

Decision on an application for resource consents under the Resource Management Act 1991



Discretionary activity

Application numbers: BUN60333645
(LUC60325312, SUB60333646, and DIS60340705)

Applicant: Franklin Plumbing and Bathroomware

Site address: 301 Buckland Road, Pukekohe

Legal description: Pt Lot 1 DP 3363

Site area: 4.3602 ha

Auckland Unitary Plan (Operative in part)

Zoning and precinct: Future Urban Zone

Overlays, controls, special features, designations, etc: Natural Resources: High-Use Aquifer Management Areas Overlay [rp] - Pukekohe Kaawa Aquifer
Natural Resources: High-Use Aquifer Management Areas Overlay [rp] - Pukekohe Central Volcanic
Natural Resources: Quality-Sensitive Aquifer Management Areas Overlay [rp] - Franklin Volcanic Aquifer

Proposal:

To construct and operate a purpose-built warehouse and distribution centre for a Trade Supplier at 301 Buckland Road, Pukekohe.

The resource consents required are:

Land use consents (s9) – LUC60325312

Auckland Unitary Plan (Operative in part)

Regional Land Use

Chapter E11 – Land Disturbance (Regional)

- Earthworks over an area greater than 2,500m² are proposed, where the land has a slope equal to or great than 10 degrees, and the subject site is outside the Sediment Control Area. Consent is therefore required as a **restricted discretionary activity** in accordance with E11.4.1 (A8).

District land use

Chapter E12 – Land Disturbance (District)

- Earthworks of a volume of approximately 31,785m³ of cut and approximately 42,086m³ of fill across approximately 4.36ha are proposed and consent is therefore

required in accordance with E12.4.1 as **restricted discretionary activities** for earthworks greater than 2,500m² (A6) and 2,500m³ (A10).

Chapter E23 – Signs

- Comprehensive development signage is proposed in association with the development. Consent is therefore required as a **restricted discretionary activity** in accordance in E23.4.1. (A53)

Chapter E27 – Infrastructure

- The proposal involves accessory parking and access that does not meet the following parking and access standards and is a **restricted discretionary activity** under rule E27.4.1(A2).
 - The southern vehicle crossing is 12m, infringing the 7m maximum pursuant to E27.6.4.3.2 (T156); and
 - As the proposal involves a new vehicle crossing for a change of activity, in accordance with E27.6.4.1 (2) and (3), Vehicle Access Restrictions apply and vehicle crossings must not be constructed or used to provide vehicle access across that part of a site boundary which access an arterial road.

Chapter E36 – Natural hazards and flooding

- The proposal involves the diversion of overland flow paths, as such consent is required for a **restricted discretionary activity** in accordance with E36.4.1 (A41);
- The proposed building is located within an overland flow, as such consent is required for a **restricted discretionary activity** in accordance with E36.4.1 (A42);

Chapter H18 – Future Urban Zone

- The proposed activity meets the AUP:OP definition for a Trade Supplier. As Trade Suppliers are not specifically provided for within the Future Urban Zone, in accordance with C1.7, consent is required as a **discretionary activity**.
- New buildings in the Future Urban Zone require consent for the same activity status as the land use activity that the new building is designed to accommodate. As such, consent is required as a **discretionary activity** in accordance with H18.4.1 (A2);
- The new building infringes the following standards of H18.6 and is a **restricted discretionary activity** under rule C.1.9(2):
 - The maximum building height standard (H18.6.2) of 15m is infringed by a maximum of 2.6m; and
 - The yard standard (H18.6.3) is infringed with respect to the 20m front yard, but a maximum of 16m.

National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (“NES CS”)

- A detailed site investigation has been provided, and the soil contamination exceeds the applicable standard in the regulations for arsenic concentrations. Consent is required as a **restricted discretionary activity** in accordance with regulation 10 of the NES:CS.

Subdivision Consent (s11) – SUB60333646

Auckland Unitary Plan – Operative in Part (AUP OP)

- The proposal includes the subdivision of the site to provide for the vesting of land to form an extension to Webb Street. Within the Future Urban Zone, subdivision for road realignment requires consent as a **discretionary activity** in accordance with E39.4.3 (A28).

Discharge permits (s15) – DIS60340705

Auckland Unitary Plan – Operative in Part (AUP OP)

Regional Land Use

Chapter E8 – Stormwater Discharge and Diversion

- Impervious surfaces of approximately 2.1ha are proposed. Impervious surfaces of greater than 5,000m² require consent as a **discretionary activity** in accordance with E8.4.1 (A10).

Chapter E9 – Stormwater quality - High contaminant generating car parks and high use roads

- The proposal includes the construction of a carpark and accessways of approximately 9,600m², which are defined as a “high contaminant generating car park”. As the high contaminant generating car park will be greater than 5,000m² consent is required as a **controlled activity** in accordance with E9.4.1 (A6).

Decision

I have read the application, supporting documents, and the report and recommendations on the application for resource consents. I am satisfied that I have adequate information to consider the matters required by the Resource Management Act 1991 (RMA) and make a decision under delegated authority on the application.

Acting under delegated authority, under sections 104, 104B, 105, 106 and 107 and Part 2 of the RMA, the resource consents is **GRANTED**.

Reasons

The reasons for this decision are:

1. In accordance with an assessment under ss104(1)(a) and (ab) of the RMA the actual and potential effects from the proposal will be acceptable as:
 - a. In the context of the site and surrounding environment, and in particular with regards to the proximity of the site to the Pukekohe township and the identification of the subject site for future industrial zoned land in the Pukekohe Area Plan, the operation of a trade supplier activity on the site is considered to be acceptable, and any adverse amenity effects on the surrounding future urban zoned rural environment are considered to be less than minor;
 - b. The proposed buildings associated with the activity are of a scale and nature that is considered to be in keeping with the proposed activity, and have been designed to

respond appropriately to the existing site and surrounding environment and future transitional environment;

- c. The comprehensive building and site signage (including wayfinding pylon signs) are considered to have less than minor adverse effects on the streetscape and amenity of the surrounding environment;
- d. The proposed subdivision provides the necessary mechanism to enable Webb Street to be vested, and the subdivision is considered appropriate and logical;
- e. Traffic effects associated with the activity and development of the land can be appropriately managed by conditions of consent relating to detailed design;
- f. The land disturbance works can be managed in accordance with best practice land management to ensure that any effects associated with silt and sediment are less than minor;
- g. In terms of infrastructure provision, adverse effects on water quality, water quantity, and as a result of the management of stormwater on the site, can be managed to ensure that they are less than minor, whilst adequate infrastructure for water and wastewater is available;
- h. Adverse effects associated with the diversion of the flow path can be managed to ensure that any effects are less than minor;
- i. Site contamination can be remediated and managed to ensure that any adverse effects on the environment and human health are less than minor;
- j. In terms of positive effects, the proposal enables the development of the site for industrial activities in a manner consistent with the anticipated use of the Future Urban land and in-line with the Pukekohe Area Plan and Draft Pukekohe-Paerata Structure Plan. In addition, the proposed buildings have been designed to provide a high quality industrial environment that is purpose built, and provides for the long term future of a local company within the Pukekohe area. The subdivision of the site to provide for the future extension of Webb Street also provides key infrastructure connections for the future urbanisation of the Future Urban zoned land.
- k. With reference to s104(1)(ab), there are no specific offsetting or environmental compensation measures proposed or agreed to by the applicant to ensure positive effects on the environment

Overall, and having considered that the adverse effects of the proposal can be appropriately controlled and managed, and that the proposal will have notable positive effects, the proposal is considered to be acceptable from an effects perspective.

2. In accordance with an assessment under s104(1)(b) of the RMA the proposal is consistent with the relevant statutory documents. In particular:
 - a. The proposal is considered to be consistent with the anticipated outcomes of the NES CS with the adverse effects of contamination able to be managed appropriately.
 - b. The land disturbance activities and stormwater management can be undertaken and managed to ensure that the outcomes of the proposal are consistent with the anticipated outcomes of the New Zealand Coastal Policy Statement and National Policy Statement

for Freshwater Management and the management of effects on water bodies is appropriate;

- c. The proposed Trade Supplier activity and associated warehouse and distribution centre buildings and integrated signage, land disturbance and contaminated land remediation works, and stormwater management, are considered to be generally consistent with the direction of the AUP OP and are acceptable in the context of the anticipated outcomes of the Plan for the Future Urban Zone (FUZ). In particular, the necessary works to establish the activity can be managed in accordance with best practice land and contamination management, whilst the scale and nature of the activity and built environment proposed have been designed to ensure that any adverse effects are acceptable and appropriate in the context of the site, existing surrounding rural environment, and transitional nature of the FUZ.
 - d. The subdivision of the site provides for a logical and efficient layout for the site and future extension of Webb Street. In addition, the applicant has made appropriate provision for services and the management of natural hazards on site in a manner that is consistent with the direction of the AUP OP.
3. In accordance with an assessment under s104(1)(c) of the RMA no other matters are considered relevant.
 4. Having considered the nature and scale of the effects associated with the proposed discharges of contaminants from stormwater to water and/or land, the discharges are considered appropriate with respect to s105, and there is no reason with respect to the provisions of s107 that restrict the granting of consent.
 5. In terms of s106 of the RMA the proposal is not considered to give rise to a significant risk from natural hazards, and sufficient provision has been made for legal and physical access to the proposed allotments. Accordingly council is able to grant this subdivision consent subject to the conditions below.
 6. With respect to s123 of the RMA:
 - a. It is considered appropriate that the stormwater discharge and diversion component of DIS60340705 have a term of 35 years as the nature of the activity is unlikely to change during this period and suitable conditions of consent in-line with the ongoing maintenance and operation of the approved stormwater management system can be imposed; and
 - b. Given the nature and scale of the regional land disturbance works component of LUC60325312, it is considered appropriate that a term of 5 years is suitable to allow for the completion of works and any unexpected delays in the commencement of work.
 7. In the context of these controlled, restricted discretionary, and discretionary activity applications to establish and operate the trade supplier activity on the subject site, where the objectives and policies of the relevant statutory documents were prepared having regard to Part 2 of the RMA, they capture all relevant planning considerations and contain a coherent set of policies designed to achieve clear environmental outcomes. They also provide a clear framework for assessing all relevant potential effects and there is no need to go beyond these provisions and look to Part 2 in making this decision as an assessment against Part 2 would not add anything new to the evaluative exercise.

8. Overall the proposal is considered to be consistent with the relevant matters of the NES CS and AUP OP, and the outcomes anticipated for the FUZ. Any actual or potential adverse effects are assessed to be acceptable in the context of the receiving environment and management techniques that form part of the application, and the proposal is considered to have notable positive effects.

Furthermore the application is considered to meet the relevant tests of the RMA, and can be considered to provide an efficient use of an existing land resource. For these reasons, the proposal is considered to be acceptable from a resource management perspective.

Conditions

Under section 108 of the RMA, these consents are subject to the following conditions:

General conditions

These conditions apply to all resource consents.

1. The construction and operation of the warehouse and distribution centre for a Trade Supplier activity shall be carried out in accordance with the documents and drawings and all supporting additional information submitted with the application, detailed below, and all referenced by the council as resource consent numbers BUN60333645 (LUC60325312, SUB60333646, and DIS60340705)
 - Application Form, and Assessment of Effects prepared by Rosie Daly of Scott Wilkinson Planning, titled “Franklin Plumbing and Bathroomware, Proposed Warehousing and Distribution Centre (Trade Supplier), 301 Buckland Road, Pukekohe”, dated January 2019.

Report title and reference	Author	Rev	Dated
Infrastructure Report: W3150- 301 Buckland Road, Pukekohe,	CKL	3	30/10/2018
Detailed Site Investigation (DSI) 301 Buckland Road, Pukekohe REP-1258A/DSI/Jan19	Geosciences		15 January 2019
Remediation Action Plan (RAP) 301 Buckland Road, Pukekohe REP-1258A/RAP/Jan19	Geosciences		15 January 2019
Geotechnical Investigation Report: 301 Buckland Road, Pukekohe	Lander Geotechnical	-	23 July 2018
Transportation Assessment Report: 301 Buckland Road, Pukekohe Trade Supply Facility	Commute		16 August 2018
Urban Design and Architectural Statement	Brewer Davidson		30 July 2018

Drawing title and reference	Author	Rev	Dated
<i>Architectural Plans</i>			
RC.01 Split Level Option Existing Aerial Plan	Brewer Davidson	1	2/11/2018

Drawing title and reference	Author	Rev	Dated
RC.02 Split Level Option Existing Site Plan	Brewer Davidson	1	2/11/2018
RC.03 Split Level Option Proposed Site Plan – Lower Level	Brewer Davidson	2	16/01/2019
RC.04 Split Level Option Proposed Site Plan – Upper Level	Brewer Davidson	2	16/01/2019
RC.04A Split Level Option Proposed Coverage Plan	Brewer Davidson	1	2/11/2018
RC.05 Split Level Option Section A-A	Brewer Davidson	1	2/11/2018
RC.06 Split Level Option North Elevation	Brewer Davidson	1	2/11/2018
RC.07 Split Level Option Proposed Floor Plans	Brewer Davidson	1	2/11/2018
<i>Landscape Plan</i>			
Landscape Plan RS_0001	ResilioStudio	D	17.01.2019
<i>Engineering Plans</i>			
TOPOGRAPHICAL SURVEY OF PART LOT 1 DP 3363 CFR NA56A/559 W3150-100	CKL	00	30.07.19
PROPOSED EARTHWORKS PLAN DESIGN CONTOUR W3150-200	CKL	04	30.07.19
PROPOSED EARTHWORKS PLAN CUT AND FILL PLAN W3150-210	CKL	02	30.07.19
PROPOSED EARTHWORKS SECTIONS LINES PLAN W3150-220	CKL	01	30.07.19
PROPOSED EARTHWORKS PLAN - SECTIONS W3150-221	CKL	01	30.07.19
EROSION AND SEDIMENT CONTROL PLAN W3150-250	CKL	01	30.07.19
EROSION AND SEDIMENT CONTROL STANDARD DETAILS - SHEET 1 W3150-251	CKL	01	30.07.19
EROSION AND SEDIMENT CONTROL STANDARD DETAILS - SHEET 2 W3150-252	CKL	01	30.07.19
EROSION AND SEDIMENT CONTROL STANDARD DETAILS - SHEET 3 W3150-253	CKL	01	30.07.18

Drawing title and reference	Author	Rev	Dated
PROPOSED RETAINING WALLS LAYOUT PLAN	CKL	01	30.07.18
W3150-280			
PROPOSED RETAINING WALL LONGSECTIONS - SHEET 1	CKL	01	30.07.18
W3150-281			
PROPOSED RETAINING WALL LONGSECTIONS - SHEET 2	CKL	01	30.07.18
W3150-282			
PROPOSED ROADING PLAN - LAYOUT PLAN	CKL	01	30.07.18
W3150-300			
PROPOSED ROAD LONGSECTION AND TYPICAL CROSS SECTION	CKL	01	30.07.18
W3150-310			
PROPOSED STORMWATER MANAGEMENT LAYOUT - SHEET 1 OF 3	CKL	00	26.07.19
W3150-440			
PROPOSED STORMWATER MANAGEMENT LAYOUT - SHEET 2 OF 3	CKL	00	26.07.19
W3150-441			
PROPOSED STORMWATER MANAGEMENT LAYOUT - SHEET 3 OF 3	CKL	00	26.07.19
W3150-442			
PROPOSED PUBLIC WASTEWATER EXTENSION	CKL	01	26.07.19
W3150-500			
DRAINAGE LONGSECTIONS	CKL	01	26.07.19
W3150-510			
PUBLIC WASTEWATER CATCHMENTS PLAN	CKL	00	26.07.19
W3150-520			
Other additional information	Author	Rev	Dated
Split Level Option Proposed 3d Views Camera 1-8	Brewer Davidson	1	2/11/2018
RC08-RC.15			
Further information response and attachments	Rosie Daly, Scott Wilkinson Planning		17 January 2019

2. The consent holder shall pay the council an initial consent compliance monitoring charge of \$640 inclusive of GST, plus any further monitoring charge or charges to recover the actual and reasonable costs incurred to ensure compliance with the conditions attached to this consent.

Advice note:

The initial monitoring deposit is to cover the cost of inspecting the site, carrying out tests, reviewing conditions, updating files, etc., all being work to ensure compliance with the resource consent. In order to recover actual and reasonable costs, monitoring of conditions, in excess of those covered by the deposit, shall be charged at the relevant hourly rate applicable at the time. The consent holder will be advised of the further monitoring charge. Only after all conditions of the resource consent have been met, will the council issue a letter confirming compliance on request of the consent holder.

Pre commencement meeting

3. Prior to the commencement of the land disturbance activities, the consent holder shall hold a pre-start meeting that:
 - a) is located on the subject site;
 - b) is scheduled not less than 5 days before the anticipated commencement of construction and/or earthworks;
 - c) includes Council's Monitoring officer; and
 - d) includes representation from the contractors (including stormwater engineer) who will undertake the works and any suitably qualified professionals if required by other conditions.

The following information shall be made available at the pre-start meeting:

- Timeframes for key stages of the works authorised under this consent;
- Resource consent conditions;
- Construction traffic management plan;
- Approved Corridor Access Request (CAR), complete with Traffic Management Plan (TMP), from Auckland Transport;
- Finalised Erosion and Sediment Control Plan (as required by the conditions of consent);
- Chemical Treatment Management Plan (as required by the conditions of the consent); and
- Remedial Action Plan.

Advice Note:

To arrange the pre-start meeting please contact the Team Leader Southern Monitoring to arrange this meeting or email monitoring@aucklandcouncil.govt.nz . The conditions of consent should be discussed at this meeting. All information required by the council and listed in that condition should be provided two days prior to the meeting.

Construction management plan

4. Prior to the works commencing on site, a Construction Management Plan (CMP) (including construction traffic management) shall be submitted to the Team Leader South Monitoring for certification. All activities associated with construction activity on the site shall be in accordance with the certified CMP. No construction activity shall commence until confirmation is provided from the council that the CMP satisfactorily meets all measures identified in that plan as needing to be put in place prior to commencement of works have been.

Advice Note:

The Construction Management Plan should contain sufficient detail to address the following matters:

- *Details of the Site Manager, including 24 hour contact details (telephone, email and postal address);*
- *Measures to maintain the site in a tidy condition in terms of the storage and disposal of rubbish, unloading and storage of building materials and similar construction activities;*
- *Ingress and egress to and from the site for vehicles and construction machinery during the Works period;*
- *Location of wheel-wash facilities;*
- *Numbers and timing of truck movements throughout the day and their proposed route/s;*
- *Proposed hours of work on the site (noting the working hours authorised by this consent);*
- *Procedures for ensuring that the owners and/ or occupants in the immediate vicinity of the construction area are given prior notice of the commencement of construction activities and are informed about the expected duration of works and potential effects of the works (e.g. noise associated with construction activities);*
- *Temporary protection measures that will be installed to ensure that there shall be no damage to public roads, berms, kerbs, drains, reserves or other public assets as a result of the earthworks and construction activities; and*
- *Any other details of the intended Works programme.*

Corridor access request

5. Prior to carrying out works within the legal road corridor, (boundary to boundary) the Consent Holder shall provide a copy of their 'Corridor Access Request' (CAR), from Auckland Transport, complete with TMP to the Council Development Engineer at least ten (10) days prior to starting works within the road.

Advice Note:

A CAR is required for open cut trenching and trenchless techniques for utility installations. The application for a CAR is to be made online to www.beforeudig.co.nz. The application form requires relevant background information including resource consent details, traffic management plans, and the locations and nature of the works. Please note that a CAR may take up to 15 days to process and construction hours may be restricted on Level 2 or 3 roads, as defined in the Code of Practice for Temporary Traffic Management

(COPTTM) of NZTA. Application for a CAR is made online to www.beforeudig.co.nz. A charge may apply.

Specific conditions – land use consent LUC60325312

Lapse of consent

6. Under section 125 of the RMA, this land use consent (LUC60325312) and discharge permit (DIS60340705) lapses five years after the date it is granted unless:
 - a. The consent is given effect to; or
 - b. The council extends the period after which the consent lapses.

Architectural detail drawings and materials specifications

7. Prior to commencement of any works a finalised set of architectural detail drawings and materials specifications shall be submitted to Council for written certification by Council's Team Leader Monitoring (South). The information shall include the following:
 - a) Details of retaining walls / types adjoining the dispatch area and these walls shall be no more than what is shown on the RC drawings or smaller, ideally less than 1.5m.
 - b) Details of retaining walls / types within the visitor car parking and these walls shall be no more than what is shown on the RC drawings or smaller.
 - c) Details of the building's façade treatment to include material specification, surface finishes, and colour schemes (including colour swatches and material sample palette).
 - d) Details of the panelled / faceted façade of the showroom and shall be taken around the corner to reduce the extent of blade wall visible from the south.

The finalised set of drawings shall ensure that the building's proposed architectural treatment and finished appearance is consistent with the information submitted at the resource consenting stage. The intent of the information submitted is for high quality materials to achieve attractive streetscape. All works shall then be carried out with the details certified by council, and thereafter retained and maintained, to the satisfaction of Council.

Landscaping

8. The landscaping as detailed on the Landscape Plan RS_001 rev D prepared by ResilioStudio shall be implemented within the first planting season (May to September) following the completion of the works on the site.
9. The landscaping shall be maintained thereafter in accordance with the maintenance programme submitted with the approved landscape plan for the duration of trade supplier activity on site to the satisfaction of the Council.

Land Disturbance conditions – land use consent LUC60325312

Consent Duration

10. The regional earthworks component of LUC60325312 shall expire 5 years following the granting of consent unless it has lapsed, been surrendered or been cancelled at an earlier date pursuant to the RMA

General Conditions

11. The bulk earthworks/land disturbance works activity shall be carried out in accordance with the plans and all information submitted with the application, detailed below and all referenced by Council as LUC60325312, except where a higher standard is referred to in the conditions below, in which case this higher standard shall apply.

Reports:

- *Franklin Plumbing and Bathroomware, Proposed Warehousing and Distribution Centre (Trade Supplier), 301 Buckland Road, Pukekohe, Assessment of Environmental Effects, January 2019, 4161.01, prepared by Scott Wilkinson Planning.*
- *W3150 – 301 Buckland Road, Pukekohe, Infrastructure Report, Franklin Plumbing, 301 Buckland Road, October 30th, 2019, Revision 3, prepared by CKL Limited.*

Plans:

- *Topographical Survey of Part Lot 1 DP 3363, CFR NA56A/559, Drawing No 100, Rev 00, dated 30 July 2018, prepared by CKL Limited.*
- *Proposed Earthworks Plan, Design Contour, Drawing No 200, Rev 04, dated 30 July 2018, prepared by CKL Limited.*
- *Proposed Earthworks Plan, Cut Fill, Drawing No 210, Rev 02, dated 30 July 2018, prepared by CKL Limited.*
- *Sediment and Erosion Control Plan, Drawing No 250, Rev 01, dated 30 July 2018, prepared by CKL Limited.*

Advice Note:

In the event that minor amendments to the erosion and / or sediment controls are required, any such amendments should be limited to the scope of this consent. Any amendments which affect the performance of the controls may require an application to be made in accordance with section 127 of the RMA. Any minor amendments should be provided to the Team Leader – Compliance Monitoring South, Auckland Council prior to implementation to confirm that they are within the scope of this consent.

Pre-commencement Conditions

12. Prior to the commencement of the bulk earthworks/land disturbance works activity on the subject site, a finalised Erosion and Sediment Control Plan including the construction methodology (ESCP) shall be prepared in accordance with GD05 and submitted to the

Team Leader Compliance Monitoring South, Auckland Council. No earthworks activity on the subject site shall commence until confirmation from council is provided that the final management plan is approved.

The Erosion and Sediment Control Plan shall contain sufficient detail to address the following matters:

- (a) Specific erosion and sediment control works for all earthworks activities in accordance with Auckland Council's Guideline Document 2016/005 Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (GD05), including clarifying design of the Sediment Retention Pond;
- (b) supporting calculations including design drawings
- (c) catchment boundaries and contour information
- (d) details of construction methods
- (e) timing and duration of construction and operation of control works (in relation to the staging and sequencing of earthworks)
- (f) details relating to the management of exposed areas (e.g. grassing, mulching)
- (g) monitoring and maintenance requirements.

Advice Note:

In the event that minor amendments to the erosion and / or sediment controls are required, any such amendments should be limited to the scope of this consent. Any amendments which affect the performance of the controls may require an application to be made in accordance with section 127 of the RMA. Any minor amendments should be provided to the Team Leader Compliance Monitoring South, Auckland Council prior to implementation to confirm that they are within the scope of this consent.

13. Prior to implementation of bulk earthworks/land disturbance works, a Chemical Treatment Management Plan (CTMP) shall be submitted for the written approval of the Team Leader – Compliance Monitoring South, Auckland Council. The plan shall include as a minimum:
- (a) Specific design details of the chemical treatment system based on a rainfall activated methodology (Floc Shed or Box) for the site's Sediment Retention Pond;
 - (b) Monitoring, maintenance (including post storm) and contingency programme (including a record sheet);
 - (c) Details of optimum dosage (including assumptions);
 - (d) Results of initial chemical treatment trial and bench testing;
 - (e) A spill contingency plan; and
 - (f) Details of the person or bodies that will hold responsibility for long term operation and maintenance of the chemical treatment system and the organisational structure which will support this system.

Advice Note:

In the event that minor amendments to the CTMP are required, any such amendments should be limited to the scope of this consent. Any amendments which affect the performance of the CTMP may require an application to be made in accordance with section 127 of the RMA. Any minor amendments should be provided to the Team Leader – Compliance Monitoring South, Auckland Council prior to implementation to confirm that they are within the scope of this consent.

14. Prior to bulk earthworks/land disturbance works commencing, a certificate signed by an appropriately qualified and experienced person shall be submitted to the Team Leader – Compliance Monitoring South, Auckland Council, to certify that the erosion and sediment controls have been constructed in accordance with the erosion and sediment control plans as specified in the conditions of this consent

Certified controls shall include the Sediment Retention Pond, Runoff Diversion Bunds, Clean Water Diversions, Contour Drains, Super Silt Fences and Silt Fences. The certification for these subsequent measures shall be supplied immediately upon completion of construction of those measures. Information supplied if applicable, shall include:

- (a) Contributing catchment area;
- (b) Shape and volume of the structure (dimensions of structure);
- (c) Position of inlets/outlets; and
- (d) Stabilisation of the structure.

Specific earthworks conditions

15. All earthworks shall be managed to ensure that no debris, soil, silt, sediment or sediment-laden water is discharged in an uncontrolled manner beyond the subject site to either land, stormwater drainage systems, watercourses or receiving waters. In the event that an uncontrolled discharge occurs, works shall cease immediately, and the discharge shall be mitigated and/or rectified to the satisfaction of the Council.
16. There shall be no deposition of earth, mud, dirt or other debris on any road or footpath resulting from earthworks activity on the subject site. In the event that such deposition does occur, it shall immediately be removed. In no instance shall roads or footpaths be washed down with water without appropriate erosion and sediment control measures in place to prevent contamination of the stormwater drainage system, watercourses or receiving waters.

Advice Note:

In order to prevent sediment laden water entering waterways from the road, the following methods may be adopted to prevent or address discharges should they occur:

- *provision of a stabilised entry and exit(s) point for vehicles*
- *provision of wheel wash facilities*
- *ceasing of vehicle movement until materials are removed*
- *cleaning of road surfaces using street-sweepers*
- *silt and sediment traps*
- *cesspit protection*

In no circumstances should the washing of deposited materials into drains be advised or otherwise condoned.

It is recommended that you discuss any potential measures with the Council's monitoring officer who may be able to provide further guidance on the most appropriate approach to take. Please contact the Team Leader – Compliance Monitoring South for more details. Alternatively, please refer to Auckland Council's Guideline Document 2016/005 Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (GD05).

17. The operational effectiveness and efficiency of all erosion and sediment control measures shall be maintained in accordance with Auckland Council's Guideline Document 2016/005 Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (GD05) throughout the duration of earthworks activity, or until the site is permanently stabilised against erosion.
18. All Sediment Retention Ponds and Decanting Earth Bunds shall be chemically treated in accordance with the approved Chemical Treatment Management Plan until the earthworked areas are stabilised in accordance with Auckland Council's Guideline Document 2016/005 Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (GD05).
19. Upon abandonment or completion of earthworks on the subject site all areas of bare earth shall be permanently stabilised against erosion to the satisfaction of the Council.

Advice Note:

Should the earthworks be completed or abandoned, bare areas of earth shall be permanently stabilised against erosion. Measures may include:

- *the use of mulching*
- *top-soiling, grassing and mulching of otherwise bare areas of earth*
- *aggregate or vegetative cover that has obtained a density of more than 80% of a normal pasture sward*

The on-going monitoring of these measures is the responsibility of the consent holder. It is recommended that you discuss any potential measures with the Council's monitoring officer who will guide you on the most appropriate approach to take. Please contact the Team Leader – Compliance Monitoring South on monitoring@aucklandcouncil.govt.nz or 09 301 0101 for more details. Alternatively, please refer to Auckland Council's Guideline Document 2016/005 Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (GD05).

Ensure stability of the site/neighbouring sites.

20. All earthworks shall be managed to ensure that they do not lead to any uncontrolled instability or collapse either affecting the site or adversely affecting any neighbouring properties. In the event that such collapse or instability does occur, it shall immediately be rectified.

Seasonal Restriction

21. No earthworks on the site shall be undertaken between 30 April and 1 October in any year, without the prior written approval of the Council at least two weeks prior to 30 April of any year. Revegetation/stabilisation is to be completed by 30 April in accordance with measures detailed in Auckland Council's Guideline Document 2016/005 Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (GD05).

Monitoring

22. The sediment and erosion controls at the site of the works shall be inspected on a regular basis and within 24 hours of each rainstorm event that is likely to impair the function or performance of the control measure. A record shall be maintained of the date, time and any maintenance undertaken in association with this condition which shall be forward to the Council on request.

Contamination conditions – land use consent LUC60325312

23. The Team Leader, Southern Compliance Monitoring, Licensing & Regulatory Compliance, Auckland Council (the Team Leader), shall be informed, in writing, at least ten working days prior to the start date of the works authorised by this consent.
24. The works shall be undertaken in accordance with the Remediation Action Plan: 301 Buckland Road, Pukekohe, dated 15 January 2019 and prepared by Geoscience Limited ('the RAP'). Any variations to the RAP shall be submitted to the Team Leader for certification that it appropriately manages actual and potential soil contamination effects and is within the scope of this consent.

Advice Note:

The Council acknowledges that the RAP is intended to provide flexibility of the management of the works. Accordingly, the plan may need to be updated. Any updates should be limited to the scope of this consent and be consistent with the conditions of this consent. If you would like to confirm that any proposed updates are within scope, please contact the Team Leader.

25. During earthworks all necessary action shall be taken to prevent dust generation and sufficient water shall be available to dampen exposed soil, and/or other dust suppressing measures shall be available to avoid dust formation. The consent holder shall ensure that dust management during the excavation works generally complies with the Good Practice Guide for Assessing and Managing Dust (Ministry for the Environment 2016).
26. In the event of the accidental discovery of contamination during earthworks which has not been previously identified, the consent holder shall immediately cease the works in the vicinity of the contamination and notify the Team Leader and engage a Suitably Qualified and Experienced Professional (SQEP) to assess the situation (including possible sampling and testing) and decide in conjunction with a council compliance officer on the best option for managing the material.
27. Excavated material that is not re-used on site shall be disposed of at an appropriate facility licensed to accept the levels of contamination identified.

28. The consent holder shall ensure that the contamination level of any soil imported to the site complies with the definition of 'Cleanfill material', as outlined in the Auckland Unitary Plan (Operative in Part) (AUP(OP)).
29. All sampling and testing of contamination on the site shall be overseen by a SQEP. All sampling shall be undertaken in accordance with the RAP and Contaminated Land Management Guidelines No.5: Site Investigation and Analysis of Soils (Ministry for the Environment, 2011).
30. Within three months of the completion of earthworks on the site, a Site Validation Report (SVR) shall be provided to the Team Leader. The SVR shall be prepared by a SQEP in accordance with the Contaminated Land Management Guidelines No. 1: Reporting on Contaminated Sites in New Zealand (Ministry for the Environment, 2011) and contain sufficient detail to address the following matters:
 - (a) A summary of the works undertaken, including the location and dimensions of the excavations carried out and the volume of soil excavated;
 - (b) Details and results of any testing, including validation testing, undertaken and interpretation of the results in the context of the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health and the AUP(OP);
 - (c) Copies of the disposal docket for any material removed from the site;
 - (d) Records of any unexpected contamination encountered during the works and response actions, if applicable;
 - (e) Conditions of the final site ground surface and details of any validation sampling undertaken on materials re-used on site or imported to site; and
 - (f) A statement certifying that all works have been carried out in accordance with the requirements of the consent.

Advice Note: Site Validation Report

The SVR shall enable the Team Leader to update the property file information relating to soil contamination. Until an SVR is submitted and certified by the Team Leader, the Land Information Memorandum for the property shall not be updated to reflect any soil contamination remediation work undertaken.

Advice Note: Asbestos Containing Materials

If you are demolishing any structure that may have asbestos containing materials (ACM) in it: You have obligations under the relevant regulations for the management and removal of asbestos, including the need to engage a Competent Asbestos Surveyor to confirm the presence or absence of any ACM. Work may have to be carried out under the control of person holding a WorkSafe NZ Certificate of Competence (CoC) for restricted works. If any ACM is found, removal or demolition will have to meet the Health and Safety at Work (Asbestos) Regulations 2016.

