.73Ha, therefore, the resulting balance lot title overall size being 44.30Ha in area, being twice the controlled activity lot size for the rural production zone.

The proposed lots are 8233m^2 in area (Lot 1), and 21.57Ha in area (Lot 2),however, with the amalgamation of Lot 2 with PT OLC 214, the resulting over title sizes will be 8233m2 and 44.30Ha in area. A right of way easement is proposed to provide provision of access over the existing accessway to dwelling and farm within proposed Lot 2 and also the dwelling within proposed Lot 1.

The proposal will allow for the continued farm use of proposed Lot 2 and PT OLC 214. This large title is utilised as part of a very large farm, utilised as a dairy farm, which is over 200Ha in area, and spans north from Wireless Rd, through to just before Brotts Rd, Awanui. The dairy Farm is owned and operated by West Coast Farms Limited. The proposed boundary adjustment will not result in any change in production on the farm, as the boundary adjustment follows the timber fence of the school lease area; and therefore, will provide a legal separation of uses from the farm, and the school by giving them separate titles. There is an existing dwelling legally established within Lot 2 also, which is utilised for farm worker housing for the dairy farm, which was approved under RC 2170432.

The existing dwelling within proposed Lot 1 is utilised as a school house; and is leased/rented to the Kura teachers, and has been included as part of the subdivision as it is fenced and utilised as part of the school activities, as teacher accommodation for the school.

The proposed subdivision by way of boundary adjustment results in no physical changes as the school is already legally established and fenced and leased/utilised by the Ministry of Education. The proposed subdivision by way of boundary adjustment follows the existing fenced area of the Kura, which also is the formal and legal leased area to the Ministry of Education. Both the Kura and the existing dwelling within proposed Lot 1 are connected to the council sewer and the council reticulated water supply, and no changes

are proposed. The dwelling within proposed Lot 2 is also connected to the sewer and the council reticulated water supply.

The proposal will not result in any physical changes on the site, as the built development within the proposed new lots is existing and legally established.

The proposal will allow for existing use of proposed Lot 2 and PT OLC 214. Proposed Lot 2 already contains a dwelling, which is connected to the council sewer and council town water supply. This large title is utilised as part of a very large farm, utilised as a dairy farm, which is over 300Ha in area, and spans from Wireless Rd, through to just before Brotts Rd, Awanui. The dairy Farm is owned and operated by West Coast Farms Limited.

The proposed subdivision by way of boundary adjustment results in no physical changes as the school is already legally established and fenced and leased/utilised by the Ministry of Education. The proposed subdivision by way of boundary adjustment follows the existing fenced area of the kura, which also is the formal and legal leased area to the Ministry of Education.

In short, the proposed new titles will each contain an existing legally established dwelling, both dwellings are connected to both council sewer and council potable water. The existing Kura within proposed Lot 1 is legally established and physically constructed and operating, and the proposed boundary adjustment will not result in any physical changes, and is proposed to follow the fenced areas of kura, to create separate titles for existing landuse activities on the site, and to follow the lease area of the kura.

1.2 Landuse

A landuse aspect has been included in this consent application as a result of the proposed new titles reducing the title area to 8233m2, resulting in an increase in the percentage of coverage of the existing legally established activities and buildings within proposed Lot 1. However, although the impervious cover percentage will increase, in reality, there will be no physical changes to any impervious surfaces.

The subdivision will result in a technical setback breach from the existing Kura office building and the existing garage for the school house to the legal boundary, which is already fenced. The permitted setback is 10m, however the boundary adjustment will result in a setback of 6.2m of the existing garage to the accessway boundary, and 2m from the school office to the proposed new legal boundary. However, it is noted that this is an existing situation in the physical leased area to the ministry of Education, and therefore will have no physical changes or no physical effects.

In 2022, resource consent was granted for a landuse consent for Te Kura Kaupapa Maori O Tututarakihi, to establish Te Kura Kaupapa Māori (TKKM o Tūtūtarakihi) at 32 Wireless Road comprising administration block, two classroom pods and toilet pods to accommodate 70 students and five staff.

The proposal requires landuse consent due to infringement of, rule 8.6.5.1.4 Setback from Boundaries, rule 8.6.5.1.3 Stormwater Management, and rule 8.6.5.1.10 Building Coverage. These landuse breaches are due technical breaches, due to the size of the title decreasing as a result of the boundary adjustment, however, these buildings and impermeable surfaces are all consented under RC 2220673, and there will be no physical changes or physical effects as a result of the proposal. The proposed boundary adjustment will follow the existing leased area to the Ministry of Education, which follows the existing 1.8m high timber fenced area around the Kura and the school house, which is leased/rented to the teachers of the Kura.

It is noted within the application for RC 2220673 (for clarity for future reference) that a limited consent period is not offered for the Kura. It is not intended to surrender RC 2190071; once a permanent location has been found for the Kura, it is intended that the modular buildings will be removed from site, and the land owners retain the option of utilising the building as an education facility or as a residential unit as is provided for in RC 2190071.

2.0 Site Description:

2.1 The subject site is located at 32 Wireless Road, Kaitaia. Legally described as Lot 1 Deposited Plan 203524 (RT NA128C/923), comprising of 22hectares. The subject site currently contains two existing residential dwellings and associated accessory buildings, structures associated with rural type activities, and a consented childcare facility. The rest of the site is vacant and operated as part of a wider farming unit.

A connection to reticulated wastewater and potable water exists within the lease area, as does a connection to power supply and telecommunications.

The surrounding locality to the west is largely rural in nature with rural residential type properties interspersed along Wireless Road. To the east of the site across State Highway 1 (SH1) is a cluster of industrial activities which stretch south towards the centre of Kaitāia which is approximately 1.5km – 2.0km from the site.

The built environment along Wireless Road is characterised by one storey detached houses that have a range of setbacks from the street from around 5m-30m, with the majority of front yards defined by low fencing or landscaping. The surrounding locality includes the Petrovitch Bus depot which operates from Lot 1 DP 182864 adjoining the lease area directly to the west.

Although the subject site is located within the rural production zone, the leased area contains an existing connection to councils reticulated wastewater and potable water. Access to the lease area is gained via an existing vehicle crossing from Wireless Road, a Secondary collector Road, with a road reserve width of approximately 20m, accommodating an approximately 8m wide formed carriageway.

The surrounding locality to the west is largely rural in nature with rural residential type properties interspersed along Wireless Road. To the east of the site across State Highway

1 (SH1) is a cluster of industrial activities which stretch south towards the centre of Kaitāia which is approximately 1.5km – 2.0km from the site. The built environment along Wireless Road is characterised by one storey detached houses that have a range of setbacks from the street from around 5m-30m, with the majority of front yards defined by low fencing or landscaping. The surrounding locality includes the Petrovitch Bus depot which operates from Lot 1 DP 182864 adjoining the lease area directly to the west.

3.0 Previous Approved Resource Consents:

Previous consents

3.1 **RC 2170432**

In 2017, resource consent was granted by delegated authority as a non-notified consent for the relocation of a dwelling onto the application lot (within proposed Lot 2) breaching setback from boundaries and residential intensity rules as the second dwelling on the site.

3.2 **RC 2190071**

In 2018, resource consent was granted for a relocation of a building onto the application lot to be used as a childcare centre for up to 28 children and seven staff members or alternatively a third residential unit on the property. The rule breaches were for residential activity and traffic intensity, and the application was limited notified and approved.

3.3 **RC 2220673**

In 2022, resource consent was granted for a landuse consent for Te Kura Kaupapa Maori O Tututarakihi, to establish Te Kura Kaupapa Māori (TKKM o Tūtūtarakihi) at 32 Wireless Road comprising administration block, two classroom pods and toilet pods to accommodate 70 students and five staff.

The proposal required landuse consent due to infringement of, 8.6.5.1.4 Setback from Boundaries, Rule 8.6.5.1.5 Traffic Intensity, and Rule 8.6.5.1.11 Scale of Activities, under the Operative Far North District Plan.

District Plan Rules Affected:

Rule # & Name	Non Compliance Aspect
8.6.5.1.4 (Setback from Boundaries),	The proposed buildings achieve a 5m setback from the road boundary
8.6.5.1.11(Scale of Activities)	Approximately 70 students, three teachers and two administration staff members will be on site
15.1.6A.2.1 (Traffic Intensity)	Based on the Traffic Intensity Factors provided in the plan the proposal will generate 30 per staff member and cannot comply

3.4 It is noted within the application for RC 2220673 (for clarity for future reference) that a limited consent period is not offered for the Kura. It is not intended to surrender RC 2190071; once a permanent location has been found for the Kura, it is intended that the modular buildings will be removed from site, and the land owners retain the option of utilising the building as an education facility or as a residential unit as is provided for in RC 2190071.

4.0 **Description of the existing titles:**

4.1 The proposal will allow for the existing farm use of proposed Lot 2 and PT OLC 214. This large title is utilised as part of a very large farm, utilised as a dairy farm, which is over 300Ha in area, and spans north from Wireless Rd, through to just before Brotts Rd, Awanui. The dairy Farm is owned and operated by west coast farms.

The proposed boundary adjustment will not result in any change in production on the farm, as the boundary adjustment follows the fence of the school, and therefore will provide a legal separation of uses from the farm and the school by giving them separate titles. There is an existing dwelling legally established within Lot 2 also, which is utilised for farm worker housing for the dairy farm.

Below is an excerpt of the title of the subject site. The title has a number of interests, including consent notices, a gazette notice, a building line restriction, and an easement.

Identifier	**NA128C/923**
Land Registration District	**North Auckland**
Date Issued	09 August 2000

Prior References
NA115D/353

Estate	Fee Simple
Area	22.3972 hectares more or less
Legal Description	Lot 1 Deposited Plan 203524

Registered Owners
West Coast Farms Limited

Interests

K36694 Building Line Restriction

Subject to a right of way over part coloured blue on DP 53177 created by Transfer A110598

The easements created by Transfer A110598 are subject to Section 37 (1) (a) Counties Amendment Act 1961

548034.1 Gazette Notice declaring the adjoining State Highway 1 (Awanui to Bluff) to be a limited access road - 18.10.1977 at 2.59 pm

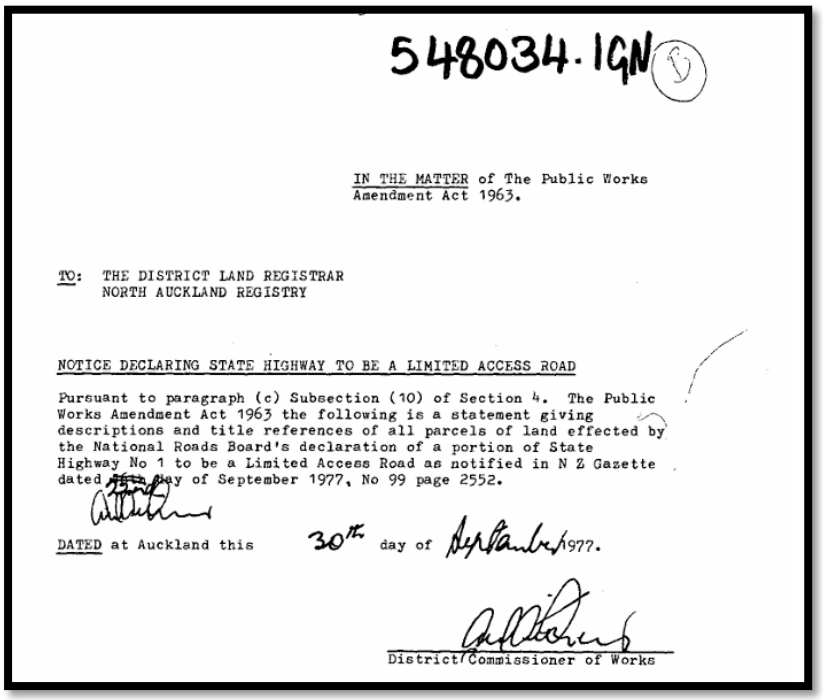
D211670.2 Consent Notice pursuant to Section 221(1) Resource Management Act 1991 - 4.11.1997 at 1.59 pm

D521251.2 Consent Notice pursuant to Section 221(1) Resource Management Act 1991 - produced 6.7.2000 at 1.38 pm and entered 9.8.2000 at 9.00 am

Appurtenant hereto is a right of way created by Easement Instrument 6220604.1 - 18.11.2004 at 9:00 am

12749030.8 Mortgage to ANZ Bank New Zealand Limited - 31.5.2023 at 12:42 pm

Below is an excerpt of the gazette notice for the State Highway. The subject site does not have any vehicle crossing place from the state highway and it is not proposed to. The only vehicle access to the subject site is via wireless road.



548034.1GN

IN THE MATTER of The Public Works Amendment Act 1963.

TO: THE DISTRICT LAND REGISTRAR
NORTH AUCKLAND REGISTRY

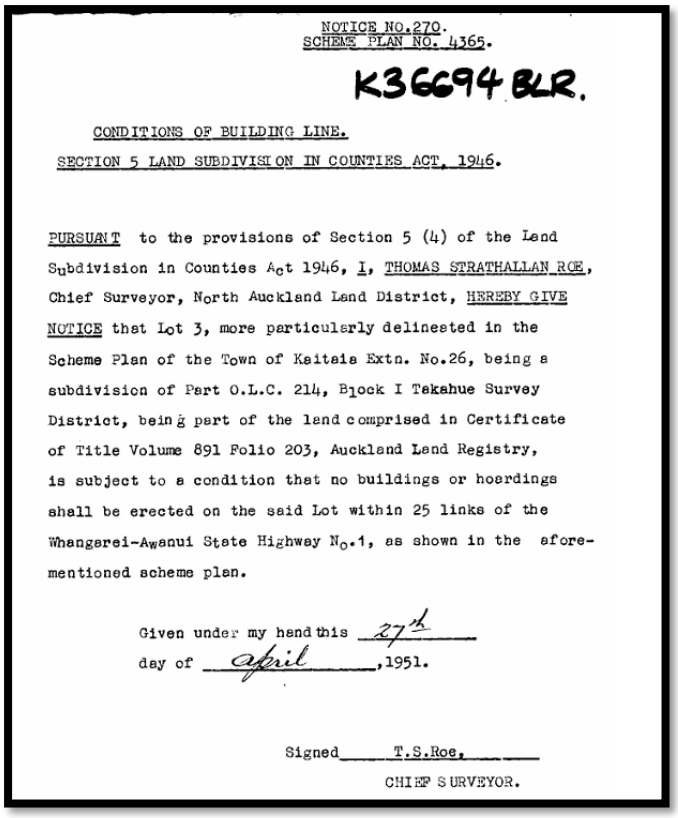
NOTICE DECLARING STATE HIGHWAY TO BE A LIMITED ACCESS ROAD

Pursuant to paragraph (c) Subsection (10) of Section 4. The Public Works Amendment Act 1963 the following is a statement giving descriptions and title references of all parcels of land effected by the National Roads Board's declaration of a portion of State Highway No 1 to be a Limited Access Road as notified in N Z Gazette dated 15th day of September 1977, No 99 page 2552.

DATED at Auckland this 30th day of September 1977.

District Commissioner of Works

Below is an excerpt of the building line restriction for the subject site. The building line restriction is from 1951, and is related to a required setback from the State Highway for any buildings. No new buildings are proposed, and the proposal for this subdivision by way of boundary adjustment will not impact this existing building line restriction.



NOTICE NO.270.
SCHEME PLAN NO. 4365.

K36694 BLR.

CONDITIONS OF BUILDING LINE.

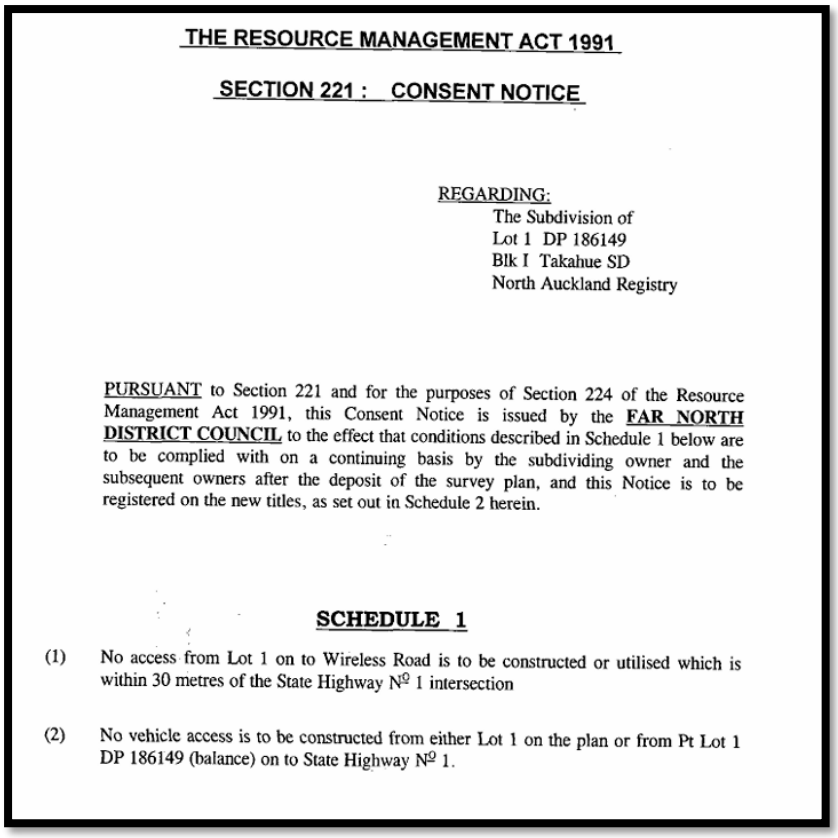
SECTION 5 LAND SUBDIVISION IN COUNTIES ACT, 1946.

PURSUANT to the provisions of Section 5 (4) of the Land Subdivision in Counties Act 1946, I, THOMAS STRATHALLAN ROE, Chief Surveyor, North Auckland Land District, HEREBY GIVE NOTICE that Lot 3, more particularly delineated in the Scheme Plan of the Town of Kaitaia Extn. No.26, being a subdivision of Part O.L.C. 214, Block I Tekahue Survey District, being part of the land comprised in Certificate of Title Volume 891 Folio 203, Auckland Land Registry, is subject to a condition that no buildings or hoardings shall be erected on the said Lot within 25 links of the Whangarei-Awanui State Highway No.1, as shown in the aforementioned scheme plan.

Given under my hand this 27th
day of April, 1951.

Signed T.S.Roe,
CHIEF SURVEYOR.

Below is an excerpt of the consent notice registered against this title. This consent notice relates to access from the State Highway, and limitations of vehicle access onto wireless road within 30 metres of the State Highway. No new crossing places to changes to vehicle access are proposed as part of this subdivision by way of boundary adjustment, therefore this consent notice is complied with.



THE RESOURCE MANAGEMENT ACT 1991

SECTION 221 : CONSENT NOTICE

REGARDING:
The Subdivision of
Lot 1 DP 186149
Blk I Takahue SD
North Auckland Registry

PURSUANT to Section 221 and for the purposes of Section 224 of the Resource Management Act 1991, this Consent Notice is issued by the **FAR NORTH DISTRICT COUNCIL** to the effect that conditions described in Schedule 1 below are to be complied with on a continuing basis by the subdividing owner and the subsequent owners after the deposit of the survey plan, and this Notice is to be registered on the new titles, as set out in Schedule 2 herein.

SCHEDULE 1

(1) No access from Lot 1 on to Wireless Road is to be constructed or utilised which is within 30 metres of the State Highway Nº 1 intersection

(2) No vehicle access is to be constructed from either Lot 1 on the plan or from Pt Lot 1 DP 186149 (balance) on to State Highway Nº 1.

Below is an excerpt of a second consent notice registered against the title of the subject site. The consent notice requires a Geotechnical report for buildings for their foundation design, and also has two clauses related to the Mangonui County Plan at the time. The two clauses related to bona fide rural A zone activity and also a time clause for no subdivisions within 1 year of the consent notice (which was in 1997) are both now redundant and not relevant to the current district plan or resource management issues. This consent notice is complied with, and no new activities or built development will result from this subdivision by way of boundary adjustment.

D211670.2
COND

THE RESOURCE MANAGEMENT ACT 1991

SECTION 221 : CONSENT NOTICE

REGARDING:
The Subdivision of
Lot 2 DP 150692 and
Pt OLC 214
Blk I Takahue SD
North Auckland Registry

PURSUANT to Section 221 and for the purposes of Section 224 of the Resource Management Act 1991, this Consent Notice is issued by the **FAR NORTH DISTRICT COUNCIL** to the effect that conditions described in Schedule 1 below are to be complied with on a continuing basis by the subdividing owner and the subsequent owners after the deposit of the survey plan, and this Notice is to be registered on the new titles, as set out in Schedule 2 herein.

SCHEDULE 1

(1) No building shall be erected on proposed Lot 1 without the prior approval of the Council to specific designs for foundations, prepared by a registered engineer with geotechnical expertise.

(2) Lot 1 on the subdivision plan may not, at any time, be transferred (except to S R and V J Crene), leased or otherwise disposed of until such time as the Council is satisfied [by way, at least, of an approved development plan (to scale) and a statutory declaration that the prospective purchaser intends to carry out such development] that a prospective purchaser for any of the said lots has a bona fide proposal to establish a permitted, controlled or discretionary Rural A zone activity, as required by Rule 6.1.6 of the Mangonui County Section of the Operative Far North District Plan, or an activity compatible with the policies and objectives of the Proposed Far North District Plan.

Alternatively, a transfer of Lot 1 may be effected to allow the re-imposition of the amalgamation covenant with CT 12B/5 or an amalgamation to like effect.

(3) No non-complying re-subdivision of Lot 1 or the balance area of residue CT 12B/5 is to be permitted for a period of one year from the date of deposit of this subdivision.

SCHEDULE 2

(1) That Condition (1) set out in Schedule 1 refers to Lot 1 DP 182864 -- being contained in CT 113D/882.

(2) That Condition (2) set out in Schedule 1 refers to Lot 1 DP 182864 -- being contained in CT 113D/882.

(3) That Condition (3) set out in Schedule 1 refers to Lot 1 DP 182864 -- being contained in CT 113D/882.

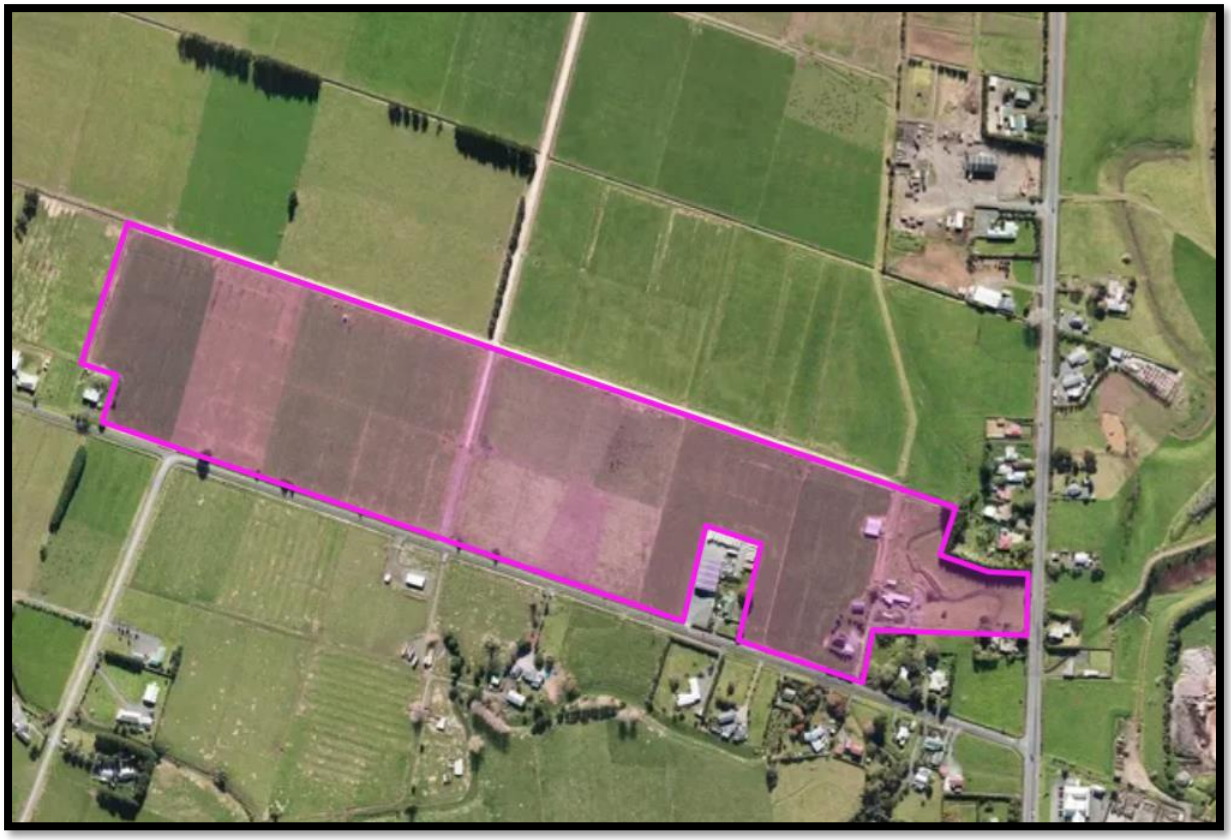
SIGNED: _____
ENVIRONMENTAL SERVICES MANAGER for the Far North District Council

DATE: 17th October 1997

4.2 Access to the proposed lots will utilise existing separate, and legally established existing crossing places off 32 and 20 Wireless Road.

The character of the locality is residential/lifestyle and pastoral grazing. The subject site is located within the Rural Production Zone; however the subject site has a tar sealed road, and both council potable town water and council reticulated sewer.

A excerpt of the existing subject site is shown below. Lot 1 DP 203524 is 22.39 hectares in area, and fronts both Wireless Road, and State Highway 1 (Awanui Straight).



The excerpt shown below is of PT OLC 214, being the adjacent title that proposed Lot 2 will be amalgamated with, which is 22.73Ha in area. The whole of PT OLC 214 is only utilised as grazing paddocks for the Dairy farm owned by West Coast Farms Limited (which is over 200Ha in total area), and it will continue to be utilised as part of a large operational dairy farm for farming purposes. The resulting balance lot title when the amalgamation/boundary adjustment is completed of proposed Lot 2 and PT OLC 214 will be an overall size being 44.30Ha in area, being twice the controlled activity lot size for the Rural Production Zone.

The aerial excerpts above are older aerial photos from Land Information New Zealand, and they do not show the recently constructed built development within proposed Lot 1. The excerpt below shows the built development within proposed Lot 1, which was consented under RC 2220673.

4.3 Photos of the subject site and the existing dwellings/built development are shown and labelled below:

The photo above shows the existing formed vehicle crossing place to the consented Kura.

The photo above shows the existing Kura buildings consented under RC 2220673.

The photos above shows the existing vehicle crossing place to proposed Lot 2 from Wireless Road.

A right of way easement is included to provide provision of access over the existing accessway to dwelling and farm within proposed Lot 2 and also the dwelling within proposed Lot 1.

The photo above shows the existing vehicle crossing place to proposed Lot 2 from Wireless Road, and also the existing timber screening fences that separates the existing farming activities within proposed Lot 2 from the Kura and school house activities within proposed Lot 1.

The photos above show the existing water tanks that are utilised for fire fighting water detention and attenuation for the Kura, as detailed within the stormwater report approved under RC 2220673.

The photo above shows the consented dwelling under RC 2170432. In 2017, resource consent was granted by delegated authority as a non-notified consent for the relocation of a dwelling onto the application lot (within proposed Lot 2) breaching setback from boundaries and residential intensity rules as the second dwelling on the site.

This subdivision by way of boundary adjustment will result in this dwelling being contained within proposed Lot 2, being the only dwelling within this new proposed title. This dwelling is utilised as a dwelling for the workers on the dairy farm.

The photo above shows the existing formed accessway to the dwelling within proposed Lot 1, and also the accessway to the dwelling within proposed Lot 2 and a farm race access to the dairy farm owned by West Coast Farms Limited, off Wireless Road. This

accessway is proposed to have an right of way easement to provide for the existing use of the existing dwellings and the farm.

The photo above shows the farm gate into the grazing paddock that is directly to the rear of the Kura, and also the existing established screening timber fence that is proposed to be the legal boundary fence of the subdivision by way of boundary adjustment to delineate the existing activities consented under Previous consents RC 2170432, RC 2190071, and RC 2220673-RMALUC.

The photo above shows the existing dwelling and garage within proposed Lot 1 that is utilised as a school house for the teachers at the Kura.

5.0 Assessment of Zone Landuse Rules

5.1 Complies

8.6.5.1.2 SUNLIGHT – All the proposed buildings comply with the sunlight rule as the setbacks of the buildings allow such that the buildings do not project beyond a 45-degree recession plan as measured inwards from any point 2m vertically above ground level on any site. The proposal complies with the sunlight rule of the District Plan.

8.6.5.1.6 KEEPING OF ANIMALS – Not applicable. The proposal does not include any keeping of animals for kennels or any other commercial use.

8.6.5.1.7 NOISE – Not applicable. The proposal is only for residential and normal farming activities. The proposal therefore will comply with the noise permitted standard.

8.6.5.1.8 BUILDING HEIGHT – The buildings on the site are existing and do not exceed the maximum height of 12 metres. The maximum height of the buildings is less than 7 metres in height.

8.6.5.1.9 HELICOPTER LANDING AREA – Not applicable. The proposal does not include any proposed helicopter landing areas.

8.6.5.1.11 SCALE OF ACTIVITIES – The proposal will not result in any new activities and does not propose any new activities. RC 2220673 approved the existing Kura within

proposed Lot 1, and a breach of the scale of activities rule within the consent for 70 students, three teachers and two administration staff members on the Kura site.

8.6.5.1.12 TEMPORARY EVENTS – Not applicable. The proposal does not include any events.

5.2 Does Not Comply

8.6.5.1.4 SETBACK FROM BOUNDARIES

RC 2220673 approved the existing Kura within a reduced setback of 5m from Wireless Road. The proposed new setback breach is not from any new buildings, but is a techcical breach, as the existing office administration building of the Kura is located 2m from the new boundary (being the existing timber screening fence and lease boundaries of the school), and also as the existing school house garage is located 6.2m from the proposed new boundary.

8.6.5.1.10 BUILDING COVERAGE (does not comply) – The building coverage of the existing buildings exceeds the 12.5% of the gross site area of the proposed new sites. The calculations for the building coverage areas are includes within the impermeable surface coverage details for the proposed new lots.

8.6.5.1.3 STORMWATER MANAGEMENT (does not comply) – The proposal exceeds the maximum proportion of the gross site area covered by buildings and other impermeable surfaces.

6.0 Activity Status of the proposal:

6.1 A copy of the scheme plan is attached. The proposal is a Non-Complying Activity, as the proposal cannot comply with the Controlled, Restricted discretionary, or discretionary Activity standards for subdivision and also as the proposed new allotment boundaries will create breaches of the landuse rules of the District Plan, as detailed above.

6.2 The proposed Lots will continue to utilise the existing separate crossing places via Wireless Road. No new crossing places are proposed, and all the existing crossing places are legally established. No additional titles are proposed to be created as part of this proposal, and this subdivision is proposed by way of boundary adjustment.

The proposed subdivision will not comply with all relevant land use rules. The proposal breaches the setback from boundaries, the building coverage rules, and the stormwater management rules of the Plan, and have been included as breaching these permitted standards as part of this consent application. All existing stormwater management, sewage, and water infrastructure will be contained within the proposed new lots.

7.0 Assessment criteria under the District Plan relating to the proposal.

7.1 The following criteria are relevant to the "Setback From Boundaries", "Building Coverage" and "Stormwater Management" rules under the District Plan.

The proposal breaches the permitted setback from boundaries rule, shown below.

Setback from Boundaries

11.6 SETBACK FROM BOUNDARIES

(a) Where there is a setback, the extent to which the proposal is in keeping with the existing character and form of the street or road, in particular with the external scale, proportions and buildings on the site and on adjacent sites.

(b) The extent to which the building(s) intrudes into the street scene or reduces outlook and privacy of adjacent properties.

(c) The extent to which the buildings restrict visibility for vehicle manoeuvring.

(d) The ability to mitigate any adverse effects on the surrounding environment, for example by way of street planting.

(e) The extent to which provision has been made to enable and facilitate all building maintenance and construction activities to be contained within the boundaries of the site.

The assessment criteria for breaching the setback from boundaries rule of the plan, as shown and assessed below:

Where there is a setback, the extent to which the proposal is in keeping with the existing character and form of the street or road, in particular with the external scale, proportions and buildings on the site and on adjacent sites.

The kura buildings and school house and garage buildings within Lot 1 are already established. Therefore, dispensation is sought for this minor technical breach of the setback from the existing timber fence, which is proposed to be the new legal boundary as a result of this boundary adjustment.

The extent to which the building(s) intrudes into the street scene or reduces outlook and privacy of adjacent properties.

The subject sites includes an existing 1.8m high timber screening fence to provide visual screening between residential units and from adjacent properties. No physical changes are proposed as part of this proposal and all built development is consented as part of RC 2220673.

The extent to which the buildings restrict visibility for vehicle manoeuvring.

The subject site contains an existing school and two existing residential dwellings, with an existing metalled driveway, which gains access to the site from Wireless Road. The site is considered to have sufficient space for vehicle access and manoeuvring. The

proposal is not considered to restrict visibility for vehicle manoeuvring. The subject site has relatively flat topography.

The ability to mitigate any adverse effects on the surrounding environment, for example by way of street planting.

The subject sites include timber screening fences to provide visual screening between residential units and from adjacent properties. There is considered to be sufficient open space to provide aural privacy between residential units and the location of the proposed shed also aids in the visual and aural screening between the existing school and existing dwellings on the site and from adjacent properties.

The extent to which provision has been made to enable and facilitate all building maintenance and construction activities to be contained within the boundaries of the site.

There is considered to be ample space for all building maintenance and construction activities with the proposed setback. All activities will be contained within the boundaries of the site.

7.2 **Stormwater Management**

The proposal breaches the permitted stormwater management rule, shown below.

8.6.5.1.3 STORMWATER MANAGEMENT

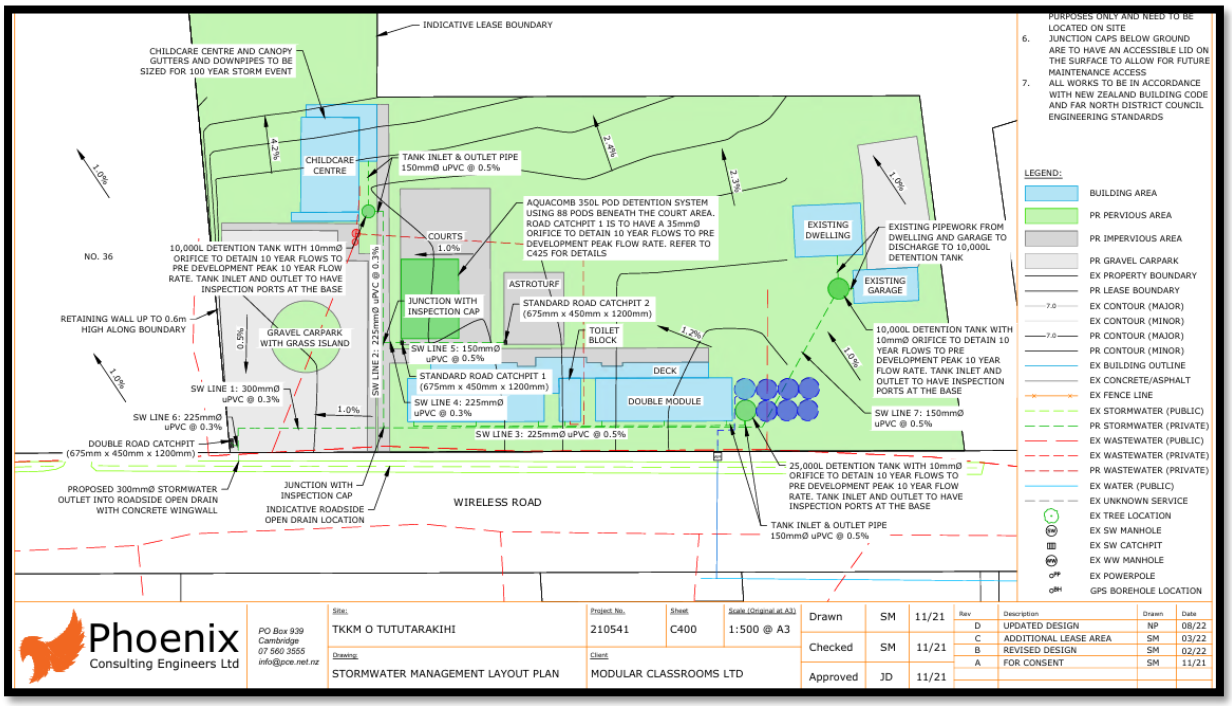
The maximum proportion of the gross site area covered by buildings and other impermeable surfaces shall be 15%.

The assessment criteria for breaching the stormwater management rule of the plan, as shown and assessed below:

STORMWATER MANAGEMENT

(*a) The extent to which building site coverage and impermeable surfaces result in increased stormwater runoff and contribute to total catchment impermeability and the provisions of any catchment or drainage plan for that catchment*.

The stormwater attenuation approved under RC 2220673 was designed to not discharge into the farm area (proposed Lot 2) and be piped back towards wireless road.



The stormwater design under RC 2220673 was also scoped to not create any effects on proposed Lot 2.

See the excerpt, above, of the stormwater management plan site mitigation layout for stormwater, shown below, which includes the water storage tanks for detention and attenuation, and also the existing ground level contours and the Aqua comb pod, which proposed stormwater detention below the court area within the kura.

(b) The extent to which Low Impact Design principles have been used to reduce site impermeability.

Below is an excerpt from the stormwater report proposed for RC 2220673, which details that attenuation of all buildings and impermeable surfaces within the leased area (within proposed Lot 1) was designed to be attenuated back to pre-development levels for all the development within Lot 1.

Stormwater Attenuation Requirements

The district plan allows the maximum impervious and building footprint area to be 15% of the gross site area. The proposed school development is made up as per Table 4 below:

Table 4: Site Coverage

Site Coverage	Area (m^2)	Ratio (%)
Total Lot Area	8,223	100
Total Pervious	5,578	67.8
Existing Impervious	380	32.2
Proposed Impervious	2,265	

The proposed buildings and impervious areas of the school are above the 15% threshold. To ensure neighbouring properties are not affected, attenuation of the ARI 10 year event to predevelopment flows will be required for the school development.

(c) Any cumulative effects on total catchment impermeability.

(d) The extent to which building site coverage and impermeable surfaces will alter the natural contour or drainage patterns of the site or disturb the ground and alter its ability to absorb water.

(e) The physical qualities of the soil type.

(f) Any adverse effects on the life supporting capacity of soils.

The stormwater report highlights that all stormwater is to discharge to the open drain on the northern side of wireless road, and all overland flow, and detention is designed and managed to be attenuated back to the permitted baseline of 15% impermeable site coverage of leased area of the kura, which is now proposed to be the new title size.

(g) The availability of land for the disposal of effluent and stormwater on the site without adverse effects on the water quantity and water quality of water bodies (including groundwater and aquifers) or on adjacent sites.

(h) The extent to which paved, impermeable surfaces are necessary for the proposed activity.

Lot 2 does not breach the stormwater management rule, as it is over 20ha in area, and is predominately grazing paddocks with the exception of the residential dwelling, and the farm barns/sheds.

The buildings and stormwater effects relating to this proposal are avoided, as they have already been consented and mitigated within RC 2220673, back to pre-developments, and attenuation and detention of all surface water and roof water areas within proposed Lot 1 has already been approved under RC 2220673, and given effect to on the site. It is also noted that proposed Lot 2 also contains an existing consented dwelling, as such both proposed Lots each contain an existing established residential unit, and no physical changes at all are required or proposed.

(*i) The extent to which landscaping may reduce adverse effects of run-off.*

(j) Any recognised standards promulgated by industry groups.

The existing stormwater design has been developed to recognise the expected standards and to reduce run off for stormwater events, and the design is developed from a chartered professional engineer.

(k) The means and effectiveness of mitigating stormwater run-off to that expected by the permitted activity threshold.

The excerpt below from the stormwater management report details the agreement between the landowner and the ministry of education, to not provide any discharges of stormwater towards the grazing paddocks, and also not manage stormwater runoff from impervious surfaces for up to an ARI 10 year rainfall event, by detaining stormwater runoff and providing attenuation of all overflows from that detention. This stormwater report was approved under RC 2220673, and the works approved within the stormwater report have been undertaken, such that mitigation and attenuation of all stormwater effects is already given effect to, to avoid any stormwater effects of the proposed subdivision by way of boundary adjustment.

Proposed Stormwater Management

As part of the lease agreement between Ministry of Education and the Landowner, it has been agreed that impervious runoff from the school will not discharge towards the landowners grazing paddocks. In order to allow for this requirement, stormwater from the proposed double module classrooms, existing dwelling, existing childcare centre and the associated impervious surfaces are to discharge to the open drain on the northern side of Wireless road via a private piped network and overland flow as per the PCE Stormwater Drawings in Appendix D.

The private stormwater network has been designed to manage stormwater runoff from impervious surfaces for up to an ARI 10-year rainfall event by detaining stormwater runoff from the Childcare Centre and Canopy, Proposed Double Modules and Canopy, Existing Dwelling & Garage and the Courts & Astroturf in detention tanks. The flows out of each tank will be controlled by an orifice at a flow rate which allows runoff from the remaining impervious areas to discharge into the proposed private pipe network at peak ARI 10-year post development flow rates (uncontrolled) while still achieving the ARI 10-year rainfall predevelopment peak flow rate. The proposed detention tanks are sized as per Table 5. Refer to Appendix D for calculations.

(l) The extent to which the proposal has considered and provided for climate change.

The design has factored in climate change and peak stormwater events, and provided detention and attenuation

(m) The extent to which stormwater detention ponds and other engineering solutions are used to mitigate any adverse effects.

The attenuation and detention of stormwater for the kura and school house were all designed and implemented as part of RC 2220673, as an offered condition of consent, as the subdivision of the site was part of the lease agreement conditions, and due to the reduction of the title size, it was known that the subdivision would result in a breach of the stormwater management rule under the district plan. Attenuation was undertaken in

the design of the ARI 10 year event to predevelopment flows for the school design development.

The stormwater mitigation design that has already been implemented includes water storage tanks for detention and attenuation, and an Aqua comb pod under the kura courts. Attenuation of all buildings and impermeable surfaces within the leased area (within proposed Lot 1) was designed to be attenuated back to pre-development levels for all the development within Lot 1.

7.3 **Building Coverage**

The proposal breaches the permitted building coverage rule, shown below.

8.6.5.1.10 BUILDING COVERAGE

Any new building or alteration/addition to an existing building is a permitted activity if the total Building Coverage of a site does not exceed 12.5% of the gross site area.

The assessment criteria for breaching the stormwater management rule of the plan, as shown and assessed below:

(a) the ability to provide adequate landscaping for all activities associated with the site.

(b) the extent to which building(s) are consistent with the character and scale of the existing buildings in the surrounding environment.

The buildings and stormwater effects relating to this proposal are avoided, as they have already been consented and mitigated within RC 2220673. The conditions of RC 2220673, included the offered condition of consent for landscape planting along the southern boundary interface with Wireless Road, which has been given effect to, and has in place currently.

No new buildings are proposed as part of the consent, and the breach of this rule is a technical breach, as the proposed boundary adjustment includes the reduction of the Lot size. The building coverage rule relates to the Lot size gross area, which is why, although there is no physical changes proposed, that this rule is breached.

(c) the scale and bulk of the building in relation to the site.

(*d) the extent to which private open space can be provided for future uses.*

(e) the extent to which the cumulative visual effects of all the buildings impact on landscapes, adjacent sites and the surrounding environment.

(f) the extent to which the siting, setback and design of building(s) avoid visual dominance on landscapes, adjacent sites and the surrounding environment.

The proposal does not propose any new buildings, and there is an existing timber screening fence that separates the farming activity site (Lot 2) from the school and school

house site (Lot 1), which are all consented under RC 2170432, RC 2190071, and RC 2220673-RMALUC. This is why the boundary is proposed to follow the existing timber fence. There is existing open space within each site, and no new uses or buildings are proposed or required.

(g) the extent to which landscaping and other visual mitigation measures may reduce adverse effects.

(*h) the extent to which non-compliance affects the privacy, outlook and enjoyment of private open spaces on adjacent sites*.

The buildings and stormwater effects relating to this proposal are avoided, as they have already been consented and mitigated within RC 2220673. The conditions of RC 2220673, included the offered condition of consent for landscape planting along the southern boundary interface with Wireless Road, which has been given effect to, and has in place currently. There is an existing timber screening fence that separates the farming activity site (Lot 2) from the school and school house site (Lot 1), this timber fence surrounds all the boundaries, with the exception of wireless road, which has a metal fence with landscaping along the road frontage. No new effects will result, and no new conditions are proposed, as all the development on the site is existing and legally established.

7.4 Transportation Chapter of the District Plan

RC 2220673 approved a breach of the traffic intensity rule of the District Plan as the consented Kura breached rule 15.1.6A.2.1 Traffic Intensity. This existing activity is not proposed to change and is consistent with the activity approved under RC 2220673.

District Plan Rules Affected:

Rule # & Name	Non Compliance Aspect
8.6.5.1.4 (Setback from Boundaries),	The proposed buildings achieve a 5m setback from the road boundary
8.6.5.1.11(Scale of Activities)	Approximately 70 students, three teachers and two administration staff members will be on site
15.1.6A.2.1 (Traffic Intensity)	Based on the Traffic Intensity Factors provided in the plan the proposal will generate 30 per staff member and cannot comply

The proposal will comply with rule 15.1.6C.1.1. and appendix 3B-1 of the Plan (shown below). The vehicle crossing to the existing school is already established and has been updated to a wider standard, to allow for buses and other access to the school site. No changes are proposed to this private vehicle crossing.

The proposal includes a right of way to allow for private access from Wireless Road to both the existing dwelling within proposed Lot 1 and also the existing dwelling within proposed Lot 2. The legal width of the right of way easement is greater than 5m in legal width, and also the carriageway width is already 3m wide, and metalled. The right of way easement is proposed to provide for the existing access arrangement to continue for both existing dwellings.

15.1.6C.1.1 PRIVATE ACCESSWAY IN ALL ZONES

(a) The construction of private accessway, in addition to the specifics also covered within this rule, is to be undertaken in accordance with Appendix 3B-1 in Part 4 of this Plan.

APPENDIX 3B-1: STANDARDS FOR PRIVATE ACCESS

(Reference: ***Part 3 District Wide Provisions, Section 15.1 Traffic, Parking and Access*** and ***Zone Maps***)

Zone	No. of H.E.s	Legal Width	Carriageway Width	Maximum Gradient		Kerb	Foot-path	Storm-water Drain[1]
				Unsealed	Sealed			
Residential	1	-	3.0	1:6	1:4	-	-	Yes
Coastal Residential	2	5.0	3.0	-	1:4	-	-	Yes
Russell Township	3 - 4	7.5	3.0 with passing bays	-	1:4	-	-	Yes
Point Veronica	5 - 8	7.5	5.0	-	1:4	Yes	-	Yes
Commercial	1	-	3.0	1:8	1:5	-	-	Yes
Industrial	2 - 4	8.0	6.0	-	1:5	-	-	Yes
Orongo Bay Special Purpose	>5	8.0	6.0	-	1:5		-	Yes
Rural Production Rural Living	1	-	3.0	1:5	1:4	-	-	Yes
Waimate North Horticultural Processing Carrington Estate	2	5	3.0	1:5	1:4	-	-	Yes
General Coastal Coastal Living	3 – 4	7.5	3.0 with passing bays	1:5	1:4	-	-	Yes
South Kerikeri Inlet								

Rule 15.1.6C.1.5, shown below, relates to the vehicle crossing standards in rural zones. The existing crossing places to the subject site are both sealed or concreted and have good sight lines. No changes to the existing crossing places are proposed, and the access arrangements to the existing two dwellings (within proposed Lots 1 and 2) are working well. No changes are proposed, as all the development within both Lots 1 and 2 is already established, and no additional traffic movements or access effects will result at all from this proposal, as all the built development on the site is already consented and given effect to, under RC 2170432, RC 2190071, and RC 2220673-RMALUC.

15.1.6C.1.5 VEHICLE CROSSING STANDARDS IN RURAL AND COASTAL ZONES

(a) Private access off roads in the rural and coastal zones the vehicle crossing is to be constructed in accordance with Council's "Engineering Standards and Guidelines" (June 2004 – Revised 2009).

(b) Where the access is off a sealed road, the vehicle crossing plus splays shall be surfaced with permanent impermeable surfacing for at least the first 5m from the road carriageway or up to the road boundary, whichever is the lesser.

(c) Where the vehicle crossing serves two or more properties the private accessway is to be 6m wide and is to extend for a minimum distance of 6m from the edge of the carriageway. Note 1: Refer to Appendix 3G for a visual representation of what a vehicle crossing is and how it works in relation to a private access.

No changes are proposed, as all the development within both Lots 1 and 2 is already established, and no additional traffic movements or access effects will result at all from this proposal, as all the built development on the site is already consented and given effect to, under RC 2170432, RC 2190071, and RC 2220673-RMALUC.

8.0 Consideration of Subdivision effects of the other matters listed in 13.10 of the Plan.

The Council will use the assessment criteria in 13.10 as a guide when assessing Non-Complying subdivision activities in conjunction with the matters set out in Sections 104, 104B, 104D and 106 of the Act. These criteria area shown, as assessed below accordingly.

8.1 The subject site is located within the Rural Production Zone under the District Plan. The site has a rural grazing and lifestyle/industrial character, which is considered to be consistent with the locality. The lots are intended to be utilized for the existing purposed that they are utilised for now, as the existing dwellings, kura and farm paddocks will not change any use or have any physical changes as a result of the proposal.

13.10.1 ALLOTMENT SIZES AND DIMENSIONS

(a) Whether the allotment is of sufficient area and dimensions to provide for the intended purpose or land use, having regard to the relevant zone standards and any District wide rules for land uses.

(b) Whether the proposed allotment sizes and dimensions are sufficient for operational and maintenance requirements.

(c) The relationship of the proposed allotments and their compatibility with the pattern of the adjoining subdivision and land use activities, and access arrangements.

(d) Whether the cumulative and long term implications of proposed subdivisions are sustainable in terms of preservation of the rural and coastal environments.

13.7.1 BOUNDARY ADJUSTMENTS: ALL ZONES EXCEPT THE RECREATIONAL ACTIVITIES AND CONSERVATION ZONES

Boundary Adjustments Performance Standards

Boundary adjustments to lots may be carried out as a controlled (subdivision) activity provided that:

(a) there is no change in the number and location of any access to the lots involved; and

(b) there is no increase in the number of certificates of title; and

(c) the area of each adjusted lot complies with the allowable minimum lot sizes specified for the relevant zone, as a controlled activity in all zones except for General Coastal or as a restricted discretionary activity in the General Coastal Zone (refer ***Table 13.7.2.1***); except that where an existing lot size is already non-complying the degree of non-compliance shall not be increased as a result of the boundary adjustment; and

(d) the area affected by the boundary adjustment is within or contiguous with the area of the original lots; and

(e) all boundary adjusted sites must be capable of complying with all relevant land use rules (e.g building setbacks, effluent disposal); and

(f) all existing on-site drainage systems (stormwater, effluent disposal, potable water) must be wholly contained within the boundary adjusted sites.

Applications under this rule will not be notified but where these conditions cannot be met the application will be considered under the relevant zone rules set out in **Rules 13.7.2 to 13.7.10.**

The proposed boundary adjustment complies will all the assessment criteria, with the exception of criteria (c) and criteria (e), as proposed Lot 1 will be less than 1 hectare in

area and the existing built development within Lot 1 will result in technical breaches of landuse rules, however there will be no physical changes on the site due to the existing development consented under RC 2170432, RC 2190071, and RC 2220673-RMALUC.

The proposed boundary adjustment will not result in any additional titles, it will not change the number or location of any access to the lots involved, Proposed Lot 2 complies with the controlled activity Lot size of the rural production zone, being 20 hectares. Rule 13.7.1 only provides for a controlled activity, or a non-complying activity for all boundary adjustments.

The proposed subdivision includes the design to follow the fence of the Kura as this is a natural change of use boundary of the existing consented landuse activities, and it will result in no reduction in the productive use of the adjacent dairy farm pastoral grazing by following the existing fenced lease area of the Kura.

The application site is located within the Rural Production Zone; a zone which anticipates the establishment of a wide array of activities where they are compatible with the existing amenity value of the rural environment. Wireless Road is not necessarily typical of the broader Rural Production environment within the Far North District in that there is a mix in terms of activities that have established making it to some degree more of a transitory zone, reflected by the presence of council reticulated infrastructure (water and wastewater).

Activities established include the commercial operation of a bus depot within the property adjoining to the west, the existing legally established childcare facility within the application site, rural residential and lifestyle type development, the cluster of industrial activities to the east and of course the true rural production type activities that surround the site to the north and east. Regardless of the above, a sense of open space heavily contributed to by the large agricultural land holdings, interspersed with built form (including large areas of impermeable surfaces) and landscaped gardens (including hedging) along the road interface dominates the character and amenity along Wireless Road, especially towards the SH1 end.

The proposal could have been designed to have a 12ha allotment for Lot 1, and the balance Lot (once amalgamated) to be over 20ha, therefore meeting the restricted discretionary Lot size rule (shown below), however this would then remove the paddocks of the dairy farm out of being of their most productive use for their valuable soil type, and result in a smaller title that is less productive than its current use.

TABLE 13.7.2.1: MINIMUM LOT SIZES

(i) RURAL PRODUCTION ZONE

Controlled Activity Status (Refer also to 13.7.3)	Restricted Discretionary Activity Status (Refer also to 13.8)	Discretionary Activity Status (Refer also to 13.9)
The minimum lot size is 20ha. **Note 1:** Reference should also be made to the minimum lot size applying to land within an Outstanding Landscape, Outstanding Landscape Feature or Outstanding Natural Feature (see below in this Table and ***Rule 13.7.2.5***). **Note 2:** Subdivision in the Pouerua Heritage Precinct (refer ***Maps 35***, ***41*** and ***HP1***), is a discretionary subdivision activity. **Note 3:** Subdivision within 100m of the boundary of the Minerals Zone is a restricted discretionary activity.	1. Subdivision that complies with the controlled activity standard, but is within 100m of the boundary of the Minerals Zone; 2. The minimum lot size is 12ha; or 3. A maximum of 3 lots in any subdivision, provided that the minimum lot size is 4,000m^2 and there is at least 1 lot in the subdivision with a minimum lot size of 4ha, and provided further that the subdivision is of sites which existed at or prior to 28 April 2000, or which are amalgamated from titles existing at or prior to 28 April 2000; or 4. A maximum of 5 lots in a subdivision (including the parent lot) where the minimum size of the lots is 2ha, and where the subdivision is created from a site that existed at or prior to 28 April 2000; 5. Rules under clauses 3 and 4 provide two alternative options for the creation of a specified number of small lots from sites existing at 28 April 2000. Where an application under one of these clauses takes up only part of the total allowance, a subsequent application to take up the remainder of that particular	1. The minimum lot size is 4ha; or 2. A maximum of 3 lots in any subdivision, provided that the minimum lot size is 2,000m² and there is at least 1 lot in the subdivision with a minimum size of 4ha, and provided further that the subdivision is of sites which existed at or prior to 28 April 2000, or which are amalgamated from titles existing at or prior to 28 April 2000; or 3. A subdivision in terms of a management plan as per ***Rule 13.9.2*** may be approved. 4. Subdivision in the Pouerua Heritage Precinct (refer ***Maps 35***, ***41*** and ***HP1***), is a discretionary subdivision activity. **Note 1:** There is no restriction on the number of 4ha lots in a subdivision (clause 1). **Note 2:** The effect of the rule under clause 2 is that there is a once-off opportunity to subdivide a maximum of two small lots from a site existing at 28 April 2000. Subdivision of small lots which does not meet this rule is a non-complying activity unless the lots are part of a Management Plan application.

In summary, although the boundary adjustment could be designed in different ways, with an “easier” activity status by increasing the Lot size of Lot 1 to 12ha in area, the most efficient and effective use of resources, is to follow the existing delineation of land uses. These land uses are consented under RC 2170432, RC 2190071, and RC 2220673-RMALUC, by creating the 8233m2 Lot surrounding the existing Kura and School House, and a larger balance title to be amalgamated with the adjacent title that is utilised as farm grazing paddocks, as part of the large dairy farm.

The proposed boundary adjustment meets the purpose of the Resource Management Act 1991; is consistent with the objectives of the Rural Production Zone; and will not set a precedent for other subdivisions. This is due to the proposed allotments each containing an existing legally established dwelling, no additional titles or development rights will be created from the subdivision, and in this instance, the boundary proposed for Lot 1 is to align with the leased area of an existing legally established school.

The proposal therefore has unusual and individual circumstances that differentiate it from other subdivision proposals, and also has existing consented landuse activities, which will not physically change or result in any change in physical effects as a result of the non-complying boundary adjustment.

The proposal has no physical changes as a result of the proposal, and therefore avoid creating effects on the environment, and all stormwater, traffic and amenity effects have

been avoided and mitigated as part of the previous granted landuse consents, under Previous consents RC 2170432, RC 2190071, and RC 2220673-RMALUC.

This proposal will not result in any additional titles being created, as the proposal is by way of boundary adjustment. The proposal will result in a smaller title surrounding the existing established Kura and school house, however, the proposed new title boundaries will follow the existing timber screening fenced area that separates the farming and the school activities, and therefore follows the natural existing delineation of the existing consented landuse activities.

The proposal will not result in any removal of land out of productive use, as the proposed boundary will follow the existing fenced lease area for the kura and the school house, and there will be no physical changes or physical effects as part of the proposal.

The proposal will allow for the continued farm use of proposed Lot 2 and PT OLC 214.
The amalgamation condition proposed that will need to be approved by the DLR reads as follows:

"That Lot 2 and PT OLC 214 hereon be held in the same record of title"

This amalgamation condition will need to be sent to the DLR for approval, as part of the decision process for this subdivision proposal by way of boundary adjustment.

This title is utilised as part of a very large farm, utilised as a dairy farm, which is over 300Ha in area, and spans north from Wireless Rd, through to just before Brotts Rd, Awanui. The dairy Farm is owned and operated by west coast farms. The proposed boundary adjustment will not result in any change in production on the farm, as the boundary adjustment follows the fence of the school; and therefore will provide a legal separation of uses from the farm and the school by giving them separate titles. There is an existing dwelling legally established within Lot 2 also, which is utilised for farm worker housing for the dairy farm.

The configuration of the proposal is considered to be consistent with the character of the allotments in the locality, including the titles next door, and the titles across the road/adjacent to the site. No new titles will result from the proposed boundary adjustment, and the proposal has special and unusual circumstances due to the granted land use consents under RC 2170432, RC 2190071, and RC 2220673-RMALUC, which as a result means no physical changes are proposed or required.

13.10.2 NATURAL AND OTHER HAZARDS

In assessing any subdivision, and for the purposes of s106 of the Act, the Council will have regard to:

(a) Any information held by the Council or the Northland Regional Council regarding natural hazards, contaminated sites or other hazards.

(b) Information obtained by suitably qualified experts, whose investigations are supplied for subdivision applications.

(c) Potential adverse effects on other land that may be caused by the subdivision or anticipated land use activities.

(d) In relation to inundation from any source, the Council shall have regard to the following factors:

(i) the effects of any proposed filling being undertaken to avoid inundation and the consequential effects on the natural drainage pattern and adjoining land;

(ii) flood plain management measures proposed;

(iii) the proposed coastal protection mechanisms / techniques / measures and their environmental effects;

(iv) any proposed boundary drainage to protect surrounding properties;

(v) the adequacy of existing outfalls and any need for upgrading;

(vi) any need for retention basins to regulate the rate and volume of surface run-off.

(e) In relation to erosion, falling debris or slippage, the need for ongoing conditions aimed at avoiding, remedying or mitigating future potential adverse effects, and any need for registration of consent notices on the allotment's Certificate of Title, pursuant to ***Rule 13.6.7***.

(f) In relation to subsidence, the provision of suitability certificates, such as NZS 4431, or if not appropriate, the setting of ongoing conditions, with consent notices registered on the Certificates of Title, pursuant to ***Rule 13.6.7***.

(g) In relation to contaminated sites, any soil tests establishing suitability, and methods to avoid, mitigate or remedy the effects, including removal to approved disposal points.

(h) In relation to land filling and excavation operations, the following factors:

(i) the effects on surrounding properties in terms of dust nuisance, visual detraction, or the potential height of buildings on filled land;

(ii) any adverse impacts on the natural pattern of surface drainage both on and outside the site;

(iii) the type of, and placement of, fill material in terms of its potential for contamination of land or water, or potential subsidence;

(iv) mitigation, or avoidance, of adverse effects caused by filtration affecting neighbouring properties;

(v) remedies necessary during emergencies;

(vi) the rules contained in ***Section 12.3*** relating to filling and excavation of land;

(vii) the impact of filling or excavation on heritage values, ecological values, cultural values, surface water quality, and access along waterways;

(viii) any beneficial effects in terms of waterway enhancement.

8.2 The subject site is not identified as containing any flood zone areas within the 10 year flood extent and the 100 year flood extent. All the built development on the site is existing and no hazards present any issues for the existing built development or access to the existing built development within the proposed Lots. All the services to the site are provided as reticulated council services (water and sewer), no on-site wastewater is required or proposed.

13.10.3 WATER SUPPLY

(a) Where there is no reticulated water supply available for connection, whether it would be appropriate to allow a private restricted flow rural-type water supply system; such supply being always available and complying with *"Drinking Water Standards of New Zealand" (1995)*.

(b) Whether the provisions of the *"Engineering Standards and Guidelines 2004 – Revised March 2009" (*to be used in conjunction with NZS 4404:2004) have been met in respect of fire fighting water supply requirements.

(c) Whether the provisions of the Council's *"Engineering Standards and Guidelines" (2004) - Revised March 2009* (to be used in conjunction with NZS 4404:2004) have been met in respect of installation of all necessary water supply pipe lines, and ancillary equipment necessary for the subdivision, including extensions to existing supply systems, and including mains, sub-mains, service and fire hydrants.

(d) Whether the existing water supply systems, to which the connection will be made, have sufficient capacity to service the subdivision.

(e) Whether it may be necessary to provide new reservoirs, pumping stations and rising mains, or increased pipe sizes leading to the subdivision in existing streets, or providing new wells and new pumping units.

(f) Whether there is a need for a local purpose reserve to be set aside and vested in the Council as a site for any public water supply utility required to be provided.

8.3 Each proposed lot has an existing residential dwelling which has water supply via the council town water supply. The Kura within proposed Lot 1 also has a connection to the town supply to provide potable water.

13.10.4 STORMWATER DISPOSAL

(a) Whether the application complies with any regional rules relating to any water or discharge permits required under the Act, and with any resource consent issued to the District Council in relation to any urban drainage area stormwater management plan or similar plan.

(b) Whether the application complies with the provisions of the Council's *"Engineering Standards and Guidelines" (2004) - Revised March 2009* (to be used in conjunction with NZS 4404:2004).

(c) Whether the application complies with the Far North District Council Strategic Plan - Drainage.

(d) The degree to which Low Impact Design principles have been used to reduce site impermeability and to retain natural permeable areas.

(e) The adequacy of the proposed means of disposing of collected stormwater from the roof of all potential or existing buildings and from all impervious surfaces.

(f) The adequacy of any proposed means for screening out litter, the capture of chemical spillages, the containment of contamination from roads and paved areas, and of siltation.

(g) The practicality of retaining open natural waterway systems for stormwater disposal in preference to piped or canal systems and adverse effects on existing waterways.

(h) Whether there is sufficient capacity available in the Council's outfall stormwater system to cater for increased run-off from the proposed allotments.

(i) Where an existing outfall is not capable of accepting increased run-off, the adequacy of proposals and solutions for disposing of run-off.

(j) The necessity to provide on-site retention basins to contain surface run-off where the capacity of the outfall is incapable of accepting flows, and where the outfall has limited capacity, any need to restrict the rate of discharge from the subdivision to the same rate of discharge that existed on the land before the subdivision takes place.

(k) Any adverse effects of the proposed subdivision on drainage to, or from, adjoining properties and mitigation measures proposed to control any adverse effects.

(l) In accordance with sustainable management practices, the importance of disposing of stormwater by way of gravity pipe lines. However, where topography dictates that this is not possible, the adequacy of proposed pumping stations put forward as a satisfactory alternative.

(m) The extent to which it is proposed to fill contrary to the natural fall of the country to obtain gravity outfall; the practicality of obtaining easements through adjoining owners' land to other outfall systems; and whether filling or pumping may constitute a satisfactory alternative.

(n) For stormwater pipes and open waterway systems, the provision of appropriate easements in favour of either the registered user or in the case of the Council, easements in gross, to be shown on the survey plan for the subdivision, including private connections passing over other land protected by easements in favour of the user.

(o) Where an easement is defined as a line, being the centre line of a pipe already laid, the effect of any alteration of its size and the need to create a new easement.

(p) For any stormwater outfall pipeline through a reserve, the prior consent of the Council, and the need for an appropriate easement.

(q) The need for and extent of any financial contributions to achieve the above matters.

(r) The need for a local purpose reserve to be set aside and vested in the Council as a site for any public utility required to be provided.

8.4 Each Lot contains an existing residential dwelling. All lots are a size to adequately dispose of stormwater and have existing water tanks with the overflow of stormwater disposal flowing back to wireless rd. Each lot contains existing built development. The attenuation and detention of stormwater for the kura and school house were all designed and implemented as part of RC 2220673, as an offered condition of consent, as the

subdivision of the site was part of the lease agreement conditions, and due to the reduction of the title size, it was known that the subdivision would result in a breach of the stormwater management rule under the district plan. Attenuation was undertaken in the design of the ARI 10 year event to predevelopment flows for the school design development.

The stormwater mitigation design that has already been implemented includes water storage tanks for detention and attenuation, and an Aqua comb pod under the kura courts. Attenuation of all buildings and impermeable surfaces within the leased area (within proposed Lot 1) was designed to be attenuated back to pre-development levels for all the development within Lot 1.

13.10.5 SANITARY SEWAGE DISPOSAL

(a) Whether the capacity, availability, and accessibility of the reticulated system is adequate to serve the proposed subdivision.

(b) Whether the application includes the installation of all new reticulation, and complies with the provisions of the Council's *"Engineering Standards and Guidelines" (2004) - Revised March 2009* (to be used in conjunction with NZS 4404:2004).

(c) Whether the existing sanitary sewage disposal system, to which the outfall will be connected, has sufficient capacity to service the subdivision.

