Waitakere City Council Feedback and Comments on: NRC Concept Design Report For NAL Stage 2 Duplication (New Lynn to Henderson) October 2004.

Thank you for the opportunity to comment on the draft concept designs for Stage 2 double tracking. Please note, these are preliminary officer comments only. Officers wish to report the concept design work to Council as soon as possible, and feedback from this process will also be provided to the ARC. Given the identified need to lodge a funding application in December 2004, officers provide preliminary comment to guide the funding application.

General Comments

- Around stations, there is a need to take account of rail related developments which fall outside the rail corridor, including bus/taxi/drop-off areas and park and rides. There needs to be a regionally agreed process for ensuring that planning for these and rail is integrated, as is any applications for funding.
- WCC welcomes the thought put into the walk/cycleway. This is a critical link in the regional walking and cycling network as developed by the ARC with input from TLAs. As such, WCC requests that the walkway/cycleway be viewed as a critical component of implementing both the ARCs and WCC's strategic direction. Therefore, I have requested that Anna Percy contact you to further discuss these plans.

The Schematic plan:

- Waitakere City Council request that the project commence to the west of the Titirangi Road overbridge on the following basis:-
    - Concerns have been raised by Council's roading engineers regarding the width of the Titirangi Road bridge and a possible need for 4 lanes on Titirangi Road.
    - To ensure that no rail options for New Lynn, including undergrounding, are foreclosed prior to Stage 3 concept design work.
    -
- At Sunnyvale station the proposed cycle track loops under the road bridge and back to the opposite side of the road to cross the bridge, this is not desirable. There are a couple of options open that WCC are currently investigating:
  1. To use the proposed Park and Ride development to accommodate part of the cycle track up to the bridge. At present there is a project looking at providing a Park and Ride facility on the Auckland City side of the bridge, we are proposing that we look at using the abutting rail side portion of the Park & Ride development to connect the cycle way to road and bringing cyclist back up to the road in line with traffic direction.
  2 Bring the cycle track back to the other side rail track by acquiring the land that is currently preventing the track from continuing on the same side through to Henderson. (Ref Addendum 8 para 5.1.5).
  Discussion on these two options would be appreciated.
- Shows Henderson as side platforms

Executive Summary:

- There are concerns over the possible delays in starting the DT which ultimately will have an effect on the start time of Henderson Station upgrade and the connectivity for the out-of-corridor cycleway project.

Section 2.2:

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- A Communications Strategy should be included.

Section 2.3:

- Potentially contaminated material. Waitakere City Council expresses a concern with regard to this disposal site, particularly given its close proximity to Paremuka. Waitakere City Council requests feedback from the ARC with regard to any potential water issues and how these are being addressed.

Section 2.4:

- Fencing and security, fencing for the cycleway should be a minimum swimming pool type fencing.
- Landscaping – Council supports the inclusion of landscaping around stations and key public areas, particularly road and pedestrian crossings. Council will further investigate this issue, particularly with regard to graffiti and the rail corridor as a weeds corridor and will provide additional feedback. WCC will require landscaping to be addressed as part of the OPW.

Section 2.5:

- This section doesn't address pedestrian handling as part of level crossings. This is particularly important at Fruitvale where the crossing is close to a school, and frequently used by its pupils. There is a crossing identified north of Henderson, the Mt Lebanon crossing, that needs to be considered in the report.

Section 2.6:

- Titirangi Bridge – please exclude from Stage 2 as detailed above
- Existing bridge abutments – please provide WCC with an outline of this report, particularly if it is identifying any issues around bridges at road/rail crossings. Should any bridges require replacing, Council would investigate the need for widening roads to allow for footpaths, cycle ways and additional road lanes where appropriate.

Section 2.7:

- Henderson
  - Lifts – These are required from a PT perspective to provide disabled access to the station and should therefore be funded as part of the double tracking project.

- Glen Eden
  - The proposal to cut 1.7 m from the Glen Eden platform will require the station canopy to be cut back and will result in a platform width (in front of the heritage building) below the ARC minimum standard. WCC requests to work with the ARC and other rail parties in considering options for Glen Eden, including removal of the centre fencing, moving of the building, acceptance of the width, and other options. This is an area where there is likely to be strong political interest.
  - There is a need to develop a regionally agreed policy on the design of shelters adjacent heritage stations.

Section 2.8:

- Preliminary received by WCC officers is consistent with the planning advice included in the cycleway section. However WCC officers are seeking further advice to confirm (or otherwise) the need for public notification of the walk/cycleway.

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- The development of a walk/cycleway along the rail corridor is a key component of Council and ARC achieving regionally agreed strategic goals for walking and cycling. Council recognises that large amount of work required prior to implementation of this project and outlines below the processes currently or about to commence:-
    - Confirm planning advice - current
    - Public consultation – awaiting NZRC feedback on any issues relating to this, particularly around concerns about double tracking being caught up in any community concerns.
    - Further work on walk/cycleway – including connections, off road links and other opportunities to implement in identified gaps e.g. land purchases.
    - Funding application – to Transfund Dec 04
- It is WCC's desire to have the above works completed in time for implementation alongside the double tracking process, however there could be time delays around consenting issues. WCC requests that any major earthworks required for a walk/cycleway be implemented alongside the double tracking works. This would be prudent given that these enabling works would allow for future access along the corridor which could benefit rail as well as the walk/cycleway. This has been discussed briefly with NZRC and ARTNL, who indicated support for further investigating this option.

Other comments include:-

- The cycleway could be shared with all types of mobility and as a means as connectivity between areas. The proposed cycleway route could be used as for delivering services such as fibre optic cables.
- Consideration should be given to the surface construction of the cycleway for example it could be made from permeable material for storm water drainage.
- Titirangi Road under bridge section, at present it is a bottleneck for roads and is a potential danger point for pedestrians and cyclist. There are several options, WCC to investigate the possibility of widening the bridge, providing signalised crossing, refuges in the centre of the road, providing an additional cycle/pedestrian bridge, etc. this area needs further consideration and development. Council requests that stage 2 commences west of Titirangi Road.

General observations/requests:

- WCC's Consents department have requested that all parties work closely together prior to any applications being submitted to effect speedy decisions and to mitigate any unnecessary surprises. Included in these documents would be Construction Management Plans, Outline Plans and Conditions, Outline Plan for Landscaping, resource consents, Contamination Reports etc. Earthworks Plans would be required end of January for early approval.
- A request to NZRC has been made to identify all unauthorised crossing.
- Public meetings and consultation required around public boundaries.
- Pedestrian over bridges: should consider having a wheel groove adjacent steps in any new bridges to allow cycle usage.
- Landscaping could be co-ordinated with Engineers with Art Projects.
- Any consultation should include Iwi.
- Signage for cycle way, who will provide budget for this?

Addendum

1 **Planning & Resource Management Issues** – no comments at this moment in time.

2 **Project Management And Control**– no comments at this moment in time.

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3 **Ground Conditions & Civil Works**– no comments at this moment in time.

4 **Alignment and Track Design:** – no comments at this moment in time.

5 **Signalling Proposal and Analysis**– no comments at this moment in time.

6 **Bridging Issues**– no comments at this moment in time.

7 **Station, Platforms, Signs**– costings included for stations are those supplied by ARTNL and do not specifically address how NZRC has altered these to arrive at their costings.

8 **Cycleway Proposed**– See attached review.

9 **Level Crossings Study** - This is being reviewed by Council's Transport Assets Team.

10 **Risk Management Report:** WCC would be happy to assist in anyway to help mitigate some of the identified risks due to Council processes, and would appreciate being involved in any further risk discussions.