Information on asbestos containing materials and your obligations can be found at www.worksafe.govt.nz .

Traffic conditions – land use consent LUC60325312

Buckland Road Upgrades

31. The consent holder shall submit full detail engineering design drawings of the proposed trade facility at 301 Buckland Road fronting the site and any necessary tie in works for the approval of the Team Leader – Development Engineering South (and Auckland Transport peer review) prior to any road works commencing on site. The design shall be in general accordance with the Proposed Site Plan included in the application (Drawing RC-03), and in accordance with the Auckland Transport Code of Practice (ATCOP), or updated equivalent Auckland Transport standards which apply at the time of applying for Engineering Plan Approval.

The design shall include, but not be limited to, the following details:

- a) Provision of vehicle tracking for the inbound/outbound movements at the proposed vehicle access points off Buckland Road, should be provided for the largest design vehicle to be used on site.
- b) Provision of a footpath on the western side of Buckland Road (north of the northern access) and up to the intersection with Kitchener Street. Pram crossings are to be installed in accordance with Drawing FP009 of ATCOP. This footpath shall have adequate street lighting and kerb and channel fronting the street.
- c) Provision of a temporary turning head at the end of Road 1 in the event the entrance will be closed after hours. Please confirm if a turning head is required, and if necessary, provide updated plans for the largest design vehicle tracking.
- d) Ensure all vehicle accesses are designed in accordance with GD019A-1C of the TDM Standards (Commercial Vehicle Crossing).
- e) Signage and line marking plans are to be developed and designed in accordance with the relevant design standard, including MOTSAM Parts 1 and 2, NZTA Traffic Control Devices Manual, Part 3, Advertising Signs (text within the potential public consultation board for Buckland Road).
- f) To avoid damage to the road shoulder and minimise increased maintenance cost in the future, please provide a basic left turn treatment in accordance to Figure 8.2 in Austroads Guide to Road Design – Part 4A: Unsignalised and Signalised Intersections for the left turn movement (supported with heavy vehicle tracking) onto Road 1 off Buckland Road.
- g) Works associated with Buckland Road, site access and any reinstatement shall be constructed in accordance with the approved plans, at the consent holder's expense, and shall be completed prior to any activity commencing on the site:
- h) Relocation of existing power poles, edge marker post locations and road signs if any shall be clearly identified on the engineering plans.
- i) Detail Signage and Markings Plan shall be submitted as part of the Engineering Plan application.

- j) Detail street lighting plans & utility structures existing and relocated shall comply with ATCOP Standards and be submitted together with the engineering plans for approval by Council (and Auckland Transport peer review).

Approval of Traffic Control Committee

32. The consent holder is required to submit a resolution report for approval by the Auckland Transport Traffic Control Committee to legalise all new and proposed changes to road markings, signage and traffic control devices. A copy of the resolution by the Traffic Control Committee must be submitted with the application for the certificate pursuant to section 224(c) of the Resource Management Act. The consent holder is to engage an Auckland Transport nominated contractor to carry out consultation with the affected landowners (if any) and to prepare the resolution report for the Traffic Control Committee (TCC) approval in order to legalise the proposed changes at the cost of the consent holder.

Advice Notes:

Auckland Transport approval for changes to the road reserve or for new road reserve is made through its Traffic Control Committee ("TCC") resolutions.

The consent holder needs to contact Auckland Transport to initiate the resolution process at least 6 weeks prior to any works in the road reserve. No installation or any road markings will be permitted before the resolution has been approved by the Auckland Transport Traffic Control Committee.

Parking, Access, and Manoeuvring

33. That the new driveways, 70 parking spaces, traffic islands and manoeuvring areas shall be formed, sealed, marked and drained in general accordance with Council's current Engineering Standards and the approved plan.
34. That the two new vehicle crossings of width 9.0m & 12.0m at the boundary for northern and southern access respectively shall be constructed in accordance with GD019A-1C of the TDM Standards (Commercial Vehicle Crossing).
35. That the vehicle crossing for the truck entrance from proposed Lot 2 shall be constructed in accordance with GD019A-1C of the TDM Standards (Commercial Vehicle Crossing).

Advice note

A vehicle crossing permit is required to be obtained from Auckland Transport prior to the construction of the vehicle crossing on existing public roads. See Auckland Transport's website <https://at.govt.nz/about-us/working-on-the-road/vehicle-crossing-application/> for more information.

36. The driveways and manoeuvring areas shall be constructed, with stormwater control, in compliance with Council's current Auckland Council Engineering Standards, prior to the commencement of the activity to the Team Leader Compliance Monitoring South.
37. That all four accessible parking spaces shall be identified and marked in accordance with New Zealand Standards NZS4121-2001. Ramp access shall be provided as required.
38. That the following shall be constructed/installed in accordance with of the ATCOP Standards and the approved plan.

- (a) Internal footpaths to be constructed for pedestrian access route and for accessible parking route. This footpath to be linked to the footpath on Buckland Road.
 - (b) Directional arrows on the driveway surface and within the site to indicate the direction of flow of traffic for entry and exit points within the parking lots.
 - (c) ENTRY and NO ENTRY signs for parking lot with one-way circulation.
 - (d) Right turn bay and flush median markings on Buckland Road to be installed.
39. That not less than three (3) bike stands for short stay visitor parking and 3 for secure bike parking for staff shall be provided within the site. Design shall be in accordance with Australian Standards AS/NZS 2890.3-1993, Parking Facilities Part 3 – Bicycle Parking Facilities. These shall be provided on a continuing basis as and when the need arises.

Engineering conditions – land use consent LUC60325312

Geotechnical

40. The construction of all earthworks including the placement and compaction of fill materials shall be supervised by a suitably qualified engineering professional. In supervising the works, the suitably qualified engineering professional shall ensure that they are constructed and otherwise completed in accordance with the approved plans forming part of the application.
41. Certification from a suitably qualified engineering professional responsible for supervising the works shall be provided to the Council's Team Leader Regulatory Engineering South confirming that the works have been completed in accordance with approved plans within ten (10) working days following completion. Written certification shall be in the form of a Geotechnical Completion Report, producer statement or any other form acceptable to Council.
42. All earthworks and excavation must be monitored and supervised on-site by a Supervising Engineer. When the earthworks are completed an Engineer's Certificate and Geotechnical Completion Report must be provided to the satisfaction of the Council's Team Leader Regulatory Engineering South prior to the release of the Section 224(c) Certificate on the site, certifying:
- a) That the works were undertaken in accordance with NZS4431:1989, the Code of Practice for Earth Fill for Residential Subdivisions; AND
 - b) The suitability of the filled ground and the original unfilled ground for the erection of buildings not requiring specific design under NZS3604:1999; AND
 - c) The extent to which settlement of the site is expected and its impact on future building(s) construction; AND
 - d) Include a statement of professional opinion as to the suitability of the site for the development.
 - e) Any related matters that are identified in other conditions of this consent.
43. All construction works (including bulk earthworks, subsoil drainage, shear keys, retaining walls and any other stability measures including monitoring) shall be subject to detailed design by a suitably qualified and experienced Chartered Professional Engineer. The

Consent Holder shall submit the detailed design (engineering plans) to the Council for approval prior to the commencement of any works onsite or on the Buckland Road road frontage. The Council may appoint an independent geotechnical engineer to peer review the detailed design for the purposes of determining if it can give its approval. This shall be done at the Consent Holder's expense.

Retaining Wall

44. All retaining walls shall be constructed in accordance with the engineering plan approval. Any ancillary and supporting structures (e.g. post, rail and subsoil drain) of a retaining wall shall be clear of the proposed lot boundary immediately parallel to the wall. A certificate from a licensed cadastral surveyor shall be provided to the Council certifying the compliance with this requirement at the time of lodgement of the survey plan for approval.

Engineering Plan Requirements and Approvals

45. Prior to commencement of any works on site the consent holder shall submit two hard copies and one PDF/CD version of complete engineering plans (including engineering calculations and specifications) to the Council's Team Leader Regulatory Engineering South for approval. The plans shall be approved for construction prior to works commencing on site. Details of the registered engineer who will act as the consent holder's representative for the duration of the development shall also be provided with the application for Engineering Plan Approval.

The engineering plans shall include but not be limited to the information regarding the following engineering works:

- a) Design and details of any retaining walls in the road reserve.
- b) Design detail including pipe sizing, cross sections and long sections for stormwater infrastructure. Public stormwater reticulation, including manholes and pipes, should be located within the berm. However, the final location shall be confirmed in consultation with other service providers, Auckland Transport and Auckland Council's Development Engineer.
- c) Design and location of any counterfort and/or subsoil land drainage required and the proposed ownership and maintenance of the counterfort and/or subsoil land drainage.
- d) Detailed design of all works to be carried out on existing road reserves including intersections, parking, vehicle crossings, pedestrian crossings and footpaths. In particular, compound corners shall be adopted throughout the development. All roads shall be designed in accordance with Auckland Transport's Code of Practice (ATCOP).
- e) Detailed design of all street lighting, street furniture and other structures/facilities on the road reserves (including traffic calming devices, tree pits, raingardens and safety measurements, marking and street signs etc.) shall be designed in accordance with Auckland Transport's Code of Practice (ATCOP).
- f) Pavement and surfacing for all parking areas, footpaths and pedestrian crossing points must be designed in accordance with Auckland Transport's Code of Practice (ATCOP).

- g) Visitor parking on Roads, and any associated changes to carriageway width, to be confirmed in consultation with Auckland Transport.
- h) Detailed Landscape Planting Plans for all street planting and landscaping on the proposed roads and stormwater treatment devices, including a maintenance programme until the planting is confirmed as established.
- i) Detailed design of the stormwater system and devices for the management of both quantity and quality of the stormwater runoff from the contributing development upstream catchment (including treatment devices and all ancillary equipment/structure etc.). The stormwater system and devices shall be designed in accordance with the Council's Code of Practice for Land Development and Subdivision: Chapter 4 - Stormwater; in particular:
- Pipes appropriately sized to accommodate 10% AEP flows – relevant calculations to be provided.
 - The proposed stormwater system shall be designed to identify health and safety risks for the public, operating personnel, contractor and Council employees.
 - The proposed stormwater system shall have an asset life of a minimum of 100 years.
 - Principles of Water-Sensitive Design and “Best Management Practices” to minimise stormwater run-off volumes and peak flow rates and to improve the quality of stormwater run-off entering the receiving environment shall be utilised for the design of the proposed stormwater system.
 - The system shall cater for stormwater run-off from the site being developed together with any run-off from upstream catchments in accordance with TP108 (Guidelines for Stormwater Runoff Modelling in the Auckland Region 1999) and allowances for climate changes. The upstream catchment shall be considered for the Maximum Probable Development scenario (full development to the extent defined in the Proposed Auckland Unitary Plan).
 - Mitigation measures (e.g. peak flow attenuations and/or velocity control) to mitigate the downstream effects shall be taken into account during the design of the stormwater system
- j) Details design of all raingardens including:
- Treatment catchment plans and associated calculations showing catchment area, raingarden sizing and raingarden spacing to demonstrate individual raingardens will not be overloaded.
 - Plan and long sections of connected underdrains at the kerb, in reference to the road profile and other services within the berm.
 - Where a raingarden adjoins a road or footpath, the raingarden wall must be set behind a standard kerb.
- k) Details of the stormwater discharge outlets including engineered erosion protection measures designed in accordance with Council's GD01, December 2017.
- l) Details of the hydrology mitigation measures in accordance with the following standards:

- Council's Code of Practice for Land Development and Subdivision: Chapter 4 – Stormwater
- m) Details of fire hydrants to be installed. Any fire hydrants shall be designed in accordance with the Council's Water and Wastewater Code of Practice for Land Development and Subdivision.
- n) Details confirming that the maximum depth velocity relationship should be no more than 0.6m²/s, as per AUSTroads Part 5A – Table 5.2.
- o) Information relating to gas, electrical and/or telecommunication reticulation including ancillary equipment.

As part of the application for Engineering Plan Approval, a registered engineer shall:

- Certify that all public roads and associated structures/facilities or access ways have been designed in accordance with the Auckland Transport's Code of Practice (ATCOP).
- Certify that the proposed stormwater system or devices proposed have been designed in accordance with the Council's Code of Practice for Land Development and Subdivision: Chapter 4 - Stormwater.
- Provide a statement that the proposed infrastructure has been designed for the long term operation and maintenance of the asset.
- Confirm that all practical measures are included in the design to facilitate safe working conditions in and around the asset.

Wastewater Connections

46. The sewer system, as required by this consent, shall be designed and adequately sized to service future development of upstream lots and lots in that area as defined in the Catchment Management Plan.
47. The consent holder shall provide and install a complete public wastewater system to serve all lots in accordance with the Water and Wastewater Code of Practice for Land Development and Subdivision to the satisfaction of Auckland Council.

Water Supply

48. The consent holder shall provide and install a complete water supply reticulation system to serve all lots in accordance with the Water and Wastewater Code of Practice for Land Development and Subdivision to the satisfaction of the Council Team Leader Regulatory Engineering South.

Specific consent conditions for DIS60340705 & LUC60325312– stormwater diversion and discharge and stormwater quality

Stormwater management works

49. The following stormwater management works shall be constructed for the following catchment areas and design requirements, and shall be completed prior to discharges commencing from the site:

Works to be undertaken	Catchment area: impervious and pervious areas	Design requirement(s)
<i>Rain tanks</i>	2.467Ha	<ul style="list-style-type: none"> • Pre-treatment to be provided for all flows to the tank • 10-yr ARI event: Attenuation of post-development peak flow to not exceed pre-development peak flow
<i>Swale – Tank to raingardens</i>	2.467Ha Encompasses all flows to the underground tank.	<ul style="list-style-type: none"> • Conveyance of stormwater runoff from the rain tank to the raingardens • Conveyance of 100-yr ARI event flows to the Attenuation Basin, via bypass of raingardens • 100-yr ARI capacity is provided for the full length of the swale.
<i>Swale – OLF from neighbouring site</i>	2.81Ha Overland flows from 42 Kitchener Rd	<ul style="list-style-type: none"> • Conveyance of overland flows up to the 100-yr ARI design event entering 301 Buckland Rd from 42 Kitchener Rd to the Buckland Rd roadside swale • 100-yr ARI capacity is provided for the full length of the swale, with flows contained within 301 Buckland Rd.
<i>Raingardens</i>	All impervious areas within the site.	<ul style="list-style-type: none"> • Water quality treatment (WQ: 9,600m²) in accordance with Auckland Council's GD01 (superseding TP10) • Sized to meet the following hydrology mitigation: <ul style="list-style-type: none"> (a) Provide retention of a minimum of 5mm runoff depth for all impervious areas; and (b) Provide detention with a draindown period of 24 hours for the difference between the pre-development and post development runoff volumes from the 95th percentile, 24-hour rainfall event minus the retention volume for all impervious areas.
<i>Attenuation Basin – Dry Basin</i>	3.352Ha	<ul style="list-style-type: none"> • 100-yr ARI event: Attenuation of post-development peak flow to not exceed pre-development peak flow.
<i>Outfall & associated erosion protection – Level Spreader</i>	3.352Ha Discharge from attenuation basin	<ul style="list-style-type: none"> • Flow dispersal to be accomplished within the site prior to discharge across the boundary to the reconstructed roadside swale. • Erosion protection required to minimise bed scour and bank erosion • Design in accordance with Auckland Council Technical Report 2013/018 for inlet and outlet design. • Specimen trees are not to be in the zone of the level spreader pathway, to prevent

		preferential pathways & scour.
All roof areas	Roofing material	No exposed unpainted metal surfaces

Advice Note:

The final design details and calculations for the stormwater works will be confirmed at the building consent stage.

Swale – the landowner is to maintain the swale(s) on site to be weed free with grass height not in excess of 100mm.

Level spreader – the landowner is to maintain unimpeded flows from the level spreader to the swale and prevent and/or mitigate any scour or erosion from the level spreader to the swale.

Design sizing assumes a raingarden media with 300mm/hr percolation rate to enable reduced device sizes. The consent holder shall undertake required testing of media prior to installation to demonstrate the 300mm/hr infiltration capacity is achieved, as per the design, or modify the design accordingly.

Modifications approval

50. In the event that any within scope modifications to the stormwater management system are required, the following information shall be provided:

- (a) Plans and drawings outlining the details of the modifications; and
- (b) Supporting information that details how the proposal does not affect the capacity or performance of the stormwater management system.

All information shall be submitted to, and approved by the Team Leader Compliance Monitoring South, prior to implementation.

Advice Note:

All proposed changes must be discussed with the Team Leader Compliance Monitoring South, prior to implementation. Any changes to the proposal which will affect the capacity or performance of the stormwater management system will require an application to Council pursuant to Section 127 of the RMA. An example of a minor modification can be a change to the location of a pipe or slight changes to the site layout. If there is a change of device type (even proprietary), the consent will have to be varied (s127 under the RMA).

Post Construction meeting

51. A post-construction meeting shall be held by the consent holder, within 20 working days of completion of the stormwater management works, that:

- (a) is located on the subject area;
- (b) includes representation from the Team Leader Compliance Monitoring South; and
- (c) includes representation from the site stormwater engineer or contractors who have undertaken the works and any other relevant parties.

The following information shall be made available 5 days prior to the post construction meeting:

- As-Built certification and plans of the stormwater management works, which are certified (signed) by a suitably qualified registered surveyor as a true record of the stormwater management system;
- Operation and Maintenance Plan (as required by the conditions of this consent);

Advice Note:

To arrange the construction meetings required by this consent, please contact the Team Leader Compliance Monitoring South via monitoring@aucklandcouncil.govt.nz.

Contents of As-Built Plans

52. The As-Built plans shall display the entirety of the stormwater management system, and shall include:
- (a) the surveyed location (to the nearest 0.1m) and level (to the nearest 0.01m) of the discharge structure, with co-ordinates expressed in terms of NZTM and LINZ datum;
 - (b) location, dimensions and levels of any overland flowpaths including cross sections and long sections;
 - (c) plans and cross sections of all stormwater management devices;
 - (d) documentation of any discrepancies between the design plans and the As-Built plans approved by the Modifications Approval condition.

Overland Flowpaths

53. For stormwater flows in excess of the capacity of the primary drainage systems, overland flow paths shall be provided and maintained to allow surplus stormwater from critical storms (up to the 100-year ARI event), to discharge with the minimum of nuisance and damage.
54. Major secondary flow paths shall be kept free from significant obstructions such as buildings and solid fences.

Operation and Maintenance

55. The Operation and Maintenance Plan shall set out how the stormwater management system is to be operated and maintained to ensure that adverse environmental effects are minimised. The plan shall include:
- (a) details of who will hold responsibility for long-term maintenance of the stormwater management system and the organisational structure which will support this process;
 - (b) a programme for regular maintenance and inspection of the stormwater management system;
 - (c) a programme for the collection and disposal of debris and sediment collected by the stormwater management devices or practices;
 - (d) a programme for post storm inspection and maintenance;

- (e) a programme for inspection and maintenance of the outfall; and
 - (f) general inspection checklists for all aspects of the stormwater management system, including visual checks.
56. The stormwater management system shall be managed in accordance with the approved Operation and Maintenance Plan for the duration of the activity on site.
57. The Operation and Maintenance Plan shall be maintained and updates submitted to the Team Leader Compliance Monitoring South for approval.

Maintenance Report

58. A maintenance report shall be provided to the Team Leader Compliance Monitoring South on request.
59. The maintenance report shall include the following information:
- (a) details of who is responsible for maintenance of the stormwater management system and the organisational structure supporting this process;
 - (b) details of any maintenance undertaken; and
 - (c) details of any inspections completed.
60. Details of all inspections and maintenance for the stormwater management system, for the preceding three years, shall be retained.

Specific conditions – subdivision consent SUB60333646

61. This subdivision consent shall be carried out in accordance with the documents and drawings and all supporting additional information submitted with the application, detailed below, and all referenced by the council as resource consent number SUB60333646.
- Application Form, and Assessment of Effects prepared by Rosie Daly of Scott Wilkinson Planning, titled “Franklin Plumbing and Bathroomware, Proposed Warehousing and Distribution Centre (Trade Supplier), 301 Buckland Road, Pukekohe”, dated January 2019

Drawing title and reference	Author	Rev	Dated
Proposed Subdivision of Part Lot 1 DP 3363 Existing Site Plan DwG 150	CKL	0	24/10/18
Proposed Subdivision of Part Lot 1 DP 3363 Proposed Site Layout DwG 151	CKL	0	24/10/18

62. Under section 125 of the RMA, this subdivision consent lapses five years after the date it is granted unless:
- a. A survey plan is submitted to council for approval under section 223 of the RMA before the consent lapses, and that plan is deposited within three years of the approval date in accordance with section 244 of the RMA; or

- b. An application under section 125 of the RMA is made to the council before the consent lapses (five years) to extend the period after which the consent lapses and the council grants an extension.

Survey plan approval (s223) conditions

- 63. The consent holder shall submit to council for approval to Section 223 of the Resource Management Act 1991 a Land Transfer Plan in accordance with the approved scheme plan of subdivision including:
 - a. Any easements required by this consent shall be shown in the Memorandum of Easements with the Section 223 documentation; and
 - b. That lot 2 shall vest in Council as public road. The consent holder shall meet all costs associated with the vesting of the road (subject to any agreement with Auckland Transport).

Section 224(c) compliance conditions

Section 224 (c) certificate

- 64. The application for a certificate under section 224(c) of the RMA shall be accompanied by certification from a professionally qualified surveyor or engineer that all the conditions of subdivision consent have been complied with, and that in respect of those conditions that have not been complied with:
 - a. a completion certificate has been issued in relation to any conditions to which section 222 applies;
 - b. a consent notice has been issued in relation to any conditions to which section 221 applies; and
 - c. a bond has been entered into by the subdividing owner in compliance with any condition of subdivision consent imposed under section 108(2)(b).

Wastewater Connections

- 65. A certificate from Watercare confirming that separate wastewater connections have been provided for Lot 1 shall be provided in support of the 224(c) application. No buildings in the development are to be occupied until confirmation from Watercare has been provided to the Council.

Water Supply

- 66. A certificate from Watercare confirming a separate water supply connection for Lot 1 shall be provided in support of the section 224(c) application.

Fire Hydrants

- 67. Fire hydrants shall be designed, provided and installed within 135m of the furthest point on any property in accordance with Water and Wastewater Code of Practice for Land Development and Subdivision to the satisfaction of Auckland Council.

Advice Note;

Should this hydrant need to be on private property the hydrant will be a private hydrant owned by the property owner

68. A certificate from Watercare confirming that evidence of undertaking the hydrant flow test and compliance with the relevant standards has been undertaken shall be provided in support of the section 224 application.

Advice notes

1. *Any reference to number of days within this decision refers to working days as defined in s2 of the RMA.*
2. *For the purpose of compliance with the conditions of consent, “the council” refers to the council’s monitoring inspector unless otherwise specified. Please contact monitoring@aucklandcouncil.govt.nz] to identify your allocated officer.*
3. *For more information on the resource consent process with Auckland Council see the council’s website: www.aucklandcouncil.govt.nz. General information on resource consents, including making an application to vary or cancel consent conditions can be found on the Ministry for the Environment’s website: www.mfe.govt.nz.*
4. *If you as the applicant disagree with any of the above conditions, or disagree with the additional charges relating to the processing of the application, you have a right of objection pursuant to sections 357A or 357B of the Resource Management Act 1991. Any objection must be made in writing to the council within 15 working days of your receipt of this decision (for s357A) or receipt of the council invoice (for s357B).*
5. *The consent holder is responsible for obtaining all other necessary consents, permits, and licences, including those under the Building Act 2004, and the Heritage New Zealand Pouhere Taonga Act 2014. This consent does not remove the need to comply with all other applicable Acts (including the Property Law Act 2007 and the Health and Safety at Work Act 2015), regulations, relevant Bylaws, and rules of law. This consent does not constitute building consent approval. Please check whether a building consent is required under the Building Act 2004.*

Delegated decision maker:

Name: Jane Masters

Title: Team Leader, Resource Consents

Signed:



Date: 9 September 2019



BUN60333645
 Approved Resource Consent Plan
 09/09/2019

PT LOT 1 DP 3363
 43644

ARCHITECT

**BREWER
 DAVIDSON**
 architecture / urban design

CLIENT

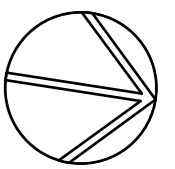
Franklins Plumbing

PROJECT

Franklins Warehouse &
 Head Office

DRAWING INFORMATION

Design KB
 Drawn SW
 Plot Date 2/11/2018
 Plot Time 12:08 PM



Original Scale (mm)
 0 10 20 30 40 50

DRAWING TITLE

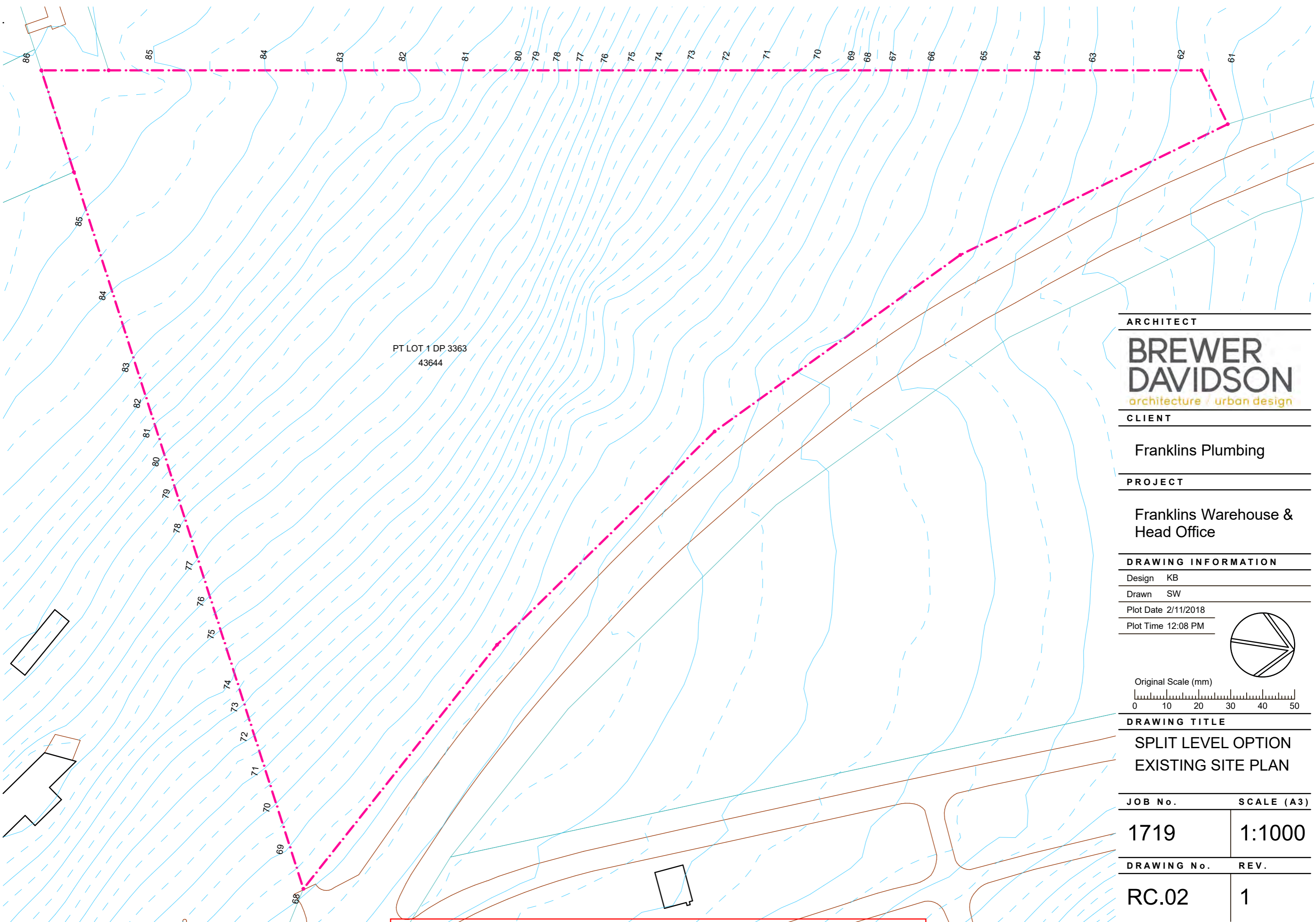
SPLIT LEVEL OPTION
 EXISTING AERIAL PLAN

JOB No. SCALE (A3)

1719 1:1000

DRAWING No. REV.

RC.01 1



ARCHITECT

**BREWER
DAVIDSON**
architecture / urban design

CLIENT

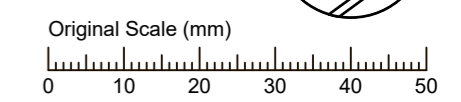
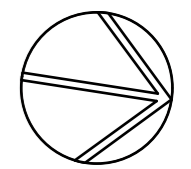
Franklins Plumbing

PROJECT

Franklins Warehouse &
Head Office

DRAWING INFORMATION

Design KB
 Drawn SW
 Plot Date 2/11/2018
 Plot Time 12:08 PM



DRAWING TITLE

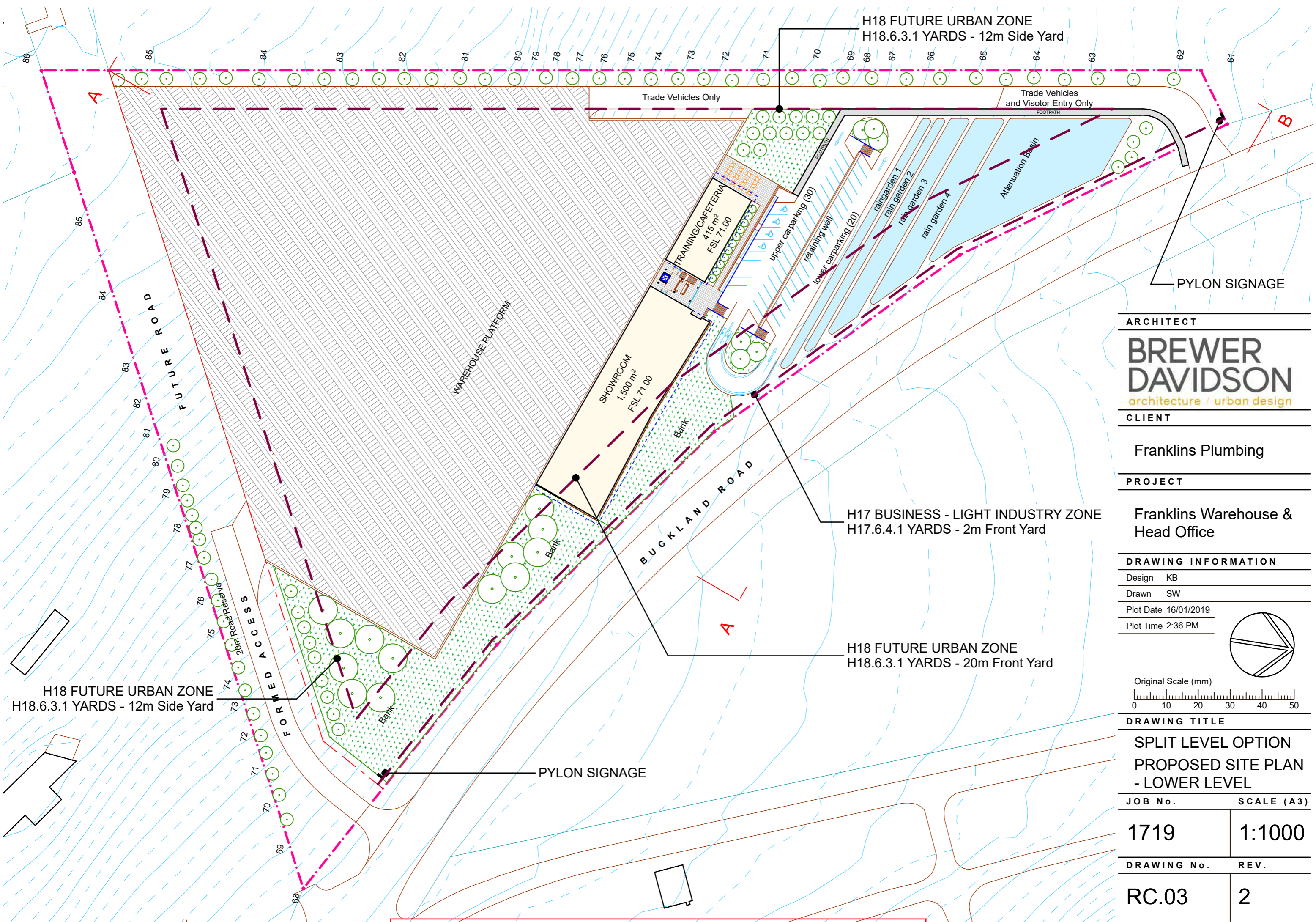
**SPLIT LEVEL OPTION
EXISTING SITE PLAN**

JOB No. SCALE (A3)

1719 1:1000

DRAWING No. REV.