(d) Whether a reticulated system with a gravity outfall is provided, and where it is impracticable to do so, whether it is feasible to provide alternative individual pump connections (with private rising mains), or new pumping stations, complete pressure, or vacuum systems.

Note: Council consent to install private rising mains within legal roads will be required, under the Local Government Act.

(e) Where a reticulated system is not available, or a connection is impractical, whether a suitable sewage treatment or other disposal systems is provided in accordance with regional rules or a discharge system in accordance with regional rules or a discharge permit issued by the Northland Regional Council.

(f) Where a reticulated system is not immediately available but is likely to be in the near future, whether a temporary system is appropriate.

Note: Consent notices may be registered against Certificates of Title pursuant to ***Rule 13.6.7*** requiring individual allotments to connect with the system when it does become available.

(g) Whether provision has been made by the applicant for monitoring mechanisms to ensure contaminants are not discharged into the environment from a suitable sewage treatment or other disposal system, together with any consent notices to ensure compliance.

(h) Whether there is a need for, and the extent of, any development contributions to achieve the above matters.

(i) Whether there is a need for a local purpose reserve to be set aside and vested in the Council as a site for any public sewage utility for sanitary disposal purposes required to be provided.

(j) Whether the subdivision represents the best practical option in respect of the provision that is made for the disposal of sewage and waste water.

8.5 Each Lot (1, 2 and 3) contains an existing residential dwelling with connection to the council reticulated sewer. The existing kura is also connected to the council sewer.

8.6 The provision of power and telecommunications is not anticipated to be a condition of consent for this proposal. Each of the Lots contain an existing residential dwelling and the existing school. Power is already provided to the each of the lots and telecommunications are provided via wireless which provides fibre to the kura and dwellings along wireless rd.

13.10.8 TELECOMMUNICATIONS

(a) Where the subdivision involves construction of new roads or formed rights of way, whether an extended reticulation system has been installed (at the subdivider's cost), having regard to the Council's "*Engineering Standards and Guidelines 2004 – Revised March 2009* (to be used in conjunction with NZS 4404:2004) and "The National Environmental Standard for Telecommunication Facilities 2008".

(b) Where the proposed system will serve other land which is not part of the subdivision, whether the network operator is providing sufficient capacity as initially installed, and the cost of such provision.

(c) Whether the proposed reticulation system will have potential adverse effects on amenity values.

Note: Upgrading or cost-sharing will be solely a matter for the network operator.

13.10.6 ENERGY SUPPLY

(a) Where the subdivision involves the construction of new roads or formed rights of way, whether an extended reticulation system will be installed (at the subdivider's cost), having regard to the provisions of the Council's *"Engineering Standards and Guidelines 2004 – Revised March 2009 (*to be used in conjunction with NZS 4404:2004). The application for subdivision consent should also indicate how lots are to be reticulated.

(b) Whether the proposed reticulated system to be installed by the subdivider is adequate for the likely development.

(c) Where the proposed system will serve other land that is not part of the subdivision, whether the network operator is providing sufficient capacity as initially installed and the cost of such provision.

Note: Upgrading or cost sharing will be solely a matter for the network operator.

(d) Where a gas supply is proposed, whether the gas network operator is responsible for the installation of all pipelines and their future maintenance, in line with the provisions of the Council's *"Engineering Standards and Guidelines" (2004)- Revised March 2009 (*to be used in conjunction with NZS 4404:2004).

(e) Whether there is a need for a local purpose reserve to be set aside as a site for any public utility required to be provided.

(f) Whether there will be potential adverse effects of the proposed reticulation system on amenity values.

(g) Whether the subdivision design, location of building platforms and proposed electricity supply has had adequate regard to the future adoption of appropriate renewable energy initiatives and technologies.

8.7 No new easements are proposed or required as part of this proposal, with the exception of a proposed right of way easement to allow the continued use of the accessway to the dwelling at 20 wireless road. This existing crossing place provides access to both the dwelling within Lot 1 and also the dwelling within Lot 2. A right of way easement is required to ensure legal access is provided to both existing dwellings within Lot 1 and 2.

13.10.9 EASEMENTS FOR ANY PURPOSE

Whether there is a need for an easement for any of the following purposes:

(a) Easements in gross where a service or access is required by the Council.

(b) Easements in respect of other parties in favour of nominated allotments or adjoining Certificates of Title.

(c) Service easements, whether in gross or private purposes, with sufficient width to permit maintenance, repair or replacement. Centre line easements shall apply when the line is privately owned and unlikely to require upgrading.

(d) Easements for any of the following purposes:

(i) private ways, whether mutual or not;

(ii) stormwater, sanitary sewer, water supply, electric power, gas reticulation;

(iii) telecommunications;

(iv) party walls and floors/ceilings.

(v) any other network utilities.

(e) Easements in gross in favour of the Council adjoining banks of rivers, streams, lakes, wetlands or the coastal marine area not subject to an esplanade reserve or strip.

(f) Stormwater easements passing through esplanade reserves where drainage will be to the adjoining lake or river.

8.8 Lots 1, 2 will utilise the existing crossing places via Wireless Road. The existing crossing places are onto the road in locations that have adequate sight distances.

No conditions of consent for the upgrade of crossing places are anticipated. All the existing crossing places are legally established and formed to a good standard.

13.10.11 PROVISION OF ACCESS

(a) Whether provision for access to and within the subdivision, including private roads, has been made in a manner that will avoid, remedy or mitigate adverse effects on the environment, including but not limited to traffic effects, including effects on existing roads, visual effects, effects on vegetation and habitats, and natural character.

8.9 No physical works or earthworks are proposed as part of the application. No additional titles or earth works are proposed as a result of this proposal

13.10.12 EFFECT OF EARTHWORKS AND UTILITIES

(a) Whether the effects of earthworks and the provision of services to the subdivision will have an adverse effect on the environment and whether these effects can be avoided, remedied or mitigated.

8.10 The Lots each contain an existing residential dwelling. No additional titles are proposed to be created as a result of this proposal

13.10.13 BUILDING LOCATIONS

(a) Whether the subdivision provides physically suitable building sites.

(b) Whether or not development on an allotment should be restricted to parts of the site.

(c) Where a proposed subdivision may be subject to inundation, whether the establishment of minimum floor heights for buildings is necessary in order to avoid or mitigate damage.

(d) Whether the subdivision design in respect of the orientation and dimensions of new allotments created facilitates the siting and design of buildings able to take advantage of passive solar gain (e.g. through a northerly aspect on an east/west axis).

Note: Attention is also drawn to the Visual Amenity rules applying in the General Coastal, South Kerikeri Inlet and Coastal Living Zones and in Outstanding Landscapes (see ***Chapter 10*** and ***Section 11.1***).

8.11 The proposed lots are suitable for their intended rural and lifestyle use. The subject site contains significant soils – the soil classification is Kaitaia Clay Loam. However, there will be no physical changes on the site. The proposal is able to pass the test of retaining the overall productive capacity of the subject land over the long term, as all the built development on the site is legally established under existing approved resource consents, and no new built development is proposed, and neither will any new development rights be created as a result of this subdivision.

Both Lots 1 and 2 contain existing residential units, and both lots contain existing access and connections to reticulated infrastructure. As the consenting for the existing Kura within Lot 1 was approved by FNDC in October 2022, after the NPS for Highly Productive Land came into effect, the existing Kura was consented under this NPS and is legally established. The Kura is existing and legally established, and fenced and utilised physically separated from the dairy farm paddocks within Lot 2. The boundary proposed for this boundary adjustment is the existing 1.8m high timber fence that separates the farming activity and the existing Kura activity. No paddocks at all will be removed from the farming use as part of this boundary adjustment proposal, and no reduction in productive use will result from this proposal.

The existing farm that is operating within proposed Lot 2 is a large dairy farm (over 200Ha), and meets the definiation of “land based primary production” and “productive capacity” under the NPS. The paddock area within Lot 2 will be unchanged, and will continue to operate as part of the dairy farm. No interference to the productive capacity of the farm is proposed. The existing dwelling within proposed Lot 2 is an existing farm house, which provides accommodation for the dairy farm workers. No changes to this existing dwelling are proposed or required as part of this consent application for subdivision.

13.10.15 SOIL

(a) The extent to which any subdivision will contribute to or affect the ability to safeguard the life supporting capability of soil.

(b) The degree to which the life supporting capacity of the soil may be adversely affected by the subdivision and the degree to which any soils classified as I, II or III in the NZ Land Resource Inventory Worksheets are adversely affected by the subdivision.

8.12 The character of the locality is rural, industrial, and lifestyle. The activities of the site will remain unchanged due the subdivision all the built development on the site is legally established under existing approved resource consents, and no new built development is proposed, and neither will any new development rights be created as a result of this subdivision.

13.10.17 LAND USE INCOMPATIBILITY

(a) The degree to which the proposed allotments take into account adverse effects arising from incompatible land use activities (including but not limited to noise, vibration, smell, smoke, dust and spray) resulting from an existing land use adjacent to the proposed subdivision.

8.13 The proposal will not have any known effects on flora or fauna. No vegetation clearance is proposed.

13.10.14 PRESERVATION AND ENHANCEMENT OF HERITAGE RESOURCES, VEGETATION, FAUNA AND LANDSCAPE, AND LAND SET ASIDE FOR CONSERVATION PURPOSES

(a) Whether any vegetation, habitats of indigenous fauna, heritage resources and landscape features are of sufficient value in terms of the objectives and policies in ***Chapter 12*** of the Plan, that they should be protected.

(b) Whether the means (physical and/or legal) by which ongoing preservation of the resource, area or feature will be achieved is adequate.

(c) Where there are Sites of Cultural Significance to Maori, (refer to ***Appendix 1F*** and the ***Resource Maps***), whether it is appropriate to require their protection by physical or legal means and/or to provide for access to the site over the land to be subdivided.

(d) Where a reserve is to be set aside and vested in the Council, whether the value of the reserve land is offset against the assessment of any financial contribution.

(e) Whether any measures are proposed to protect known high density kiwi habitats from predation by dogs, cats, rats, mustelids, pigs, and other animal pests.

(f) Whether the subdivision would have an adverse effect on the ability to protect listed historic buildings, places or objects and their setting or surrounds; and the protection of listed notable trees.

(g) Whether the subdivision will result in the permanent protection and/or enhancement of heritage resources, areas of significant indigenous vegetation and significant habitats of indigenous fauna, outstanding landscapes, outstanding landscape features or outstanding natural features.

(h) Whether the subdivision will result in the significant enhancement of biodiversity values through planting of native flora (preferably those species that naturally grow in the area) and ongoing management (including pest animal and plant control, fencing and replacement of failed plantings, stream enhancement and waterway protection).

Note: There are many ways in which preservation/protection can be achieved, and the appropriate means will vary according to the circumstance. In some cases physical means (e.g. fencing) may be appropriate. In other cases, a legal means will be preferred instead of (or as well as) physical means. Mechanisms other than a Consent Notice which may be acceptable include:

(i) a Maori reservation under s338 and s340 of Te Ture Whenua Maori (Maori Land) Act;

(ii) a conservation covenant with the Department of Conservation or the Council;

(iii) an open space covenant with the Queen Elizabeth II National Trust;

(iv) a heritage covenant with the New Zealand Historic Places Trust;

(v) a reserve under the Reserves Act.

9.0 Other matters:

9.1 <u>Character and Amenity</u>

The proposal is not considered to erode the Rural and industrial character of the area. The subject sites have no distinguishing characteristics that would give the public a perception that the locality has high amenity values. The area is characterised by lifestyle blocks, industrial use, and pastoral grazing.

The surrounding locality to the west is largely rural in nature with rural residential type properties interspersed along Wireless Road. To the east of the site across State Highway 1 (SH1) is a cluster of industrial activities which stretch south towards the centre of Kaitāia which is approximately 1.5km – 2.0km from the site. The built environment along Wireless Road is characterised by one storey detached houses that have a range of setbacks from the street from around 5m-30m, with the majority of front yards defined by low fencing or landscaping. The surrounding locality includes the Petrovitch Bus depot which operates from Lot 1 DP 182864 adjoining the lease area directly to the west.

The application site is located within the Rural Production Zone; a zone which anticipates the establishment of a wide array of activities where they are compatible with the existing amenity value of the rural environment. Wireless Road is not necessarily typical of the broader Rural Production environment within the Far North District in that there is a mix in terms of activities that have established making it to some degree more of a transitory zone, reflected by the presence of council reticulated infrastructure (water and wastewater).

Activities established include the commercial operation of a bus depot within the property adjoining to the west, the existing legally established childcare facility within the application site, rural residential and lifestyle type development, the cluster of industrial activities to the east and of course the true rural production type activities that surround the site to the north and east. Regardless of the above, a sense of open space heavily contributed to by the large agricultural land holdings, interspersed with built form (including large areas of impermeable surfaces) and landscaped gardens (including hedging) along the road interface dominates the character and amenity along Wireless Road, especially towards the SH1 end.

The proposal is considered to be consistent with the character and rural amenity of the locality. As shown previously, the proposed lots are consistent with the character of the locality and will have no more than minor effects on the character and amenity values of the area.

9.2 Cumulative Effects

Over time cumulative effects can arise. These effects can be created through incremental changes that are created by activities. The proposal is not considered to set a precedent in terms of lot size as there are other many lots in the locality that are this size, including right next door with the bus dept, the titles across the road, and also titles along bell road and along the Awanui Straight (SH1)..

The excerpt shown below, identifies the similar allotment sizes in close vicinity of the site along Wireless Road, Bell Road, and along the Awanui Straight (SH1).

This further excerpt shown above, identifies the very high number of other allotments in close vicinity to the subject that are a similar allotment size to the proposed smaller lifestyle allotments.

The primary reason that this proposal is considered to have special circumstances, and therefore will not have cumulative effects, is the fact that the subject site two existing consented dwellings, and also a consented school (Kura) and the proposal will also not result in any additional titles, as the proposed subdivision is by way of boundary adjustment. The subdivision will therefore essentially not create adverse cumulative environmental effects, as the physical development of the site has already occurred and both proposed Lots are fully developed.

The proposed boundary adjustment complies will all the assessment criteria, with the exception of criteria (c) and criteria (e), as proposed Lot 1 will be less than 1 hectare in area and the existing built development within Lot 1 will result in technical breaches of landuse rules, however there will be no physical changes on the site.

The proposed subdivision includes the design to follow the fence of the Kura as this is a natural change of use boundary of the existing consented landuse activities, and it will result in no reduction in the productive use of the adjacent dairy farm pastoral grazing by following the existing fenced lease area of the Kura.

The proposal could have been designed to have a 12ha allotment for Lot 1, and the balance Lot (once amalgamated) to be over 20ha, therefore meeting the restricted discretionary Lot size rule, however this would then remove the paddocks of the dairy

farm out of being of their most productive use for their valuable soil type, and result in a smaller title that is less productive than its current use.

In summary, although the boundary adjustment could be designed in different ways, with an "easier" activity status by increasing the Lot size of Lot 1 to 12ha in area, the most efficient and effective use of resources, is to follow the existing delineation of land uses. These land uses are consented under RC 2170432, RC 2190071, and RC 2220673-RMALUC, by creating the 8233m2 Lot surrounding the existing Kura and School House, and a larger balance title to be amalgamated with the adjacent title that is utilised as farm grazing paddocks, as part of the large dairy farm.

The proposed boundary adjustment meets the purpose of the Resource Management Act 1991; is consistent with the objectives of the Rural Production Zone; and will not set a precedent for other subdivisions. This is due to the proposed allotments each containing an existing legally established dwelling, no additional titles or development rights will be created from the subdivision, and in this instance, the boundary proposed for Lot 1 is to align with the leased area of an existing legally established school.

The proposal therefore has unusual and individual circumstances that differentiate it from other subdivision proposals, and also has existing consented landuse activities, which will not physically change or result in any change in physical effects as a result of the non-complying boundary adjustment.

This proposal will therefore not result in any physical changes on the subject site as a result of this proposed subdivision. The intent of the subdivision is to create a separate title for the existing leased area that contains the kura and the school house, and to continue to utilise the farm paddocks are part of the greater large dairy farm.

It is considered that the proposed subdivision is sustainable in terms of preservation of the rural environment and will not result in any changes to the rural environment, as these activities on the site are already physically established.

9.3 Hazards

The subject site is not identified as containing areas within the 10 year flood extent and the 100 year flood extent that affects any of the existing built development or access to the existing built development on the site. All the built development within each proposed Lot is existing, and not affected by any hazards.

9.4 Access and Traffic

The lots will utilise existing crossing places from Wireless Road. The crossing places are legally established and are in locations that have adequate sight distances. No conditions of consent for the upgrade of crossing places are anticipated. No new crossing places are proposed. The subdivision includes a new right of way easement to provide legal easement to the existing dwellings within Lots 1 and 2. A photo of the this formed accessway is shown previously in this report.

9.5 Physical works

No physical works or earthworks are required or proposed as part of the application.

9.6 Effects on the neighbourhood and the wider community (social, economic or cultural effects)

The rural and lifestyle use of the site will not change as a result of the subdivision and is consistent with the character of the area. It is considered that the proposal will not result in any adverse social, economic or cultural effects, as the proposed allotments will contain existing established dwellings and an established school.

The proposed large farm balance allotment (Lot 2 and Pt OLC 214) will result in the site being of a size for good productive use, as is currently the case. The site is utilised for grazing for dairy farming and the proposed lot size for Lot 2 is considered to be of a good economic size for dairy farming, and Lot 1 will continue to be utilised as a school and school house, therefore result in no changes of use, and no physical changes as a result of the proposal.

9.7 Landscape and Visual Effects

The subject site is not located within an outstanding landscape and does not contain any outstanding landscape features. No physical changes are required or proposed. The proposal will have less than minor landscape and visual effects.

9.8 Effects on Ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity.

The application is not considered to affect any such ecosystems.

9.9 Any effect on Natural and Physical Resources having aesthetic, recreational, scientific, historical, spiritual, or cultural value, or other special value, for present and future generations.

No effects of these values are considered to be generated by the proposal.

9.10 Any Discharge of Contaminants into the Environment; including any unreasonable emission of noise, and options for the treatment and disposal of contaminants.

The application is not considered to discharge any known contaminants into the environment. No physical changes are anticipated as a result of this subdivision.

9.11 Any risk to the Neighbourhood, the Wider Community, or the environment through natural hazards or the use of any hazardous substances or hazardous installations.

There are no known hazards or hazardous substances that will arise as a result of this proposal.

9.12 Conclusion of the Assessment of Effects

Overall, based on the above assessment, it is considered that the proposal will result in no more than minor actual or potential environmental effects.

10.0 Conclusion for Assessment of Environmental Effects:

In terms of the RMA "Gateway" test assessment under Section 104D, the assessment of the physical effects, detailed above, demonstrate that the proposal is considered to not to have more than minor effects on the environment. The proposal has no physical changes as a result of the proposal, and therefore avoid creating effects on the environment, and all stormwater, traffic and amenity effects have been avoided and mitigated as part of the previous granted landuse consents, under Previous consents RC 2170432, RC 2190071, and RC 2220673-RMALUC.

This proposal will not result in any additional titles being created, as the proposal is by way of boundary adjustment. The proposal will result in a smaller title surrounding the existing established kura and school house, however, the proposed new title boundaries will follow the existing timber screening fenced area that separates the farming and the school activities, and therefore follows the natural existing delineation of the existing consented landuse activities.

The proposal will not result in any removal of land out of productive use, as the proposed boundary will follow the existing fenced lease area for the kura and the school house, and there will be no physical changes or physical effects as part of the proposal.

The proposal will allow for the continued farm use of proposed Lot 2 and PT OLC 214. This large title is utilised as part of a very large farm, utilised as a dairy farm, which is over 300Ha in area, and spans north from Wireless Rd, through to just before Brotts Rd, Awanui. The dairy Farm is owned and operated by west coast farms. The proposed boundary adjustment will not result in any change in production on the farm, as the boundary adjustment follows the fence of the school; and therefore, will provide a legal separation of uses from the farm and the school by giving them separate titles. There is an existing dwelling legally established within Lot 2 also, which is utilised for farm worker housing for the dairy farm.

11.0 Assessment of District Plan Objectives and Policies

11.1 The relevant objectives and policies of the Plan are those related to the Rural Environment, Rural Production Zone and Subdivision. The proposal is considered to create no more than minor adverse effects on the rural environment. The proposal is considered to be consistent with the rural character of the surrounding area and is considered to have negligible effects on rural amenity value of the area, as the lot sizes in the locality reflect the size of the resultant Lots proposed.

The proposal is a Non-Complying Activity; however, no new titles are proposed, and no physical changes will result from the proposal. The it is not considered to be contrary to the objectives and policies of the Plan, and therefore meets the "gateway tests" under Section 104D of the Act. An assessment of the objectives and policies of the plan are shown below.

11.2 Assessment of the objectives and policies within the Rural Zone.

OBJECTIVES

To promote the sustainable management of natural and physical resources of the rural environment while enabling activities to establish in the rural environment.

- The proposal is to undertake a non-complying subdivision by way of boundary adjustment. The proposed boundary adjustment meets the purpose of the Resource Management Act 1991; is consistent with the objectives of the Rural Production Zone; and will not set a precedent for other subdivisions. This is due to the proposed allotments each containing an existing legally established dwelling, no additional titles or development rights will be created from the subdivision, and in this instance, the boundary proposed for Lot 1 is to align with the leased area of an existing legally established school.

  The proposal therefore has unusual and individual circumstances that differentiate it from other subdivision proposals, and has existing consented landuse activities, which will not physically change or result in any change in physical effects as a result of the non-complying boundary adjustment.

- The proposal results in a superior outcome in meeting the purpose of the Resource Management Act 1991, and a superior use of land for the existing consented land uses under RC 2170432, RC 2190071, and RC 2220673-RMALUC, than designing the subdivision for Lot 1 to be 12ha Lot (which would be a discretionary activity), the proposal will result in no physical changes, no more than minor effects on the rural environment and less than minor effects on an persons while not compromising the sustainable management of natural and physical resources of the rural environment.

To ensure that the life supporting capacity of soils is not compromised by inappropriate subdivision, use or development.

- The existing titles contain residential dwellings on the subject sites, and Lot 1 also contains an existing school.

  The proposal is able to pass the test of retaining the overall productive capacity of the subject land over the long term, as all the built development on the site is legally established under existing approved resource consents, and no new built development is proposed, and neither will any new development rights be created as a result of this subdivision. Both Lots 1 and 2 contain existing residential units, and both lots contain existing access and connections to reticulated infrastructure.

- As the consenting for the existing Kura within Lot 1 was approved by FNDC in October 2022, after the NPS for Highly Productive Land came into effect, the existing Kura was consented under this NPS and is legally established. The Kura is existing and legally established, and fenced and utilised physically separated from the dairy farm paddocks within Lot 2. The boundary proposed for this boundary adjustment is the existing 1.8m high timber fence that separates the farming activity and the existing Kura activity. No paddocks at all will be removed from the farming use as part of this boundary adjustment proposal, and no reduction in productive use will result from this proposal.

- The existing farm that is operating within proposed Lot 2 is a large dairy farm (over 200Ha), and meets the definition of "land based primary production" and "productive capacity" under the NPS. The paddock area within Lot 2 will be unchanged, and will continue to operate as part of the dairy farm. No interference to the productive capacity of the farm is proposed. The existing dwelling within proposed Lot 2 is an existing farm house, which provides accommodation for the dairy farm workers. No changes to this existing dwelling are proposed or required as part of this consent application for subdivision.

To avoid, remedy or mitigate adverse effects of activities on the rural environment.

- The proposal is considered to be consistent with the landuse activities in the locality (being lifestyle and pastoral grazing). The existing use of the sites are industrial/residential and pastoral grazing purposes. The proposal is considered to result in less than minor adverse effects on the rural environment. No paddocks at all will be removed from the farming use as part of this boundary adjustment proposal, and no reduction in productive use will result from this proposal as the boundary adjustment is proposed to follow the existing timber fence of the ministry of education lease boundary of the site and as Lots 1 and 2 both contain an existing residential unit. The proposal will result in no changes in effects as existing consented land uses were consented and given effect to under RC 2170432, RC 2190071, and RC 2220673-RMALUC.

To protect areas of significant indigenous vegetation and significant habitats of indigenous fauna.

- It is noted that the site is not located within a potentially kiwi present area or a high kiwi habitat area. There are no areas of significant indigenous vegetation or habitats of fauna on the site.

To protect outstanding natural features and landscapes.

- N/A - The subject sites are not located within an area of outstanding natural features or landscapes. The subject sites are also not located within close proximity of any outstanding landscapes or features.
-

To avoid actual and potential conflicts between land use activities in the rural environment.

- The existing lots contain existing residential dwellings, and a school is located within proposed Lot 1m, which are legal established. There are no known conflicts of landuse between the pastoral grazing of the farmland and the lifestyle/residential use of the sites, as all the existing activities are physically there.

To promote the amenity values of the rural environment.

- The subject site is located on a property that has high productive soils. The amenity of the rural environment is not considered to be compromised by the proposal, as the development is consistent with the character of the Lots in the surrounding area. The amenity of the locality is considered to be maintained by the proposal, as the proposal will not result in any changes in effects, as the development within the proposal Lots is already physically established.

To facilitate the sustainable management of natural and physical resources in an integrated way to achieve superior outcomes to more traditional forms of subdivision, use and development through management plans and integrated development.

- As noted above, it is considered that the proposed rural/lifestyle use of the proposed Lots is consistent with the existing character and use of development in the locality. The proposed larger Lot continues to be utilised for productive farming use, and the Ministry of Education lease area remains with proposed Lot 1, with no physical changes required or proposed.

11.3 POLICIES

That activities which will contribute to the sustainable management of the natural and physical resources of the rural environment are enabled to locate in that environment.

- As noted above, the proposed Lots are consistent with the existing character and Lot size of sites in the locality. The proposed larger Lot (Lot 2) continues to be utilised for productive farming use, and the Ministry of Education lease area remains with proposed Lot 1, with no physical changes required or proposed.

That activities be allowed to establish within the rural environment to the extent that any adverse effects of these activities are able to be avoided, remedied or mitigated and as a result the life supporting capacity of soils and ecosystems is safeguarded.

- The existing titles each contain a residential dwelling, and Lot 1 contains an existing school. The proposal is considered to have no adverse effects on the life supporting capacity of soils, as noted above, as the proposed larger Lot (Lot 2) continues to be utilised for productive farming use, and the Ministry of Education lease area remains with proposed Lot 1, with no physical changes required or proposed. The proposal will result in no changes in effects as existing consented land uses were consented and given effect to under RC 2170432, RC 2190071, and RC 2220673-RMALUC.

That any new infrastructure for development in rural areas be designed and operated in a way that safeguards the life supporting capacity of air, water, soil and ecosystems while

protecting areas of significant indigenous vegetation and significant habitats of indigenous fauna, outstanding natural features and landscapes.

- The existing lots each contain an existing residential dwelling and an existing school. This use will continue within the proposed new Lots. No new infrastructure is proposed or required.

That development which will maintain or enhance the amenity value of the rural environment and outstanding natural features and outstanding landscapes be enabled to locate in the rural environment.

- The amenity of the rural environment is not compromised by the proposal, as all the development within both proposed Lots is existing, and also the subdivision is proposed by way of boundary adjustment, which will result in no additional titles being created.

  The proposal is considered to have no adverse effects on the life supporting capacity of soils, as noted above, as the proposed larger Lot (Lot 2) continues to be utilised for productive farming use, and the Ministry of Education lease area remains with proposed Lot 1, with no physical changes required or proposed. The amenity of the locality will be maintained by the proposed subdivision by way of boundary adjustment. The proposal will result in no changes in effects as existing consented land uses were consented and given effect to under RC 2170432, RC 2190071, and RC 2220673-RMALUC.

- The rural environment in the Far North is varied and diverse. The proposed allotment sizes are considered to be consistent with the character within the locality. A map demonstrating the Lot sizes in the area has been provided, which shows that the proposed Lots are consistent with the Lot sizes and character of the area.

That plan provisions encourage the avoidance of adverse effects from incompatible land uses, particularly new developments adversely affecting existing land-uses (including by constraining the existing land-uses on account of sensitivity by the new use to adverse effects from the existing use – i.e. reverse sensitivity).

The proposal is considered to be consistent with the landuse activities in the locality. The proposal will result in no changes in effects as existing consented land uses were consented and given effect to under RC 2170432, RC 2190071, and RC 2220673-RMALUC. The proposal is considered to result in no changes, and no changes in effects relating reverse sensitivity effects.

That, when considering subdivision, use and development in the rural environment, the Council will have particular regard to ensuring that its intensity, scale and type is controlled to ensure that adverse effects on habitats (including freshwater habitats), outstanding natural features and landscapes on the amenity value of the rural environment, and where appropriate on natural character of the coastal environment, are avoided, remedied or mitigated.

- As previously discussed, the proposed subdivision is consistent with the character and amenity of the locality and the rural environment, and no changes in any effects are required or proposed as existing consented land uses were consented and given effect to under RC 2170432, RC 2190071, and RC 2220673-RMALUC. The site is not coastal. The scale and intensity of the proposed subdivision by way of boundary adjustment is

appropriate in the context of the site location and also provides for the continued rural production purposes within proposed Lot 2.

12.0 Assessment of the objectives and policies within the Rural Production Zone.

12.1 Objectives

-To promote the sustainable management of natural and physical resources in the Rural Production Zone.

The proposal is to undertake a non-complying subdivision by way of boundary adjustment. The proposal is considered to have no adverse effects on the life supporting capacity of soils, as noted above, as the proposed larger Lot (Lot 2) continues to be utilised for productive farming use, and the Ministry of Education lease area remains with proposed Lot 1, with no physical changes required or proposed. The amenity of the locality will be maintained by the proposed subdivision by way of boundary adjustment.

The proposed boundary adjustment meets the purpose of the Resource Management Act 1991; is consistent with the objectives of the Rural Production Zone; and will not set a precedent for other subdivisions. This is due to the proposed allotments each containing an existing legally established dwelling, no additional titles or development rights will be created from the subdivision, and in this instance, the boundary proposed for Lot 1 is to align with the leased area of an existing legally established school.

The proposal therefore has unusual and individual circumstances that differentiate it from other subdivision proposals, and also has existing consented landuse activities, which will not physically change or result in any change in physical effects as a result of the non-complying boundary adjustment.

It is considered that that the proposal results in a superior outcome in meeting the purpose of the Resource Management Act 1991, and a superior use of land for the existing consented land uses under RC 2170432, RC 2190071, and RC 2220673-RMALUC, than designing the subdivision for Lot 1 to be 12ha Lot (which would be a discretionary activity), and the proposal will result in no physical changes.

-To enable the efficient use and development of the Rural Production Zone in a way that enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety.

- The use of the resultant lots within the locality is consistent with the character of the allotments in the area. The proposal is considered to allow for people and the community to provide for their social, economic, and cultural well-being and for their health and safely by continuing the existing uses on the site and having no changes in effects and no physical changes required or proposed as part of the proposal.

-To promote the maintenance and enhancement of the amenity values of the Rural Production Zone.

- The subject site is located on a property has high productive soils. The amenity of the rural environment is not compromised by the proposal. The existing titles each contain a residential dwelling, and Lot 1 contains an existing school. The proposal is considered to have no adverse effects on the life supporting capacity of soils, as noted above, as the proposed larger Lot (Lot 2) continues to be utilised for productive farming use, and the Ministry of Education lease area remains with proposed Lot 1, with no physical changes required or proposed.

  The proposal will result in no changes in effects as existing consented land uses were consented and given effect to under RC 2170432, RC 2190071, and RC 2220673-RMALUC and there will be no changes to the amenity values of the locality of the subject site, or to the rural environment at large.

-To promote the protection of significant natural values of the Rural Production Zone.

- The rural environment in the Far North is varied and diverse. The property does not contain any outstanding landscapes or natural features. The amenity of the locality is considered to be maintained by the proposal as the proposal will not result in any physical changes or any physical effects.

-To avoid, remedy or mitigate the actual and potential conflicts between new land use activities and existing lawfully established activities (reverse sensitivity) within the Rural Production Zone and on land use activities in neighbouring zones.

- The proposal is consistent with the landuse activities in the locality (being lifestyle and pastoral grazing, and industrial). The existing uses of the site will remain, and no changes are proposed. The proposal is considered to result in no changes in reverse sensitivity effects than those already consented under RC 2170432, RC 2190071, and RC 2220673-RMALUC.

-To avoid remedy or mitigate the adverse effects of incompatible use or development on natural and physical resources.

- As noted above, the proposal continues to be consistent with the existing character and use of development in the locality.

-To enable the efficient establishment and operation of activities and services that have a functional need to be located in rural environments.

- The subject site is not located near or adjacent to any activity or services that are considered to have potential reserve sensitivity effects. The location of the site is positioned between the Kaitaia Township and Awanui area, and the proposed Lot sizes are consistent with the character of Lot sizes in the locality, and no changes to any

activities on the site are required or proposed. There will be no physical changes as a result of this proposal.

-To enable rural production activities to be undertaken in the zone.

- The proposal already provides for rural production activities within proposed Lot 2, and this boundary adjustment is proposed to follow the timber screening fence that separates the existing school activity and the existing farming activity, by following this existing screening fence that separates the existing consented activities.

-To provide for the subdivision of land in such a way as will be consistent with the purpose of various zones in the Plan, and will promote the sustainable management of the natural and physical resources of the District, including airports and roads and the social, economic and cultural well-being of people and communities.

- The proposal is to undertake a non-complying subdivision by way of boundary adjustment. The existing uses of the site will remain, and no changes are proposed. The proposal is considered to result in no changes in reverse sensitivity effects than those already consented under RC 2170432, RC 2190071, and RC 2220673-RMALUC.

  Due to the proposed allotments each containing an existing legally established dwelling, no additional titles or development rights will be created from the subdivision, and in this instance, the boundary proposed for Lot 1 is to align with the leased area of an existing legally established school.

  The proposal therefore has unusual and individual circumstances that differentiate it from other subdivision proposals, and also has existing consented landuse activities, which will not physically change or result in any change in physical effects as a result of the non-complying boundary adjustment.

  It is considered that that the proposal results in a superior outcome in meeting the purpose of the Resource Management Act 1991, and a superior use of land for the existing consented land uses under RC 2170432, RC 2190071, and RC 2220673-RMALUC, than designing the subdivision for Lot 1 to be 12ha Lot (which would be a discretionary activity),

  To ensure that subdivision of land is appropriate and is carried out in a manner that does not compromise the life-supporting capacity of air, water, soil or ecosystems, and that any actual or potential adverse effects on the environment which result directly from subdivision, including reverse sensitivity effects and the creation or acceleration of natural hazards, are avoided, remedied or mitigated.

- The proposed subdivision is considered to be appropriate. No reverse sensitivity issues, are anticipated as all the built development on the site is existing and no physical changes are required or proposed.

12.2 Policies

-That a wide range of activities be allowed in the Rural Production Zone, subject to the need to ensure that any adverse effects on the environment, including any reverse sensitivity effects, resulting from these activities are avoided, remedied or mitigated and are not to the detriment of rural productivity.

- The proposal is not considered to erode the Rural character of the area. The subject site has no distinguishing characteristics that would give the public a perception that the locality has high amenity values. The proposal will result in no changes in reverse sensitivity effects than those already consented under RC 2170432, RC 2190071, and RC 2220673-RMALUC. The proposal is consistent with the character and rural amenity of the locality, and therefore is considered to have no more than minor adverse effects on the character of the locality.

  The proposal already provides for rural production activities within proposed Lot 2, and this boundary adjustment is proposed to follow the timber screening fence that separates the existing school activity and the existing farming activity, by following this existing screening fence that separates the existing consented activities.

  -That standards be imposed to ensure that the off-site effects of activities in the Rural Production Zone are avoided, remedied or mitigated.

  -That although a wide range of activities that promote rural productivity are appropriate in the Rural Production Zone, an underlying goal is to avoid the actual and potential adverse effects of conflicting land use activities.

  - That activities whose adverse effects, including reverse sensitivity effects cannot be avoided remedied or mitigated are given separation from other activities

- The existing use of proposed Lots will continue and the use will remain unchanged. There will be no reverse sensitivity changes in effects as a result of this boundary adjustment.

  -That land management practices that avoid, remedy or mitigate adverse effects on natural and physical resources be encouraged.

- The existing use of the site is for farming purposes and the existing dwellings and school. The use of the site will not change as a result of the proposal.

  -That the intensity of development allowed shall have regard to the maintenance and enhancement of the amenity values of the Rural Production Zone.

  The amenity in the locality of this site is lifestyle and farming blocks. The proposed boundary adjustment will not result in any additional titles, it will not change the number or location of any access to the lots involved.

  The proposed subdivision includes the design to follow the fence of the Kura as this is a natural change of use boundary of the existing consented landuse activities, and it will result in no reduction in the productive use of the adjacent dairy farm pastoral grazing by following the existing fenced lease area of the Kura.

The application site is located within the Rural Production Zone; a zone which anticipates the establishment of a wide array of activities where they are compatible with the existing amenity value of the rural environment. Wireless Road is not necessarily typical of the broader Rural Production environment within the Far North District in that there is a mix in terms of activities that have established making it to some degree more of a transitory zone, reflected by the presence of council reticulated infrastructure (water and wastewater).

Activities established include the commercial operation of a bus depot within the property adjoining to the west, the existing legally established childcare facility within the application site, rural residential and lifestyle type development, the cluster of industrial activities to the east and of course the true rural production type activities that surround the site to the north and east. Regardless of the above, a sense of open space heavily contributed to by the large agricultural land holdings, interspersed with built form (including large areas of impermeable surfaces) and landscaped gardens (including hedging) along the road interface dominates the character and amenity along Wireless Road, especially towards the SH1 end.

The proposal could have been designed to have a 12ha allotment for Lot 1, and the balance Lot (once amalgamated) to be over 20ha, therefore meeting the restricted discretionary Lot size rule (shown below), however this would then remove the paddocks of the dairy farm out of being of their most productive use for their valuable soil type, and result in a smaller title that is less productive than its current use.

-That the efficient use and development of physical and natural resources be taken into account in the implementation of the Plan.

The proposed allotments each contain an existing legally established dwelling, no additional titles or development rights will be created from the subdivision, and in this instance, the boundary proposed for Lot 1 is to align with the leased area of an existing legally established school.

The proposal therefore has unusual and individual circumstances that differentiate it from other subdivision proposals, and also has existing consented landuse activities, which will not physically change or result in any change in physical effects as a result of the non-complying boundary adjustment.

It is considered that that the proposal results in a superior outcome in meeting the purpose of the Resource Management Act 1991, and a superior use of land for the existing consented land uses under RC 2170432, RC 2190071, and RC 2220673-RMALUC, than designing the subdivision for Lot 1 to be 12ha Lot (which would be a discretionary activity), and the proposal will result in no physical changes.

-That the type, scale and intensity of development allowed shall have regard to the maintenance and enhancement of the amenity values of the Rural Production Zone to a level that is consistent with the productive intent of the zone.

- the proposal will result in no physical changes than those already consented and given effect to under RC 2170432, RC 2190071, and RC 2220673-RMALUC. The proposed allotment sizes are considered to be consistent with the scale and intensity of

development within the locality. The proposed lot sizes are considered to be consistent with the productive intent of the zone.

That activities be discouraged from locating where they are sensitive to the effects of or may compromise the continued operation of lawfully established existing activities in the Rural Production zone and in neighbouring zones.

- The proposed existing uses of the lots is consistent with the character and use of sites in the locality. No new reverse sensitivity effects are anticipated.

That the sizes, dimensions and distribution of allotments created through the subdivision process be determined with regard to the potential effects including cumulative effects, of the use of those allotments on:

(a) natural character, particularly of the coastal environment;

(b) ecological values;

(c) landscape values;

(d) amenity values;

(e) cultural values;

(f) heritage values; and

(g) existing land uses.

The proposed lots sizes are consistent with the allotment sizes in the locality. The proposed allotments each contain an existing legally established dwelling, no additional titles or development rights will be created from the subdivision, and in this instance, the boundary proposed for Lot 1 is to align with the leased area of an existing legally established school.

The proposal therefore has unusual and individual circumstances that differentiate it from other subdivision proposals, and also has existing consented landuse activities, which will not physically change or result in any change in physical effects as a result of the non-complying boundary adjustment.

It is considered that that the proposal results in a superior outcome in meeting the purpose of the Resource Management Act 1991, and a superior use of land for the existing consented land uses under RC 2170432, RC 2190071, and RC 2220673-RMALUC, than designing the subdivision for Lot 1 to be 12ha Lot (which would be a discretionary activity), and the proposal will result in no physical changes. No cumulative effects are anticipated.

13.0 Assessment of objectives and policies within the Subdivision Chapter of the Plan:

13.1 OBJECTIVES

To provide for the subdivision of land in such a way as will be consistent with the purpose of the various zones in the Plan, and will promote the sustainable management of the

natural and physical resources of the District, including airports and roads and the social, economic and cultural wellbeing of people and communities.

- The character of the locality will not change as a result of this proposed boundary adjustment as all the activities on the site are existing and legally established under RC 2170432, RC 2190071, and RC 2220673-RMALUC . The proposed subdivision is consistent with the character of the allotments in the locality. The existing lots each contain an existing residential dwelling and Lot 1 contains a school.

  The subject site is located within the Rural Production Zone. The proposal is non-complying activity, however the proposed allotment sizes are consistent with the lot sizes within the locality, and no additional titles will be created as a result of the proposal for this boundary adjustment.

To ensure that subdivision of land is appropriate and is carried out in a manner that does not compromise the life-supporting capacity of air, water, soil or ecosystems, and that any actual or potential adverse effects on the environment which result directly from subdivision, including reverse sensitivity effects and the creation or acceleration of natural hazards, are avoided, remedied or mitigated.

- Each proposed Lot contains an existing residential unit and Lot 1 contains a school. The subject sites do not contain any known natural hazards.

  To ensure that subdivision does not adversely affect scheduled heritage resources through alienation of the resource from its immediate setting/context.

- There are no scheduled heritage resources on the site.

  To ensure that all new subdivisions provide a reticulated water supply and/or on-site water storage and include storm water management sufficient to meet the needs of the activities that will establish all year round

- The existing residential dwellings and the school each have portable water via town water supply.

  To ensure the relationship between Maori and their ancestral lands, water, sites, wahi tapu and other taonga is recognised and provided for.

- The subject site is not located on Whenua Maori, and there are no registered sites of cultural significant within the subject site. The proposal will not result in any additional titles, and all the existing activities on the site (including the Te Kura Kaupapa Māori o Tūtūtarakihi, which is a new school that has a foundation of Kaupapa Māori within their curriculum) are legally established and no changes are required or proposed.

  To ensure that all new subdivision provides an electricity supply sufficient to meet the needs of the activities that will establish on the new lots created.

- The proposed lots contain an existing residential dwelling with existing electricity provided to these dwellings, and existing infrastructure to the school.

  To ensure, to the greatest extent possible, that all new subdivision supports energy efficient design through appropriate site layout and orientation in order to maximise the

ability to provide light, heating, ventilation and cooling through passive design strategies for any buildings developed on the site(s).

- The dwelling within each lot is existing and the school is existing. No new buildings are required or proposed.

  To ensure that the design of all new subdivision promotes efficient provision of infrastructure, including access to alternative transport options, communications and local services.

- The proposed lots will each contain an existing residential dwelling and Lot 1 also contains a school. These are accessed via existing crossing places off Wireless road. Access to the existing buildings and existing activities will not change as a result of the proposal.

  To ensure that the operation, maintenance, development and upgrading of the existing National Grid is not compromised by incompatible subdivision and land use activities

- N/A – the existing dwelling on each lot and the school have existing power supply.

***13.2 POLICIES**:*

That the sizes, dimensions and distribution of allotments created through the subdivision process be determined with regard to the potential effects including cumulative effects, of the use of those allotments on:

(a) natural character, particularly of the coastal environment;

(b) ecological values;

(c) landscape values;

(d) amenity values;

(e) cultural values;

(f) heritage values; and

(g) existing land uses.

That standards be imposed upon the subdivision of land to require safe and effective vehicular and pedestrian access to new properties.

- The proposed lot sizes are consistent with the character of lots in the locality. The existing crossing places are legally established and are formed to Council Engineering standards, and no changes are proposed to the existing access arrangements.

  That natural and other hazards be taken into account in the design and location of any subdivision.

- The subject site and the existing building and accessways are not affected by Natural hazards.

That in any subdivision where provision is made for connection to utility services, the potential adverse visual impacts of these services are avoided.

- The existing lots contain an existing residential dwelling and Lot 1 contains a school. Connection to utility services is existing.

That access to, and servicing of, the new allotments be provided for in such a way as will avoid, remedy or mitigate any adverse effects on neighbouring property, public roads (including State Highways), and the natural and physical resources of the site caused by silt runoff, traffic, excavation and filling and removal of vegetation.

- Access to the existing site and the existing activities is via existing separate crossing places off Wireless Road. Each crossing place to access to the existing residential dwelling is legally established. No changes to the existing access and servicing of the sites is proposed as a result of this subdivision.

That any subdivision proposal provides for the protection, restoration and enhancement of heritage resources, areas of significant indigenous vegetation and significant habitats of indigenous fauna, threatened species, the natural character of the coastal environment and riparian margins, and outstanding landscapes and natural features where appropriate.

- The site is not coastal and does not contain any significant landscapes. There is no indigenous vegetation or habitat of indigenous fauna, on the site.

That the need for a financial contribution be considered only where the subdivision would:

(a) result in increased demands on car parking associated with non-residential activities; or

(b) result in increased demand for esplanade areas; or

(c) involve adverse effects on riparian areas; or (d) depend on the assimilative capacity of the environment external to the site.

- N/A- Not applicable. The site does not adjoin any rivers or the coast.

That bonus development donor and recipient areas be provided for so as to minimise the adverse effects of subdivision on Outstanding Landscapes and areas of significant indigenous flora and significant habitats of fauna.

- N/A- Not applicable. The proposal is a subdivision and there are no effects on indigenous flora and habitats of indigenous fauna.

The Council will recognise that subdivision within the Conservation Zone that results in a net conservation gain is generally appropriate.

- N/A- Not applicable.

That subdivision recognises and provides for the relationship of Maori and their culture and traditions, with their ancestral lands, water, sites, waahi tapu and other taonga and shall take into account the principles of the Treaty of Waitangi.

- The subject site is not located on Whenua Maori, and there are no registered sites of cultural significant within the subject site. The proposal will not result in any additional titles, and all the existing activities on the site (including the Te Kura Kaupapa Māori o Tūtūtarakihi, which is a new school that has a foundation of Kaupapa Māori within their curriculum) are legally established and no changes are required or proposed.

That more intensive, innovative development and subdivision which recognises specific site characteristics is provided for through the management plan rule where this will result in superior environmental outcomes.

- N/A – this is not a management plan subdivision.

Subdivision, use and development shall preserve and where possible enhance, restore and rehabilitate the character of the applicable zone in regards to s6 matters. In addition subdivision, use and development shall avoid adverse effects as far as practicable by using techniques including:

(a) clustering or grouping development within areas where there is the least impact on natural character and its elements such as indigenous vegetation, landforms, rivers, streams and wetlands, and coherent natural patterns;

(b) minimising the visual impact of buildings, development, and associated vegetation clearance and earthworks, particularly as seen from public land and the coastal marine area;

(c) providing for, through siting of buildings and development and design of subdivisions, legal public right of access to and use of the foreshore and any esplanade areas;

(d) through siting of buildings and development, design of subdivisions, and provision of access that recognise and provide for the relationship of Maori with their culture, traditions and taonga including concepts of mauri, tapu, mana, wehi and karakia and the important contribution Maori culture makes to the character of the District (refer Chapter 2 and in particular Section 2.5 and Council's "Tangata Whenua Values and Perspectives" (2004);

(e) providing planting of indigenous vegetation in a way that links existing habitats of indigenous fauna and provides the opportunity for the extension, enhancement or creation of habitats for indigenous fauna, including mechanisms to exclude pests;

(f) protecting historic heritage through the siting of buildings and development and design of subdivisions.

(g) achieving hydraulic neutrality and ensuring that natural hazards will not be exacerbated or induced through the siting and design of buildings and development

- There are no known adverse effects from this proposal that are relevant to Section 6 of the Act. This proposal is a subdivision by way of boundary adjustment (no additional titles will be created) and each proposed lot contains an existing dwelling and Lot 1 contains

an existing school. No changes to access are proposed and there will be no effects on indigenous flora and fauna.

That the objectives and policies of the applicable environment and zone and relevant parts of Part 3 of the Plan will be taken into account when considering the intensity, design and layout of any subdivision.

Each lot will contain an existing dwelling and Lot 1 will contain an existing school. No additional titles or development rights will be created from the subdivision, and in this instance, the boundary proposed for Lot 1 is to align with the leased area of an existing legally established school.

The proposal therefore has unusual and individual circumstances that differentiate it from other subdivision proposals, and also has existing consented landuse activities, which will not physically change or result in any change in physical effects as a result of the non-complying boundary adjustment.

- It is considered that that the proposal results in a superior outcome in meeting the purpose of the Resource Management Act 1991, and a superior use of land for the existing consented land uses under RC 2170432, RC 2190071, and RC 2220673-RMALUC, than designing the subdivision for Lot 1 to be 12ha Lot (which would be a discretionary activity). The proposal will result in no physical changes, and no more than minor effects on the environment, as all the activities on the site are existing.

  That conditions be imposed upon the design of subdivision of land to require that the layout and orientation of all new lots and building platforms created include, as appropriate, provisions for achieving the following:

  (a) development of energy efficient buildings and structures;

  (b) reduced travel distances and private car usage;

  (c) encouragement of pedestrian and cycle use;

  (d) access to alternative transport facilities;

  (e) domestic or community renewable electricity generation and renewable energy use.

- The dwellings within each lot are existing and there is an existing school within proposed Lot 1 also.

When considering proposals for subdivision and development within an existing National Grid Corridor the following will be taken into account:

(a) the extent to which the proposal may restrict or inhibit the operation, access, maintenance, upgrading of transmission lines or support structures;

(b) any potential cumulative effects that may restrict the operation, access, maintenance, upgrade of transmission lines or support structures; and

(c) whether the proposal involves the establishment or intensification of a sensitive activity in the vicinity of an existing National Grid line. Note 1: Structures and activities located near transmission lines must comply with the safe distance requirements in the

New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP34:2001). Compliance with this plan does not ensure compliance with NZECP34:2001. Note 2: Vegetation to be planted within, or adjacent to, the National Grid Corridor should be selected and/or managed to ensure that it will not result

- N/A – the existing dwellings and school have existing power supply.

14.0 Assessment of the Proposed Plan Objectives and Polices

The Proposed Far North District Plan (PDP) was notified on 27 July 2022. Rules in a Proposed Plan have legal effect once the Council makes a decision on submissions relating to that rule and publicly notified this decision, unless the rule has immediate legal effect in accordance with section 86(3) of the Resource Management Act 1991 (the Act).

The submission period on the PDP has closed, therefore only rules in the PDP with immediate legal effect are relevant. These rules are identified with a 'hammer' in the plan. Public hearings have commenced, and in 2026 the council will give notice of its decisions on the Proposed District Plan based on the recommendations of the hearings panel.

Rules that do not have immediate legal effect do not trigger the need for a resource consent under the PDP. An assessment of the proposal against the rules with immediate legal effect has been undertaken. It has been assessed that there are no reasons for consent under the Proposed District Plan that are relevant to the proposal.

15.0 Conclusion of Assessment of the Objectives and Policies of the Plan:

In terms of the RMA "Gateway" test assessment under Section 104D, the assessment of effects, detailed above, it has been demonstrated that the proposal is considered to not be contrary to the objectives and policies of the objectives and policies of the Plan.

16.0 Regional Policy Statement

16.1 Section 75(3)(c) of the RMA requires district plans to 'give effect' to any RPS. The RPS was made operative on 14 June 2018.

The subject site is not identified as being within outstanding natural landscape or containing an area of high natural character under the Regional Policy Statement for Northland. The subject site is also not identified as being located within the coastal environment under the Regional Policy Statement Maps. The site does however contain productive soils (the site has Kaitaia Clay Loam). An excerpt from the Regional Policy Statement Maps is shown below, which identifies that the subject site is not located within the any overlay areas under the Operative and Proposed Regional Plan.

The subject site is identified as Highly Productive Soils by the Northland Regional Council (NRC) Soils mapping. The soils on the subject site are identified as being Kaitaia Clay, which is identified as a highly productive soil.

16.2 **Assessment of the objectives and policies within the Operative Regional Policy Statement:**

The Northland Regional Policy Statement objectives and policies and the implementation methods require the PDP to

-Consider the Regional urban design guidelines as they can apply to rural settings

-Ensure that development is undertaken in a planned and coordinated way that does not create any loss of production now or in the future, does not result in incompatible land uses in close proximity and avoids the potential for reverse sensitivity effects

- Subdivision and plan changes on land with versatile soils in a primary production zones shall clearly demonstrate that the benefits to the public (social, economic and cultural) arising from subdivision and subsequent development are greater than the benefits that would have occurred from productive use of the land

- Avoid the adverse effects (including reverse sensitivity) of subdivision and land use (particularly residential development) on primary production activities in primary production zones

- That productive land and associated activities, that are important for Northland's economy are protected from the negative impacts of subdivision and land use, with particular emphasis on managing reverse sensitivity effects on existing primary production activities

- Maintains or enhances the sense of place and character of the surrounding environment

- Require the protection and management of section 6 matters as they relate to the rural environment The NRPS states that primary production activities (such as dairy farming, horticulture, apiculture, forestry, aquaculture and intensive indoor primary production) are the biggest contributor to Northland's economy.

The provisions of the RPS that are relevant to the proposed activity are summarised as follows:

• Objectives 3.5 and 3.6 refer to enabling economic wellbeing and addressing reverse sensitivity associated with existing industrial and commercial activities.

• Objective 3.11 refers to regional form, where sustainable built development is developed which has a sense of place, identity and a range of lifestyle, employment and transport choices. This effectively directs that new development is well planned, co-ordinated and adopts good urban design practices.

• Policy 5.1.1 details what is considered to constitute planned and co-ordinated development. It includes direction that cumulative effects are recognised and addressed, incompatible land uses in close proximity and potential for reverse sensitivity is avoided, and ensuring that the sense of place and character of the surrounding environment is maintained or enhanced.

• Policy 5.1.3 specifically addresses adverse effects, including reverse sensitivity effects, of new development on commercial and industrial activities in commercial and industrial zones.

While these provisions are stated in terms of a Northland-wide context, they are relevant in terms of the appropriateness of residential / commercial development in a rural zone in terms of character and amenity, reverse sensitivity, and cumulative effects. The following comments address these provisions in relation to the specific proposal:

• The extent of adverse effects has been assessed previously in this report. That assessment considers that the adverse effects will be acceptable in the receiving environment.

• In directly addressing Policy 5.1.1, clauses (c), (e), (g), and (h) of that Policy are met by the finding regarding the extent of adverse effects including servicing of the site.

• The wording of Policy 5.1.3 regarding reverse sensitivity effects refers to '....(b) Commercial and industrial activities in commercial and industrial zones;....' Importantly, the existing bus depot at 36 Wireless Road is not zoned for commercial or industrial activities. It is in the Rural Production Zone as is the subject site. The proposal is therefore considered to be generally consistent with the provisions of the RPS.

16.3 The proposed subdivision will allow for lifestyle and pastoral grazing activities to continue in a manner that has no more than minor effects on the activities occurring on adjoining rural sites. The resultant allotment sizes are considered to be consistent with the character of the locality.

Issue 2.3 of the RPS for Northland details that Subdivision, use and development, particularly residential development, that compromises either: (i) existing and future productive activities and use of land; or (ii) regionally significant infrastructure; should be avoided.

The subject site does not contain productive soils. The proposal will create lifestyle allotments and a larger allotment in order to provide more opportunities for potential productive use. The size of the larger allotment will be utilised for pastoral grazing and lifestyle purposes. The smaller allotments are still of a size that can provide a suitable site for lifestyle use, while also allowing for rural grazing use of the site.

The proposal is considered to be contrary to the objectives and policies of the Regional Policy Statement for Northland.

17.0 National Policy Statement for Highly Productive Land

17.1 National Policy Statement for Highly Productive soils includes objectives to:

- Maintain the availability and productive capacity of highly productive land for primary production

- Avoid urban expansion on highly productive land unless it is demonstrated that there is a shortage of development capacity or it is the most appropriate option

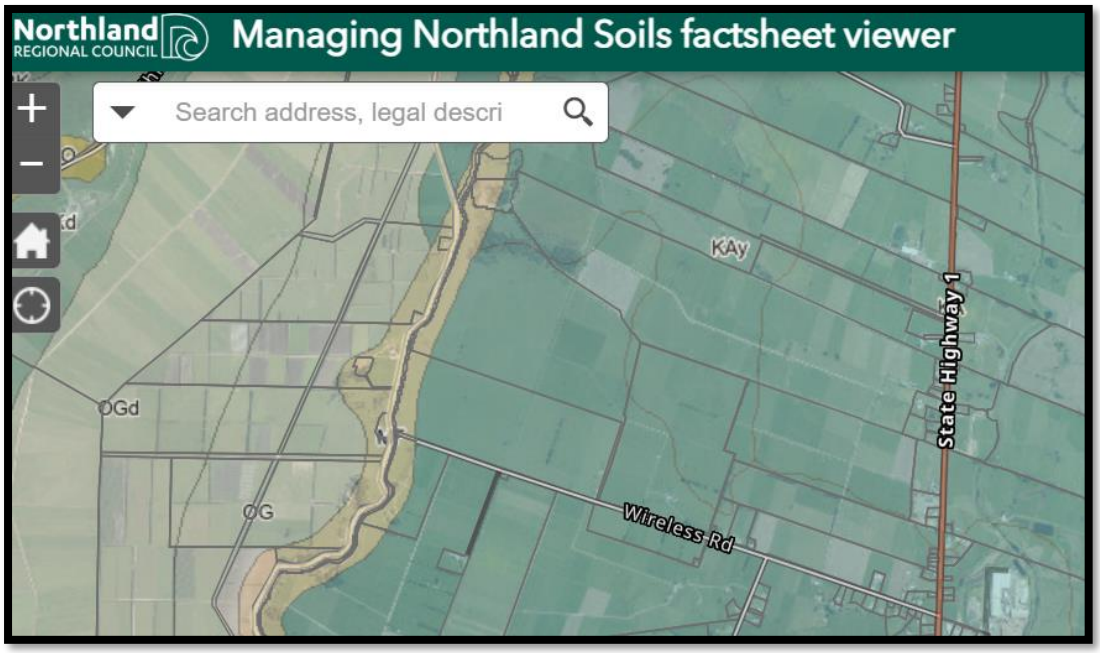
- Manage rural subdivision to avoid fragmentation and maintain the productive capacity of highly productive land

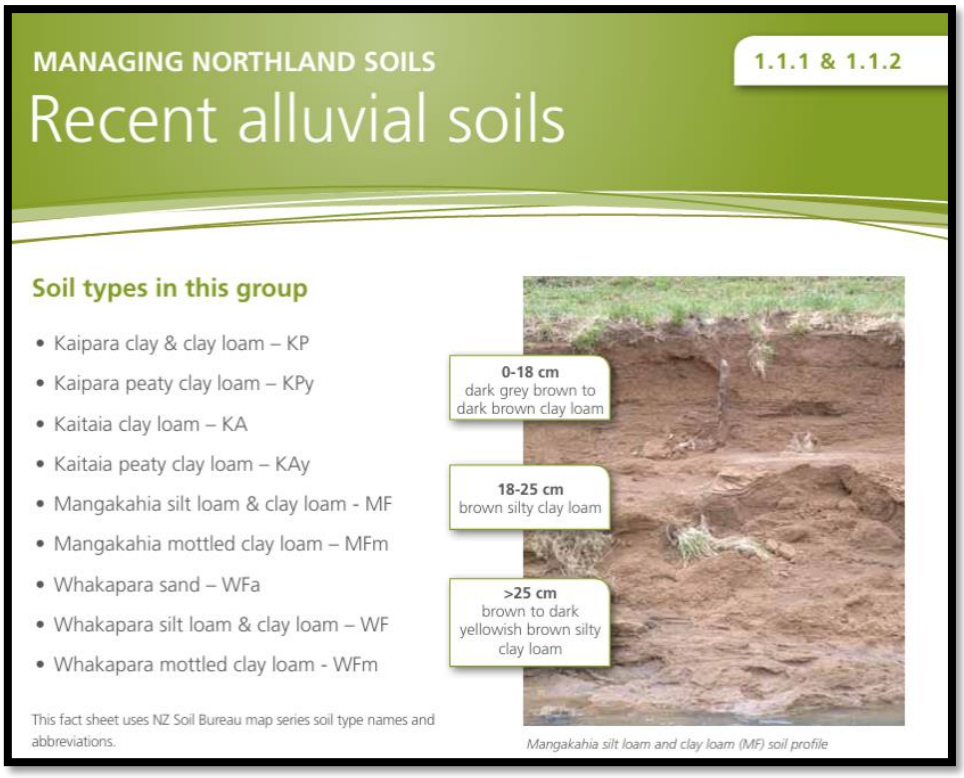
Property Title: NA128C/923

There is 1 soil type on this property:

- Soil type: KA covers 17.79ha. -> (100%)
Relevant factsheet: 1.1.1 & 1.1.2

KAIPARA SUITE Gleyed soils based on estuarine clays, sands and alluvium		
KP	Kaipara clay and clay loam	1⇌0 - Poorly drained to no natural drainage
KA	Kaitaia clay loam	1⇌0 - Poorly drained to no natural drainage
KPy	Kaipara peaty clay loam	0 - No natural drainage
KAy	Kaitaia peaty clay loam	0 - No natural drainage





17.2 The NPS for Highly Productive Land came into effect in September 2022. The consenting for the existing Kura within Lot 1 was approved by FNDC in October 2022, after the NPS for Highly Productive Land came into effect. The NPS for Highly Productive Land was subsequently amended in August 2024.

Objective: Highly productive land is protected for use in land-based primary production, both now and for future generations.

Policy 7: The subdivision of highly productive land is avoided, except as provided in this National Policy Statement.

Policy 8: Highly productive land is protected from inappropriate use and development.

Policy 9: Reverse sensitivity effects are managed so as not to constrain land-based primary production activities on highly productive land.

17.3 Implementaton of the NPS for Highly Productive Land

An assessement of the implementation of the NPS for Highly Producitive Land has been undertaken as part of this subdivision by way of boundary adjustment. As shown below, this NPS requires all terrororial authories to avoid of highly productive land unless the applicant has demonstrated that the proposed lots will retain the overall produtive capacity of the subject land over the long term.

17.4 <u>Avoiding subdivision of highly productive land</u>

Territorial authorities must avoid the subdivision of highly productive land unless one of the following applies to the subdivision, and the measures in subclause (2) are applied:

(a) the applicant demonstrates that the proposed lots will retain the overall productive capacity of the subject land over the long term:

(b) the subdivision is on specified Māori land:

(c) the subdivision is for specified infrastructure, or for defence facilities operated by the New Zealand Defence Force to meet its obligations under the Defence Act 1990, and there is a functional or operational need for the subdivision.

17.5 Territorial authorities must take measures to ensure that any subdivision of highly productive land:

(a) avoids if possible, or otherwise mitigates, any potential cumulative loss of the availability and productive capacity of highly productive land in their district;

(b) and avoids if possible, or otherwise mitigates, any actual or potential reverse sensitivity effects on surrounding land-based primary production activities.

The definitions of **land-based primary production** and **productive capacity** under the NPS for Highly productive soils are shown below:

land-based primary production means production, from agricultural, pastoral, horticultural, or forestry activities, that is reliant on the soil resource of the land

productive capacity, in relation to land, means the ability of the land to support land-based primary production over the long term, based on an assessment of: (a) physical characteristics (such as soil type, properties, and versatility); and (b) (c) legal constraints (such as consent notices, local authority covenants, and easements); and the size and shape of existing and proposed land parcels

17.6 The proposal is able to pass the test of retaining the overall productive capacity of the subject land over the long term, as all the built development on the site is legally established under existing approved resource consents, and no new built development is proposed, and neither will any new development rights be created as a result of this subdivision. Both Lots 1 and 2 contain existing residential units, and both lots contain existing access and connections to reticualted infrastructure.

As the consenting for the existing Kura within Lot 1 was approved by FNDC in October 2022, after the NPS for Highly Productive Land came into effect, the existing Kura was consented under this NPS and is legally established. The Kura is existing and legally established, and fenced and utilised phsycally seperately from the dairy farm paddocks within Lot 2. The boundary proposed for this boundary adjustment is the existing 1.8m high timber fence that separates the farming activity and the existing Kura activity. No paddocks at all will be removed from the farming use as part of this boundary adjustment proposal, and no reduction in produtive use will result from this proposal.

The existing farm that is operating within proposed Lot 2 is a large dairy farm (over 200Ha), and meets the definiation of “land based primary production” and “productive capacity” under the NPS. The paddock area within Lot 2 will be unchanged, and will continue to operate as part of the dairy farm. No interference to the productive capacitiy of the farm is proposed. The existing dwelling within proposed Lot 2 is an existing farm house, which provides accommodation for the dairy farm workers. No changes to this existing dwelling are proposed or required as part of this consent application for subdivision.

18.0 National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011 (NES Contaminated Soils)

18.1 A search of the property file has been conducted, which does not contain any documents concerning land contamination. The application site is not included in the Northland Regional Council's Selected Land-use Register (SLR) online maps indicating potentially contaminated HAIL sites.

The standards are applicable if the land in question is, or has been, or is more likely than not to have been used for a hazardous activity or industry and the applicant proposes to subdivide or change the use of the land, or disturb the soil, or remove or replace a fuel storage system. Regulation 6 of the NES Contaminated Soils establishes the methods available to ascertain if a site is 'land covered' as defined in Regulation 7 of the NES Contaminated Soil. As noted earlier, the site currently forms part of a wider farming unit however the lease area to which this application relates has been operating as an education facility pursuant to RC 2190071, and also RC 2220673 relates to the site operating as a school and school house.

The resource consent application, made on behalf of the Ministry of Education (being the lease) notes that the site was not 'known to contain previous activities or current activities that are identified on the HAIL list. With this in mind, and the fact that the school has since been operating within the lease area, it is considered that there is not a HAIL activity being undertaken on the site. In addition to the statement made in the application for RC 2190071, and RC 2220673, a review of historic aerial imagery available from Retrolense has been undertaken to provide further confirmation as to whether a HAIL activity has been undertaken on the site. This review established that the land retained in pastoral use up until the area was developed with residential development occurring around and potentially on the site from as early as 1960s which aligns with the age of the title (12 June 1952).