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Proposed Rail Corridor Cycleway – New Lynn to Henderson

Preliminary feedback from Waitakere staff, please note not all issues of concern are included in this feedback.

8 November, 2004

Compiled by Rachel Sander, Project Manager - Transport Projects

Generally

- 2.5 – 3.0m width is good. 3.0m width is the preferred option if at all technically possible. This is a major regional commuter route. It is likely to also become a significant pedestrian route. Pinch points will provide difficulty and conflict between cyclists and pedestrians, and need to be avoided where technically feasible.
- Guidelines for facilities – Austroads Part 13 – Pedestrians – could be replaced with the LTSA Pedestrian Network & Facilities guide once finalised & referenced prior to it being finalised
- Increasing aged population needs to be considered during design – particularly for access points to the route, crossing facilities for the rail-line and road intersections. Gradients need to be suitable for mobility scooters at these crossings
- Cyclists crossing rail lines at grade. This is a large hazard for cyclists.
- Consideration needs to be given to cycle & pedestrian linkages from the rail corridor/stations to town centres & key community facilities/parks.

Design Guidelines

- Guidelines for facilities – Austroads Part 13 – Pedestrians – could be replaced with the LTSA Pedestrian Network & Facilities guide once finalised & referenced prior to it being finalised.
- Also, add Transit New Zealand Cycling Design Guide (in draft form at present).
- 4.4.5 Sight Distances
  This will depend on ..." vegetation and landscaping. Avoid planting trees and shrubs that will reduce sight distances if not kept trimmed.
- 4.4.6 Crossfall
  Presume 1% comes from the Pedestrian Guidelines. Auckland City and Christchurch City have adopted 3% as a standard. (Christchurch construction standards may be found at http://www.ccc.govt.nz/doingbusiness/CSS/CSSPart6.pdf
  See drawings SD 607 & SD 608)
- Austroads 14 has 2% to 4% with 5% cross fall for unsealed paths. (6.3.8)
  1% maximum nominal cross fall might be too small to avoid puddles. This needs further investigation. To avoid puddles, the nominal cross fall needs to exceed variabilities in surface level resulting from choice of paving material and practicalities of workmanship.

ROUTE SPECIFIC FEEDBACK - preliminary

New Lynn – Titrangi Road

As per Glenda Lock, the lack of decisions made to date on the exact alignment and grade of the New Lynn station will have an impact on the town centre development and planning. This in turn will impact the cycle route through New Lynn into Auckland City – this has not yet been determined.

- If the route does in future follow the railway across Titirangi Road there will be considerable difficulties for pedestrians and cyclists if the route has an at-grade

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crossing. Waitakere engineering and strategy staff have great difficulty in seeing how this is going to function safely and effectively.

- Titirangi Road at this crossing point is a busy traffic area – at the bottom of a dip.
- The sight lines for crossing the road in this vicinity are constrained by the support columns of the rail bridge.
- Evening peak traffic queues through under the rail bridge, resulting in an unsafe situation for crossing the road as cyclists and pedestrians would emerge from between the stopped vehicles.
- Providing a centre refuge would have a flow on effect of increasing the required road width under the existing rail bridge.
- A signalised crossing would provide greater security for pedestrians & cyclists, but will still provide vehicle conflict and would considerable inconvenience route users – hence they are likely to try and cross the road using the rail bridge – creating a significant safety hazard.
- A cycle/pedestrian bridge is the preferred option. This would keep pedestrians and cyclists out of the vehicle zone altogether.
- Waitakere realises that the cost of an additional bridge may be substantial due to the need to widen the rail embankment or build board walks on the embankment to approach the bridge. However, Waitakere would like to see this option re-considered and costed.

Fruitvale Station / Mason Park

- Drawing 4 - 21, Fruitvale Station/Mason Park: there appears to be some encroachment into the reserve. This could be a complicated matter. Waitakere had some consultation on this in the past (with respect to the station relocation etc) and the community were opposed to some of the concepts.
- Further to this there are also some complicated land ownerships of Mason Park as well - some Council, some DoC owned, some held for rail purposes (which may make the encroachment easier). This will need to be clarified.

Drawing 7 or 21

- should there be a short link to Malam Street? It looks like it is only a few metres away.

. Glen Eden on road section – Brandon Pl – Clayburn Rd – Waikumete Road

- How much land taking would be required to stay on the rail corridor edge between Brandon Road and Glenview?
- The Brandon Road section is a significant deviation from the direct route, and the use of Clayburn would require some modification of the existing traffic chicanes to provide a kerbside bypass for cyclists.
- Can the cycle route return to the rail corridor at Glenview or is it necessary to use Waikumete Road?
- Waikumete Rd is a low traffic road but the level of parking in the road is not particularly cycle friendly.
- Also, if exploration determines the above options to be unfeasible and the route must be diverted - could pedestrian access still be retained to the station (1.5m path)? Provide signs to divert cyclists. Part of the need for the rail trail is to increase the access/ped shed of each station.

Back of Waikumete Cemetery

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- There is a section of cycleway that strays from alongside the rail alignment by some 15-20 metres along the area at the back of the cemetery.
- This area is probably the least safe and secure part of the route having no houses nearby, and therefore to provide at least some level of surveillance it is desirable to keep the cycleway close to the rail in this area.

Between Sunnyvale and Railside

- Could the cycleway stay on the eastern side of the rail corridor if land was acquired at 192 Railside Ave?
- This is highly desirable as it allows the elimination of the messy spiral to cross the rail at Seymour Road and re-crossing the rail at grade at Bruce McLaren Road. Some sort of over/underpass would still be required at the Oratia Stream Bridge to provide a connection through to Aetna Place.

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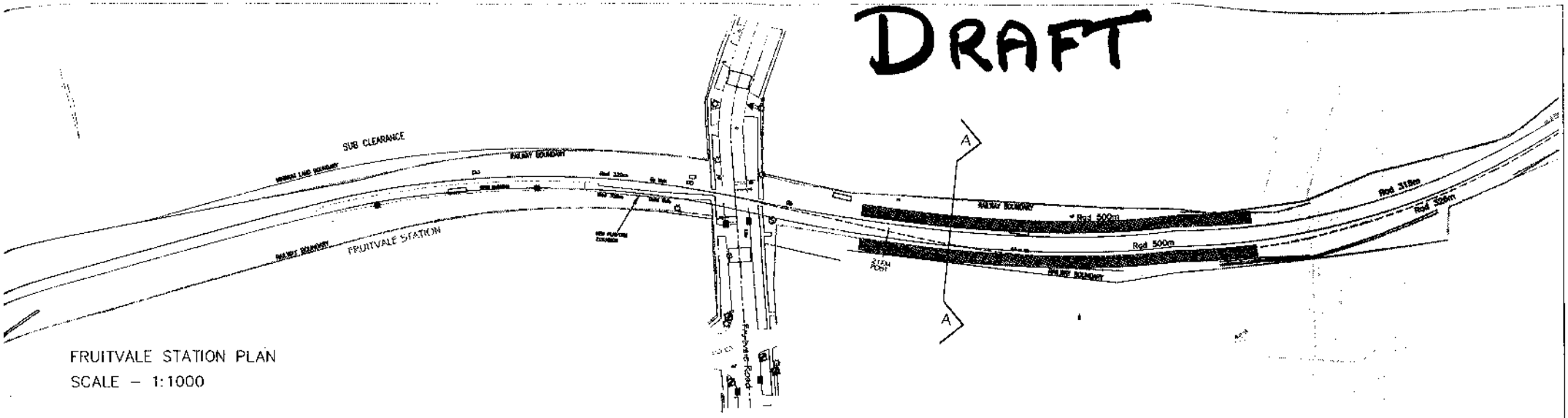