RC.02 1



H18 FUTURE URBAN ZONE
H18.6.3.1 YARDS - 12m Side Yard

Trade Vehicles Only

Trade Vehicles
and Visitor Entry Only

PYLON SIGNAGE

ARCHITECT

**BREWER
DAVIDSON**
architecture / urban design

CLIENT

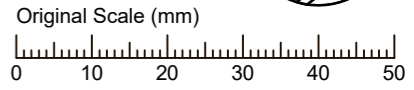
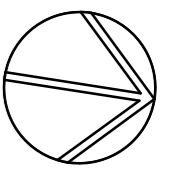
Franklins Plumbing

PROJECT

Franklins Warehouse &
Head Office

DRAWING INFORMATION

Design KB
Drawn SW
Plot Date 16/01/2019
Plot Time 2:36 PM



DRAWING TITLE

SPLIT LEVEL OPTION
PROPOSED SITE PLAN
- LOWER LEVEL

JOB No. SCALE (A3)

1719 1:1000

DRAWING No. REV.

RC.03 2

WAREHOUSE PLATFORM

SHOWROOM
1,500 m²
FSL 71.00

TRAINING/CAFETERIA
415 m²
FSL 71.00

upper carparking (30)

retaining wall

lower carparking (20)

rain garden 1

rain garden 2

rain garden 3

rain garden 4

Attenuation Basin

Bank

BUCKLAND ROAD

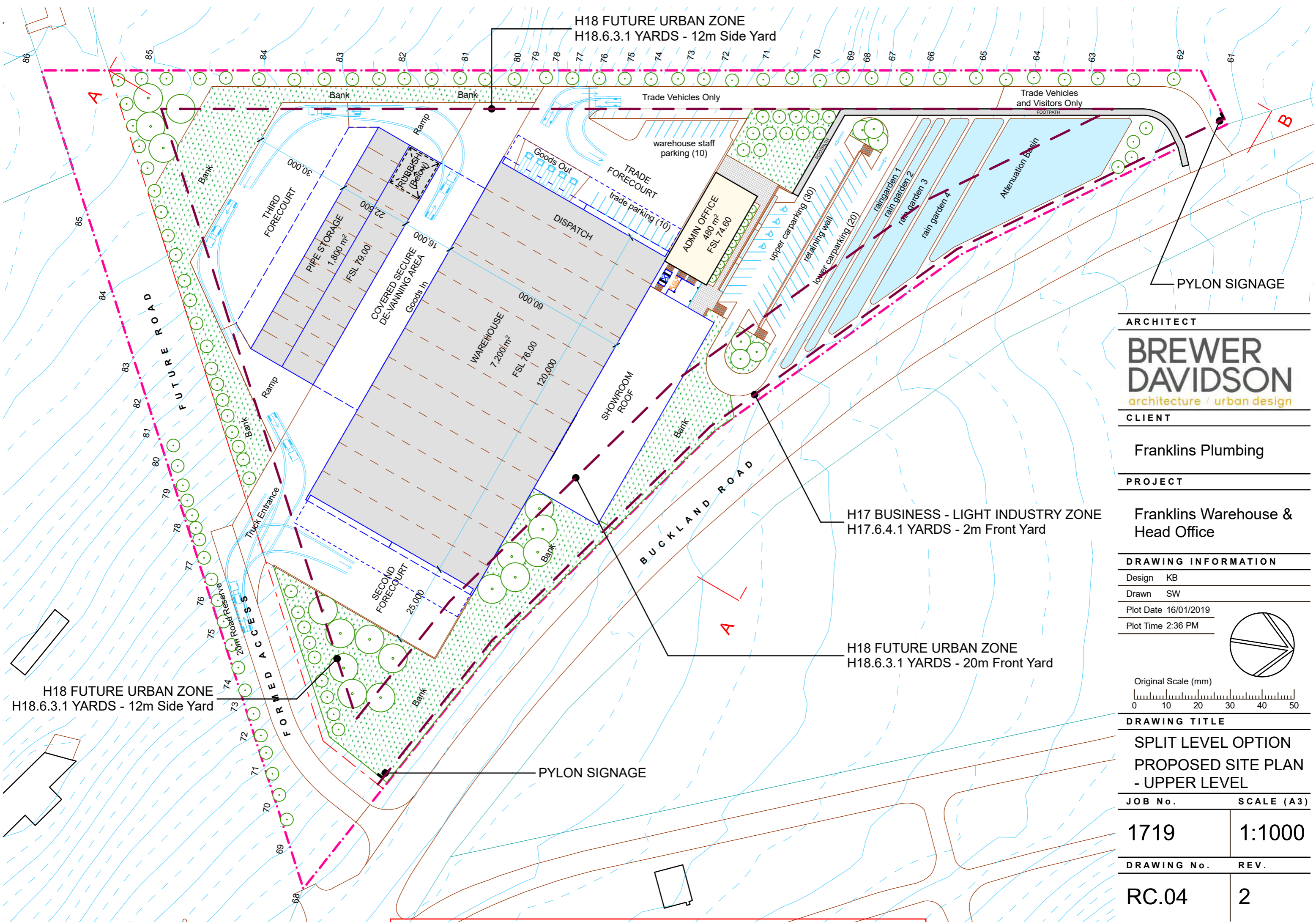
H17 BUSINESS - LIGHT INDUSTRY ZONE
H17.6.4.1 YARDS - 2m Front Yard

H18 FUTURE URBAN ZONE
H18.6.3.1 YARDS - 20m Front Yard

H18 FUTURE URBAN ZONE
H18.6.3.1 YARDS - 12m Side Yard

FORMED ACCESS

PYLON SIGNAGE



H18 FUTURE URBAN ZONE
H18.6.3.1 YARDS - 12m Side Yard

H18 FUTURE URBAN ZONE
H18.6.3.1 YARDS - 12m Side Yard

H17 BUSINESS - LIGHT INDUSTRY ZONE
H17.6.4.1 YARDS - 2m Front Yard

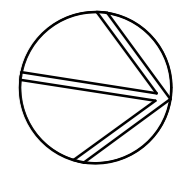
H18 FUTURE URBAN ZONE
H18.6.3.1 YARDS - 20m Front Yard

ARCHITECT
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PROJECT
**Franklins Warehouse &
Head Office**

DRAWING INFORMATION
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Drawn SW
Plot Date 16/01/2019
Plot Time 2:36 PM

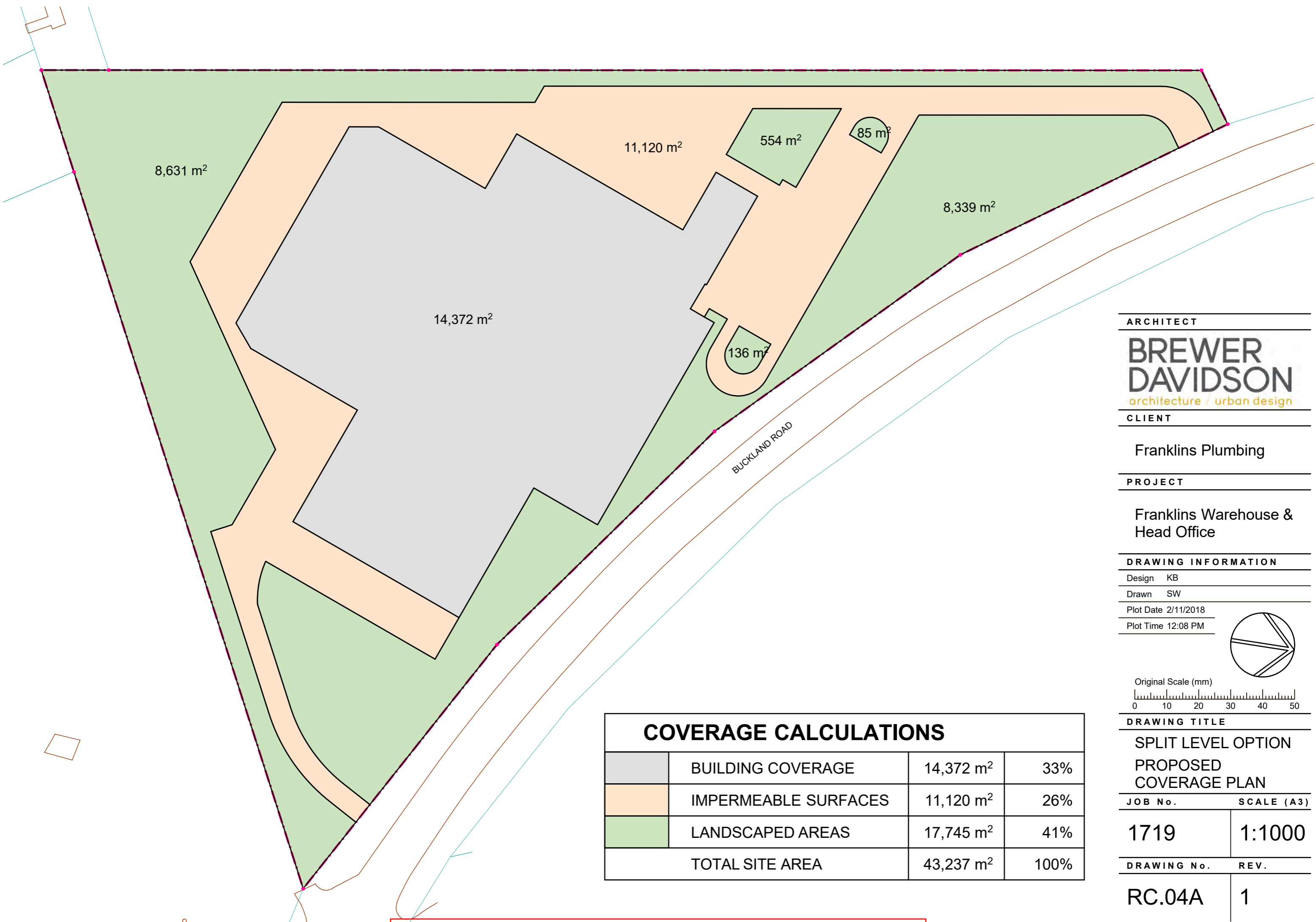


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DRAWING TITLE
**SPLIT LEVEL OPTION
PROPOSED SITE PLAN
- UPPER LEVEL**

JOB No.	SCALE (A3)
1719	1:1000

DRAWING No.	REV.
RC.04	2



COVERAGE CALCULATIONS			
	BUILDING COVERAGE	14,372 m ²	33%
	IMPERMEABLE SURFACES	11,120 m ²	26%
	LANDSCAPED AREAS	17,745 m ²	41%
TOTAL SITE AREA		43,237 m ²	100%

ARCHITECT

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Head Office

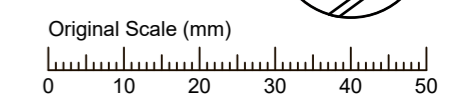
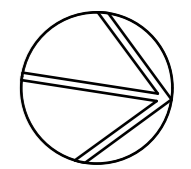
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Plot Time 12:08 PM



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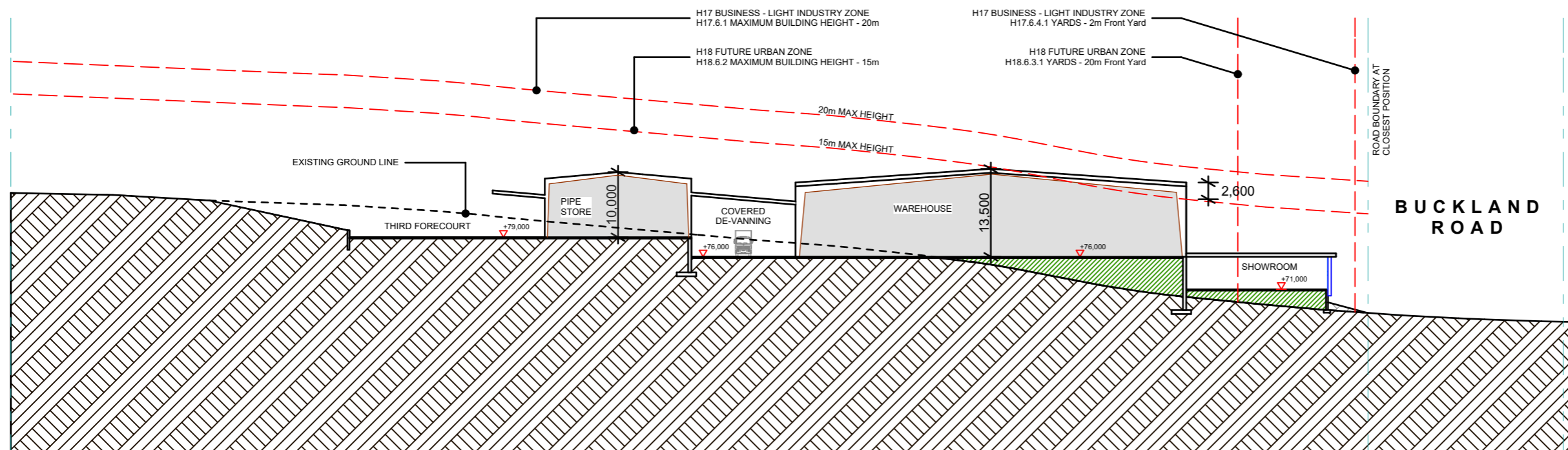
SPLIT LEVEL OPTION
PROPOSED
COVERAGE PLAN

JOB No. SCALE (A3)

1719 1:1000

DRAWING No. REV.

RC.04A 1



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DRAWING INFORMATION

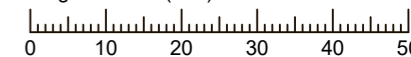
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Drawn SW

Plot Date 2/11/2018

Plot Time 12:08 PM

Original Scale (mm)



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SPLIT LEVEL OPTION
SECTION A-A

JOB No.

SCALE (A3)

1719

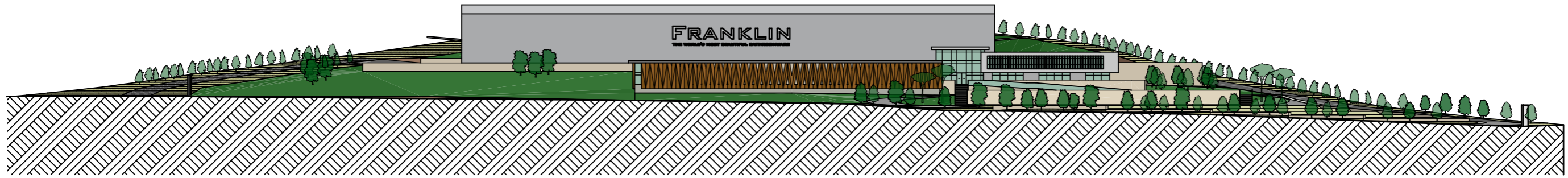
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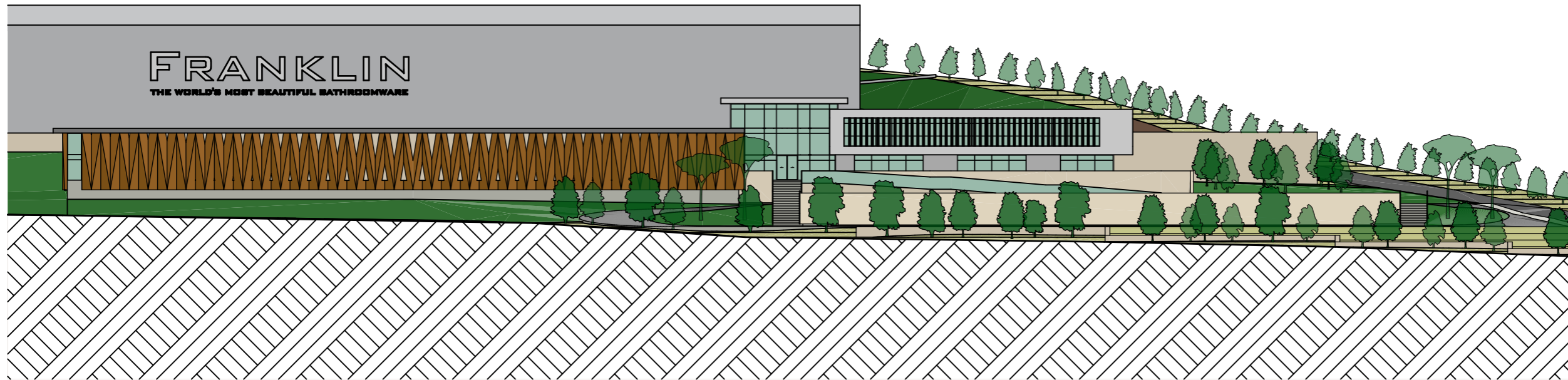
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RC.05

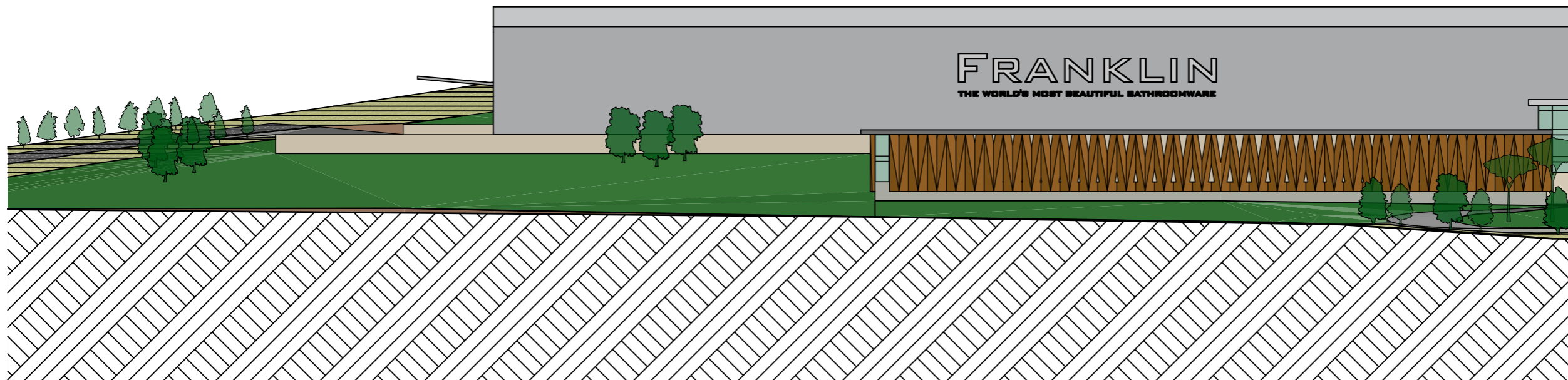
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1 OVERALL NORTH ELEVATION 1:1000



2 PART NORTH ELEVATION - 1 1:500



3 PART NORTH ELEVATION - 2 1:500

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DRAWING INFORMATION

Design KB
Drawn SW
Plot Date 2/11/2018
Plot Time 12:08 PM

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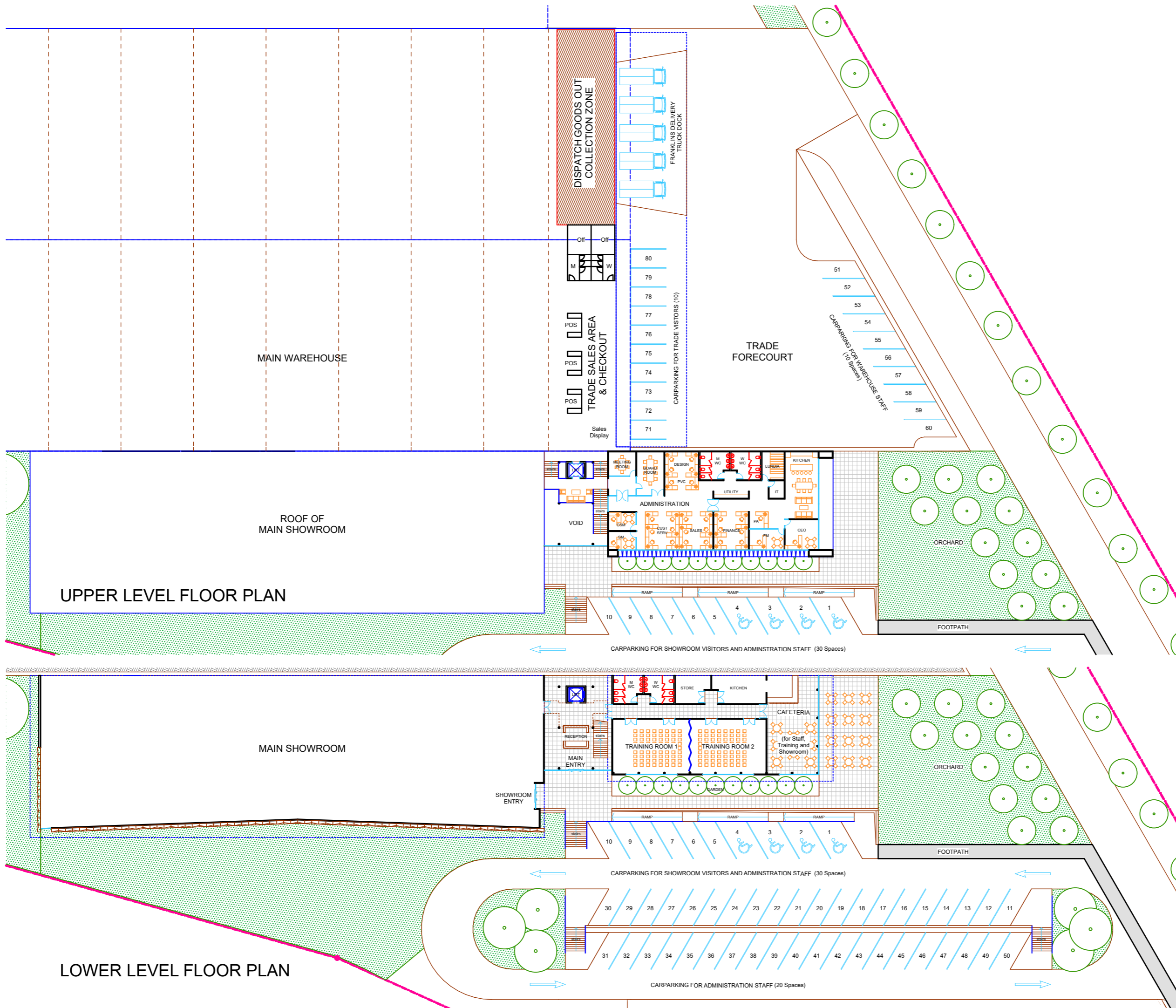
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NORTH ELEVATION

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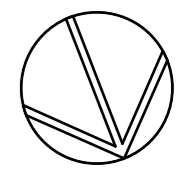


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BREWER DAVIDSON
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CLIENT
 Franklins Plumbing

PROJECT
 Franklins Warehouse & Head Office

DRAWING INFORMATION
 Design KB
 Drawn SW
 Plot Date 2/11/2018
 Plot Time 12:08 PM

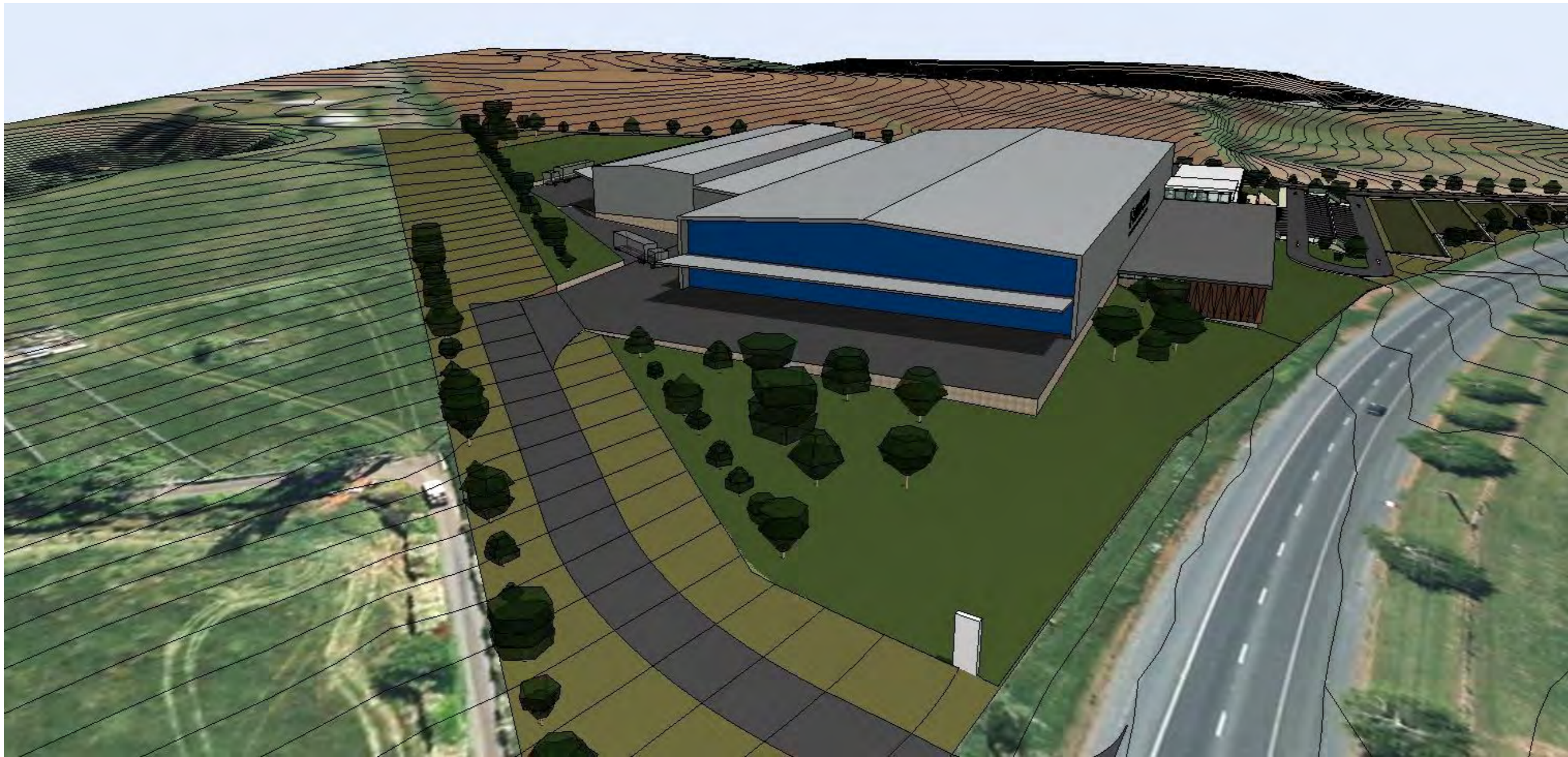


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DRAWING TITLE
 SPLIT LEVEL OPTION
 PROPOSED FLOOR
 PLANS

JOB No.	SCALE (A3)
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DRAWING No.	REV.
RC.07	1



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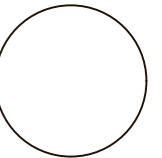
Franklins Plumbing

PROJECT

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DRAWING INFORMATION

Design KB
Drawn SW
Plot Date 2/11/2018
Plot Time 12:08 PM



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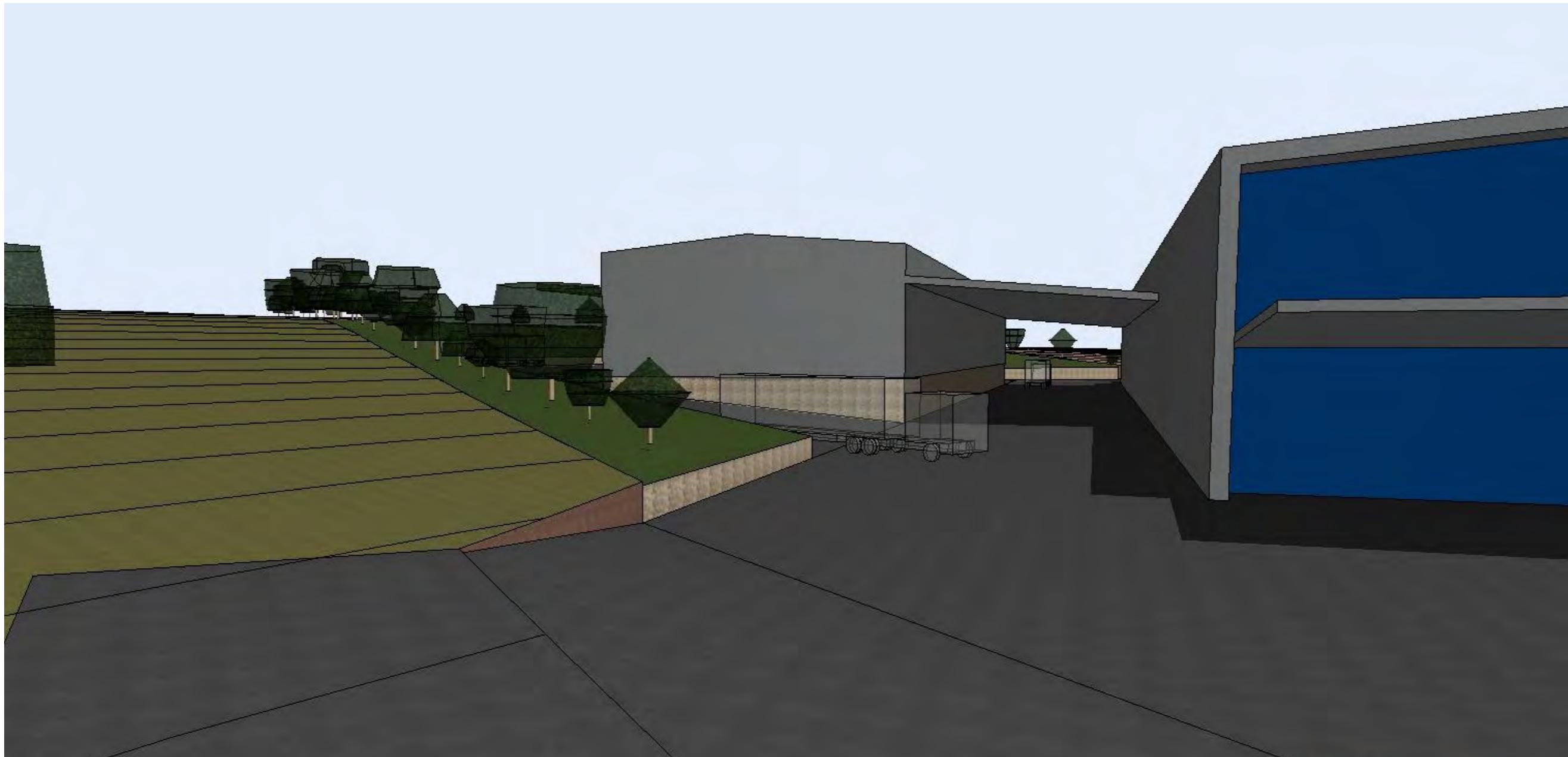
SPLIT LEVEL OPTION
PROPOSED 3D VIEWS -
CAMERA 1

JOB No. SCALE (A3)

1719 NTS

DRAWING No. REV.

RC.08 1



ARCHITECT

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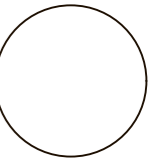
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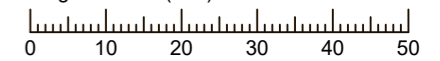
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Plot Date 2/11/2018

Plot Time 12:08 PM



Original Scale (mm)



DRAWING TITLE

SPLIT LEVEL OPTION
PROPOSED 3D VIEWS -
CAMERA 2

JOB No. SCALE (A3)

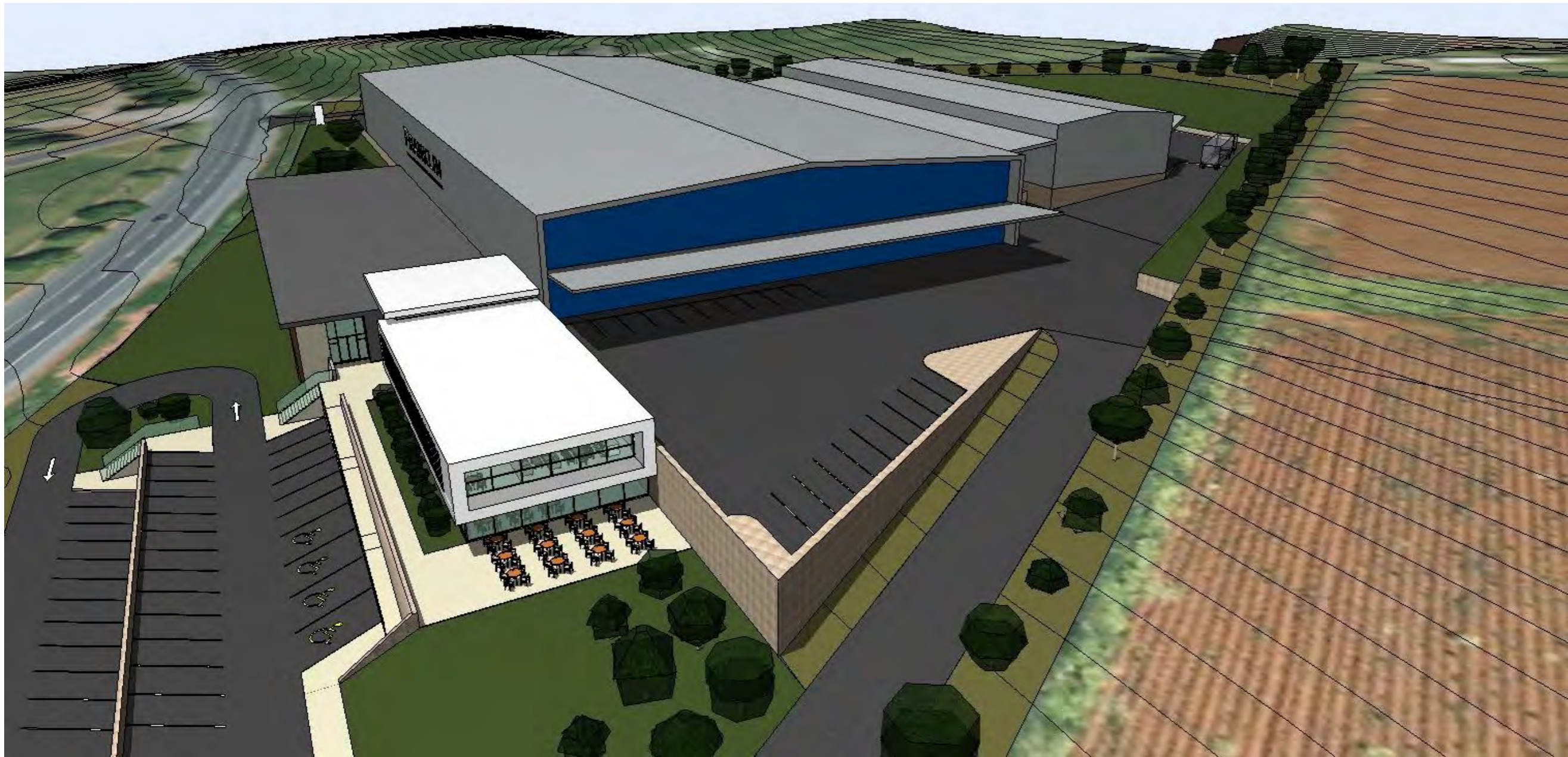
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NTS

DRAWING No. REV.