A review of Northland Regional Councils Selected Land Use Register has also been undertaken and does not identify the site as HAIL, or any sites within proximity. With the above in mind, it is considered that pursuant to methods made available in regulation 6(b) it is more likely than not that a HAIL activity has not been undertaken on the site and that the site is not 'land covered' by the NES CS.

None of the activities in the current edition of HAIL (October 2011, Ministry for the Environment), is currently being carried out on the site. Therefore based on the above findings, it can be reasonably concluded that an activity or industry described in the HAIL is not being, or has been, undertaken on the site. Therefore, the NES does not apply to the site and no further assessment under the NES is required for the proposed activity.

19.0 The Northland Regional Plan

19.1 The Proposed Regional Plan combines the operative Regional Plans (coastal, air quality, water and soil) into one. The Proposed Regional Plan includes objectives and policies for the management of freshwater resources, including managing the quantity and quality of freshwater resources and also discharges as they relate to agrichemicals, odour and dust.

The Proposed Regional Plan also focuses on the economic vitality and wellbeing of Northland's people and communities. The objectives identified above broadly relate to

primary production activities, insofar as the sector relies on freshwater resources to operate efficiently. In short, these objectives seek to ensure Northland's natural and physical resources are managed in a way that attracts investment and business opportunities to the region to improve the wellbeing of people and the communities.

The proposal does not breach any rules under the regional plan for Northland.

20.0 Assessment of the proposal against the principles of the Resource Management Act.

20.1 Section 5 – Sustainable Management

5 Purpose
(1) The purpose of this Act is to promote the sustainable management of natural and physical resources.
(2) In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while—
(a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
(b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
(c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

The proposal is considered to achieve the overall purpose of the Act. The proposal will result in no additional titles being created. The proposed boundary adjustment meets the purpose of the Resource Management Act 1991; is consistent with the objectives of the Rural Production Zone; and will not set a precedent for other subdivisions. This is due to the proposed allotments each containing an existing legally established dwelling, no additional titles or development rights will be created from the subdivision, and in this instance, the boundary proposed for Lot 1 is to align with the leased area of an existing legally established school.

The proposal therefore has unusual and individual circumstances that differentiate it from other subdivision proposals, and also has existing consented landuse activities, which will not physically change or result in any change in physical effects as a result of the non-complying boundary adjustment.

It is considered that that the proposal results in a superior outcome in meeting the purpose of the Resource Management Act 1991, and a superior use of land for the existing consented land uses under RC 2170432, RC 2190071, and RC 2220673-RMALUC. The proposal is considered to enable the efficient use of the site, and enable the existing consented uses to continue. The proposal is therefore considered to achieve the sustainable management purpose of the Resource Management Act.

20.2 Section 6

6 Matters of National Importance
In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:
(a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:
(b) the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:
(c) the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:
(d) the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:
(e) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga:
(f) the protection of historic heritage from inappropriate subdivision, use, and development:
(g) the protection of protected customary rights.

The subject site is not located within an area of high natural character. The subject site is not known to contain any Heritage or Archaeological sites. The subject site is not located on Whenua Maori, and there are no registered sites of cultural significant within the subject site. The proposal will not result in any additional titles, and all the existing activities on the site (including the Te Kura Kaupapa Māori o Tūtūtarakihi, which is a new school that has a foundation of Kaupapa Māori within their curriculum) are legally established and no changes are required or proposed.

The proposed Lots are consistent with the character of the lot sizes within the locality. The boundary adjustment is considered to be consistent with the character and amenity of the locality.

20.3 Section 7

7 Other matters
In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to—
(a) kaitiakitanga:
(aa) the ethic of stewardship:
(b) the efficient use and development of natural and physical resources:
(ba) the efficiency of the end use of energy:
(c) the maintenance and enhancement of amenity values:
(d) intrinsic values of ecosystems:
(e) [Repealed]
(f) maintenance and enhancement of the quality of the environment:
(g) any finite characteristics of natural and physical resources:
(h) the protection of the habitat of trout and salmon:
(i) the effects of climate change:
(j) the benefits to be derived from the use and development of renewable energy.

The issues of relevance to the proposal include the efficient use and development of natural and physical resources, the maintenance and enhancement of amenity values

and the maintenance and enhancement of the quality of the environment. The proposal is consistent with these factors, as no physical changes will result from the proposal. All the built development on the site is consented and existing.

It is considered that the development achieves the efficient use and development of resources. It is therefore considered that the proposal maintains amenity values, while not compromising the quality of the environment.

20.4 Section 8

8 Treaty of Waitangi
In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

The subject site is not located on Whenua Maori, and there are no registered sites of cultural significant within the subject site. The proposal will not result in any additional titles, and all the existing activities on the site (including the Te Kura Kaupapa Māori o Tūtūtarakihi, which is a new school that has a foundation of Kaupapa Māori within their curriculum) are legally established and no changes are required or proposed.

Tproposal has taken into account the principals of the Treaty of Waitangi, and is not considered to be contrary to these principals. The proposal will not create any new titles and will not result in a change of use of the proposed Lots.

21.0 Consideration of potentially affected parties

21.1 Sections 95D and 95E (shown below) details the requirement of consideration of likely effects on any person or party by the consenting authority to determine if a person is considered to be an "affected" by the proposed activity.

21.2 ***95D Consent authority decides if adverse effects likely to be more than minor***
A consent authority that is deciding, for the purpose of section 95A(2)(a), whether an activity will have or is likely to have adverse effects on the environment that are more than minor—
(a) must disregard any effects on persons who own or occupy—
(i) the land in, on, or over which the activity will occur; or
(ii) any land adjacent to that land; and
(b) may disregard an adverse effect of the activity if a rule or national environmental standard permits an activity with that effect; and
(c) in the case of a controlled or restricted discretionary activity, must disregard an adverse effect of the activity that does not relate to a matter for which a rule or national environmental standard reserves control or restricts discretion; and
(d) must disregard trade competition and the effects of trade competition; and
(e) must disregard any effect on a person who has given written approval to the relevant application.

21.3 The proposal included an assessment of effects, that demonstrates that the actual and potential adverse effects of the proposal are no more than minor on the environment.

21.4 ***95E Consent authority decides if person is affected person***

(1) A consent authority must decide that a person is an affected person, in relation to an activity, if the activity's adverse effects on the person are minor or more than minor (but are not less than minor).

(2) The consent authority, in making its decision,—

(a) may disregard an adverse effect of the activity on the person if a rule or national environmental standard permits an activity with that effect; and

(b) in the case of a controlled or restricted discretionary activity, must disregard an adverse effect of the activity on the person that does not relate to a matter for which a rule or national environmental standard reserves control or restricts discretion; and

(c) must have regard to every relevant statutory acknowledgement made in accordance with an Act specified in Schedule 11.

(3) Despite anything else in this section, the consent authority must decide that a person is not an affected person if—

(a) the person has given written approval to the activity and has not withdrawn the approval in a written notice received by the authority before the authority has decided whether there are any affected persons; or

(b) it is unreasonable in the circumstances to seek the person's written approval.

21.5 The proposal is a non-complying subdivision by way of boundary adjustment, that will create no additional titles. The proposal will result no physical changes and each proposed lot containing an existing residential unit, as well as Lot 1 containing the existing school. The proposal will have no physical effects and less than minor effects on any persons and parties for the following reasons:

(a) The size of the proposed allotments is considered consistent with the character of allotments in the locality. Maps highlighting this fact have been shown previously within this assessment report. The proposed allotments will each contain existing residential units and no new development is buildings are required or proposed. There is sufficient area within each of the proposed allotments to allow for adequate parking, manoeuvring, and use of the existing dwellings and the school, plus all the existing buildings are connected to Council water and sewer, and therefore do not require on-site disposal for these services.

(b) The primary reason that this proposal is considered to have less than minor effects on neighbours is the fact that the subject site contains 2 existing dwellings, plus the existing consented school. The subdivision will therefore essentially not create any physical changes or adverse environmental effects, as the physical development of the site has already occurred. Therefore, there will be no visible physical changes, or no additional titles created as a result of the proposed subdivision by way of boundary adjustment.

(d) This proposal will not result in any physical changes on the subject site as a result of this proposed subdivision. The intent of the subdivision is to create smaller separate allotment surrounding the existing leased school area, and

amalgamating the balance Lot (Lot 2) into the existing working dairy farm, that it will continue to be utilised as part of.

(e) The proposal will create no more than minor adverse effects on the rural environment as the proposal will result in no physical changes as effects on the environment. All stormwater, traffic and amenity effects have been avoided and mitigated as part of the previous granted landuse consents, under Previous consents RC 2170432, RC 2190071, and RC 2220673-RMALUC.

The proposal could have been designed to have a 12ha allotment for Lot 1, and the balance Lot (once amalgamated) to be over 20ha, therefore meeting the restricted discretionary Lot size rule, however this would then remove the paddocks of the dairy farm out of being of their most productive use for their valuable soil type, and result in a smaller title that is less productive than its current use.

In summary, although the boundary adjustment could be designed in different ways, with an "easier" activity status by increasing the Lot size of Lot 1 to 12ha in area, the most efficient and effective use of resources, is to follow the existing delineation of land uses.

The proposal will allow for the continued farm use of proposed Lot 2 and PT OLC 214. This large title is utilised as part of a very large farm, utilised as a dairy farm, which is over 300Ha in area, and spans north from Wireless Rd, through to just before Brotts Rd, Awanui. The dairy Farm is owned and operated by west coast farms. The proposed boundary adjustment will not result in any change in production on the farm, as the boundary adjustment follows the fence of the school; and therefore will provide a legal separation of uses from the farm and the school by giving them separate titles. There is an existing dwelling legally established within Lot 2 also, which is utilised for farm worker housing for the dairy farm.

The proposed boundary adjustment will not result in any change in production on the farm, as the boundary adjustment follows the fence of the school; and therefore, will provide a legal separation of uses from the farm and the school by giving them separate titles. There is an existing dwelling legally established within Lot 2 also, which is utilised for farm worker housing for the dairy farm.

21.6 No persons or parties are considered actually or potentially affected by the subdivision proposal as there will be no physical changes as a result of the proposal and all the physical works and built development has already been consented and built under prior approved landuse resource consents. Pursuant to Sections 95(E) and 95(D) of the Resource Management Act 1991, it is considered that this subdivision consent application should be process on a non-notified, not heard basis.

22.0 Conclusions:

22.1 No significant adverse effects are anticipated to arise from the activity. Overall, it is considered that the proposal will result in no more than minor effects on the environment.

In terms of the RMA "Gateway" test assessment under Section 104D, the assessment of the physical effects, detailed above, demonstrate that the proposal is considered to not to have more than minor effects on the environment. The proposal has no physical changes as a result of the proposal, and therefore avoid creating effects on the environment, and all stormwater, traffic and amenity effects have been avoided and mitigated as part of the previous granted landuse consents, under Previous consents RC 2170432, RC 2190071, and RC 2220673-RMALUC.

This proposal will not result in any additional titles being created, as the proposal is by way of boundary adjustment. The proposal will result in a smaller title surrounding the existing established kura and school house, however, the proposed new title boundaries will follow the existing timber screening fenced area that separates the farming and the school activities, and therefore follows the natural existing delineation of the existing consented landuse activities.

The proposal will not result in any removal of land out of productive use, as the proposed boundary will follow the existing fenced lease area for the kura and the school house, and there will be no physical changes or physical effects as part of the proposal.

The proposed subdivision includes the design to follow the fence of the Kura as this is a natural change of use boundary of the existing consented landuse activities, and it will result in no reduction in the productive use of the adjacent dairy farm pastoral grazing by following the existing fenced lease area of the Kura.

The proposal could have been designed to have a 12ha allotment for Lot 1, and the balance Lot (once amalgamated) to be over 20ha, therefore meeting the restricted discretionary Lot size rule, however this would then remove the paddocks of the dairy farm out of being of their most productive use for their valuable soil type, and result in a smaller title that is less productive than its current use.

In summary, although the boundary adjustment could be designed in different ways, with an "easier" activity status by increasing the Lot size of Lot 1 to 12ha in area, the most efficient and effective use of resources, is to follow the existing delineation of land uses.

The proposal will allow for the continued farm use of proposed Lot 2 and PT OLC 214. This large title is utilised as part of a very large farm, utilised as a dairy farm, which is over 300Ha in area, and spans north from Wireless Rd, through to just before Brotts Rd, Awanui. The dairy Farm is owned and operated by west coast farms. The proposed boundary adjustment will not result in any change in production on the farm, as the boundary adjustment follows the fence of the school; and therefore will provide a legal separation of uses from the farm and the school by giving them separate titles. There is an existing dwelling legally established within Lot 2 also, which is utilised for farm worker housing for the dairy farm.

22.2 Monitoring of conditions are not considered to be appropriate in this instance, as there will be no physical changes as a result of this application.

22.3 The relevant objectives and policies of the Plan are those related to the Rural Environment, Rural Production Zone and Subdivision. The proposal is considered to create no more than minor adverse effects on the rural environment as the proposal will result in no physical changes as effects on the environment, and all stormwater, traffic and amenity effects have been avoided and mitigated as part of the previous granted landuse consents, under Previous consents RC 2170432, RC 2190071, and RC 2220673-RMALUC.

The proposal is considered to be consistent with the rural character of the surrounding area, and is considered to have negligible effects on rural amenity value of the area, as the lot sizes in the locality reflect the size of the resultant Lots proposed. This proposal will not result in any additional titles being created, as the proposal is by way of boundary adjustment. The proposal will result in a smaller title surrounding the existing established kura and school house, however, the proposed new title boundaries will follow the existing timber screening fenced area that separates the farming and the school activities, and therefore follows the natural existing delineation of the existing consented landuse activities, and will have no physical changes as a result the proposal.

The proposal is a Non-Complying Activity; however, it is not considered to be contrary to the objectives and policies of the Plan, and therefore meets the "gateway tests" under Section 104D of the Act. An assessment of the objectives and policies of the plan are shown below.

22.4 As a Non-Complying Activity, the application has been assessed under the matters specified under Section 104, 104B, 104D of the Resource Management Act 1991.

The proposed boundary adjustment meets the purpose of the Resource Management Act 1991; is consistent with the objectives of the Rural Production Zone; and will not set a precedent for other subdivisions. This is due to the proposed allotments each containing an existing legally established dwelling, no additional titles or development rights will be created from the subdivision, and in this instance, the boundary proposed for Lot 1 is to align with the leased area of an existing legally established school.

The proposal therefore has unusual and individual circumstances that differentiate it from other subdivision proposals, and also has existing consented landuse activities, which will not physically change or result in any change in physical effects as a result of the non-complying boundary adjustment.

It is considered that that the proposal results in a superior outcome in meeting the purpose of the Resource Management Act 1991, and a superior use of land for the existing consented land uses under RC 2170432, RC 2190071, and RC 2220673-RMALUC, than designing the subdivision for Lot 1 to be 12ha Lot (which would be a discretionary activity), the proposal will result in no physical changes, no more than minor effects on the environment and less than minor effects on an persons, and that the activity is not considered to be contrary to the relevant objectives and policies of the Operative District Plan.

22.5 The relevant provisions within Part 2 of the Act have been addressed as part of this application. The overall conclusion from the assessment of the statutory considerations is that the proposal is considered to be consistent with the sustainable management purpose of the Resource Management Act 1991.

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Limited as to Parcels
Search Copy

R.W. Muir
Registrar-General
of Land

Identifier **NA128C/923**
Land Registration District **North Auckland**
Date Issued 09 August 2000

Prior References
NA115D/353

Estate Fee Simple
Area 22.3972 hectares more or less
Legal Description Lot 1 Deposited Plan 203524
Registered Owners
West Coast Farms Limited

Interests

K36694 Building Line Restriction

Subject to a right of way over part coloured blue on DP 53177 created by Transfer A110598

The easements created by Transfer A110598 are subject to Section 37 (1) (a) Counties Amendment Act 1961

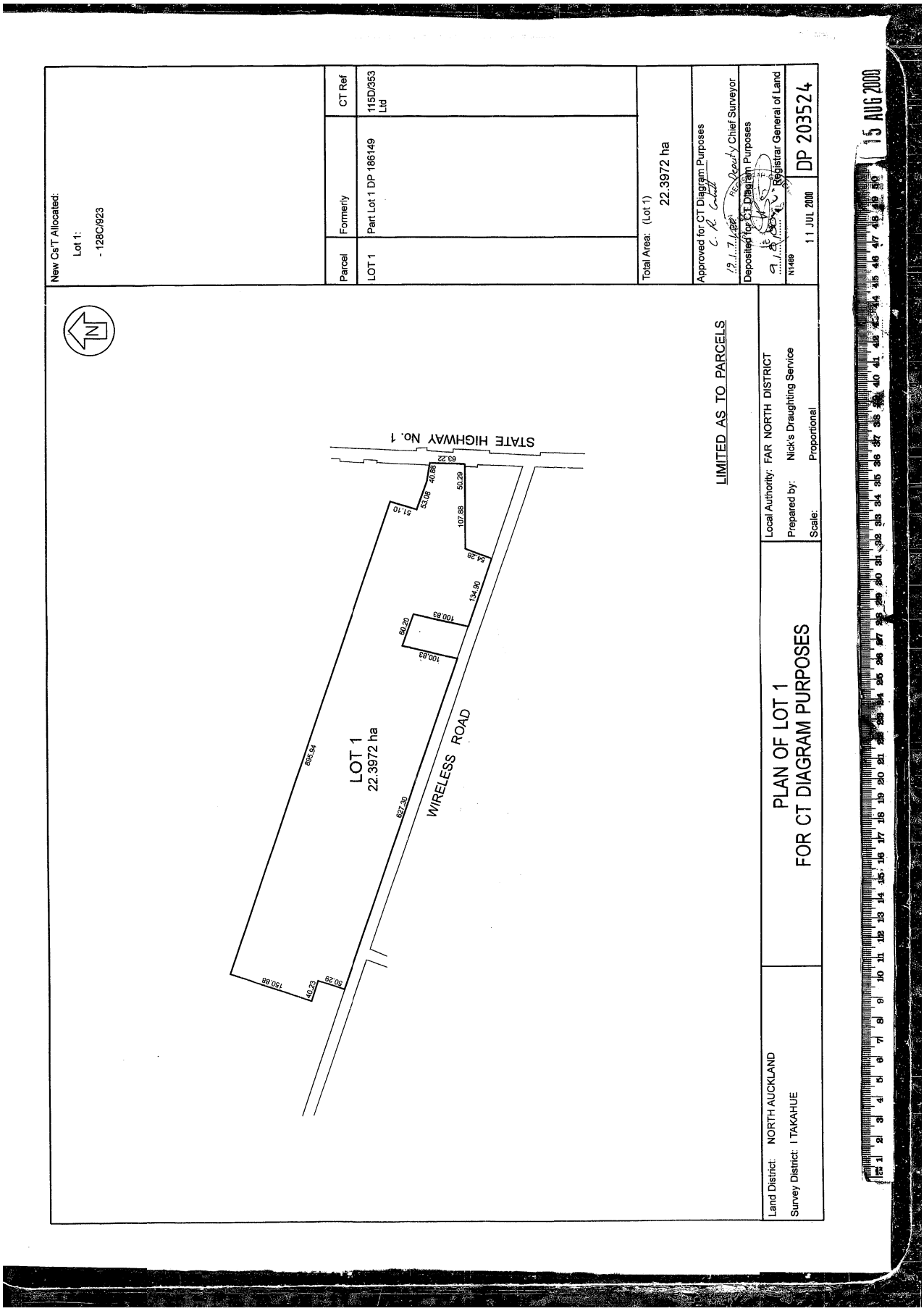
548034.1 Gazette Notice declaring the adjoining State Highway 1 (Awanui to Bluff) to be a limited access road - 18.10.1977 at 2.59 pm

D211670.2 Consent Notice pursuant to Section 221(1) Resource Management Act 1991 - 4.11.1997 at 1.59 pm

D521251.2 Consent Notice pursuant to Section 221(1) Resource Management Act 1991 - produced 6.7.2000 at 1.38 pm and entered 9.8.2000 at 9.00 am

Appurtenant hereto is a right of way created by Easement Instrument 6220604.1 - 18.11.2004 at 9:00 am

12749030.8 Mortgage to ANZ Bank New Zealand Limited - 31.5.2023 at 12:42 pm


New CsT Allocated:
Lot 1:
- 128C/923
Parcel
Formerly
CT Ref
LOT 1
Part Lot 1 DP 186149
115D/353 Ltd
Total Area: (Lot 1)
22.3972 ha
Approved for CT Diagram Purposes
Deposited for CT Diagram Purposes
N1469
11 JUL 2000
Registrar General of Land
DP 203524
15 AUG 2000
LIMITED AS TO PARCELS
STATE HIGHWAY No. 1
63.22
40.88
53.08
51.10
50.29
107.88
84.28
134.90
100.83
60.20
100.83
LOT 1
22.3972 ha
WIRELESS ROAD
895.84
627.30
150.88
40.29
50.29
PLAN OF LOT 1
FOR CT DIAGRAM PURPOSES
Land District: NORTH AUCKLAND
Survey District: I TAKAHUE
Local Authority: FAR NORTH DISTRICT
Prepared by: Nick's Draughting Service
Scale: Proportional

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Limited as to Parcels
Search Copy

R.W. Muir
Registrar-General
of Land

Identifier **NA1590/3**
Land Registration District **North Auckland**
Date Issued 10 September 1958

Prior References
NA1313/87

Estate Fee Simple
Area 22.7368 hectares more or less
Legal Description Part Old Land Claim 214
Registered Owners
West Coast Farms Limited

Interests

K56449 Building Line Restriction

Subject to a right of way over part created by Transfer 608450

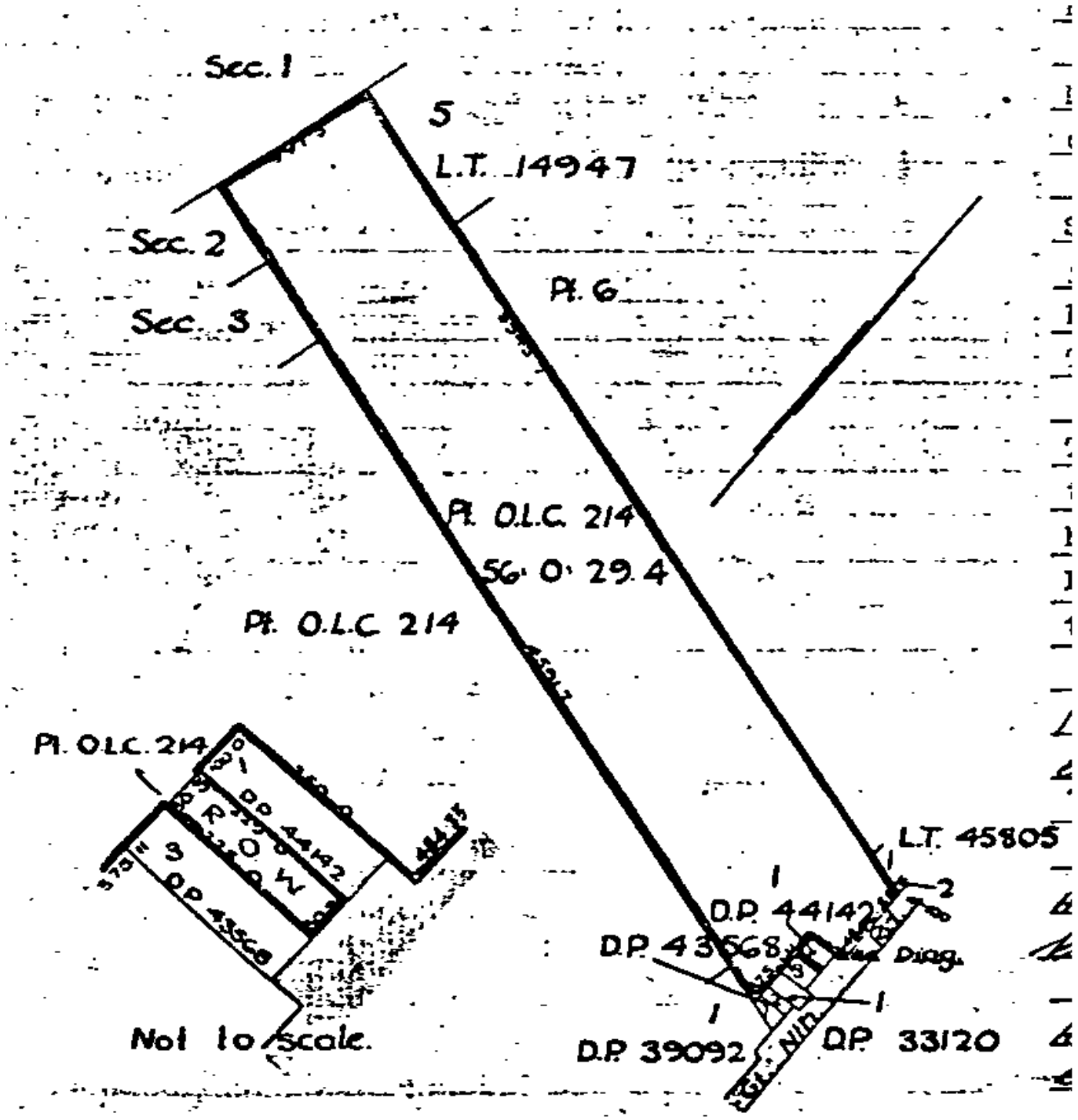
Subject to a right of way over part created by Transfer 610275 - 18.9.1958 at 10.35 am

548034.1 Gazette Notice declaring the adjoining State Highway No. 1 (Awanui-Bluff) to be a limited access road - 18.10.1977 at 2.59 pm

C417420.10 COVENANT UNDER SECTION 240 RESOURCE MANAGEMENT ACT 1991 (ALSO AFFECTS CT NA89D/719) - 28.9.1992 AT 1.55 PM

Appurtenant hereto is a right of way created by Easement Instrument 6220604.1 - 18.11.2004 at 9:00 am

12749030.8 Mortgage to ANZ Bank New Zealand Limited - 31.5.2023 at 12:42 pm


Sec. 1
5
L.T. 14947
Sec. 2
Sec. 3
Pt. 6
Pt. O.L.C. 214
56. 0. 29.4
Pt. O.L.C 214
Pt. O.L.C. 214
P
O
W
D.P. 44142
3
D.P. 43568
375"
L.T. 45805
1
2
D.P. 44142
D.P. 43568
Diag.
D.P. 39092
D.P. 33120
Not to Scale.

548034.1GN

IN THE MATTER of The Public Works Amendment Act 1963.

TO: THE DISTRICT LAND REGISTRAR
NORTH AUCKLAND REGISTRY

NOTICE DECLARING STATE HIGHWAY TO BE A LIMITED ACCESS ROAD

Pursuant to paragraph (c) Subsection (10) of Section 4. The Public Works Amendment Act 1963 the following is a statement giving descriptions and title references of all parcels of land effected by the National Roads Board's declaration of a portion of State Highway No 1 to be a Limited Access Road as notified in N Z Gazette dated ~~16th~~ 23rd day of September 1977, No 99 page 2552.

DATED at Auckland this 30th day of September 1977.

District Commissioner of Works

Extract from *N.Z. Gazette*, 22 September 1977, No. 99, p. 2552

National Roads Board: Declaring State Highway to be a Limited Access Road

It is notified that the National Roads Board, by resolution dated 14 September 1977, and pursuant to section 4 of the Public Works Amendment Act 1963, hereby declares that part of State Hignway 1 (Awanui to Bluff) from its junction with Gills Road, Awanui, to its junction with Wireless Road, as more particularly shown on sheets 1 to 3 of Plan L.A. 11/2/2 and accompanying schedule, held in the office of the Resident Engineer, Ministry of Works and Development, Whangarei, and there available for public inspection, to be a limited access road.

Dated at Wellington this 16th day of September 1977.

D. J. CHAPMAN, Secretary.

(72/1/1/5)

E. C. KEATING, Government Printer, Wellington, New Zealand—1977

SCHEDULE FOR LIMITED ACCESS ROAD DECLARATION

State Highway No ..1... from ..Gills Road..... to....Wireless Road.....

LEFT HAND SIDE (EAST)

GAZETTE INFORMATION			NOT FOR PUBLICATION
Land in North Auckland Land District	Access Particulars at 9-7-76		
	No.	Description	MOW ref'
		Start of Limited Access Road R.P. 01/0 - 55	
Pt. O.L.C. 159 - C.T. 778/19 LTD.	1	Vehicle Access	1
Pt. O.L.C. 159 C.T. 766/143 LTD.	1	Vehicle Access	2
Pt. O.L.C. 159 C.T. 2042/76 LTD.	1	Vehicle Access	3
Lot 4 D.P. 43158 C.T. 1365/62	1	Vehicle Access	4
Lot 1 D.P.43158 C.T. 1375/63	Nil	No existing entrance to State Highway. Access is by R.O.W. over C.T. 1375/64	-
Lot 2 D.P. 43158 C.T. 1375/64	1	Vehicle Access	5

SCHEDULE FOR LIMITED ACCESS ROAD DECLARATION

State Highway No ...1.. from ...Gills Road..... to...Wireless Road.....
LEFT HAND SIDE (EAST)

GAZETTE INFORMATION			NOT FOR PUBLICATION
Land in North Auckland Land District	Access Particulars at 9 - 7 - 76		
	No.	Description	NOW ref'
Lot 3 DP 43158 CT 1375/62	Nil	No existing entrance to State Highway. Access is by R.O.W. over C.T. 1375/64	-
Pt O.L.C. 159 CT 1375/65	Nil	No existing entrance to State Highway.	5A
Pt O.L.C. 159 CT 594/226 LTD	1	Farm Gate	6
Pt O.L.C. 159 Pt CT 19B/730 LTD.	1	Access Vehicle	7
Lot 1 DP ~~53245~~ 63245 CT 19B/729	Nil	No existing entrance to State Highway. Access is by R.O.W. over Pt. C.T. 19B/730 LTD.	-
		QUARRY ROAD (FORMED)	
Pt O.L.C. 159 Pt CT 19B/730 LTD	-	No existing entrance to State Highway. Access to Quarry Rd is practical.	-
Lot 1 DP 52696 Pt CT 1676/57 LTD.	2	Vehicle access Vehicle access	8 9
Pt O.L.C. 159 Pt CT 1676/57 LTD	2	Vehicle access Vehicle access	10 11
Lot 2 DP 43942 CT 24D/832	1	Vehicle access	12
Lot 1 DP 42043 CT 1188/72	Nil	No existing entrance to State Highway. Access point allocated.	13

LA 11/2/2

Sheet....[illegible]....of....[illegible]...sheets

SCHEDULE FOR LIMITED ACCESS ROAD DECLARATION

State Highway No ...1... from ..[illegible]......... to..[illegible]..................

[illegible]

GAZETTE INFORMATION				NOT FOR PUBLICATION	
Land in North Auckland Land District	Access Particulars at [illegible]				
	No.	Description	MOW ref	Registered Proprietor	Occupier
[illegible] CT 119[illegible]/[illegible] LTD	[illegible]	[illegible] Vehicle access Vehicle access	1[illegible] 1[illegible] 17	X	
Lot [illegible] DP 4[illegible] CT 11[illegible]/74	Nil	No existing entrance to State Highway. Access point allocated	1[illegible]	X	
Lot 4 DP 4[illegible] CT 11[illegible]/4	1	Vehicle access	1[illegible]	X	
[illegible] Pt OLC 193 CT 526/209 LTD	Nil	No existing entrance to State Highway. Access point allocated	19	X	
Pt OLC 1[illegible] CT 1[illegible]/70 LTD	1	Vehicle access	20	X	
Lot 2 DP [illegible] CT 9[illegible]/[illegible]	Nil	No existing entrance to State Highway. Access point allocated	21	X	
[illegible] CT 526/21[illegible] LTD	1	Vehicle access	[illegible]	X	
Pt [illegible] 193 CT 1[illegible]/7[illegible] LTD	2	Farm Gate Vehicle Access	[illegible] [illegible]	X	
Lot [illegible] DP 36573 CT 951/272	2	Vehicle access Vehicle access	[illegible] [illegible]	X	
[illegible] CT 128/524	[illegible]	Vehicle access	[illegible]	X	

[illegible] 11/[illegible]

SCHEDULE FOR LIMITED ACCESS ROAD DECLARATION

State Highway No ..1... from ...Gills Road..... to...Mirolens Road.....

LEFT HAND SIDE (EAST)

GAZETTE INFORMATION				NOT FOR PUBLICATION	
Land in North Auckland Land District	Access Particulars at 9 - 7 - 76			Registered Proprietor	Occupier
	No.	Description	NOW ref		
Lot 1 DP 58115 CT 11D/761	1	Vehicle access	29	✓	
Lot 1 DP 13043 Pt CT 793/225	Nil	No existing entrance to State Highway. Access point allocated	30	✓	
Lot 2 DP 13043 Pt CT 793/225	Nil	No existing entrance to State Highway. Access point allocated	31	✓	
Lot 1 DP 69364 CT 23C/1471	1	Vehicle access	32	✓	
Pt Lot 3 DP 13043 Pt CT 342/153 342/153 pt now 23C/1471	2	Farm gate Farm gate	33 36	✓	
Lot 1 DP 44607 CT 1506/3	1	Vehicle access	34	✓	
Lot 2 DP 44607 CT 1506/4	1	Vehicle access	35	✓	
		END OF LIMITED ACCESS ROAD R...	01		

JA 11/2/3

SCHEDULE FOR LIMITED ACCESS ROAD DECLARATION

State Highway No ...1... from ..Gills Road..... to....Wireless Road.....

RIGHT HAND SIDE (EAST)

GAZETTE INFORMATION				NOT FOR PUBLICATION	
Land in North Auckland Land District	Access Particulars at 6 - 7 - 76			Registered Proprietor	Occupier
	No.	Description	NOW ref.		
		STATE HIGHWAY 1 (GILLS ROAD) N.Z. 01/0.41			
		GILLS ROAD (WIDENED)			
Lot 1 DP 29509 Pt. CT 730/201	1	Vehicle access	37		
Lot 2 DP 29509 Pt CT 730/201	Nil	No existing entrance to State Highway. Legal access to Duke Street is practicable.	-		
Lot 3 DP 29509 CT 730/198	1	Vehicle access	38		
Pt O.L.C. 159 Pt CT 213/241 LTD	Nil	No existing entrance to State Highway. Legal access to Prince Street and Duke Street is practicable.	-		
		PRINCE STREET (UNFORMED)			

SCHEDULE FOR LIMITED ACCESS ROAD DECLARATION

State Highway No ..1... from ..Gills Road..... to..Wireless Road.....

NORTH-BOUND SIDE (RHS)

GAZETTE INFORMATION				NOT FOR PUBLICATION	
Land in North Auckland Land District	Access Particulars at 9 - 7 - 76			Registered Proprietor	Occupier
	No.	Description	NOW ref*		
Pt OLC 159 Pt CT 210/241 LTD	Nil	No existing entrance to State Highway Legal access to Prince St is practicable	-	✓	
Pt OLC 159 CT 593/127 LTD	2	Farm gate Farm gate	39 40	✓	
Lot 3 DP 27532 CT 608/189	2	Farm gate Vehicle access	41 42	✓	
Pt OLC 159 CT 593/121 LTD	2	Farm gate Vehicle access	43 44	✓	
Pt OLC 159 CT 752/303 LTD	Nil	No existing entrance to State Highway. Access point allocated	45	✓	
Pt OLC 159 CT 1116/278 LTD	3	Farm gate Vehicle access Vehicle access	46 47 49	✓	
Pt OLC 159 CT 1120/283 LTD	Nil	No existing entrance to State Highway. Access point allocated	48	✓	
Pt OLC 193 CT 526/206 LTD	Nil	No existing entrance to State Highway. Legal access to Brotts Road is practicable	-	✓	
		BROTTS ROAD (FORMED)			

LA 11/2/2

SCHEDULE FOR LIMITED ACCESS ROAD DECLARATION

State Highway No 1 from Gills Road to Wireless Road

HIGH HAND SIDE (WEST)

GAZETTE INFORMATION				NOT FOR PUBLICATION	
Land in North Auckland Land District	Access Particulars at 9 - 7 - 76			Registered Proprietor	Occupier
	No.	Description	NOW ref		
Lot 2 DP 38578 CT 1056/132	1	Farm gate	50	✓	
Pt CLC 103 DP 25300 CT 1340/63	2	Farm gate Vehicle access	51 52	✓	
Lot 1 DP 46327 CT 1613/22	1	Vehicle access	53	✓	
Pt Lot 5 DP 40430 CT 1302/83	Nil	No existing entrance to State Highway. Access point allocated.	54	✓	
Pt Lot 5 DP 40430 CT 1613/23	1	Vehicle access	55	✓	
Lot 1 DP 44581 Pt CT 1083/17	Nil	No existing entrance to State Highway. Access point allocated	56	✓	
Pt Lot 2 DP 40430 Pt CT 1083/17	1	Vehicle access	57	✓	
Lot 1 DP 40430 CT 1118/278	Nil	No existing entrance to State Highway. Access point allocated	58	✓	
Lot 1 DP 43523 CT 1035/65	1	Vehicle access	59	✓	

LA 11/2/2

SCHEDULE FOR LIMITED ACCESS ROAD DECLARATION

State Highway No ..1.... from ..Cills Road..... to...Wirelass Road.....

RIGHT HAND SIDE (WEST)

GAZETTE INFORMATION				NOT FOR PUBLICATION	
Land in North Auckland Land District	Access Particulars at 6 - 7 - 76			Registered Proprietor	Occupier
	No.	Description	NOW ref.		
Lot 1 DP 30521 CT 984/165	1	Vehicle access	60		
Pt Lot 1 DP 23624 CT 210/91	1	Vehicle access	61		
Pt OLC 193 DP 12517 CT 1109/15	3	Vehicle access Vehicle access Vehicle access	62 63 64		
Lot 2 DP 40683 CT 1106/67	Nil	No existing entrance to State Highway. Access point allocated	65		
Pt Lot 1 DP 13673 CT 260/209	1	Vehicle access	66		
Lot 1 DP 64767 CT 240/755	2	Farm gate Vehicle access	67 68		
Lot 1 DP 44142 CT 1580/18	1	Vehicle access	69		
Pt OLC 214 CT 1590/5 LTD	1	Farm gate	70		
Lot 3 DP 43568 CT 1313/88	1	Vehicle access	71		
Lot 1 DP 33120 CT 885/2	1	Vehicle access	72		

LA 11/72

...s at Wellington...

Sheet...9....of...9...sheets

SCHEDULE FOR LIMITED ACCESS ROAD DECLARATION

State Highway No ..1... from ....Gills Road..... to...Hingaia Road.....
RIGHT HAND SIDE (WEST)

GAZETTE INFORMATION				NOT FOR PUBLICATION	
Land in North Auckland Land District	Access Particulars at 9 - 7 - 76			Registered Proprietor	Occupier
	No.	Description	NOW ref'		
Lot 2 DP 43568 CT 1378/92	1	Vehicle access	73		
Lot 1 DP 43568 CT 1377/91	1	Vehicle access	74		
Lot 1 DP 39902 CT 1069/96	1	Vehicle access	75		
Pt OLC 214 CT 12B/5	1	Vehicle access	76		
Lot 2 DP 39911 CT 891/236	1	Vehicle access	77		
	WIRELESS ROAD (FORMED)				
	END OF LIMITED ACCESS ROAD RP 01/4.80				

LA 11/2/2 ...

... ... of selling ...

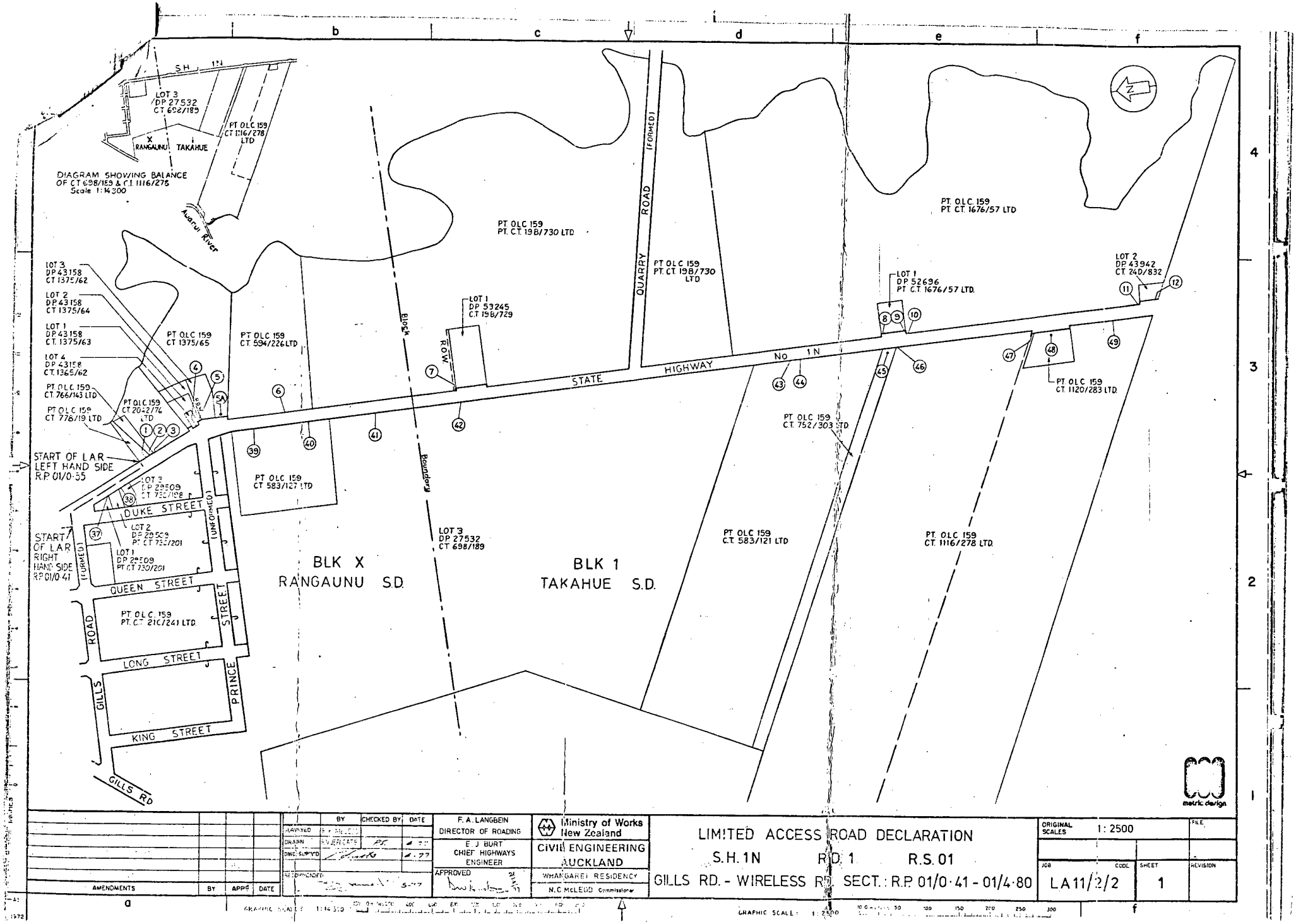


DIAGRAM SHOWING BALANCE OF CT 698/189 & CT 1116/278 Scale 1:14300
SH 1N
LOT 3 DP 27532 CT 698/189
PT OLC 159 CT 1116/278 LTD
RANGAUNU
TAKAHUE
Auarui River
PT OLC 159 PT. C.T. 198/730 LTD
QUARRY ROAD (FORMED)
PT OLC 159 PT. C.T. 1676/57 LTD
LOT 3 DP 43158 CT 1375/62
LOT 2 DP 43158 CT 1375/64
LOT 1 DP 43158 CT. 1375/63
LOT 4 DP 43158 CT. 1365/62
PT OLC 159 CT 766/143 LTD
PT OLC 159 CT 778/19 LTD
PT OLC 159 CT 1375/65
PT OLC 159 CT. 594/226 LTD
PT OLC 159 CT 2042/76 LTD
LOT 1 DP 53245 C.T. 198/729
ROW
Block
LOT 1 DP 52696 PT C.T. 1676/57 LTD.
LOT 2 DP 43942 CT. 240/832
STATE HIGHWAY No 1N
PT OLC 159 CT. 1120/283 LTD.
PT OLC 159 CT. 752/303 LTD
START OF LAR LEFT HAND SIDE R.P. 01/0·55
LOT 3 DP 29509 CT 730/198
DUKE STREET
PT OLC 159 CT 583/127 LTD
Boundary
START OF LAR RIGHT HAND SIDE R.P. 01/0·41
LOT 2 DP 29509 PT. C.T. 730/201
LOT 1 DP 29509 PT C.T. 730/201
(UNFORMED)
(FORMED)
QUEEN STREET
PT OLC 159 PT. C.T. 21C/241 LTD
LOT 3 DP 27532 CT 698/189
BLK X RANGAUNU S.D.
BLK 1 TAKAHUE S.D.
PT OLC 159 C.T. 583/121 LTD
PT. OLC 159 CT. 1116/278 LTD.
ROAD
STREET
LONG STREET
GILLS
PRINCE
KING STREET
GILLS RD
metric design
F. A. LANGBEIN DIRECTOR OF ROADING
E. J. BURT CHIEF HIGHWAYS ENGINEER
APPROVED
Ministry of Works New Zealand
CIVIL ENGINEERING AUCKLAND
WHANGAREI RESIDENCY
N. C. McLEOD Commissioner
LIMITED ACCESS ROAD DECLARATION
S.H. 1N R.D. 1 R.S. 01
GILLS RD. - WIRELESS RD SECT.: R.P 01/0·41 - 01/4·80
ORIGINAL SCALES 1:2500
JOB CODE LA11/2/2
SHEET 1
FILE
REVISION
AMENDMENTS BY APP'D DATE
GRAPHIC SCALE 1:14300
GRAPHIC SCALE 1:2500

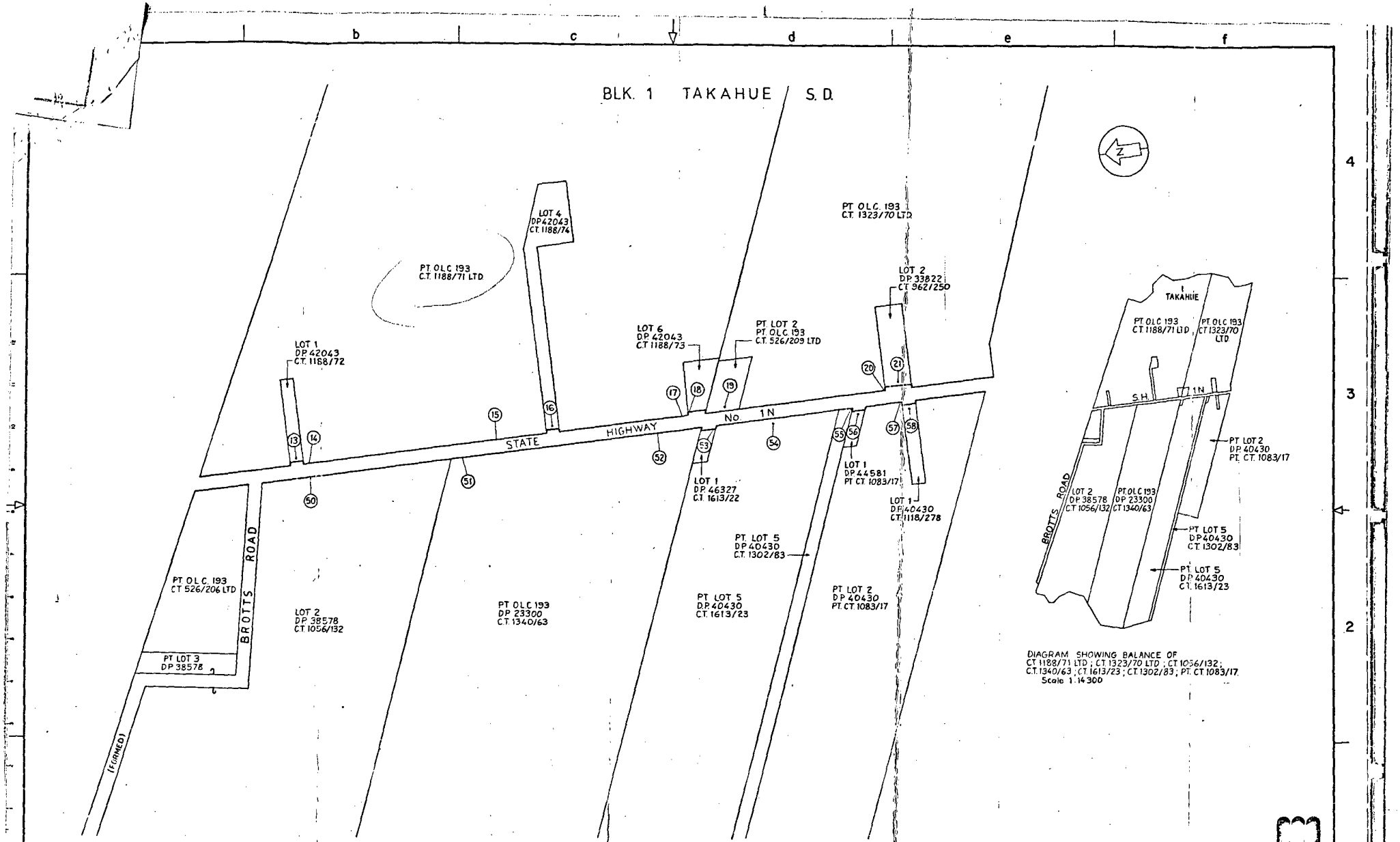


DIAGRAM SHOWING BALANCE OF CT 1188/71 LTD ; CT 1323/70 LTD ; CT 1056/132 ; CT 1340/63 ; CT 1613/23 ; CT 1302/83 ; PT. CT 1083/17
Scale 1:14300

AMENDMENTS	BY	APP'D	DATE

	BY	CHECKED BY	DATE
SURVEYED	R.P. McLEOD		
DRAWN	S. JEFFCOATE		4-77
DWG. SUPVD			4-77
RECOMMENDED			5/77

F. A. LANGBEIN
DIRECTOR OF ROADING

E. J. BURT
CHIEF HIGHWAYS ENGINEER

APPROVED

Ministry of Works New Zealand
CIVIL ENGINEERING
AUCKLAND
WHANGAREI RESIDENCY
N. C. McLEOD Commissioner

LIMITED ACCESS ROAD DECLARATION

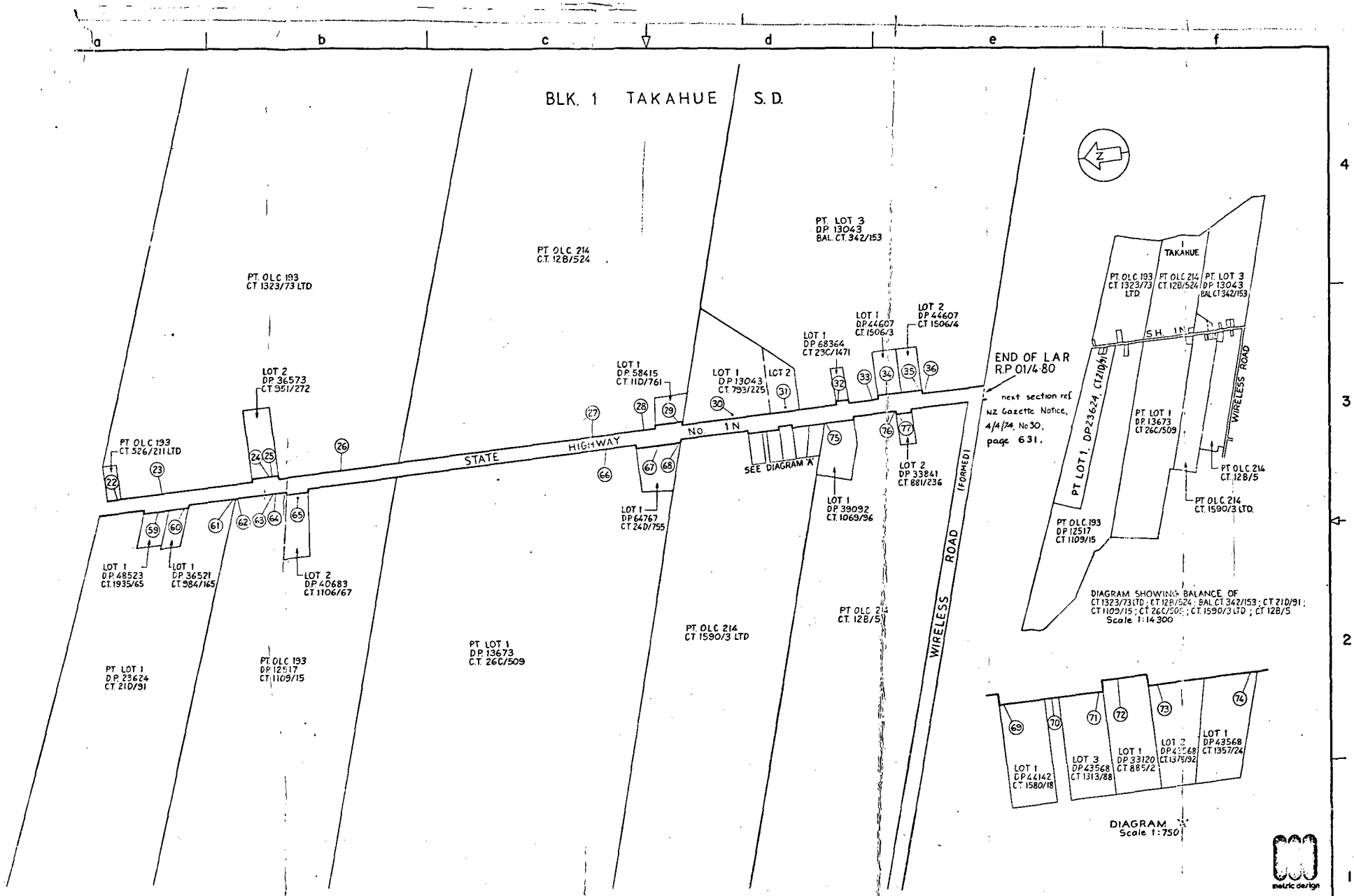
S.H. 1N R.D. 1 R.S. 01

GILLS RD. - WIRELESS RD. SECT.: R.P 01/0·41 - 01/4·80

ORIGINAL SCALES	1 : 2500		FILE
JOB CODE	SHEET		REVISION
LA11/2/2	2		

GRAPHIC SCALE 1:14300

metric design



AMENDMENTS	BY	APP'D	DATE

	BY	CHECKED BY	DATE
SURVEYED			
DRAWN			4-77
LAND SURV'D			4-77
RECOMMENDED			5-77

F. A. LANGBEIN
DIRECTOR OF ROADING

E. J. BURT
CHIEF HIGHWAYS ENGINEER

APPROVED

Ministry of Works New Zealand
CIVIL ENGINEERING
AUCKLAND
WHANGAREI RESIDENCY
N. C. McLEOD Commissioner

LIMITED ACCESS ROAD DECLARATION

S.H. 1N R.D. 1 R.S. 01

GILLS RD. - WIRELESS RD. SECT.: R.P. 01/0-41 - 01/4-80

ORIGINAL SCALES	1:2500	FILE
JOB	LA11/2/2	
SHEET	3	
REVISION		

GRAPHIC SCALES: 1:1250 1:750

NOTICE DECLARING STATE HIGHWAY TO BE
A LIMITED ACCESS ROAD

IN THE MATTER of the Public Works Amendment Act 1963

AND N Z Gazette Notice 22nd September 1977 No 99 Page 2552

See Schedule

DISTRICT LAND REGISTRY
AUCKLAND NO. 1

Oct 18 2 59 PM '77

DISTRICT LAND REGISTRAR NORTH AUCKLAND, N.Z.

548034.1

— G.N declaring part State Highway No 1 (Auckland-Whangarei) adjoining to be a limited access road —

D211670.2
COND

THE RESOURCE MANAGEMENT ACT 1991

SECTION 221 : CONSENT NOTICE

REGARDING:
The Subdivision of
Lot 2 DP 150692 and
Pt OLC 214
Blk I Takahue SD
North Auckland Registry

PURSUANT to Section 221 and for the purposes of Section 224 of the Resource Management Act 1991, this Consent Notice is issued by the **FAR NORTH DISTRICT COUNCIL** to the effect that conditions described in Schedule 1 below are to be complied with on a continuing basis by the subdividing owner and the subsequent owners after the deposit of the survey plan, and this Notice is to be registered on the new titles, as set out in Schedule 2 herein.

SCHEDULE 1

(1) No building shall be erected on proposed Lot 1 without the prior approval of the Council to specific designs for foundations, prepared by a registered engineer with geotechnical expertise.

(2) Lot 1 on the subdivision plan may not, at any time, be transferred (except to S R and V J Crene), leased or otherwise disposed of until such time as the Council is satisfied [by way, at least, of an approved development plan (to scale) and a statutory declaration that the prospective purchaser intends to carry out such development] that a prospective purchaser for any of the said lots has a bona fide proposal to establish a permitted, controlled or discretionary Rural A zone activity, as required by Rule 6.1.6 of the Mangonui County Section of the Operative Far North District Plan, or an activity compatible with the policies and objectives of the Proposed Far North District Plan.

Alternatively, a transfer of Lot 1 may be effected to allow the re-imposition of the amalgamation covenant with CT 12B/5 or an amalgamation to like effect.

(3) No non-complying re-subdivision of Lot 1 or the balance area of residue CT 12B/5 is to be permitted for a period of one year from the date of deposit of this subdivision.

SCHEDULE 2

(1) That Condition (1) set out in Schedule 1 refers to Lot 1 DP 182864 -- being contained in CT 113D/882.

(2) That Condition (2) set out in Schedule 1 refers to Lot 1 DP 182864 -- being contained in CT 113D/882.

(3) That Condition (3) set out in Schedule 1 refers to Lot 1 DP 182864 -- being contained in CT 113D/882.

SIGNED: _____
ENVIRONMENTAL SERVICES MANAGER for the Far North District Council

DATE: 17th October 1997

SIGNED by STEPHEN RICHARD CRENE and VERONICA JOAN CRENE as registered proprietor(s)

in the presence of:

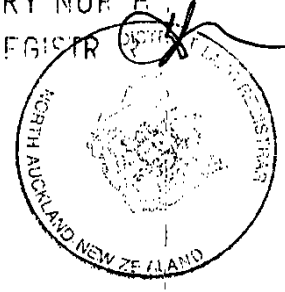
_____
Name

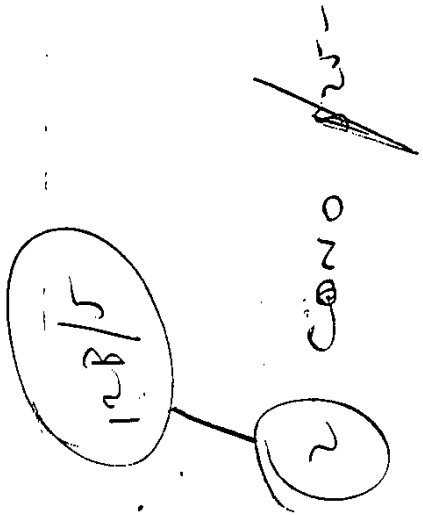
J. M. MacLean
Legal Executive To
Clive Patterson
Solicitor
KAITAIA
Occupation

P\3PCN7719.DOC

1.59 04.NOV97 D 211670.2

PARTICULARS ENTERED IN REGISTER
LAND REGISTRY NORTH
ASST LAND REGISTR





D521251.2 CONO

THE RESOURCE MANAGEMENT ACT 1991

SECTION 221 : CONSENT NOTICE

REGARDING:
The Subdivision of
Lot 1 DP 186149
Blk I Takahue SD
North Auckland Registry

PURSUANT to Section 221 and for the purposes of Section 224 of the Resource Management Act 1991, this Consent Notice is issued by the **FAR NORTH DISTRICT COUNCIL** to the effect that conditions described in Schedule 1 below are to be complied with on a continuing basis by the subdividing owner and the subsequent owners after the deposit of the survey plan, and this Notice is to be registered on the new titles, as set out in Schedule 2 herein.

SCHEDULE 1

(1) No access from Lot 1 on to Wireless Road is to be constructed or utilised which is within 30 metres of the State Highway Nº 1 intersection

(2) No vehicle access is to be constructed from either Lot 1 on the plan or from Pt Lot 1 DP 186149 (balance) on to State Highway Nº 1.

SCHEDULE 2

(1) Condition (1) on Schedule 1 refers to Lot 1 DP 193975, contained in CT 123A/449.

(2) Condition (2) on Schedule 1 refers to Lot 1 DP 193975, being contained in CT123A/449, and Pt Lot 1 DP 186149 (residue CT 115D/353).

SIGNED:

ENVIRONMENTAL SERVICES MANAGER for the Far North District Council

DATE: 9th MARCH 1999

SIGNED by Crene Farms Ltd by its director

as registered proprietor(s)

in the presence of:

Name: C. A. Patterson

Occupation: Solicitor KAITAIA

P\3PCN9203.DOC

PRODUCED 1.38 06.JUL00 D 521251.2
ENTERED 9.00 9 Aug 00
PARTICULARS ENTERED IN REGISTER
LAND REGISTRY NORTH AUCKLAND
for REGISTRAR-GENERAL OF LAND

REGISTRAR-GENERAL OF LAND
NEW ZEALAND

115D/353

(2) CONO 138-

NOTICE NO.270.
SCHEME PLAN NO. 4365.

K36694 BLR.

CONDITIONS OF BUILDING LINE.

SECTION 5 LAND SUBDIVISION IN COUNTIES ACT, 1946.

PURSUANT to the provisions of Section 5 (4) of the Land Subdivision in Counties Act 1946, I, THOMAS STRATHALLAN ROE, Chief Surveyor, North Auckland Land District, HEREBY GIVE NOTICE that Lot 3, more particularly delineated in the Scheme Plan of the Town of Kaitaia Extn. No.26, being a subdivision of Part O.L.C. 214, Block I Takahue Survey District, being part of the land comprised in Certificate of Title Volume 891 Folio 203, Auckland Land Registry, is subject to a condition that no buildings or hoardings shall be erected on the said Lot within 25 links of the Whangarei-Awanui State Highway No.1, as shown in the aforementioned scheme plan.

Given under my hand this 27th day of April, 1951.

Signed T.S.Roe,
CHIEF SURVEYOR.

NORTH AUCKLAND LAND DISTRICT.

I, THOMAS STRATHALLAN ROE, Hereby Certify that this is a copy of a Notice issued in accordance with the Land Subdivision in Counties Act,1946.

T.S.Roe
CHIEF SURVEYOR.

(*e*) THAT these presents are intended to take effect as a lease under section 5 of the Small Farms Amendment Act, 1939, and the provisions of the said Act and of the Regulations made thereunder applicable to such leases and such provisions of the Land Act, 1924, as have been applied by Regulation to such leases, shall be binding in all respects upon the parties hereto in the same manner as if such provisions had been fully set out herein.

(*f*) THAT the Lessee's rights to extract or remove minerals from the land are limited to those set out in section 206 of the Land Act, 1924.

In witness whereof the Commissioner of Crown Lands for the Land District of , on behalf of the Lessor, hath hereunto set his hand, and these presents have also been executed by the said Lessee.

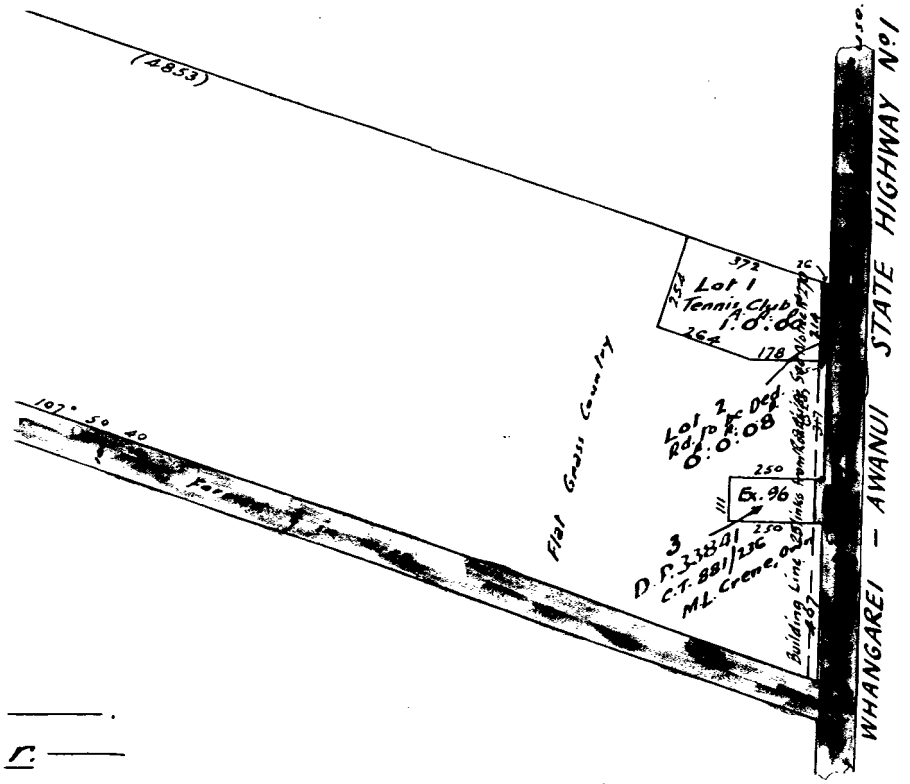
SCHEDULE.

LAND & SURVEY DEPARTMENT 28 MAY 1951 AUCKLAND

K36694 BLR.

4

sson, Own.