FRUITVALE STATION PLAN
SCALE – 1:1000

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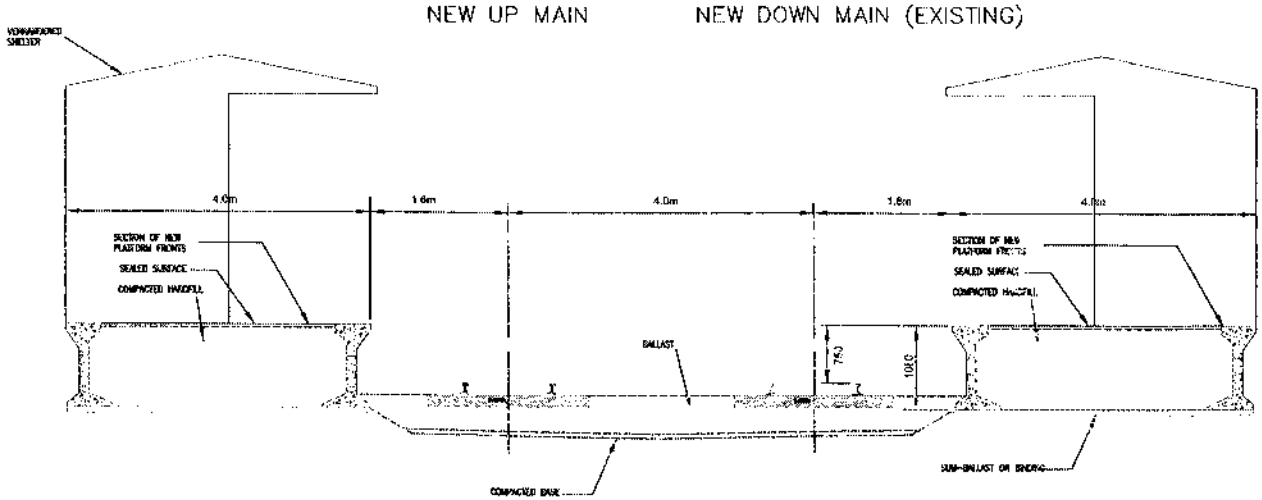

STATION SECTION A – A
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DRAWN	DRL	7/9/04
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N.A.L. DUPLICATION
FRUITVALE STATION
CROSS-SECTIONS

Tranz Rail
Infrastructure Development

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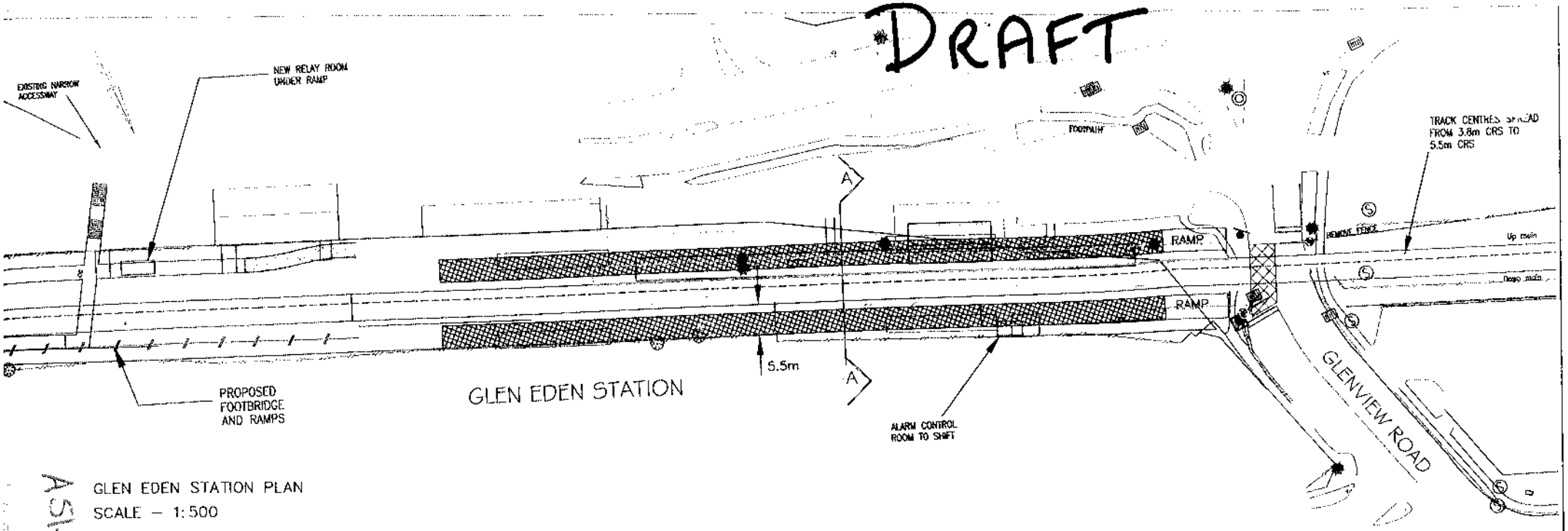

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GLEN EDEN STATION PLAN
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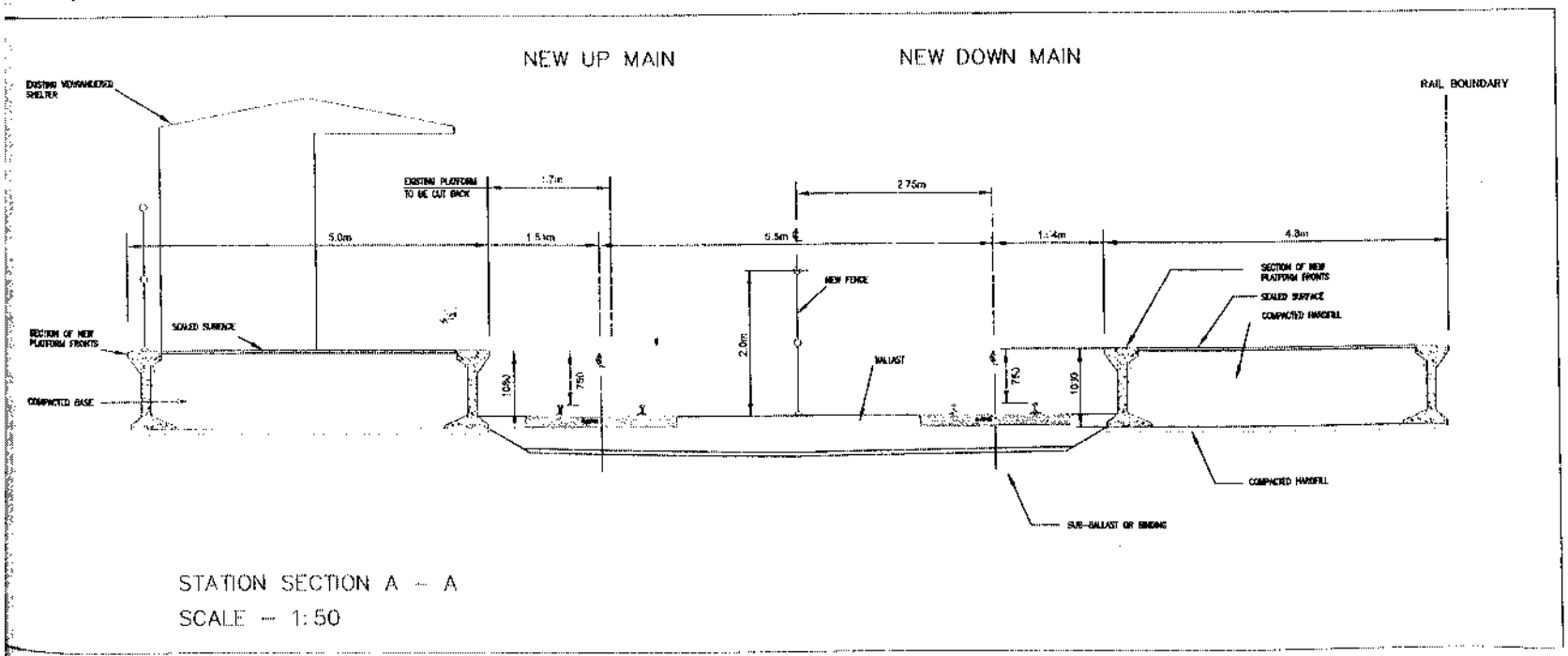