RC.09

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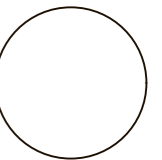
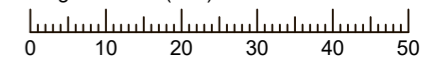
PROJECT

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DRAWING INFORMATION

Design KB
Drawn SW
Plot Date 2/11/2018
Plot Time 12:08 PM

Original Scale (mm)



DRAWING TITLE

SPLIT LEVEL OPTION
PROPOSED 3D VIEWS -
CAMERA 3

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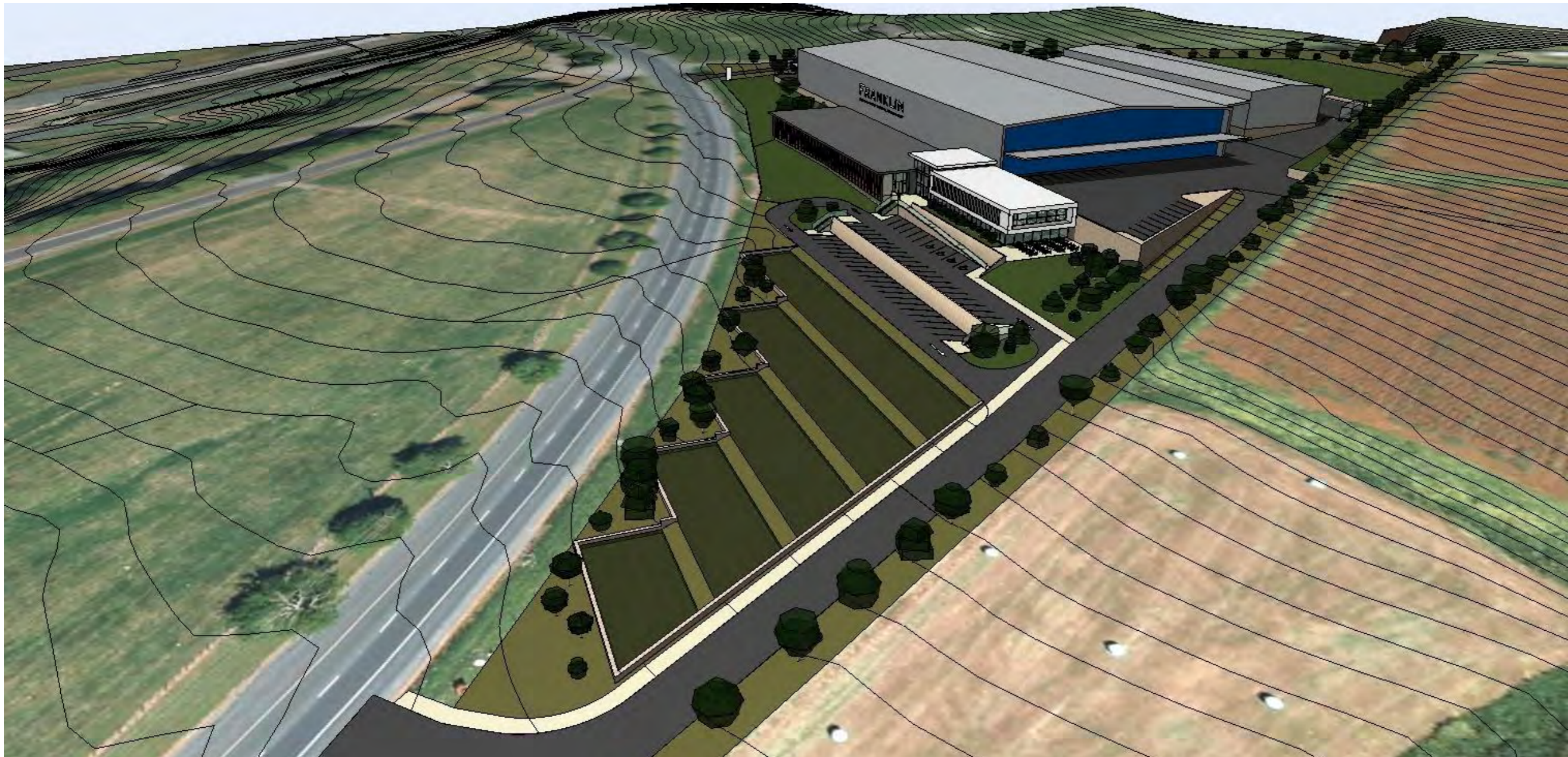
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DRAWING No. REV.

RC.10

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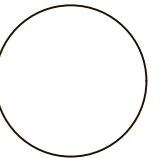
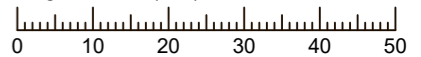
PROJECT

Franklins Warehouse &
Head Office

DRAWING INFORMATION

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Plot Date 2/11/2018
Plot Time 12:08 PM

Original Scale (mm)



DRAWING TITLE

SPLIT LEVEL OPTION
PROPOSED 3D VIEWS -
CAMERA 4

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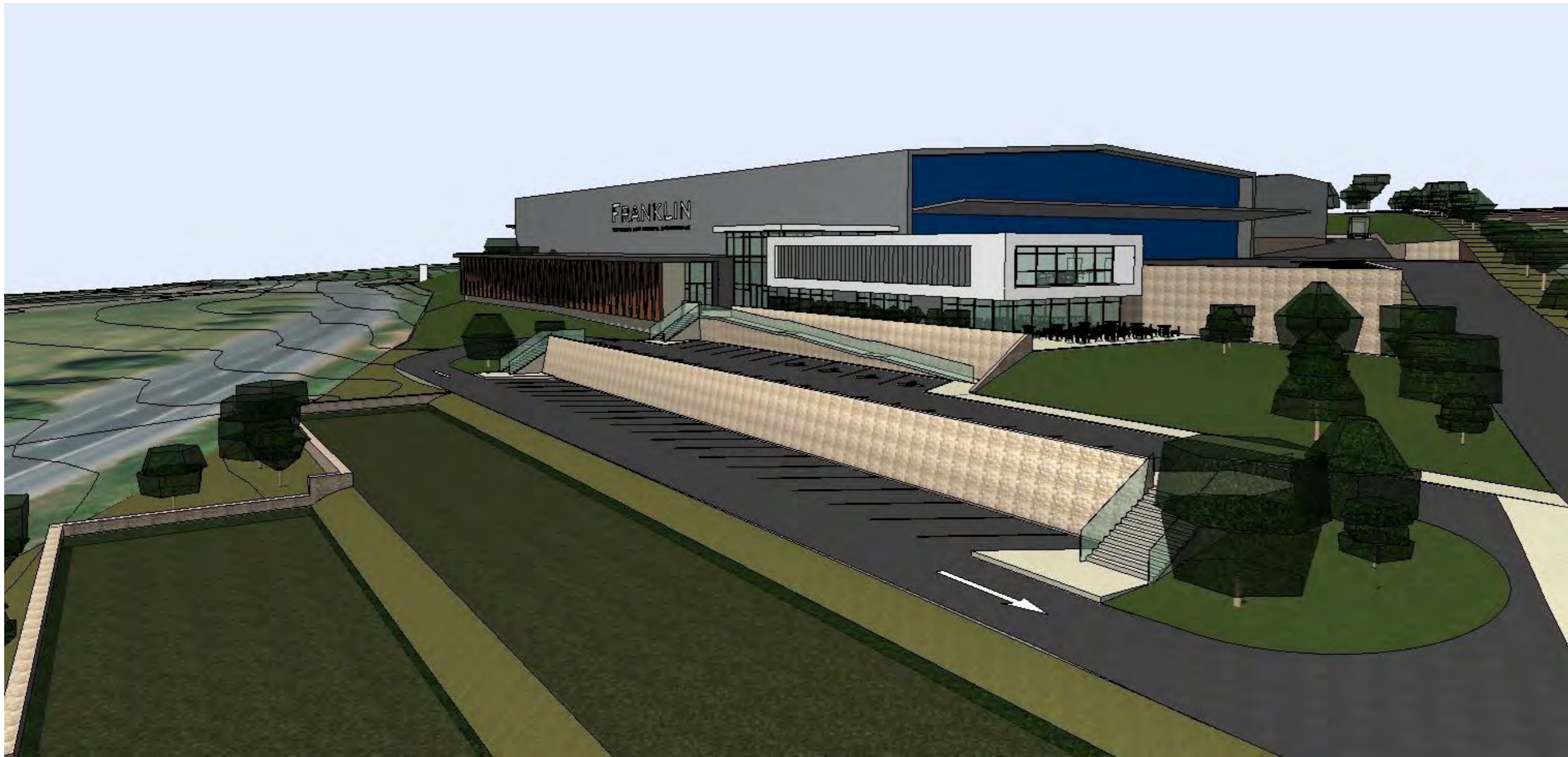
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NTS

DRAWING No. REV.

RC.11

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DRAWING INFORMATION

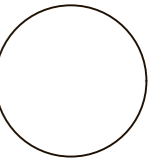
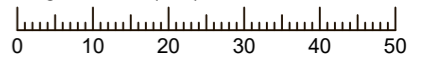
Design KB

Drawn SW

Plot Date 2/11/2018

Plot Time 12:08 PM

Original Scale (mm)



DRAWING TITLE

SPLIT LEVEL OPTION
PROPOSED 3D VIEWS -
CAMERA 5

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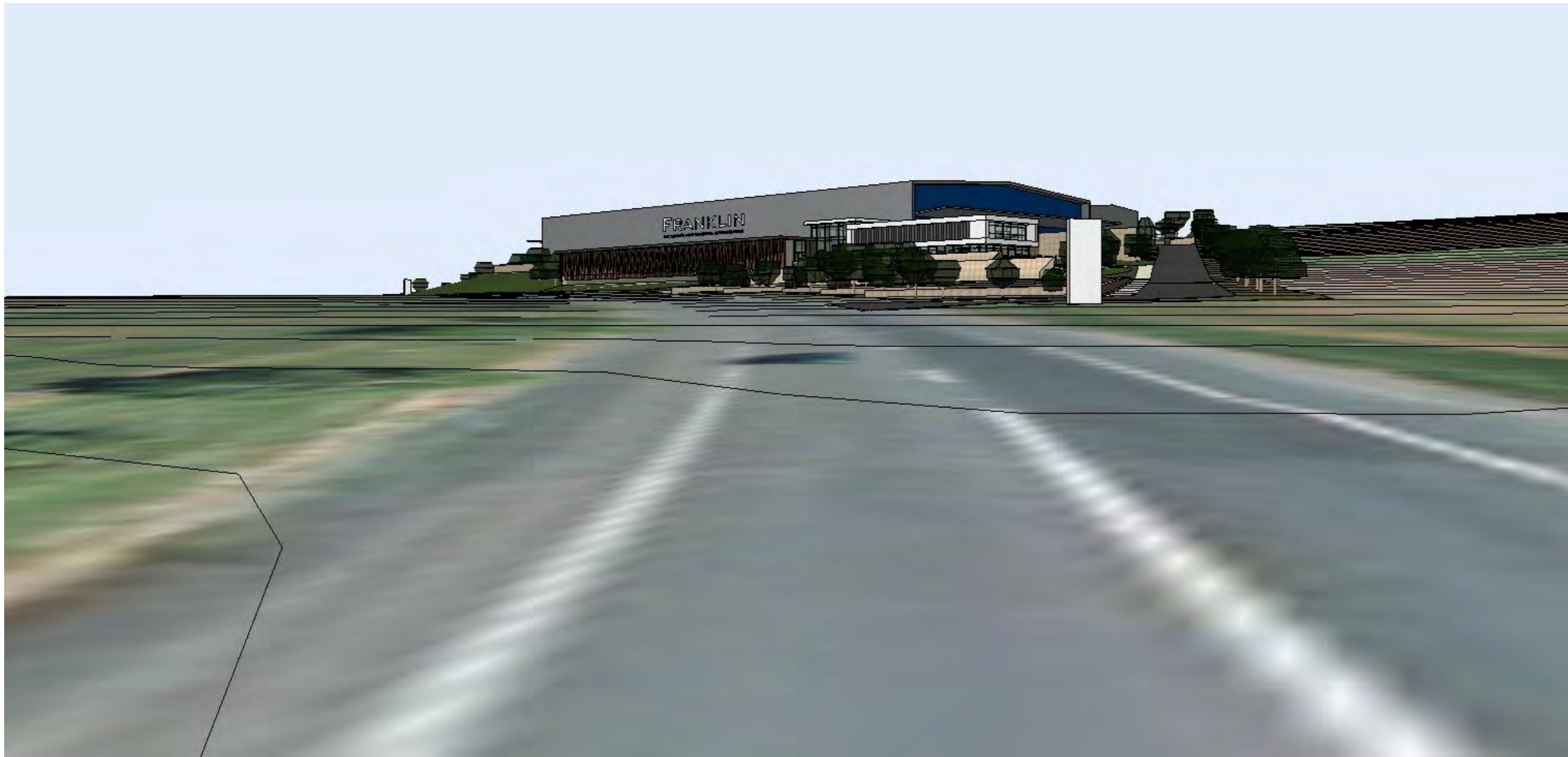
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DRAWING No. REV.

RC.12

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ARCHITECT

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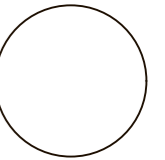
Franklins Plumbing

PROJECT

Franklins Warehouse &
Head Office

DRAWING INFORMATION

Design KB
Drawn SW
Plot Date 2/11/2018
Plot Time 12:08 PM



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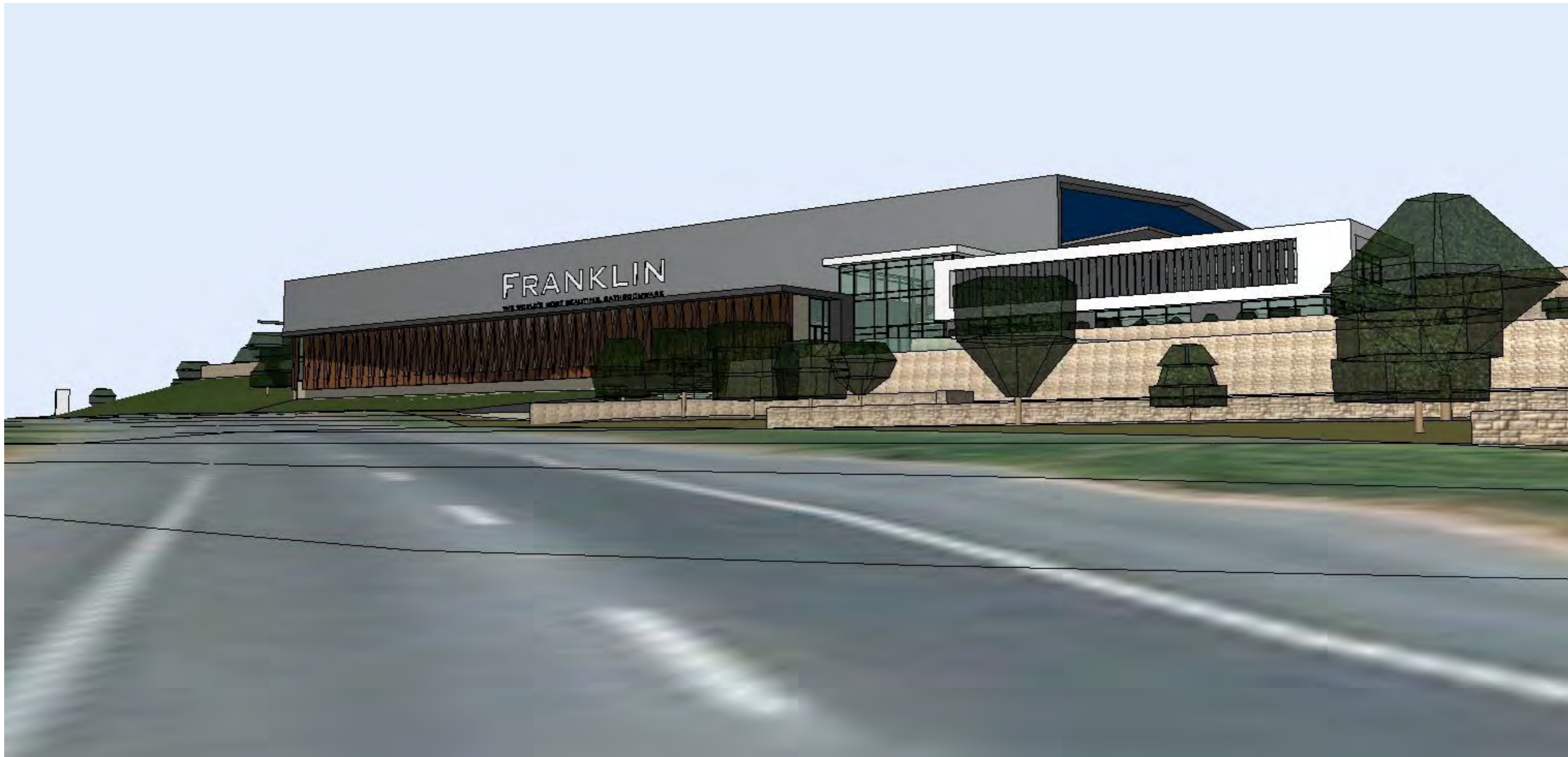
SPLIT LEVEL OPTION
PROPOSED 3D VIEWS -
CAMERA 6

JOB No. SCALE (A3)

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DRAWING No. REV.

RC.13 1



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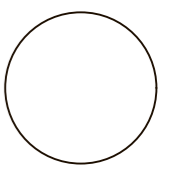
Franklins Plumbing

PROJECT

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Head Office

DRAWING INFORMATION

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Plot Date 2/11/2018
Plot Time 12:08 PM



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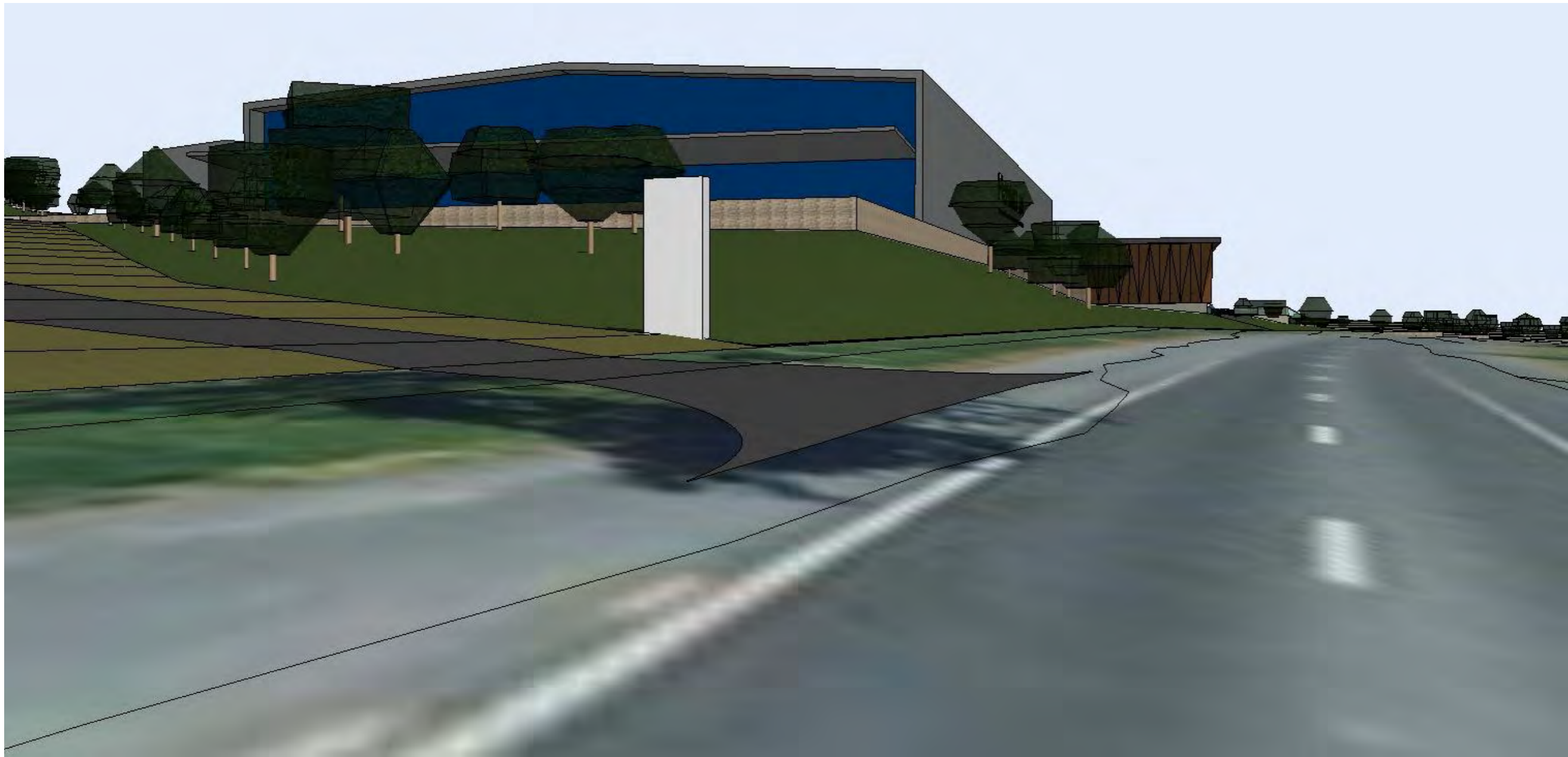
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PROPOSED 3D VIEWS -
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JOB No. SCALE (A3)

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DRAWING No. REV.

RC.14	1
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ARCHITECT

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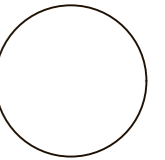
Franklins Plumbing

PROJECT

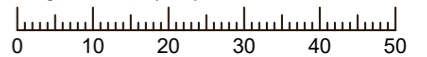
Franklins Warehouse &
Head Office

DRAWING INFORMATION

Design KB
Drawn SW
Plot Date 2/11/2018
Plot Time 12:08 PM



Original Scale (mm)



DRAWING TITLE

SPLIT LEVEL OPTION
PROPOSED 3D VIEWS -
CAMERA 8

JOB No. SCALE (A3)

1719 NTS

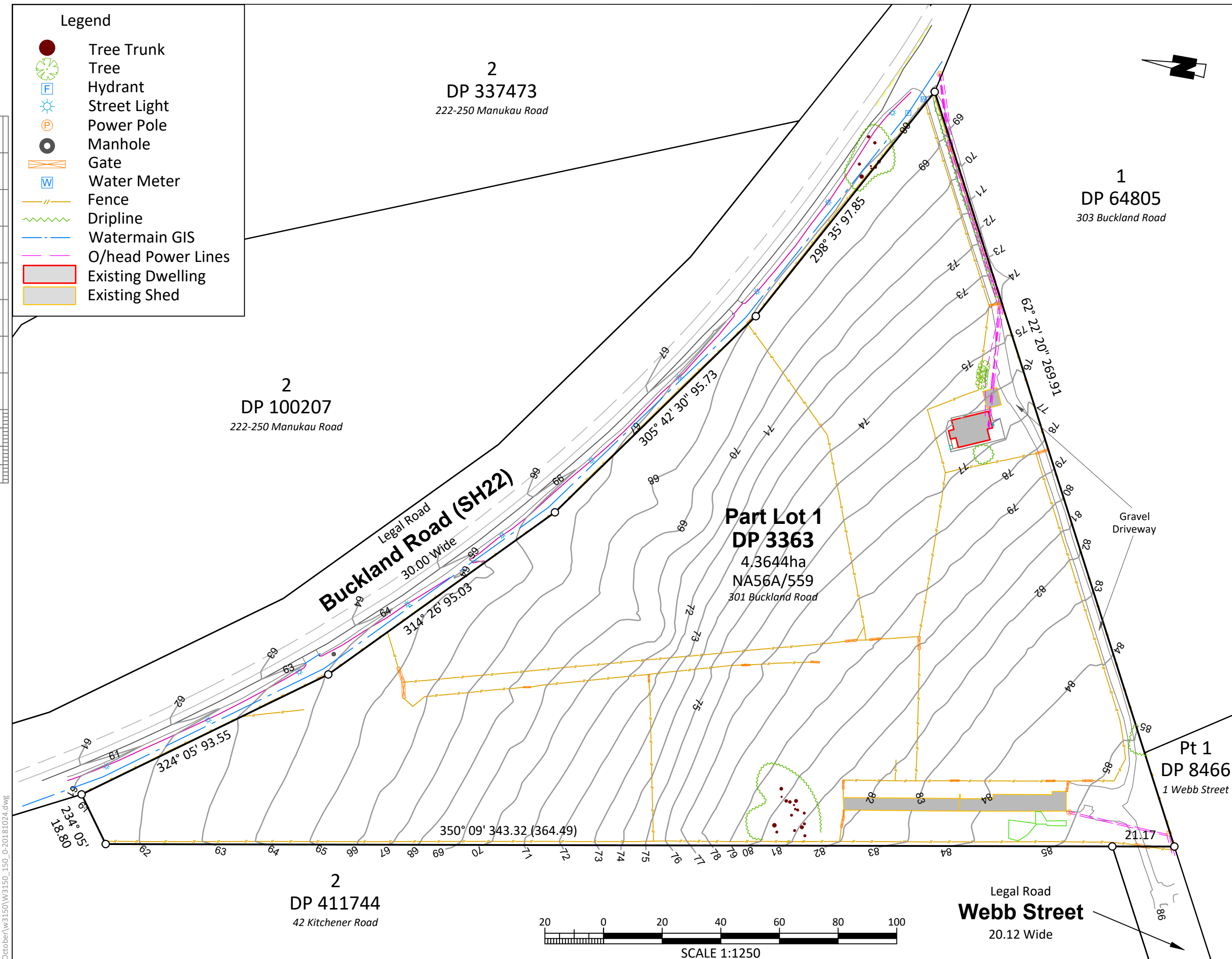
DRAWING No. REV.

RC.15 1

Legend

- Tree Trunk
- Tree
- Hydrant
- Street Light
- Power Pole
- Manhole
- Gate
- Water Meter
- Fence
- Dripline
- Watermain GIS
- O/head Power Lines
- Existing Dwelling
- Existing Shed

Applicant: Frankin Plumbing
Comprised In: NA56A/559
Local Authority: Auckland Council
Total Area: 4.3644ha



- Notes:**
1. Changes may occur to the layout of the proposal shown as a result of the Resource Consent Conditions.
 2. Areas and dimensions on this plan may be subject to change following field survey.
 3. The copyright and intellectual property rights for the information shown on this plan remain the property of CKL Surveys Ltd.
 4. This plan has been prepared only for the purpose of illustrating an application for resource consent. It should not be used for any other purpose.

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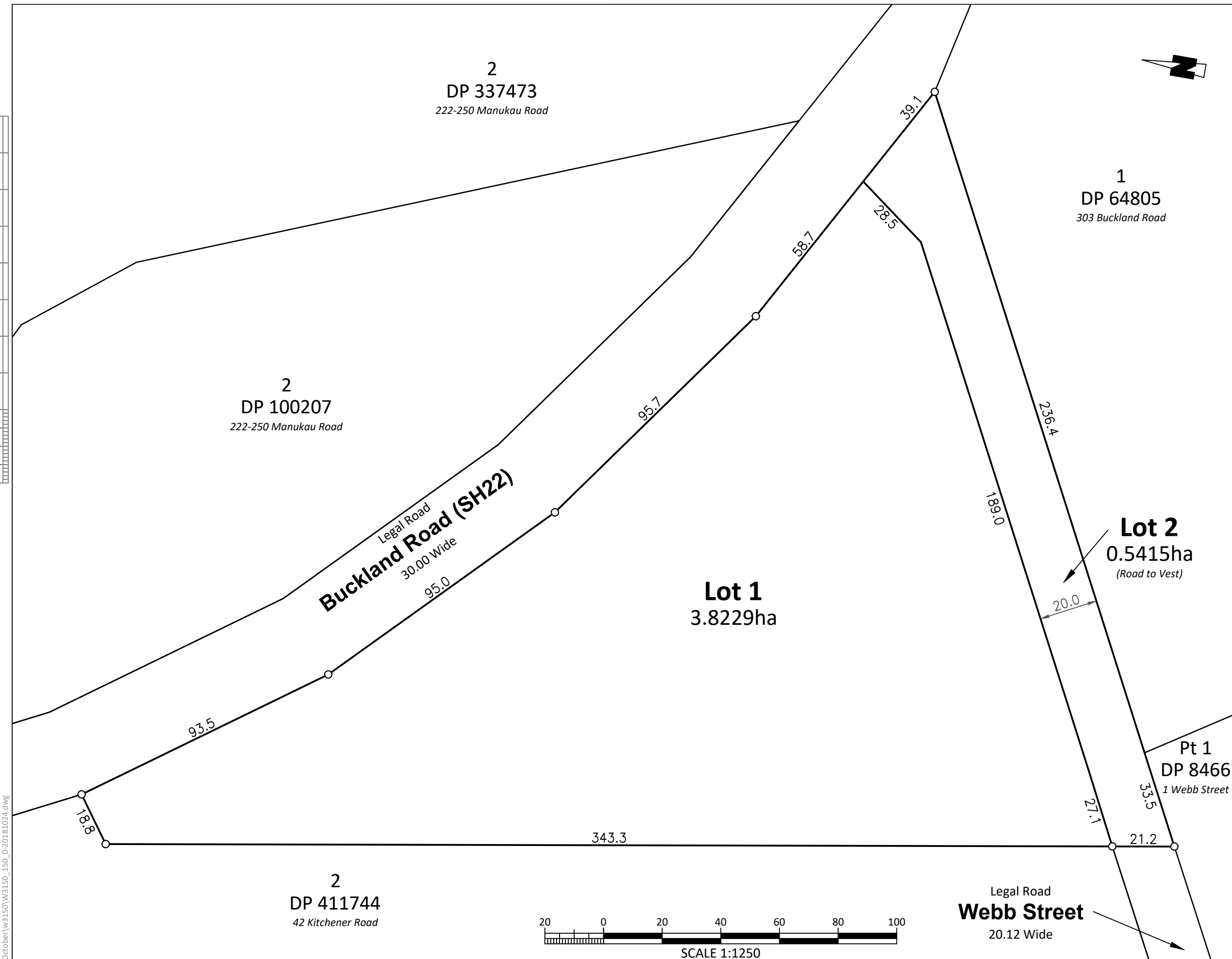
Auckland Office:
 A: 25 Broadway, Newmarket
 P: 09 524 7029
Hamilton Office:
 A: 58 Church Road, Hamilton
 P: 07 849 9921
Te Awamutu Office:
 A: 103 Market Street, Te Awamutu
 P: 07 871 6144

Application Plan
301 Buckland Road
Pukekohe

Proposed Subdivision Of
Part Lot 1 DP 3363
Existing Site Plan

Issue	Description	Checked	Date	Date	Scale:
	Designed:				1:1250 (A3 Original)
	Drawn: SMR		23.10.18		
	Checked: DB		24.10.18		
Job No: W3150			Dwg No: 150	Rev: 0	

Applicant: Frankin Plumbing
 Comprised In: NA56A/559
 Local Authority: Auckland Council
 Total Area: 4.3644ha



- Notes:
- Changes may occur to the layout of the proposal shown as a result of the Resource Consent Conditions.
 - Areas and dimensions on this plan may be subject to change following field survey.
 - The copyright and intellectual property rights for the information shown on this plan remain the property of CKL Surveys Ltd.
 - This plan has been prepared only for the purpose of illustrating an application for resource consent. It should not be used for any other purpose.