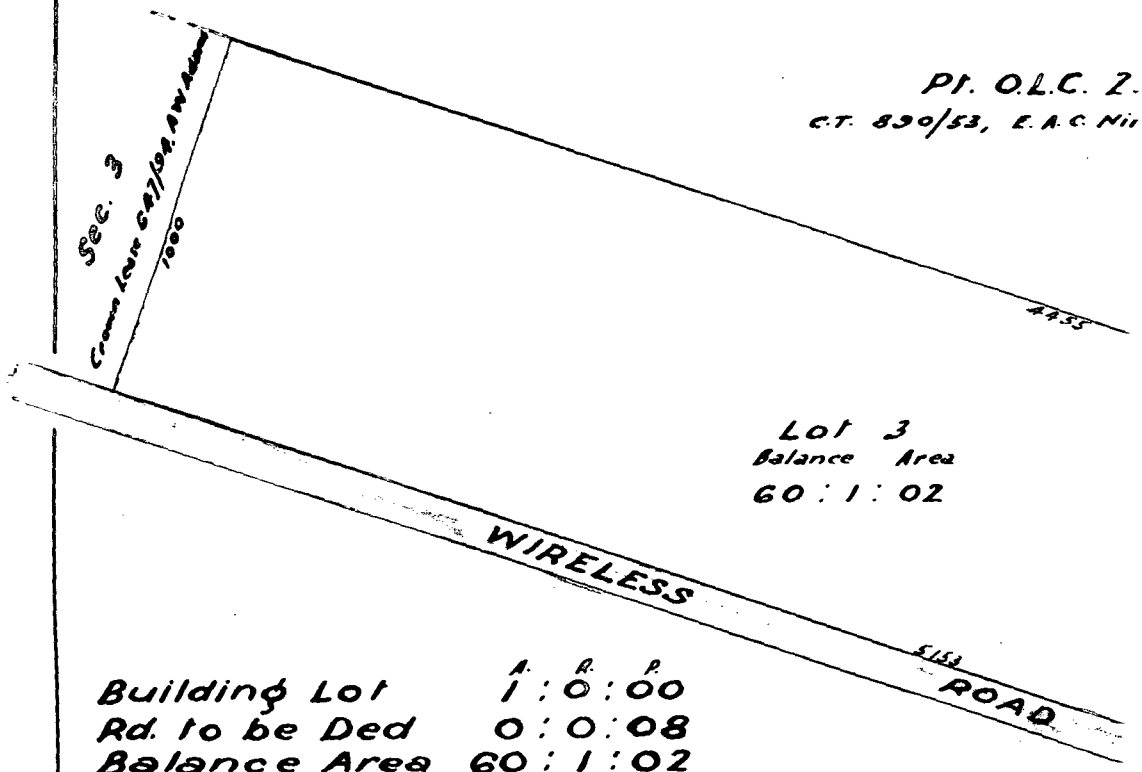
Approved:
A. E. M. Crewe
Registered Owner

Approved:
Chief Surveyor

Recommended for approval
Surveyor General

Approved
Minister of Lands.

4365



	A.	R.	P.
Building Lot	1	0	00
Rd. to be Ded	0	0	08
Balance Area	60	1	02
Total Area	61	1	10

L.T. 39092

Town of Kaitaia Extn. No. 26

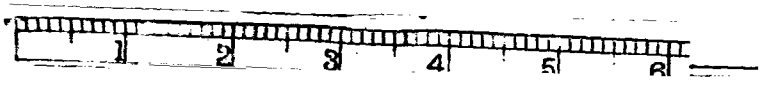
— Scheme Plan of Subdn. of Pt. O.L.C. 214
— C.T. 891/203, Annie Cecilia May Crene, Owne
— Nth. Auck. Land Dist. — Mangonui County. —
—— Blk. I Takahue S.D. ——
— Hall & Williams, Regd. Surveyors, Jan., 195
—— Scale 3 Chs. to 1 Inch. ——

I, Matthew Charles Williams, Registered Surveyor, hereby certify that this scheme plan has been prepared by me in accordance with the provisions of the Land Subdivision in Counties Act, 1946.

M. C. Williams
Regd. Surveyor.
5th January, 1951.

I, THOMAS STRATHAIRN [illegible], Registered Surveyor, certify that this is a copy of the Scheme Plan approved in my name by the Council of the [illegible] County, under the Counties Act, 1946.

[illegible] SURVEYOR



366794

PARTICULARS ENTERED IN THE REGISTER-BOOK
VOL 89 / FOLIO 203

THE 23rd DAY OF May / 1957
AT 11 O'CLOCK.

Assistant Land Registrar

Noted on 764R.

Phoenix
Consulting Engineers Ltd

PO BOX 939
CAMBRIDGE 3450
TEL. 07 5603555

GEOTECHNICAL SITE ASSESSMENT & STORMWATER MANAGEMENT REPORT

PROPOSED NEW MODULAR BUILDING

TKKM O TUTUTARAKIHI, 32 WIRELESS ROAD, KAITAIA

29 AUGUST 2022
REFERENCE: 210541/REV3

GEOTECHNICAL SITE ASSESSMENT & STORMWATER MANAGEMENT REPORT
PROPOSED NEW MODULAR BUILDING
TKKM O TUTUTARAKIHI, 32 WIRELESS ROAD, KAITAIA

29 AUGUST 2022
REFERENCE: 210541/REV3

CLIENT:
MODULAR CLASSROOMS LTD

Revision	Details	Status
0	Original Issue	For Consent
1	Second Issue	For Consent
2	Third Issue	For Consent
3	Fourth Issue	For Consent, Updated in response to RFI

Responsibility	Name Position / Qualifications	Signature
Prepared by	Amanda Longshaw Engineering Geologist, BSc	
Peer Reviewed by	Christina McPherson Senior Geotechnical Engineer	
Issued by	Natalie Pullyn Chartered Civil Engineer	

TABLE OF CONTENTS

Appendices

1.0 INTRODUCTION

Phoenix Consulting Engineers has been engaged by Modular Classrooms Ltd to undertake a site investigation and provide an assessment of subsoil conditions and land stability to provide foundation and other geotechnical related recommendations, for two proposed new modular classroom building at TKKM o Tututarakihi, 32 Wireless Road, Kaitaia.

The development consists of constructing two new double modular classroom. The classrooms are to be constructed as a relocatable building with Colorsteel cladding and lightweight roofing sheets on suspended timber flooring using a piled foundation.

2.0 SITE DESCRIPTION

The site location is shown in Appendix A. The site investigation made reference to a plan showing potential new classroom locations as provided by the Ministry of Education, shown in Appendix B.

The subject site is at TKKM o Tututarakihi, 32 Wireless Road, Kaitaia and is legally described as Lot 1 DP 203524. The site is bound by residential and rural properties.

The site is irregularly shaped but is generally rectangular. The site is generally flat, with a slight slope down from Wireless Road. LIDAR regional contours indicate that the proposed development area lies at an elevation of approximately 10m RL as shown in Figure 1 below.

Figure 1: Site location (courtesy of Far North District Council GIS)

The site topography is shown in Appendix B.

3.0 PUBLISHED GEOLOGY

In assessing the geology of the site, we have referred to the following geological maps and records:

- Isaac, M.J. (compiler) 1996, *Institute of Geological & Nuclear Sciences, Map 1: Kaitaia (Scale 1:250,000)*. Retrieved from GNS website.
- GNS webmap (https://data.gns.cri.nz/geology/)
- New Zealand Geotechnical Database (https://www.nzgd.org.nz/arcgismapviewer/mapviewer.aspx)

Figure 2: Geological Map (extract from GNS webmap)

The 1:250,000 geological map and web map indicates that the site is on the Karioitahi Group comprised of unconsolidated to poorly consolidated sand, peat, mud and shell deposits (estuarine, lacustrine, swamp, alluvial and colluvial).

4.0 GEOTECHNICAL INVESTIGATIONS

4.1 Investigation Methodology

The site testing and assessment has been completed to investigate the suitability of the soils for the construction of foundations for the proposed structure, and their compliance with the criteria of NZS 3604:2011. NZS 3604 requires the determination of "good ground" at the base of the foundations by demonstration of an ultimate soil bearing capacity of 300kPa by the performance of specified Dynamic Cone Penetrometer tests and boreholes, along with the observation of site and soil conditions, site profile, buried services and fill. A visual inspection of slopes was conducted to confirm the site's compliance with NZS3604:2011.

4.2 Field Investigation

Our site investigation at TKKM o Tututarakihi Kaitaia School, carried out on 26 October 2021, comprised the following activities:

- A detailed walkover inspection of the site.
- One 100mm diameter hand auger borehole (BH1) to a depth of 2.0m below existing ground surface within the approximate location of the proposed new classrooms.
- Eleven 50mm diameter hand auger boreholes (BH2 – BH12) to a maximum depth of 2.0m below existing ground surface within the approximate footprint of the proposed new classrooms.
- Dynamic Cone Penetrometer (DCP) tests to a depth of 1.9m adjacent to the hand auger boreholes.
- Shear vane tests within cohesive soils at regular intervals in each hand auger borehole

During the testing, a site walkover was completed to confirm boundaries, physical characteristics of the site and any water bodies.

The approximate locations of the boreholes are indicated on the appended site plan (Appendix C). The borehole logs and the DCP test results are also appended (Appendix C).

The soil descriptions given on the borehole logs are in general accordance with the New Zealand Geotechnical Society's "Field Description of Soil and Rock", dated 2005. The measured in situ undrained shear strength values given on the borehole logs are corrected readings factored in accordance with the New Zealand Geotechnical Society Guidelines and are not direct readings from the shear vane dial. The groundwater table levels given on the borehole logs were measured in the boreholes following drilling, within two hours of completing the drilling of the boreholes.

5.0 SUBSOIL CONDITIONS

5.1 Site Characterisation and Soil Properties

The subsoils encountered within the boreholes are summarised below and in Table 1, with a detailed description provided on the appended borehole logs (Appendix C). The subsoils were found to comprise:

- Topsoil (within the uppermost 0.1m to 0.2m of all the boreholes) overlying stiff to very stiff clay with variable silt content.
- The underlying soils on site have been assessed to generally be of moderate plasticity and have therefore been categorised as Class M expansive soils.
- Groundwater was not encountered at the time of the investigation, however due to the low permeability of the soils on site, groundwater is anticipated to be approximately 3m below ground level and related to the Pairatahi River to the east.
- Shear vane readings showed an undrained shear strength (Su) between 89kPa and 163kPa from a depth of 300mm to 2,000mm.
- Scala readings generally indicate an increase in density with depth.

Table 1: Borehole Information

Borehole Number	Borehole Depth (m)	Depth of Topsoil (m)	Minimum Depth to Ultimate Bearing Capacity of 300kPa (m)
BH1	2.0	0.2	0.3
BH2	2.0	0.2	0.3
BH3	2.0	0.2	0.3
BH4	2.0	0.1	0.3
BH5	2.0	0.1	0.3
BH6	2.0	0.1	0.3
BH7	2.0	0.1	0.3
BH8	2.0	0.2	0.3
BH9	2.0	0.2	0.3
BH10	2.0	0.2	0.3
BH11	2.0	0.1	0.3
BH12	20	0.1	0.3

Note: N.E. indicates Not Encountered.

5.1 Percolation Testing

Site percolation testing was carried out at BH1 in accordance with NZS Building Code E1/VM1 Sec 9, New Zealand Water Environment Research Foundation (NZWERF) On-Site, SW Management Guide and Auckland Regional Council TP 10 Design Manual.

Table 2. Percolation Test Results (from ground level)

Time (mins)	0	5	10	15	20	25	30	35	40	45	50	55	60
Drop (mm)	0	10	20	20	20	20	30	30	40	40	40	40	40

During our percolation test, we observed a soakage rate of 30mm/hr. Results of the test are shown in Table 2.

5.2 Bearing Capacity

Based on the ground conditions encountered below the topsoil layer, Shear vane and Scala penetrometer tests we consider that an ultimate bearing capacity of 300kPa is available from a depth of 300mm (which after application of a static strength reduction capacity factor (φ=0.5) indicates a dependable bearing capacity of at least 150kPa).

5.3 Soil Seismic Class

In accordance with Section 3.1.3 of AS/NZS1170.5:2004, the site is considered to be Site Subsoil Class C.

5.4 Expansive Soil

Based on our site investigation and experience, the shallow soils are considered to have a moderate plasticity and may consequently lie outside the scope of good ground, as defined in NZS 3604, Timber Framed Buildings. Therefore, we recommend assuming Class M (moderately expansive) site soils, as defined in AS 2870, Residential Slabs and Footings - Construction. Characteristic surface ground movement for Class M soils of between 20mm and 40mm is indicated in Table 2.3 of AS 2870. Foundations should be embedded a minimum of 600mm below finished ground level or be otherwise designed to accommodate the potential shrink/swell movement.

6.0 LAND STABILITY

From the site assessment carried out, further slope stability analysis is not required for the proposed building platform. During our site assessment, we identified the following:

- The building platform is on generally flat land.
- The surrounding area slopes at less than 8°.
- No signs of slope movement were observed.

7.0 LIQUEFACTION

The underlying soils found on site in the shallow depths were generally cohesive materials which are not considered to be readily susceptible to liquefaction. Due to groundwater not being encountered at the time of investigation and the low permeability recorded on site, it is considered very unlikely that the site will experience liquefaction induced ground surface damage. Therefore, detailed liquefaction assessment is not considered necessary for this site.

For the proposed structure on piles, further mitigation is not required with the foundation expected not to collapse during an ultimate limit state (ULS) seismic event. In the event of differential settlement, it is anticipated that the foundation or floor framing can be repaired and relevelled.

8.0 OTHER HAZARDS

A qualitative risk assessment of potential additional hazards has been undertaken. In particular, the following hazards were considered:

- Delivery of structures (road closures and site access) – a significant access width and height will be required for the new structures to be delivered to site. Care must be taken due to fences and powerlines on site.
- Access would be off Wireless Road. It may be necessary to remove some fencing to allow easier access. The potential site access location from the Ministry of Education is included in Appendix F.
- Existing services – existing services have been identified on the eastern side of the proposed new building, with a second pipeline indicated on the western side of the proposed structure on the architects plans shown in Appendix B.

9.0 RECOMMENDATIONS

9.1 General

We provide the following general foundation recommendations for the proposed structure:

- Should weaker soils, organic soils, fill material, sub-structures associated with the existing/neighbouring developments (i.e. pipelines, etc.) or any other unsuitable materials be encountered during the foundation excavations, then any such material should be sub-excavated and backfilled with concrete or compacted granular hard-fill up to the required level.
- Should the soils become affected by rain, then these soils should be excavated from the foundation excavations to provide a firm base prior to concrete placement.
- Provision should be made to case or shore the foundation excavations to avoid collapse within the saturated soils. In addition, provision should be made to pump groundwater from the base of the foundation excavations and/or apply a tremie methodology for concrete placement, as required.

9.2 Foundations

Based on the exploratory hole results and the proposed development type, we consider the proposed shallow piled foundations to be a viable option.

The proposed shallow piled foundations will be embedded into very stiff natural ground a **minimum depth of 0.6m** below finished ground level, where a geotechnical ultimate bearing capacity of 300kPa is available.

For pile design, we provide the following soil parameters:

Table 3: Soil Parameters for Pile Design

Depth range (m)	Soil Type	Parameters
0.0 - 0.2	Topsoil	Ignore
0.2 – 0.6	Clay	Cohesive (Su = 100kPa)
0.6 – 2.0	Clay	UBC – 300kPa, Cohesive (Su = 100kPa)

9.3 Retaining Structures

Retaining structures are not anticipated for the proposed development. However, if any retaining structures are to be built, we recommend that further advice be requested from PCE and that a suitably qualified and experienced engineer is engaged to design the retaining structure if it supports a surcharge load or the retaining structure is higher than 1.2m on this site.

9.4 Service Connections

Public 3 waters services in the site area are recorded on the Far North District Council GIS viewer, as shown in Appendix B. A wastewater pipe is indicated on the site to the east of the proposed building platform. No other public pipes are indicated to cross the site. Any other pipes/cables located in this area are therefore understood to be private services.

Stormwater Disposal

Refer to Section 9.5 for details of the proposed stormwater management system for the school.

Potable Water Supply

Refer to Section 9.6 for details of the proposed water supply system for the school.

Wastewater Disposal

Refer to Section 9.7 for details of the proposed water supply system for the school.

9.5 Stormwater Design

Introduction

A Stormwater Management Report was prepared by Vision Consulting Engineers and Planners for 20 Wireless Road, Kaitaia, dated 30/04/2018, job number J13185 for the childcare centre at the same site as the proposed school. Refer to Appendix E for report. This stormwater management plan has been designed to manage the stormwater runoff from the proposed double module classrooms, existing childcare centre and associated impervious surfaces located within the proposed lease boundaries and will replace the previous stormwater management plan prepared by Vision Consulting Engineers for the childcare centre.

Stormwater Attenuation Requirements

The district plan allows the maximum impervious and building footprint area to be 15% of the gross site area. The proposed school development is made up as per Table 4 below:

Table 4: Site Coverage

Site Coverage	Area (m^2)	Ratio (%)
Total Lot Area	8,223	100
Total Pervious	5,578	67.8
Existing Impervious	380	32.2
Proposed Impervious	2,265	

The proposed buildings and impervious areas of the school are above the 15% threshold. To ensure neighbouring properties are not affected, attenuation of the ARI 10 year event to predevelopment flows will be required for the school development.

Flooding

The proposed school site is located within an area mapped as being flood susceptible land only and not prone to flooding as per Figure 3. Refer to flood map from Northland Regional Council Natural Hazards Viewer within Appendix D. There are existing open drains along both sides of Wireless Road with the open drain on the southern side of the road expected to capture upstream runoff before the site and discharge these flows to the west.

Figure 3: ARI 10, 50 & 100 year flood extents (From NRC Hazard Maps Portal)

The Far North District Council Engineering Standards require secondary flow paths to be designed for the ARI 100 year event with allowance for climate change.

Proposed Stormwater Management

As part of the lease agreement between Ministry of Education and the Landowner, it has been agreed that impervious runoff from the school will not discharge towards the landowners grazing paddocks. In order to allow for this requirement, stormwater from the proposed double module classrooms, existing dwelling, existing childcare centre and the associated impervious surfaces are to discharge to the open drain on the northern side of Wireless road via a private piped network and overland flow as per the PCE Stormwater Drawings in Appendix D.

The private stormwater network has been designed to manage stormwater runoff from impervious surfaces for up to an ARI 10-year rainfall event by detaining stormwater runoff from the Childcare Centre and Canopy, Proposed Double Modules and Canopy, Existing Dwelling & Garage and the Courts & Astroturf in detention tanks. The flows out of each tank will be controlled by an orifice at a flow rate which allows runoff from the remaining impervious areas to discharge into the proposed private pipe network at peak ARI 10-year post development flow rates (uncontrolled) while still achieving the ARI 10-year rainfall predevelopment peak flow rate. The proposed detention tanks are sized as per Table 5. Refer to Appendix D for calculations.

Table 5: Detention Tank Details

	Tank Size (L)	Attenuation Volume (L)	Orifice Diameter (mm)	Orifice Invert Level (m)	Controlled Discharge (l/s)
Double Modules and Canopy	25,000L Tank	19,463L	10mm	0.1m from base of tank	0.31l/s

Childcare Centre and Canopy	10,000L Tank	7,862L	10mm	0.1m from base of tank	0.31l/s
Existing Dwelling and Garage	10,000L Tank	6,074L	10mm	0.1m from base of tank	0.27l/s
Courts, Astroturf and Footpath	Aquacomb Pods 30,800L	30,026L	35mm	At the base of tank	1.42l/s

Proposed pipe sizing for the private network has been designed for a post development ARI 10-year rainfall event to ensure that the pipe network has capacity. Table 6 below provides an overview of the proposed private pipe network as per PCE Stormwater Management Layout Plan, Sheet C400. Refer to Appendix D for calculations.

Table 6: Stormwater Pipe Sizing

Stormwater Line Name	Pipe Details	Catchments	Design Storm Event	Pipe Flow (l/s)	Pipe Capacity (l/s)
10,000L Tank Inlet & Outlet	150mmø uPVC @ 0.50%	Existing Dwelling & Garage	10 year	4.00l/s	14.40l/s
SW Line 7	150mmø uPVC @ 0.50%	Existing Dwelling, Garage & Driveway	10 year	8.20l/s	14.40l/s
10,000L Tank Inlet & Outlet	150mmø uPVC @ 0.50%	Childcare Centre & Canopy	10 year	5.10l/s	14.40l/s
SW Line 5	150mmø uPVC @ 0.50%	Astroturf	10 year	3.00l/s	14.40l/s
SW Line 4	225mmø uPVC @ 0.50%	Courts & Astroturf	10 year	19.80l/s	42.20l/s
SW Line 2	225mmø uPVC @ 0.30%	Childcare Centre & Canopy, Courts, Astroturf and Footpaths	10 year	24.90l/s	32.40l/s
25,000L Tank Inlet & Outlet	150mmø uPVC @ 0.50%	Double Modules & Canopy	10 year	12.10l/s	14.40l/s
SW Line 3	225mmø uPVC @ 0.50%	Existing Dwelling & Garage and Double Modules & Canopy	10 year	20.30l/s	42.20l/s
SW Line 1	300mmø uPVC @ 0.30%	Childcare Centre & Canopy, Courts, Astroturf, Footpaths and Double Modules & Canopy	10 year	36.90l/s	69.20l/s
SW Line 6	225mmø uPVC @ 0.30%	Gravel Carpark	10 year	14.80l/s	32.40l/s
SW Outlet	300mmø uPVC @ 0.30%	Existing Dwelling & Garage, Childcare Centre & Canopy, Courts, Astroturf, Footpaths, Double Modules & Canopy and Gravel Carpark	10 year	60.20l/s	69.20l/s

Stormwater discharge to the existing open drain on Wireless Road at ARI 10-year predevelopment peak flow rate has been provided to enable stormwater runoff collection from the school without adverse effect to neighbouring properties.

Secondary flowpaths have been provided for impervious runoff as indicated on the PCE Overland Flow Path Plan, Sheet C430 in Appendix D. Earthworks are required to ensure overland flows from impervious areas discharge to the road and not towards the landowners grazing paddocks.

Maintenance of the stormwater management system shall be as follows:

- Annual inspection of all drains/downpipes.
- Annual inspection of tanks, overflows and orifices.
- Ensure all catchpit and drains into the system are free of blockages.
- Removal of sediment inside the catchpits on a quarterly basis
  If blockages are found with the system, ensure removal by suitably qualified person/drainlayer.

9.6 Water Supply Design

The water supply for the school is proposed to be supplied from a new 32 OD PE connection to the existing 50 ID main on the southern side of Wireless Road, with a water meter at the boundary.

Supply Assessment

Council have asked for an assessment of the existing 50mm ID main along wireless road and its capacity to supply the existing properties on Wireless Road, as well as the new school.

Working pressure and flows for the existing 50mm main are unknown, however assuming low pressure one ended supply, using the empirical design guide in NZS 4404, it can be assumed that the existing 50mm main has a capacity for 7 'dwelling units'. Currently it appears there are approximately 5-6 dwellings serviced from this line.

Schools typically have much lower usage rates per person than the typical rates for dwellings, and is estimated at around 30L/p/day, for the school this requires a total of 2,100 Litres per day for the school. With this in consideration its proposed to install a 25,000L tank for potable water storage on site, that can be filled by the new supply connection and flow can be restricted by a float valve in the tank, requiring the tank is only filled when it is below a certain level. The remaining storage available allows for emergency storage or in situations of restricted supply.

Fire Fighting Requirements

In accordance with SNZ/PAS 4509:2008, the school is assessed as having a FW3 classification.

In accordance with Table 2 of SNZ/PAS 4508, a total on site storage volume of 180m³ is required. It is proposed to install 6x30,000 Litre tanks, to give a total of 180m³ of storage.

The tanks should be connected top and bottom, and have a fire fighting kit installed to be able to draw water from all tanks for fire fighting. The tanks should be located in a position where it is within 90m of all buildings (taking into account routing around any obstructions such as buildings). The proposed location on C600 attached is within this required distance.

9.7 Wastewater Design

The proposed new toilet block for the school is proposed to connect into the new manhole next to the existing pumpstation (as per drawing C500) which connects to the existing low pressure pumping station.

It is expected that the existing council pumpstation will need to be upgraded for the increased school roll of 70 pupils and staff. Information on the existing council pumpstation has not been able to obtained from council, however in speaking with Ecoflow, they confirmed a E/ONE model 2010ip pumpstation was installed at this site in 2020, and supplied the standard specification details for this pumpstation, which is provided in Appendix C.

The upgraded pumpstation will need to be able to cater for a total daily flow of 2100L/day (30L/person/day) and have an emergency storage volume of 1050 Litres (based on 12 hour storage requirement from councils engineering code). The existing pump chamber has a storage volume of 718 Litres, so any new additional storage will need to provide for at least 332 litres of additional storage. In Appendix C on drawings C500 and C510, shows an additional 1050mm dia manhole upstream of the existing pumpstation, connecting into the existing line into the pumpstation. This will provide an additional 860 Litres of emergency storage volume available to the wastewater system.

The additional flows from the increased school roll is not expected to impact the performance of the pumpstation or councils low pressure network. The overall daily discharge will increase, and there will be increased frequency (or time) of pumping. However the pump capacity has a peak flow rate well in excess of the peak flow rate for the site – Peak flow rate = 0.12 L/S, while the pump curve provided in Appendix C shows the pump has an operating flow rate of between 0.24 to 0.76 L/s. Its not expected any upgrades to the pump is required.

9.8 Supervision Considerations

It is recommended that a Chartered Professional Engineer with appropriate geotechnical experience be engaged to supervise any foundation excavations and retaining wall construction (if required). This is in accordance with normal Council practice at the Building Consent stage. It should also be noted that under the Building Act (2004), there are specific requirements for supervision by appropriately qualified personnel.

Foundation Inspections

The geotechnical engineer should generally inspect earthworks and foundation construction at the following stages, and pursuant to any Building Consent conditions:

- Once topsoil and existing fill is stripped (if required)
- During any bulk cut and fill required to form a platform
- Following excavation of the foundation pile holes.

Stormwater, Wastewater & Water Supply Inspections

The engineer should generally inspect stormwater, wastewater & water supply system at the following stages, and pursuant to any Building Consent conditions:

- Prior to backfilling of outlet pipe and main stormwater lines (lines 1 to 3)
- After tanks are installed with orifice connected.
- Prior to backfilling of manholes or other chambers
- After potable supply and fire fighting tanks are completed

General

All inspections will require a minimum of 24-hours' notice and it should be noted that unless PCE are given the chance to undertake all appropriate inspections for the items specified in the Building Consent, we would not be able to issue a Producer Statement (PS4).

9.9 Exclusions

Due to seasonal variations affecting the water table depth, moisture contents of the soil may differ to what we have noted above and may affect construction techniques. Earthworks cost will have to allow for possible change of ground conditions at the time of construction and or the proposed foundations may be modified to cater for varying moisture conditions.

10.0 SAFETY IN DESIGN

Consideration must be given to Safety in Design of the proposed development, from design and construction, through site usage to decommissioning/demolition. In particular, for this development, consideration should be given to (but not limited to):

- Access to the site for delivery of the new building (with regards to students on site, road closures, movement over softer/unsealed ground, etc).
- Access to the site for contractors to prepare the site and place and connect the relocatable structure (with regards to students on site and parking requirements).

11.0 HISTORIC, HERITAGE AND CULTURAL CONSIDERATIONS

It is understood that:

- There is no known site archaeological data.
- There are no cultural considerations or activities required to be adhered to or performed before works are undertaken on the proposed development.
- There are no registered historic buildings that may be affected by proposed works.
- There are no heritage buildings or items that may be affected by proposed works.

12.0 LIMITATIONS

This report was completed for the client based on the supplied brief and proposed development of the site at the time that this assessment was completed. Recommendations within this report are site specific in relation to the brief and should not be used for any other development or by any other client without further review and approval from Phoenix Consulting Engineers.

Our findings and recommendations are based on the limited testing locations conducted to infer probable geotechnical site characterisation. The inferences, extrapolations, and assumptions cannot be guaranteed to be the actual ground conditions due to potential variability and nature of subsoil conditions. If the actual ground conditions are found to be different from what has been described in this report, the matter should be referred back immediately to Phoenix Consulting Engineers before proceeding with works.

13.0 REFERENCES

Auckland Council GD01 (2017), *Stormwater Management Devices in the Auckland Region.*

Auckland Regional Council Technical Publication no. 58 (TP58): *On-Site Wastewater Systems: Design and Management Manual*

Building Industry Authority (2002), *Approved Document for New Zealand Building Code Surface Water, Clause E1*

Far North District Council, *FNDC Maps*, accessed on 10 November 2021 *https://fndc.maps.arcgis.com/apps/webappviewer/index.html?id=9b351ce681e34ec29443ae1a6468cc2c*

GNS Science (2014), *New Zealand Geology Web Map*, accessed on 10 November 2021 http://data.gns.cri.nz/geology/.

Isaac, M.J. (compiler) 1996, *Institute of Geological & Nuclear Sciences, Map 1: Kaitaia (Scale 1:250,000)*. Retrieved from GNS website.

New Zealand Building Code (1992), *Clause E1*

New Zealand Geotechnical Database, accessed on 10 November 2021 https://www.nzgd.org.nz/arcgismapviewer/mapviewer.aspx

New Zealand Geotechnical Society (2005), Guidelines for the Field Classification and Description of Soil and Rock for Engineering Purposes.

Northland Regional Council, *Hazard Maps*, accessed on 17 November 2021 *https://nrcgis.maps.arcgis.com/apps/webappviewer/index.html?id=81b958563a2c40ec89f2f60efc99b13b*

NZWERF (2004), *On-Site Stormwater Management Guidelines.*

NZ3604:2011, New Zealand Standard Timber Framed Buildings.

APPENDIX A – SITE LOCATION

Far North Maps

Far North District Council
Te Kaunihera o Tai Tokerau ki te Raki

0 0 0 0 km

Projection NZTM2000. Datum NZGD2000. Scale:1:2,257

Created: 10/11/2021

APPENDIX B – REFERENCE & ARCHITECTURAL PLANS

SHEET INDEX - OUTLINE PLAN OF WORKS		
SHEET ID	**SHEET NAME**	REV ID
A000	COVER PAGE	A - WIP
A001	PROPOSED SITE PLAN	A - WIP
A002	PROPOSED MODULE LOCATION	A - WIP
A100	MODULE 1 AND TOILET BLOCK GROUND FLOOR PLAN	A - WIP
A101	MODULE 2 GROUND FLOOR PLAN	A - WIP
A120	MODULE 1 AND TOILET BLOCK ROOF PLAN	A - WIP
A121	MODULE 2 ROOF PLAN	A - WIP
A200	MODULE 1, 2 AND TOILET BLOCK ELEVATIONS	A - WIP
A201	TOILET BLOCK ELEVATIONS	A - WIP
A202	MODULE 1, 2 AND TOILET BLOCK ELEVATIONS	A - WIP
A203	MODULE 1 AND 2 ELEVATIONS	A - WIP
A220	MODULE 1, 2 AND TOILET BLOCK SECTIONS	A - WIP
A221	MODULE 1, 2 AND TOILET BLOCK SECTIONS	A - WIP

TKKM o TUTUTARAKIHI SCHOOL

DOUBLE MODULAR BUILDINGS AND TOILET BLOCK FOR MODULAR CLASSROOMS LTD

RESOURCE CONSENT
MARCH 2022

RESPOND —— ARCHITECTS

TKKM o TUTUTARAKIHI SCHOOL

Lot 1 DP 203524

PROPOSED CAR PARK PROVISIONS
8x NORMAL CAR PARKS
PROVIDED ON SCHOOL GROUNDS
WITH 1x ACCESSIBLE CAR PARK

NEW LOT BOUNDARY

NEW PLAYING FIELDS

EXISTING GRAVEL CAR PARK TO BE MODIFIED AS REQUIRED TO MEET NECESSARY PARKING PROVISIONS

EXISTING BUILDING TO BE REFURBISHED (BY OTHERS)

47.07 m²

REFURBISHED BUILDING

27.48 m²

8x NORMAL CAR PARKS TO FOR 4x NEW CLASSROOMS

1x ACCESSIBLE CAR PARK

390.00 m²

SITE AREA
8233m2

NEW PLAYING FIELDS

EXISTING GRASS AREA

255.49 m²

120.00 m²

NEW LANDSCAPED AREA

NEW BUS STOP

EXISTING HOUSE

METAL DRIVEWAY

EXISTING SHED

PROPOSED LOCATION OF NEW MODULAR BUILDINGS
2x DOUBLE MODULES AND 1x TOILET BLOCK WITH DECK, RAMP AND STEPS

11.5m TO ROAD

EXISTING GRASS AREA

WIRELESS ROAD

EXISTING BARN

EXISTING SHED

EXISTING DWELLING

Lot 1 DP 182864

Lot 2 DP 43568

Lot 1 DP 43568

Lot 1 DP 39092

Lot 2 DP 33841

Lot 1 DP 193975

Lot 1 DP 145587

Lot 1 DP 79534

36 35 31 27 23 12

SS 10

1 - SITE PLAN
Scale 1:500

PROJECT INFORMATION

SITE ADDRESS:	32 WIRELESS ROAD KAITAIA 0482
LEGAL DESCRIPTION:	LOT 1 DP 203524
WIND ZONE:	HIGH
EARTHQUAKE ZONE:	1
RAINFALL INTENSITY:	80 - 90
EXPOSURE ZONE:	C
CLIMATE ZONE:	1
SITE AREA:	6699 sq.km
GROUND FLOOR AREA:	MODULE 1 = 165m² MODULE 2 = 165m² TOILET BLOCK = 26m²

FENCING LEGEND

- EXISTING SCHOOL FENCE TO REMAIN
- EXISTING TIMBER FENCE TO BE REFURBISHED INTO AN ACOUSTIC TIMBER FENCE (BY OTHERS). ENSURE FENCE IS 2m HIGH WITH SOLID PALING WITH MINIMUM DENSITY OF 10kg /m2 (OR MINIMUM 20mm THICK BOARDS) ALONG WESTERN BOUNDARY AS SHOWN. PALINGS TO BE OVERLAPPED OR CLOSE BOARDED WITH BATTENS OVER THE GAPS. NO SPACE UNDER FENCE AT THE GROUND LEVEL
- NEW 1.8m TIMBER FENCE ALONG BOUNDARY (BY OTHERS)

DRAINAGE LEGEND

- SS — PUBLIC WASTE WATER MAIN
- PUBLIC WATER MAIN SUPPLY

NOTE: GIS DATAINDICATES THAT PUBLIC STORMWATER SERVICES ARE NOT ON SITE OR WITHIN BOUNDARIES.

OVERLAND FLOW PATHAND FLOODING LEGEND

- RIVER FLOOD HAZARD ZONE - 100yr EXTENT
- RIVER FLOOD HAZARD ZONE - 50yr EXTENT
- RIVER FLOOD HAZARD ZONE - 10yr EXTENT
- OVERLAND FLOW PATH
- EXISTING DEVELOPMENT 100yr AVERAGE RETURN INTERVAL FLOODPLAIN
- EXISTING DEVELOPMENT 10yr AVERAGE RETURN INTERVAL FLOODPLAIN

2 - PROPOSED SITE LOCATION
Scale N.T.S

RESPOND —— ARCHITECTS

NOTES
1. ALL DIMENSIONS TO BE CHECKED ON SITE. WRITTEN DIMENSIONS ONLY TO BE USED. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.
2. REFER TO ALL DETAIL DWGS, STRUCTURAL, MECHANICAL & SERVICE DWGS BEFORE COMMENCING WORK. REFER ANY DISCREPANCIES TO THE ENGINEER TO THE CONTRACT.
3. ALL DRAWINGS TO BE READ IN CONJUNCTION WITH SCOPE OF WORKS.
4. ALL DRAWINGS AND SPECIFICATIONS REMAIN THE COPYRIGHT PROPERTY OF "PRENDOS NEW ZEALAND LIMITED TRADING AS RESPOND ARCHITECTS" AND SHALL BE CONFIDENTIAL UNDER SECTION 27(3) OF THE BUILDING ACT AND SECTION 42 OF THE RESOURCE MANAGEMENT ACT.

Rev	Issue Name	Date
A - WIP	OUTLINE PLAN OF WORKS	Work in Progress

PROJECT: TKKM o TUTUTARAKIHI SCHOOL

CLIENT: MODULAR CLASSROOMS LTD

DRAWING TITLE: PROPOSED SITE PLAN

N

PURPOSE: RESOURCE CONSENT
DESIGNED: WR
SCALE @ A1 / A3: AS SHOWN
DATE: 16/03/2022
JOB NO.: 034102049
DWG NO.: A001
REVISION: A - WIP

Lot 1 DP 203524

Lot 1 DP 182864

PROPOSED CAR PARK PROVISIONS
8x NORMAL CAR PARKS
PROVIDED ON SCHOOL GROUNDS
WITH 1x ACCESSIBLE CAR PARK

34,136

NEW LOT BOUNDARY

EXISTING FENCE TO REMAIN

NEW PLAYING FIELDS

EXISTING FENCE TO REMAIN

EXISTING FENCE TO REMAIN

NEW LOT BOUNDARY

EXISTING FENCE AND GATE IN LINE WITH RAMP HAND RAIL

40,994

EXISTING BUILDING TO BE REFURBISHED (BY OTHERS)

NEW COVERED DECK TO EXISTING BUILDING (BY OTHERS)

3,000 FENCE TO BLDG

47.07 m²

REFURBISHED BUILDING
155.00 m²

NEW 1.8m TIMBER FENCE ALONG BOUNDARY (BY OTHERS)

NEW LOT BOUNDARY

68,400 FENCE TO FENCE

EXISTING TIMBER FENCE TO BE REFURBISHED INTO AN ACOUSTIC TIMBER FENCE (BY OTHERS), REFER TO LEGEND FOR DESIGN SPECIFICATIONS

59,000 (LENGTH OF ACOUSTIC FENCE - C.O.S)

14,783 (C.O.S)

NEW CONCRETE PATHWAYS

NEW TREES PROPOSED TO SITE

1,406 PATH

27.48 m²

EXISTING RAMP

3,000

2,000 PATH

NEW CONCRETE PATHWAY (1.2m WIDE) AROUND CAR PARK

8x NORMAL CAR PARKS TO FOR 4x NEW CLASSROOMS

EXISTING SERVICE BOX TO REMAIN (ACTUAL LOCATION TO BE DETERMINED ON SITE)

NEW GRAVEL CAR PARK
777.56 m²

NP

1x ACCESSIBLE CAR PARK

EXISTING FENCE TO BE REPLACED WITH NEW 2.4m WIDE GATE AND 1.8m HIGH TIMBER FENCE (LOCATION BETWEEN SCHOOL AND PARKING) BY OTHERS

NEW DIRECTIONAL ARROWS FOR ONE-WAY SYSTEM AS RECOMMENDED IN TRAFFIC REPORT

390.00 m²

1,200 PATH

NEW CONCRETE PATHWAY (1.2m WIDE) AROUND CAR PARK

NEW PLAYING FIELDS

PROPOSED HARD COURTS WITH SHADE SAIL (SHOWN AS 15m x 26m)

CENTRAL ISLAND (GRASSED) WITH 6m RADIUS

R10,000

6,000 RADIUS

GRASS AREA

NEW ACCESS AND PARKING AS PER TRAFFIC ENGINEER REPORT

2,000 PATH

EARTH MOUND TO BE REMOVED TO ALLOW FOR NEW PAVING

PROPOSED ASTROTURF/PLAYGROUND WITH SHADE SAIL (SHOWN 12m x 10m)

NEW WAHAROA GATEWAY (BY OTHERS)

NEW LANDSCAPED AREA, ALLOW FOR PLANTING OF NATIVE TREES SUCH AS KOWHAI AND KAWAKAWA AND FRUIT TREES

120.00 m²

255.49 m²

2,750

NEW BUS STOP

3,000 TOPATH

TOILET BLOCK

NEW RAMP AND STAIRS

1,500 MIN.

12,000

6,000

16,105 EXISTING DRIVEWAY WIDTH

20,230 NEW DRIVEWAY WIDTH

MODULE 1

MODULE 2

2,500

2,500

6,000

PROPOSED LOCATION OF NEW MODULAR BUILDINGS
2x DOUBLE MODULES AND 1x TOILET BLOCK WITH DECK, RAMP AND STEPS

NEW 1.8m TIMBER FENCE ALONG BOUNDARY

11,537 TO ROAD

9,199 TO BDRY (C.O.S)

SITE AREA
8233m2

EXISTING GRASS AREA

EXISTING FENCE TO REMAIN

NEW 1.8m TIMBER FENCE ALONG BOUNDARY (BY OTHERS)

EXISTING HOUSE
97.00 m²

EXISTING FENCE TO REMAIN

METAL DRIVEWAY
218.00 m²

59,200 BOUNDARY

EXISTING SHED 60.00 m²

NEW 2.4m WIDE GATE AND 1.8m HIGH TIMBER FENCE (BY OTHERS)

PROPOSED WATER TANKS - LOCATION TO BE CONFIRMED BY CIVIL ENGINEER

NEW 3.66m WIDE GATE AND 1.8m HIGH TIMBER FENCE (BY OTHERS)

EXISTING GRASS AREA

1 PROPOSED SITE PLAN
Scale 1:250

DRAINAGE LEGEND

SS — PUBLIC WASTE WATER MAIN

PUBLIC WATER MAIN SUPPLY

NOTE: GIS DATA INDICATES THAT PUBLIC STORMWATER SERVICES ARE NOT ON SITE OR WITHIN BOUNDARIES.

PROJECT INFORMATION

SITE ADDRESS:	32 WIRELESS ROAD KAITAIA 0482
LEGAL DESCRIPTION:	LOT 1 DP 203524
WIND ZONE:	HIGH
EARTHQUAKE ZONE:	1
RAINFALL INTENSITY:	80 - 90
EXPOSURE ZONE:	C
CLIMATE ZONE:	1
SITE AREA:	6699 sq.km
GROUND FLOOR AREA:	MODULE 1 = 165m² MODULE 2 = 165m² TOILET BLOCK = 26m²

FENCING LEGEND

EXISTING SCHOOL FENCE TO REMAIN

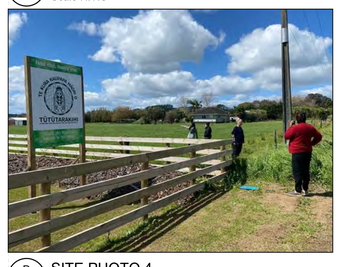
EXISTING TIMBER FENCE TO BE REFURBISHED INTO AN ACOUSTIC TIMBER FENCE (BY OTHERS). ENSURE FENCE IS 2m HIGH WITH SOLID PALING WITH MINIMUM DENSITY OF 10kg /m2 (OR MINIMUM 20mm THICK BOARDS) ALONG WESTERN BOUNDARY AS SHOWN. PALINGS TO BE OVERLAPPED OR CLOSE BOARDED WITH BATTENS OVER THE GAPS. NO SPACE UNDER FENCE AT THE GROUND LEVEL

NEW 1.8m TIMBER FENCE ALONG BOUNDARY (BY OTHERS)

A - SITE PHOTO 1
Scale N.T.S

B - SITE PHOTO 2
Scale N.T.S

C - SITE PHOTO 3
Scale N.T.S



D - SITE PHOTO 4
Scale N.T.S

RESPOND — ARCHITECTS

NOTES
1. ALL DIMENSIONS TO BE CHECKED ON SITE. WRITTEN DIMENSIONS ONLY TO BE USED. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.
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Rev	Issue Name	Date
A - WIP	OUTLINE PLAN OF WORKS	Work in Progress

PROJECT
TKKM o TUTUTARAKIHI SCHOOL

CLIENT
MODULAR CLASSROOMS LTD

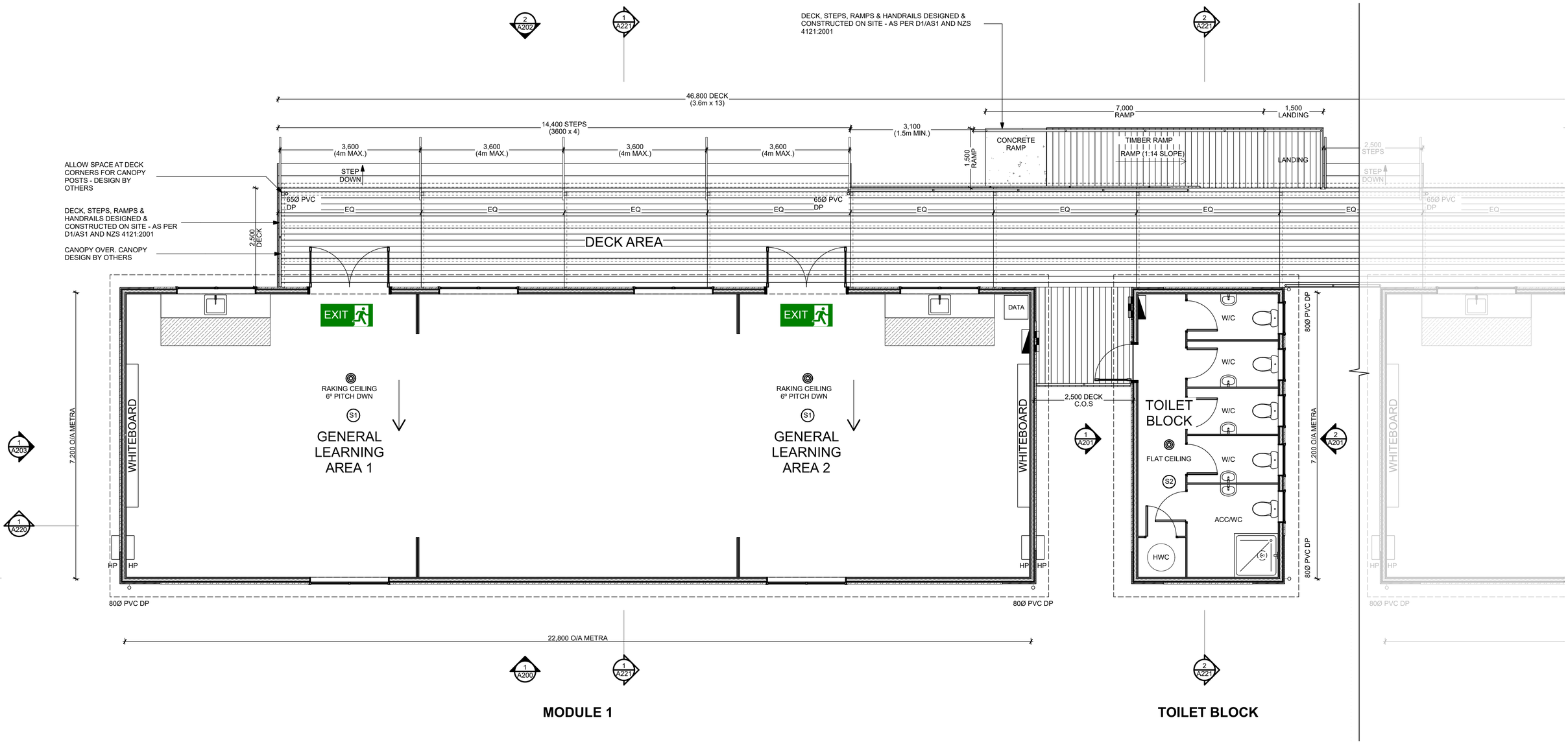
DRAWING TITLE
PROPOSED MODULE LOCATION

N

PURPOSE: RESOURCE CONSENT
DWG NO.: A002
DESIGNED: WR
SCALE @ A1 / A3: AS SHOWN
DATE: 16/03/2022
JOB NO.: 034102049
REVISION: A - WIP

LEGEND

- DISTRIBUTION BOARD (INTERNAL)
- METER BOARD (EXTERNAL)
- SMOKE ALARM AS PER FIRE REPORT (IN ACCORDANCE WITH NZS4512.2021)
- HP — HEATPUMP/ AC UNITS
- S1 — SECTION 1 - GENERAL LEARNING AREAS
- S2 — SECTION 2 - TOILET BLOCK
- EXIT — EXIT ILLUMINATED SIGNS TO COMPLY WITH F8/AS1



MODULE 1

TOILET BLOCK

RESPOND — ARCHITECTS

NOTES
1. ALL DIMENSIONS TO BE CHECKED ON SITE. WRITTEN DIMENSIONS ONLY TO BE USED. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.
2. REFER TO ALL DETAIL DWGS, STRUCTURAL, MECHANICAL & SERVICE DWGS BEFORE COMMENCING WORK. REFER ANY DISCREPANCIES TO THE ENGINEER TO THE CONTRACT.
3. ALL DRAWINGS TO BE READ IN CONJUNCTION WITH SCOPE OF WORKS.
4. ALL DRAWINGS AND SPECIFICATIONS REMAIN THE COPYRIGHT PROPERTY OF "PRENDOS NEW ZEALAND LIMITED TRADING AS RESPOND ARCHITECTS" AND SHALL BE CONFIDENTIAL UNDER SECTION 27(3) OF THE BUILDING ACT AND SECTION 42 OF THE RESOURCE MANAGEMENT ACT.

Rev	Issue Name	Date
A-WIP	OUTLINE PLAN OF WORKS	Work in Progress

PROJECT: TKKM o TUTUTARAKIHI SCHOOL

CLIENT: MODULAR CLASSROOMS LTD

DRAWING TITLE: MODULE 1 AND TOILET BLOCK GROUND FLOOR PLAN

***NOTE:** REFER TO SITE PLAN FOR NORTH POINT

PURPOSE: RESOURCE CONSENT

DESIGNED: WR

SCALE @ A1 / A3: 1:50/1:100

DATE: 16/03/2022

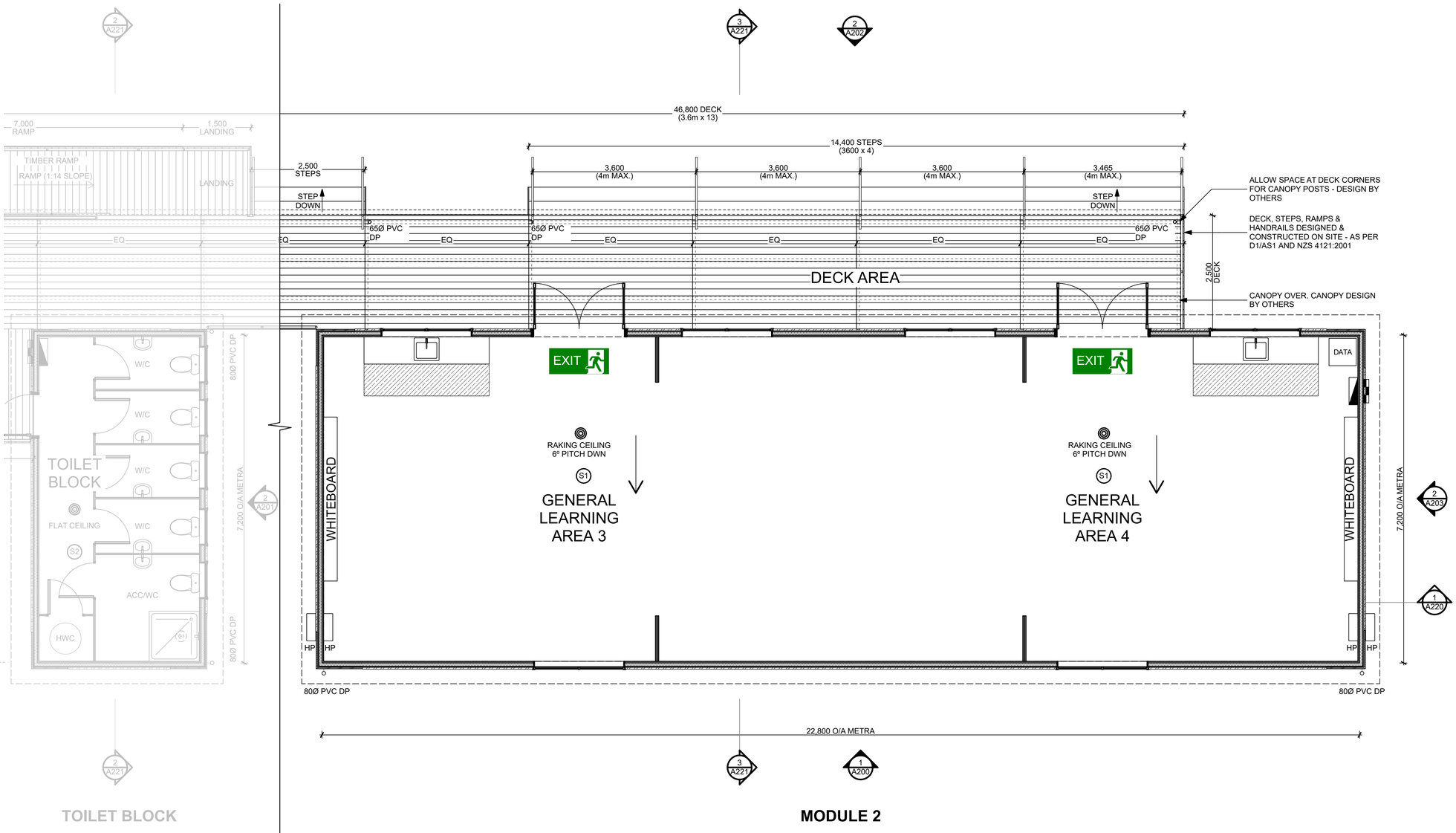
JOB NO.: 034102049

DWG NO.: A100

REVISION: A - WIP

LEGEND

- DISTRIBUTION BOARD (INTERNAL)
- METER BOARD (EXTERNAL)
- SMOKE ALARM AS PER FIRE REPORT (IN ACCORDANCE WITH NZS4512.2021)
- HP — HEATPUMP/ AC UNITS
- S1 — SECTION 1 - GENERAL LEARNING AREAS
- S2 — SECTION 2 - TOILET BLOCK
- EXIT — EXIT ILLUMINATED SIGNS TO COMPLY WITH F8/AS1



RESPOND — ARCHITECTS

NOTES

1. ALL DIMENSIONS TO BE CHECKED ON SITE. WRITTEN DIMENSIONS ONLY TO BE USED. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.
2. REFER TO ALL DETAIL DWGS, STRUCTURAL, MECHANICAL & SERVICE DWGS BEFORE COMMENCING WORK. REFER ANY DISCREPANCIES TO THE ENGINEER TO THE CONTRACT.
3. ALL DRAWINGS TO BE READ IN CONJUNCTION WITH SCOPE OF WORKS.
4. ALL DRAWINGS AND SPECIFICATIONS REMAIN THE COPYRIGHT PROPERTY OF "PRENDOS NEW ZEALAND LIMITED TRADING AS RESPOND ARCHITECTS" AND SHALL BE CONFIDENTIAL UNDER SECTION 27(3) OF THE BUILDING ACT AND SECTION 42 OF THE RESOURCE MANAGEMENT ACT.

Rev	Issue Name	Date
A-WIP	OUTLINE PLAN OF WORKS	Work in Progress

PROJECT
TKKM o TUTUTARAKIHI SCHOOL

CLIENT
MODULAR CLASSROOMS LTD

DRAWING TITLE
MODULE 2 GROUND FLOOR PLAN

***NOTE:**
REFER TO SITE PLAN FOR NORTH POINT

PURPOSE
RESOURCE CONSENT

DESIGNED
WR

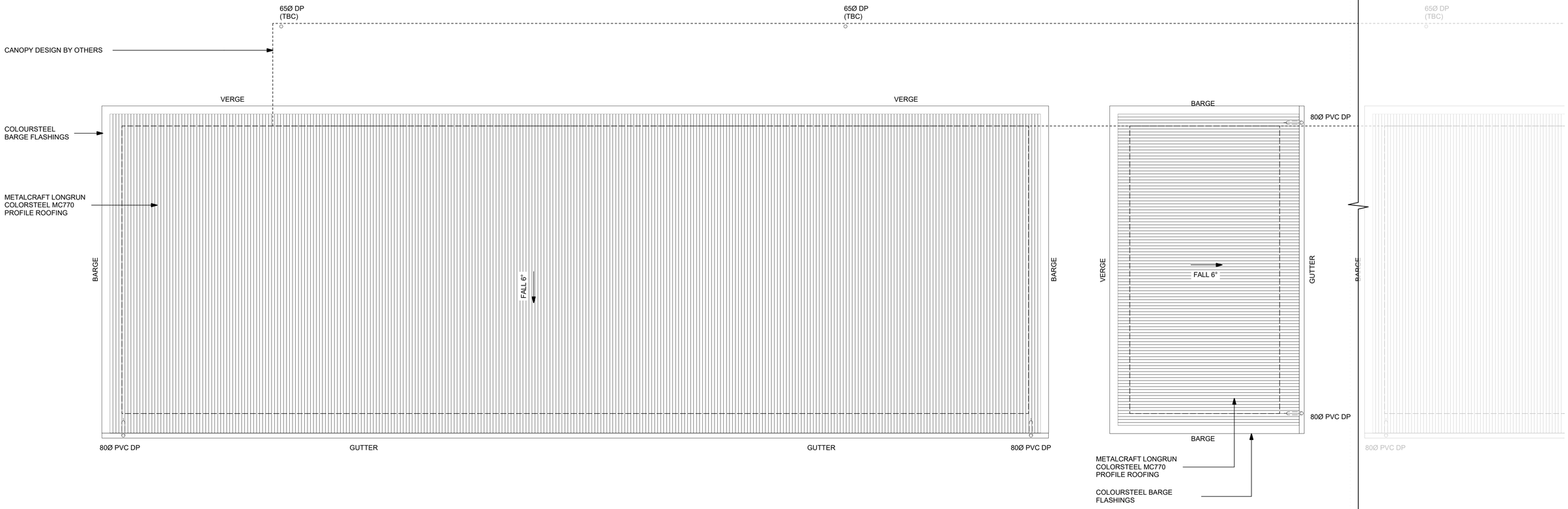
SCALE @ A1 / A3
1:50/1:100

DATE
16/03/2022

JOB NO.
034102049

DWG NO.
A101

REVISION
A - WIP



MODULE 1

TOILET BLOCK

RESPOND —— ARCHITECTS

NOTES

1. ALL DIMENSIONS TO BE CHECKED ON SITE. WRITTEN DIMENSIONS ONLY TO BE USED. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.
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3. ALL DRAWINGS TO BE READ IN CONJUNCTION WITH SCOPE OF WORKS.
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Rev.	Issue Name	Date
A-WIP	OUTLINE PLAN OF WORKS	Work in Progress

PROJECT
TKKM o TUTUTARAKIHI SCHOOL

CLIENT
MODULAR CLASSROOMS LTD

DRAWING TITLE
MODULE 1 AND TOILET BLOCK ROOF PLAN

*NOTE:
REFER TO SITE PLAN FOR NORTH POINT

PURPOSE
RESOURCE CONSENT

DESIGNED
WR

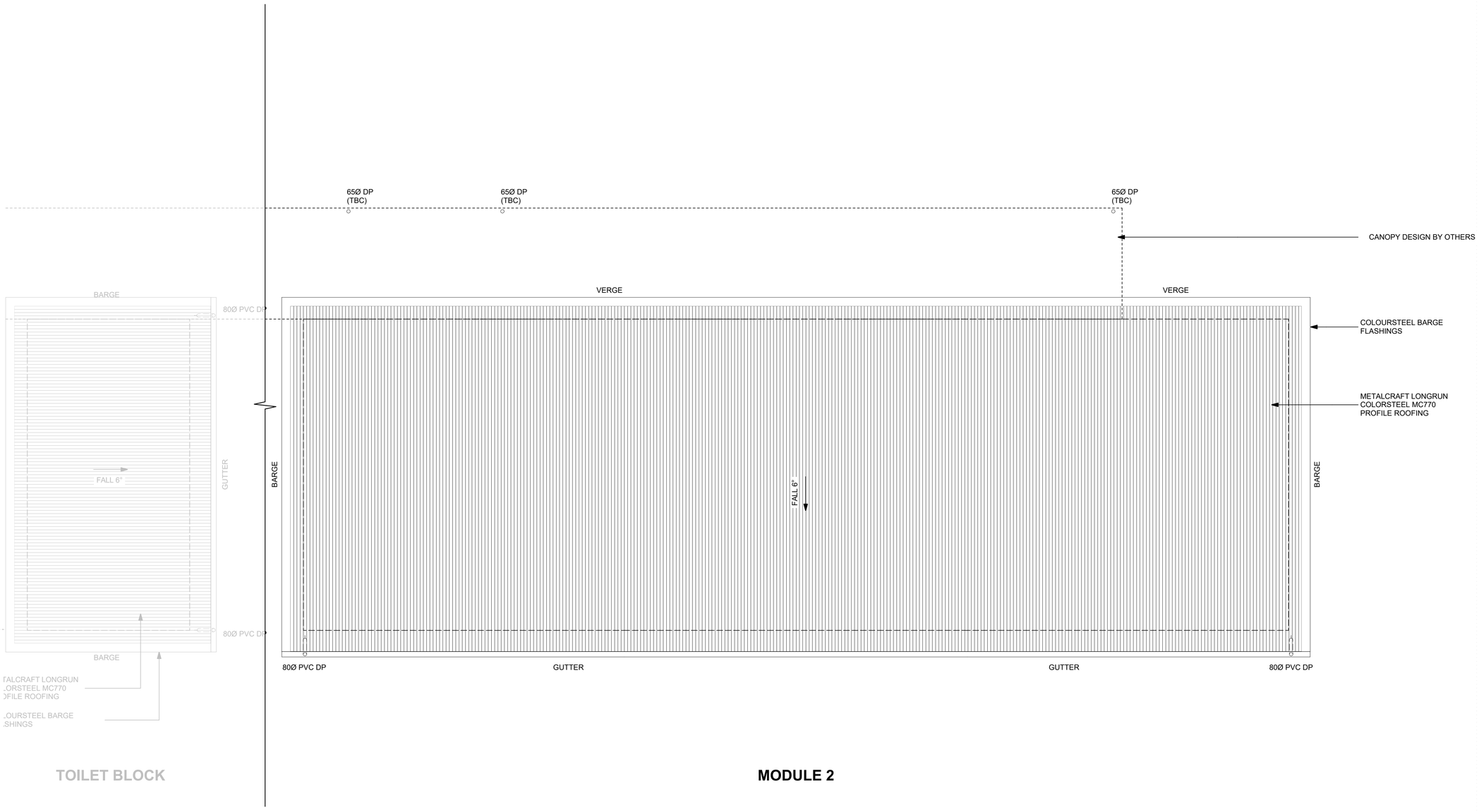
SCALE @ A1 / A3
1:50/1:100

DATE
16/03/2022

JOB NO.
034102049

DWG NO.
A120

REVISION
A - WIP



MODULE 2

RESPOND —— ARCHITECTS

NOTES

1. ALL DIMENSIONS TO BE CHECKED ON SITE. WRITTEN DIMENSIONS ONLY TO BE USED. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.
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Rev.	Issue Name	Date
A-WIP	OUTLINE PLAN OF WORKS	Work in Progress

PROJECT
TKKM o TUTUTARAKIHI SCHOOL

CLIENT
MODULAR CLASSROOMS LTD

DRAWING TITLE
MODULE 2 ROOF PLAN

***NOTE:**
REFER TO SITE PLAN FOR NORTH POINT

PURPOSE
RESOURCE CONSENT

DESIGNED
WR

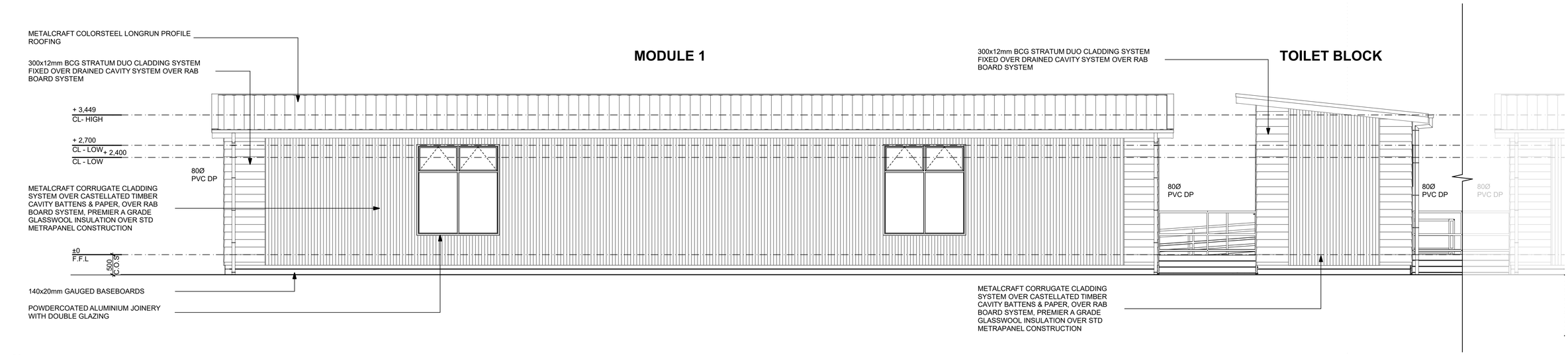
SCALE @ A1 / A3
1:50/1:100

DATE
16/03/2022

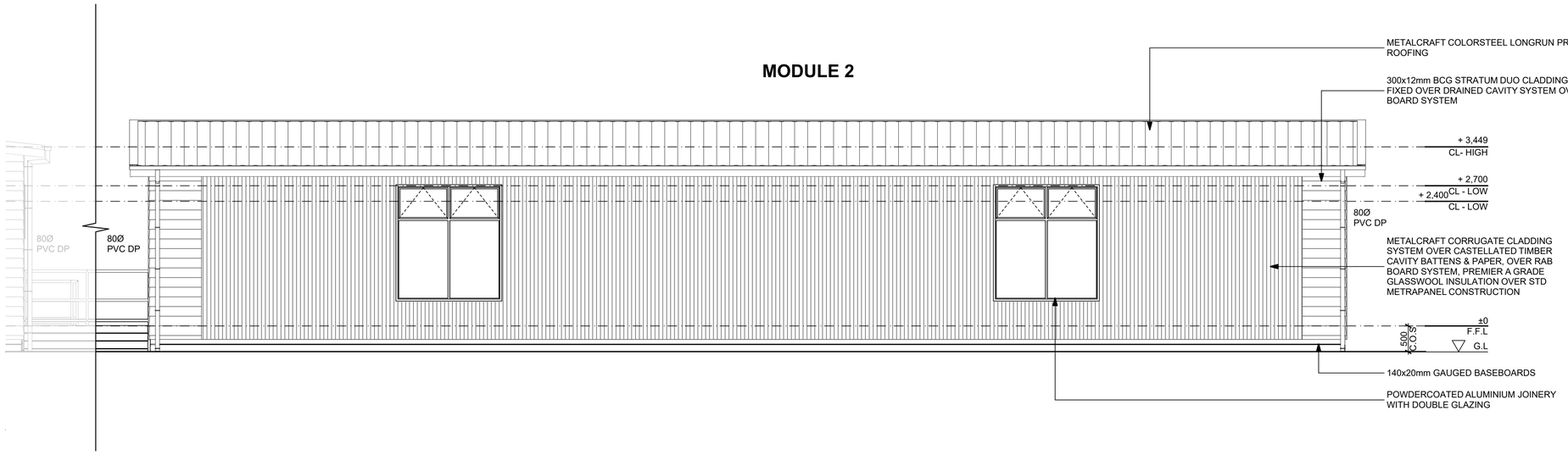
JOB NO.
034102049

DWG NO.
A121

REVISION
A - WIP



1 / A100 ELEVATION 1
SCALE: 1:50



2 / A101 ELEVATION 1
SCALE: 1:50

RESPOND —— ARCHITECTS

NOTES
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Rev	Issue Name	Date
A - WIP	OUTLINE PLAN OF WORKS	Work in Progress