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N.A.L. DUPLICATION
GLEN EDEN STATION
CROSS-SECTION

Tranz Rail
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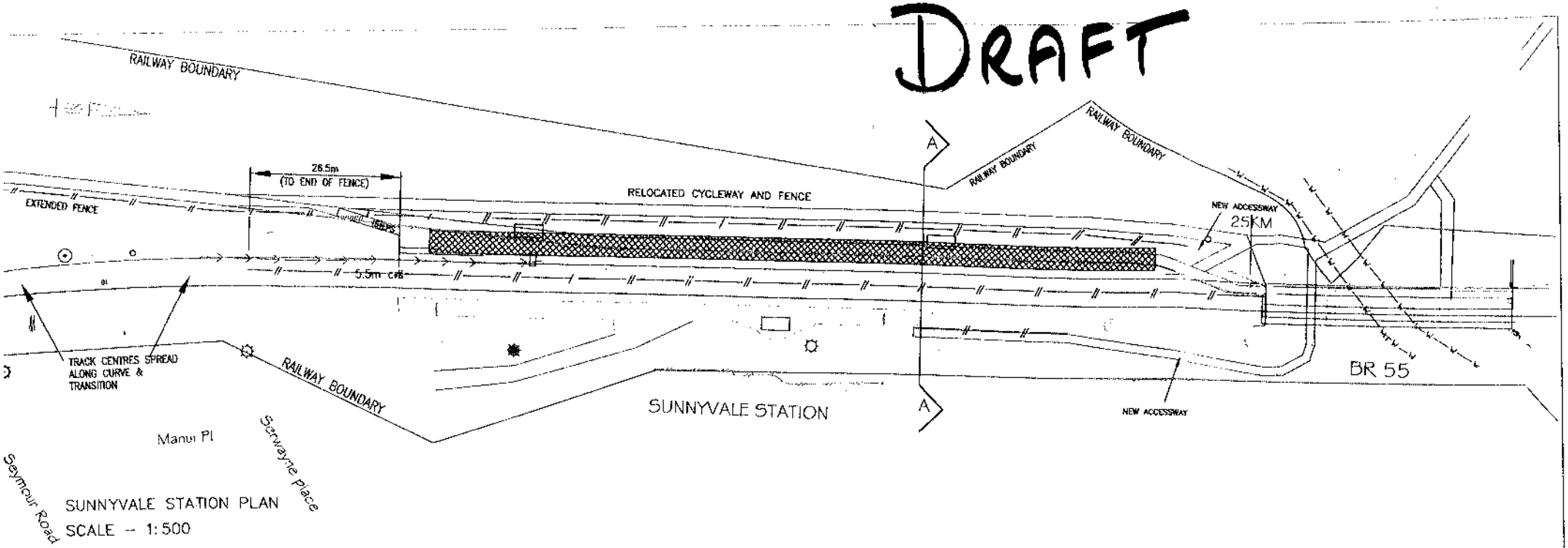

SUNNYVALE STATION PLAN
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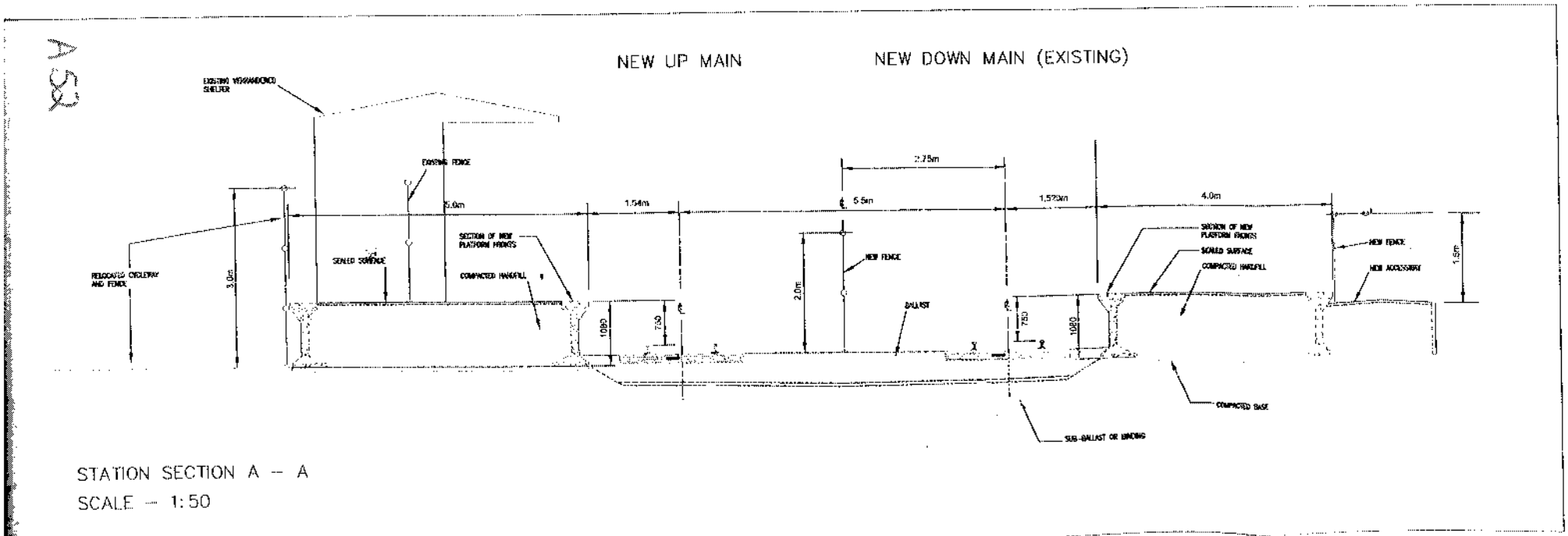