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C:\00 ckl offline\2018\10 October\w3150\w3150_150_0-20181024.dwg



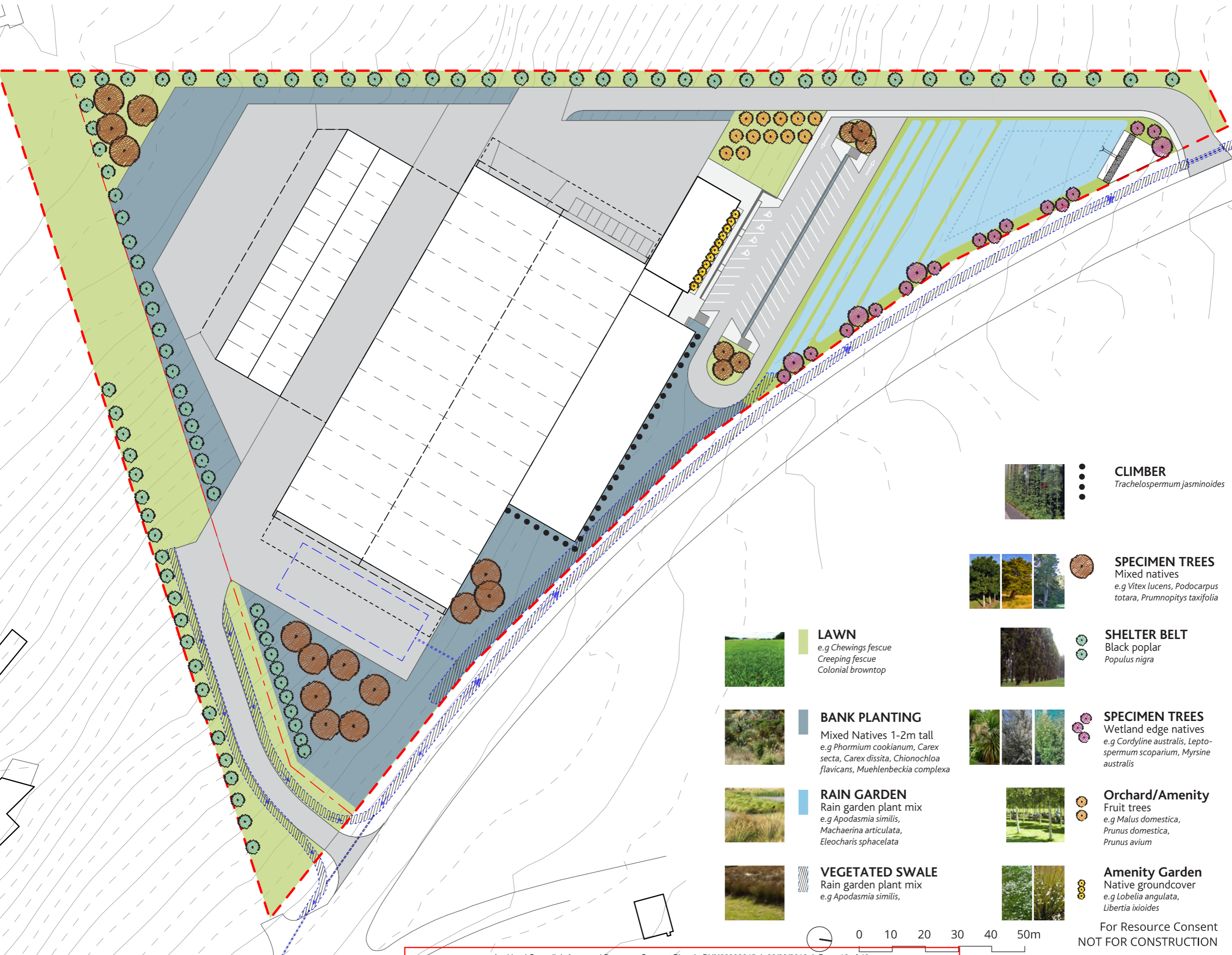
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 A: 25 Broadway, Newmarket
 P: 09 524 7029
Hamilton Office:
 A: 58 Church Road, Hamilton
 P: 07 849 9921
Te Awamutu Office:
 A: 103 Market Street, Te Awamutu
 P: 07 871 6144










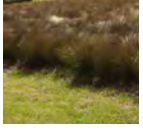
Application Plan
 301 Buckland Road
 Pukekohe

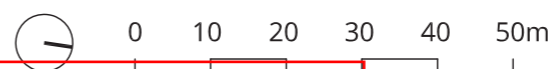
Proposed Subdivision Of
 Part Lot 1 DP 3363
Proposed Site Layout

Issue	Description	Checked	Date	Designed:	Date	Scale:
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				Checked: DB	24.10.18	
				Job No:	Dwg No:	Rev:
				W3150	151	0

NOTES:



- 
CLIMBER
Trachelospermum jasminoides
- 
SPECIMEN TREES
 Mixed natives
 e.g *Vitex lucens*, *Podocarpus totara*, *Prumnopitys taxifolia*
- 
SHELTER BELT
 Black poplar
Populus nigra
- 
SPECIMEN TREES
 Wetland edge natives
 e.g *Cordylina australis*, *Leptospermum scoparium*, *Myrsine australis*
- 
Orchard/Amenity
 Fruit trees
 e.g *Malus domestica*, *Prunus domestica*, *Prunus avium*
- 
Amenity Garden
 Native groundcover
 e.g *Lobelia angulata*, *Libertia ixioides*
- 
LAWN
 e.g *Chewings fescue*, *Creeping fescue*, *Colonial browntop*
- 
BANK PLANTING
 Mixed Natives 1-2m tall
 e.g *Phormium cookianum*, *Carex secta*, *Carex dissita*, *Chionochloa flavicans*, *Muehlenbeckia complexa*
- 
RAIN GARDEN
 Rain garden plant mix
 e.g *Apodasmia similis*, *Machaerina articulata*, *Eleocharis sphacelata*
- 
VEGETATED SWALE
 Rain garden plant mix
 e.g *Apodasmia similis*,



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 2 Galatos Street
 Auckland
 1010
 021 591 279
 www.Resilio.nz

PROJECT 18013
Franklins Plumbing Warehouse & Head Office
 SHEET
 Landscape Plan

DRAWING NUMBER
RS_001
 SCALE
 1:1000 @ A3
 APPROVED GM
 For RESILIO Limited

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 CONTRACTOR MUST VERIFY ALL DIMENSIONS
 ON SITE BEFORE COMMENCING ANY WORK
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For Resource Consent
 NOT FOR CONSTRUCTION

FRANKLIN PLUMBING

WAREHOUSE AND HEAD OFFICE

301 BUCKLAND ROAD, PUKEKOHE, AUCKLAND

CIVIL ENGINEERING DRAWINGS



DRAWING INDEX		DATE & REV		
DWG NO.	DESCRIPTION	30 JULY 18		
W3150-100	TOPOGRAPHICAL SURVEY OF PART LOT 1 DP 3363 CFR NA56A/559	00		
W3150-200	PROPOSED EARTHWORKS PLAN DESIGN CONTOUR	04		
W3150-210	PROPOSED EARTHWORKS PLAN CUT AND FILL PLAN	02		
W3150-220	PROPOSED EARTHWORKS SECTIONS LINES PLAN	01		
W3150-221	PROPOSED EARTHWORKS PLAN - SECTIONS	01		
W3150-250	EROSION AND SEDIMENT CONTROL PLAN	01		
W3150-251	EROSION AND SEDIMENT CONTROL STANDARD DETAILS - SHEET 1	01		
W3150-252	EROSION AND SEDIMENT CONTROL STANDARD DETAILS - SHEET 2	01		
W3150-253	EROSION AND SEDIMENT CONTROL STANDARD DETAILS - SHEET 3	01		
W3150-280	PROPOSED RETAINING WALLS LAYOUT PLAN	01		
W3150-281	PROPOSED RETAINING WALL LONGSECTIONS - SHEET 1	01		
W3150-282	PROPOSED RETAINING WALL LONGSECTIONS - SHEET 2	01		
W3150-300	PROPOSED ROADING PLAN - LAYOUT PLAN	01		
W3150-310	PROPOSED ROAD LONGSECTION AND TYPICAL CROSS SECTION	01		
W3150-440	PROPOSED STORMWATER MANAGEMENT LAYOUT - SHEET 1 OF 3	00		
W3150-441	PROPOSED STORMWATER MANAGEMENT LAYOUT - SHEET 2 OF 3	00		
W3150-442	PROPOSED STORMWATER MANAGEMENT LAYOUT - SHEET 3 OF 3	00		
W3150-500	PROPOSED PUBLIC WASTEWATER EXTENSION	00		
W3150-510	DRAINAGE LONGSECTIONS	00		
W3150-520	PUBLIC WASTEWATER CATCHMENTS PLAN	00		



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CKL PROJECT NO: W3150
DATE OF ISSUE: JULY 2018
ISSUED FOR CONSENT

Notes:

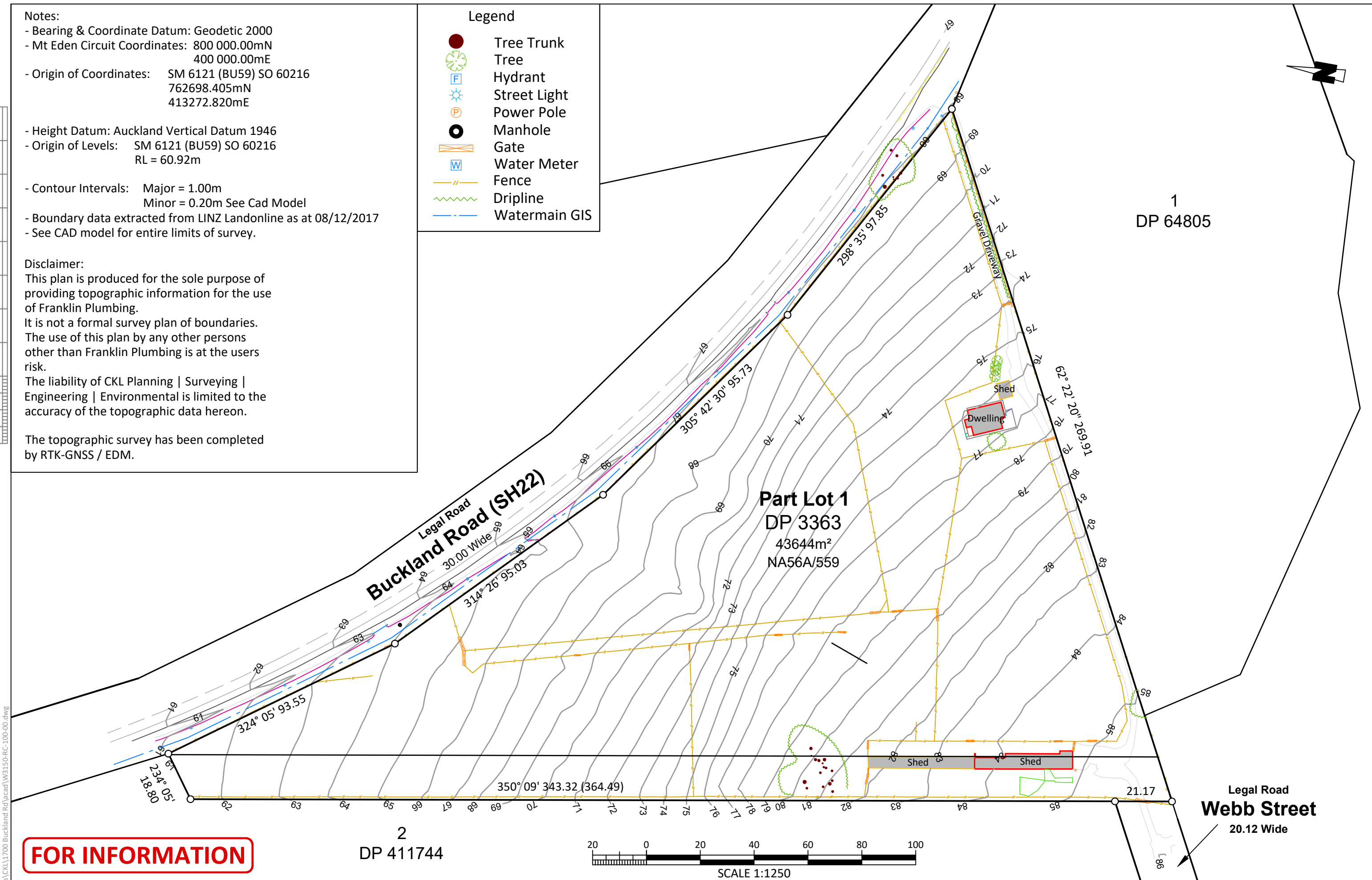
- Bearing & Coordinate Datum: Geodetic 2000
- Mt Eden Circuit Coordinates: 800 000.00mN
400 000.00mE
- Origin of Coordinates: SM 6121 (BU59) SO 60216
762698.405mN
413272.820mE
- Height Datum: Auckland Vertical Datum 1946
- Origin of Levels: SM 6121 (BU59) SO 60216
RL = 60.92m
- Contour Intervals: Major = 1.00m
Minor = 0.20m See Cad Model
- Boundary data extracted from LINZ Landonline as at 08/12/2017
- See CAD model for entire limits of survey.

Disclaimer:

This plan is produced for the sole purpose of providing topographic information for the use of Franklin Plumbing. It is not a formal survey plan of boundaries. The use of this plan by any other persons other than Franklin Plumbing is at the users risk. The liability of CKL Planning | Surveying | Engineering | Environmental is limited to the accuracy of the topographic data hereon.

The topographic survey has been completed by RTK-GNSS / EDM.

- Legend**
- Tree Trunk
 - Tree
 - ⊠ Hydrant
 - ☀ Street Light
 - ⊙ Power Pole
 - ⊙ Manhole
 - ⊠ Gate
 - ⊠ Water Meter
 - Fence
 - ~ Dripline
 - Watermain GIS



FOR INFORMATION

2
DP 411744



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**WAREHOUSE AND HEAD OFFICE
FRANKLIN PLUMBING
301 BUCKLAND ROAD, PUKEKOHE**

**Topographical Survey
Of Part Lot 1 DP 3363
CFR NA56A/559**

Issue	Description	Checked	Date	Designed:	Date	Scale:
01	ISSUED FOR CONSENT	SS	30.07.18	Drawn: SMR	09.12.17	1:1250
				Checked: SS	11.12.17	(A3 Original)
				Job No:	Dwg No:	Rev:
				W3150	100	00

EARTHWORKS NOTES:

1. ALL WORKS TO COMPLY WITH THE RELEVANT LOCAL AUTHORITY STANDARDS.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE OPERATIONAL PRIOR TO ANY WORKS COMMENCING AND SHALL BE INSTALLED IN ACCORDANCE WITH AC GD005 'EROSION AND SEDIMENT CONTROL GUIDE FOR LAND DISTURBING ACTIVITIES'.
3. REFER TO EARTHWORKS SPECIFICATION FOR EARTHFILL REQUIREMENTS AND STANDARDS OF COMPACTION. ALL EARTHWORKS TO BE UNDERTAKEN IN ACCORDANCE WITH GEOTECHNICAL INVESTIGATION REPORT, CONTRACTOR TO VIEW THE REPORT TO INFORM THEMSELVES.
4. ALL MATERIAL FROM GULLIES DEEMED BY THE ENGINEER TO BE UNSUITABLE SHALL BE EXCAVATED.
5. TOPSOIL AND OTHER RELATIVELY DRY ORGANIC MATERIAL THAT CAN BE STRIPPED FROM STEEP AREAS/GULLIES USING EXCAVATOR/TRACTOR AND SCOOP SHALL BE CLASSIFIED AS SUBSOIL/TOPSOIL STRIPPING.
6. ALL GULLIES SHALL BE SURVEYED AFTER CLEARING OPERATIONS (PRIOR TO REMOVAL OF UNSUITABLE) AND THEN AGAIN AFTER UNSUITABLE REMOVAL FOR VOLUMES.
7. UNSUITABLE MATERIAL SHALL BE CLASSIFIED AS SOILS DEEMED BY THE ENGINEER TO HAVE EXCESSIVE NATURAL WATER CONTENT AND/OR ORGANIC CONTENT REQUIRING MULTIPLE HANDLING, DRYING/CONDITIONING AND STOCKPILING/RESPREADING AS DIRECTED.
8. THE LOCATIONS OF ALL STOCKPILES ARE WHOLLY THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE LOCATED CLEAR OF ALL EARTHWORKS OPERATIONS AND AWAY FROM GEOTECHNICALY UNSTABLE LAND. NO PAYMENT SHALL BE MADE FOR RELOCATION OF ANY STOCKPILES THAT HAVE BEEN FOUND TO HAVE BEEN PLACED IN THE INCORRECT LOCATION.
9. ALL SETOUT TO BE UNDERTAKEN BY THE CONTRACTOR.
10. IT IS THE CONTRACTORS RESPONSIBILITY FOR HEALTH & SAFETY & SECURITY ON SITE, APPROPRIATE FENCING AND SIGNAGE SHALL BE ERECTED AND MAINTAINED AT ALL TIMES TO KEEP THE GENERAL PUBLIC OFF SITE.
11. FINAL QUANTITIES AND EXTENT OF EARTHWORKS TO BE DETERMINED BY THE ENGINEER.

EARTHWORKS LEGEND:

85 — PROPOSED CONTOURS - MAJOR (1.0)



1
DP 64805

2
DP 411744

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**WAREHOUSE AND HEAD OFFICE
FRANKLIN PLUMBING
301 BUCKLAND ROAD, PUKEKOHE**

**PROPOSED EARTHWORKS PLAN
DESIGN CONTOUR**

Issue	Description	Checked	Date	Designed:	Date	Scale:
01	PRELIMINARY	GW	23.03.18	MJW	22.07.18	1:1250 (A3 Original)
02	PLATFORMS REVISED	GW	07.03.18	MJW	22.07.18	
03	PLATFORMS REVISED	GW	23.03.18	SS	30.07.18	
04	ISSUED FOR CONSENT	SS	30.07.18			
				Job No:	Dwg No:	Rev:
				W3150	200	04

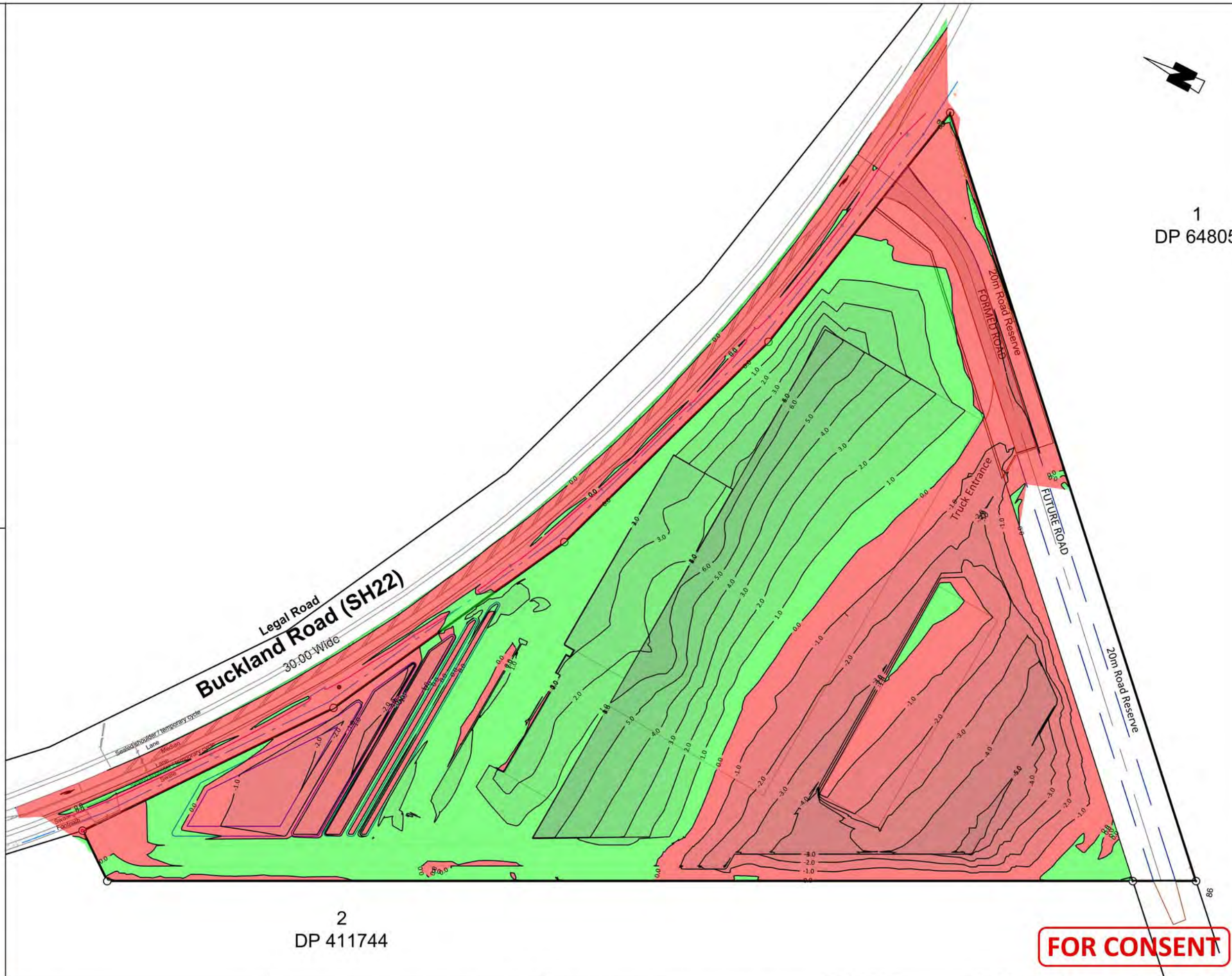
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EARTHWORKS LEGEND:

85 — PROPOSED CONTOURS - MAJOR (1.0)

EARTHWORKS CUT-FILL TABLE				
FROM	TO	UNIT	COLOUR	RANGE VOLUME (m ³)
0	1	m	Green	42086
0	-1	m	Red	-31785



1
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301 BUCKLAND ROAD, PUKEKOHE**

**PROPOSED EARTHWORKS PLAN
CUT FILL**

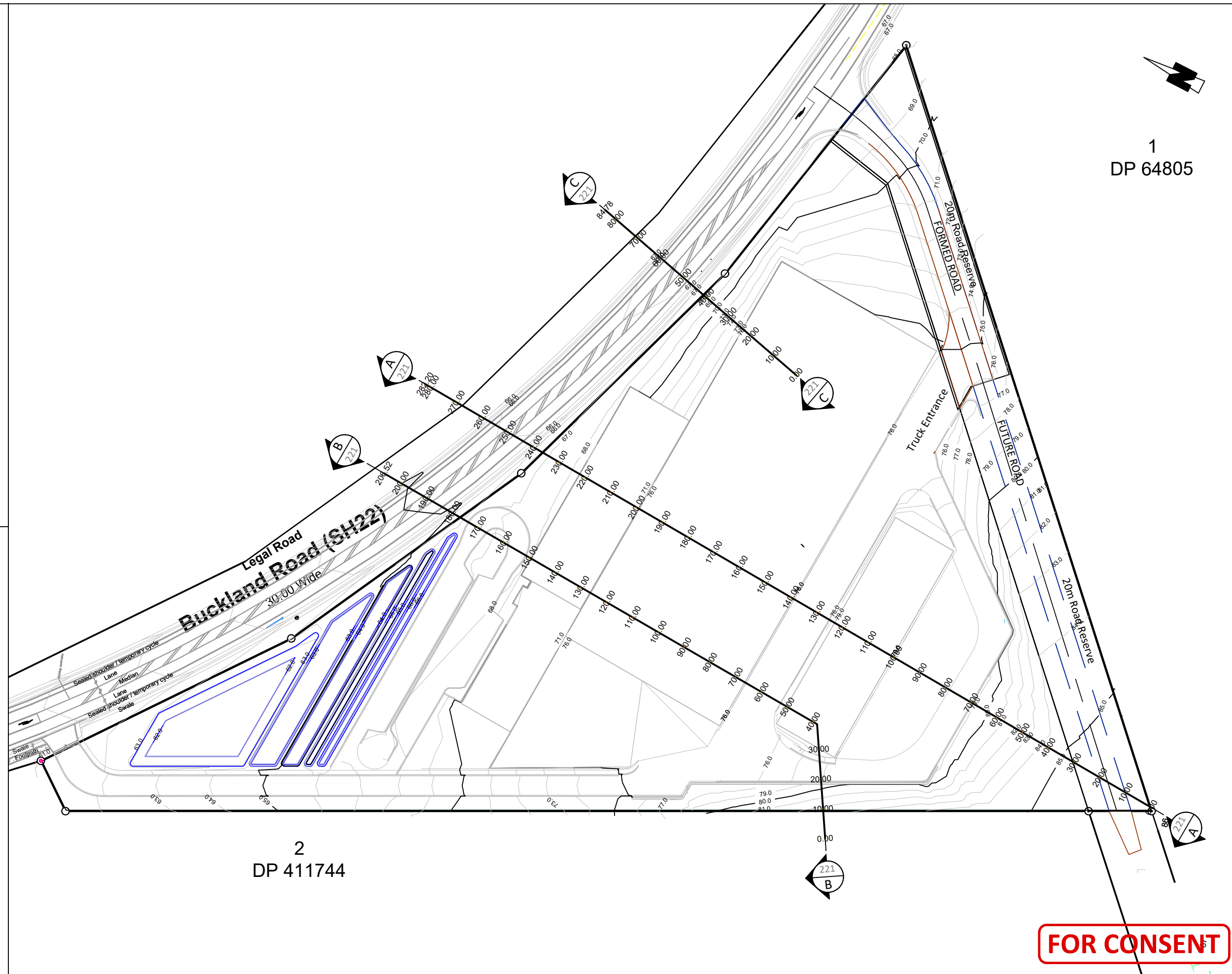
Issue	Description	Checked	Date	Designed:	Date	Scale:
01	PRELIMINARY	GW	26.03.18	MJW	22.07.18	1:1250
02	ISSUED FOR CONSENT	SS	30.07.18	MJW	22.07.18	(A3 Original)
				Checked: SS	30.07.18	
				Job No:	Dwg No:	Rev:
				W3150	210	02

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EARTHWORKS LEGEND:

85 — PROPOSED CONTOURS - MAJOR (1.0)



1
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**WAREHOUSE AND HEAD OFFICE
FRANKLIN PLUMBING
301 BUCKLAND ROAD, PUKEKOHE**

**PROPOSED EARTHWORKS
SECTION LINES
PLAN**

Issue	Description	Checked	Date	Designed	Date	Scale:
01	ISSUED FOR CONSENT	SS	30.07.18	MJW	22.07.18	1:1250
				MJW	22.07.18	(A3 Original)
				SS	30.07.18	
				Job No:	Dwg No:	Rev:
				W3150	220	01

AC TP90/GD05 SEDIMENT RETENTION POND SIZING

PROJECT:	W3150
PREPARED:	MJW
CHECKED:	SS
DATE:	26.07.18
AREA:	Site Earthworks

STAGE 1 - SRP 01	
CATCHMENT AREA:	4.36 ha
WORKING AREA:	4.36 ha
AVERAGE SITE SLOPE:	8.00 %
SITE LENGTH:	366 m

MINIMUM TREATMENT VOLUME
SRP sized for 2% catchment area where site length <200m/gradient <18%, or 3% where length/grade exceeded

Min. pond size =	3%	of contributing catchment area
Min. total volume =	1308 m ³	
Min. forebay volume =	196.2 m ³	15% of total volume
Min. main pond volume =	1111.8 m ³	
Min. dead storage =	392 m ³	30% of total volume
Min. live storage =	916 m ³	70% of total volume

DESIGN TREATMENT VOLUME
Design Volume to match or exceed Minimum Volume

Main Pond			
Pond Length =		40.0	
Pond Width =	1 in 3	13.3	Not to exceed 1:2 unless max. 1m deep
Surface Area =		533 m ²	
Pond Depth =		2 m	Not to exceed 2m
Side Slopes =	1vt:	1 hz	
Pond Volume =		869 m ³	
Dead Storage Volume - Main Pond =		316 m ³	
Live Storage Volume - Main Pond =		553 m ³	

Forebay			
Forebay Width =		13.3	
Forebay Length =		7.1	
Surface Area =		94.7 m ²	
Forebay Depth =		1 m	Not to exceed 2m (Typical 1m)
Side Slopes =	1vt:	1 hz	
Forebay Volume =		76 m ³	

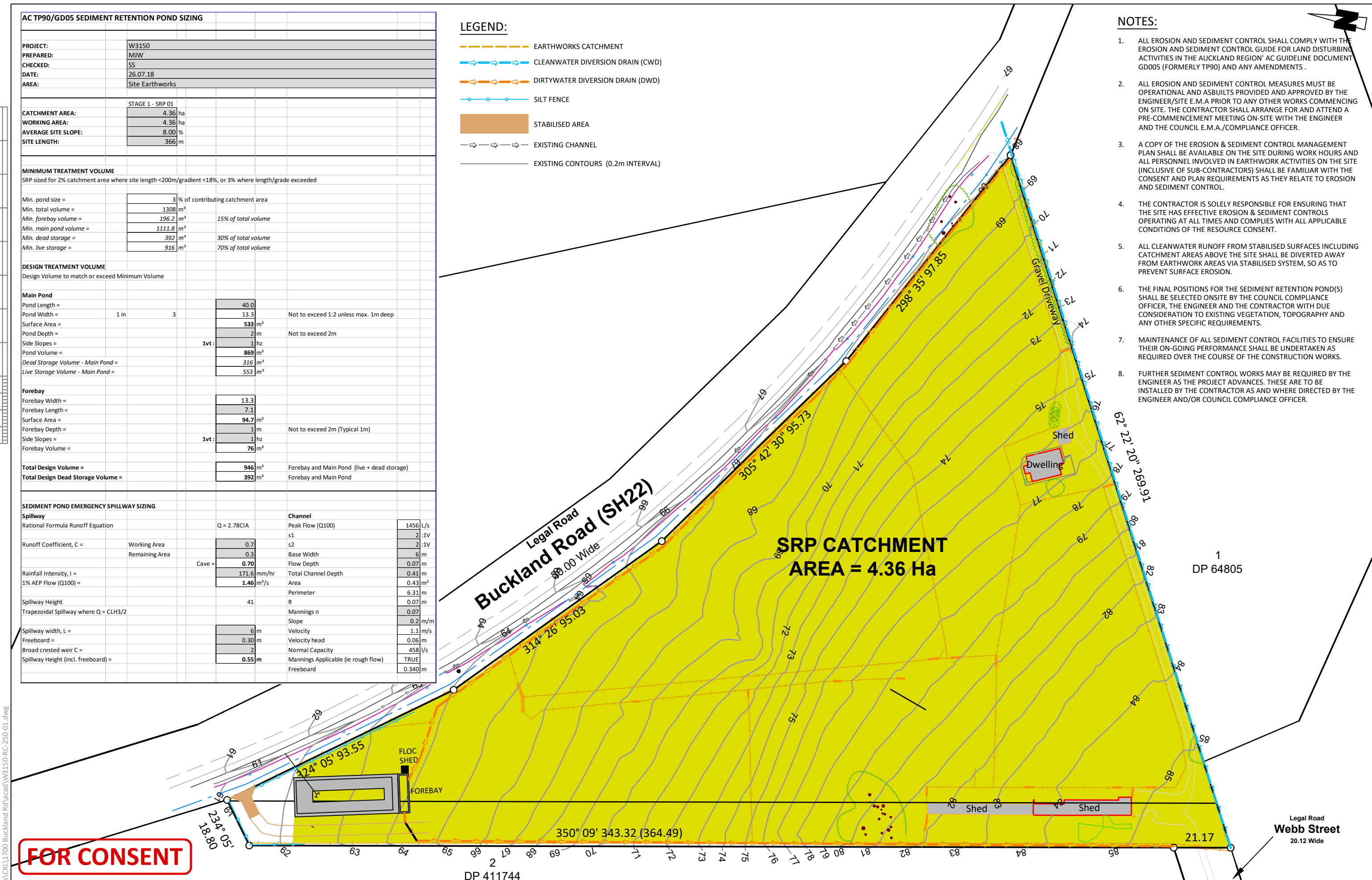
Total Design Volume =	946 m ³	Forebay and Main Pond (live + dead storage)
Total Design Dead Storage Volume =	392 m ³	Forebay and Main Pond

SEDIMENT POND EMERGENCY SPILLWAY SIZING

Spillway			
Rational Formula Runoff Equation	Q = 2.78CIA	Channel	Peak Flow (Q100)
Runoff Coefficient, C =	Working Area: 0.7 Remaining Area: 0.3	s1	1456 L/s
Rainfall Intensity, I =	171.6 mm/hr	s2	2:1V
1% AEP Flow (Q100) =	1.46 m ³ /s	Base Width	6 m
Spillway Height	41	Flow Depth	0.07 m
Trapezoidal Spillway where Q = CLH3/2		Total Channel Depth	0.41 m
Spillway width, L =	6 m	Area	0.43 m ²
Freeboard =	0.30 m	Perimeter	6.31 m
Broad crested weir C =	2	R	0.07 m
Spillway Height (incl. freeboard) =	0.55 m	Mannings n	0.07
		Slope	0.2 m/m
		Velocity	1.1 m/s
		Velocity head	0.06 m
		Normal Capacity	458 l/s
		Mannings Applicable (ie rough flow)	TRUE
		Freeboard	0.340 m

- LEGEND:**
- EARTHWORKS CATCHMENT
 - CLEANWATER DIVERSION DRAIN (CWD)
 - DIRTYWATER DIVERSION DRAIN (DWD)
 - SILT FENCE
 - STABILISED AREA
 - EXISTING CHANNEL
 - EXISTING CONTOURS (0.2m INTERVAL)

- NOTES:**
- ALL EROSION AND SEDIMENT CONTROL SHALL COMPLY WITH THE EROSION AND SEDIMENT CONTROL GUIDE FOR LAND DISTURBING ACTIVITIES IN THE AUCKLAND REGION' AC GUIDELINE DOCUMENT GD005 (FORMERLY TP90) AND ANY AMENDMENTS.
 - ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE OPERATIONAL AND ASBUILT PROVIDED AND APPROVED BY THE ENGINEER/SITE E.M.A PRIOR TO ANY OTHER WORKS COMMENCING ON SITE. THE CONTRACTOR SHALL ARRANGE FOR AND ATTEND A PRE-COMMENCEMENT MEETING ON-SITE WITH THE ENGINEER AND THE COUNCIL E.M.A./COMPLIANCE OFFICER.
 - A COPY OF THE EROSION & SEDIMENT CONTROL MANAGEMENT PLAN SHALL BE AVAILABLE ON THE SITE DURING WORK HOURS AND ALL PERSONNEL INVOLVED IN EARTHWORK ACTIVITIES ON THE SITE (INCLUDING OF SUB-CONTRACTORS) SHALL BE FAMILIAR WITH THE CONSENT AND PLAN REQUIREMENTS AS THEY RELATE TO EROSION AND SEDIMENT CONTROL.
 - THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING THAT THE SITE HAS EFFECTIVE EROSION & SEDIMENT CONTROLS OPERATING AT ALL TIMES AND COMPLIES WITH ALL APPLICABLE CONDITIONS OF THE RESOURCE CONSENT.
 - ALL CLEANWATER RUNOFF FROM STABILISED SURFACES INCLUDING CATCHMENT AREAS ABOVE THE SITE SHALL BE DIVERTED AWAY FROM EARTHWORK AREAS VIA STABILISED SYSTEM, SO AS TO PREVENT SURFACE EROSION.
 - THE FINAL POSITIONS FOR THE SEDIMENT RETENTION POND(S) SHALL BE SELECTED ONSITE BY THE COUNCIL COMPLIANCE OFFICER, THE ENGINEER AND THE CONTRACTOR WITH DUE CONSIDERATION TO EXISTING VEGETATION, TOPOGRAPHY AND ANY OTHER SPECIFIC REQUIREMENTS.
 - MAINTENANCE OF ALL SEDIMENT CONTROL FACILITIES TO ENSURE THEIR ON-GOING PERFORMANCE SHALL BE UNDERTAKEN AS REQUIRED OVER THE COURSE OF THE CONSTRUCTION WORKS.
 - FURTHER SEDIMENT CONTROL WORKS MAY BE REQUIRED BY THE ENGINEER AS THE PROJECT ADVANCES. THESE ARE TO BE INSTALLED BY THE CONTRACTOR AS AND WHERE DIRECTED BY THE ENGINEER AND/OR COUNCIL COMPLIANCE OFFICER.