PROJECT
TKKM o TUTUTARAKIHI SCHOOL

CLIENT
MODULAR CLASSROOMS LTD

DRAWING TITLE
MODULE 1, 2 AND TOILET BLOCK ELEVATIONS

PURPOSE
RESOURCE CONSENT

DESIGNED
WR

SCALE @ A1 / A3
1:50/1:100

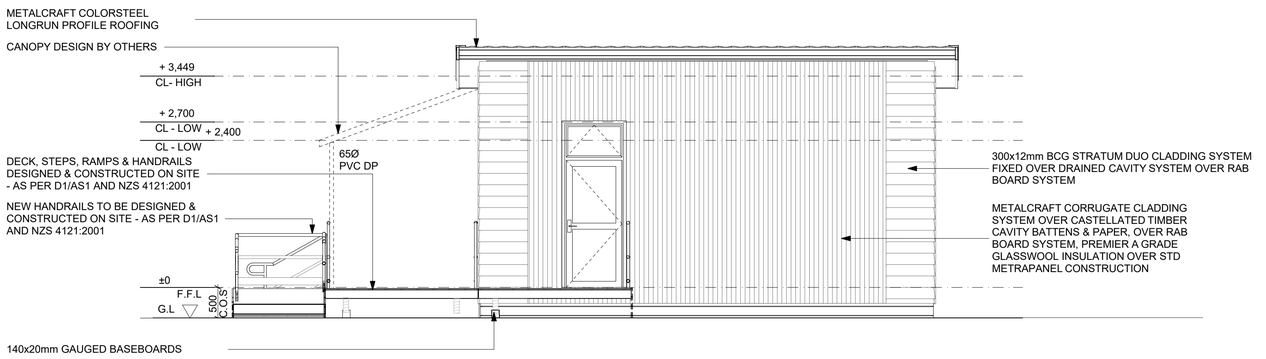
DATE
16/03/2022

JOB NO.
034102049

DWG NO.
A200

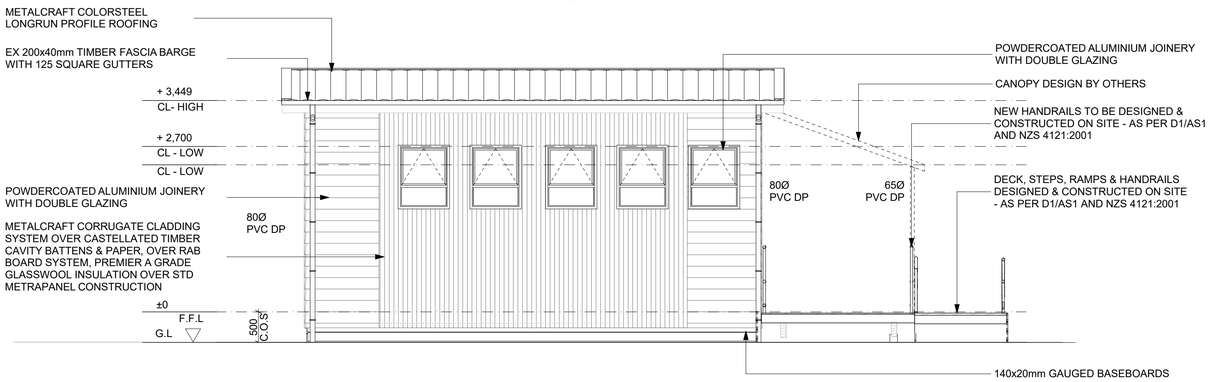
REVISION
A - WIP

TOILET BLOCK



1 / A100 TOILET BLOCK ELEVATION 1
Scale 1:50

TOILET BLOCK



2 / A100 TOILET BLOCK ELEVATION 2
Scale 1:50

RESPOND —— ARCHITECTS

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Rev	Issue Name	Date
A - WIP	OUTLINE PLAN OF WORKS	Work in Progress

PROJECT
TKKM o TUTUTARAKIHI SCHOOL

CLIENT
MODULAR CLASSROOMS LTD

DRAWING TITLE
TOILET BLOCK ELEVATIONS

PURPOSE
RESOURCE CONSENT

DESIGNED
WR

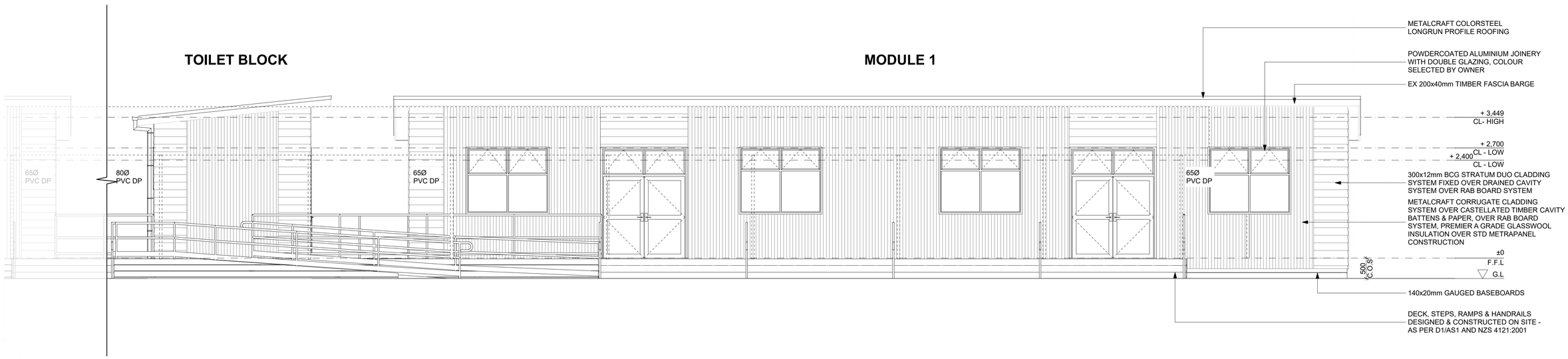
SCALE @ A1 / A3
1:50/1:100

DATE
16/03/2022

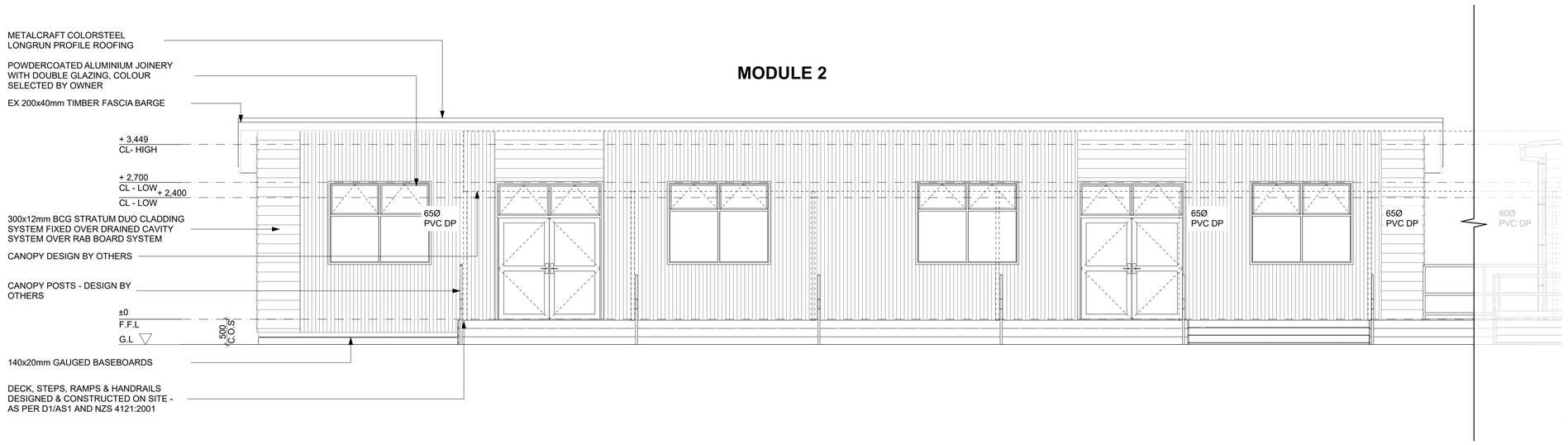
JOB NO.
034102049

DWG NO.
A201

REVISION
A - WIP



2 / A100 ELEVATION 2
Scale 1:50



2 / A101 ELEVATION 2
Scale 1:50

RESPOND —— ARCHITECTS

NOTES
1. ALL DIMENSIONS TO BE CHECKED ON SITE. WRITTEN DIMENSIONS ONLY TO BE USED. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.
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Rev	Issue Name	Date
A - WIP	OUTLINE PLAN OF WORKS	Work in Progress

PROJECT
TKKM o TUTUTARAKIHI SCHOOL

CLIENT
MODULAR CLASSROOMS LTD

DRAWING TITLE
MODULE 1, 2 AND TOILET BLOCK ELEVATIONS

PURPOSE
RESOURCE CONSENT

DESIGNED
WR

SCALE @ A1 / A3
1:50/1:100

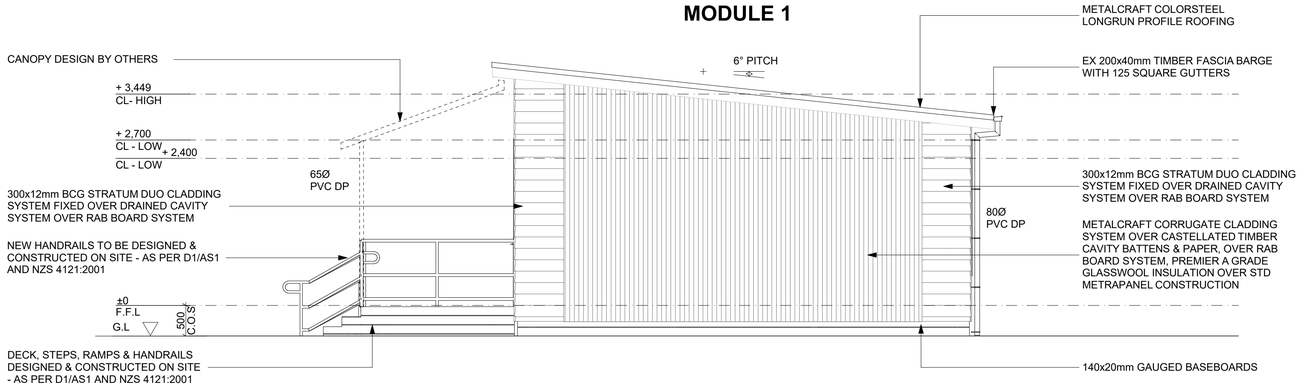
DATE
16/03/2022

JOB NO.
034102049

DWG NO.
A202

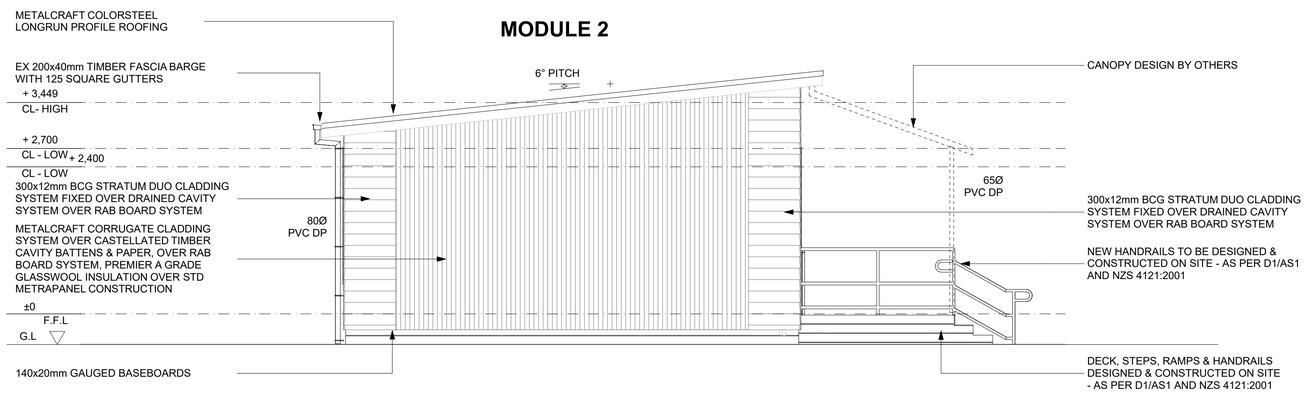
REVISION
A - WIP

MODULE 1



1 / A100 ELEVATION 3
Scale 1:50

MODULE 2



2 / A101 ELEVATION 4
Scale 1:50

RESPOND —— ARCHITECTS

NOTES
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Rev	Issue Name	Date
A - WIP	OUTLINE PLAN OF WORKS	Work in Progress

PROJECT
TKKM o TUTUTARAKIHI SCHOOL

CLIENT
MODULAR CLASSROOMS LTD

DRAWING TITLE
MODULE 1 AND 2 ELEVATIONS

PURPOSE
RESOURCE CONSENT

DESIGNED
WR

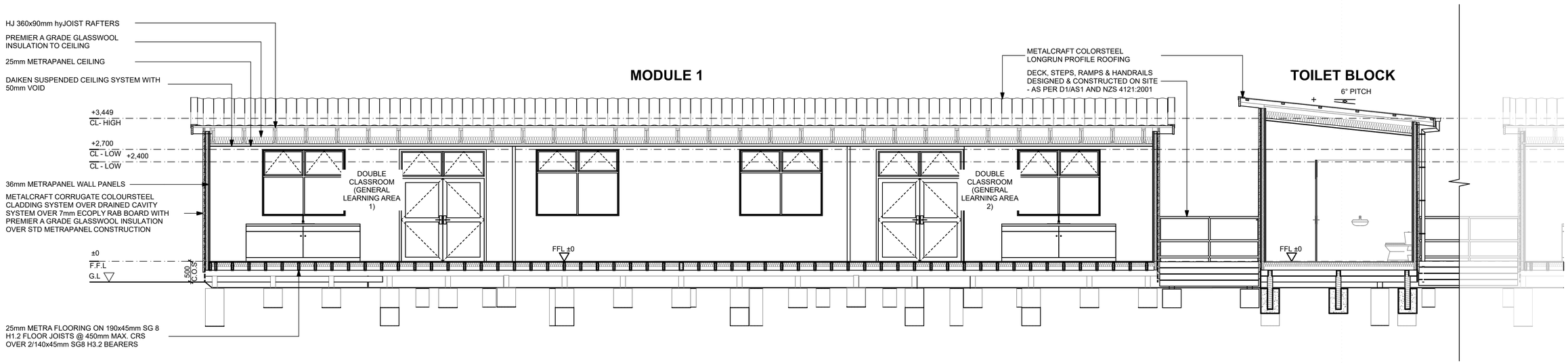
SCALE @ A1 / A3
1:50/1:100

DATE
16/03/2022

JOB NO.
034102049

DWG NO.
A203

REVISION
A - WIP



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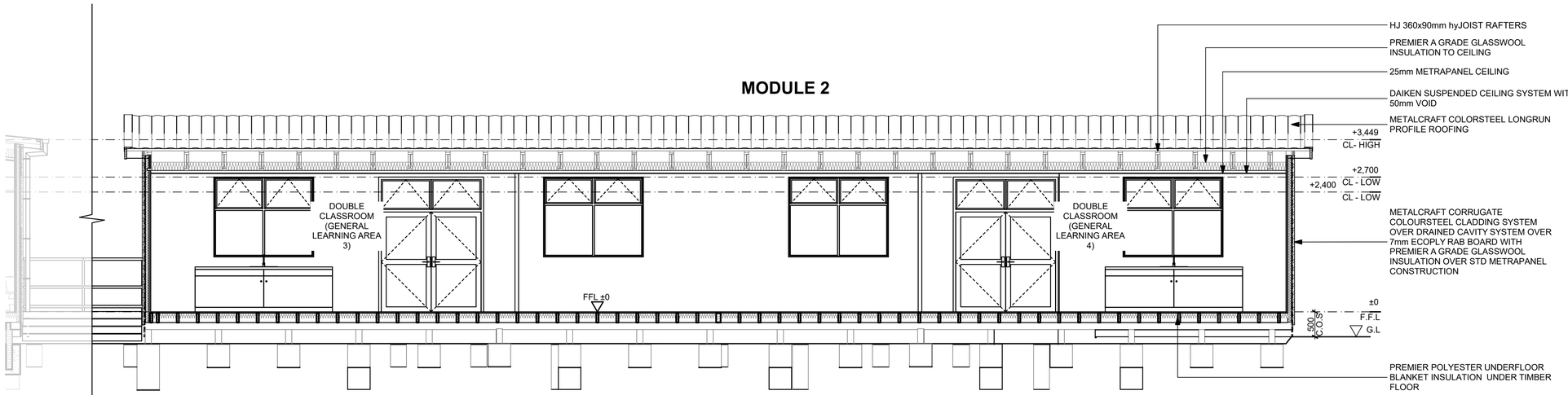
SCALE: 1:50



2 / A101 LONG SECTION
SCALE: 1:50

RESPOND —— ARCHITECTS

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Rev	Issue Name	Date
A - WIP	OUTLINE PLAN OF WORKS	Work in Progress

PROJECT
TKKM o TUTUTARAKIHI SCHOOL

CLIENT
MODULAR CLASSROOMS LTD

DRAWING TITLE
MODULE 1, 2 AND TOILET BLOCK SECTIONS

PURPOSE
RESOURCE CONSENT

DESIGNED
WR

SCALE @ A1 / A3
1:50/1:100

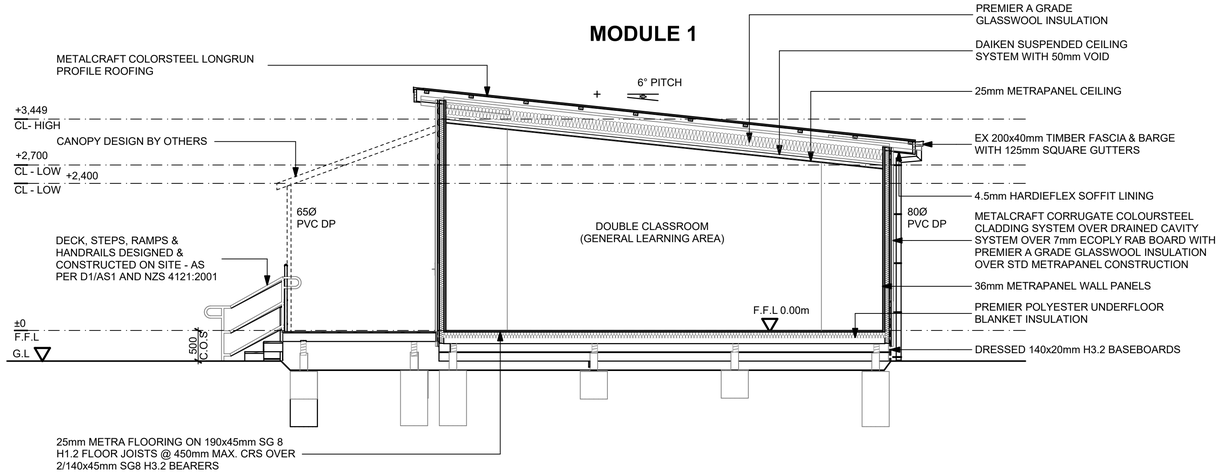
DATE
16/03/2022

JOB NO.
034102049

DWG NO.
A220

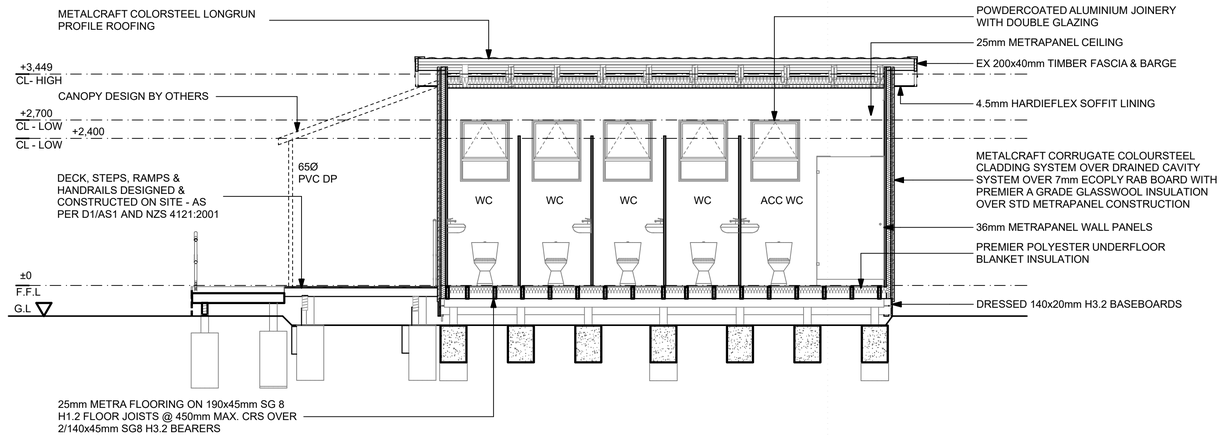
REVISION
A - WIP

MODULE 1



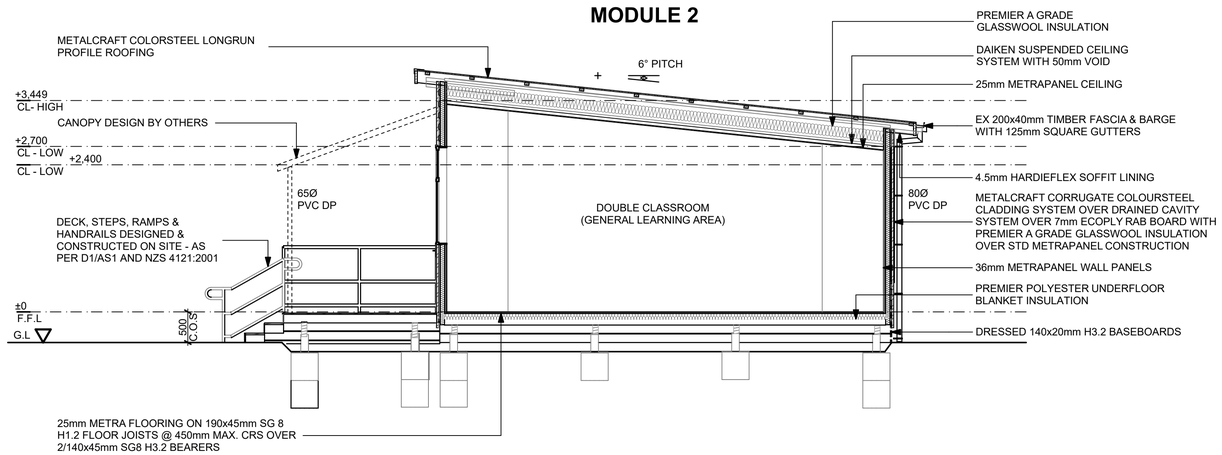
1 A100 MODULE 1 SECTION
SCALE: 1:50

TOILET BLOCK



2 A100 TOILET BLOCK SECTION
SCALE: 1:50

MODULE 2



3 A101 MODULE 2 SECTION
SCALE: 1:50

RESPOND —— ARCHITECTS

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Rev	Issue Name	Date
A - WIP	OUTLINE PLAN OF WORKS	Work in Progress

PROJECT
TKKM o TUTUTARAKIHI SCHOOL

CLIENT
MODULAR CLASSROOMS LTD

DRAWING TITLE
MODULE 1, 2 AND TOILET BLOCK SECTIONS

PURPOSE
RESOURCE CONSENT

DESIGNED
WR

SCALE @ A1 / A3
1:50/1:100

DATE
16/03/2022

JOB NO.
034102049

DWG NO.
A221

REVISION
A - WIP

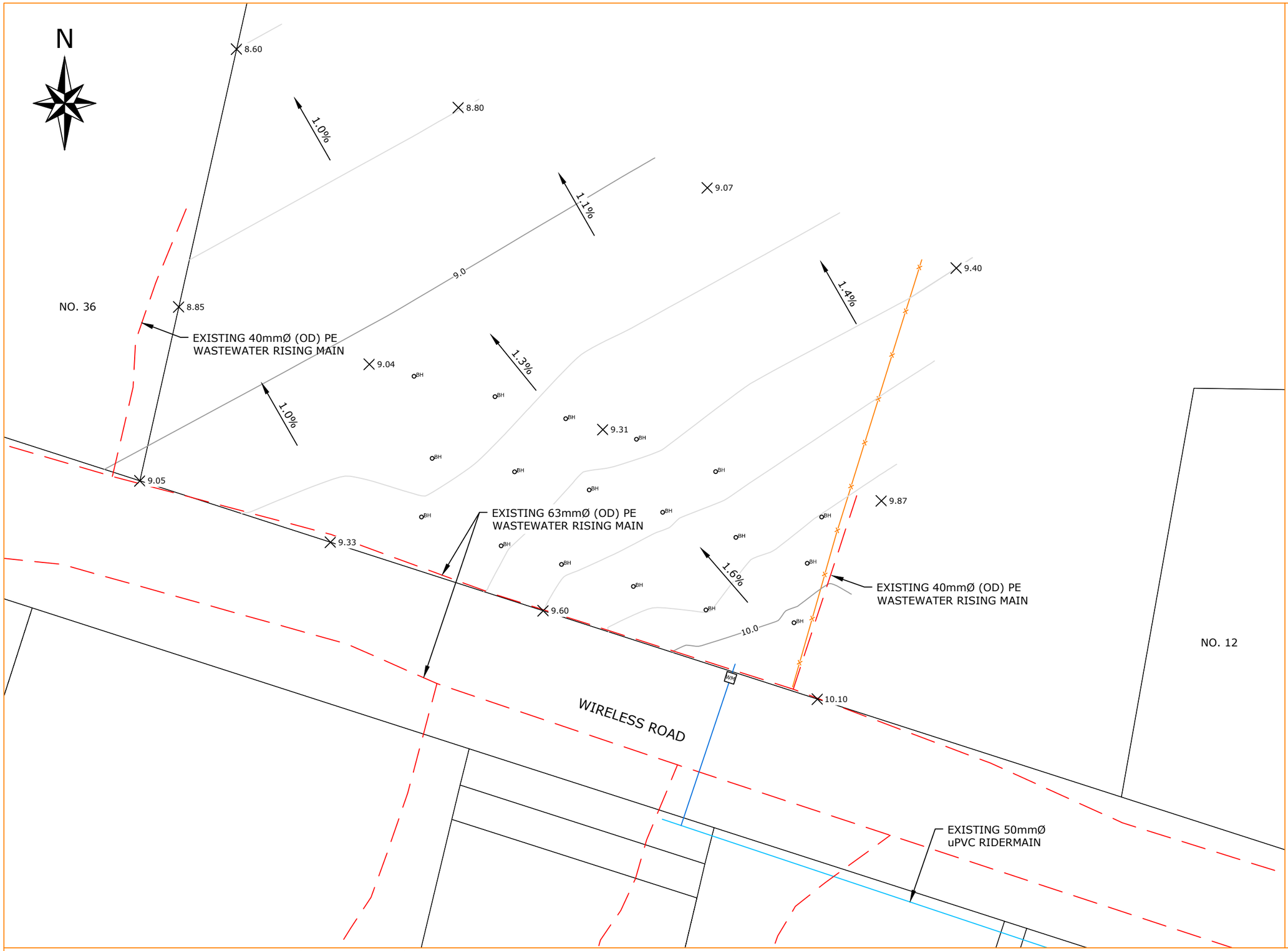
32 Wireless Road

Far North District Council
Te Kaunihera o Tai Tokerau ki te Raki

0 0 0 0 km

Projection NZTM2000. Datum NZGD2000. Scale:1:1,128

Created: 18/11/2021



NOTES:

1. PROPERTY BOUNDARIES ARE FOR INDICATIVE PURPOSES ONLY
2. COORDINATES ARE IN TERMS OF MT EDEN 2000
3. LEVELS ARE IN TERMS OF ONE TREE POINT 1964 LEVEL DATUM
4. CONTOURS INTERVALS ARE:
   MAJOR: 1.0m
   MINOR: 0.2m
5. WASTEWATER AND WATER LINE LOCATIONS ARE FOR INDICATIVE PURPOSES ONLY AND NEED TO BE LOCATED ON SITE

LEGEND:

- EX PROPERTY BOUNDARY
- 7.0 EX CONTOUR (MAJOR)
- EX CONTOUR (MINOR)
- EX BUILDING OUTLINE
- EX CONCRETE/ASPHALT
- EX FENCE LINE
- EX STORMWATER (PUBLIC)
- EX WASTEWATER (PUBLIC)
- EX WATER (PUBLIC)
- EX UNKNOWN SERVICE
- EX TREE LOCATION
- SW EX SW MANHOLE
- EX SW CATCHPIT
- WW EX WW MANHOLE
- PP EX POWERPOLE
- BH GPS BOREHOLE LOCATION

Phoenix Consulting Engineers Ltd
PO Box 939
Cambridge
07 560 3555
info@pce.net.nz

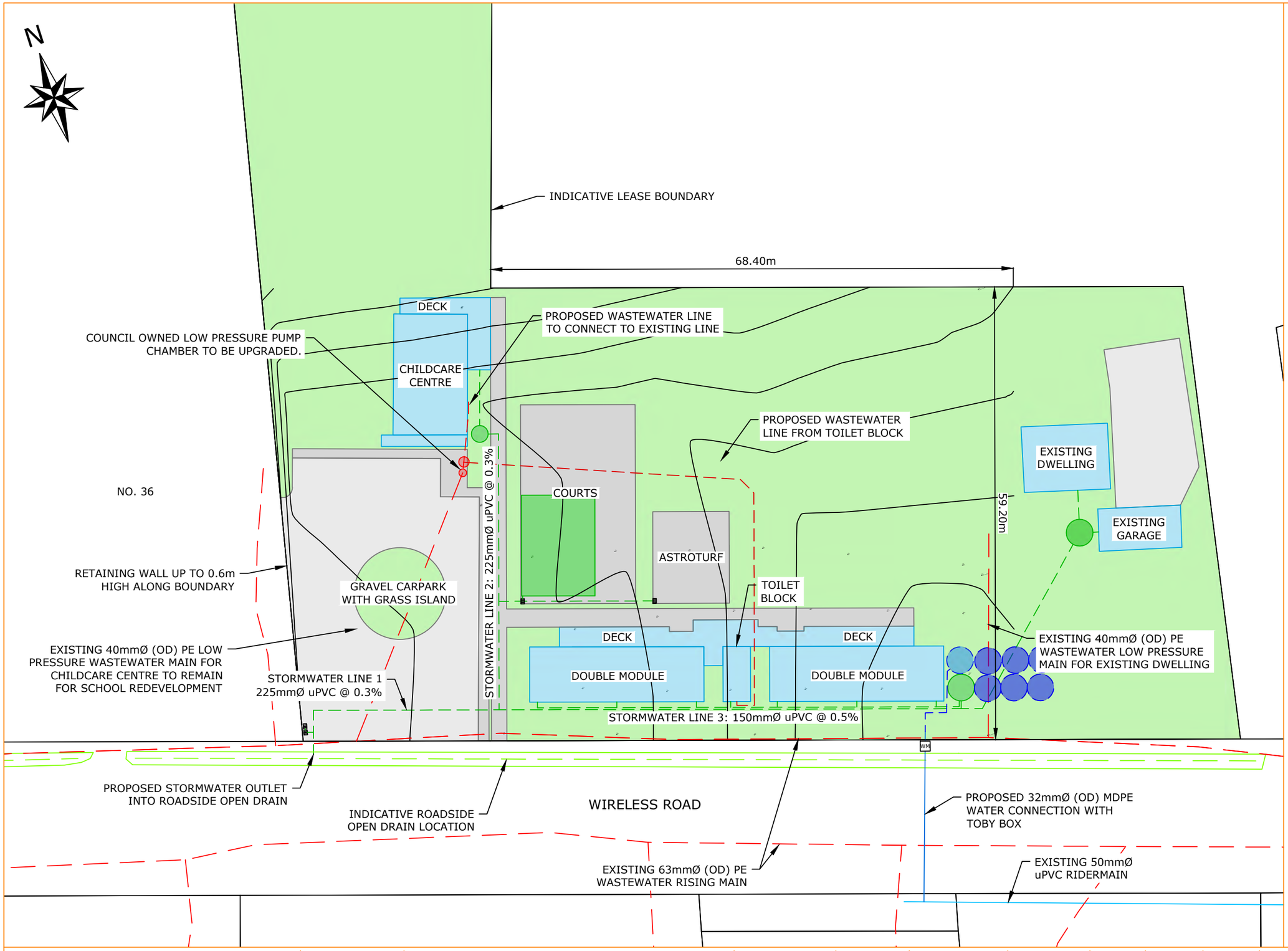
Site:	Project No.	Sheet	Scale (Original at A3)
TKKM O TUTUTARAKIHI	210541	C050	1:500 @ A3

Drawing: TOPOGRAPHICAL PLAN

Client: MODULAR CLASSROOMS LTD

Drawn	SM	11/21
Checked	SM	11/21
Approved	JD	11/21

Rev	Description	Drawn	Date
B	PLAN UPDATED	SM	02/22
A	TOPOGRAPHICAL SURVEY	SM	11/21



NOTES:

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2. COORDINATES ARE IN TERMS OF MT EDEN 2000
3. LEVELS ARE IN TERMS OF ONE TREE POINT 1964 LEVEL DATUM
4. CONTOURS INTERVALS ARE:
   MAJOR: 1.0m
   MINOR: 0.2m
5. WASTEWATER AND WATER LINE LOCATIONS ARE FOR INDICATIVE PURPOSES ONLY AND NEED TO BE LOCATED ON SITE

LEGEND:

- BUILDING AREA
- PR PERVIOUS AREA
- PR IMPERVIOUS AREA
- PR GRAVEL CARPARK
- EX PROPERTY BOUNDARY
- PR LEASE BOUNDARY
- 7.0 EX CONTOUR (MAJOR)
- EX CONTOUR (MINOR)
- 7.0 PR CONTOUR (MAJOR)
- PR CONTOUR (MINOR)
- EX BUILDING OUTLINE
- EX CONCRETE/ASPHALT
- EX FENCE LINE
- EX STORMWATER (PUBLIC)
- PR STORMWATER (PRIVATE)
- EX WASTEWATER (PUBLIC)
- EX WASTEWATER (PRIVATE)
- PR WASTEWATER (PRIVATE)
- EX WATER (PUBLIC)
- EX UNKNOWN SERVICE
- EX TREE LOCATION
- SW EX SW MANHOLE
- EX SW CATCHPIT
- WW EX WW MANHOLE
- PP EX POWERPOLE
- BH GPS BOREHOLE LOCATION

Phoenix Consulting Engineers Ltd
PO Box 939
Cambridge
07 560 3555
info@pce.net.nz

Site:	Project No.	Sheet	Scale (Original at A3)
TKKM O TUTUTARAKIHI	210541	C100	1:500 @ A3

Drawing: THREE WATERS LAYOUT PLAN

Client: MODULAR CLASSROOMS LTD

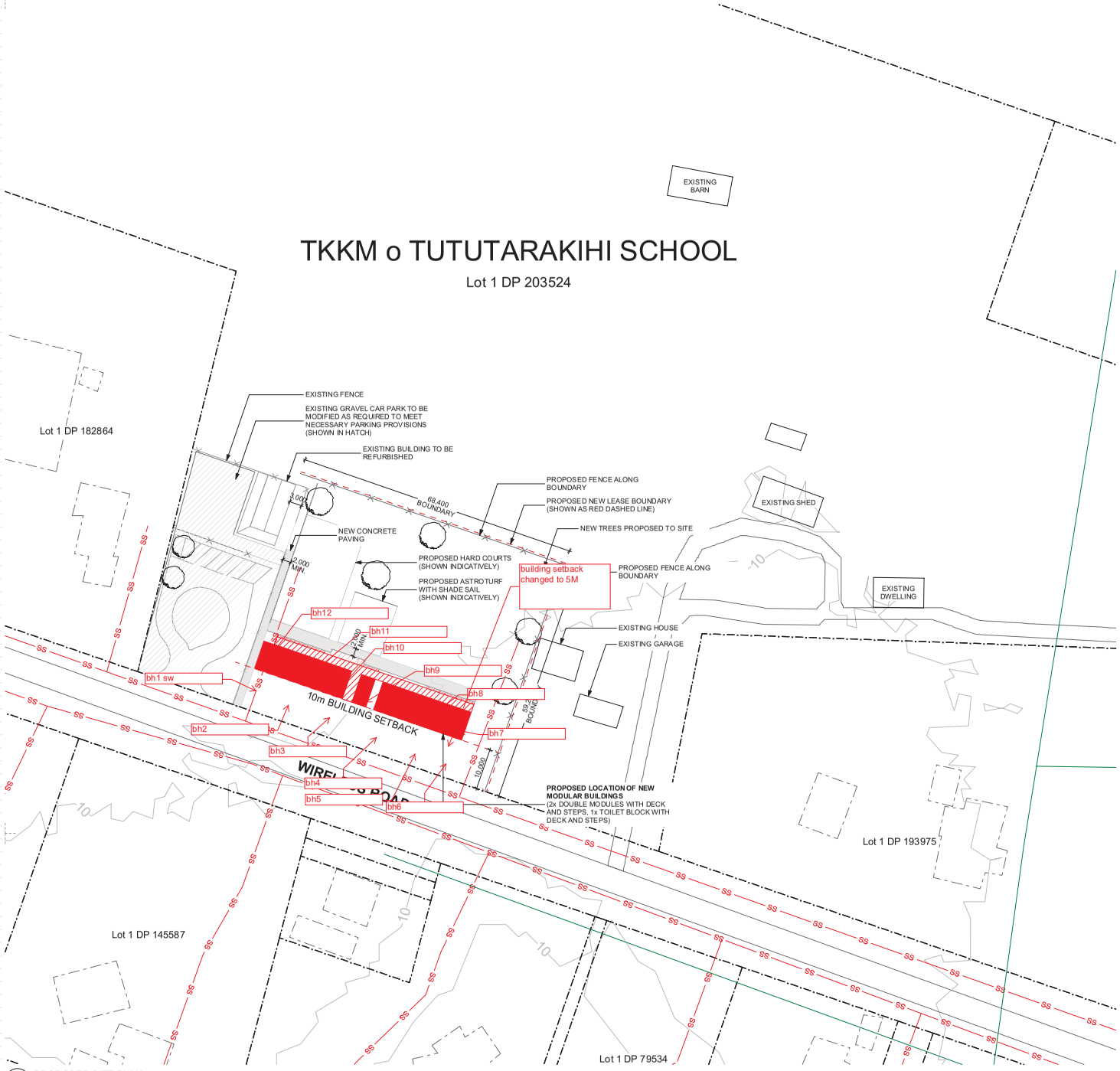
Drawn	SM	02/22
Checked	SM	02/22
Approved	JD	02/22

Rev	Description	Drawn	Date
C	WASTEWATER UPDATED	NP	08/22
B	ADDITIONAL LEASE AREA	SM	03/22
A	FOR CONSENT	SM	02/22

APPENDIX C – TEST LOCATIONS AND TEST RESULT

TKKM o TUTUTARAKIHI SCHOOL

Lot 1 DP 203524



1 PROPOSED SITE PLAN
Scale 1:500

DRAINAGE LEGEND

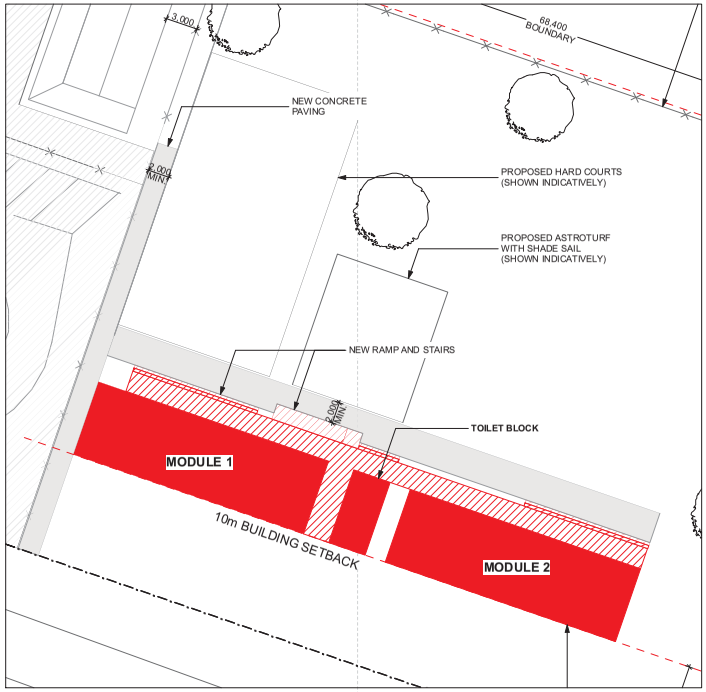
SS PUBLIC WASTE WATER MAIN

PUBLIC WATER MAIN SUPPLY

NOTE: GIS DATA INDICATES THAT PUBLIC STORMWATER SERVICES ARE NOT ON SITE OR WITHIN BOUNDARIES.

PROJECT INFORMATION

SITE ADDRESS:	32 WIRELESS ROAD KAITAIA 0482
LEGAL DESCRIPTION:	LOT 1 DP 203524
WIND ZONE:	HIGH
EARTHQUAKE ZONE:	1
RAINFALL INTENSITY:	80 - 90
EXPOSURE ZONE:	C
CLIMATE ZONE:	1



2 PROPOSED MODULE LOCATION
Scale 1:250

3 PROPOSED SITE LOCATION
Scale N.T.S

RESPOND — ARCHITECTS

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Rev	Issue Name	Date
A - WIP	OUTLINE PLAN OF WORKS	Work in Progress

PROJECT
TKKM o TUTUTARAKIHI SCHOOL

CLIENT
MODULAR CLASSROOMS LTD

DRAWING TITLE
PROPOSED SITE PLAN

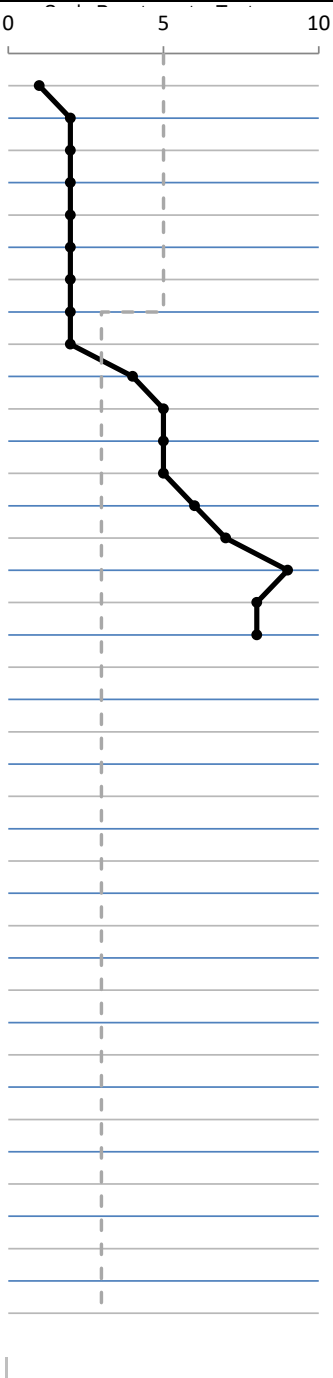
N

PURPOSE: OUTLINE PLAN OF WORKS
DESIGNED: WR
SCALE @ A1 / A3: AS SHOWN
DATE: 21/10/2021
JOB NO.: #Pln
DWG NO.: A001
REVISION: A - WIP

PROJECT	TKKM o Tututarakihi, 32 Wireless Road		
CLIENT	Modular Classrooms Ltd	JOB No.	210541
LOCATION	Kaitaia	DATE	26-Oct-21
BH No.	1	TESTS BY	WH

Phoenix Consulting Engineers Ltd

Depth (mm)	Soil Description	Shear Vane (kPa)	blows
100	TOPSOIL		-
200			1
300	CLAY, moderate plasticity, light brown, moist; minor silt	126 / 67	2
400		Very Stiff	2
500			2
600		119 / 59	2
700		Very Stiff	2
800			2
900		119 / 59	2
1000		Very Stiff	2
1100			4
1200		104 / 52	5
1300			5
1400			5
1500		104 / 59	6
1600		Very Stiff	7
1700			9
1800		104 / 59	8
1900			8
2000	END OF BOREHOLE- Target Depth	111 / 59	
2100		Very Stiff	
2200			
2300			
2400			
2500			
2600			
2700			
2800			
2900			
3000			
3100			
3200			
3300			
3400			
3500			
3600			
3700			
3800			
3900			
4000			



Percolation Test

Time (min)	0	5	10	15	20	25	30	35	40	45	50	55	60
Water Depth (mm)	2000	1990	1980	1980	1980	1980	1970	1970	1960	1960	1960	1960	1960

Tailing Gradient 0.64 mm / mins

Percolation Rate = 30 mm / hour

Comments

Notes

1. Scala results are number of blows per 100mm
2. Shear Vane readings are converted readings, as per calibration Certificate. (Values are not Ultimate)
3. UTP = Unable To Penetrate

PROJECT	TKKM o Tututarakihi, 32 Wireless Road		
CLIENT	Modular Classrooms Ltd	JOB No.	210541
LOCATION	Kaitaia	DATE	26-Oct-21
BH No.	2	TESTS BY	WH

Phoenix Consulting Engineers Ltd

Depth (mm)	Soil Description	Shear Vane (kPa)	Scala Penetrometer Test: blows
100	TOPSOIL		-
200			
300	CLAY, moderate plasticity, light brown/ light grey, moist; minor silt	119 / 59	
400		Very Stiff	
500			
600		119 / 59	
700		Very Stiff	
800			
900		126 / 65	
1000		Very Stiff	
1100	- brown/light brown/ light grey		
1200		119 / 59	
1300			
1400			
1500		119 / 59	
1600		Very Stiff	
1700			
1800		104 / 45	
1900			
2000	END OF BOREHOLE- Target Depth	89 / 45	
2100		Stiff	
2200			
2300			
2400			
2500			
2600			
2700			
2800			
2900			
3000			
3100			
3200			
3300			
3400			
3500			
3600			
3700			
3800			
3900			
4000			

Scala Penetrometer Test: 0 2 4 6

Percolation Test

Time (min)	0	5	10	15	20	25	30	35	40	45	50	55	60
Water Depth (mm)													

Tailing Gradient mm / mins

Percolation Rate = mm / hour

Comments

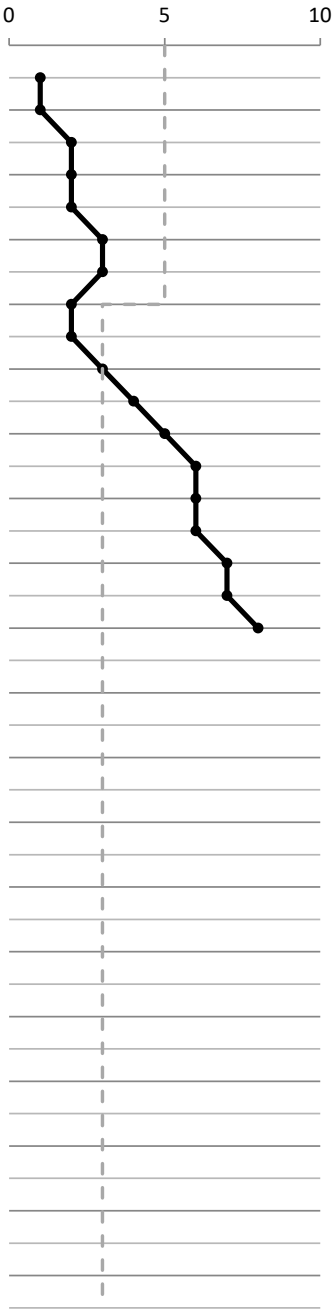
Notes

1. Scala results are number of blows per 100mm
2. Shear Vane readings are converted readings, as per calibration Certificate. (Values are not Ultimate)
3. UTP = Unable To Penetrate

PROJECT	TKKM o Tututarakihi, 32 Wireless Road		
CLIENT	Modular Classrooms Ltd	JOB No.	210541
LOCATION	Kaitaia	DATE	26-Oct-21
BH No.	3	TESTS BY	WH

Phoenix Consulting Engineers Ltd

Depth (mm)	Soil Description	Shear Vane (kPa)	Scala Penetrometer Test blows
100	TOPSOIL		-
200			1
300	CLAY, low to moderate plasticity, brown/light brown, moist; minor silt	119 / 45	1
400		Very Stiff	2
500			2
600		134 / 45	2
700		Very Stiff	3
800			3
900		134 / 45	2
1000		Very Stiff	2
1100			3
1200		119 / 37	4
1300			5
1400			6
1500		119 / 45	6
1600		Very Stiff	6
1700			7
1800			7
1900			8
2000	END OF BOREHOLE- Target Depth	119 / 45	
2100		Very Stiff	
2200			
2300			
2400			
2500			
2600			
2700			
2800			
2900			
3000			
3100			
3200			
3300			
3400			
3500			
3600			
3700			
3800			
3900			
4000			



Percolation Test													
Time (min)	0	5	10	15	20	25	30	35	40	45	50	55	60
Water Depth (mm)													

Tailing Gradient mm / mins

Percolation Rate = mm / hour

Comments

Notes

1. Scala results are number of blows per 100mm
2. Shear Vane readings are converted readings, as per calibration Certificate. (Values are not Ultimate)
3. UTP = Unable To Penetrate

PROJECT	TKKM o Tututarakihi, 32 Wireless Road		
CLIENT	Modular Classrooms Ltd	JOB No.	210541
LOCATION	Kaitaia	DATE	26-Oct-21
BH No.	4	TESTS BY	WH

Phoenix Consulting Engineers Ltd

Depth (mm)	Soil Description	Shear Vane (kPa)	Scala Penetrometer Test: blows	Scala Penetrometer Test: 0 2 4 6
100	TOPSOIL		-	
200	CLAY, moderate plasticity, light brown, moist; minor silt			
300		134 / 45		
400		Very Stiff		
500				
600		119 / 45		
700		Very Stiff		
800				
900		163 / 59		
1000		Very Stiff		
1100				
1200		149 / 56		
1300				
1400				
1500		163 / 59		
1600		Very Stiff		
1700				
1800		149 / 59		
1900				
2000	END OF BOREHOLE- Target Depth	149 / 71		
2100		Very Stiff		
2200				
2300				
2400				
2500				
2600				
2700				
2800				
2900				
3000				
3100				
3200				
3300				
3400				
3500				
3600				
3700				
3800				
3900				
4000				

Percolation Test

Time (min)	0	5	10	15	20	25	30	35	40	45	50	55	60
Water Depth (mm)													

Tailing Gradient mm / mins

Percolation Rate = mm / hour

Comments

Notes

1. Scala results are number of blows per 100mm
2. Shear Vane readings are converted readings, as per calibration Certificate. (Values are not Ultimate)
3. UTP = Unable To Penetrate

PROJECT	TKKM o Tututarakihi, 32 Wireless Road		
CLIENT	Modular Classrooms Ltd	JOB No.	210541
LOCATION	Kaitaia	DATE	26-Oct-21
BH No.	5	TESTS BY	WH

Phoenix Consulting Engineers Ltd

Depth (mm)	Soil Description	Shear Vane (kPa)	Scala Penetrometer Test: blows	Scala Penetrometer Test: 0 2 4 6
100	TOPSOIL		-	
200	CLAY, moderate plasticity, light brown/ light grey, moist; minor silt			
300		149 / 59		
400		Very Stiff		
500				
600		163 / 59		
700		Very Stiff		
800	- minor to some silt			
900		119 / 52		
1000		Very Stiff		
1100				
1200		149 / 45		
1300				
1400				
1500		163 / 52		
1600		Very Stiff		
1700				
1800		163 / 45		
1900				
2000	END OF BOREHOLE- Target Depth	163 / 45		
2100		Very Stiff		
2200				
2300				
2400				
2500				
2600				
2700				
2800				
2900				
3000				
3100				
3200				
3300				
3400				
3500				
3600				
3700				
3800				
3900				
4000				

Percolation Test

Time (min)	0	5	10	15	20	25	30	35	40	45	50	55	60
Water Depth (mm)													

Tailing Gradient mm / mins

Percolation Rate = mm / hour

Comments

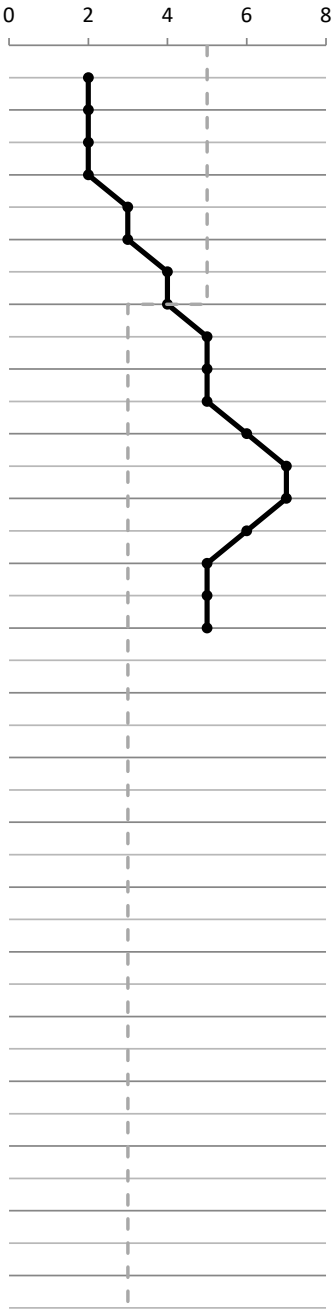
Notes

1. Scala results are number of blows per 100mm
2. Shear Vane readings are converted readings, as per calibration Certificate. (Values are not Ultimate)
3. UTP = Unable To Penetrate

PROJECT	TKKM o Tututarakihi, 32 Wireless Road		
CLIENT	Modular Classrooms Ltd	JOB No.	210541
LOCATION	Kaitaia	DATE	26-Oct-21
BH No.	6	TESTS BY	WH

Phoenix Consulting Engineers Ltd

Depth (mm)	Soil Description	Shear Vane (kPa)	Scala Penetrometer Test blows
100	TOPSOIL		-
200	CLAY, moderate plasticity, brown/light brown, moist; minor silt		2
300		134 / 59	2
400		Very Stiff	2
500			2
600		134 / 74	3
700		Very Stiff	3
800			4
900		149 / 74	4
1000		Very Stiff	5
1100			5
1200		149 / 74	5
1300			6
1400			7
1500		134 / 59	7
1600		Very Stiff	6
1700			5
1800		134 / 59	5
1900			5
2000	END OF BOREHOLE- Target Depth	134 / 59	
2100		Very Stiff	
2200			
2300			
2400			
2500			
2600			
2700			
2800			
2900			
3000			
3100			
3200			
3300			
3400			
3500			
3600			
3700			
3800			
3900			
4000			



Percolation Test

Time (min)	0	5	10	15	20	25	30	35	40	45	50	55	60
Water Depth (mm)													

Tailing Gradient mm / mins

Percolation Rate = mm / hour

Comments

Notes

1. Scala results are number of blows per 100mm
2. Shear Vane readings are converted readings, as per calibration Certificate. (Values are not Ultimate)
3. UTP = Unable To Penetrate

PROJECT	TKKM o Tututarakihi, 32 Wireless Road		
CLIENT	Modular Classrooms Ltd	JOB No.	210541
LOCATION	Kaitaia	DATE	26-Oct-21
BH No.	7	TESTS BY	WH

Phoenix Consulting Engineers Ltd

Depth (mm)	Soil Description	Shear Vane (kPa)	Scala Penetrometer Test blows
100	TOPSOIL		-
200	CLAY, moderate plasticity, light brown, moist; minor silt		
300		104 / 45	
400		Very Stiff	
500			
600		119 / 59	
700		Very Stiff	
800			
900		119 / 59	
1000		Very Stiff	
1100	- light brown/ light grey		
1200		149 / 74	
1300			
1400			
1500		149 / 74	
1600		Very Stiff	
1700			
1800		149 / 74	
1900			
2000	END OF BOREHOLE- Target Depth	163 / 59	
2100		Very Stiff	
2200			
2300			
2400			
2500			
2600			
2700			
2800			
2900			
3000			
3100			
3200			
3300			
3400			
3500			
3600			
3700			
3800			
3900			
4000			

Scala Penetrometer Test: 0 2 4 6

Percolation Test														
Time (min)	0	5	10	15	20	25	30	35	40	45	50	55	60
Water Depth (mm)													

Tailing Gradient mm / mins

Percolation Rate = mm / hour

Comments

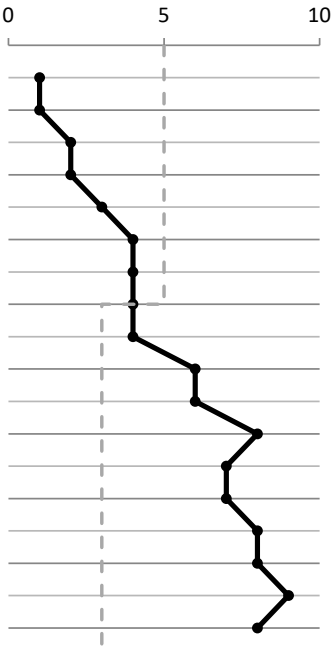
Notes

1. Scala results are number of blows per 100mm
2. Shear Vane readings are converted readings, as per calibration Certificate. (Values are not Ultimate)
3. UTP = Unable To Penetrate

PROJECT	TKKM o Tututarakihi, 32 Wireless Road		
CLIENT	Modular Classrooms Ltd	JOB No.	210541
LOCATION	Kaitaia	DATE	26-Oct-21
BH No.	8	TESTS BY	WH

Phoenix Consulting Engineers Ltd

Depth (mm)	Soil Description	Shear Vane (kPa)	Scala Penetrometer Test blows (0 5 10)
100	TOPSOIL		-
200			1
300	CLAY, moderate plasticity, light brown, moist; minor silt	149 / 74	1
400		Very Stiff	2
500			2
600		149 / 74	3
700		Very Stiff	4
800			4
900		163 / 74	4
1000		Very Stiff	4
1100			6
1200		163 / 74	6
1300			8
1400			7
1500		149 / 59	7
1600		Very Stiff	8
1700			8
1800		149 / 59	9
1900			8
2000	END OF BOREHOLE- Target Depth	149 / 59	
2100		Very Stiff	
2200			
2300			
2400			
2500			
2600			
2700			
2800			
2900			
3000			
3100			
3200			
3300			
3400			
3500			
3600			
3700			
3800			
3900			
4000			



Percolation Test

Time (min)	0	5	10	15	20	25	30	35	40	45	50	55	60
Water Depth (mm)													

Tailing Gradient mm / mins

Percolation Rate = mm / hour

Comments

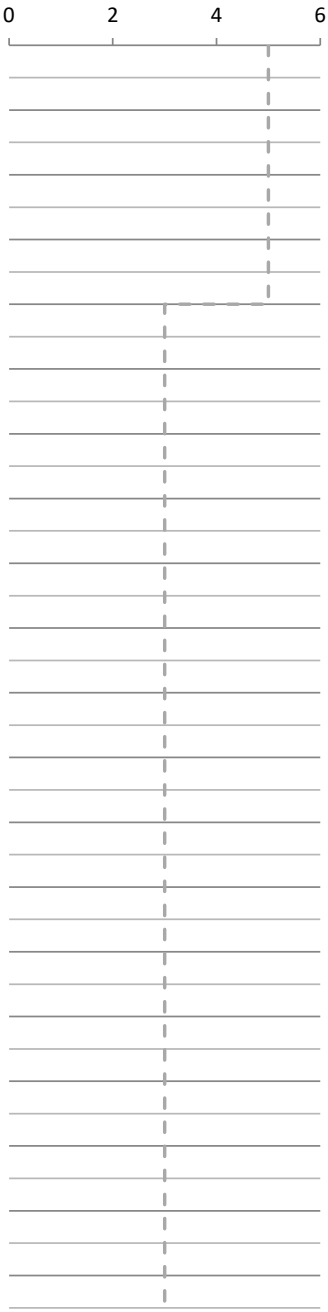
Notes

1. Scala results are number of blows per 100mm
2. Shear Vane readings are converted readings, as per calibration Certificate. (Values are not Ultimate)
3. UTP = Unable To Penetrate

PROJECT	TKKM o Tututarakihi, 32 Wireless Road		
CLIENT	Modular Classrooms Ltd	JOB No.	210541
LOCATION	Kaitaia	DATE	26-Oct-21
BH No.	9	TESTS BY	WH

Phoenix Consulting Engineers Ltd

Depth (mm)	Soil Description	Shear Vane (kPa)	Scala Penetrometer Test blows
100	TOPSOIL		-
200			
300	CLAY, moderate plasticity, brown/light brown, moist; minor silt	134 / 74	
400		Very Stiff	
500			
600		134 / 74	
700		Very Stiff	
800			
900		149 / 74	
1000		Very Stiff	
1100			
1200		149 / 67	
1300			
1400			
1500		149 / 74	
1600		Very Stiff	
1700			
1800		149 / 67	
1900			
2000	END OF BOREHOLE- Target Depth	149 / 67	
2100		Very Stiff	
2200			
2300			
2400			
2500			
2600			
2700			
2800			
2900			
3000			
3100			
3200			
3300			
3400			
3500			
3600			
3700			
3800			
3900			
4000			



Percolation Test													
Time (min)	0	5	10	15	20	25	30	35	40	45	50	55	60
Water Depth (mm)													

Tailing Gradient mm / mins

Percolation Rate = mm / hour

Comments

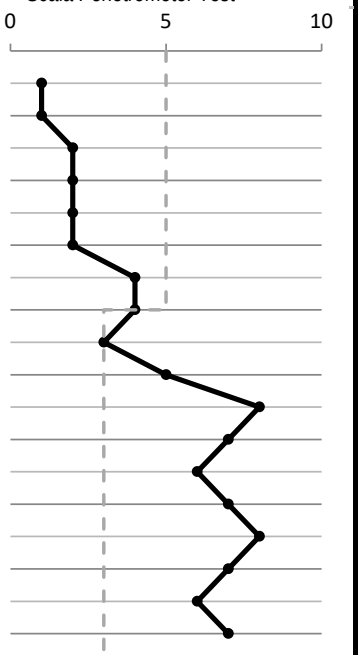
Notes

1. Scala results are number of blows per 100mm
2. Shear Vane readings are converted readings, as per calibration Certificate. (Values are not Ultimate)
3. UTP = Unable To Penetrate

PROJECT	TKKM o Tututarakihi, 32 Wireless Road		
CLIENT	Modular Classrooms Ltd	JOB No.	210541
LOCATION	Kaitaia	DATE	26-Oct-21
BH No.	10	TESTS BY	WH

Phoenix Consulting Engineers Ltd

Depth (mm)	Soil Description	Shear Vane (kPa)	Scala Penetrometer Test blows
100	TOPSOIL		-
200			1
300	CLAY, moderate plasticity, light brown, moist; minor silt	134 / 74	1
400		Very Stiff	2
500			2
600		126 / 59	2
700		Very Stiff	2
800			4
900		126 / 59	4
1000		Very Stiff	3
1100	- brown/light brown/ light grey		5
1200		149 / 59	8
1300			7
1400			6
1500		149 / 59	7
1600		Very Stiff	8
1700			7
1800			6
1900			7
2000	END OF BOREHOLE- Target Depth		
2100			
2200			
2300			
2400			
2500			
2600			
2700			
2800			
2900			
3000			
3100			
3200			
3300			
3400			
3500			
3600			
3700			
3800			
3900			
4000			



Percolation Test													
Time (min)	0	5	10	15	20	25	30	35	40	45	50	55	60
Water Depth (mm)													

Tailing Gradient mm / mins

Percolation Rate = mm / hour

Comments

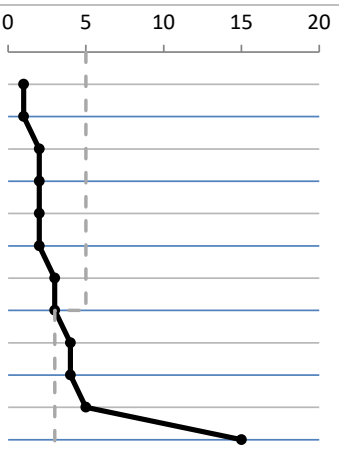
Notes

1. Scala results are number of blows per 100mm
2. Shear Vane readings are converted readings, as per calibration Certificate. (Values are not Ultimate)
3. UTP = Unable To Penetrate

PROJECT	TKKM o Tututarakihi, 32 Wireless Road		
CLIENT	Modular Classrooms Ltd	JOB No.	210541
LOCATION	Kaitaia	DATE	26-Oct-01
BH No.	11	TESTS BY	WH

Phoenix Consulting Engineers Ltd

Depth (mm)	Soil Description	Shear Vane (kPa)	Scala Penetrometer Test blows
100	TOPSOIL		-
200	CLAY, moderate plasticity, light brown, moist; minor silt		1
300		134 / 59	1
400		Very Stiff	2
500			2
600		134 / 59	2
700		Very Stiff	2
800			3
900		149 / 45	3
1000		Very Stiff	4
1100			4
1200	- some gravel	134 / 52	5
1300			15
1400	END OF BOREHOLE- Unable to Penetrate		15+
1500			UTP
1600			
1700			
1800			
1900			
2000			
2100			
2200			
2300			
2400			
2500			
2600			
2700			
2800			
2900			
3000			
3100			
3200			
3300			
3400			
3500			
3600			
3700			
3800			
3900			
4000			



Percolation Test

Time (min)	0	5	10	15	20	25	30	35	40	45	50	55	60
Water Depth (mm)													

Tailing Gradient mm / mins

Percolation Rate = mm / hour

Comments

Notes

1. Scala results are number of blows per 100mm
2. Shear Vane readings are converted readings, as per calibration Certificate. (Values are not Ultimate)
3. UTP = Unable To Penetrate

PROJECT	TKKM o Tututarakihi, 32 Wireless Road		
CLIENT	Modular Classrooms Ltd	JOB No.	210541
LOCATION	Kaitaia	DATE	26-Oct-01
BH No.	12	TESTS BY	WH

Phoenix Consulting Engineers Ltd

Depth (mm)	Soil Description	Shear Vane (kPa)	Scala Penetrometer Test: blows	Scala Penetrometer Test: 0 2 4 6
100	TOPSOIL		-	
200	CLAY, moderate plasticity, light brown, moist; minor silt			
300		134 / 45		
400		Very Stiff		
500				
600		126 / 45		
700		Very Stiff		
800				
900		134 / 52		
1000		Very Stiff		
1100				
1200		149 / 45		
1300				
1400				
1500		149 / 45		
1600		Very Stiff		
1700				
1800		163 / 45		
1900				
2000	END OF BOREHOLE- Target Depth	163 / 45		
2100		Very Stiff		
2200				
2300				
2400				
2500				
2600				
2700				
2800				
2900				
3000				
3100				
3200				
3300				
3400				
3500				
3600				
3700				
3800				
3900				
4000				

Percolation Test

Time (min)	0	5	10	15	20	25	30	35	40	45	50	55	60
Water Depth (mm)													

Tailing Gradient mm / mins

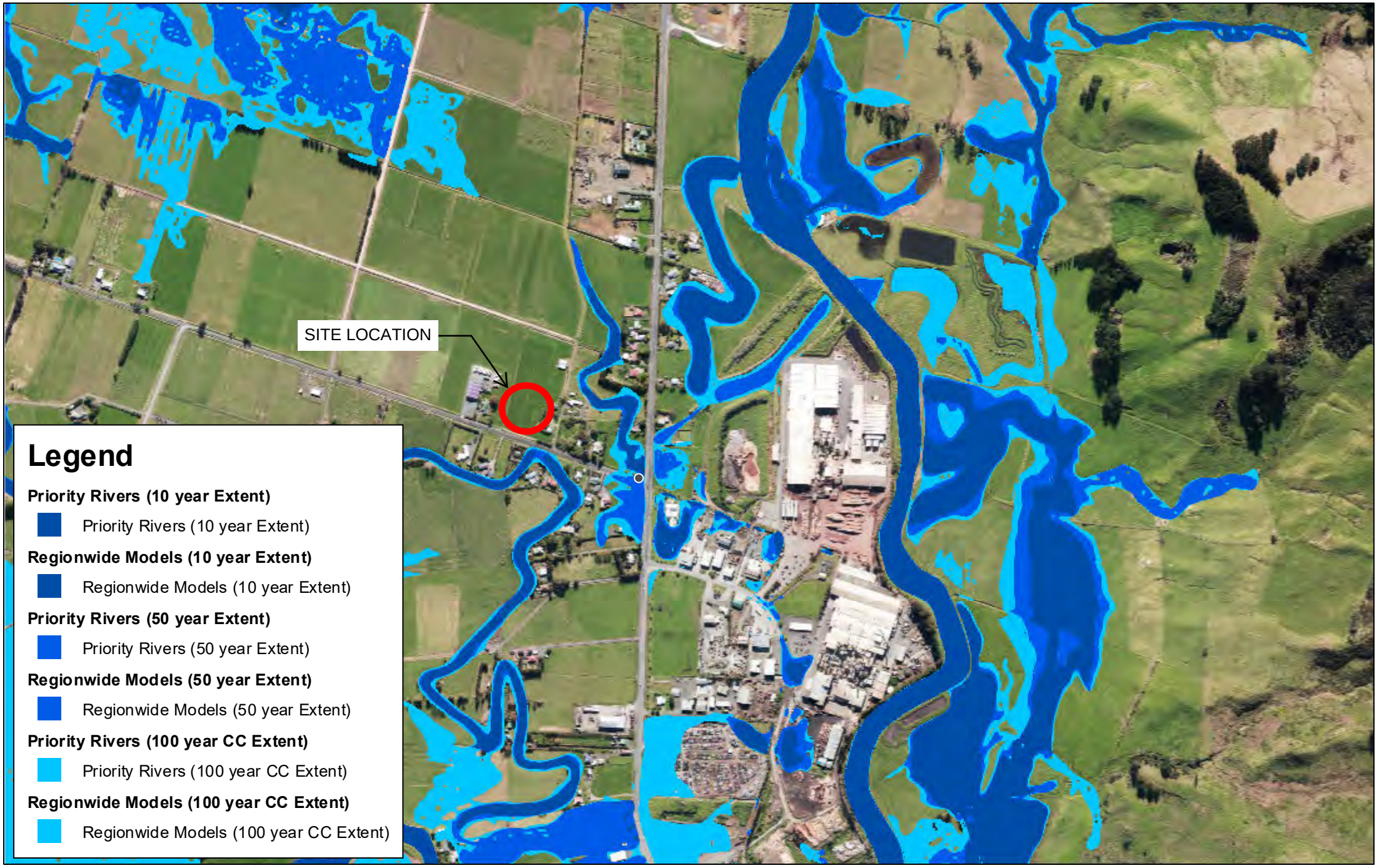
Percolation Rate = mm / hour

Comments

Notes

1. Scala results are number of blows per 100mm
2. Shear Vane readings are converted readings, as per calibration Certificate. (Values are not Ultimate)
3. UTP = Unable To Penetrate

APPENDIX D – STORMWATER CALCULATIONS & DRAWINGS



Northland REGIONAL COUNCIL

Flood Mapping

Projection NZTM. Datum NZTM2000.
DISCLAIMER:
The Northland Regional Council cannot guarantee that the information shown is accurate and should not be reused in any manner without proper consultation with its owner.