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N.A.L. DUPLICATION
SUNNYVALE STATION
CROSS-SECTION

Tranz Rail
Infrastructure Development

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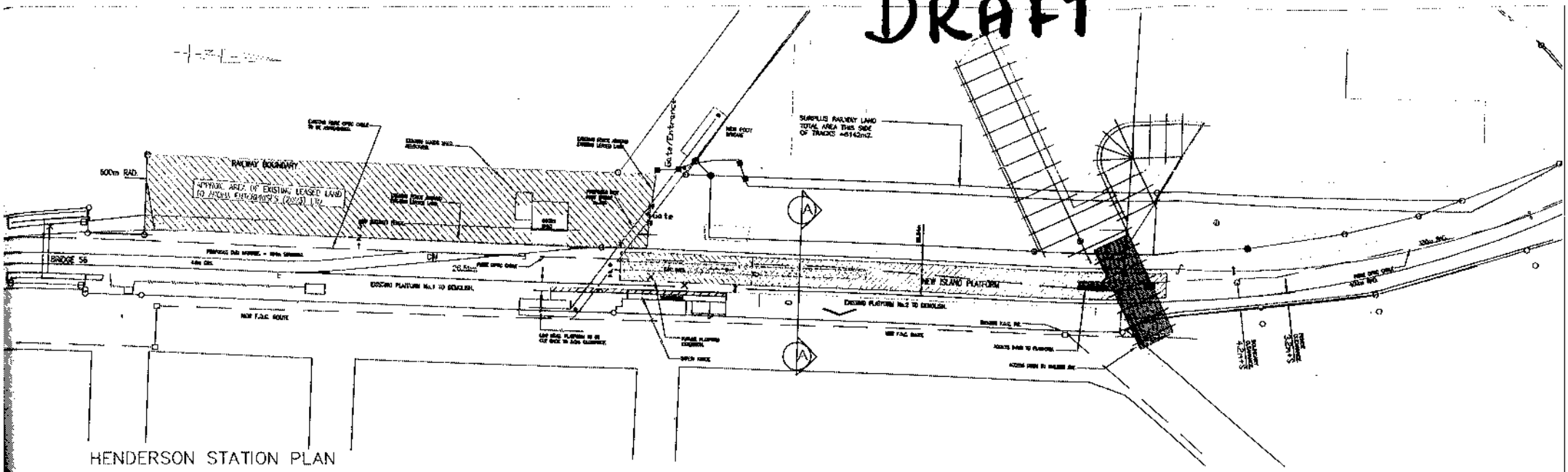

HENDERSON STATION PLAN

SCALE – 1:1000

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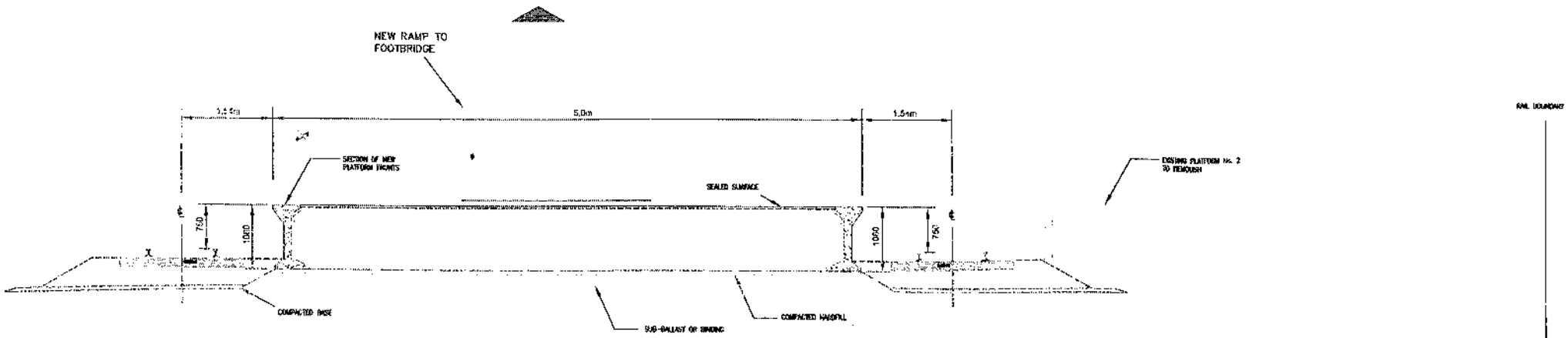