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WAREHOUSE AND HEAD OFFICE
FRANKLIN PLUMBING
301 BUCKLAND ROAD, PUKEKOHE

SEDIMENT AND EROSION CONTROL
PLAN

Issue	Description	Checked	Date	Designed	Date	Scale:
01	ISSUED FOR CONSENT	SS	30.07.18	MJW	27.07.18	1:1250
				MJW	27.07.18	(A3 Original)
				SS	30.07.18	
			Job No:	W3150	Dwg No:	250
					Rev:	01

STABILISED CONSTRUCTION ENTRANCE SPECIFICATIONS:

APPLICATION

USE A STABILISED CONSTRUCTION ENTRANCE AT ALL POINTS OF CONSTRUCTION SITE INGRESS AND EGRESS WITH A CONSTRUCTION PLAN LIMITING TRAFFIC TO THESE ENTRANCES ONLY. THEY ARE PARTICULARLY USEFUL ON SMALL CONSTRUCTION SITES BUT CAN BE UTILISED FOR ALL PROJECTS.

DESIGN:

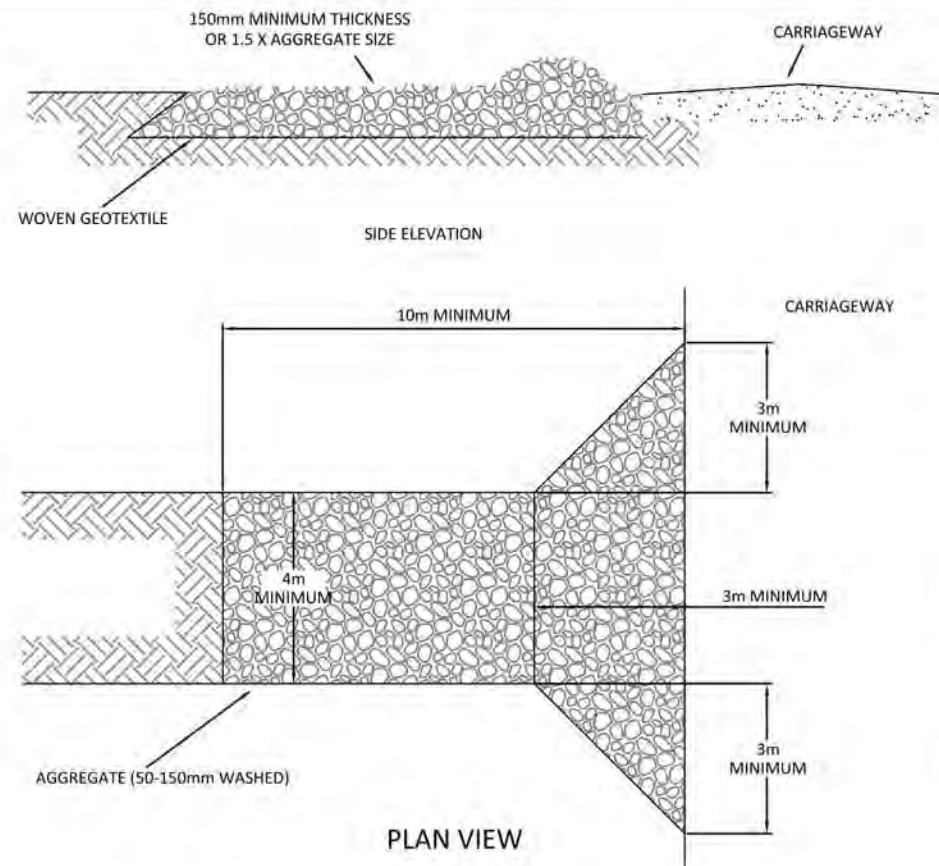
1. CLEAR THE ENTRANCE AND EXIT AREA OF ALL VEGETATION, ROOTS AND OTHER UNSUITABLE MATERIAL AND PROPERLY GRADE IT.
2. LAY WOVEN GEOTEXTILE; PIN DOWN EDGES AND OVERLAP JOINTS.
3. PROVIDE DRAINAGE TO CARRY RUNOFF FROM THE STABILISED CONSTRUCTION ENTRANCE TO A SEDIMENT CONTROL MEASURE.
4. PLACE AGGREGATE TO THE SPECIFICATIONS BELOW AND SMOOTH IT.

STABILISED CONSTRUCTION ENTRANCE AGGREGATE SPECIFICATIONS:

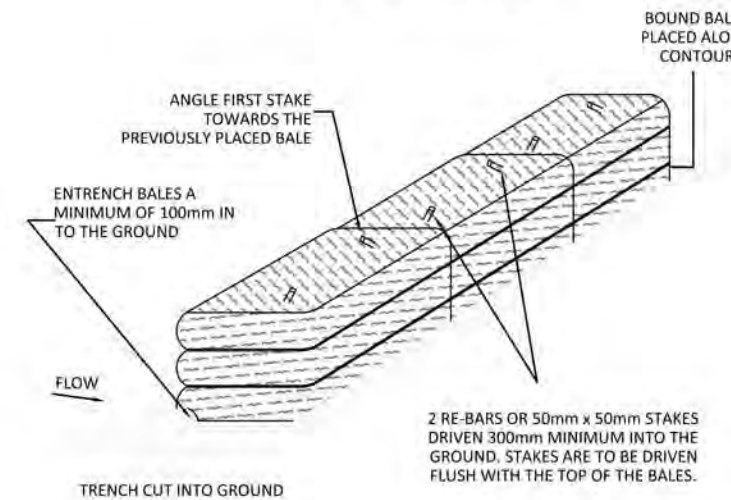
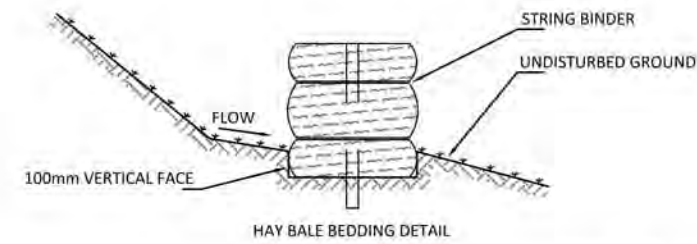
AGGREGATE SIZE	5-150mm WASHED AGGREGATE
THICKNESS	150mm MINIMUM OR 1.5 X AGGREGATE SIZE
LENGTH	10m MINIMUM
WIDTH	4m MINIMUM

MAINTENANCE

1. MAINTAIN THE STABILISED CONSTRUCTION ENTRANCE IN A CONDITION TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. AFTER EACH RAINFALL INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT FROM THE STABILISED CONSTRUCTION ENTRANCE AND CLEAN OUT AS NECESSARY.
2. WHEN WHEEL WASHING IS ALSO REQUIRED, ENSURE THIS IS DONE ON AN AREA STABILISED WITH AGGREGATE WHICH DRAINS TO AN APPROVED SEDIMENT RETENTION FACILITY.



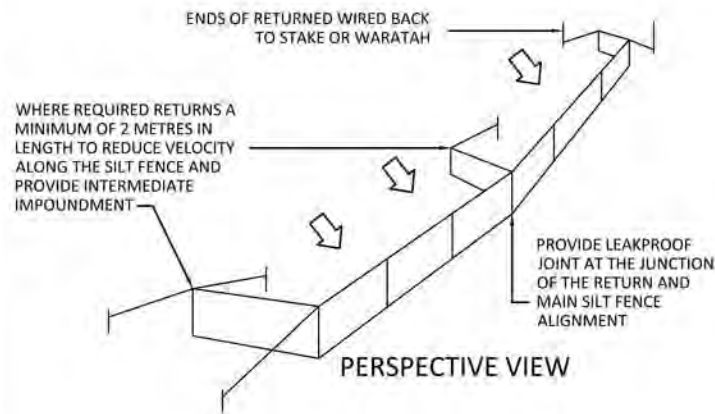
STABILISED CONSTRUCTION ENTRANCE



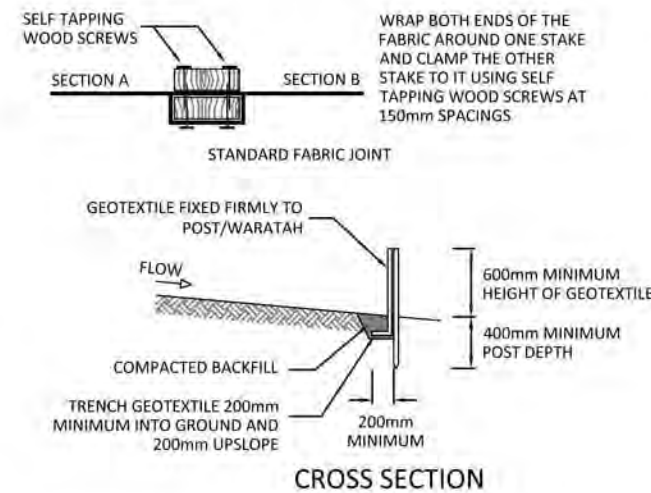
HAY BALE BARRIER

NOTES:

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2. A COPY OF THE EROSION MANAGEMENT PLAN SHALL BE AVAILABLE ON THE SITE DURING WORK HOURS AND ALL PERSONNEL INVOLVED IN EARTHWORK ACTIVITIES ON THE SITE (INCLUDING OF SUB-CONTRACTORS) SHALL BE FAMILIAR WITH THE CONSENT AND PLAN REQUIREMENTS AS THEY RELATE TO EROSION AND SEDIMENT CONTROL.
3. THAT ALL "CLEANWATER" RUNOFF FROM STABILISED SURFACES INCLUDING CATCHMENT AREAS ABOVE THE SITE SHALL BE DIVERTED AWAY FROM EARTHWORK AREAS VIA STABILISED SYSTEM, SO AS TO PREVENT SURFACE EROSION.
4. ALL EROSION AND SEDIMENT CONTROL SHALL COMPLY WITH THE EROSION AND SEDIMENT CONTROL GUIDE FOR LAND DISTURBING ACTIVITIES IN THE AUCKLAND REGION' AC GUIDELINE DOCUMENT GD005 (FORMERLY TP90) AND ANY AMENDMENTS.
5. THE SITES FOR SEDIMENT RETENTION PONDS SHALL BE SELECTED ONSITE BY THE EW OFFICER, THE ENGINEER AND THE CONTRACTOR WITH DUE CONSIDERATION TO THE NATIVE VEGETATION, TOPOGRAPHY AND ANY OTHER SPECIFIC REQUIREMENTS. THE MAIN SILT CONTROL MEASURES FOR THIS SITE ARE:
 - (i) DIVERSION OF "CLEAN WATER" FROM THE ABOVE CATCHMENTS AROUND THE EARTHWORKS AREA BY MEANS OF DIVERSION DRAINS, AND/OR OTHER APPROVED METHOD.
 - (ii) CONSTRUCTION OF CUT OFF DRAINS, CONTOUR DRAINS AND EARTH BUNDS TO INTERCEPT SILT LADEN WATERS AND DIRECT INTO RETENTION PONDS AND OTHER SEDIMENT CONTROL FACILITIES. CONTOUR DRAINS ARE TO BE SPREAD AT 100m INTERVALS WITH THE SLOPE LIMITED TO 2%.
 - (iii) CONSTRUCTION OF SEDIMENT RETENTION POND TO COLLECT SILT FROM (ii) ABOVE WITH THE ADDITIONAL TEMPORARY CONSTRUCTION OF HAY BALE BARRIER/SILT FENCES AS REQUIRED.
 - (iv) THAT THE SITE BE STABILISED AGAINST EROSION AS SOON AS PRACTICABLE AND IN A PROGRESSIVE MANNER AS EARTHWORKS ARE FINISHED OVER VARIOUS AREAS OF THE SITE. REVEGETATION IS TO BE COMPLETED BY 30 APRIL IN THE YEAR OF EARTHWORKS CONSTRUCTION, UNLESS A LATER DATE IS APPROVED IN WRITING BY THE AUCKLAND COUNCIL.
 - (v) MAINTENANCE OF ALL SEDIMENT CONTROL FACILITIES AS REQUIRED.
 - (vi) THE CONTRACTOR SHALL SUBMIT ASBUILTS SHOWING ALL THE APPROPRIATE SEDIMENT CONTROL MEASURES ARE INSTALLED AND IS TO BE SUBMITTED TO THE ARC WITHIN 7 DAYS FOLLOWING THE CONSTRUCTION OF THE CONTROLS.
6. FURTHER SEDIMENT CONTROL WORKS MAY BE REQUIRED BY THE ENGINEER AS THE PROJECT ADVANCES. THESE WILL BE INSTALLED AS AND WHERE DIRECTED BY THE ENGINEER. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING THAT THE SITE HAS EFFECTIVE SILT DETENTION FACILITIES OPERATING AT ALL TIMES.



PERSPECTIVE VIEW

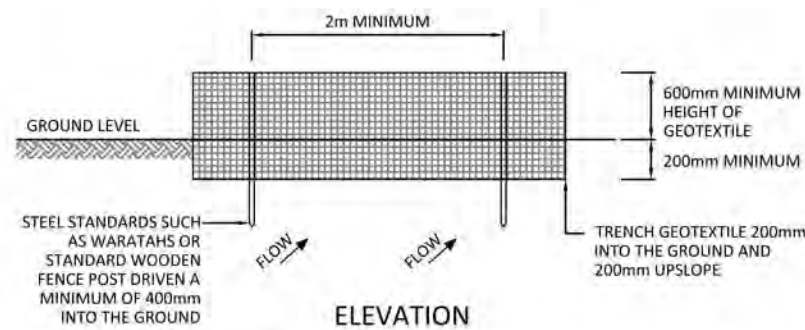


CROSS SECTION

SILT FENCE DESIGN CRITERIA:

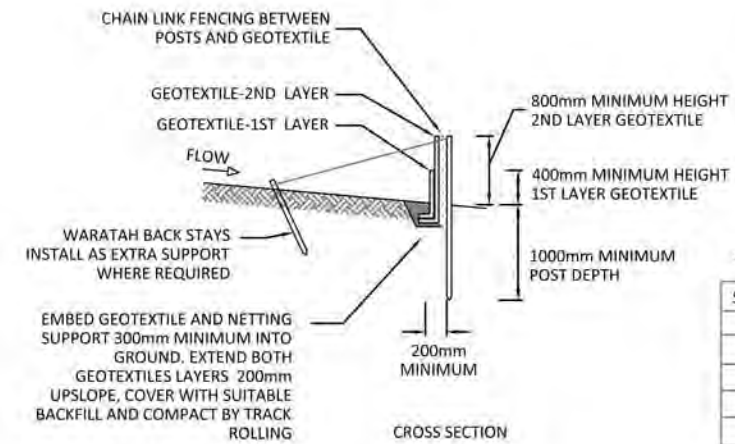
SLOPE STEEPNESS %	SLOPE LENGTH (m) (MAXIMUM)	SPACING OF RETURNS (m)
< 2%	N/A	UNLIMITED
2-10%	40	60
10-20%	30	50
20-33%	20	40
33-50%	15	30
>50%	6	20

GRAB TENSILE STRENGTH: >440N (ASTM D4632)
 TENSILE MODULUS: 0.140 pa (MINIMUM)
 APPARENT OPENING SIZE: 0.1-0.5mm (ASTM D4751)



ELEVATION

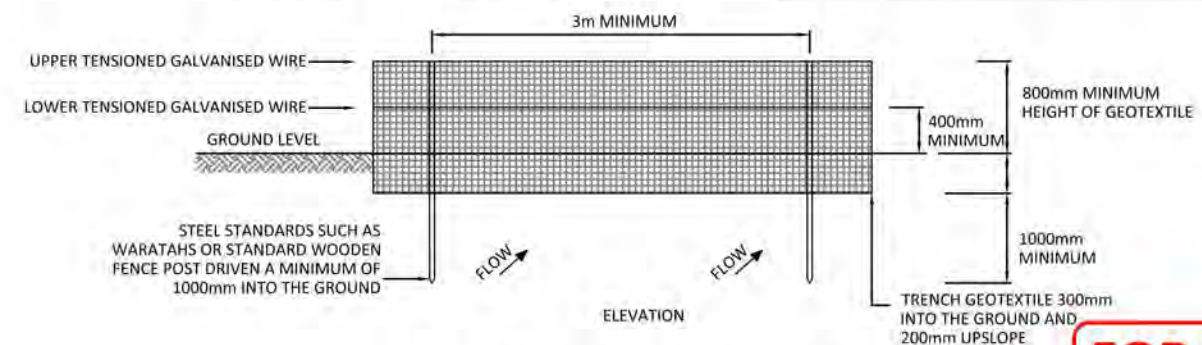
SILT FENCE CONSTRUCTION



CROSS SECTION

SUPER SILT FENCE DESIGN CRITERIA:

SLOPE STEEPNESS %	SLOPE LENGTH (m) (MAXIMUM)	SPACING OF RETURNS (m)
0-10%	UNLIMITED	60
10-20%	60	50
20-33%	30	40
33-50%	30	30
>50%	15	20



ELEVATION

SUPER SILT FENCE CONSTRUCTION

FOR CONSENT



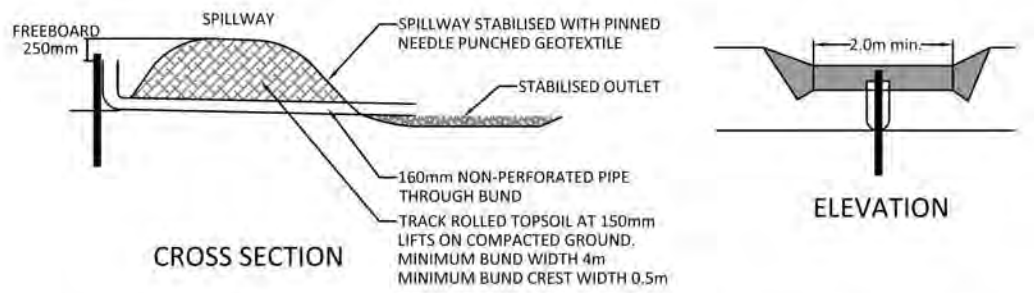
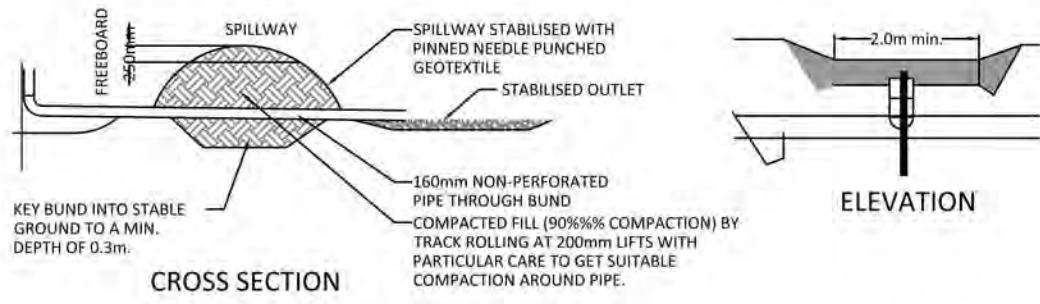
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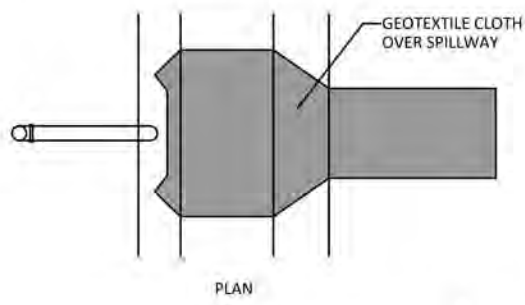
**EROSION & SEDIMENT CONTROL
 TYPICAL STANDARD DETAILS
 SHEET 1**

Issue/Description	Checked	Date	Designed:	Date	Scale:
01 ISSUED FOR CONSENT	SS	30.07.18	MJW	27.07.18	NTS
			Checked: SS	30.07.18	(A3 Original)
			Job No: W3150	Dwg No: 251	Rev: 01

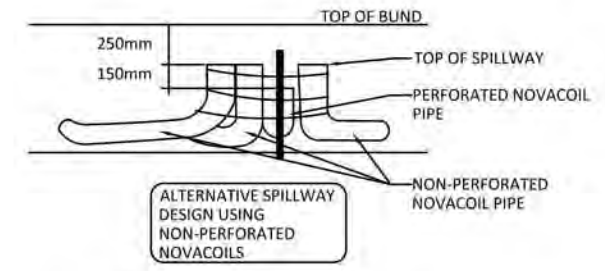


NOTE: THE 100mm DIAMETER PVC PIPE UPSTAND IS ONLY REQUIRED WHERE THE 2m WIDE EMERGENCY SPILLWAY DISCHARGES TO VULNERABLE AREA OR WHERE THE DISCHARGE IS REQUIRED TO BE PIPED TO A SAFE OUTFALL SUCH AS A STORMWATER MANHOLE. IF THE UPSTAND IS NOT REQUIRED THE DECANT CAN BE CONNECTED DIRECT TO A 40mm DIAMETER OUTFALL PIPE AND THE TREATMENT VOLUME IS MEASURED TO THE INVERT OF THE EMERGENCY SPILLWAY.

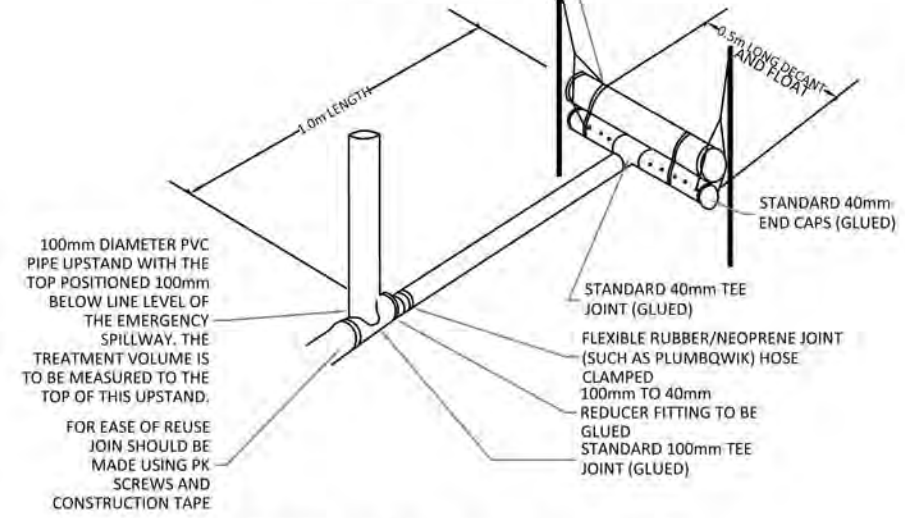
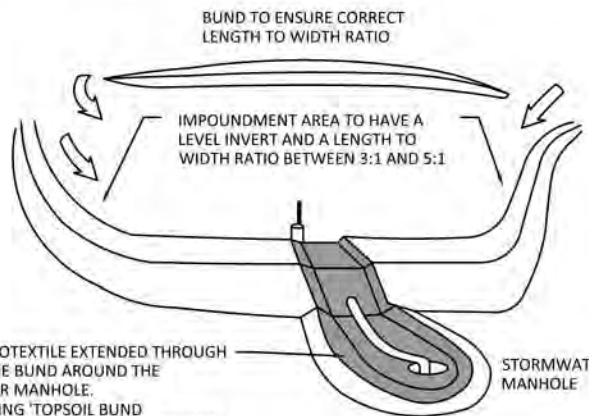
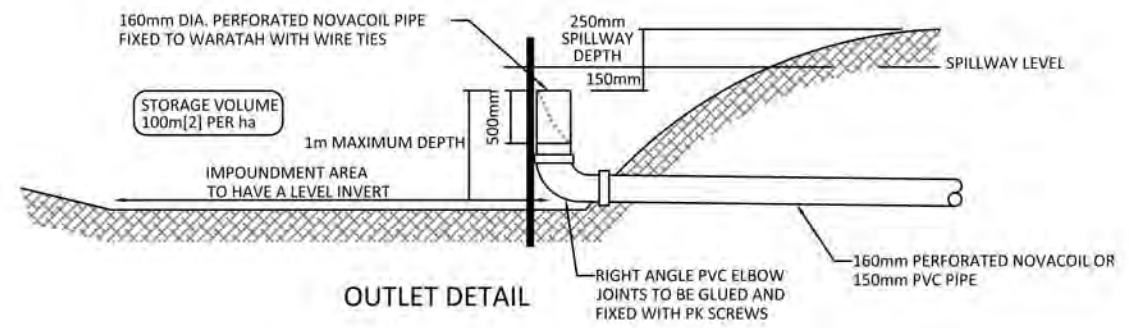
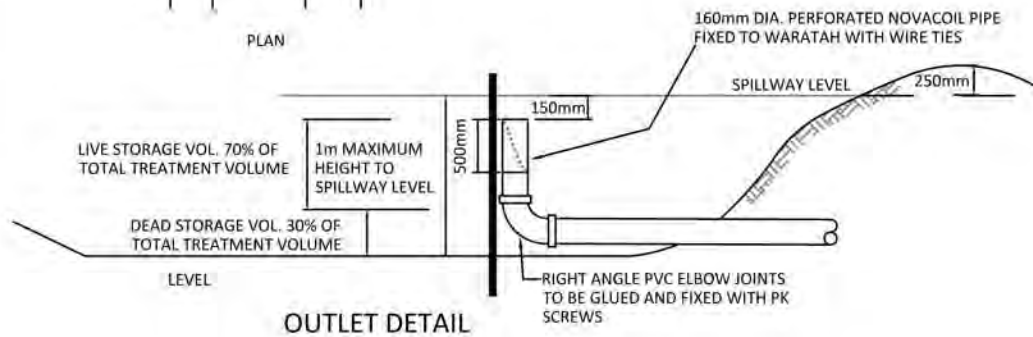
NOTE: THE DECANT HAS A 40mm DIAMETER PVC PIPE WITH A 1.3m LONG ARM (INCLUDING FLEXIBLE JOINT), A 0.5m LONG DECANT AND 20 x 10mm DIAMETER EQUALLY SPACED HOLES POSITIONED HORIZONTALLY AT 10 AND 2 O'CLOCK



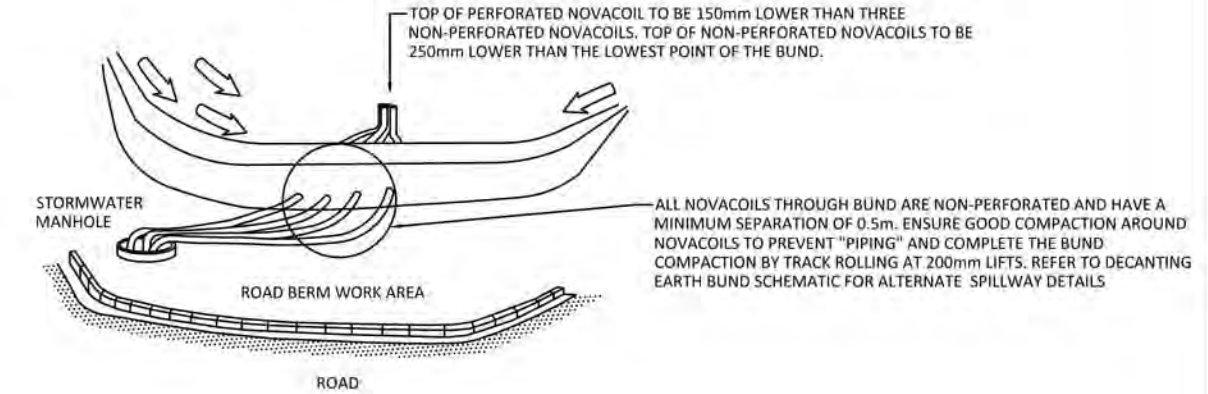
DECANTING EARTH BUND
 MAXIMUM CATCHMENT 0.3ha
 2% VOLUME (60m³) PER 0.3ha CATCHMENT



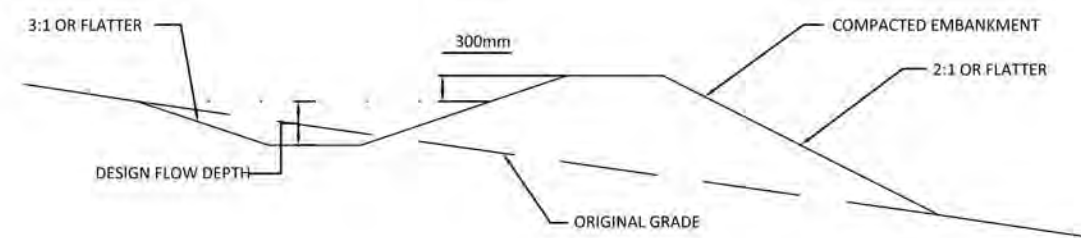
1% DECANTING TOPSOIL BUND
 MAXIMUM CATCHMENT IS 1ha IF THE MAXIMUM SLOPE IS LESS THAN 10% AND THE SLOPE LENGTH IS LESS THAN 200m OTHERWISE THE MAXIMUM CATCHMENT IS 0.3ha. DECANTING TOPSOIL BUNDS ARE ONLY TO BE USED FOR TOPSOILED/STABILISED CATCHMENTS.