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3/1/2022, 1:56:34

PROJECT	TKKM o Tututarakihi Kaitaia	**OUR Ref**	210541
LOCATION	Kaitaia	**DATE**	24/03/22
CLIENT	Modular Classrooms Ltd	**DESIGN BY**	SM
SHEET	1	**CHECK BY**	JD

Phoenix Consulting Engineers Ltd

Stormwater Detention Tank Design-Proposed Class Modules & Canopy

Impervious-Class Modules & Canopy (Controlled)	485	m²	Tank Type	Circular	
Impervious-Childcare Centre & Canopy (Controlled)	205	m²	Tank Capacity	25000L CT	
Impervious-Existing Dwelling & Garage (Controlled)	160	m²			
Impervious-Footpath, Court & Astroturf (Controlled)	795	m²			
Impervious-Existing Gravel Driveway (Uncontrolled)	220	m²	Tank Diameter	3.5	m
Impervious-Gravel Carpark (Uncontrolled)	780	m²	Tank Height	3	m
ARI 10 years 60 Minute Rainfall Intensity	39.7	mm/hr	Tank Base Area	9.621	m²
ARI 10 years 10 Minute Rainfall Intensity	85.0	mm/hr	Orifice Diameter	10	mm
			Orifice Coefficient	0.62	
			Total Sealed Area	485.0	m²
Rainfall Adjustment Allowance	17	%	Maximum Acc. Volume	19,463	L
			Water Level-Orifice Height	2.02	m
Run off coefficient for Sealed Areas	0.9		**Peak Controlled Flow Rate (Modules & Canopy)**	**0.31**	**l/s (Design Rate From Tank)**
Runoff coefficient for Gravel Areas	0.7				
Run off coefficient for Greenfield Areas (grass)	0.35		Expected Tank Drain Down Time	17.7	hours

Peak Pre Development Flow Rate (10yr, 10m)	21.86	l/s
Uncontrolled Peak Flow Rate (10yr, 10min)	19.34	l/s From Gravel Carpark, Driveway and Footpaths-Unable To Detain
Controlled Flow Rate Available (10yr, 10 min)	2.52	l/s Peak Flow Rate(10yr, 10min)-Uncontrolled Peak Flow Rate(100yr, 10 min)
Flow Rate Remaining For Other Controlled Areas	2.21	l/s Total Controlled Flow Rate Available-Orifice Flow Rate

Time (min)	Rainfall % Distribution	Rainfall (mm)	Adjusted Rainfall (mm)	Inflow Volume (litres)	Inflow Rate (l/s)	Volume in tank (litres)	Depth at start (m)	Average depth (m)	Depth at end (m)	Outflow Rate (l/s)	Outflow Volume (litres)
0	0	0	0	0	0	0	0	0	0	0	0
5	3%	1.2	1.4	608	2.03	608	0.00	0.03	0.06	0.04	12
10	6%	2.4	2.8	1,216	4.05	1,813	0.06	0.13	0.19	0.08	23
15	11%	4.4	5.1	2,230	7.43	4,021	0.19	0.30	0.41	0.12	36
20	18%	7.1	8.4	3,649	12.16	7,634	0.41	0.60	0.79	0.17	50
25	18%	7.1	8.4	3,649	12.16	11,234	0.79	0.98	1.16	0.21	64
30	16%	6.4	7.4	3,244	10.81	14,414	1.16	1.33	1.49	0.25	75
35	12%	4.8	5.6	2,433	8.11	16,772	1.49	1.62	1.73	0.27	82
40	7%	2.8	3.3	1,419	4.73	18,109	1.73	1.81	1.87	0.29	87
45	4%	1.6	1.9	811	2.70	18,833	1.87	1.92	1.95	0.30	90
50	2%	0.8	0.9	405	1.35	19,148	1.95	1.97	1.98	0.30	91
55	2%	0.8	0.9	405	1.35	19,463	1.98	2.00	2.01	0.31	92
60	1%	0.4	0.5	203	0.68	19,574	2.01	2.02	2.02	0.31	92

PROJECT	TKKM o Tututarakihi Kaitaia	**OUR Ref**	210541
LOCATION	Kaitaia	**DATE**	24/03/22
CLIENT	Modular Classrooms Ltd	**DESIGN BY**	SM
SHEET	2	**CHECK BY**	JD

Phoenix Consulting Engineers Ltd

Stormwater Detention Tank Design-Existing Childcare Centre & Canopy

Impervious-Class Modules & Canopy (Controlled)	485	m²	Tank Type	Circular	
Impervious-Childcare Centre & Canopy (Controlled)	205	m²	Tank Capacity	10000L CT	
Impervious-Existing Dwelling & Garage (Controlled)	160	m²			
Impervious-Footpath, Court & Astroturf (Controlled)	795	m²			
Impervious-Existing Gravel Driveway (Uncontrolled)	220	m²	Tank Diameter	2.2	m
Impervious-Gravel Carpark (Uncontrolled)	780	m²	Tank Height	2.9	m
ARI 10 years 60 Minute Rainfall Intensity	39.7	mm/hr	Tank Base Area	3.801	m²
ARI 10 years 10 Minute Rainfall Intensity	85.0	mm/hr	Orifice Diameter	10	mm
			Orifice Coefficient	0.62	
			Total Sealed Area	205.0	m²
Rainfall Adjustment Allowance	17	%	Maximum Acc. Volume	7,862	L
			Water Level-Orifice Height	2.07	m
Run off coefficient for Sealed Areas	0.9		**Peak Controlled Flow Rate (Childcare Centre)**	**0.31**	**l/s (Design Rate From Tank)**
Runoff coefficient for Gravel	0.7				
Run off coefficient for Greenfield Areas (grass)	0.35		Expected Tank Drain Down Time	7.1	hours

Peak Flow Rate (10yr, 10m)	21.86	l/s
Uncontrolled Peak Flow Rate (10yr, 10min)	19.34	l/s From Gravel Carpark, Courts and Turf-Unable To Detain
Flow Rate Remaining For Other Controlled Areas	**1.91**	l/s Total Controlled Flow Rate Available-Previous Orifice Flow Rates

Time (min)	Rainfall % Distribution	Rainfall (mm)	Adjusted Rainfall (mm)	Inflow Volume (litres)	Inflow Rate (l/s)	Volume in tank (litres)	Depth at start (m)	Average depth (m)	Depth at end (m)	Outflow Rate (l/s)	Outflow Volume (litres)
0	0	0	0	0	0	0	0	0	0	0	0
5	3%	1.2	1.4	257	0.86	257	0.00	0.03	0.06	0.04	12
10	6%	2.4	2.8	514	1.71	759	0.06	0.13	0.19	0.08	24
15	11%	4.4	5.1	943	3.14	1,678	0.19	0.32	0.43	0.12	37
20	18%	7.1	8.4	1,543	5.14	3,185	0.43	0.63	0.82	0.17	52
25	18%	7.1	8.4	1,543	5.14	4,676	0.82	1.03	1.21	0.22	66
30	16%	6.4	7.4	1,371	4.57	5,981	1.21	1.39	1.55	0.25	76
35	12%	4.8	5.6	1,028	3.43	6,933	1.55	1.69	1.80	0.28	84
40	7%	2.8	3.3	600	2.00	7,449	1.80	1.88	1.94	0.30	89
45	4%	1.6	1.9	343	1.14	7,703	1.94	1.98	2.00	0.30	91
50	2%	0.8	0.9	171	0.57	7,783	2.00	2.02	2.02	0.31	92
55	2%	0.8	0.9	171	0.57	7,862	2.02	2.05	2.04	0.31	93
60	1%	0.4	0.5	86	0.29	7,855	2.04	2.06	2.04	0.31	93

PROJECT	TKKM o Tututarakihi Kaitaia	**OUR Ref**	210541
LOCATION	Kaitaia	**DATE**	24/03/22
CLIENT	Modular Classrooms Ltd	**DESIGN BY**	SM
SHEET	3	**CHECK BY**	JD

Phoenix Consulting Engineers Ltd

Stormwater Detention Tank Design-Existing Dwelling and Garage

Impervious-Class Modules & Canopy (Controlled)	485	m²	Tank Type	Circular	
Impervious-Childcare Centre & Canopy (Controlled)	205	m²	Tank Capacity	10000L CT	
Impervious-Existing Dwelling & Garage (Controlled)	160	m²			
Impervious-Footpath, Court & Astroturf (Controlled)	795	m²			
Impervious-Existing Gravel Driveway (Uncontrolled)	220	m²	Tank Diameter	2.2	m
Impervious-Gravel Carpark (Uncontrolled)	780	m²	Tank Height	2.9	m
ARI 10 years 60 Minute Rainfall Intensity	39.7	mm/hr	Tank Base Area	3.801	m²
ARI 10 years 10 Minute Rainfall Intensity	85.0	mm/hr	Orifice Diameter	10	mm
			Orifice Coefficient	0.62	
			Total Sealed Area	160.0	m²
Rainfall Adjustment Allowance	17	%	Maximum Acc. Volume	6,074	L
			Water Level-Orifice Height	1.60	m
Run off coefficient for Sealed Areas	0.9		**Peak Controlled Flow Rate (Childcare Centre)**	**0.27**	**l/s (Design Rate From Tank)**
Runoff coefficient for Gravel	0.7				
Run off coefficient for Greenfield Areas (grass)	0.35		Expected Tank Drain Down Time	6.2	hours

Peak Flow Rate (10yr, 10m)	21.86	l/s
Uncontrolled Peak Flow Rate (10yr, 10min)	19.34	l/s From Gravel Carpark, Courts and Turf-Unable To Detain
Flow Rate Remaining For Other Controlled Areas	**1.63**	l/s Total Controlled Flow Rate Available-Previous Orifice Flow Rates

Time (min)	Rainfall % Distribution	Rainfall (mm)	Adjusted Rainfall (mm)	Inflow Volume (litres)	Inflow Rate (l/s)	Volume in tank (litres)	Depth at start (m)	Average depth (m)	Depth at end (m)	Outflow Rate (l/s)	Outflow Volume (litres)
0	0	0	0	0	0	0	0	0	0	0	0
5	3%	1.2	1.4	201	0.67	201	0.00	0.03	0.05	0.04	11
10	6%	2.4	2.8	401	1.34	591	0.05	0.10	0.15	0.07	21
15	11%	4.4	5.1	736	2.45	1,306	0.15	0.25	0.34	0.11	32
20	18%	7.1	8.4	1,204	4.01	2,478	0.34	0.49	0.64	0.15	46
25	18%	7.1	8.4	1,204	4.01	3,637	0.64	0.80	0.94	0.19	58
30	16%	6.4	7.4	1,070	3.57	4,649	0.94	1.08	1.21	0.22	67
35	12%	4.8	5.6	803	2.68	5,384	1.21	1.31	1.40	0.25	74
40	7%	2.8	3.3	468	1.56	5,778	1.40	1.46	1.50	0.26	78
45	4%	1.6	1.9	268	0.89	5,967	1.50	1.53	1.55	0.27	80
50	2%	0.8	0.9	134	0.45	6,021	1.55	1.57	1.56	0.27	81
55	2%	0.8	0.9	134	0.45	6,074	1.56	1.58	1.58	0.27	81
60	1%	0.4	0.5	67	0.22	6,059	1.58	1.59	1.57	0.27	82

PROJECT	TKKM o Tututarakihi Kaitaia	**OUR Ref**	210541	Phoenix Consulting Engineers Ltd	
LOCATION	Kaitaia	**DATE**	24/03/22		
CLIENT	Modular Classrooms Ltd	**DESIGN BY**	SM		
SHEET	4	**CHECK BY**	JD		

Stormwater Detention Tank Design-Proposed Footpath, Courts and Astroturf

Impervious-Class Modules & Canopy (Controlled)	485	m²	Tank Type	Aquacomb	
Impervious-Childcare Centre & Canopy (Controlled)	205	m²	Tank Capacity	88 Pods	
Impervious-Existing Dwelling & Garage (Controlled)	160	m²	Aquacomb Pod Total Capacity	30800	L
Impervious-Footpath, Court & Astroturf (Controlled)	795	m²			
Impervious-Existing Gravel Driveway (Uncontrolled)	220	m²	Tank Width	9.6	m
Impervious-Gravel Carpark (Uncontrolled)	780	m²	Tank Length	13.2	m
ARI 10 years 60 Minute Rainfall Intensity	39.7	mm/hr	Tank Base Area	102.667	m²
ARI 10 years 10 Minute Rainfall Intensity	85.0	mm/hr	Orifice Diameter	35	mm
			Orifice Coefficient	0.62	
			Total Sealed Area	795.0	m²
Rainfall Adjustment Allowance	17	%	Maximum Acc. Volume	30,026	L
			Water Level-Orifice Height	0.29	m
Run off coefficient for Sealed Areas	0.9		**Peak Controlled Flow Rate (Childcare Centre)**	**1.42**	**l/s (Design Rate From Tank)**
Runoff coefficient for Gravel	0.7				
Run off coefficient for Greenfield Areas (grass)	0.35		Expected Tank Drain Down Time	5.9	hours

Peak Flow Rate (10yr, 10m)	21.86	l/s
Uncontrolled Peak Flow Rate (10yr, 10min)	19.34	l/s From Gravel Carpark, Courts and Turf-Unable To Detain
Flow Rate Remaining For Other Controlled Areas	**1.63**	l/s Total Controlled Flow Rate Available-Previous Orifice Flow Rates

Time (min)	Rainfall % Distribution	Rainfall (mm)	Adjusted Rainfall (mm)	Inflow Volume (litres)	Inflow Rate (l/s)	Volume in tank (litres)	Depth at start (m)	Average depth (m)	Depth at end (m)	Outflow Rate (l/s)	Outflow Volume (litres)
0	0	0	0	0	0	0	0	0	0	0	0
5	3%	1.2	1.4	997	3.32	997	0.00	0.00	0.01	0.18	55
10	6%	2.4	2.8	1,994	6.65	2,936	0.01	0.02	0.03	0.36	109
15	11%	4.4	5.1	3,656	12.19	6,482	0.03	0.05	0.06	0.56	169
20	18%	7.1	8.4	5,982	19.94	12,296	0.06	0.09	0.12	0.80	239
25	18%	7.1	8.4	5,982	19.94	18,039	0.12	0.15	0.17	1.01	304
30	16%	6.4	7.4	5,317	17.72	23,052	0.17	0.20	0.22	1.18	354
35	12%	4.8	5.6	3,988	13.29	26,687	0.22	0.24	0.26	1.30	389
40	7%	2.8	3.3	2,326	7.75	28,624	0.26	0.27	0.27	1.37	411
45	4%	1.6	1.9	1,329	4.43	29,543	0.27	0.28	0.28	1.40	421
50	2%	0.8	0.9	665	2.22	29,786	0.28	0.29	0.29	1.42	425
55	2%	0.8	0.9	665	2.22	30,026	0.29	0.29	0.29	1.42	427
60	1%	0.4	0.5	332	1.11	29,932	0.29	0.29	0.29	1.42	427

PROJECT	TKKM o Tututarakihi Kaitaia	**OUR Ref**	210541
LOCATION	Kaitaia	**DATE**	24/03/22
CLIENT	Modular Classrooms Ltd	**CALCS BY**	SM
SHEET	15	**CHECKED BY**	JD

Phoenix Consulting Engineers Ltd

Proposed Inlet & Outlet Pipe Capacity-Existing Dwelling & Garage-Q10

Proposed Catchment Information

	Area (m2)	Runoff Coefficients
Proposed Modules & Canopy	0	0.90
Proposed Courts	0	0.90
Proposed Astroturf	0	0.90
Proposed Footpaths	0	0.90
Proposed Gravel Carpark	0	0.70
Existing Childcare Centre & Canopy	0	0.90
Existing Dwelling & Garage	160	0.90
Existing Gravel Driveway	0	0.70

Storm Duration To Use Based on Time of Concentration **10.00 mins**

Catchment Design Stormwater Flow

Catchment Runoff Q = CIA/3600000

Where C = Runoff Coefficient 0.90 *Impervious*

I = Rainfall Intensity Refer to table below

A = Catchment Area 160.00 m2

Event (ARI)	Storm Duration, t (min)	Rainfall Intensity (mm/hr) Refer Sheet 16	Q ($m^{3/s}$)	24 Hour Runoff Volume (m^3)
2	10	65.6	0.0026	226.84
5	10	85.1	0.0034	293.96
10	10	99.5	0.0040	343.70
20	10	114.3	0.0046	395.05
50	10	134.6	0.0054	465.00
100	10	150.9	0.0060	521.61

Pipe sizing-Q10

Q10	0.0040	m^3/s	
Pipe slope, S	0.005	m/m	*Pipe grade of 0.50%*
Pipe diameter, d	**0.15**	m	*100mm Diameter*
Colebrook-White Roughness, k	0.15	mm	*uPVC*
Flow velocity, v	0.8	m/s	
Pipe Flow Capacity	0.0144	m^3/s	*Pipe capacity is above 10 Year Flows*

Proposed 150mm pipe has capacity for 10 year, 10 minute Event

NOTES:

1 Guides used for this assessment are:- Waikato RITS, NZS Building Code E1/VM1, SW management Guide Auckland Regional Council TP 10 Design Manual, and Waikato Stormwater Management Guideline TR201801

2 Rainfall intensity taken from Hirds V4 Historical Data with 2.1 degrees temperature rise percentage adjustment

PROJECT	TKKM o Tututarakihi Kaitaia	**OUR Ref**	210541
LOCATION	Kaitaia	**DATE**	24/03/22
CLIENT	Modular Classrooms Ltd	**CALCS BY**	SM
SHEET	12	**CHECKED BY**	JD

Phoenix Consulting Engineers Ltd

Proposed Stormwater Line 7: 150mm uPVC Pipe Capacity-Q10

Proposed Catchment Information

	Area (m2)	Runoff Coefficients
Proposed Modules & Canopy	0	0.90
Proposed Courts	0	0.90
Proposed Astroturf	0	0.90
Proposed Footpaths	0	0.90
Proposed Gravel Carpark	0	0.70
Existing Childcare Centre & Canopy	0	0.90
Existing Dwelling & Garage	160	0.90
Existing Gravel Driveway	220	0.70

Storm Duration To Use Based on Time of Concentration **10.00 mins**

Catchment Design Stormwater Flow

Catchment Runoff Q = CIA/3600000

Where C = Runoff Coefficient 0.90 *Impervious*

I = Rainfall Intensity Refer to table below

A = Catchment Area 0.00 m2

Event (ARI)	Storm Duration, t (min)	Rainfall Intensity (mm/hr) Refer Sheet 16	Q ($m^{3/s}$)	24 Hour Runoff Volume (m^3)
2	10	65.6	0.0054	469.44
5	10	85.1	0.0070	608.34
10	10	99.5	0.0082	711.27
20	10	114.3	0.0095	817.54
50	10	134.6	0.0111	962.30
100	10	150.9	0.0125	1079.45

Pipe sizing-Q10

Q10	0.0082	m^3/s	
Pipe slope, S	0.005	m/m	*Pipe grade of 0.50%*
Pipe diameter, d	**0.15**	m	*225mm Diameter*
Colebrook-White Roughness, k	0.15	mm	*uPVC*
Flow velocity, v	0.8	m/s	
Pipe Flow Capacity	0.0144	m^3/s	*Pipe capacity is above 10 Year Flows*

Proposed 150mm pipe has capacity for 10 year, 10 minute Event

NOTES:

1 Guides used for this assessment are:- Waikato RITS, NZS Building Code E1/VM1, SW management Guide Auckland Regional Council TP 10 Design Manual, and Waikato Stormwater Management Guideline TR201801

2 Rainfall intensity taken from Hirds V4 Historical Data with 2.1 degrees temperature rise percentage adjustment

PROJECT	TKKM o Tututarakihi Kaitaia	**OUR Ref**	210541
LOCATION	Kaitaia	**DATE**	24/03/22
CLIENT	Modular Classrooms Ltd	**CALCS BY**	SM
SHEET	14	**CHECKED BY**	JD

Phoenix Consulting Engineers Ltd

Proposed Inlet & Outlet Pipe Capacity-Tank for Childcare Centre-Q10

Proposed Catchment Information

	Area (m2)	Runoff Coefficients
Proposed Modules & Canopy	0	0.90
Proposed Courts	0	0.90
Proposed Astroturf	0	0.90
Proposed Footpaths	0	0.90
Proposed Gravel Carpark	0	0.70
Existing Childcare Centre & Canopy	205	0.90

Storm Duration To Use Based on Time of Concentration **10.00 mins**

Catchment Design Stormwater Flow

Catchment Runoff Q = CIA/3600000

Where C = Runoff Coefficient 0.90 *Impervious*

I = Rainfall Intensity Refer to table below

A = Catchment Area 205.00 m2

Event (ARI)	Storm Duration, t (min)	Rainfall Intensity (mm/hr) Refer Sheet 16	Q ($m^{3/s}$)	24 Hour Runoff Volume (m^3)
2	10	65.6	0.0034	290.64
5	10	85.1	0.0044	376.64
10	10	99.5	0.0051	440.36
20	10	114.3	0.0059	506.16
50	10	134.6	0.0069	595.79
100	10	150.9	0.0077	668.32

Pipe sizing-Q10

Q10	0.0051	m^3/s	
Pipe slope, S	0.005	m/m	*Pipe grade of 0.50%*
Pipe diameter, d	**0.15**	m	*100mm Diameter*
Colebrook-White Roughness, k	0.15	mm	*uPVC*
Flow velocity, v	0.8	m/s	
Pipe Flow Capacity	0.0144	m^3/s	*Pipe capacity is above 10 Year Flows*

Proposed 150mm pipe has capacity for 10 year, 10 minute Event

NOTES:

1 Guides used for this assessment are:- Waikato RITS, NZS Building Code E1/VM1, SW management Guide Auckland Regional Council TP 10 Design Manual, and Waikato Stormwater Management Guideline TR201801

2 Rainfall intensity taken from Hirds V4 Historical Data with 2.1 degrees temperature rise percentage adjustment

PROJECT	TKKM o Tututarakihi Kaitaia	**OUR Ref**	210541
LOCATION	Kaitaia	**DATE**	24/03/22
CLIENT	Modular Classrooms Ltd	**CALCS BY**	SM
SHEET	10	**CHECKED BY**	JD

Phoenix Consulting Engineers Ltd

Proposed Stormwater Line 5: 150mm uPVC Pipe Capacity-Q10

Proposed Catchment Information

	Area (m2)	Runoff Coefficients
Proposed Modules & Canopy	0	0.90
Proposed Courts	0	0.90
Proposed Astroturf	120	0.90
Proposed Footpaths	0	0.90
Proposed Gravel Carpark	0	0.70
Existing Childcare Centre & Canopy	0	0.90
Existing Dwelling & Garage	0	0.90
Existing Gravel Driveway	0	0.70

Storm Duration To Use Based on Time of Concentration **10.00 mins**

Catchment Design Stormwater Flow

Catchment Runoff Q = CIA/3600000

Where C = Runoff Coefficient 0.90 *Impervious*

I = Rainfall Intensity Refer to table below

A = Catchment Area 120.00 m2

Event (ARI)	Storm Duration, t (min)	Rainfall Intensity (mm/hr) Refer Sheet 16	Q ($m^{3/s}$)	24 Hour Runoff Volume (m^3)
2	10	65.6	0.0020	170.13
5	10	85.1	0.0026	220.47
10	10	99.5	0.0030	257.77
20	10	114.3	0.0034	296.29
50	10	134.6	0.0040	348.75
100	10	150.9	0.0045	391.21

Pipe sizing-Q10

Q10	0.0030	m^3/s	
Pipe slope, S	0.005	m/m	*Pipe grade of 0.50%*
Pipe diameter, d	**0.15**	m	*150mm Diameter*
Colebrook-White Roughness, k	0.15	mm	*uPVC*
Flow velocity, v	0.8	m/s	
Pipe Flow Capacity	0.0144	m^3/s	*Pipe capacity is above 10 Year Flows*

Proposed 150mm pipe has capacity for 10 year, 10 minute Event

NOTES:

1 Guides used for this assessment are:- Waikato RITS, NZS Building Code E1/VM1, SW management Guide Auckland Regional Council TP 10 Design Manual, and Waikato Stormwater Management Guideline TR201801

2 Rainfall intensity taken from Hirds V4 Historical Data with 2.1 degrees temperature rise percentage adjustment

PROJECT	TKKM o Tututarakihi Kaitaia	**OUR Ref**	210541
LOCATION	Kaitaia	**DATE**	24/03/22
CLIENT	Modular Classrooms Ltd	**CALCS BY**	SM
SHEET	9	**CHECKED BY**	JD

Phoenix Consulting Engineers Ltd

Proposed Stormwater Line 4: 150mm uPVC Pipe Capacity-Q10

Proposed Catchment Information

	Area (m2)	Runoff Coefficients
Proposed Modules & Canopy	0	0.90
Proposed Courts	390	0.90
Proposed Astroturf	120	0.90
Proposed Footpaths	285	0.90
Proposed Gravel Carpark	0	0.70
Existing Childcare Centre & Canopy	0	0.90
Existing Dwelling & Garage	0	0.90
Existing Gravel Driveway	0	0.70

Storm Duration To Use Based on Time of Concentration **10.00 mins**

Catchment Design Stormwater Flow

Catchment Runoff Q = CIA/3600000

Where C = Runoff Coefficient 0.90 *Impervious*

I = Rainfall Intensity Refer to table below

A = Catchment Area 795.00 m2

Event (ARI)	Storm Duration, t (min)	Rainfall Intensity (mm/hr) Refer Sheet 16	Q ($m^{3/s}$)	24 Hour Runoff Volume (m^3)
2	10	65.6	0.0130	1127.12
5	10	85.1	0.0169	1460.63
10	10	99.5	0.0198	1707.76
20	10	114.3	0.0227	1962.91
50	10	134.6	0.0267	2310.49
100	10	150.9	0.0300	2591.77

Pipe sizing-Q10

Q10	0.0198	m^3/s	
Pipe slope, S	0.005	m/m	*Pipe grade of 0.50%*
Pipe diameter, d	**0.225**	m	*225mm Diameter*
Colebrook-White Roughness, k	0.15	mm	*uPVC*
Flow velocity, v	1.1	m/s	
Pipe Flow Capacity	0.0422	m^3/s	*Pipe capacity is above 10 Year Flows*

Proposed 150mm pipe has capacity for 10 year, 10 minute Event

NOTES:

1 Guides used for this assessment are:- Waikato RITS, NZS Building Code E1/VM1, SW management Guide Auckland Regional Council TP 10 Design Manual, and Waikato Stormwater Management Guideline TR201801

2 Rainfall intensity taken from Hirds V4 Historical Data with 2.1 degrees temperature rise percentage adjustment

PROJECT	TKKM o Tututarakihi Kaitaia	**OUR Ref**	210541
LOCATION	Kaitaia	**DATE**	24/03/22
CLIENT	Modular Classrooms Ltd	**CALCS BY**	SM
SHEET	7	**CHECKED BY**	JD

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Proposed Stormwater Line 2: 225mm uPVC Pipe Capacity-Q10

Proposed Catchment Information

	Area (m2)	Runoff Coefficients
Proposed Modules & Canopy	0	0.90
Proposed Courts	390	0.90
Proposed Astroturf	120	0.90
Proposed Footpaths	285	0.90
Proposed Gravel Carpark	0	0.70
Existing Childcare Centre & Canopy	205	0.90
Existing Dwelling & Garage	0	0.90
Existing Gravel Driveway	0	0.70

Storm Duration To Use Based on Time of Concentration **10.00 mins**

Catchment Design Stormwater Flow

Catchment Runoff Q = CIA/3600000

Where C = Runoff Coefficient 0.90 *Impervious*

I = Rainfall Intensity Refer to table below

A = Catchment Area 1000.00 m2

Event (ARI)	Storm Duration, t (min)	Rainfall Intensity (mm/hr) Refer Sheet 16	Q ($m^{3/s}$)	24 Hour Runoff Volume (m^3)
2	10	65.6	0.0164	1417.76
5	10	85.1	0.0213	1837.27
10	10	99.5	0.0249	2148.12
20	10	114.3	0.0286	2469.07
50	10	134.6	0.0336	2906.28
100	10	150.9	0.0377	3260.09

Pipe sizing-Q10

Q10	0.0249	m^3/s	
Pipe slope, S	0.003	m/m	*Pipe grade of 0.30%*
Pipe diameter, d	**0.225**	m	*225mm Diameter*
Colebrook-White Roughness, k	0.15	mm	*uPVC*
Flow velocity, v	0.8	m/s	
Pipe Flow Capacity	0.0324	m^3/s	*Pipe capacity is above 10 Year Flows*

Proposed 225mm pipe has capacity for 10 year, 10 minute Event

NOTES:

1 Guides used for this assessment are:- Waikato RITS, NZS Building Code E1/VM1, SW management Guide Auckland Regional Council TP 10 Design Manual, and Waikato Stormwater Management Guideline TR201801

2 Rainfall intensity taken from Hirds V4 Historical Data with 2.1 degrees temperature rise percentage adjustment

PROJECT	TKKM o Tututarakihi Kaitaia	**OUR Ref**	210541
LOCATION	Kaitaia	**DATE**	24/03/22
CLIENT	Modular Classrooms Ltd	**CALCS BY**	SM
SHEET	13	**CHECKED BY**	JD

Phoenix Consulting Engineers Ltd

Proposed Inlet & Outlet Pipe Capacity-Tank for Modules & Canopy-Q10

Proposed Catchment Information

	Area (m2)	Runoff Coefficients
Proposed Modules & Canopy	485	0.90
Proposed Courts	0	0.90
Proposed Astroturf	0	0.90
Proposed Footpaths	0	0.90
Proposed Gravel Carpark	0	0.70
Existing Childcare Centre & Canopy	0	0.90

Storm Duration To Use Based on Time of Concentration **10.00 mins**

Catchment Design Stormwater Flow

Catchment Runoff Q = CIA/3600000

Where C = Runoff Coefficient 0.90 *Impervious*

I = Rainfall Intensity Refer to table below

A = Catchment Area 485.00 m2

Event (ARI)	Storm Duration, t (min)	Rainfall Intensity (mm/hr) Refer Sheet 16	Q ($m^{3/s}$)	24 Hour Runoff Volume (m^3)
2	10	65.6	0.0080	687.61
5	10	85.1	0.0103	891.08
10	10	99.5	0.0121	1041.84
20	10	114.3	0.0139	1197.50
50	10	134.6	0.0163	1409.55
100	10	150.9	0.0183	1581.14

Pipe sizing-Q10

Q10	0.0121	m^3/s	
Pipe slope, S	0.005	m/m	*Pipe grade of 0.50%*
Pipe diameter, d	**0.15**	m	*150mm Diameter*
Colebrook-White Roughness, k	0.15	mm	*uPVC*
Flow velocity, v	0.8	m/s	
Pipe Flow Capacity	0.0144	m^3/s	*Pipe capacity is above 10 Year Flows*

Proposed 150mm pipe has capacity for 10 year, 10 minute Event

NOTES:

1 Guides used for this assessment are:- Waikato RITS, NZS Building Code E1/VM1, SW management Guide Auckland Regional Council TP 10 Design Manual, and Waikato Stormwater Management Guideline TR201801

2 Rainfall intensity taken from Hirds V4 Historical Data with 2.1 degrees temperature rise percentage adjustment

PROJECT	TKKM o Tututarakihi Kaitaia	**OUR Ref**	210541
LOCATION	Kaitaia	**DATE**	24/03/22
CLIENT	Modular Classrooms Ltd	**CALCS BY**	SM
SHEET	8	**CHECKED BY**	JD

Phoenix Consulting Engineers Ltd

Proposed Stormwater Line 3: 225mm uPVC Pipe Capacity-Q10

Proposed Catchment Information

	Area (m2)	Runoff Coefficients
Proposed Modules & Canopy	485	0.90
Proposed Courts	0	0.90
Proposed Astroturf	0	0.90
Proposed Footpaths	0	0.90
Proposed Gravel Carpark	0	0.70
Existing Childcare Centre & Canopy	0	0.90
Existing Dwelling & Garage	160	0.90
Existing Gravel Driveway	220	0.70

Storm Duration To Use Based on Time of Concentration **10.00 mins**

Catchment Design Stormwater Flow

Catchment Runoff Q = CIA/3600000

Where C = Runoff Coefficient 0.90 *Impervious*

I = Rainfall Intensity Refer to table below

A = Catchment Area 485.00 m2

Event (ARI)	Storm Duration, t (min)	Rainfall Intensity (mm/hr) Refer Sheet 16	Q ($m^{3/s}$)	24 Hour Runoff Volume (m^3)
2	10	65.6	0.0134	1157.05
5	10	85.1	0.0174	1499.42
10	10	99.5	0.0203	1753.10
20	10	114.3	0.0233	2015.04
50	10	134.6	0.0275	2371.85
100	10	150.9	0.0308	2660.59

Pipe sizing-Q10

Q10	0.0203	m^3/s	
Pipe slope, S	0.005	m/m	*Pipe grade of 0.50%*
Pipe diameter, d	**0.225**	m	*225mm Diameter*
Colebrook-White Roughness, k	0.15	mm	*uPVC*
Flow velocity, v	1.1	m/s	
Pipe Flow Capacity	0.0422	m^3/s	*Pipe capacity is above 10 Year Flows*

Proposed 150mm pipe has capacity for 10 year, 10 minute Event

NOTES:

1 Guides used for this assessment are:- Waikato RITS, NZS Building Code E1/VM1, SW management Guide Auckland Regional Council TP 10 Design Manual, and Waikato Stormwater Management Guideline TR201801

2 Rainfall intensity taken from Hirds V4 Historical Data with 2.1 degrees temperature rise percentage adjustment

PROJECT	TKKM o Tututarakihi Kaitaia	**OUR Ref**	210541
LOCATION	Kaitaia	**DATE**	24/03/22
CLIENT	Modular Classrooms Ltd	**CALCS BY**	SM
SHEET	6	**CHECKED BY**	JD

Phoenix Consulting Engineers Ltd

Proposed Stormwater Line 1: 225mm uPVC Pipe Capacity-Q10

Proposed Catchment Information

	Area (m2)	Runoff Coefficients
Proposed Modules & Canopy	485	0.90
Proposed Courts	390	0.90
Proposed Astroturf	120	0.90
Proposed Footpaths	285	0.90
Proposed Gravel Carpark	0	0.70
Existing Childcare Centre & Canopy	205	0.90
Existing Dwelling & Garage	160	0.90
Existing Gravel Driveway	220	0.70

Storm Duration To Use Based on Time of Concentration **10.00 mins**

Catchment Design Stormwater Flow

Catchment Runoff Q = CIA/3600000

Where C = Runoff Coefficient

I = Rainfall Intensity

A = Catchment Area

Event (ARI)	Storm Duration, t (min)	Rainfall Intensity (mm/hr) Refer Sheet 16	Q ($m^{3/s}$)	24 Hour Runoff Volume (m^3)
2	10	30.4	0.0138	1193.32
5	10	85.1	0.0316	2728.35
10	10	99.5	0.0369	3189.96
20	10	114.3	0.0424	3666.58
50	10	134.6	0.0500	4315.83
100	10	150.9	0.0560	4841.23

Pipe sizing-Q10

Q10	0.0369	m^3/s	
Pipe slope, S	0.003	m/m	*Pipe grade of 0.30%*
Pipe diameter, d	**0.3**	m	*300mm Diameter*
Colebrook-White Roughness, k	0.15	mm	*uPVC*
Flow velocity, v	1.0	m/s	
Pipe Flow Capacity	0.0692	m^3/s	*Pipe capacity is above 10 Year Flows*

Proposed 300mm pipe has capacity for 10 year, 10 minute Event

NOTES:

1 Guides used for this assessment are:- Waikato RITS, NZS Building Code E1/VM1, SW management Guide Auckland Regional Council TP 10 Design Manual, and Waikato Stormwater Management Guideline TR201801

2 Rainfall intensity taken from Hirds V4 Historical Data with 2.1 degrees temperature rise percentage adjustment

PROJECT	TKKM o Tututarakihi Kaitaia	**OUR Ref**	210541
LOCATION	Kaitaia	**DATE**	24/03/22
CLIENT	Modular Classrooms Ltd	**CALCS BY**	SM
SHEET	11	**CHECKED BY**	JD

Phoenix Consulting Engineers Ltd

Proposed Stormwater Line 6: 225mm uPVC Pipe Capacity-Q10

Proposed Catchment Information

	Area (m2)	Runoff Coefficients
Proposed Modules & Canopy	0	0.90
Proposed Courts	0	0.90
Proposed Astroturf	0	0.90
Proposed Footpaths	0	0.90
Proposed Gravel Carpark	765	0.70
Existing Childcare Centre & Canopy	0	0.90
Existing Dwelling & Garage	0	0.90
Existing Gravel Driveway	0	0.70

Storm Duration To Use Based on Time of Concentration **10.00 mins**

Catchment Design Stormwater Flow

Catchment Runoff Q = CIA/3600000

Where C = Runoff Coefficient

I = Rainfall Intensity

A = Catchment Area m2

Event (ARI)	Storm Duration, t (min)	Rainfall Intensity (mm/hr) Refer Sheet 16	Q ($m^{3/s}$)	24 Hour Runoff Volume (m^3)
2	10	30.4	0.0045	390.96
5	10	85.1	0.0127	1093.18
10	10	99.5	0.0148	1278.13
20	10	114.3	0.0170	1469.10
50	10	134.6	0.0200	1729.24
100	10	150.9	0.0225	1939.75

Pipe sizing-Q10

Q10	0.0148	m^3/s	
Pipe slope, S	0.003	m/m	*Pipe grade of 0.30%*
Pipe diameter, d	**0.225**	m	*225mm Diameter*
Colebrook-White Roughness, k	0.15	mm	*uPVC*
Flow velocity, v	0.8	m/s	
Pipe Flow Capacity	0.0324	m^3/s	*Pipe capacity is above 10 Year Flows*

Proposed 225mm pipe has capacity for 10 year, 10 minute Event

NOTES:

1 Guides used for this assessment are:- Waikato RITS, NZS Building Code E1/VM1, SW management Guide Auckland Regional Council TP 10 Design Manual, and Waikato Stormwater Management Guideline TR201801

2 Rainfall intensity taken from Hirds V4 Historical Data with 2.1 degrees temperature rise percentage adjustment

PROJECT	TKKM o Tututarakihi Kaitaia	**OUR Ref**	210541
LOCATION	Kaitaia	**DATE**	24/03/22
CLIENT	Modular Classrooms Ltd	**CALCS BY**	SM
SHEET	5	**CHECKED BY**	JD

Phoenix Consulting Engineers Ltd

Proposed Stormwater Outlet: 300mm uPVC Pipe Capacity-Q10

Proposed Catchment Information

	Area (m2)	Runoff Coefficients
Proposed Modules & Canopy	485	0.90
Proposed Courts	390	0.90
Proposed Astroturf	120	0.90
Proposed Footpaths	285	0.90
Proposed Gravel Carpark	780	0.70
Existing Childcare Centre & Canopy	205	0.90
Existing Dwelling & Garage	160	0.90
Existing Gravel Driveway	220	0.70

Storm Duration To Use Based on Time of Concentration **10.00 mins**

Catchment Design Stormwater Flow

Catchment Runoff Q = CIA/3600000

Where C = Runoff Coefficient

I = Rainfall Intensity

A = Catchment Area

Event (ARI)	Storm Duration, t (min)	Rainfall Intensity (mm/hr) Refer Sheet 16	Q ($m^{3/s}$)	24 Hour Runoff Volume (m^3)
2	10	30.4	0.0184	1591.94
5	10	85.1	0.0515	4451.31
10	10	99.5	0.0602	5204.42
20	10	114.3	0.0692	5982.02
50	10	134.6	0.0815	7041.27
100	10	150.9	0.0914	7898.47

Pipe sizing-Q10

Q10	0.0602	m^3/s	
Pipe slope, S	0.003	m/m	*Pipe grade of 0.30%*
Pipe diameter, d	**0.3**	m	*300mm Diameter*
Colebrook-White Roughness, k	0.15	mm	*uPVC*
Flow velocity, v	1.0	m/s	
Pipe Flow Capacity	0.0692	m^3/s	*Pipe capacity is above 10 Year Flows*

Proposed 300mm pipe has capacity for 10 year, 10 minute Event

NOTES:

1 Guides used for this assessment are:- Waikato RITS, NZS Building Code E1/VM1, SW management Guide Auckland Regional Council TP 10 Design Manual, and Waikato Stormwater Management Guideline TR201801

2 Rainfall intensity taken from Hirds V4 Historical Data with 2.1 degrees temperature rise percentage adjustment

PROJECT	TKKM o Tututarakihi Kaitaia	**OUR Ref**	210541
LOCATION	Kaitaia	**DATE**	24/03/22
CLIENT	Modular Classrooms Ltd	**CALCS BY**	SM
SHEET	16	**CHECK BY**	JD

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Design Stormwater Rainfall Intensities

HIRDS V4 INTENSITY - DURATION - FREQUENCY TABLE

ARI (y)	AEP	10m	20m	30m	60m	2h	6h	12h	24h	48h	72h
1.58	0.633	51.3	39.3	33	23.8	16.5	8.51	5.33	3.22	1.87	1.33
2	0.5	56.1	43	36.1	26	18.1	9.33	5.85	3.53	2.05	1.46
5	0.2	72.7	55.8	46.9	33.9	23.5	12.2	7.64	4.62	2.68	1.92
10	0.1	85	65.3	55	39.7	27.6	14.3	8.99	5.44	3.16	2.26
20	0.05	97.7	75.1	63.3	45.8	31.8	16.5	10.4	6.29	3.66	2.62
30	0.033	105	81.1	68.3	49.4	34.4	17.9	11.3	6.81	3.97	2.84
40	0.025	111	85.4	71.9	52.1	36.2	18.8	11.9	7.19	4.19	3
50	0.02	115	88.7	74.8	54.1	37.7	19.6	12.4	7.49	4.36	3.13
60	0.017	119	91.5	77.1	55.8	38.9	20.2	12.8	7.73	4.51	3.23
80	0.012	125	95.9	80.8	58.6	40.8	21.3	13.4	8.12	4.74	3.39
100	0.01	129	99.3	83.8	60.7	42.3	22	13.9	8.43	4.92	3.52
250	0.004	147	114	95.8	69.5	48.5	25.3	16	9.7	5.67	4.06

% ADJUSTMENTS FOR CLIMATE CHANGE

ARI (YRS)	AEP	10m	20m*	30m	60m	2h	6h	12h	24h	48h	72h
2	0.50	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
5	0.20	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
10	0.10	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
20	0.05	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
30	0.03	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
50	0.02	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
100	0.01	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0

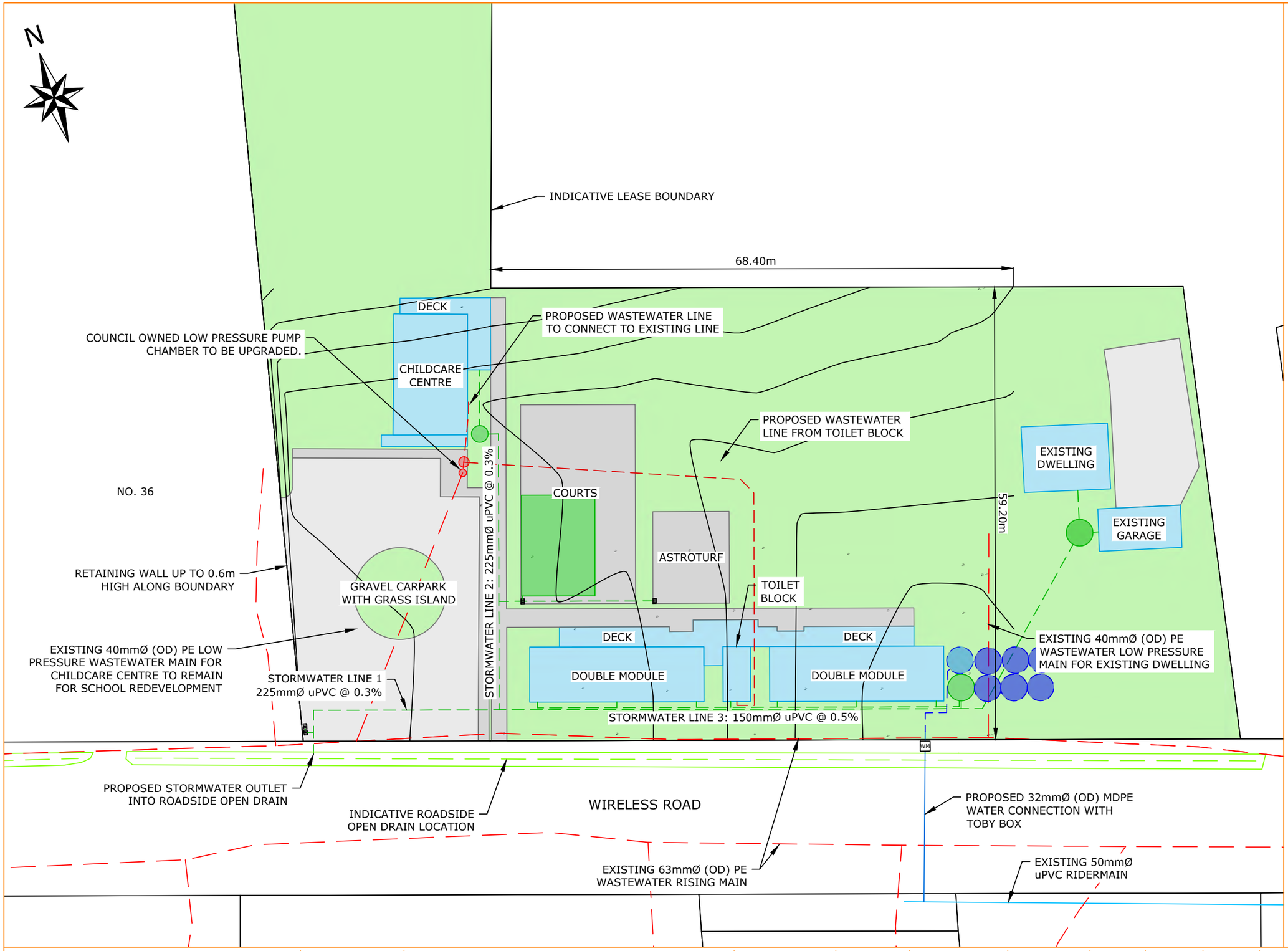
ADJUSTED TABLE FOR DESIGN USE (ALLOWING FOR CLIMATE CHANGE)

ARI (y)	AEP	10m	20m	30m	60m	2h	6h	12h	24h	48h	72h
1.58											
2	0.50	65.64	50.31	42.24	30.42	21.18	10.92	6.84	4.13	2.40	1.71
5	0.20	85.06	65.29	54.87	39.66	27.50	14.27	8.94	5.41	3.14	2.25
10	0.10	99.45	76.40	64.35	46.45	32.29	16.73	10.52	6.36	3.70	2.64
20	0.05	114.31	87.87	74.06	53.59	37.21	19.31	12.17	7.36	4.28	3.07
30	0.03	122.85	94.89	79.91	57.80	40.25	20.94	13.22	7.97	4.64	3.32
50	0.02	134.55	103.78	87.52	63.30	44.11	22.93	14.51	8.76	5.10	3.66
100	0.01	150.93	116.18	98.05	71.02	49.49	25.74	16.26	9.86	5.76	4.12

NOTES:

1 Guides used for this assessment are:- NZS Building Code E1/VM1 and Auckland Regional Council TP 10 Design Manual

2 Rainfall intensity taken from Hirds V4 Historical Data with 2.1 degrees temperature rise percentage adjustment



NOTES:

1. PROPERTY BOUNDARIES ARE FOR INDICATIVE PURPOSES ONLY
2. COORDINATES ARE IN TERMS OF MT EDEN 2000
3. LEVELS ARE IN TERMS OF ONE TREE POINT 1964 LEVEL DATUM
4. CONTOURS INTERVALS ARE:
   MAJOR: 1.0m
   MINOR: 0.2m
5. WASTEWATER AND WATER LINE LOCATIONS ARE FOR INDICATIVE PURPOSES ONLY AND NEED TO BE LOCATED ON SITE

LEGEND:

- BUILDING AREA
- PR PERVIOUS AREA
- PR IMPERVIOUS AREA
- PR GRAVEL CARPARK
- EX PROPERTY BOUNDARY
- PR LEASE BOUNDARY
- 7.0 EX CONTOUR (MAJOR)
- EX CONTOUR (MINOR)
- 7.0 PR CONTOUR (MAJOR)
- PR CONTOUR (MINOR)
- EX BUILDING OUTLINE
- EX CONCRETE/ASPHALT
- EX FENCE LINE
- EX STORMWATER (PUBLIC)
- PR STORMWATER (PRIVATE)
- EX WASTEWATER (PUBLIC)
- EX WASTEWATER (PRIVATE)
- PR WASTEWATER (PRIVATE)
- EX WATER (PUBLIC)
- EX UNKNOWN SERVICE
- EX TREE LOCATION
- SW EX SW MANHOLE
- EX SW CATCHPIT
- WW EX WW MANHOLE
- PP EX POWERPOLE
- BH GPS BOREHOLE LOCATION

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Cambridge
07 560 3555
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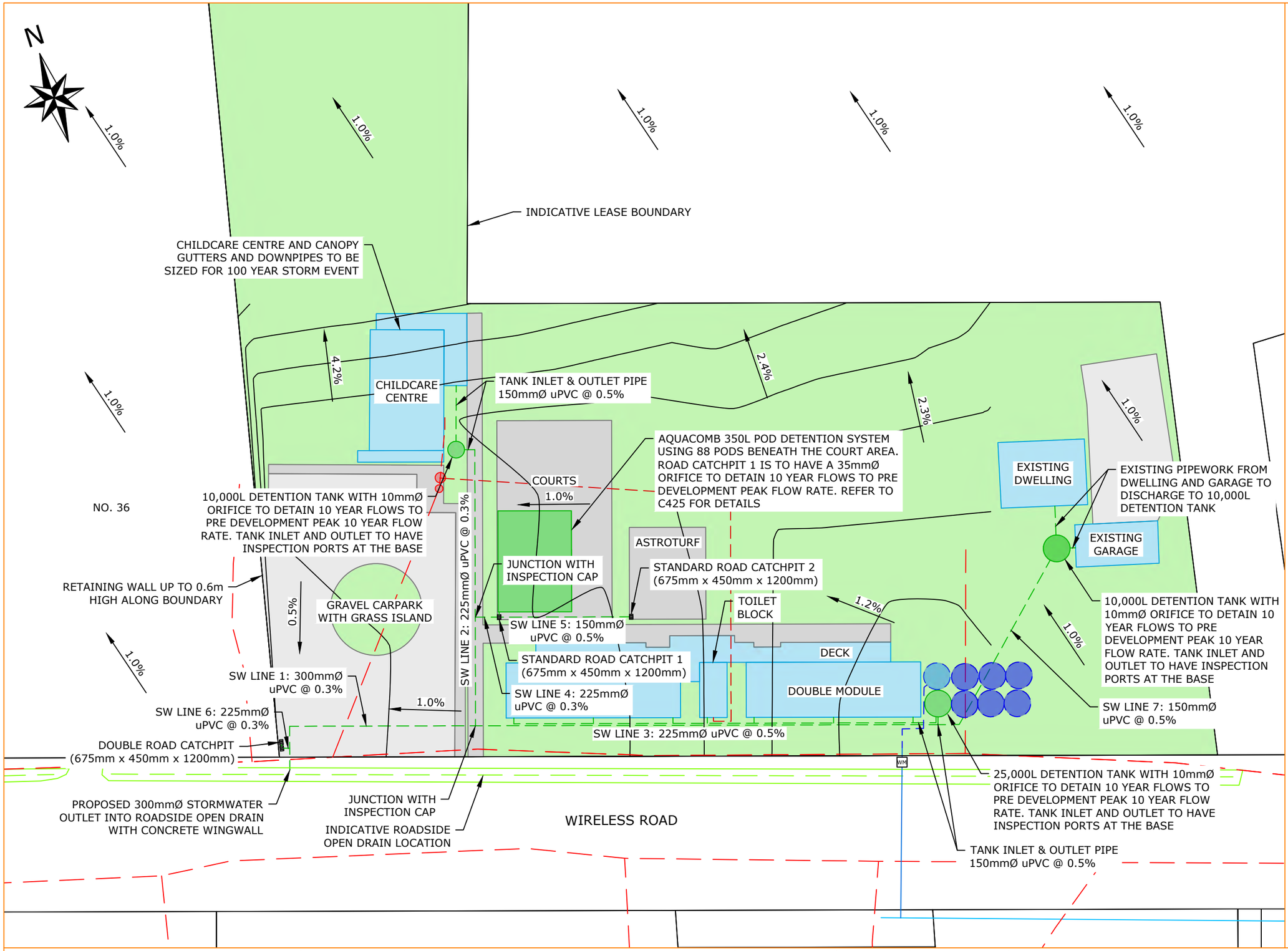
Site:	Project No.	Sheet	Scale (Original at A3)
TKKM O TUTUTARAKIHI	210541	C100	1:500 @ A3

Drawing: THREE WATERS LAYOUT PLAN

Client: MODULAR CLASSROOMS LTD

Drawn	SM	02/22
Checked	SM	02/22
Approved	JD	02/22

Rev	Description	Drawn	Date
C	WASTEWATER UPDATED	NP	08/22
B	ADDITIONAL LEASE AREA	SM	03/22
A	FOR CONSENT	SM	02/22



NOTES:

1. PROPERTY BOUNDARIES ARE FOR INDICATIVE PURPOSES ONLY
2. COORDINATES ARE IN TERMS OF MT EDEN 2000
3. LEVELS ARE IN TERMS OF ONE TREE POINT 1964 LEVEL DATUM
4. CONTOUR INTERVALS ARE:
   MAJOR: 1.0m
   MINOR: 0.2m
5. WASTEWATER AND WATER LINE LOCATIONS ARE FOR INDICATIVE PURPOSES ONLY AND NEED TO BE LOCATED ON SITE
6. JUNCTION CAPS BELOW GROUND ARE TO HAVE AN ACCESSIBLE LID ON THE SURFACE TO ALLOW FOR FUTURE MAINTENANCE ACCESS
7. ALL WORKS TO BE IN ACCORDANCE WITH NEW ZEALAND BUILDING CODE AND FAR NORTH DISTRICT COUNCIL ENGINEERING STANDARDS

LEGEND:

- BUILDING AREA
- PR PERVIOUS AREA
- PR IMPERVIOUS AREA
- PR GRAVEL CARPARK
- EX PROPERTY BOUNDARY
- PR LEASE BOUNDARY
- 7.0 EX CONTOUR (MAJOR)
- EX CONTOUR (MINOR)
- 7.0 PR CONTOUR (MAJOR)
- PR CONTOUR (MINOR)
- EX BUILDING OUTLINE
- EX CONCRETE/ASPHALT
- EX FENCE LINE
- EX STORMWATER (PUBLIC)
- PR STORMWATER (PRIVATE)
- EX WASTEWATER (PUBLIC)
- EX WASTEWATER (PRIVATE)
- PR WASTEWATER (PRIVATE)
- EX WATER (PUBLIC)
- EX UNKNOWN SERVICE
- EX TREE LOCATION
- SW EX SW MANHOLE
- EX SW CATCHPIT
- WW EX WW MANHOLE
- PP EX POWERPOLE
- BH GPS BOREHOLE LOCATION

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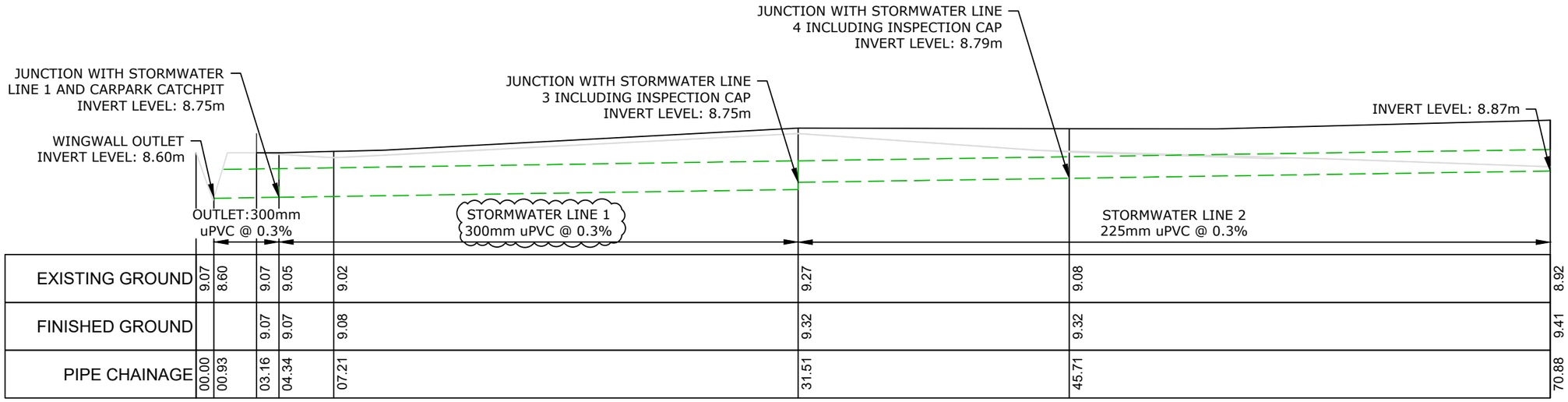
Site:	Project No.	Sheet	Scale (Original at A3)
TKKM O TUTUTARAKIHI	210541	C400	1:500 @ A3

Drawing: STORMWATER MANAGEMENT LAYOUT PLAN

Client: MODULAR CLASSROOMS LTD

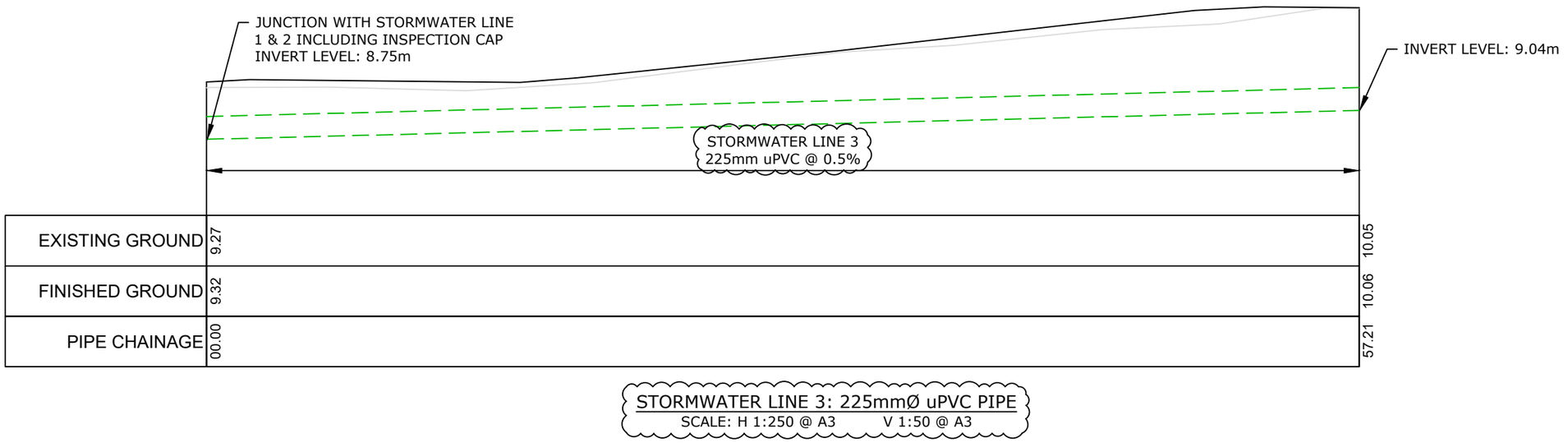
Drawn	SM	11/21
Checked	SM	11/21
Approved	JD	11/21

Rev	Description	Drawn	Date
D	UPDATED DESIGN	NP	08/22
C	ADDITIONAL LEASE AREA	SM	03/22
B	REVISED DESIGN	SM	02/22
A	FOR CONSENT	SM	11/21



STORMWATER LINE 1 & 2: 225mmØ uPVC PIPE

SCALE: H 1:250 @ A3 V 1:50 @ A3



STORMWATER LINE 3: 225mmØ uPVC PIPE

SCALE: H 1:250 @ A3 V 1:50 @ A3

NOTES:

1. VERTICAL LONGSECTION SCALE IS FIVE TIMES EXAGERRATED FOR VISUAL PURPOSES. REFER TO SCALE ON PLAN FOR DETAILS
2. ALL WORKS TO BE IN ACCORDANCE WITH NEW ZEALAND BUILDING CODE AND FAR NORTH DISTRICT COUNCIL ENGINEERING STANDARDS

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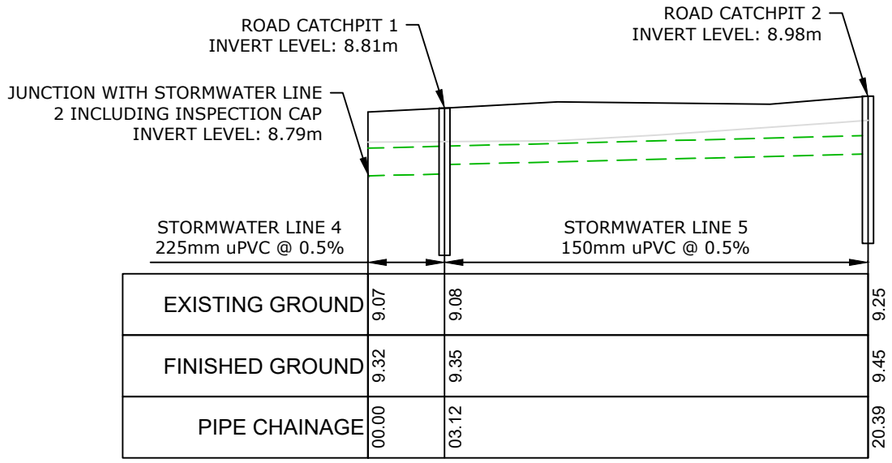
Site:	Project No.	Sheet	Scale (Original at A3)
TKKM O TUTUTARAKIHI	210541	C420	AS SHOWN