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N.A.L. DUPLICATION
HENDERSON STATION
CROSS-SECTION

Tranz Rail
Infrastructure Development

DRAWING No. 111450/2

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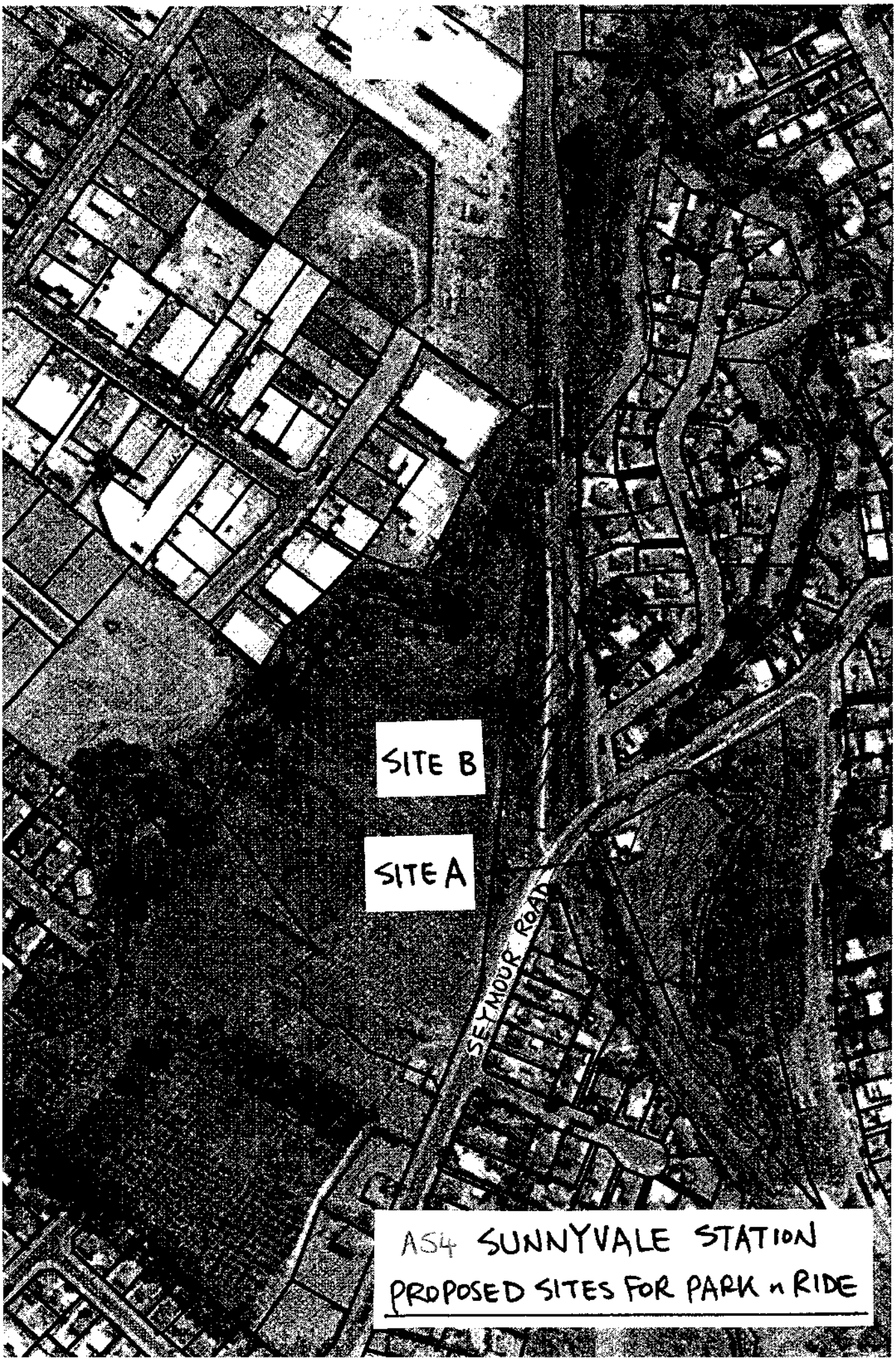
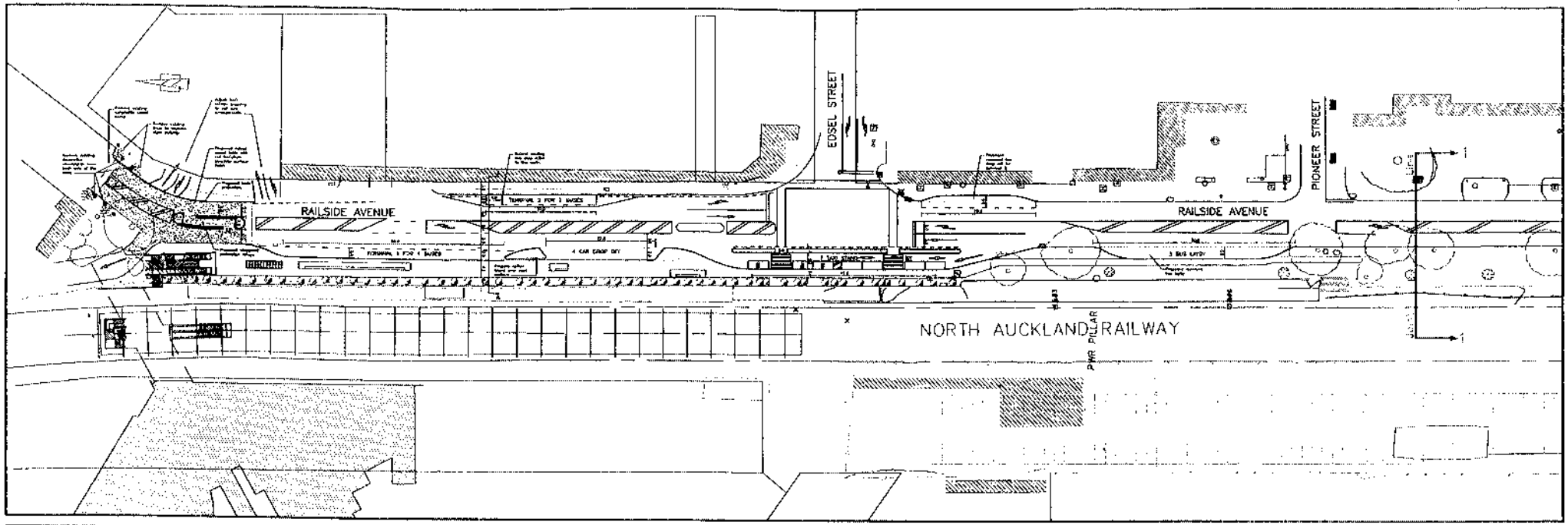
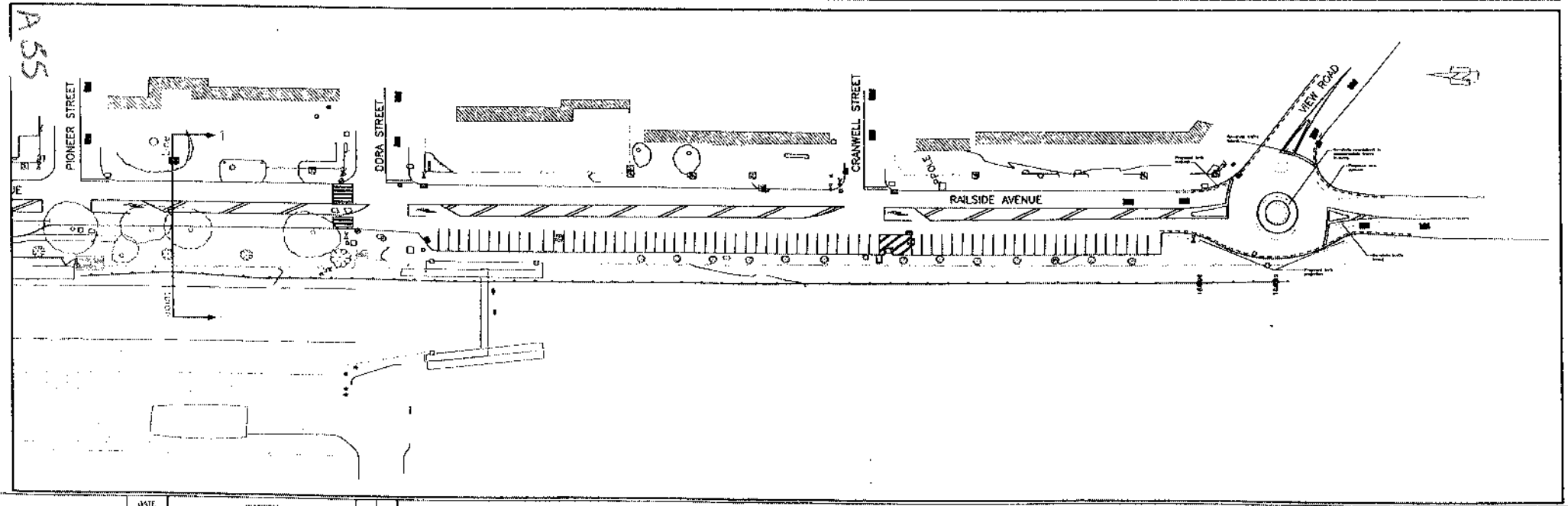


AS4 SUNNYVALE STATION
PROPOSED SITES FOR PARK n RIDE





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DESIGNED H. Rowell	Oct. 04			
DRAWN H. Rowell	Oct. 04			
DESIGN CHECK R. Hill	Oct. 04			
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WAITAKERE CITY COUNCIL