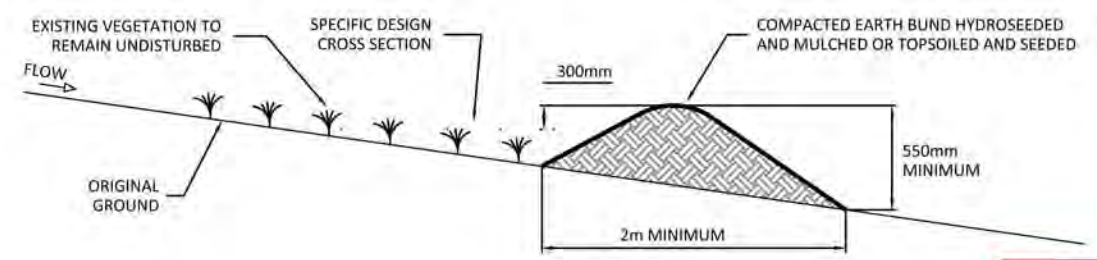
40mm DECANT WITH UPSTAND FOR DECANTING EARTH BUND



DECANTING TOPSOIL BUND



RUNOFF DIVERSION BUND - CROSS SECTION



CLEANWATER RUNOFF DIVERSION BUND - CROSS SECTION

FOR CONSENT

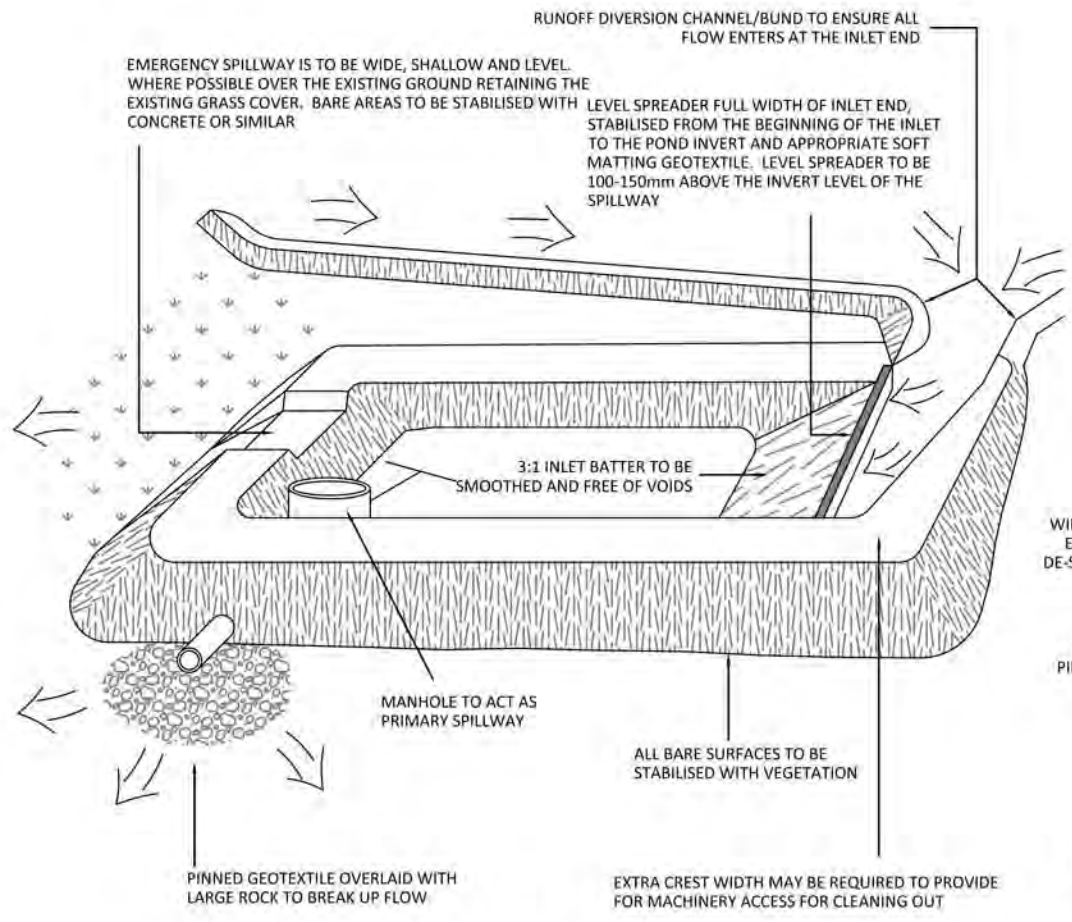


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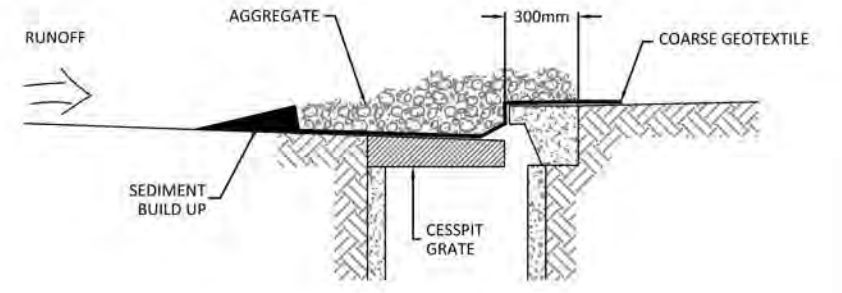
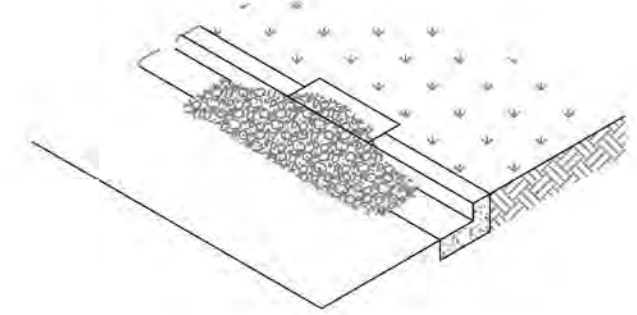
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 FRANKLIN PLUMBING
 301 BUCKLAND ROAD, PUKEKOHE**

**EROSION & SEDIMENT CONTROL
 TYPICAL STANDARD DETAILS
 SHEET 2**

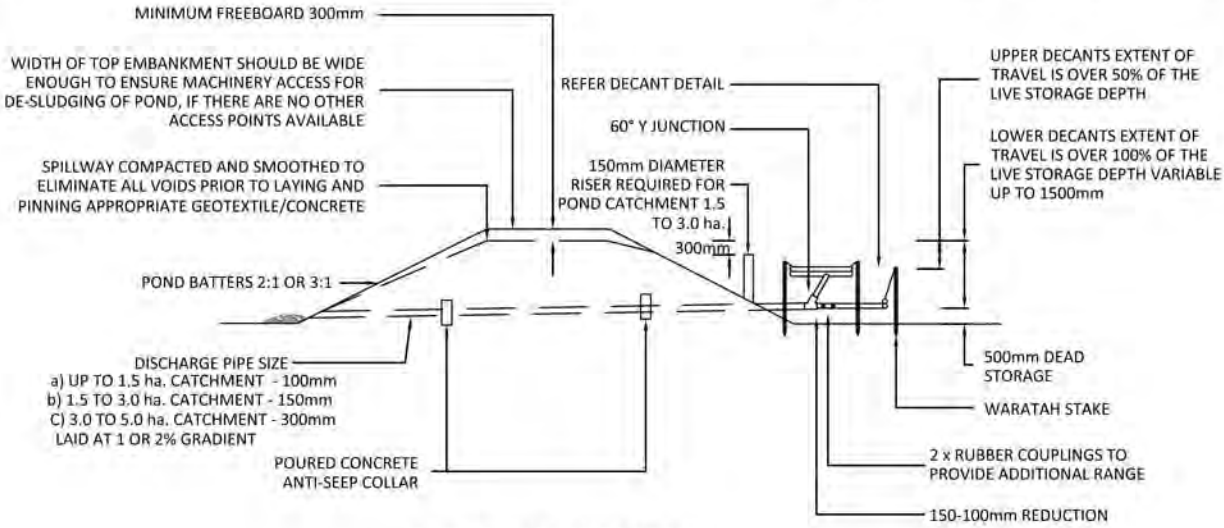
Issue/Description	Checked	Date	Designed:	Date	Scale:
A ISSUED FOR CONSENT	SS	30.07.18		27.07.18	NTS
			Drawn: MJW	27.07.18	(A3 Original)
			Checked: SS	30.07.18	
			Job No: W3150	Dwg No: 252	Rev: 01



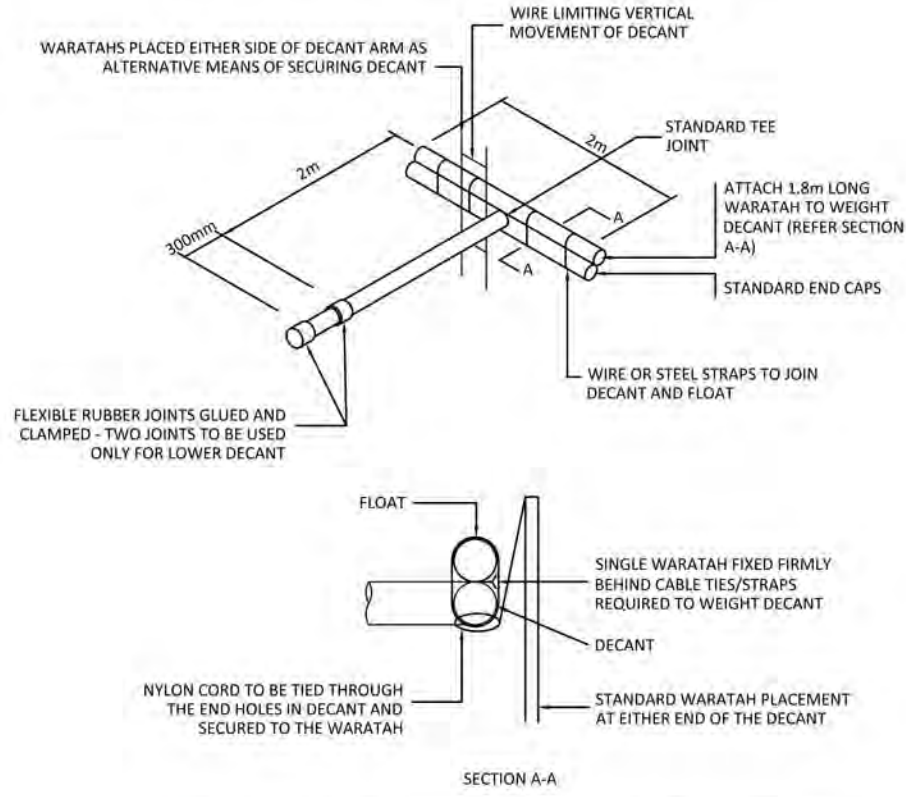
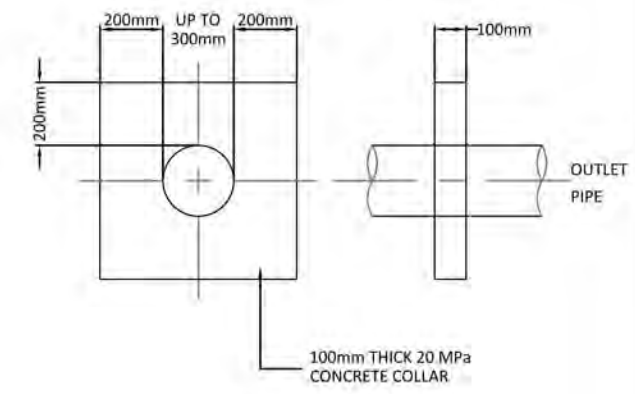
SEDIMENT RETENTION POND



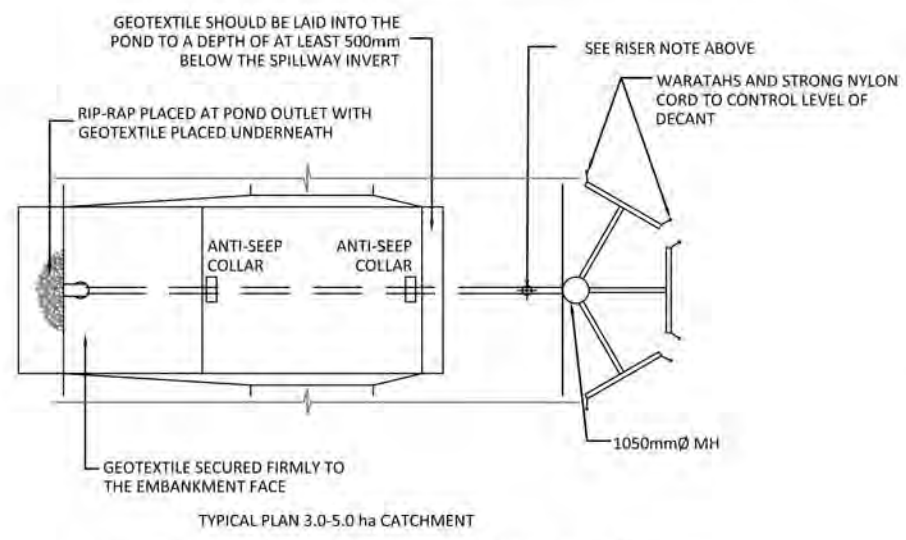
STORMWATER INLET PROTECTION - FILTER MEDIA DESIGN



TYPICAL CROSS SECTION 1.5 - 3.0 CATCHMENT

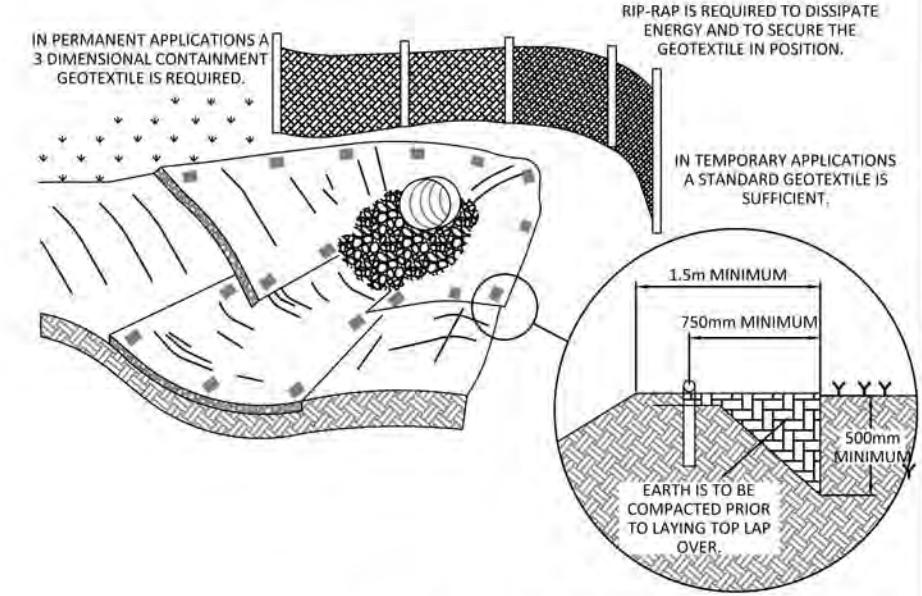


SEDIMENT RETENTION POND - DECANT DETAIL



SEDIMENT RETENTION POND EMBANKMENT

- NUMBER OF DECANTS FOR EACH POND SHALL BE AS FOLLOWS:
- i) UP TO 1.5ha CATCHMENT - 1 DECANT
 - ii) 1.5-3.0ha CATCHMENT - 2 DECANTS
 - iii) 3 TO 5 ha CATCHMENT - 3 DECANTS-CONNECTED TO 1050Ø MH



GEOTEXTILE AT CULVERT OUTLET

INFORMATION FROM AUCKLAND REGIONAL COUNCIL TP10-EROSION & SEDIMENT CONTROL

FOR CONSENT



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A: 103 Market Street, Te Awamutu
P: 07 871 6144

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**EROSION & SEDIMENT CONTROL
TYPICAL STANDARD DETAILS
SHEET 3**

Issue/Description	Checked	Date	Designed:	Date	Scale:
01 ISSUED FOR CONSENT	SS	30.07.18		27.07.18	NTS
			Drawn: MJW	27.07.18	
			Checked: SS	30.07.18	(A3 Original)
			Job No: W3150	Dwg No: 253	Rev: 01

EARTHWORKS NOTES:

1. ALL WORKS TO COMPLY WITH THE RELEVANT LOCAL AUTHORITY STANDARDS.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE OPERATIONAL PRIOR TO ANY WORKS COMMENCING AND SHALL BE INSTALLED IN ACCORDANCE WITH AC GD005 'EROSION AND SEDIMENT CONTROL GUIDE FOR LAND DISTURBING ACTIVITIES'.
3. REFER TO EARTHWORKS SPECIFICATION FOR EARTHFILL REQUIREMENTS AND STANDARDS OF COMPACTION. ALL EARTHWORKS TO BE UNDERTAKEN IN ACCORDANCE WITH GEOTECHNICAL INVESTIGATION REPORT, CONTRACTOR TO VIEW THE REPORT TO INFORM THEMSELVES.
4. ALL MATERIAL FROM GULLIES DEEMED BY THE ENGINEER TO BE UNSUITABLE SHALL BE EXCAVATED.
5. TOPSOIL AND OTHER RELATIVELY DRY ORGANIC MATERIAL THAT CAN BE STRIPPED FROM STEEP AREAS/GULLIES USING EXCAVATOR/TRACTOR AND SCOOP SHALL BE CLASSIFIED AS SUBSOIL/TOPSOIL STRIPPING.
6. ALL GULLIES SHALL BE SURVEYED AFTER CLEARING OPERATIONS (PRIOR TO REMOVAL OF UNSUITABLE) AND THEN AGAIN AFTER UNSUITABLE REMOVAL FOR VOLUMES.
7. UNSUITABLE MATERIAL SHALL BE CLASSIFIED AS SOILS DEEMED BY THE ENGINEER TO HAVE EXCESSIVE NATURAL WATER CONTENT AND/OR ORGANIC CONTENT REQUIRING MULTIPLE HANDLING, DRYING/CONDITIONING AND STOCKPILING/RESPREADING AS DIRECTED.
8. THE LOCATIONS OF ALL STOCKPILES ARE WHOLLY THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE LOCATED CLEAR OF ALL EARTHWORKS OPERATIONS AND AWAY FROM GEOTECHNICALY UNSTABLE LAND. NO PAYMENT SHALL BE MADE FOR RELOCATION OF ANY STOCKPILES THAT HAVE BEEN FOUND TO HAVE BEEN PLACED IN THE INCORRECT LOCATION.
9. ALL SETOUT TO BE UNDERTAKEN BY THE CONTRACTOR.
10. IT IS THE CONTRACTORS RESPONSIBILITY FOR HEALTH & SAFETY & SECURITY ON SITE, APPROPRIATE FENCING AND SIGNAGE SHALL BE ERECTED AND MAINTAINED AT ALL TIMES TO KEEP THE GENERAL PUBLIC OFF SITE.
11. FINAL QUANTITIES AND EXTENT OF EARTHWORKS TO BE DETERMINED BY THE ENGINEER.

EARTHWORKS LEGEND:

85 — PROPOSED CONTOURS - MAJOR (1.0)



1
DP 64805

2
DP 411744

PRELIMINARY



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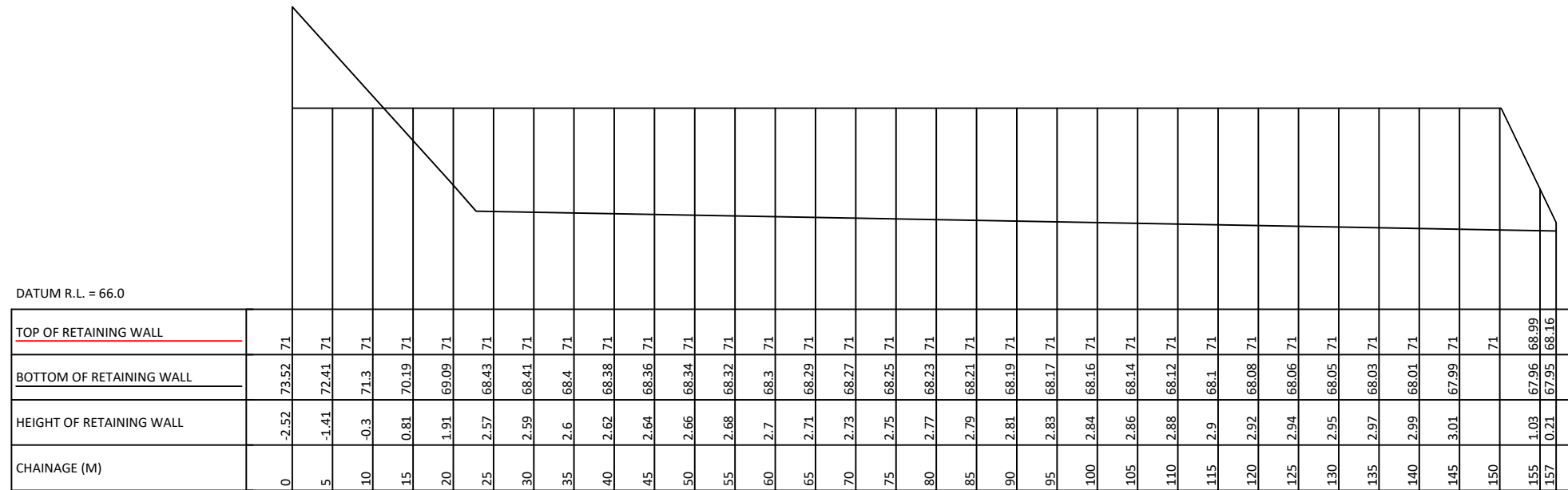
**WAREHOUSE AND HEAD OFFICE
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**PROPOSED RETAINING WALLS
LAYOUT PLAN**

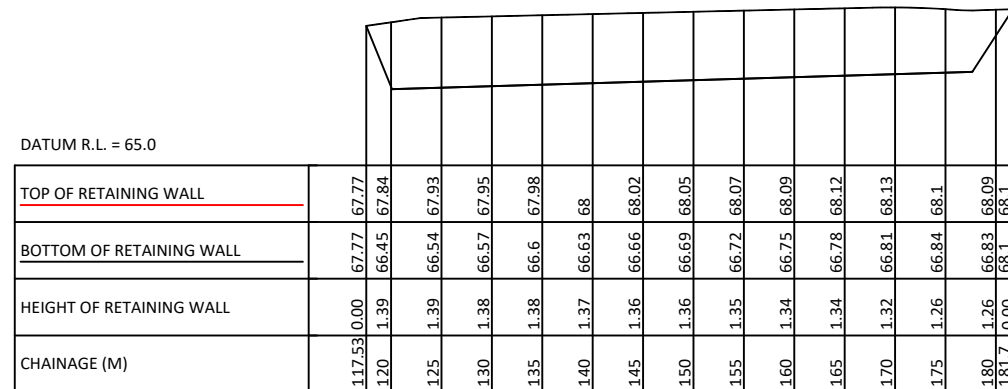
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				MJW	30.07.18	
				SS	19.07.18	(A3 Original)
				Job No:	Dwg No:	Rev:
				W3150	280	01

EARTHWORKS NOTES:

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10. FINAL QUANTITIES AND EXTENT OF EARTHWORKS TO BE DETERMINED BY THE ENGINEER.



RETAINING WALL LONGITUDINAL SECTION - WALL 2
HORIZONTAL SCALE 1:750
VERTICAL SCALE 1:150



RETAINING WALL LONGITUDINAL SECTION - WALL 1
HORIZONTAL SCALE 1:750
VERTICAL SCALE 1:150

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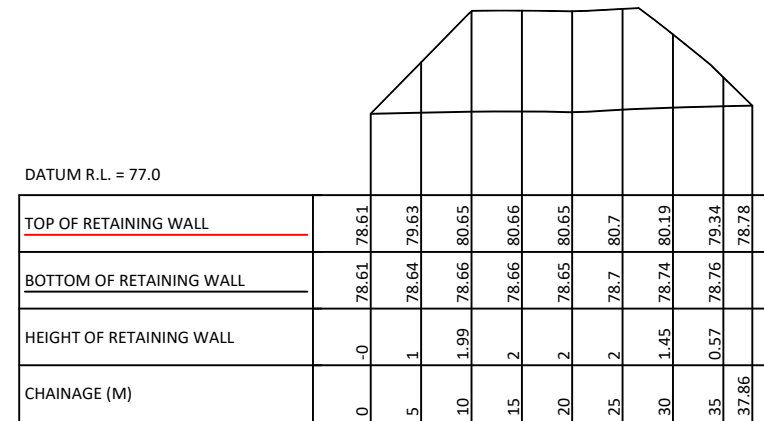
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**PROPOSED RETAINING WALL
LONGSECTIONS
SHEET 1**

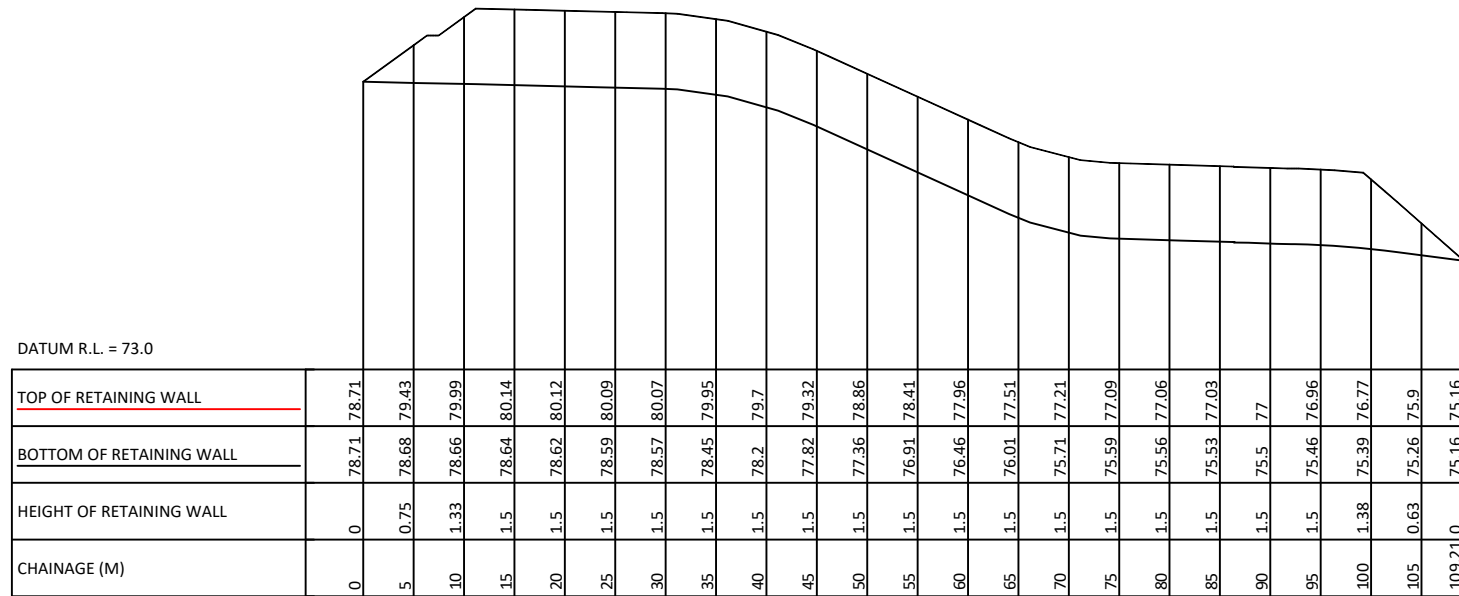
Issue	Description	Checked	Date	Designed:	Date	Scale:
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				MJW	19.07.18	(A3 Original)
				SS	30.07.18	
			Job No:	Dwg No:	Rev:	
			W3150	281	01	

EARTHWORKS NOTES:

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11. FINAL QUANTITIES AND EXTENT OF EARTHWORKS TO BE DETERMINED BY THE ENGINEER.



RETAINING WALL LONGITUDINAL SECTION - WALL 4
 HORIZONTAL SCALE 1:750
 VERTICAL SCALE 1:150



RETAINING WALL LONGITUDINAL SECTION - WALL 3
 HORIZONTAL SCALE 1:750
 VERTICAL SCALE 1:150

FOR CONSENT



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PROPOSED RETAINING WALL
LONGSECTIONS
SHEET 2

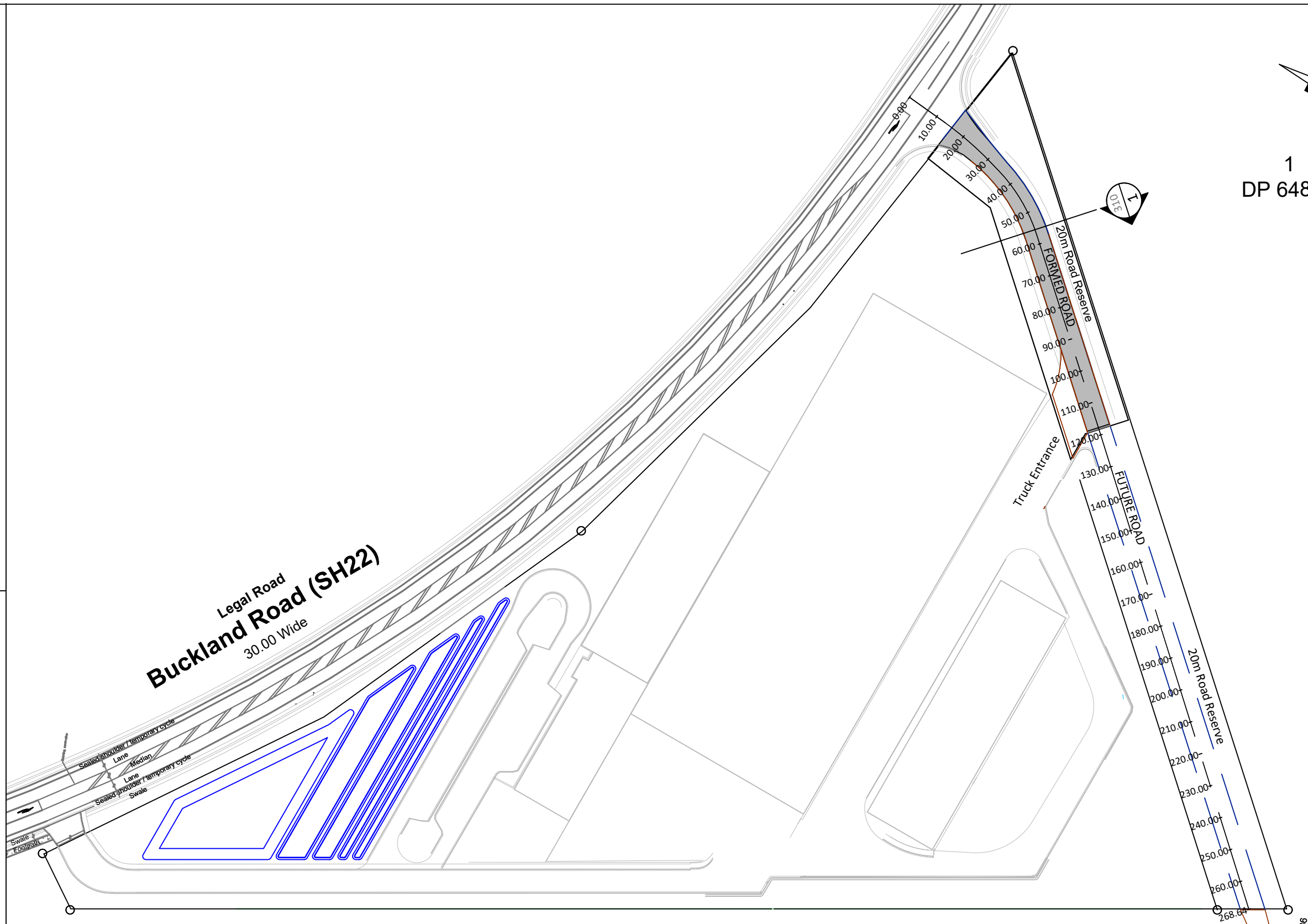
Issue	Description	Checked	Date	Date	Scale:
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	Designed: MJW			19.07.18	(A3 Original)
	Drawn: MJW				
	Checked: SS				
Job No:		Dwg No:	Rev:		
W3150		282	01		

ROADING AND PAVEMENT NOTES:

1. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH AUCKLAND COUNCIL AND AUCKLAND TRANSPORT (ATCOP) ENGINEERING STANDARDS.
2. ALL EXTRUDED/INSITU CONCRETE TO BE MIN. 20 MPa STRENGTH AT 28 DAYS.
3. ALL UNDERCHANNEL DRAINS TO BE LAID IN TNZ F/2 DRAINAGE MATERIAL AND HAVE FREE-FLOWING OUTLET TO NEAREST DOWNSTREAM CATCHPIT.
4. ALL FOOTPATHS TO COMPRISE 100mm THICK 20MPa BROOM FINISH CONCRETE ON MIN. 100mm COMPACTED DEPTH GAP40 BASECOURSE.
5. ALL REINFORCING SHALL BE PLACED ON APPROVED CHAIRS AND IS TO BE PLACED CENTRALLY OR AS PER DESIGN PLANS.
6. ALL FOOTPATH SAWCUTS ARE TO COINCIDE WITH KERB SAWCUTS AT 3m CRS TYP. UNLESS NOTED OTHERWISE.
7. PAVEMENT DESIGN IS PROVISIONAL ONLY AND INSITU SUBGRADE STRENGTH SHALL BE CONFIRMED VIA SCALA PENETROMETER TESTING FOLLOWING GULLETING OF THE CARRIAGEWAYS TO CONFIRM FINAL PAVEMENT THICKNESS AND ANY SUBGRADE IMPROVEMENT WORKS i.e. UNDERCUTTING OR STABILISATION. THE ENGINEER IS TO INSPECT, TEST AND APPROVE ALL SUBGRADES PRIOR TO AGGREGATE PLACEMENT.
8. ALL SUBGRADES SHALL BE TRIMMED WITHIN +/- 10mm TOLERANCE TO DESIGN LEVELS AND SHALL BE STRUNG AND APPROVED PRIOR TO METAL COURSE PLACEMENT.