Drawing:	Client
STORMWATER LONGSECTIONS	MODULAR CLASSROOMS LTD

Drawn	SM	11/21
Checked	SM	11/21
Approved	JD	11/21

Rev	Description	Drawn	Date
C	ADDITIONAL LEASE AREA	SM	03/22
B	REVISED DESIGN	SM	02/22
A	FOR CONSENT	SM	11/21



STORMWATER LINE 4 & 5: 150mmØ uPVC PIPE

SCALE: H 1:250 @ A3 V 1:50 @ A3

NOTES:

1. VERTICAL LONGSECTION SCALE IS FIVE TIMES EXAGERRATED FOR VISUAL PURPOSES. REFER TO SCALE ON PLAN FOR DETAILS
2. ALL WORKS TO BE IN ACCORDANCE WITH NEW ZEALAND BUILDING CODE AND FAR NORTH DISTRICT COUNCIL ENGINEERING STANDARDS

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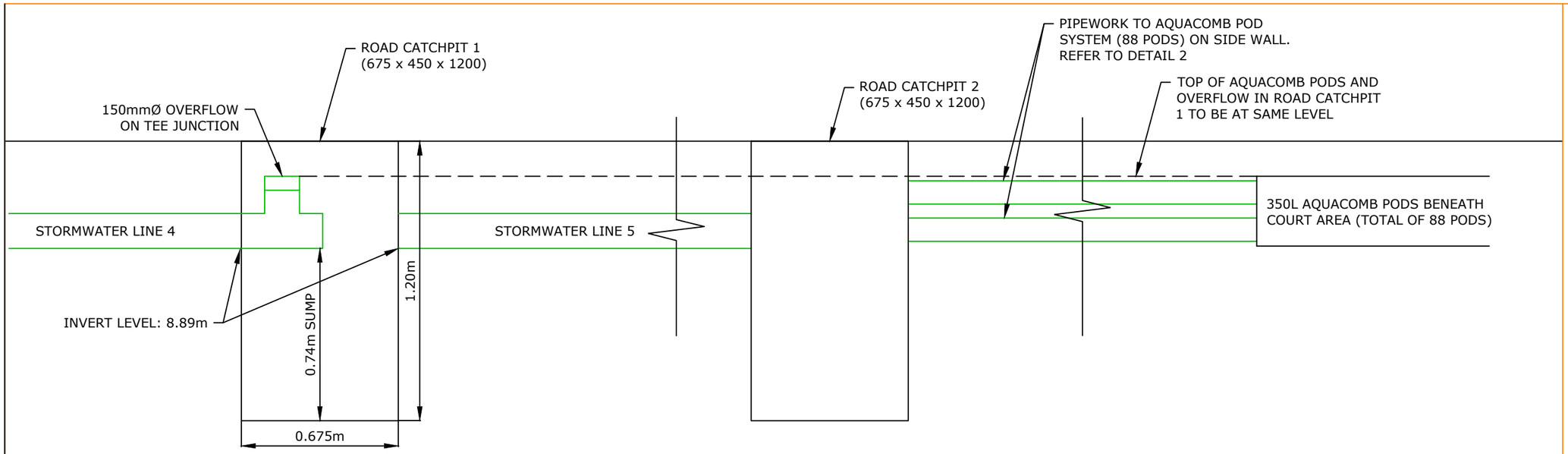
Site:	Project No.	Sheet	Scale (Original at A3)
TKKM O TUTUTARAKIHI	210541	C420	AS SHOWN

Drawing:	Client
STORMWATER LONGSECTIONS	MODULAR CLASSROOMS LTD

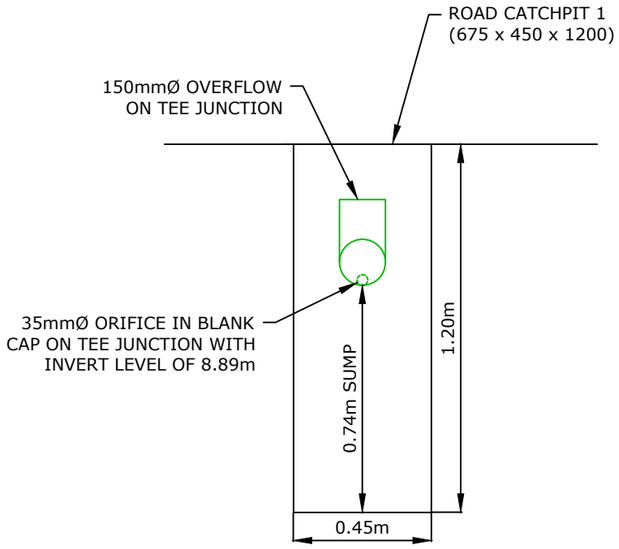
Drawn	SM	11/21
Checked	SM	11/21
Approved	JD	11/21

Rev	Description	Drawn	Date
A	FOR CONSENT	SM	03/22



ROAD CATCHPIT 1, ROAD CATCHPIT 2 AND AQUACOMB PODS DETAIL

SCALE: 1:20 @ A3



ROAD CATCHPIT 1 DETAIL

SCALE: 1:20 @ A3

NOTES:

1. VERTICAL LONGSECTION SCALE IS FIVE TIMES EXAGERRATED FOR VISUAL PURPOSES. REFER TO SCALE ON PLAN FOR DETAILS
2. ALL WORKS TO BE IN ACCORDANCE WITH NEW ZEALAND BUILDING CODE AND FAR NORTH DISTRICT COUNCIL ENGINEERING STANDARDS

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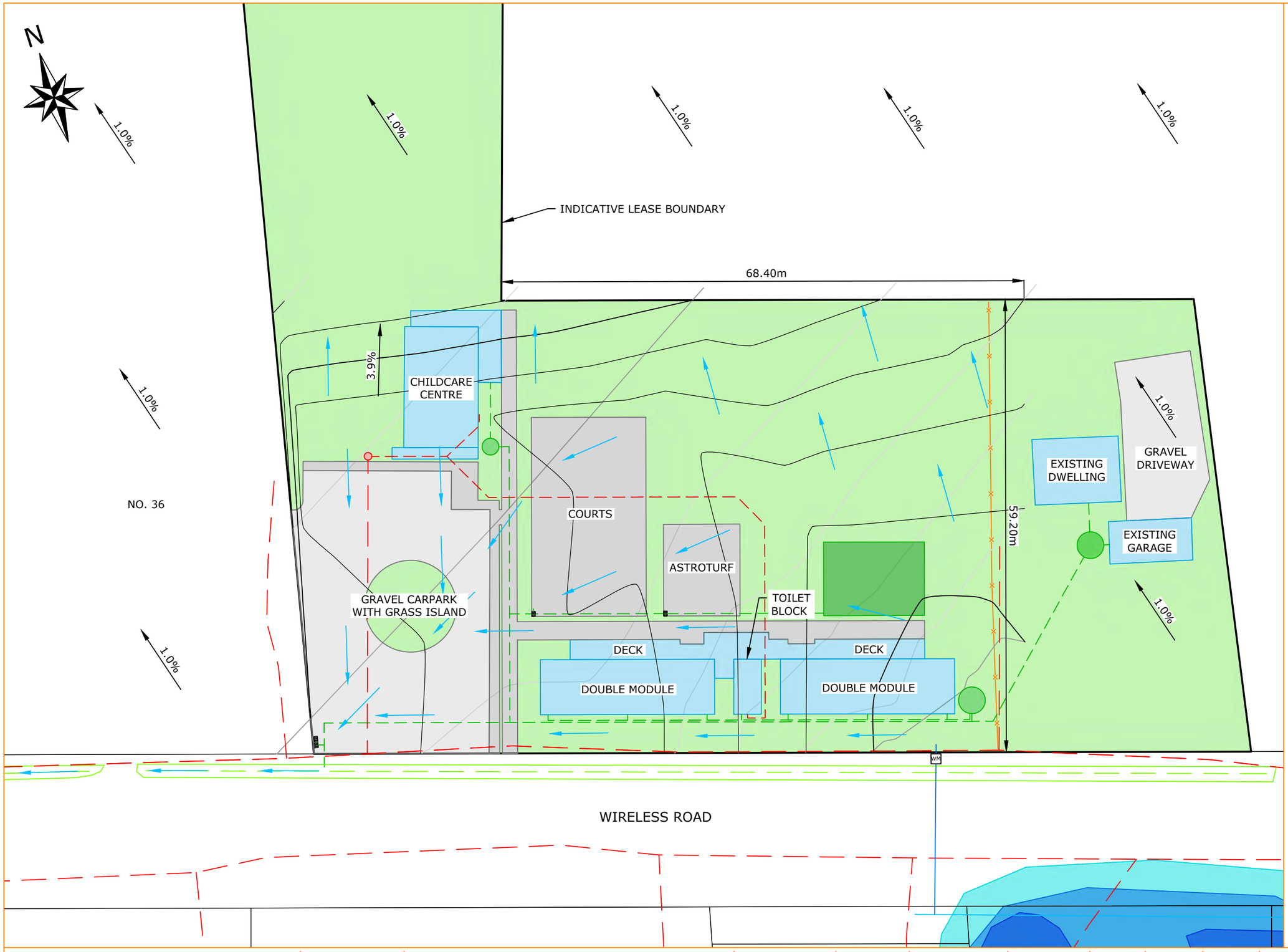
Site:	Project No.	Sheet	Scale (Original at A3)
TKKM O TUTUTARAKIHI	210541	C420	AS SHOWN

Drawing:	Client
STORMWATER DETAILS	MODULAR CLASSROOMS LTD

Drawn	SM	11/21
Checked	SM	11/21
Approved	JD	11/21

Rev	Description	Drawn	Date
A	AQUACOMB POD RELOCATED	SM	07/22



NOTES:

1. VERTICAL LONGSECTION SCALE IS FIVE TIMES EXAGERRATED FOR VISUAL PURPOSES. REFER TO SCALE ON PLAN FOR DETAILS
2. ALL WORKS TO BE IN ACCORDANCE WITH NEW ZEALAND BUILDING CODE AND FAR NORTH DISTRICT COUNCIL ENGINEERING STANDARDS

LEGEND:

- BUILDING AREA
- PR PERVIOUS AREA
- PR IMPERVIOUS AREA
- PR GRAVEL CARPARK
- 10 YEAR FLOOD EXTENT RIVER FLOOD HAZARD ZONE
- 50 YEAR FLOOD EXTENT RIVER FLOOD HAZARD ZONE
- 100 YEAR FLOOD EXTENT RIVER FLOOD HAZARD ZONE
- PR OVERLAND FLOW PATH
- EX PROPERTY BOUNDARY
- PR LEASE BOUNDARY
- 7.0 EX CONTOUR (MAJOR)
- EX CONTOUR (MINOR)
- 7.0 PR CONTOUR (MAJOR)
- PR CONTOUR (MINOR)
- EX BUILDING OUTLINE
- EX CONCRETE/ASPHALT
- EX FENCE LINE
- EX STORMWATER (PUBLIC)
- PR STORMWATER (PRIVATE)
- EX WASTEWATER (PUBLIC)
- EX WASTEWATER (PRIVATE)
- PR WASTEWATER (PRIVATE)
- EX WATER (PUBLIC)
- EX UNKNOWN SERVICE
- EX TREE LOCATION
- SW EX SW MANHOLE
- EX SW CATCHPIT
- WW EX WW MANHOLE
- PP EX POWERPOLE
- BH GPS BOREHOLE LOCATION

Phoenix Consulting Engineers Ltd
PO Box 939
Cambridge
07 560 3555
info@pce.net.nz

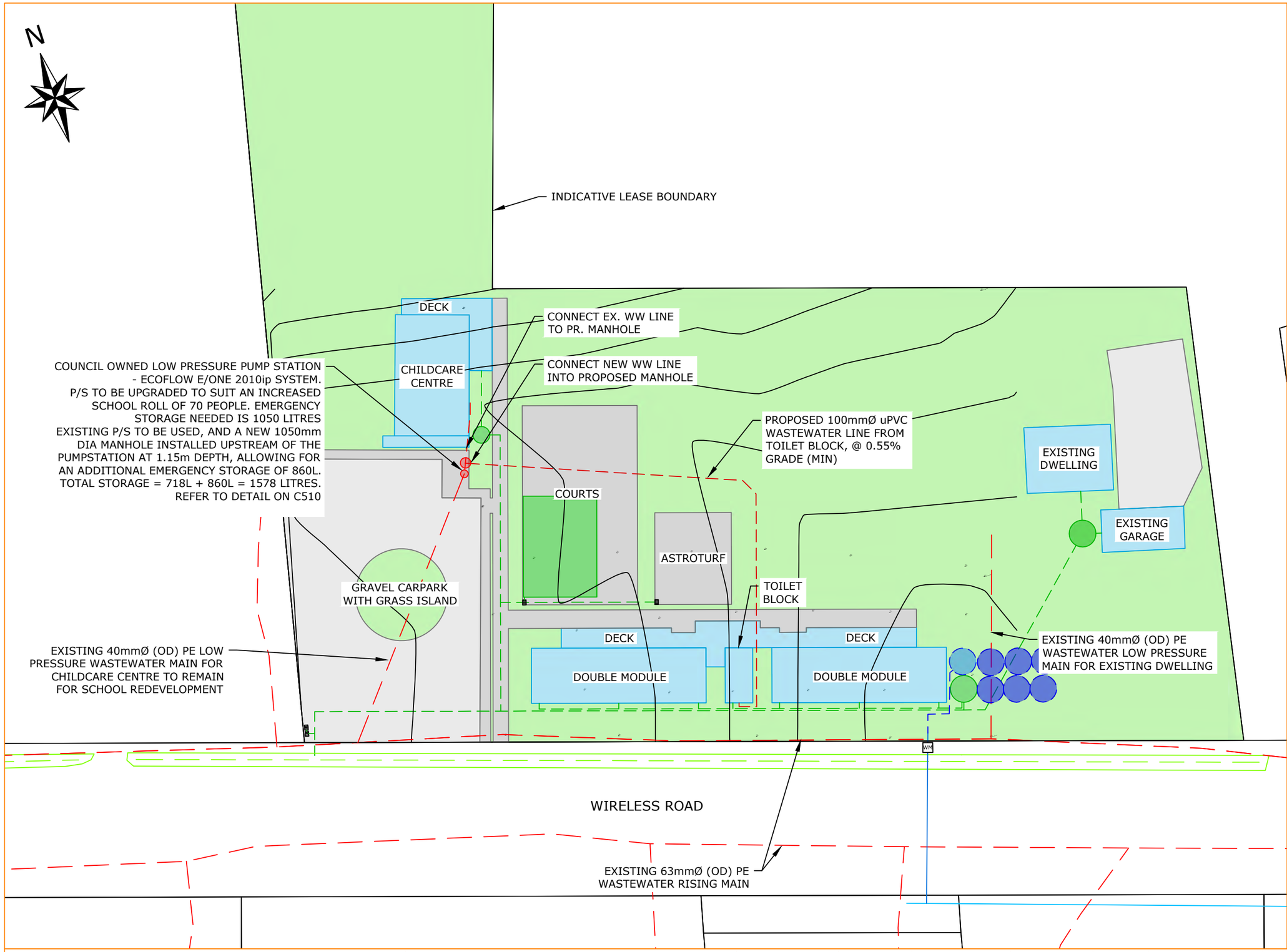
Site:	Project No.	Sheet	Scale (Original at A3)
TKKM O TUTUTARAKIHI	210541	C430	AS SHOWN

Drawing: OVERLAND FLOW PATH PLAN

Client: MODULAR CLASSROOMS LTD

Drawn	SM	02/22
Checked	SM	02/22
Approved	JD	02/22

Rev	Description	Drawn	Date
C	AQUACOMB POD RELOCATED	SM	07/22
B	ADDITIONAL LEASE AREA	SM	03/22
A	FOR CONSENT	SM	02/22



NOTES:

1. PROPERTY BOUNDARIES ARE FOR INDICATIVE PURPOSES ONLY
2. COORDINATES ARE IN TERMS OF MT EDEN 2000
3. LEVELS ARE IN TERMS OF ONE TREE POINT 1964 LEVEL DATUM
4. CONTOURS INTERVALS ARE:
   MAJOR: 1.0m
   MINOR: 0.2m
5. WASTEWATER AND WATER LINE LOCATIONS ARE FOR INDICATIVE PURPOSES ONLY AND NEED TO BE LOCATED ON SITE

LEGEND:

- BUILDING AREA
- PR PERVIOUS AREA
- PR IMPERVIOUS AREA
- PR GRAVEL CARPARK
- EX PROPERTY BOUNDARY
- PR LEASE BOUNDARY
- 7.0 EX CONTOUR (MAJOR)
- EX CONTOUR (MINOR)
- 7.0 PR CONTOUR (MAJOR)
- PR CONTOUR (MINOR)
- EX BUILDING OUTLINE
- EX CONCRETE/ASPHALT
- EX FENCE LINE
- EX STORMWATER (PUBLIC)
- PR STORMWATER (PRIVATE)
- EX WASTEWATER (PUBLIC)
- EX WASTEWATER (PRIVATE)
- PR WASTEWATER (PRIVATE)
- EX WATER (PUBLIC)
- EX UNKNOWN SERVICE
- EX TREE LOCATION
- SW EX SW MANHOLE
- EX SW CATCHPIT
- WW EX WW MANHOLE
- PP EX POWERPOLE
- BH GPS BOREHOLE LOCATION

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Site:	Project No.	Sheet	Scale (Original at A3)
TKKM O TUTUTARAKIHI	210541	C500	1:500 @ A3

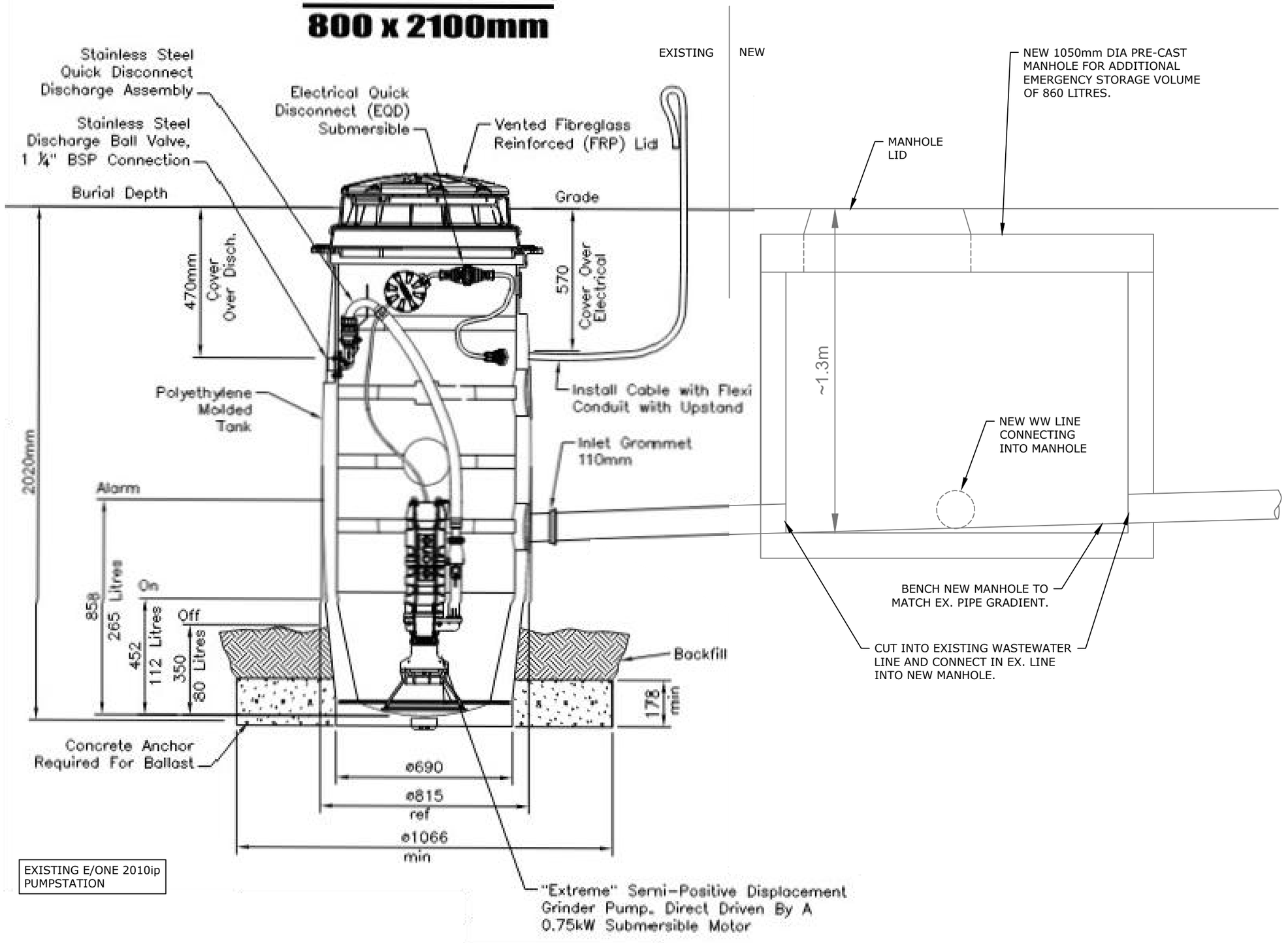
Drawing: WASTEWATER LAYOUT PLAN

Client: MODULAR CLASSROOMS LTD

Drawn	NP	08/22
Checked	NP	08/22
Approved	JD	08/22

Rev	Description	Drawn	Date
A	FOR CONSENT	NP	08/22

MODEL 2010iP
800 x 2100mm



EXISTING E/ONE 2010ip PUMPSTATION

NOTES:

1. PROPERTY BOUNDARIES ARE FOR INDICATIVE PURPOSES ONLY
2. COORDINATES ARE IN TERMS OF MT EDEN 2000
3. LEVELS ARE IN TERMS OF ONE TREE POINT 1964 LEVEL DATUM
4. CONTOURS INTERVALS ARE:
   MAJOR: 1.0m
   MINOR: 0.2m
5. WASTEWATER AND WATER LINE LOCATIONS ARE FOR INDICATIVE PURPOSES ONLY AND NEED TO BE LOCATED ON SITE

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Site:	Project No.	Sheet	Scale (Original at A3)
TKKM O TUTUTARAKIHI	210541	C510	1:500 @ A3

Drawing:	Client
PUMPSTATION UPGRADE DETAIL	MODULAR CLASSROOMS LTD

Drawn	NP	08/22
Checked	NP	08/22
Approved	JD	08/22

Rev	Description	Drawn	Date
A	FOR CONSENT	NP	08/22

N

25,000L WATER TANK, FOR POTABLE WATER SUPPLY FOR SCHOOL, STORED WATER TO BE USED FOR SUPPLY DURING DAY, TANK WILL BE FILLED DURING THE DAY AND NIGHT FROM PROPOSED WATER SUPPLY CONNECTION - USING A FLOAT VALVE SYSTEM, TO CONTROL FLOW.

6x30,000L CONNECTED TANKS FOR FIRE FIGHTING REQUIREMENTS. TO BE FILLED BY OVERFLOW FROM DETENTION TANK CAN ALSO BE FILLED FROM PROPOSED WATER SUPPLY IF REQUIRED. TANKS TO BE FITTED WITH A FIRE FIGHTING KIT.

25,000L STORMWATER DETENTION TANK (REFER TO DETAILS ON C400)

WIRELESS ROAD

PROPOSED 32mmØ (OD) MDPE WATER CONNECTION WITH TOBY BOX

EXISTING 50mmØ uPVC RIDERMAIN

NOTES:

1. PROPERTY BOUNDARIES ARE FOR INDICATIVE PURPOSES ONLY
2. COORDINATES ARE IN TERMS OF MT EDEN 2000
3. LEVELS ARE IN TERMS OF ONE TREE POINT 1964 LEVEL DATUM
4. CONTOUR INTERVALS ARE:
   MAJOR: 1.0m
   MINOR: 0.2m
5. WASTEWATER AND WATER LINE LOCATIONS ARE FOR INDICATIVE PURPOSES ONLY AND NEED TO BE LOCATED ON SITE
6. JUNCTION CAPS BELOW GROUND ARE TO HAVE AN ACCESSIBLE LID ON THE SURFACE TO ALLOW FOR FUTURE MAINTENANCE ACCESS
7. ALL WORKS TO BE IN ACCORDANCE WITH NEW ZEALAND BUILDING CODE AND FAR NORTH DISTRICT COUNCIL ENGINEERING STANDARDS

LEGEND:

- BUILDING AREA
- PR PERVIOUS AREA
- PR IMPERVIOUS AREA
- PR GRAVEL CARPARK
- EX PROPERTY BOUNDARY
- PR LEASE BOUNDARY
- 7.0 EX CONTOUR (MAJOR)
- EX CONTOUR (MINOR)
- 7.0 PR CONTOUR (MAJOR)
- PR CONTOUR (MINOR)
- EX BUILDING OUTLINE
- EX CONCRETE/ASPHALT
- EX FENCE LINE
- EX STORMWATER (PUBLIC)
- PR STORMWATER (PRIVATE)
- EX WASTEWATER (PUBLIC)
- EX WASTEWATER (PRIVATE)
- PR WASTEWATER (PRIVATE)
- EX WATER (PUBLIC)
- EX UNKNOWN SERVICE
- EX TREE LOCATION
- SW EX SW MANHOLE
- EX SW CATCHPIT
- WW EX WW MANHOLE
- PP EX POWERPOLE
- BH GPS BOREHOLE LOCATION

Phoenix Consulting Engineers Ltd
PO Box 939
Cambridge
07 560 3555
info@pce.net.nz

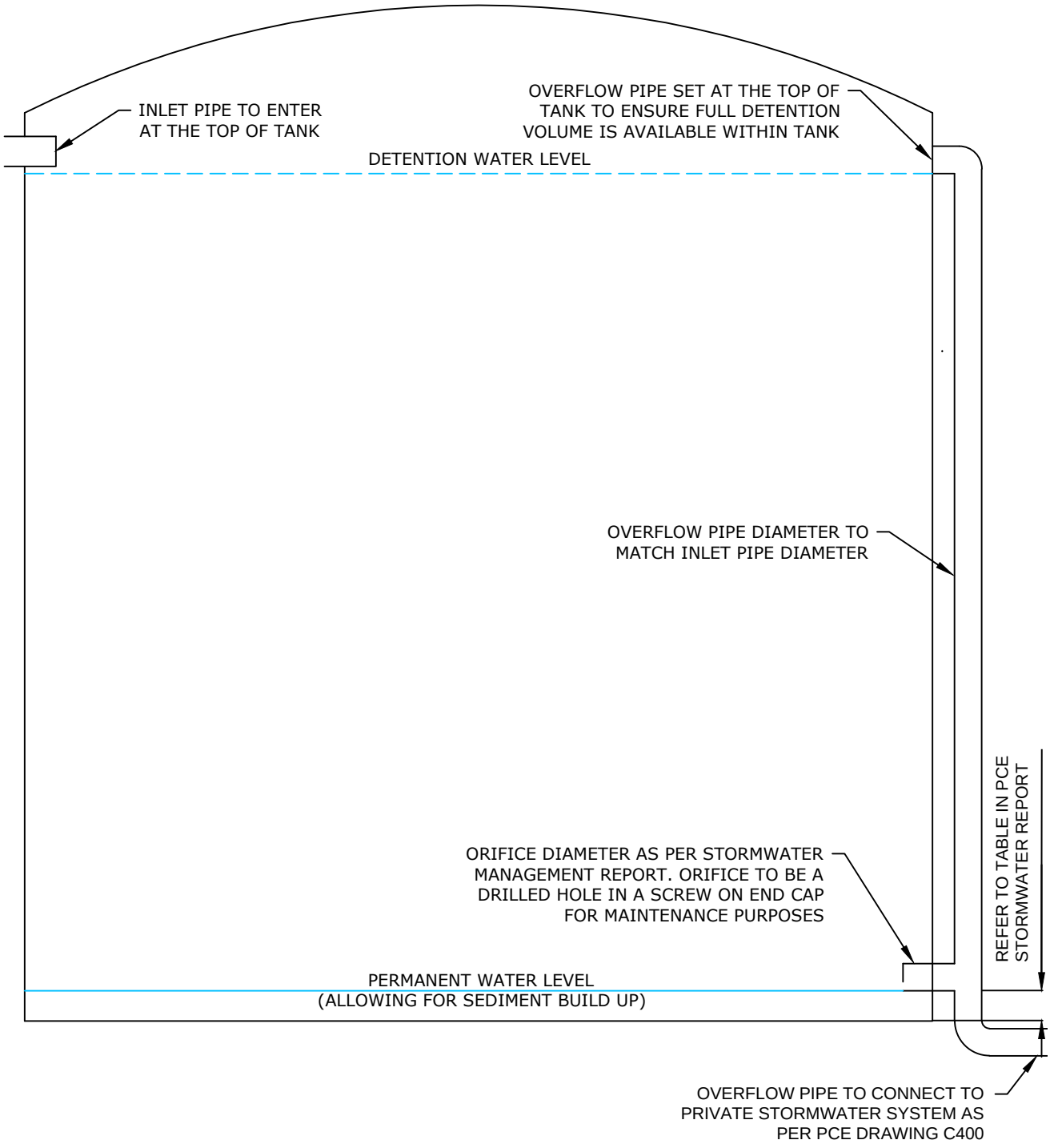
Site:	Project No.	Sheet	Scale (Original at A3)
TKKM O TUTUTARAKIHI	210541	C600	1:500 @ A3

Drawing: WATER SUPPLY LAYOUT PLAN

Client: MODULAR CLASSROOMS LTD

Drawn	NP	08/22
Checked	NP	08/22
Approved	JD	08/22

Rev	Description	Drawn	Date
A	FOR CONSENT	NP	08/22



NOTES:

1. INLET PIPE SIZING DETAILED BY ARCHITECT OR HYDRAULICS ENGINEER.
2. REFER TO PHOENIX CONSULTING ENGINEERS STORMWATER MANAGEMENT REPORT FOR DETAILS OF TANK, OVERFLOW PIPE AND ORIFICE.
3. REFER TO PHOENIX CONSULTING ENGINEERS STORMWATER OPERATION AND MAINTENANCE MANUAL.

Phoenix
Consulting Engineers Ltd

PO Box 939, Cambridge
07 560 3555
info@pce.net.nz

Drawing Title:

TYPICAL STORMWATER DETENTION TANK DETAIL

Scale:	Drawn By:	Checked By:	Approved By:
NTS	SM	MF	MF

APPENDIX E – PREVIOUS STORMWATER REPORT

VISION CONSULTING
Engineers & Planners

STORMWATER MANAGEMENT REPORT

20 Wireless Road, Kaitaia

Prepared for

Elbury Holdings Ltd

30/04/2018

Report Information Summary

Job no.	J13185
Report Author	Lidija Plantev
Report Reviewer	Ben Perry
Version No.	1
Status	Final
Date	30/04/2018

Version No.	Date	Description
1	30/04/2018	Final issued to client.

Document Acceptance

Action	Name	Signed	Date
Author	Lidija Plantev	LPV	27/04/2018
Reviewer	Ben Perry	MIPENZ, CPEng	27/04/2018

Limitations

This report has been prepared by Vision Consulting Engineers Limited (VISION) based on the scope of our engagement. It is solely for our Client's use for the purpose for which it is intended in accordance with the agreed scope of work. VISION does not accept any liability or responsibility in relation to the use of this report contrary to the above, or to any person other than the Client. Any use or reliance by a third party is at that party's own risk. Where information has been supplied by the Client or obtained from other external sources, it has been assumed that it is accurate, without independent verification, unless otherwise indicated. No liability or responsibility is accepted by VISION for any errors or omissions to the extent that they arise from inaccurate information provided by the Client or any external source. VISION should be contacted immediately if variations are encountered. It is possible that further investigation or modification of recommendations is required.

VISION CONSULTING
Engineers & Planners

Vision Consulting Engineers Ltd
Level 1, 62 Kerikeri Road
Kerikeri 0230

Contents

Appendices

Tables

Figures

1 Introduction

Vision Consulting Engineers Limited (VISION) was commissioned by Elbury Holdings Ltd to provide a stormwater management report to accompany a Resource Consent application to the Far North District Council (FNDC) for a proposed Childcare Centre at 20 Wireless Road, Kaitaia, Far North District, Lot 1 Deposited Plan 203524. It is proposed to construct a Childcare Centre, with associated access, car parking and manoeuvring, refer to the attached Akau's Herekino Childcare Site Plan dated March 2018 included in Appendix A.

2 Scope of Work

The scope of work for this report is to assess stormwater management at the site including primary and secondary flows as well as peak flow attenuation for the proposed development as defined on the Akau Site Plan included in Appendix A.

The stormwater management report is based on published and unpublished information about the site, including:

- Review of site plan provided by the client/architect
- Desktop assessment of overland flow paths, impermeable areas.
- Topography data: LiDAR.
- Stormwater management design and reporting for the proposed development.

3 Site Description & Details

The property is located at 20 Wireless Road, Kaitaia being Lot 1 DP 203524 and is approximately 223,972m^2 in area. The property is bounded by Wireless Road to the south, State Highway 1 to the east and rural production land to the north and west. The property contains existing gravel access ways, a dwelling and sheds.

The site is generally covered in grass and is flat to gently sloping.

The locality of the site is shown in Figure 1 and general site details are provided in Table 1.

Table 1. Site Details

Specific details about the site.

Item	Description
Property Owner	Elbury Holdings Ltd
Site Address	20 Wireless Road, Kaitaia, Far North District
Legal Description	Lot 1 Deposited Plan 203524
Certificate of Title	NA128C/923
Site Area	223,972 m2
Territorial Authority	Far North District
Zoning	Rural Production

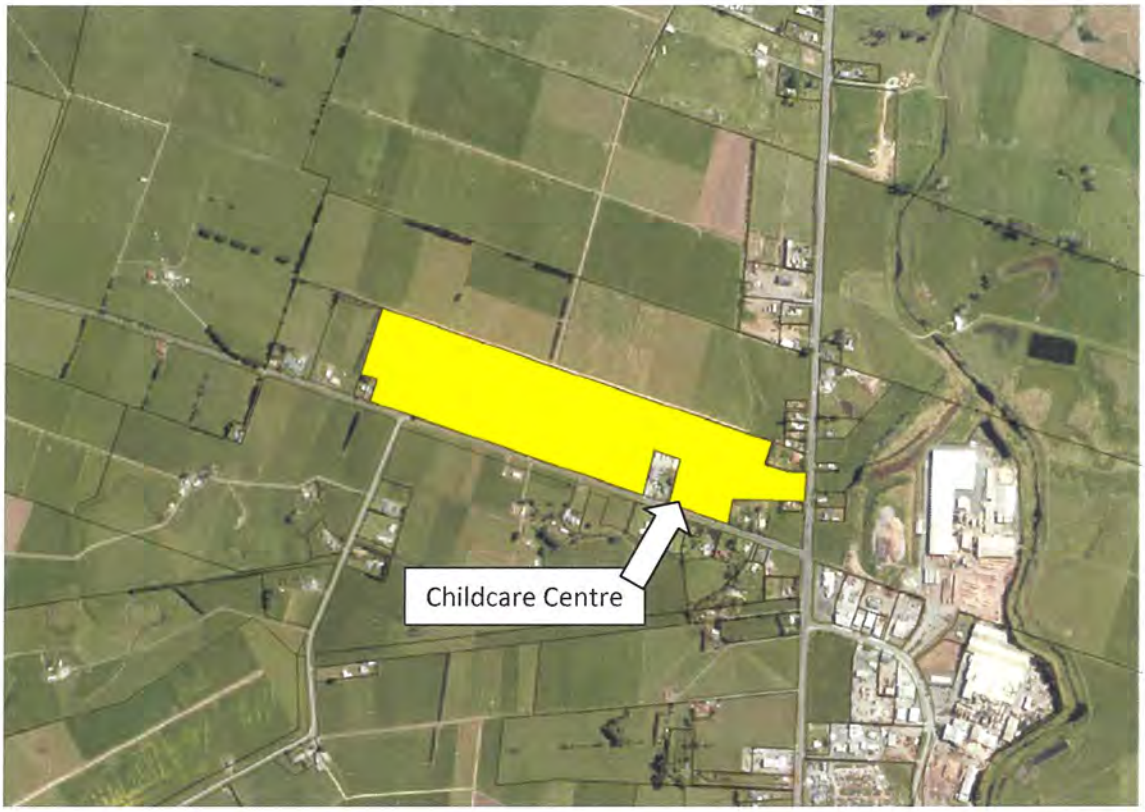


Figure 1. Locality Plan

Site location is highlighted yellow in the image, north is up the page.Image courtesy of FNDC Maps.

4 Council Attenuation Requirements

According to the District Plan the maximum proportion of the gross site area covered by buildings and other impermeable surfaces can be 15%. Impermeable surfaces in total on the side are less than what is allowed and therefore attenuation is not required.

4.1 Secondary Flows

The site is generally flat with a slight fall to the northwest. There is an open drain along the Wireless Road. As such there are no secondary flow paths within the site. The site where the new Childcare Centre is proposed is identified by the FNDC and NRC flood models as being flood susceptible but not prone to flooding. The eastern, western and northern portion of the property is identified as being flood susceptible and prone to flooding.

5 Hydrology Assessment

Given the relatively small catchment, the Rational Method is considered an acceptable solution in the New Zealand Building Code; which is the basis of this analysis.

5.1 Design Inputs

5.1.1 Flooding

The site where the Childcare Centre is proposed to be built is mapped as being flood susceptible but not flood prone by the Northland Regional Council. Figure 2 shows an excerpt of the flood model specific to the site.

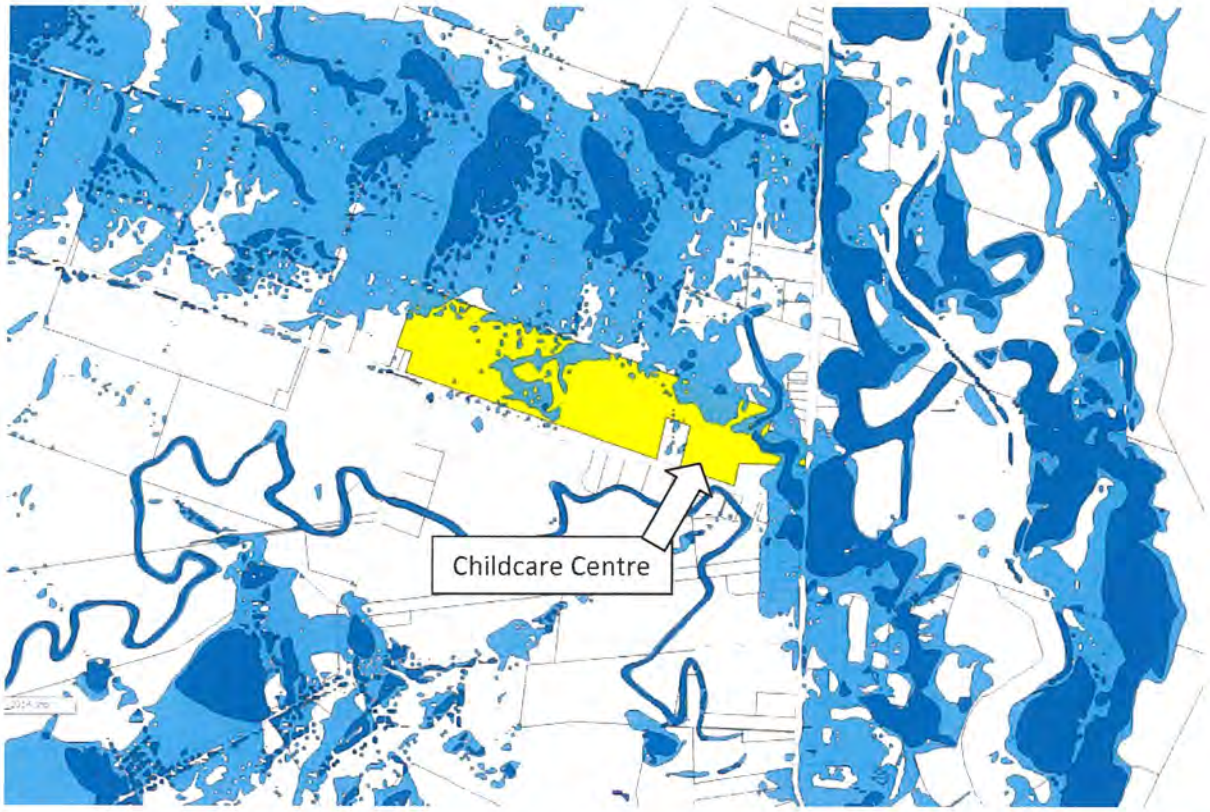


Figure 2. Flood Susceptibility Mapping

The 10- & 100- year flood levels mapped by the NRC, subject site highlighted yellow.

5.1.2 Time of Concentration

Given the small catchment, a time of concentration of 10 minutes has been used to estimate peak flows.

5.1.3 Average Recurrence Interval (ARI)

Secondary flow paths are required by the FNDC Engineering Standards to be designed for the 1 in 100 year ARI rainfall event with an allowance for climate change. A temperature increase of 2.1° C has been used to account for the effects of climate change. Rainfall intensities have been provided from the High Intensity Rainfall Data System version 3 (HIRDSv3).

5.1.4 Catchment Delineation and Runoff Coefficient

The contributing catchment has been delineated based on LiDAR derived 1m contours.
The land cover type and corresponding runoff coefficient have been assessed based on a review of geology maps, soil maps and aerial imagery.

5.1.5 Results

Design inputs and outputs for this site are as follows:

Table 3.1 – Design Inputs & Outputs

	Description	Dimension	Dimension
Inputs:	Rainfall Intensity	166.2	mm per hour
	Catchment Area (dwelling, driveway & parking area, grassed area)	1798	square metres
	Weighted Runoff Coefficient	0.53	Average value
Outputs:	Peak Flow Rate	0.044	m^3 per second

6 Hydraulic Assessment

Given the relatively small catchment, Manning's Equation is considered an acceptable solution in the New Zealand Building Code; which is the basis of this analysis.

The run-off water from the driveway & parking area, roof and grassed area is proposed to enter a swale along on the western side of the proposed building and diffuse to the original flow path on the northern side of the proposed Childcare Centre.

The following sections provide hydraulic analysis of the proposed combined primary and secondary flow path.

6.1 Design Inputs

Peak flows calculated in the preceding section will be used to estimate flow depth and extent within the secondary flow path.

The run-off water from the driveway & parking area, roof and grassed area is proposed to enter the swale on the western side of the proposed Childcare Centre and diffuse to the original flowpath on the northern side of the Childcare Centre.

6.2 Results

Design inputs and outputs for this site are as follows:

Table 3.1 – Design Inputs & Outputs

	Description		**Dimension**
Inputs:	Peak Flow Rate	0.142	m^3 per second
	Drain Type	Vee-drain	-
	Side Slopes	1:4	Vertical:Horizontal
Outputs:	Drain flow depth	15	mm

Refer to attached plans showing the location of the respective drain.

7 Summary & Conclusions

Opinions and recommendations given in this report are based on a desktop study. The calculation of the secondary flow paths is based on section E1 of the New Zealand Building Code for the 100-year event plus an allowance for climate change.

It is recommended that the run-off water from the roof and driveway be collected as described in this report to divert primary and secondary flows around the proposed building in a controlled way and re-distribute these flows back to the existing flow path on the northern side of the proposed building.

Appendix A
Supplied Drawings

NOTE TO CONTRACTORS:

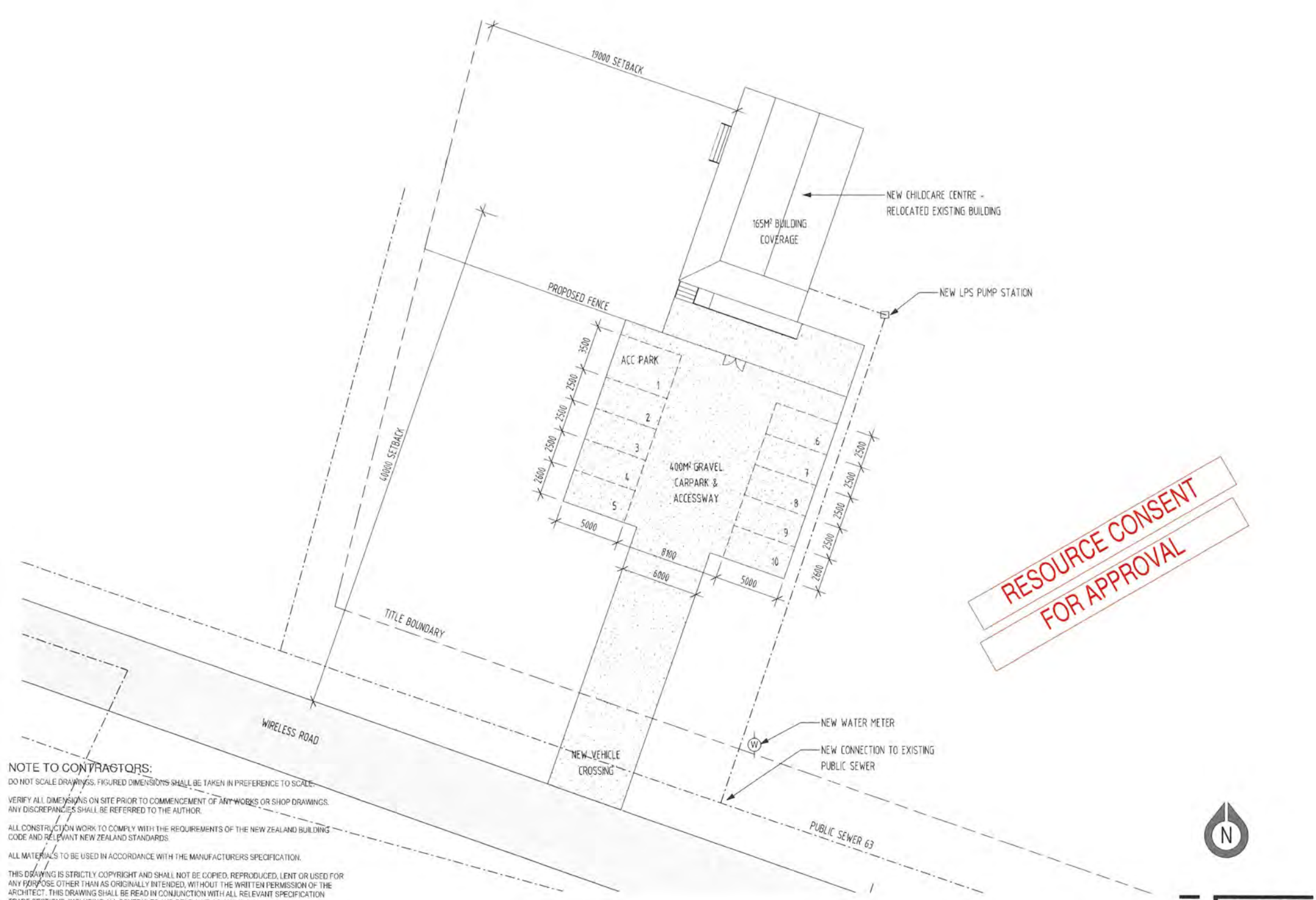
DO NOT SCALE DRAWINGS. FIGURED DIMENSIONS SHALL BE TAKEN IN PREFERENCE TO SCALE.

VERIFY ALL DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF ANY WORKS OR SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE REFERRED TO THE AUTHOR.

ALL CONSTRUCTION WORK TO COMPLY WITH THE REQUIREMENTS OF THE NEW ZEALAND BUILDING CODE AND RELEVANT NEW ZEALAND STANDARDS.

ALL MATERIALS TO BE USED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION.

18.06 HEREKINO CHILDCARE | LOCATION PLAN | 1 : 2000 | RC-000 | MARCH 2018 | ĀKAU



RESOURCE CONSENT
FOR APPROVAL

NOTE TO CONTRACTORS:

DO NOT SCALE DRAWINGS. FIGURED DIMENSIONS SHALL BE TAKEN IN PREFERENCE TO SCALE.

VERIFY ALL DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF ANY WORKS OR SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE REFERRED TO THE AUTHOR.

ALL CONSTRUCTION WORK TO COMPLY WITH THE REQUIREMENTS OF THE NEW ZEALAND BUILDING CODE AND RELEVANT NEW ZEALAND STANDARDS.

ALL MATERIALS TO BE USED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION.

18.06 HEREKINO CHILDCARE | SITE PLAN | 1 : 250 | RC-010 | MARCH 2018 | ĀKAU

NOTE TO CONTRACTORS:

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ALL CONSTRUCTION WORK TO COMPLY WITH THE REQUIREMENTS OF THE NEW ZEALAND BUILDING CODE AND RELEVANT NEW ZEALAND STANDARDS.

ALL MATERIALS TO BE USED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION.

RESOURCE CONSENT
FOR APPROVAL

4
RC-200

0 1m 5m

18.06 HEREKINO CHILDCARE

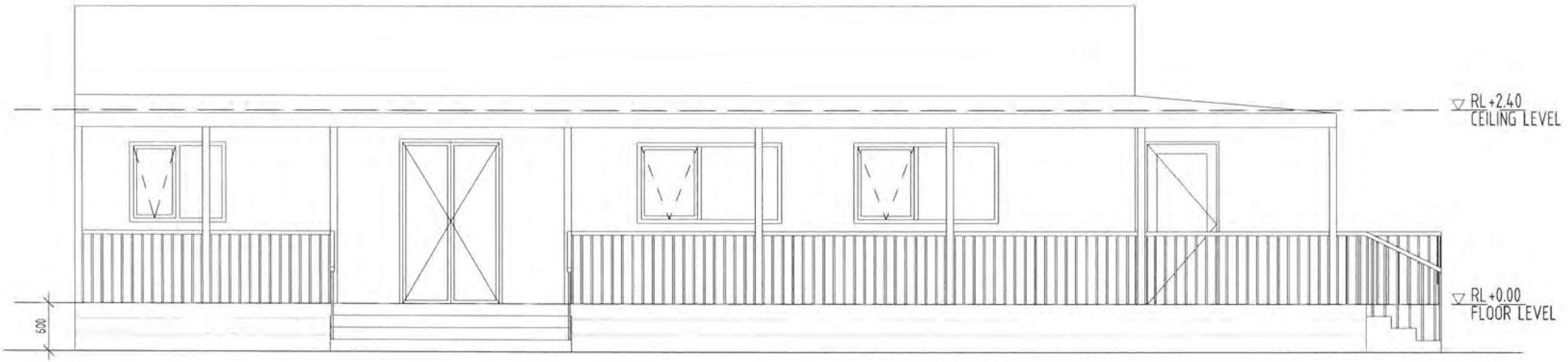
PROPOSED FLOOR PLAN

1 : 50

RC-100

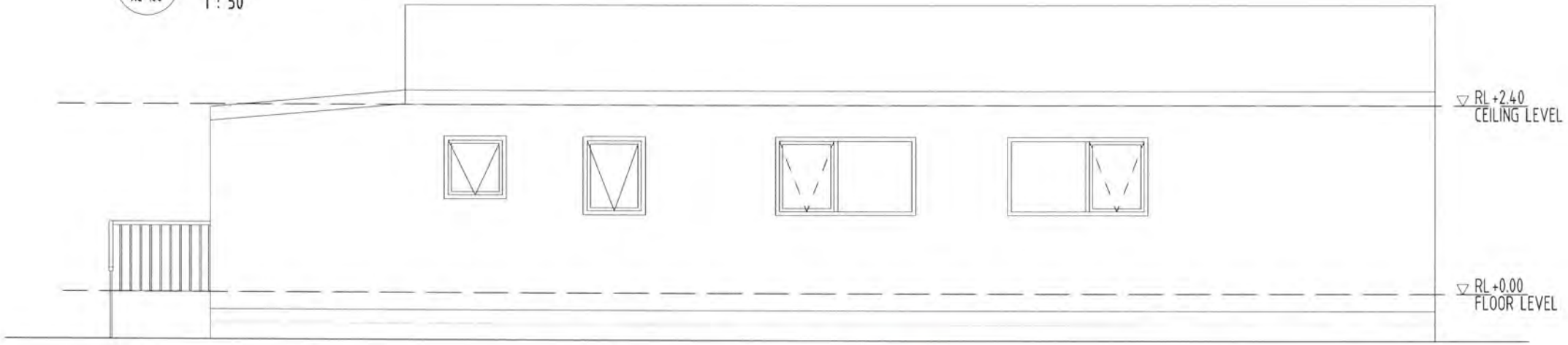
MARCH 2018

ĀKAU



1 / RC-100 EAST ELEVATION

1 : 50



4 / RC-100 WEST ELEVATION

1 : 50

NOTE TO CONTRACTORS:

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VERIFY ALL DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF ANY WORKS OR SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE REFERRED TO THE AUTHOR.

ALL CONSTRUCTION WORK TO COMPLY WITH THE REQUIREMENTS OF THE NEW ZEALAND BUILDING CODE AND RELEVANT NEW ZEALAND STANDARDS.

ALL MATERIALS TO BE USED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION.

RESOURCE CONSENT
FOR APPROVAL

0 1m 5m

18.06 HEREKINO CHILDCARE

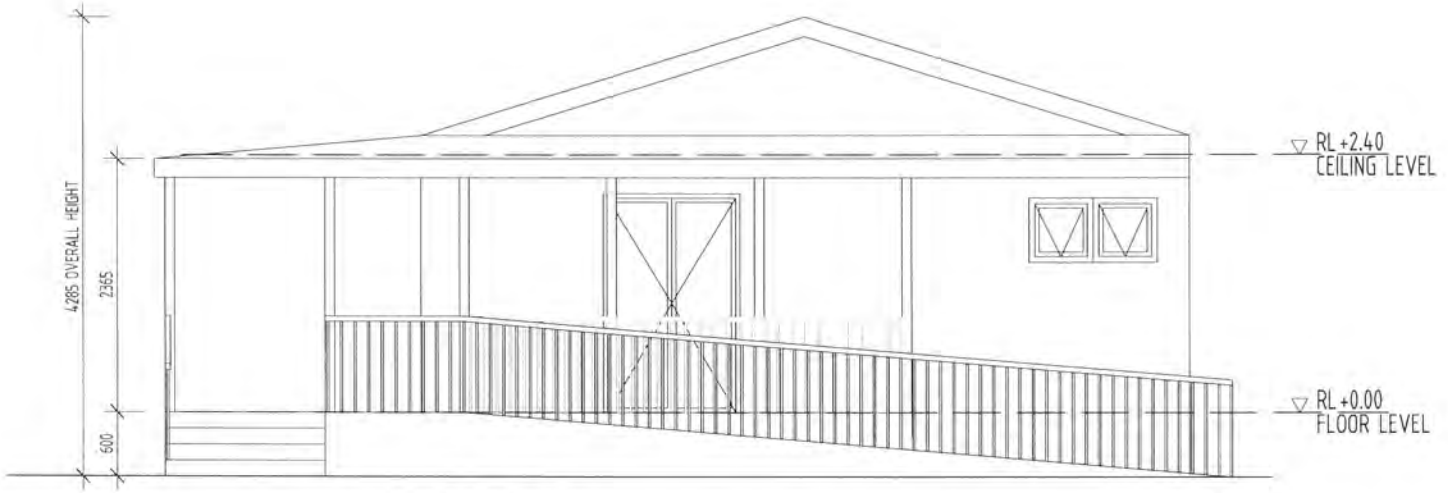
EAST & WEST ELEVATIONS

1 : 50

RC-200

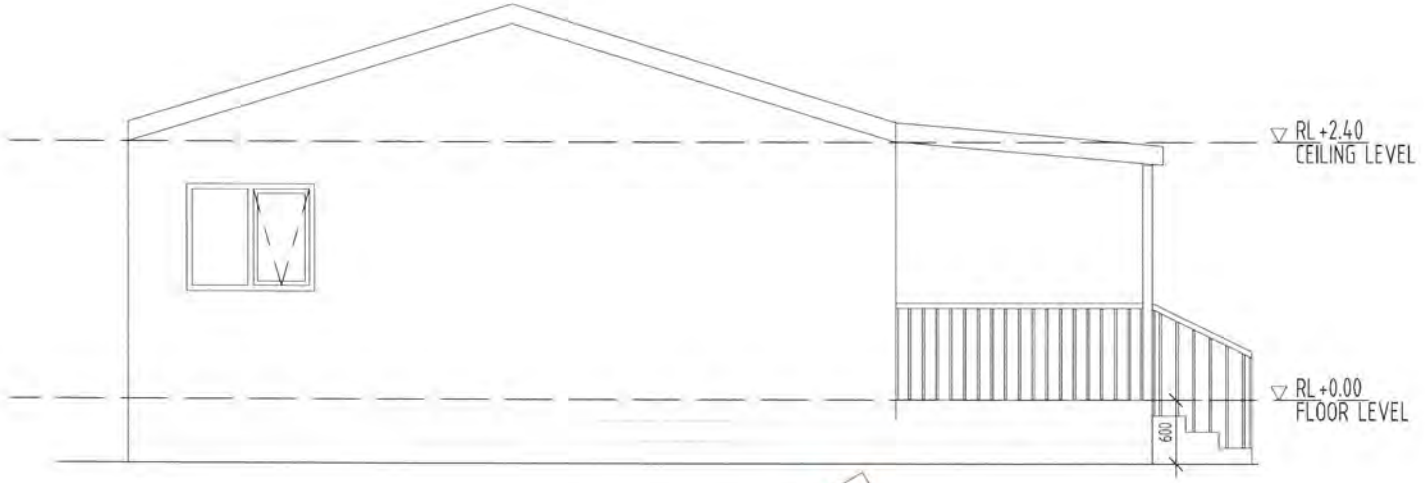
MARCH 2018

ĀKAU



1 / RC-100 SOUTH ELEVATION

1 : 50



2 / RC-100 NORTH ELEVATION

1 : 50

NOTE TO CONTRACTORS:

DO NOT SCALE DRAWINGS. FIGURED DIMENSIONS SHALL BE TAKEN IN PREFERENCE TO SCALE.

VERIFY ALL DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF ANY WORKS OR SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE REFERRED TO THE AUTHOR.

ALL CONSTRUCTION WORK TO COMPLY WITH THE REQUIREMENTS OF THE NEW ZEALAND BUILDING CODE AND RELEVANT NEW ZEALAND STANDARDS.

ALL MATERIALS TO BE USED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION.

RESOURCE CONSENT

FOR APPROVAL

0 1m 5m

18.06 HEREKINO CHILDCARE

NORTH & SOUTH ELEVATIONS

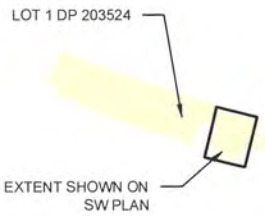
1 : 50

RC-201

MARCH 2018

ĀKAU

Appendix B
VISION drawings



north

LOCALITY MAP

SCALE A3 NTS

Site information:
20 Wireless Road, Kaitaia
Lot 1 DP 203524
Site Area: 22.3972ha

Zone: Rural Production (FNDC)
Wind Zone: High

Allowable impermeable surfaces: 15% (3.36ha)

New roof area: 150m²
New other impermeable surfaces: 541m²

0 10 20 30 40 50
Scale 1:1000 (m)

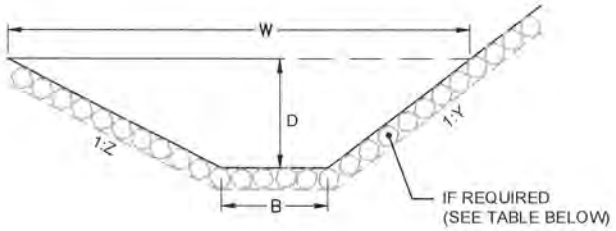
LEGEND	
SITE BOUNDARY	
ADJOINING BOUNDARY	
OPEN DRAIN	
SW PIPE	SW SW

NOTE:
1. ALL STRUCTURES AND FEATURES ARE APPROXIMATE IN LOCATION AND SIZE AND HAVE BEEN BASED FROM BC DRAWINGS BY AKAU, DATED MARCH 2018 AND AERIAL IMAGE (LINZ 2014-16)
2. LIDAR DATA CONTOURS

VISION CONSULTING
Engineers & Planners

ELBURY HOLDINGS LTD
20 WIRELESS ROAD, KAITAIA
STORMWATER MANAGEMENT PLAN

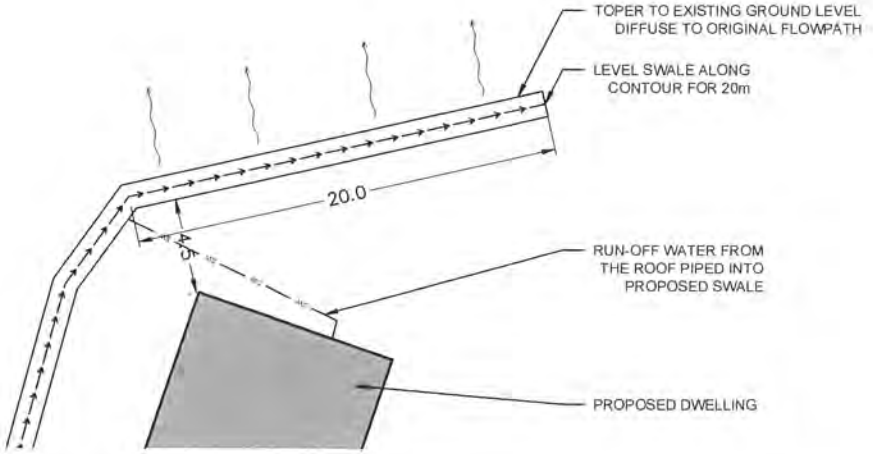
DRAWN:	LP
CHECKED:	BCP
DATE:	26/04/2018
PROJECT:	13185
SHEET:	1 of 2
SCALE A3:	1:1000



OPEN DRAIN TYPICAL CROSS SECTION

SCALE (A3) NTS

OPEN DRAIN TABLE						
ID	B	D	Z	Y	W	PROTECTION
A	0m	0.15m	4	4	1.2m	NOT REQUIRED (GRASS)



OPEN DRAIN (PLAN VIEW)

SCALE (A3) NTS

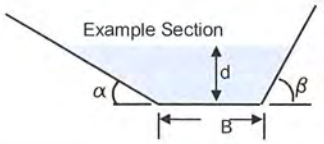
VISION CONSULTING
Engineers & Planners

ELBURY HOLDINGS LTD
20 WIRELESS ROAD, KAITAIA
STORMWATER MANAGEMENT PLAN – OPEN DRAIN DETAIL

DRAWN:	LP
CHECKED:	BCP
DATE:	26/04/2018
PROJECT:	13185
SHEET:	2 of 2
SCALE A3:	as shown

Appendix C
Calculations

Childcare Centre
Stormwater Design Sheet



Designer: BCP
Date: 26/04/2018

HGL Starting WSEL: m
10-min Storm Event: 100 yr, with Climate Change

	Drainage Area									Open Drain Dimensions & Character						Drain Data						Checks		
Decription	No	Area (m)	C	C x A	Sum C x A	Total Drainage Area (m^2)	Tc (min)	I (mm/hr)	Flow $Q(m^3/s)$	B (m)	α (°)	β (°)	Surface	n Mannings	S (%)	d (m)	A (m^2)	P (m)	R (m)	Provisional Flows Q (m^3/s)	υ (m/s)	υ·d (m^2/s)	Cr
D1		1798	0.53	946.62	947	1798	10	166.2	0.044	0	14.0	14.0	Grass	0.035	1.1	0.143	0.085	1.181	0.072	0.044	0.52	0.07	gras

[1] The design flow is based on approximated calculations using Rational Method. Flows entering the
[2] It is assuned that there are no inlet losses.
[3] Velocity is calculated based upon full-flow conditions for the 'Design Capactiy'.
[4] Hydraulic Grade is not assessed due to topography.
[5] Pipe elevations, grades, and lengths have been estiamted from LiDAR data and are considered
[†] Dimensions of the cut off drain has been assumed.

APPENDIX F – PROPOSED ACCESS ROUTE

8.05 Access Plan – access from Wireless Road.

9.00 Detailed information of Proposed Work Site Location

9.01 Option 1

- Proposed location of 2 x Double (4TS's) OMB's and Toilet Block - to be confirmed.
- Access to the site from Wireless Road.