ASSET MANAGER

RAILSIDE AVENUE

HENDERSON BUS INTERCHANGE

PROPOSED LAYOUT PLAN

TRANSPORT ASSETS

ORIGINAL SCALE 1:500

SHEET 1 OF 2 SHEETS

DRAWING No. T01

REVISION

CONTRACT No. N/A

A1 ORIGINAL

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Architecture
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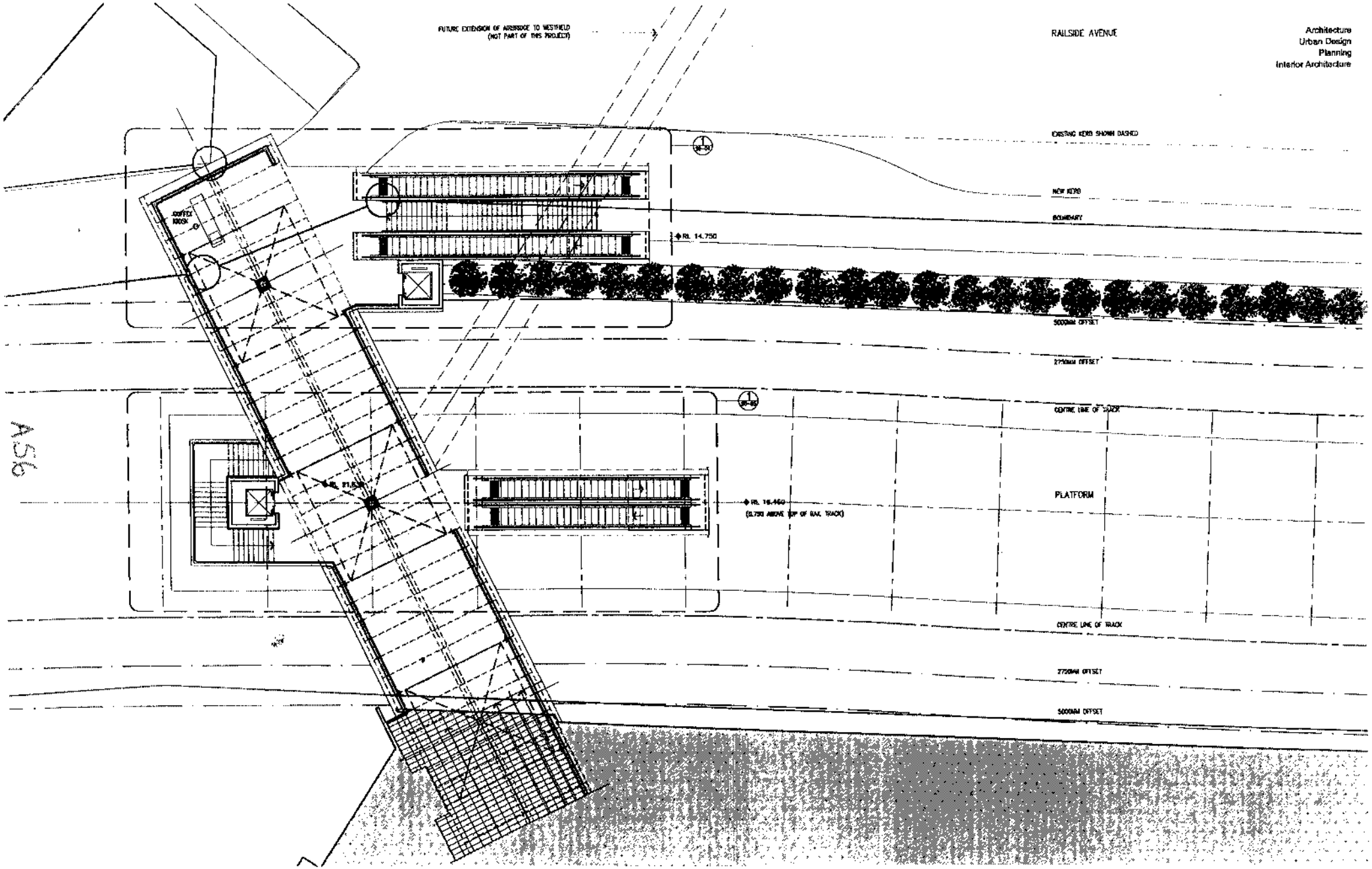
Planning
Interior Architecture



Henderson Station | Developed Design

Job no 0355

NOVEMBER 2004 | Prepared for **WAITAKERE CITY COUNCIL** | Drawing **AIRBRIDGE PLAN** | Scale 1:200 @ A3 | Drawing no **SD-03** | Issue **A**

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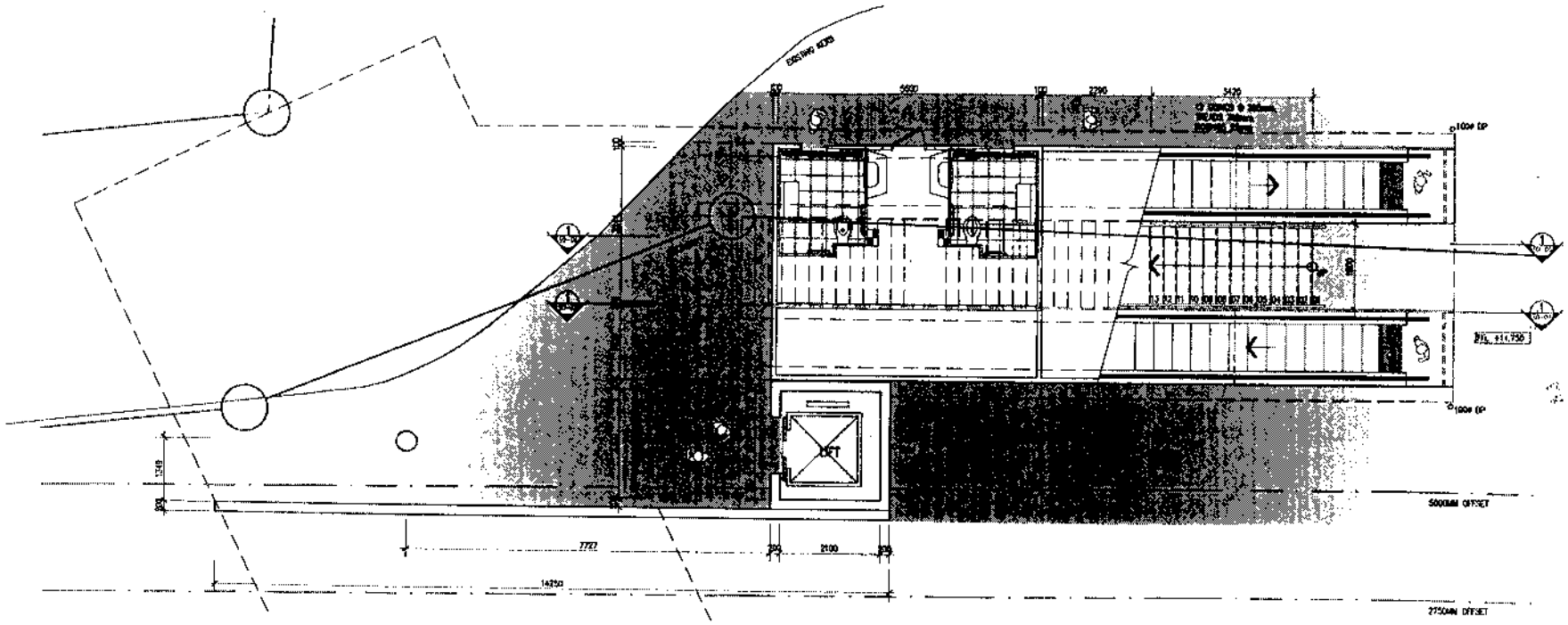