LEGEND:

- 15.0 — PROPOSED CONTOURS - MAJOR (1.0m)
- PROPOSED CHIPSEAL ROAD



1
DP 64805

2
DP 411744

FOR CONSENT



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A: 103 Market Street, Te Awamutu
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FRANKLIN PLUMBING
301 BUCKLAND ROAD, PUKEKOHE**

**PROPOSED ROADING PLAN
LAYOUT PLAN**

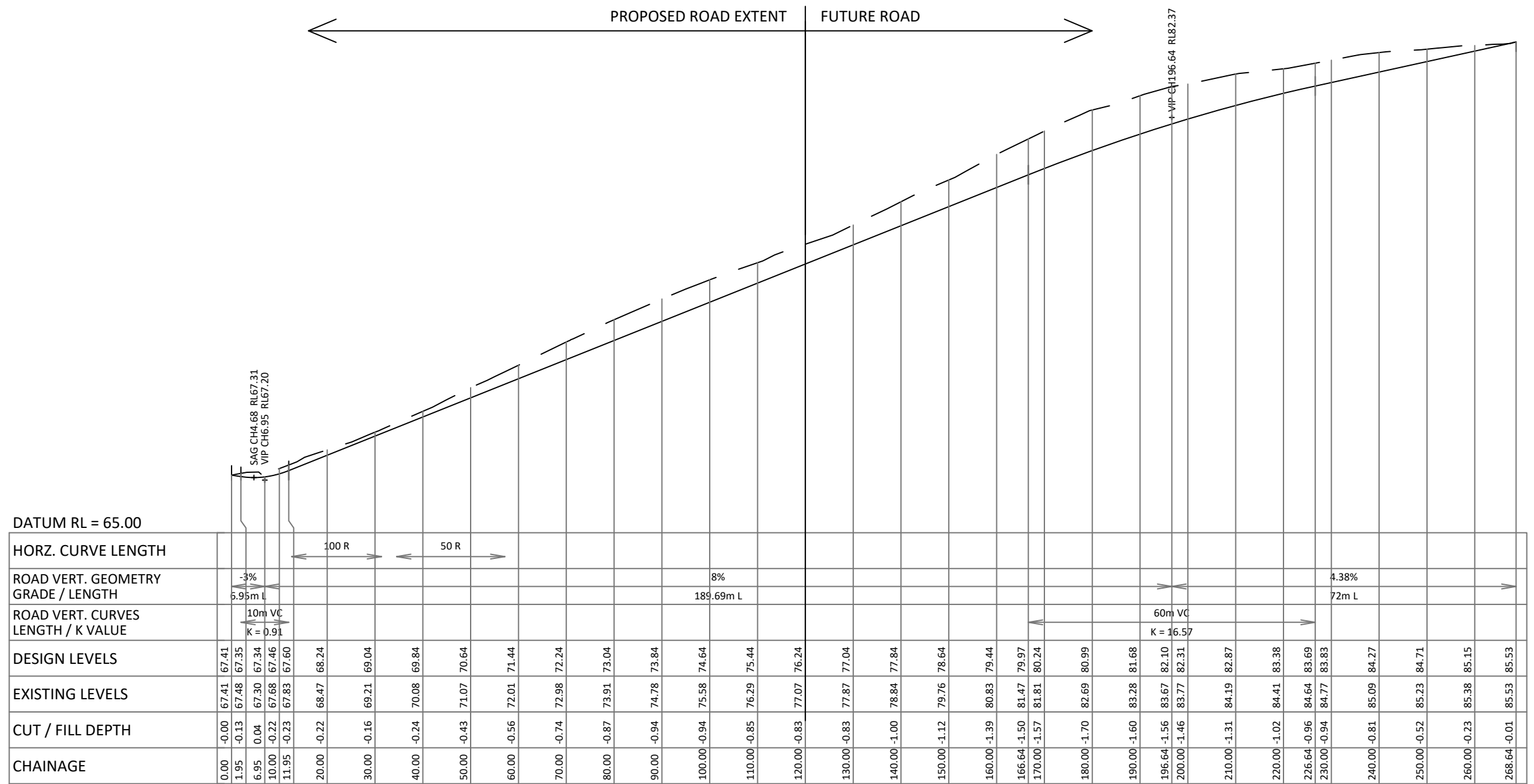
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				Checked: SS	30.07.18	
				Job No:	Dwg No:	Rev:
				W3150	300	01

ROADING AND PAVEMENT NOTES:

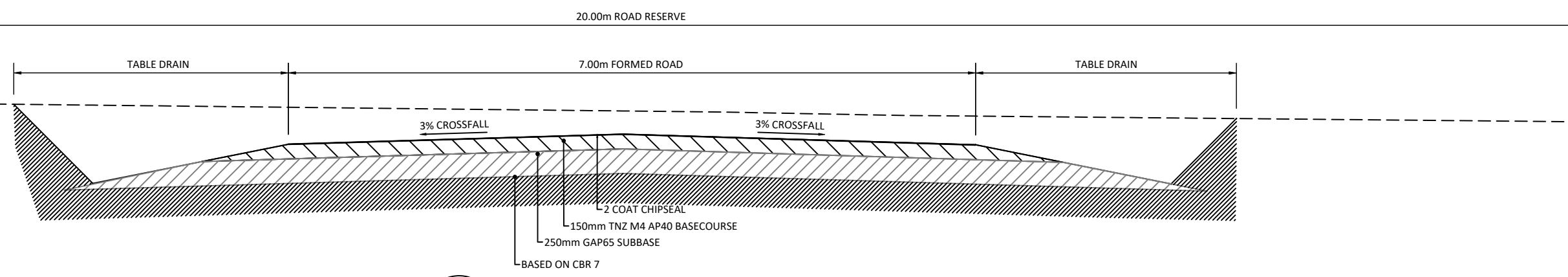
1. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH AUCKLAND COUNCIL AND AUCKLAND TRANSPORT (ATCOP) ENGINEERING STANDARDS.
2. ALL EXTRUDED/INSITU CONCRETE TO BE MIN. 20 MPa STRENGTH AT 28 DAYS.
3. ALL UNDERCHANNEL DRAINS TO BE LAID IN TNZ F/2 DRAINAGE MATERIAL AND HAVE FREE-FLOWING OUTLET TO NEAREST DOWNSTREAM CATCHPIT.
4. ALL FOOTPATHS TO COMPRISE 100mm THICK 20MPa BROOM FINISH CONCRETE ON MIN. 100mm COMPACTED DEPTH GAP40 BASECOURSE.
5. ALL REINFORCING SHALL BE PLACED ON APPROVED CHAIRS AND IS TO BE PLACED CENTRALLY OR AS PER DESIGN PLANS.
6. ALL FOOTPATH SAWCUTS ARE TO COINCIDE WITH KERB SAWCUTS AT 3m CRS TYP. UNLESS NOTED OTHERWISE.
7. PAVEMENT DESIGN IS PROVISIONAL ONLY AND INSITU SUBGRADE STRENGTH SHALL BE CONFIRMED VIA SCALA PENETROMETER TESTING FOLLOWING GULLETING OF THE CARRIAGEWAYS TO CONFIRM FINAL PAVEMENT THICKNESS AND ANY SUBGRADE IMPROVEMENT WORKS i.e. UNDERCUTTING OR STABILISATION. THE ENGINEER IS TO INSPECT, TEST AND APPROVE ALL SUBGRADES PRIOR TO AGGREGATE PLACEMENT.
8. ALL SUBGRADES SHALL BE TRIMMED WITHIN +/- 10mm TOLERANCE TO DESIGN LEVELS AND SHALL BE STRUNG AND APPROVED PRIOR TO METAL COURSE PLACEMENT.

LEGEND:

- EXISTING GROUND LEVEL
- PROPOSED GROUND LEVEL



1 ROAD 1 LONG SECTION
300 SCALE 1:500 (A3)



1 ROAD 1 CROSS SECTION 1
300 SCALE 1:50 (A3)

FOR CONSENT



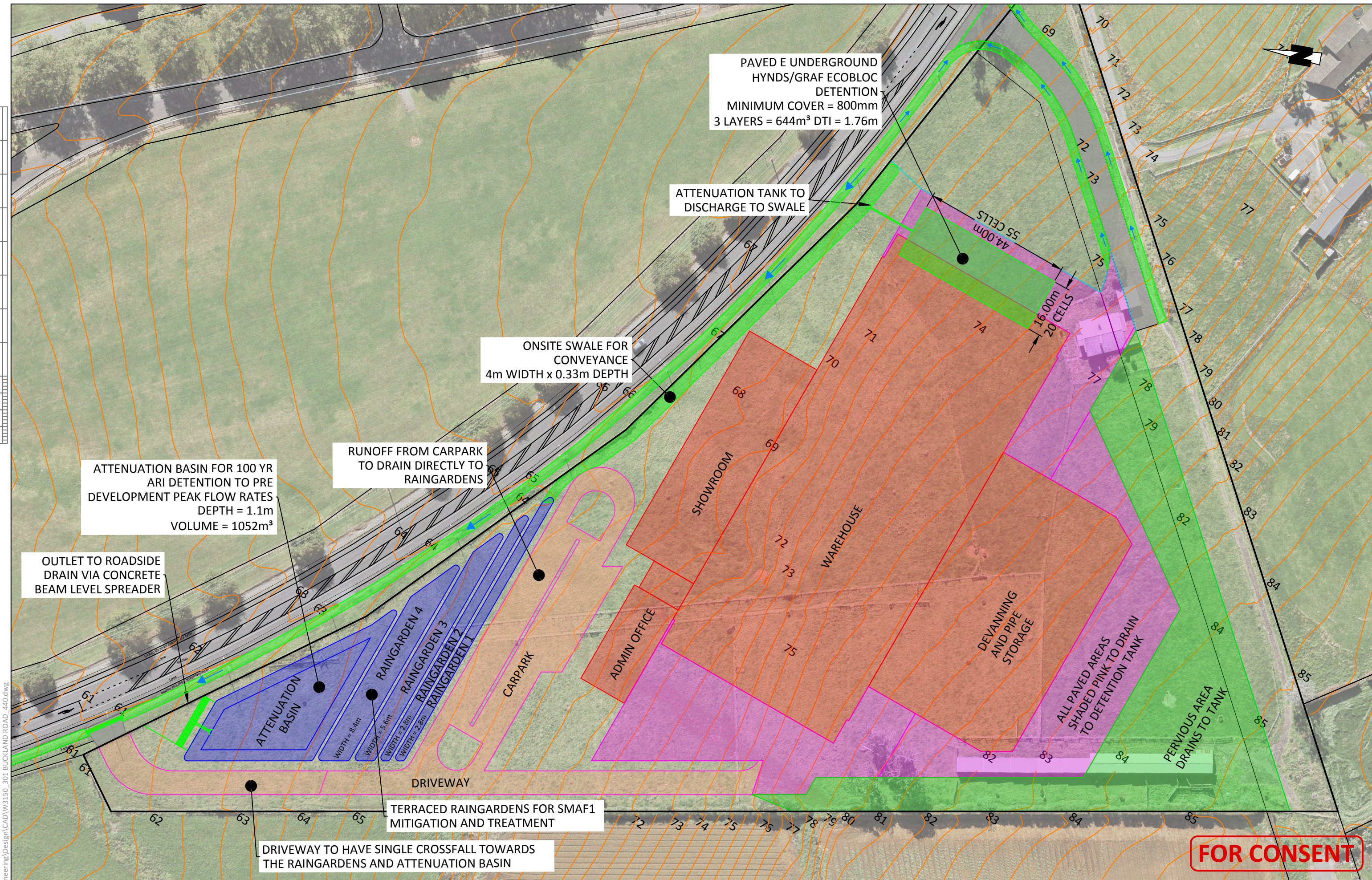
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WAREHOUSE AND HEAD OFFICE
FRANKLIN PLUMBING
301 BUCKLAND ROAD, PUKEKOHE

PROPOSED ROAD,
LONGSECTION
AND TYPICAL CROSS-SECTION

Issue	Description	Checked	Date	Designed	Date	Scale
01	ISSUED FOR CONSENT	SS	30.07.18	MJW	27.07.18	AS SHOWN
				MJW	27.07.18	(A3 Original)
				SS	30.07.18	

Job No: **W3150** Dwg No: **310** Rev: **01**



PAVED & UNDERGROUND
HYNDS/GRAF ECOBLOC
DETENTION
MINIMUM COVER = 800mm
3 LAYERS = 644m³ DTI = 1.76m

ATTENUATION TANK TO
DISCHARGE TO SWALE

ONSITE SWALE FOR
CONVEYANCE
4m WIDTH x 0.33m DEPTH

RUNOFF FROM CARPARK
TO DRAIN DIRECTLY TO
RAINGARDENS

ATTENUATION BASIN FOR 100 YR
ARI DETENTION TO PRE
DEVELOPMENT PEAK FLOW RATES
DEPTH = 1.1m
VOLUME = 1052m³

OUTLET TO ROADSIDE
DRAIN VIA CONCRETE
BEAM LEVEL SPREADER

TERRACED RAINGARDENS FOR SMAF1
MITIGATION AND TREATMENT

DRIVEWAY TO HAVE SINGLE CROSSFALL TOWARDS
THE RAINGARDENS AND ATTENUATION BASIN

FOR CONSENT

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**WAREHOUSE AND HEAD OFFICE
FRANKLIN PLUMBING
301 BUCKLAND ROAD, PUKEKOHE**

**STORMWATER
MANAGEMENT LAYOUT
SHEET 1 OF 3**

Issue	Description	Checked	Date	Designed	Date	Scale:
0	FOR RESOURCE CONSENT	SS	26.07.18	JR	26.07.18	1:1000
				JR	26.07.18	(A3 Original)
				SS	26.07.18	

Job No: **W3150** Dwg No: **440** Rev: **00**



EXISTING SWALE TO BE REFORMED TO MATCH DOWN STREAM CROSS SECTION (1.2m WIDE x 0.6m DEPTH)

PROPOSED SINGLE 300mmØ RCRRJ CULVERTS

PROPOSED ROAD AREA TO DISCHARGE TO NORTHERN BUCKLAND ROAD SWALE

PROPOSED ROADSIDE SWALES 2.4m WIDE x 0.3m DEPTH

FOR CONSENT

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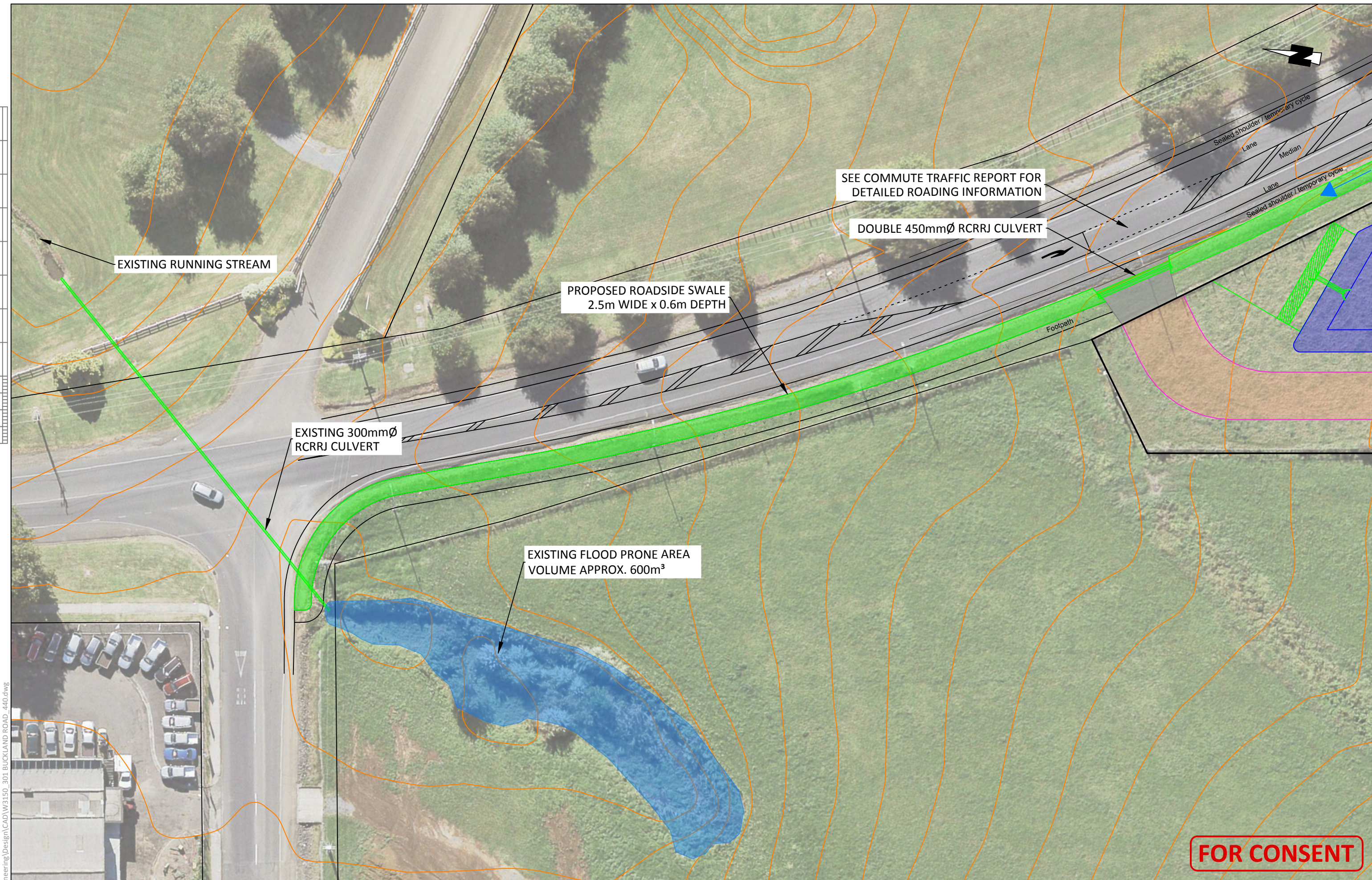
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**WAREHOUSE AND HEAD OFFICE
FRANKLIN PLUMBING
301 BUCKLAND ROAD, PUKEKOHE**

**STORMWATER
MANAGEMENT LAYOUT
SHEET 2 OF 3**

Issue	Description	Checked	Date	Designed	Date	Scale
0	FOR RESOURCE CONSENT	SS	26.07.18	JR	26.07.18	1:500
				JR	26.07.18	(A3 Original)
				SS	26.07.18	

Job No:	Dwg No:	Rev:
W3150	441	00



EXISTING RUNNING STREAM

SEE COMMUTE TRAFFIC REPORT FOR DETAILED ROADING INFORMATION

DOUBLE 450mmØ RCRRJ CULVERT

PROPOSED ROADSIDE SWALE
2.5m WIDE x 0.6m DEPTH

EXISTING 300mmØ
RCRRJ CULVERT

EXISTING FLOOD PRONE AREA
VOLUME APPROX. 600m³

FOR CONSENT

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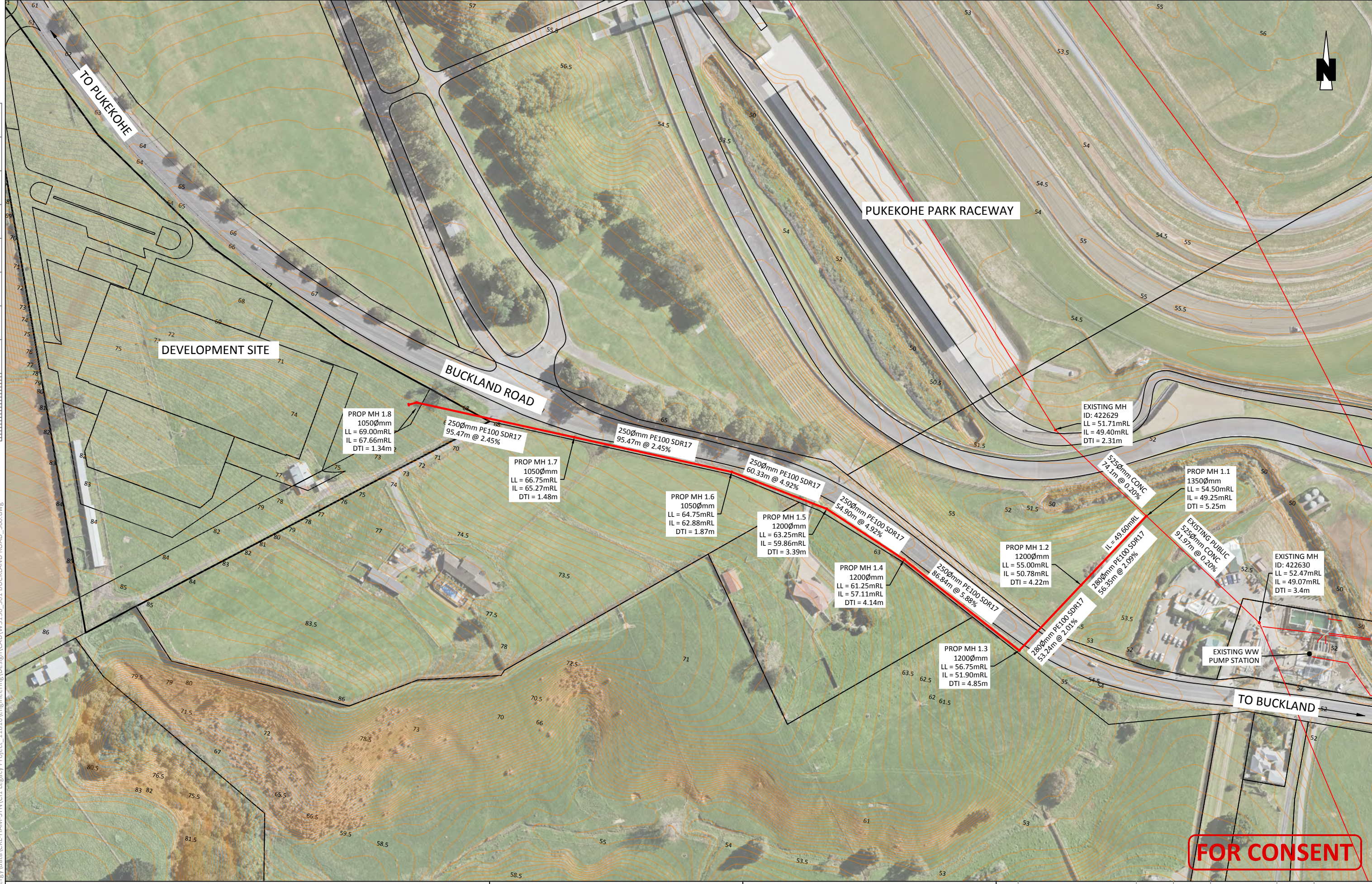


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**WAREHOUSE AND HEAD OFFICE
FRANKLIN PLUMBING
301 BUCKLAND ROAD, PUKEKOHE**

**STORMWATER
MANAGEMENT LAYOUT
SHEET 3 OF 3**

Issue	Description	Checked	Date	Designed:	Date	Scale:
0	FOR RESOURCE CONSENT	SS	26.07.18	JR	26.07.18	1:500
				Drawn: JR	26.07.18	(A3 Original)
				Checked: SS	26.07.18	
				Job No:	Dwg No:	Rev:
				W3150	442	00



FOR CONSENT

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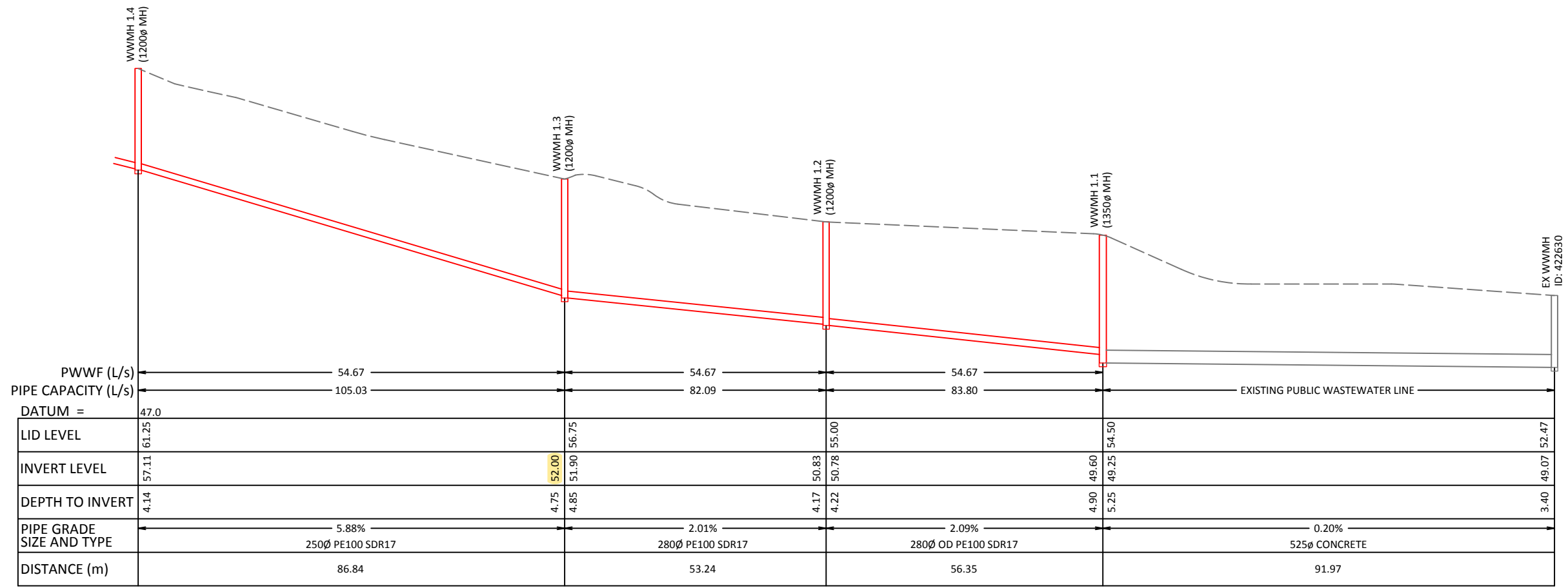
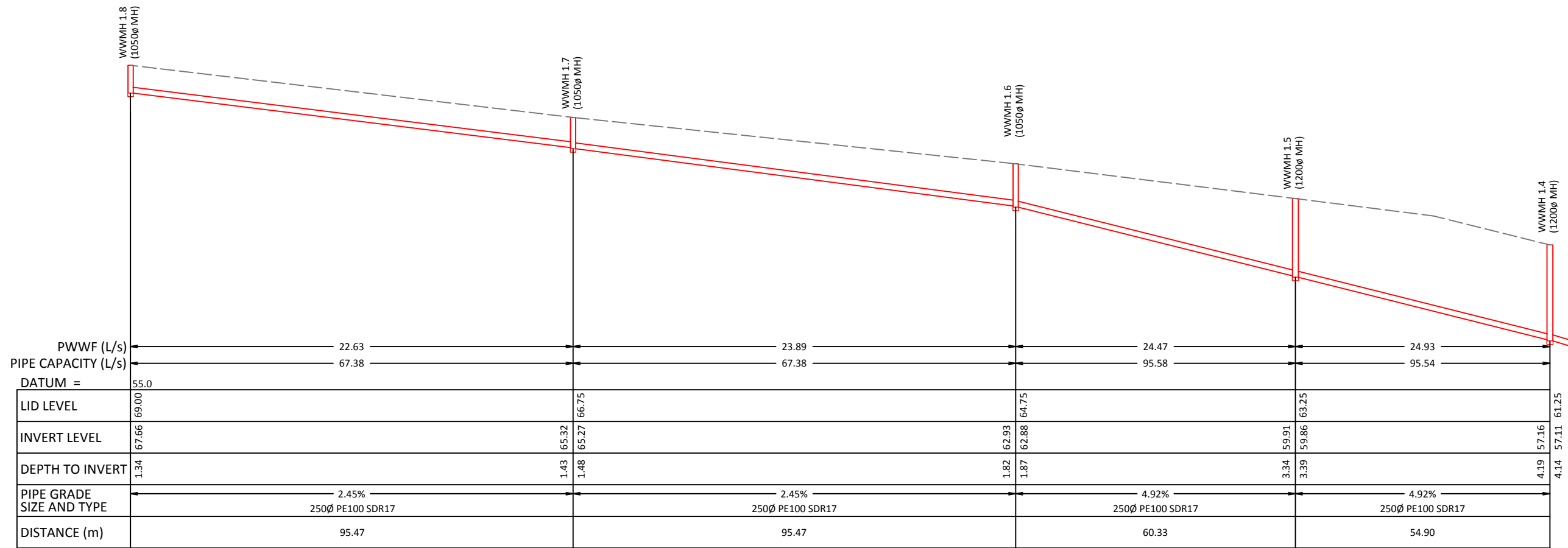
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WAREHOUSE AND HEAD OFFICE
FRANKLIN PLUMBING
301 BUCKLAND ROAD, PUKEKOHE

PUBLIC WASTEWATER
EXTENTION

Issue	Description	Checked	Date	Designed	Date	Scale:
0	FOR RESOURCE CONSENT	SS	26.07.18	JR	26.07.18	1:2000 (A3 Original)
1	S92 - UPDATED PIPE SIZES			JR	26.07.18	
				Checked:	SS	26.07.18
		Job No:	W3150	Dwg No:	500	Rev:
					1	



FOR CONSENT

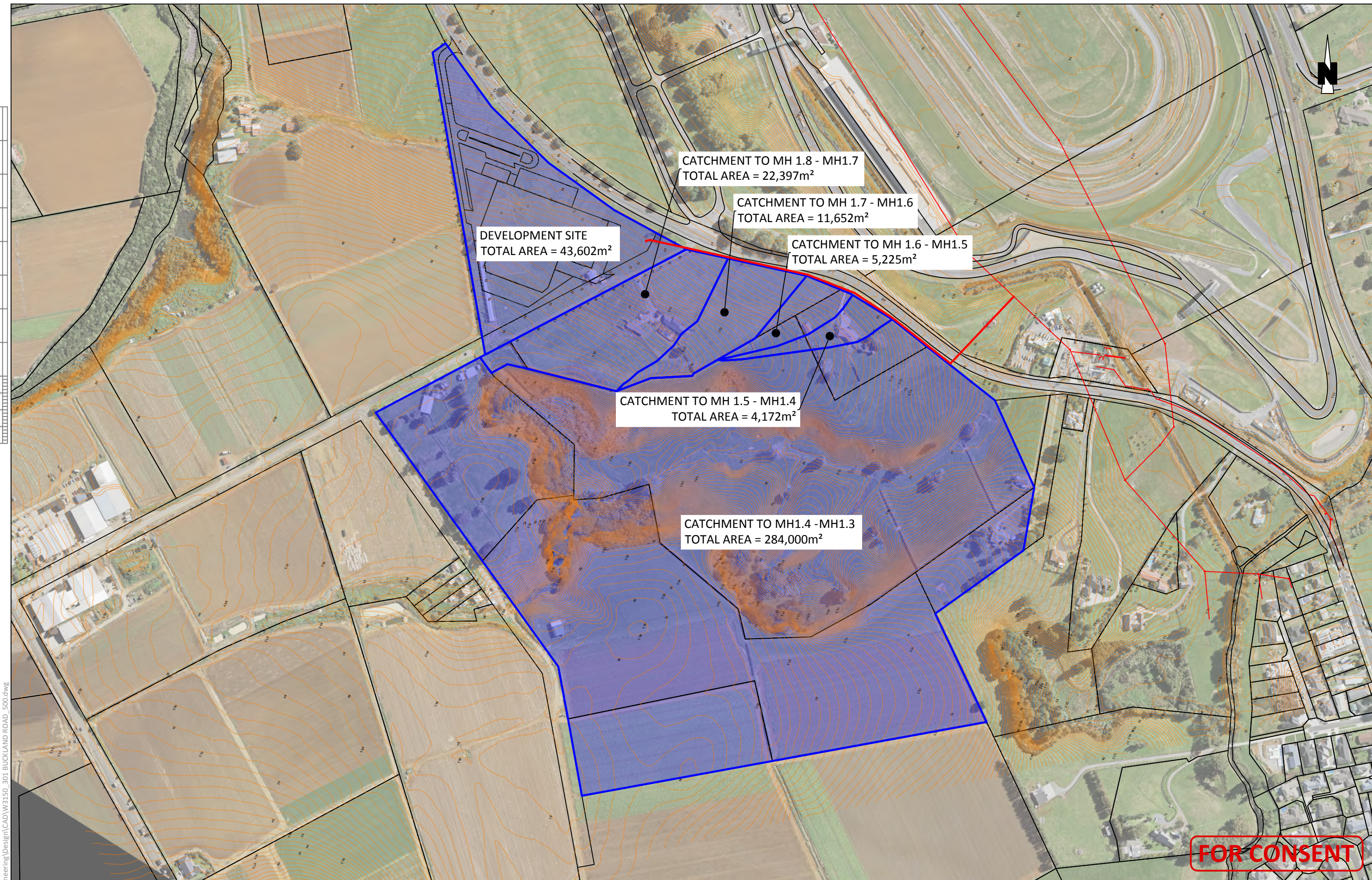


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**WAREHOUSE AND HEAD OFFICE
 FRANKLIN PLUMBING
 301 BUCKLAND ROAD, PUKEKOHE**

**DRAINAGE LONGSECTIONS
 WASTEWATER**

Issue	Description	Checked	Date	Designed	Date	Scale
0	FOR RESOURCE CONSENT	SS	26.07.18	JR	26.07.18	1:1000H 1:200V
1	S92 - UPDATED PIPE SIZES	AD	10.06.19	JR	26.07.18	(A3 Original)
				Checked: SS	26.07.18	
				Job No:	Dwg No:	Rev:
				W3150	510	1



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WAREHOUSE AND HEAD OFFICE
FRANKLIN PLUMBING
301 BUCKLAND ROAD, PUKEKOHE

PUBLIC WASTEWATER
CATCHMENTS

Issue	Description	Checked	Date	Designed:	Date	Scale:
0	FOR RESOURCE CONSENT	SS	26.07.18	JR	26.07.18	1:4000
				Drawn: JR	26.07.18	(A3 Original)
				Checked: SS	26.07.18	
				Job No:	Dwg No:	Rev:
				W3150	520	00