10.00 Site Photos – Existing school building

Table showing the Impermeable surface Site Coverage within proposed Lot 1

Stormwater Attenuation Requirements

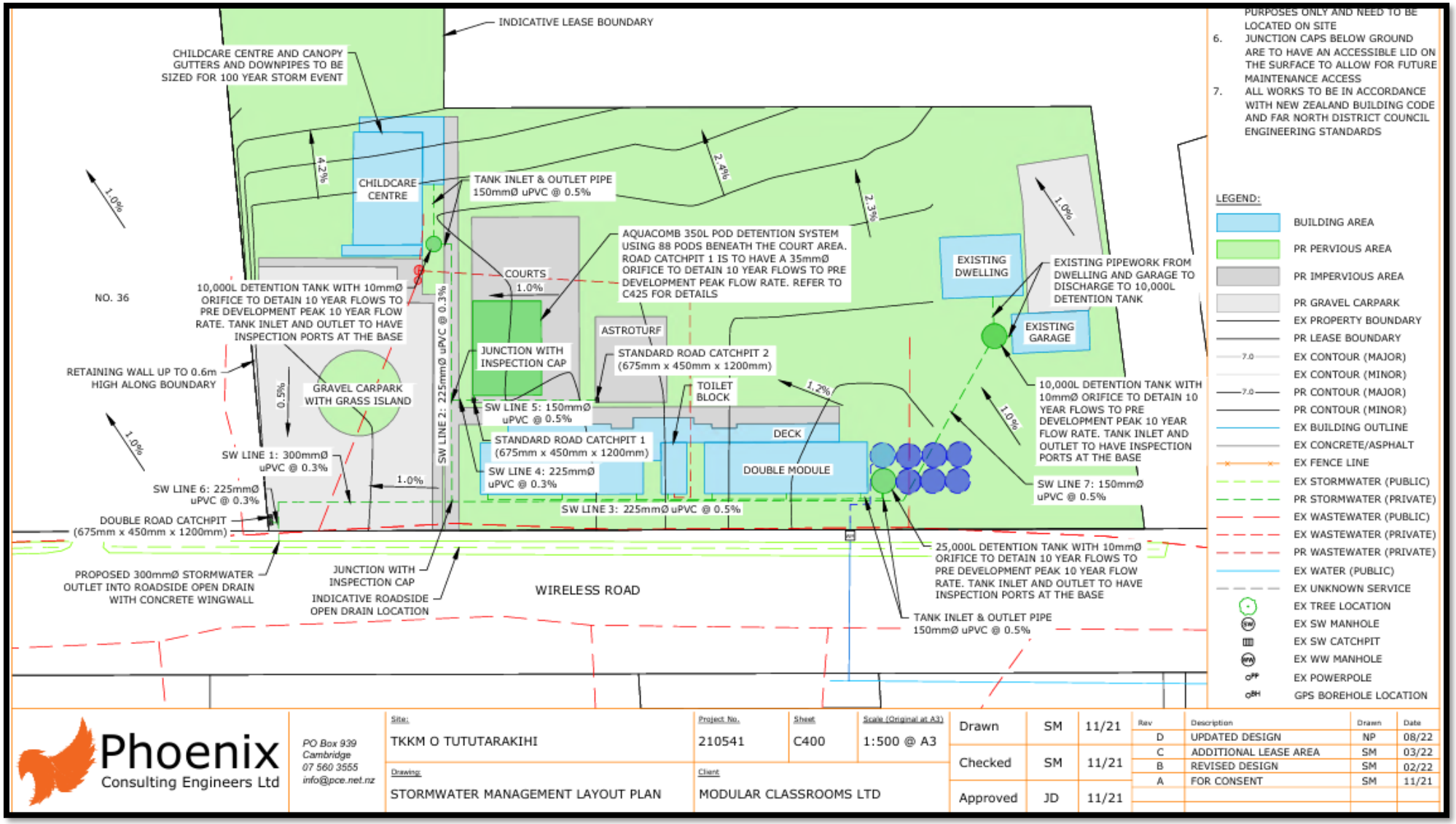
The district plan allows the maximum impervious and building footprint area to be 15% of the gross site area. The proposed school development is made up as per Table 4 below:

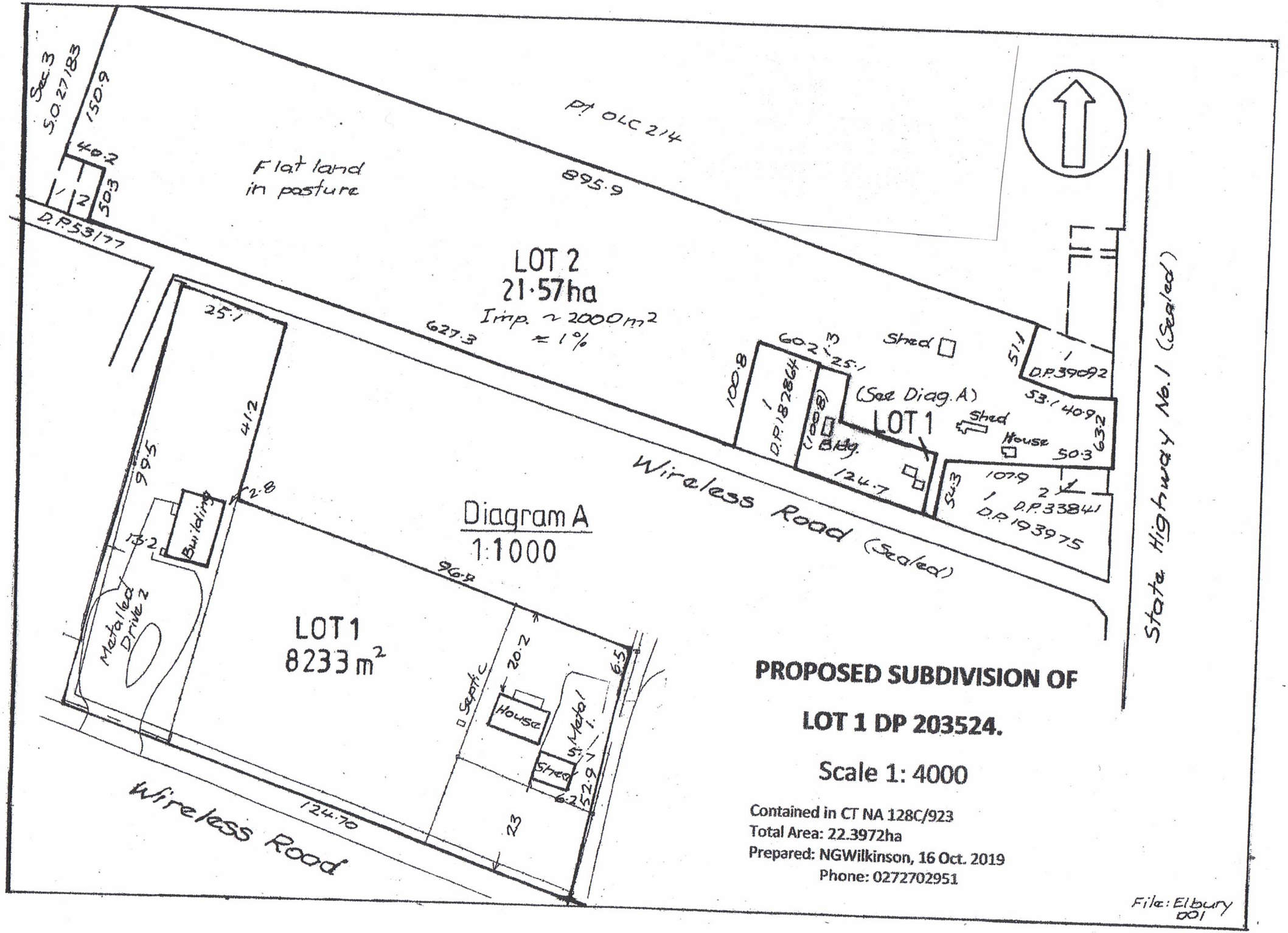
Table 4: Site Coverage

Site Coverage	Area (m^2)	Ratio (%)
Total Lot Area	8,223	100
Total Pervious	5,578	67.8
Existing Impervious	380	32.2
Proposed Impervious	2,265	

The proposed buildings and impervious areas of the school are above the 15% threshold. To ensure neighbouring properties are not affected, attenuation of the ARI 10 year event to predevelopment flows will be required for the school development.

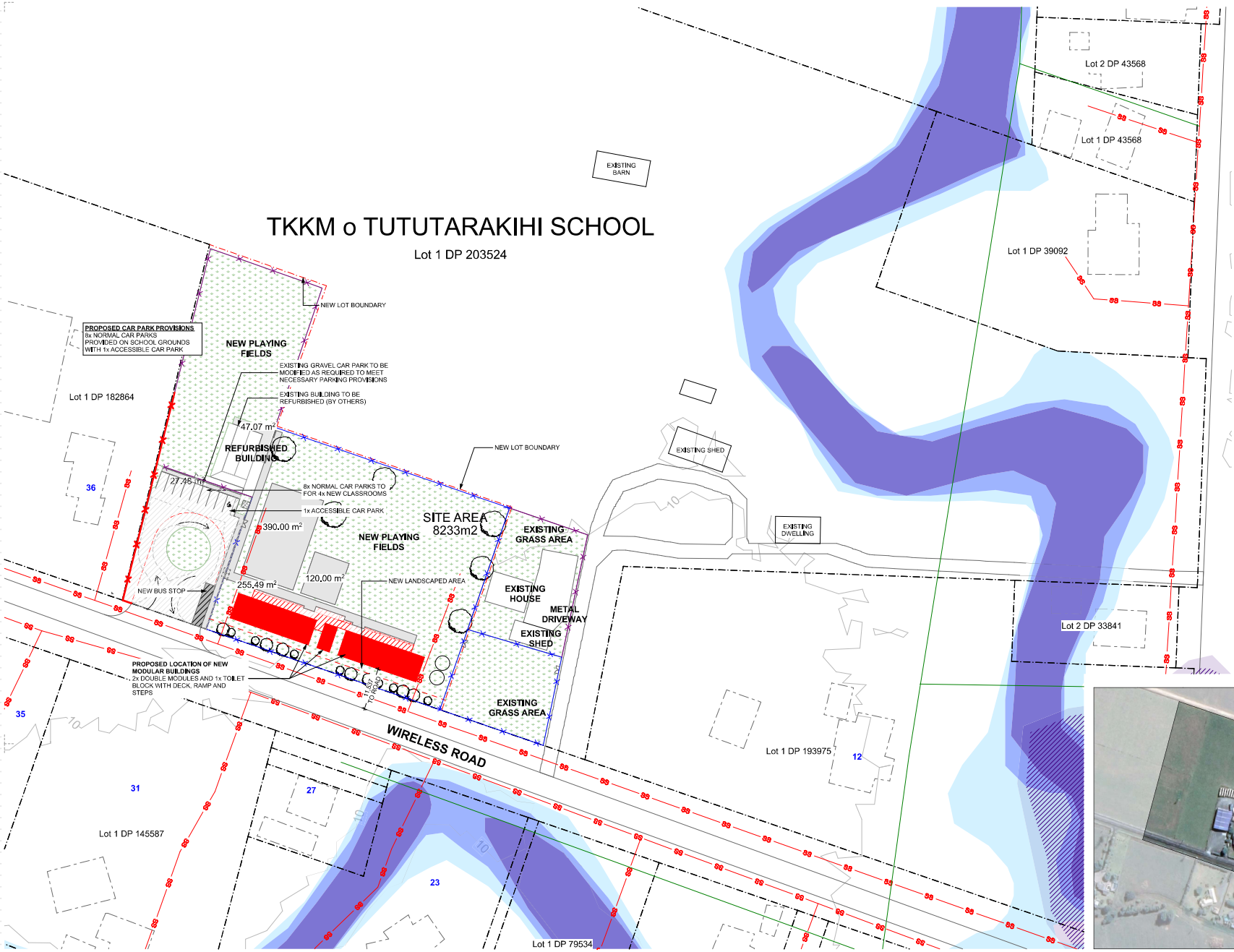
Stormwater Management Layout Plan from RC 2220673 showing the Stormwater Mitigation Measures already implemented within proposed Lot 1




Sec 3 SO 27183
150·9
40·2
50·3
1
2
Pt OLC 214
Flat land in pasture
895·9
D.P. 53177
LOT 2
21·57ha
Imp. ~ 2000m²
≈ 1%
627·3
25·1
41·2
99·5
2·8
Building
15·2
Metalled Drive
Diagram A
1:1000
LOT 1
8233 m²
96·8
Septic
20·2
House
Shed
6·5
Metal
52·9
6·2
23
Wireless Road
124·70
Wireless Road (Sealed)
100·8
1
D.P. 182864
(100·8)
Bldg.
60·2
1·3
25·1
(See Diag. A)
LOT 1
124·7
Shed
House
50·3
51·1
1
D.P. 39092
53·1
40·9
63·2
54·3
107·9
2
1
D.P. 33841
D.P. 193975
State Highway No. 1 (Sealed)
PROPOSED SUBDIVISION OF
LOT 1 DP 203524.
Scale 1: 4000
Contained in CT NA 128C/923
Total Area: 22.3972ha
Prepared: NGWilkinson, 16 Oct. 2019
Phone: 0272702951
File: Elbury 001

TKKM o TUTUTARAKIHI SCHOOL

Lot 1 DP 203524



PROJECT INFORMATION

SITE ADDRESS:	32 WIRELESS ROAD KAITAIA 0482
LEGAL DESCRIPTION:	LOT 1 DP 203524
WIND ZONE:	HIGH
EARTHQUAKE ZONE:	1
RAINFALL INTENSITY:	80 - 90
EXPOSURE ZONE:	C
CLIMATE ZONE:	1
SITE AREA:	6699 sq.km
GROUND FLOOR AREA:	MODULE 1 = 165m² MODULE 2 = 165m² TOILET BLOCK = 26m²

FENCING LEGEND

- EXISTING SCHOOL FENCE TO REMAIN
- EXISTING TIMBER FENCE TO BE REFURBISHED INTO AN ACOUSTIC TIMBER FENCE (BY OTHERS). ENSURE FENCE IS 2m HIGH WITH SOLID PALING WITH MINIMUM DENSITY OF 10kg /m2 (OR MINIMUM 20mm THICK BOARDS) ALONG WESTERN BOUNDARY AS SHOWN. PALINGS TO BE OVERLAPPED OR CLOSE BOARDED WITH BATTENS OVER THE GAPS, NO SPACE UNDER FENCE AT THE GROUND LEVEL
- NEW 1.8m TIMBER FENCE ALONG BOUNDARY (BY OTHERS)

DRAINAGE LEGEND

- PUBLIC WASTE WATER MAIN
- PUBLIC WATER MAIN SUPPLY

NOTE: GIS DATAINDICATES THAT PUBLIC STORMWATER SERVICES ARE NOT ON SITE OR WITHIN BOUNDARIES.

OVERLAND FLOW PATHAND FLOODING LEGEND

- RIVER FLOOD HAZARD ZONE - 100yr EXTENT
- RIVER FLOOD HAZARD ZONE - 50yr EXTENT
- RIVER FLOOD HAZARD ZONE - 10yr EXTENT
- OVERLAND FLOW PATH
- EXISTING DEVELOPMENT 100yr AVERAGE RETURN INTERVAL FLOODPLAIN
- EXISTING DEVELOPMENT 10yr AVERAGE RETURN INTERVAL FLOODPLAIN

1 - SITE PLAN
Scale 1:500

2 - PROPOSED SITE LOCATION
Scale N.T.S

RESPOND — ARCHITECTS

NOTES
1. ALL DIMENSIONS TO BE CHECKED ON SITE. WRITTEN DIMENSIONS ONLY TO BE USED. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.
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Rev	Issue Name	Date
A	ISSUED FOR RESOURCE CONSENT	23/03/2022
B	ISSUED FOR RESOURCE CONSENT	1/04/2022

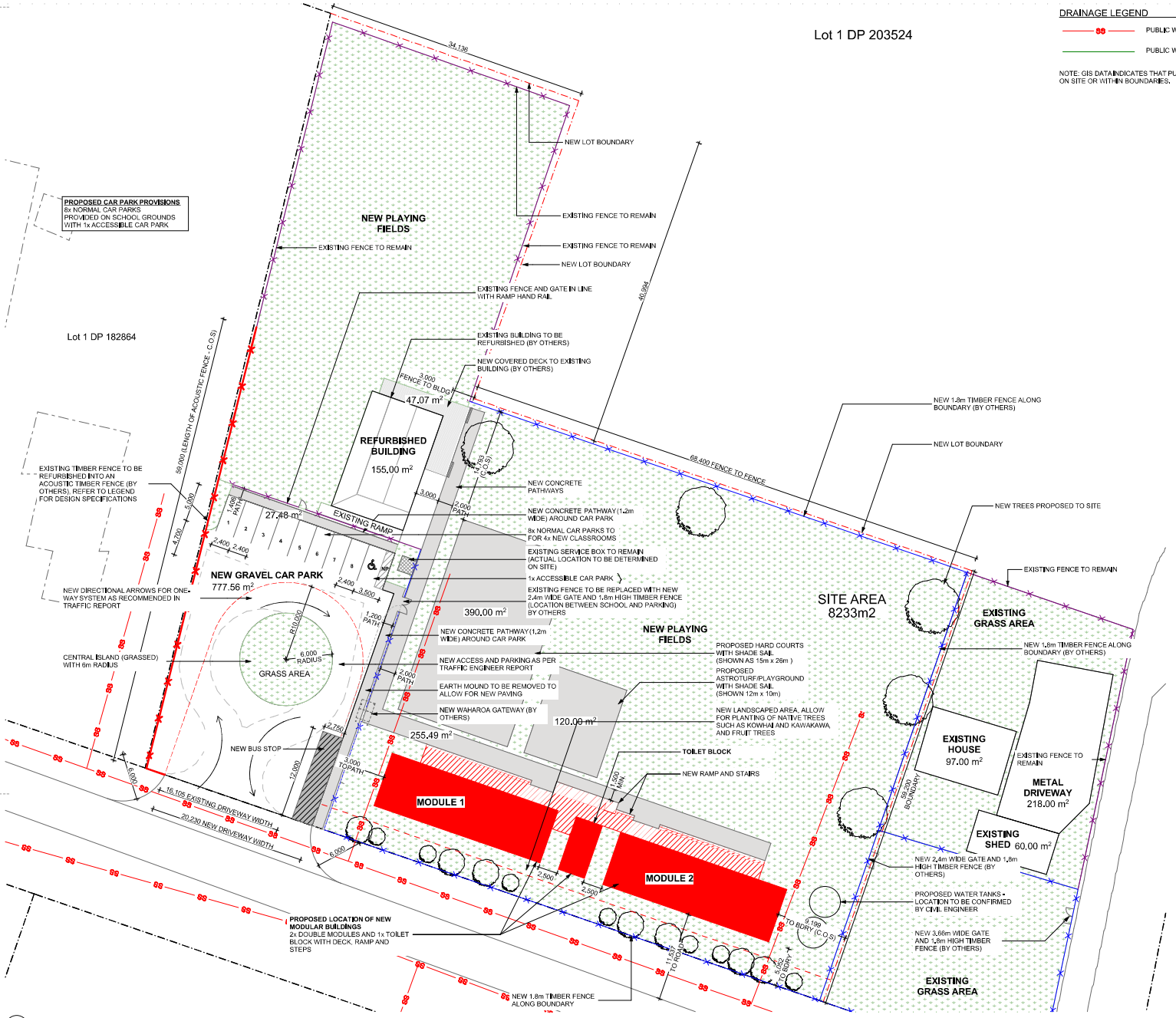
PROJECT
TKKM o TUTUTARAKIHI SCHOOL

CLIENT
MODULAR CLASSROOMS LTD

DRAWING TITLE
PROPOSED SITE PLAN

N

PURPOSE: RESOURCE CONSENT
DESIGNED: WR
SCALE @ A1 / A3: AS SHOWN
DATE: 1/04/2022
JOB NO.: 034102049
DWG NO.: A001
REVISION: B



1 PROPOSED SITE PLAN
Scale 1:250

DRAINAGE LEGEND

SS PUBLIC WASTE WATER MAIN

PUBLIC WATER MAIN SUPPLY

NOTE: GIS DATA INDICATES THAT PUBLIC STORMWATER SERVICES ARE NOT ON SITE OR WITHIN BOUNDARIES.

PROJECT INFORMATION

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EARTHQUAKE ZONE:	1
RAINFALL INTENSITY:	80 - 90
EXPOSURE ZONE:	C
CLIMATE ZONE:	1
SITE AREA:	6699 sqJm
GROUND FLOOR AREA:	MODULE 1 = 165m² MODULE 2 = 165m² TOILET BLOCK = 26m²

FENCING LEGEND

EXISTING SCHOOL FENCE TO REMAIN

EXISTING TIMBER FENCE TO BE REFURBISHED INTO AN ACOUSTIC TIMBER FENCE (BY OTHERS). ENSURE FENCE IS 2m HIGH WITH SOLID PALING WITH MINIMUM DENSITY OF 10kg /m2 (OR MINIMUM 20mm THICK BOARDS) ALONG WESTERN BOUNDARY AS SHOWN. PALINGS TO BE OVERLAPPED OR CLOSE BOARDED WITH BATTENS OVER THE GAPS, NO SPACE UNDER FENCE AT THE GROUND LEVEL

NEW 1.8m TIMBER FENCE ALONG BOUNDARY (BY OTHERS)

A - SITE PHOTO 1
Scale N.T.S

B - SITE PHOTO 2
Scale N.T.S

C - SITE PHOTO 3
Scale N.T.S

D - SITE PHOTO 4
Scale N.T.S

RESPOND — ARCHITECTS

NOTES
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Rev	Issue Name	Date
A	ISSUED FOR RESOURCE CONSENT	23/03/2022
B	ISSUED FOR RESOURCE CONSENT	1/04/2022

PROJECT
TKKM o TUTUTARAKIHI SCHOOL

CLIENT
MODULAR CLASSROOMS LTD

DRAWING TITLE
PROPOSED MODULE LOCATION

N

PURPOSE
RESOURCE CONSENT

DESIGNED
WR

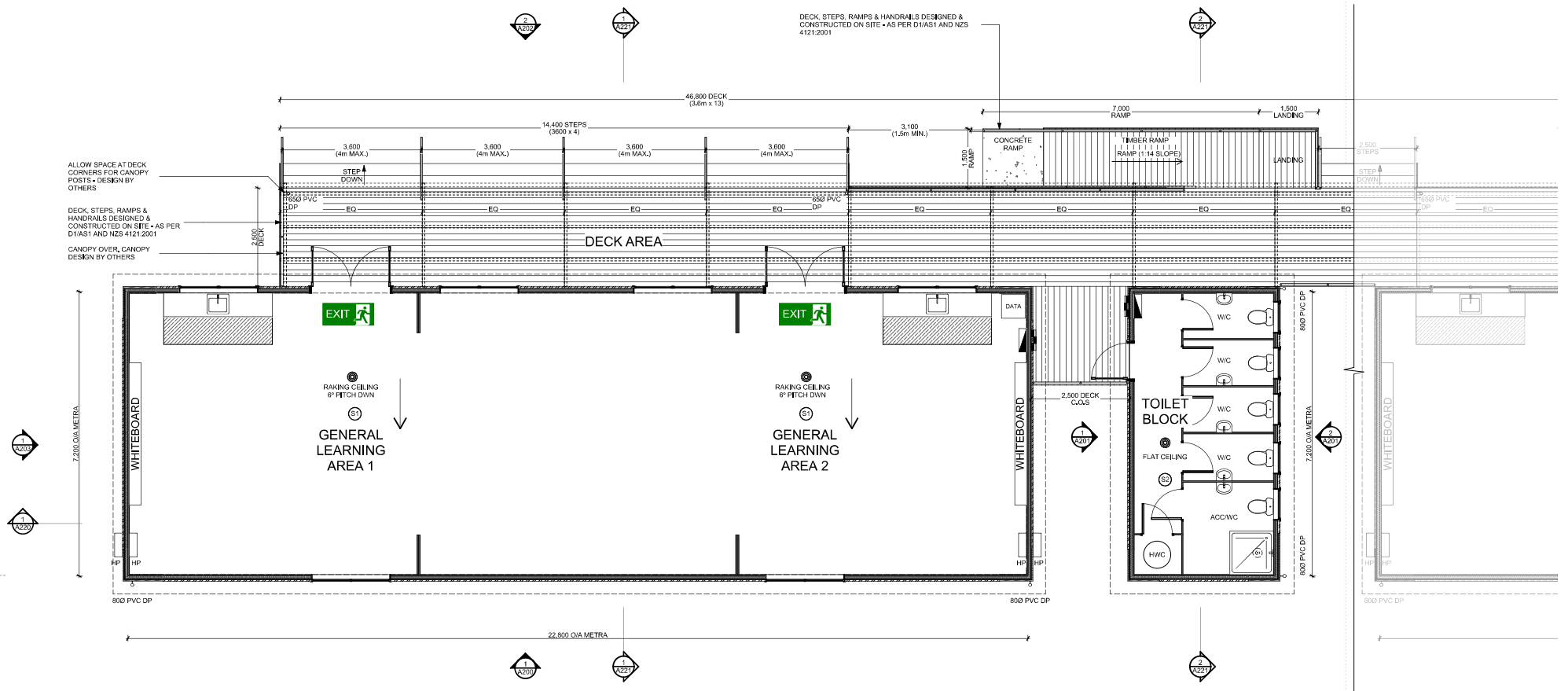
SCALE @ A1 / A3
AS SHOWN

DATE
1/04/2022

JOB NO.
034102049

DWG NO.
A002

REVISION
B



RESPOND — ARCHITECTS

NOTES
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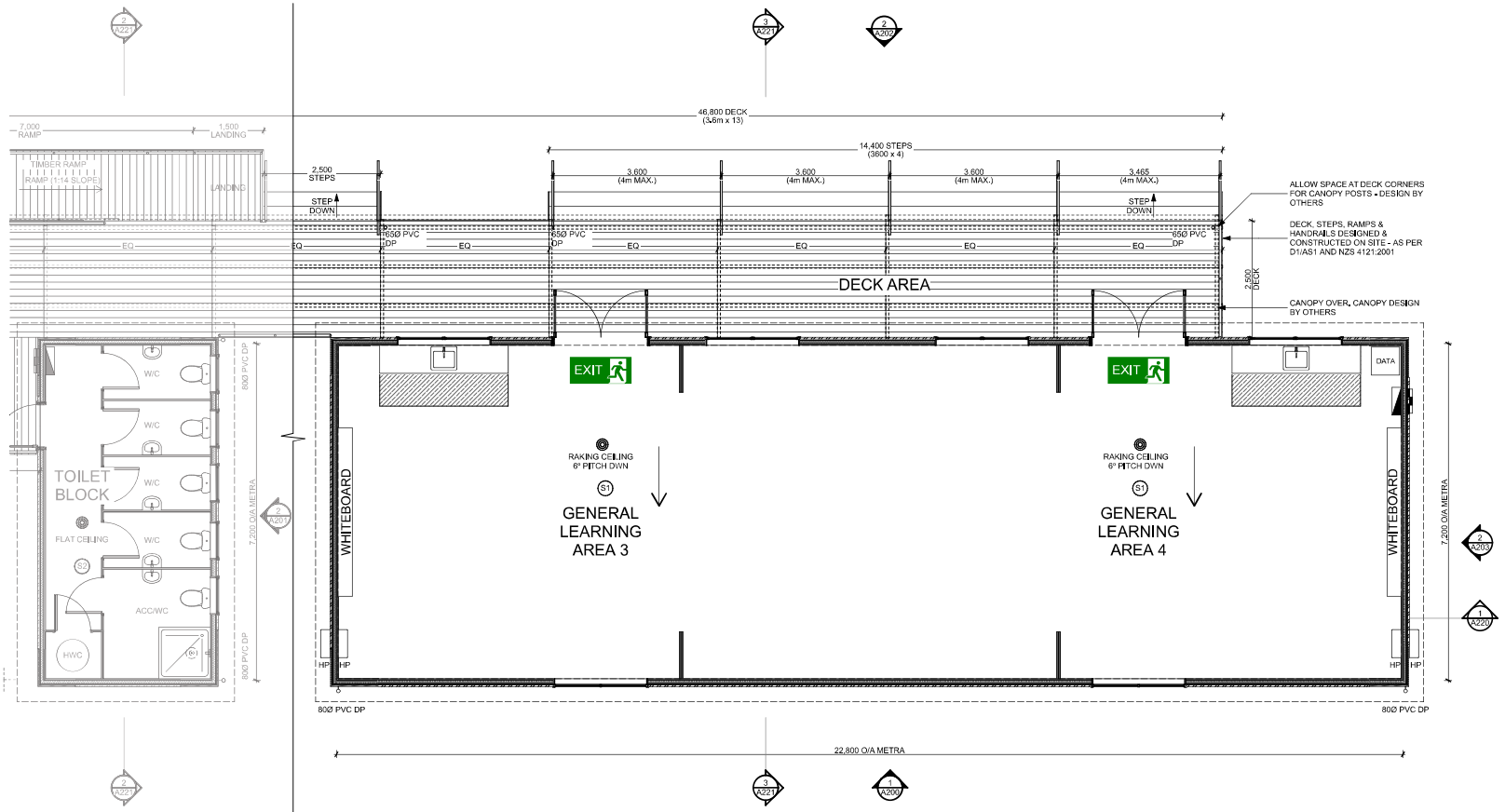
Rev	Issue Name	Date
A	ISSUED FOR RESOURCE CONSENT	29/03/2022
B	ISSUED FOR RESOURCE CONSENT	1/04/2022

PROJECT: TKKM o TUTUTARAKIHI SCHOOL
CLIENT: MODULAR CLASSROOMS LTD
DRAWING TITLE: MODULE 1 AND TOILET BLOCK GROUND FLOOR PLAN
*NOTE: REFER TO SITE PLAN FOR NORTH POINT
PURPOSE: RESOURCE CONSENT
DESIGNED: WR
SCALE @ A1 / A3: 1:50/1:100
DATE: 1/04/2022
JOB NO.: 034102049
DWG NO.: A100
REVISION: B

LEGEND

- DISTRIBUTION BOARD (INTERNAL)
- METER BOARD (EXTERNAL)
- SMOKE ALARM AS PER FIRE REPORT (IN ACCORDANCE WITH NZS4512,2021)
- HP — HEATPUMP/ AC UNITS
- S1 — SECTION 1 - GENERAL LEARNING AREAS
- S2 — SECTION 2 - TOILET BLOCK
- EXIT — EXIT ILLUMINATED SIGNS TO COMPLY WITH F8/AS1



TOILET BLOCK

MODULE 2

RESPOND — ARCHITECTS

NOTES
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Rev	Issue Name	Date
A	ISSUED FOR RESOURCE CONSENT	23/03/2022
B	ISSUED FOR RESOURCE CONSENT	1/04/2022

PROJECT: TKKM o TUTUTARAKIHI SCHOOL

CLIENT: MODULAR CLASSROOMS LTD

DRAWING TITLE: MODULE 2 GROUND FLOOR PLAN

*NOTE: REFER TO SITE PLAN FOR NORTH POINT

PURPOSE: RESOURCE CONSENT

DESIGNED: WR

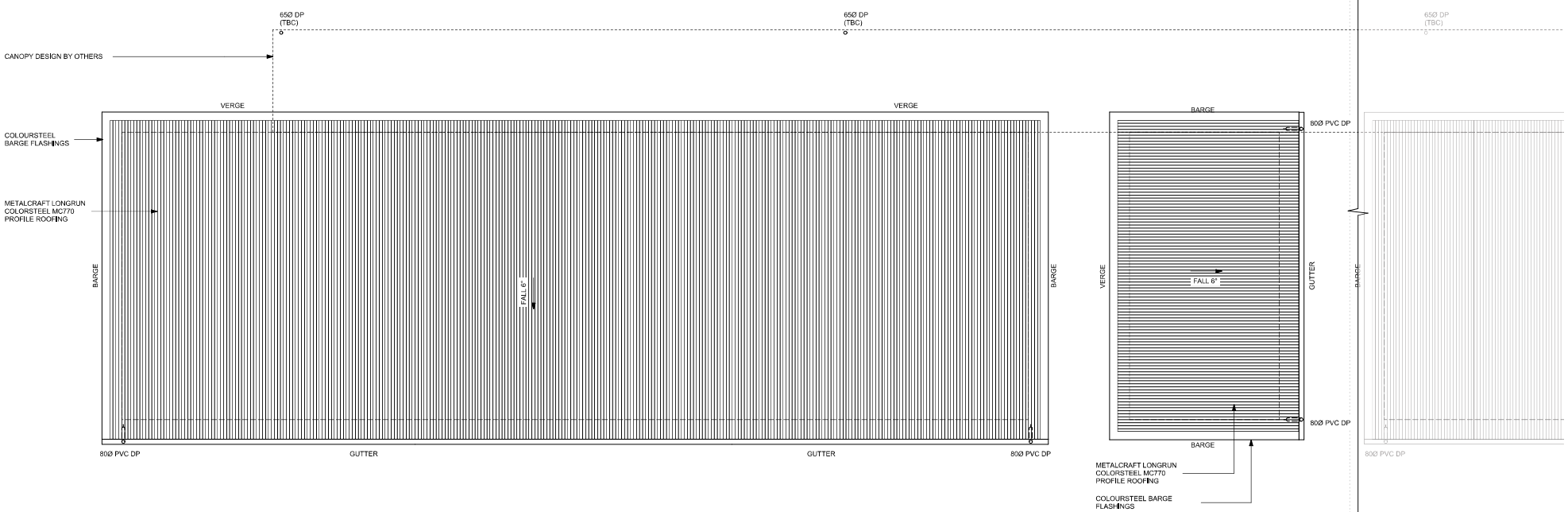
SCALE @ A1 / A3: 1:50/1:100

DATE: 1/04/2022

JOB NO.: 034102049

DWG NO.: A101

REVISION: B



MODULE 1

TOILET BLOCK

RESPOND — ARCHITECTS

NOTES
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Rev	Issue Name	Date
A	ISSUED FOR RESOURCE CONSENT	23/03/2022
B	ISSUED FOR RESOURCE CONSENT	1/04/2022

PROJECT
TKKM o TUTUTARAKIHI SCHOOL

CLIENT
MODULAR CLASSROOMS LTD

DRAWING TITLE
MODULE 1 AND TOILET BLOCK ROOF PLAN

*NOTE:
REFER TO SITE PLAN FOR NORTH POINT

PURPOSE
RESOURCE CONSENT

DESIGNED
WR

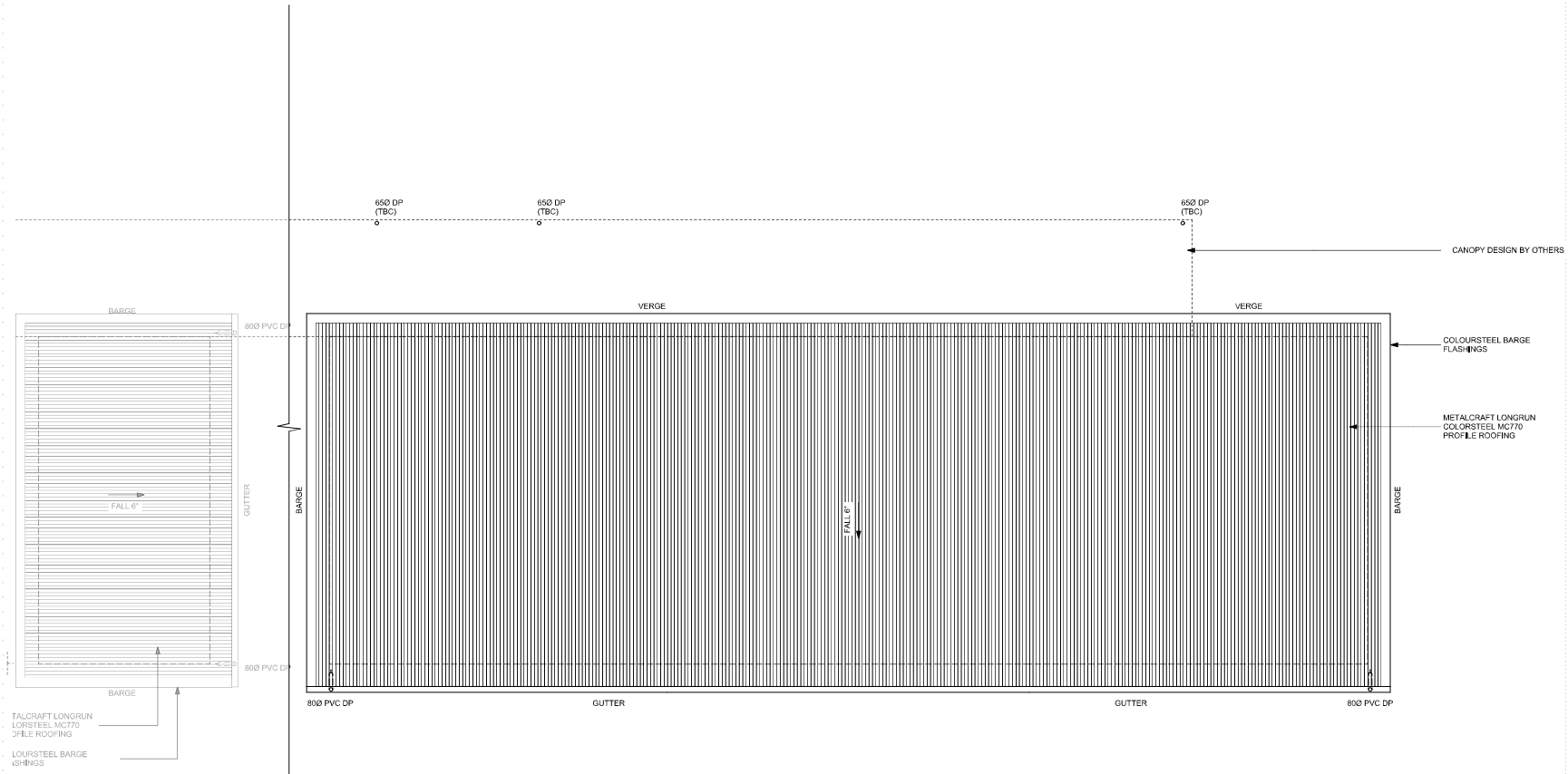
SCALE @ A1 / A3
1:50/1:100

DATE
1/04/2022

JOB NO.
034102049

DWG NO.
A120

REVISION
B



TOILET BLOCK

MODULE 2

RESPOND — ARCHITECTS

NOTES
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Rev	Issue Name	Date
A	ISSUED FOR RESOURCE CONSENT	23/03/2022
B	ISSUED FOR RESOURCE CONSENT	1/04/2022

PROJECT
TKKM o TUTUTARAKIHI SCHOOL

CLIENT
MODULAR CLASSROOMS LTD

DRAWING TITLE
MODULE 2 ROOF PLAN

*NOTE:
REFER TO SITE PLAN FOR NORTH POINT

PURPOSE
RESOURCE CONSENT

DESIGNED
WR

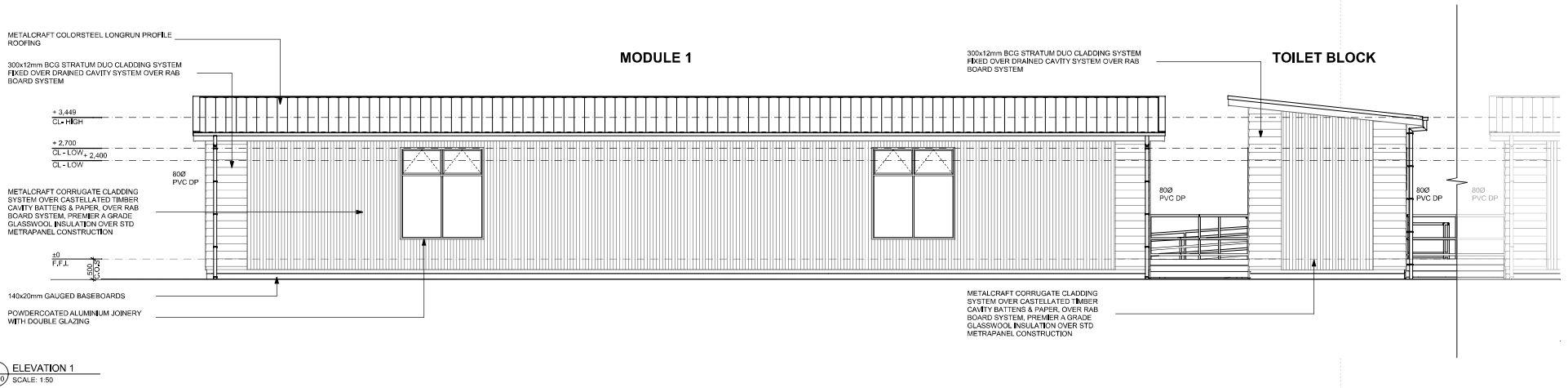
SCALE @ A1 / A3
1:50/1:100

DATE
1/04/2022

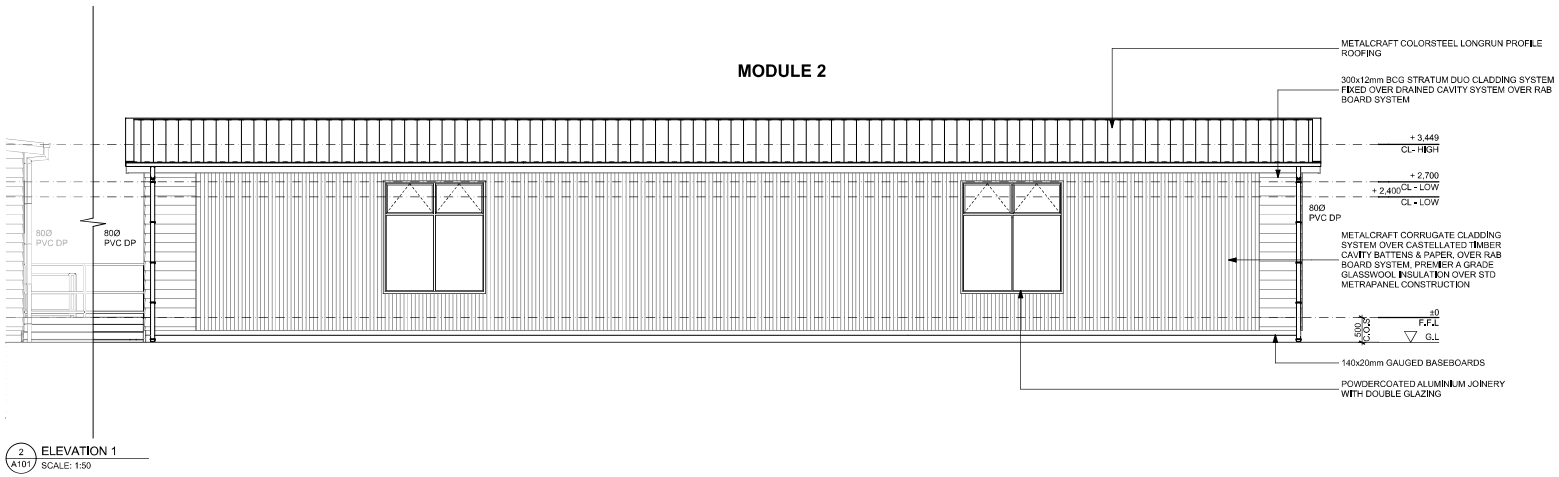
JOB NO.
034102049

DWG NO.
A121

REVISION
B



1 / A100 ELEVATION 1
SCALE: 1:50



2 / A101 ELEVATION 1
SCALE: 1:50

RESPOND — ARCHITECTS

NOTES
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Rev	Issue Name	Date
A	ISSUED FOR RESOURCE CONSENT	23/03/2022
B	ISSUED FOR RESOURCE CONSENT	1/04/2022

PROJECT
TKKM o TUTUTARAKIHI SCHOOL

CLIENT
MODULAR CLASSROOMS LTD

DRAWING TITLE
MODULE 1, 2 AND TOILET BLOCK ELEVATIONS

PURPOSE
RESOURCE CONSENT

DESIGNED
WR

SCALE @ A1 / A3
1:50/1:100

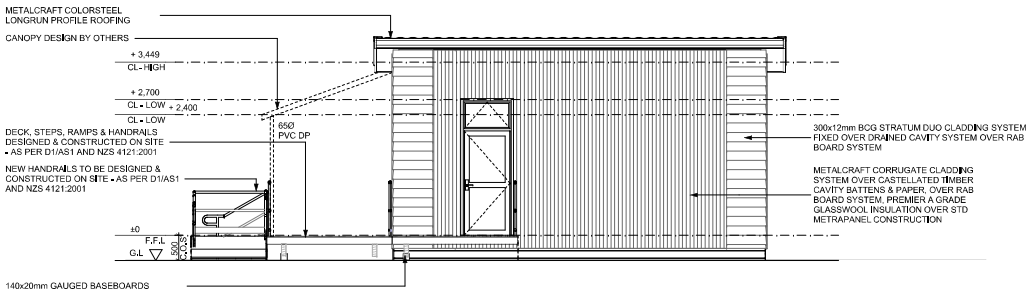
DATE
1/04/2022

JOB NO.
034102049

DWG NO.
A200

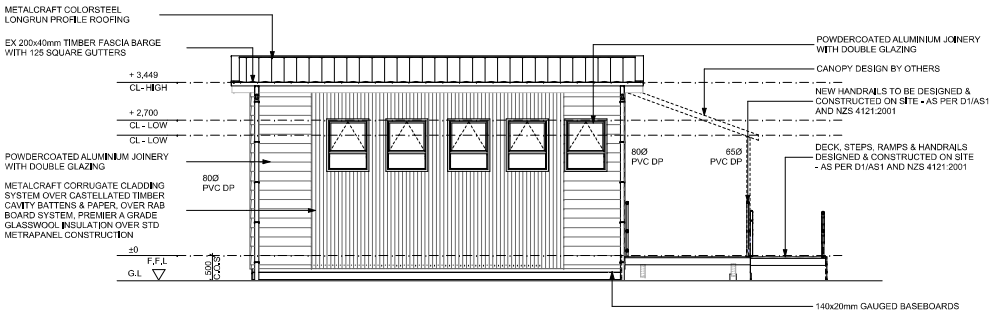
REVISION
B

TOILET BLOCK



1 / A100 TOILET BLOCK ELEVATION 1
Scale 1:50

TOILET BLOCK



2 / A100 TOILET BLOCK ELEVATION 2
Scale 1:50

RESPOND — ARCHITECTS

NOTES
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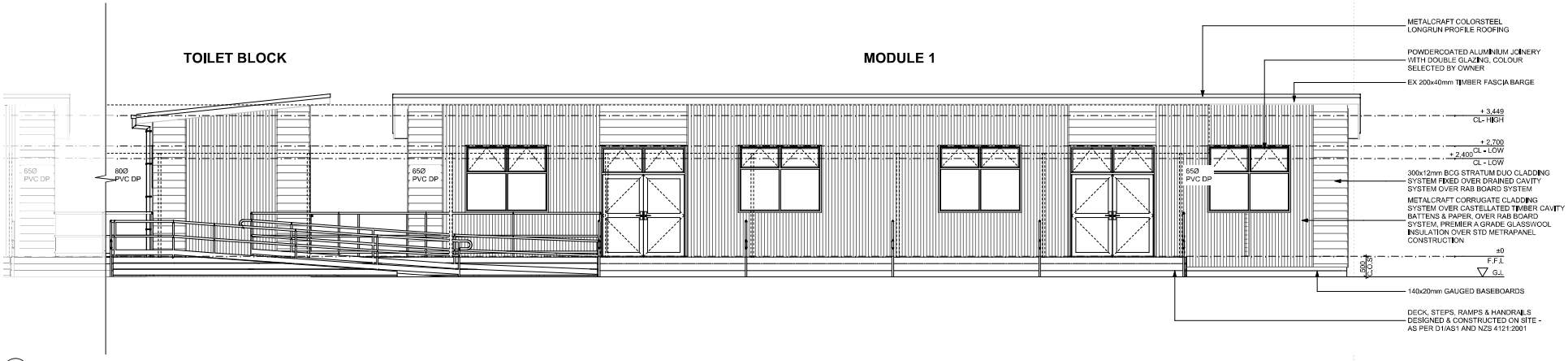
Rev	Issue Name	Date
A	ISSUED FOR RESOURCE CONSENT	23/03/2022
B	ISSUED FOR RESOURCE CONSENT	1/04/2022

PROJECT
TKKM o TUTUTARAKIHI SCHOOL

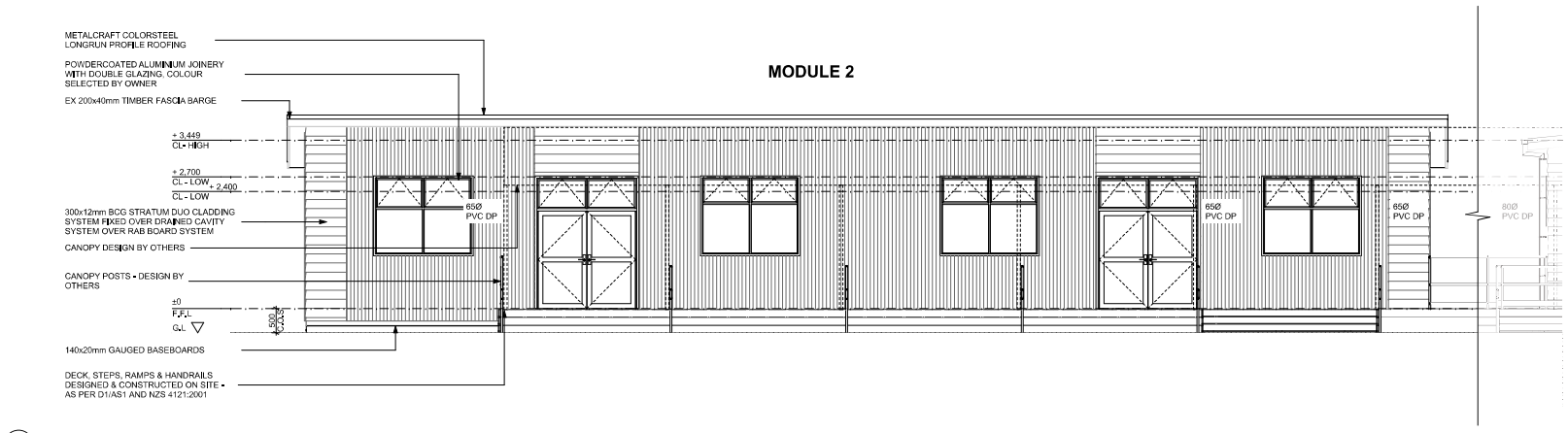
CLIENT
MODULAR CLASSROOMS LTD

DRAWING TITLE
TOILET BLOCK ELEVATIONS

PURPOSE: RESOURCE CONSENT
DESIGNED: WR
SCALE @ A1 / A3: 1:50/1:100
DATE: 1/04/2022
JOB NO.: 034102049
DWG NO.: A201
REVISION: B



2 / A100 ELEVATION 2
Scale 1:50



2 / A101 ELEVATION 2
Scale 1:50

RESPOND — ARCHITECTS

NOTES
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Rev	Issue Name	Date
A	ISSUED FOR RESOURCE CONSENT	23/03/2022
B	ISSUED FOR RESOURCE CONSENT	1/04/2022

PROJECT
TKKM o TUTUTARAKIHI SCHOOL

CLIENT
MODULAR CLASSROOMS LTD

DRAWING TITLE
MODULE 1, 2 AND TOILET BLOCK ELEVATIONS

PURPOSE
RESOURCE CONSENT

DESIGNED
WR

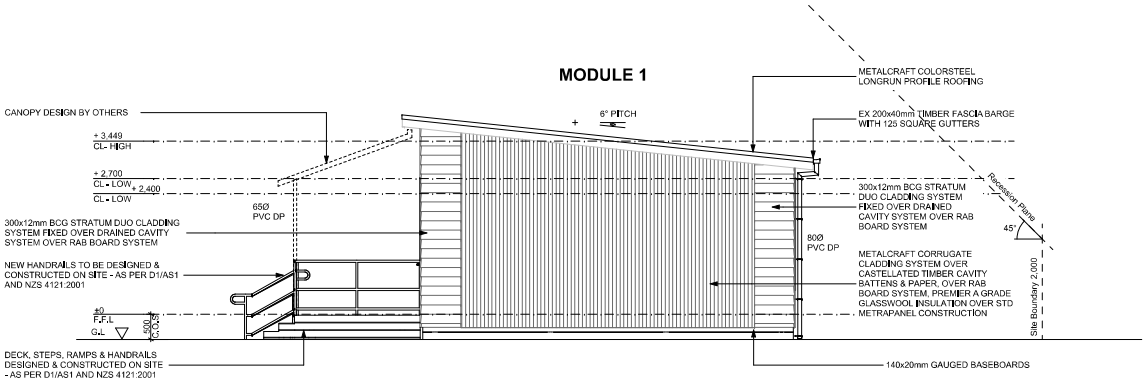
SCALE @ A1 / A3
1:50/1:100

DATE
1/04/2022

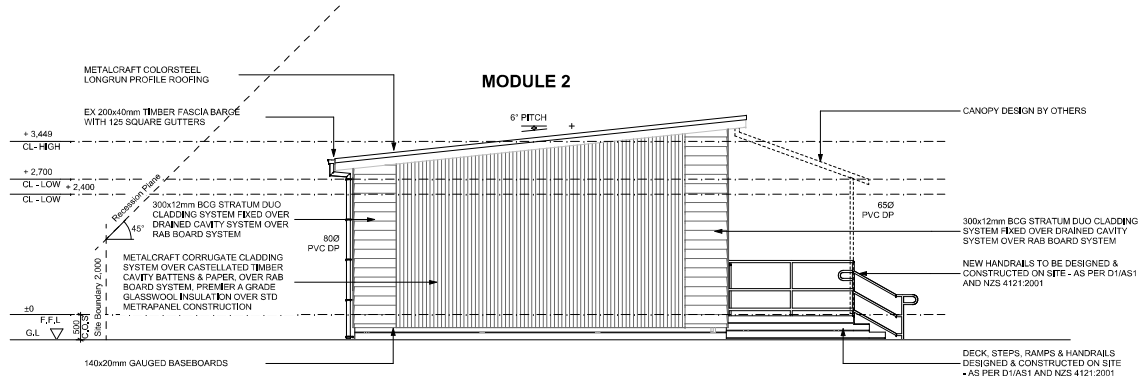
JOB NO.
034102049

DWG NO.
A202

REVISION
B



1 / A100 ELEVATION 3
Scale 1:50



2 / A101 ELEVATION 4
Scale 1:50

RESPOND — ARCHITECTS

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Rev	Issue Name	Date
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B	ISSUED FOR RESOURCE CONSENT	1/04/2022

PROJECT
TKKM o TUTUTARAKIHI SCHOOL

CLIENT
MODULAR CLASSROOMS LTD

DRAWING TITLE
MODULE 1 AND 2 ELEVATIONS

PURPOSE
RESOURCE CONSENT

DESIGNED
WR

SCALE @ A1 / A3
1:50/1:100

DATE
1/04/2022

JOB NO.
034102049

DWG NO.
A203

REVISION
B

2:13

Receipt

Done

Payment successful

$5,013.00

From:
Agri Current Account
06-0493-0609489-00

To:
Fndc Fees
12-3244-0022509-00

Payment date:
Thu 30 Jan 2025

Particulars:
Foy farmsltd

Code:
Wireless rd

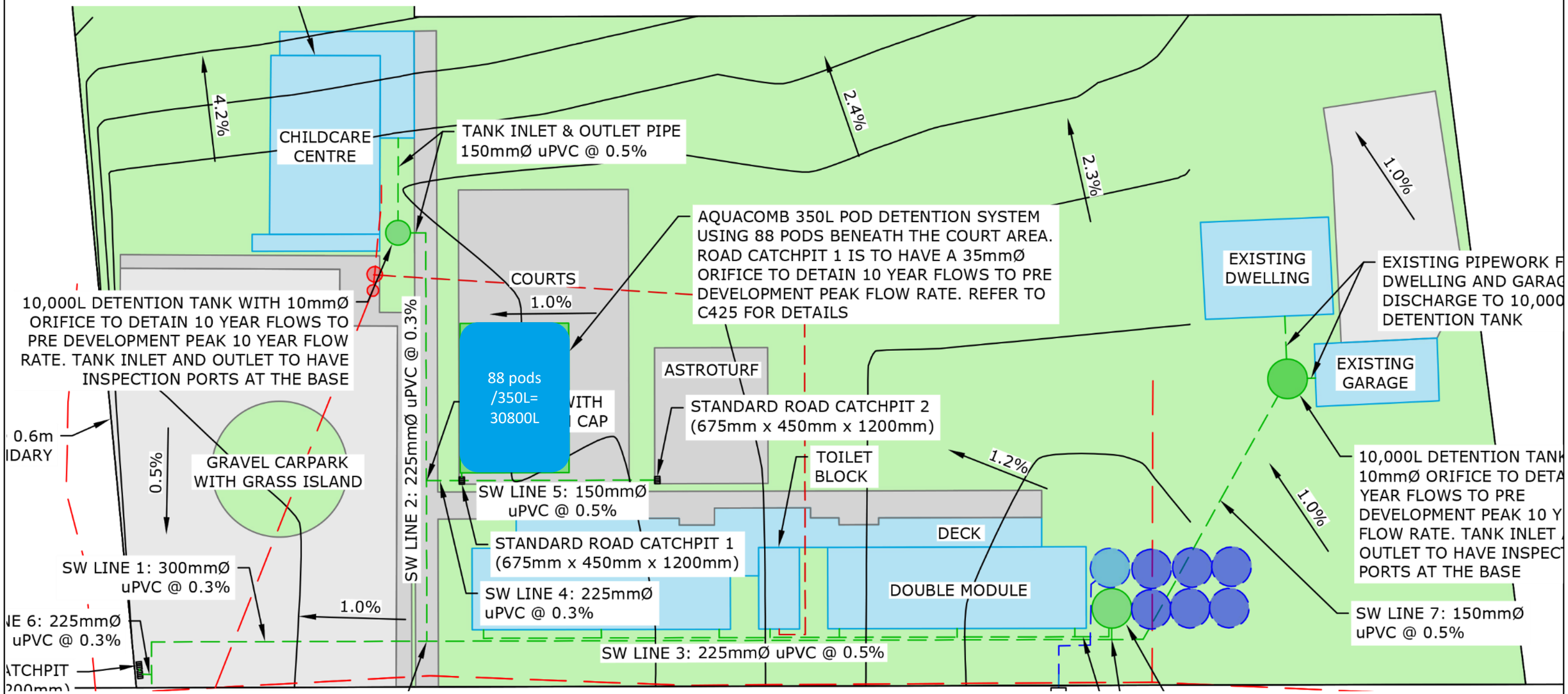
Reference:
31133242

Save changes to payee

These funds have been withdrawn from your account and the payment will be sent today.

Thu 30 Jan 2025

ANZ

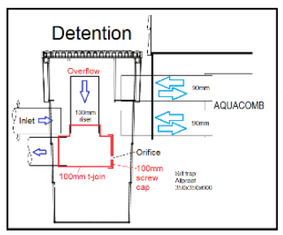


Key Plan

Important Notes

For prevention of sediment please install:

1. Either leaf slide on each downpipe or gutter guards in all gutters.
2. Install an AquaPit as entry/exit point to tank system.
3. These will exclude majority of any foreign matter, keeping your Aquacomb system free of debris for many years.
4. If pump is included, minimum 20mm internal diameter pipes should be used from the pump to all of the fixtures supplied by it.



Note: Preliminary pod layout only. Final pod layout to be checked against consented foundation plans.
CAUTION! Water tanks directly below slab topping. Ensure bottom plate fixing & drilling does not penetrate through topping. Failure to do so will cause damage.

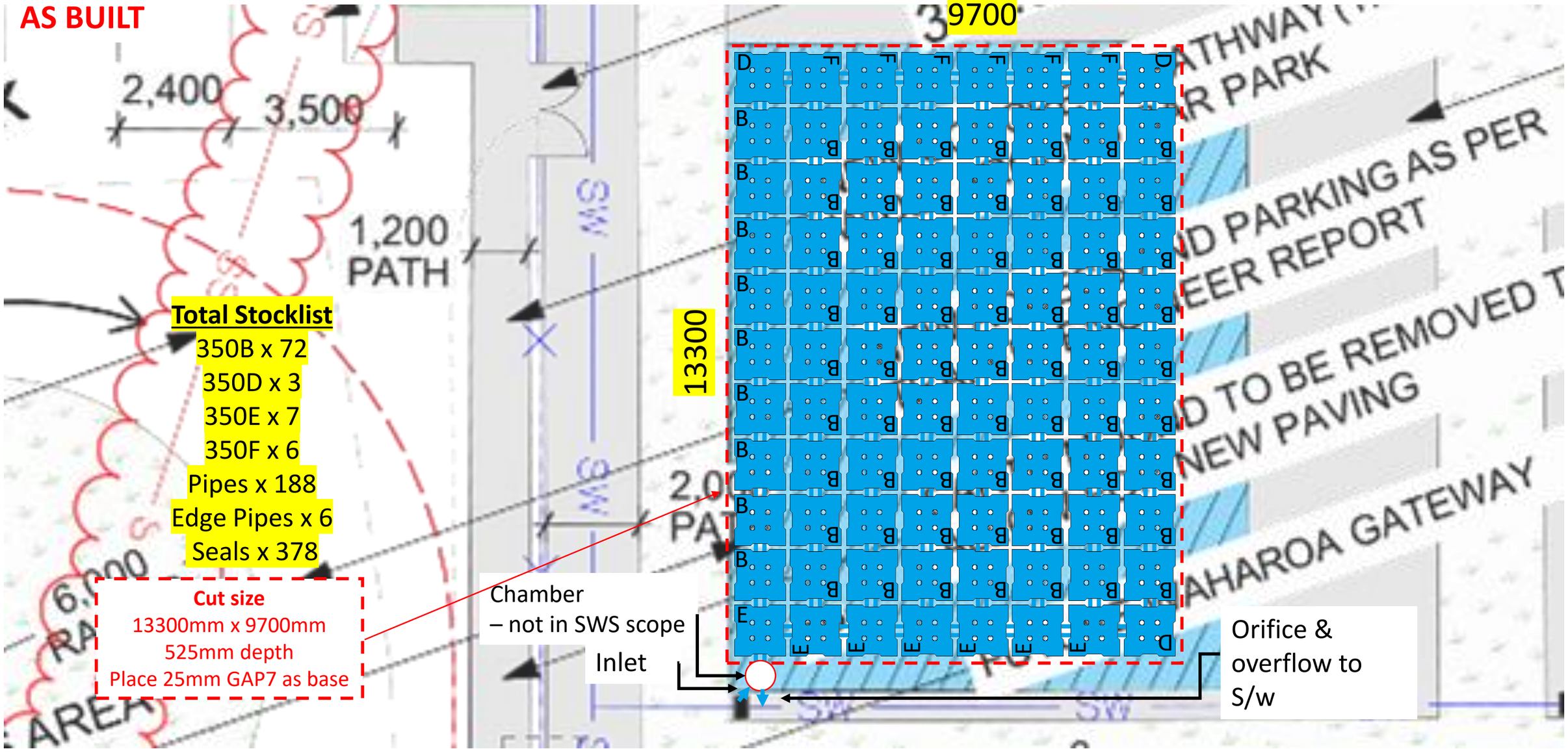
SPECIAL MEASUREMENTS:	EDGEBEAM WIDTH:	
	ORIFICE HEIGHT:	
	ORIFICE SIZE:	35mm

SITE:	CLIENT:	QUOTE NO:	PROJECT NO:	DATE:
20 Wireless Rd, Kaitaia	PW pipelines	Q1013362	J103461	22 August 2023

TITLE:	DETENTION VOLUME:	DRAWN:	CHECKED:	REVISION:
POD LAYOUT FOR AQUACOMB 30800 L DETENTION SYSTEM	30800 L = 88 x 350 L Pods RETENTION VOLUME: None required	JN	EO	C

STORMWATER SYSTEMS
aquacomb FENCE TANK
74 Patiki Rd, Avondale, Auckland
info@stormwatersystems.co.nz 0800 11 08 08
www.stormwatersystems.co.nz

AS BUILT



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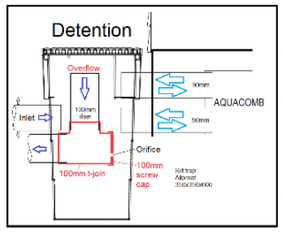

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	ORIFICE HEIGHT:	
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20 Wireless Rd, Kaitaia	PW pipelines	Q1013362	J103461	22 August 2023

TITLE:	DETENTION VOLUME:	DRAWN:	CHECKED:	REVISION:
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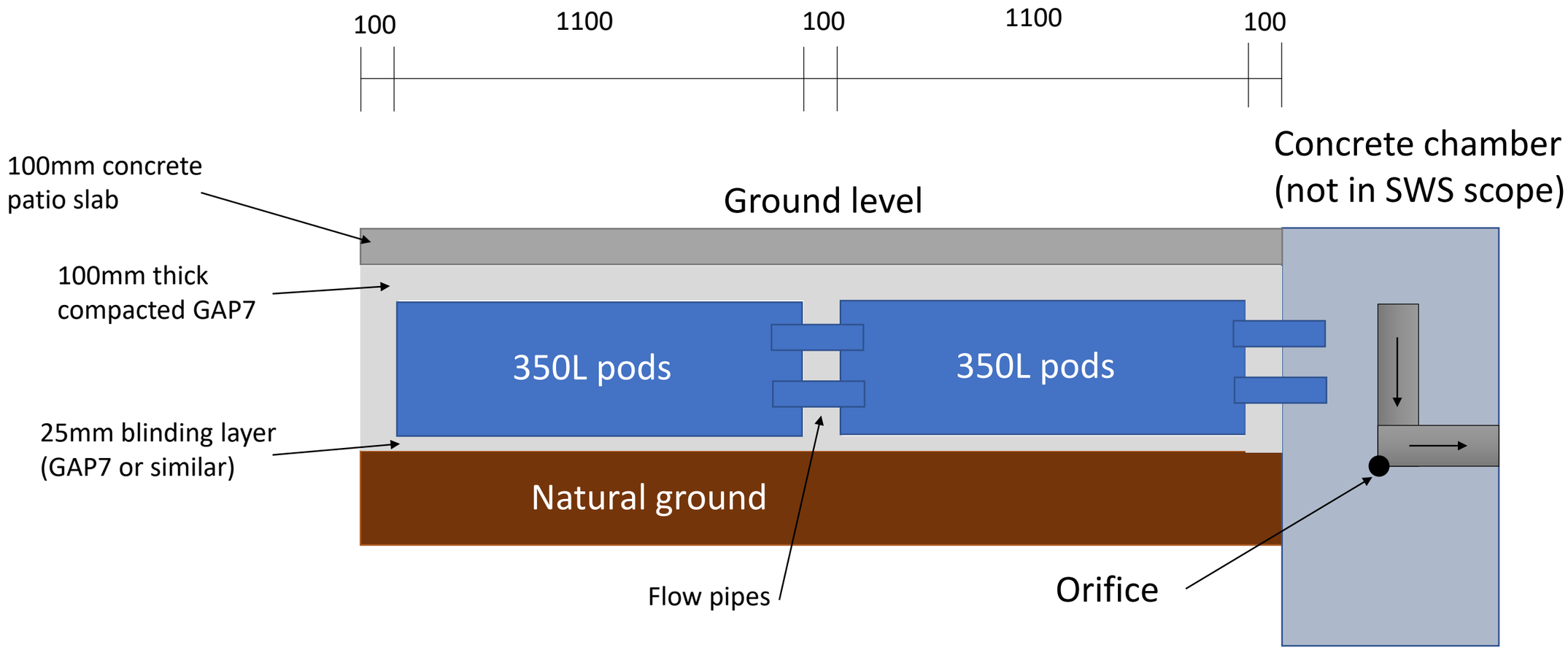

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Note:

Orifice details to be determined & confirmed by Stormwater Engineer.
This tank layout is based off plans supplied to SWS at the time of design.
This plan is designed to act as a guide for an architect and/or engineer to incorporate Aquacomb into their designs.
The Aquacomb tanks supplied to site are customized to suit this exact layout. If this layout changes in any way, SWS must be notified as soon as the alteration is made, whether major or minor.
Failure to supply SWS with notification of change may result in on site variations. All variations are the responsibility of the customer including, but not limited, to cost of replacement tanks, additional labour and materials.

SITE:	CLIENT:	QUOTE NO:	PROJECT NO:	DATE:	
20 Wireless Rd, Kaitaia	PW pipelines	Q1013362	J103461	22 August 2023	
TITLE: POD LAYOUT FOR AQUACOMB 30800 L DETENTION SYSTEM	DETENTION VOLUME: 30800 L = 88 x 350 L Pods RETENTION VOLUME:	DRAWN: JN	CHECKED: EO	REVISION: C	

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SKETCH ONLY

Whangarei Office
+64 9 430 1700

125A Bank Street
PO Box 553
Whangarei 0110

AERIAL SURVEY

CLIENT	CLIENT NAME
PROJECT	PROJECT NAME
PROJECT NO.	PROJECT NUMBER (123456.00)
DRAWN	DRAWN BY
DATE	DD-MM-YYYY