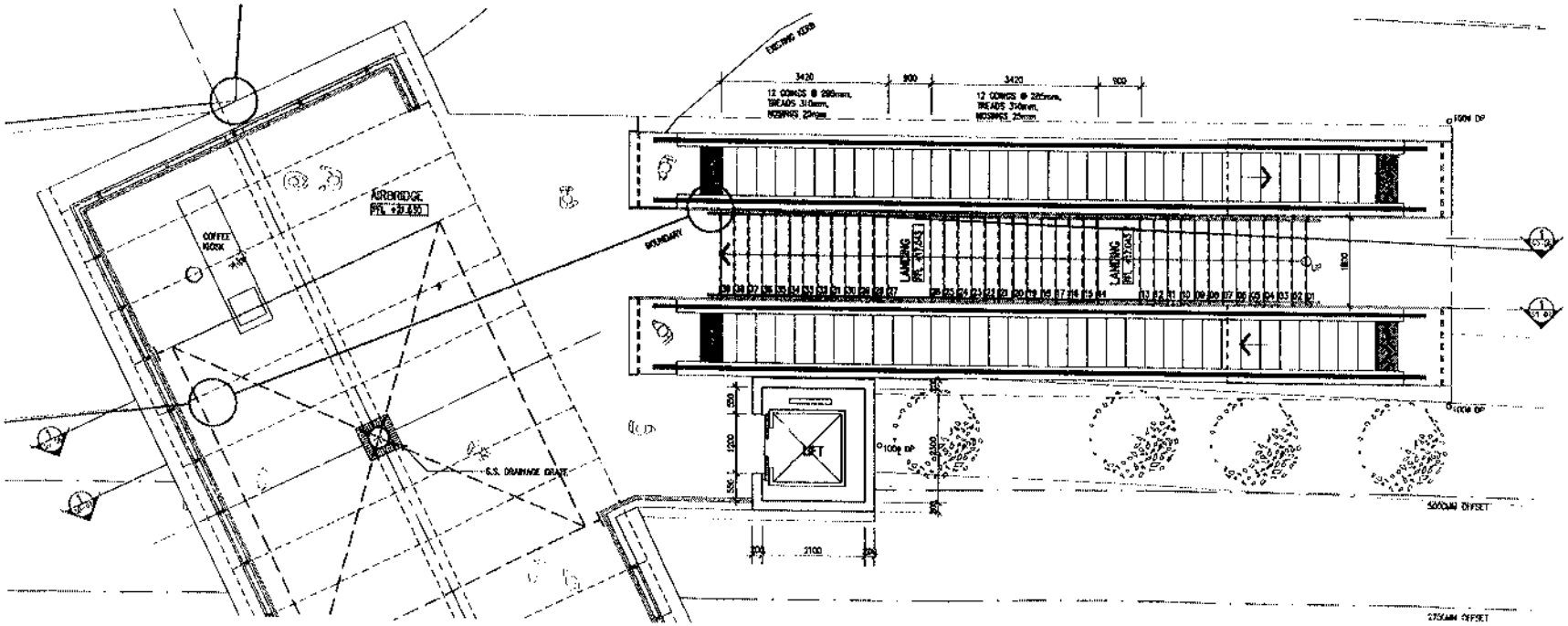

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Henderson Station | Developed Design

NOVEMBER 2004 | Prepared for **WAITAKERE CITY COUNCIL** | Drawing AIRBRIDGE ACCESS 1 | Job no **0355**

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Architecture
Urban Design
Planning
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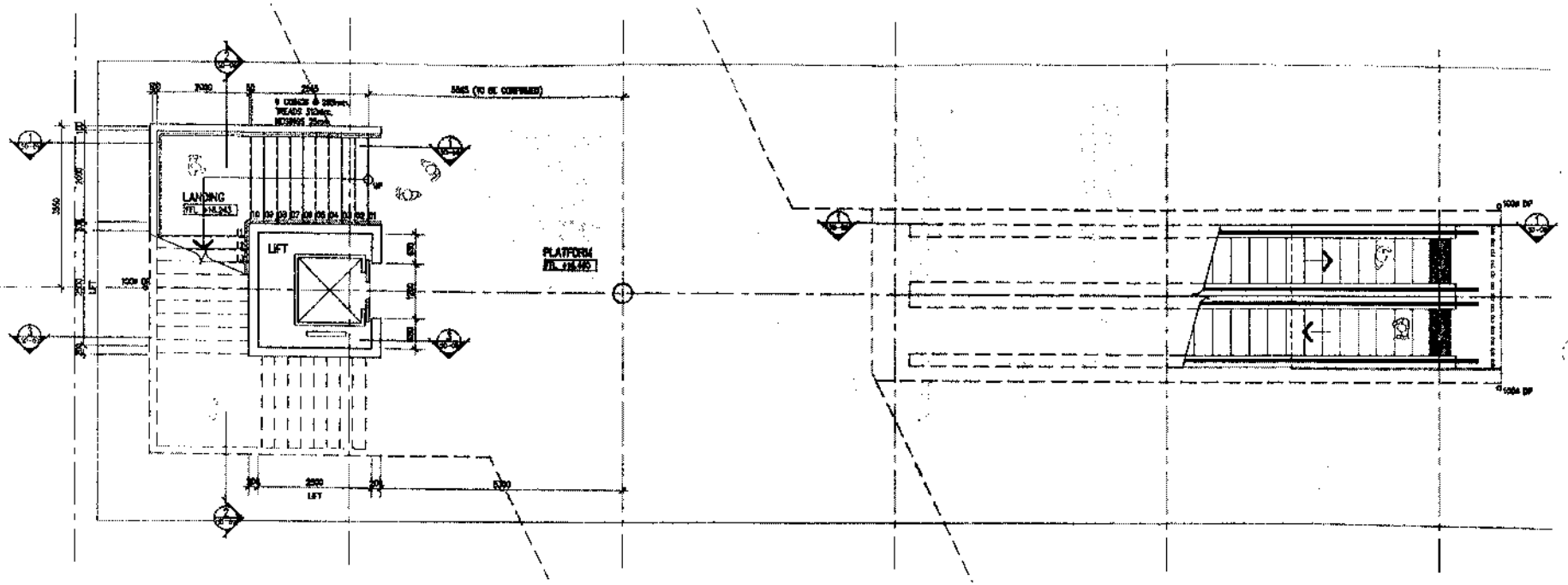

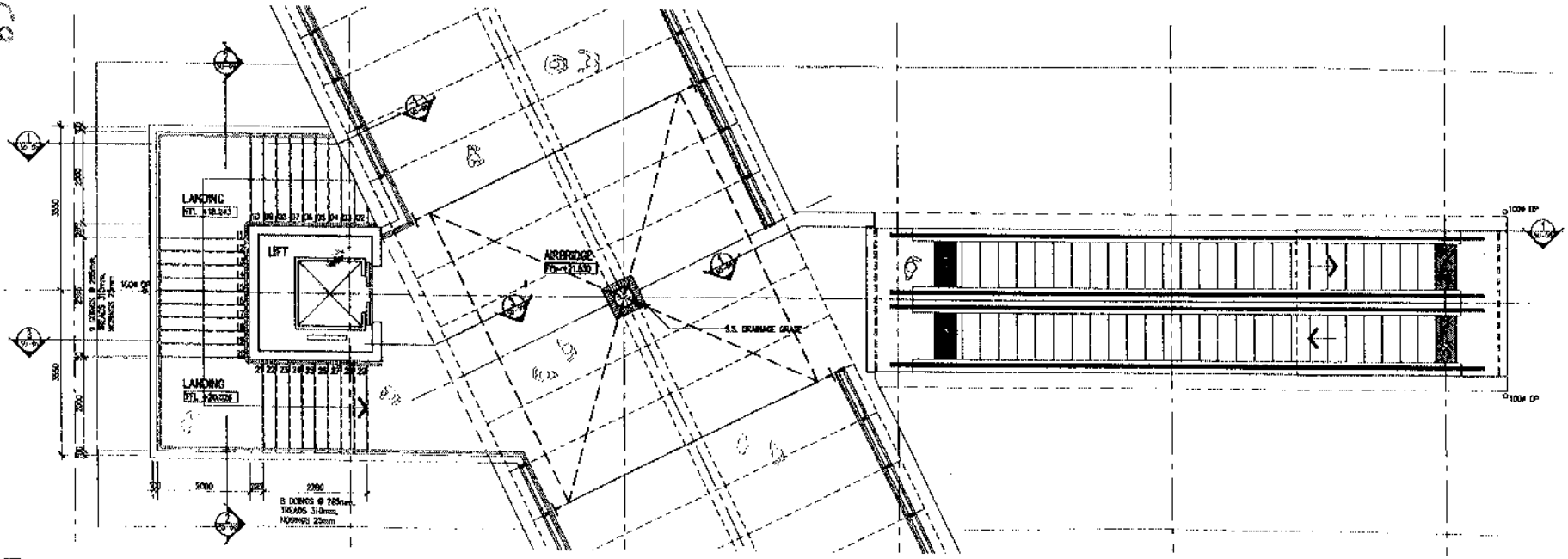

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Henderson Station | Developed Design

NOVEMBER 2004 | Prepared for **WAITAKERE CITY COUNCIL** | Drawing **AIRBRIDGE ACCESS 2** | Scale 1:100 @ A3 | Job no **0355** | Drawing no **SD 05** | Issue A

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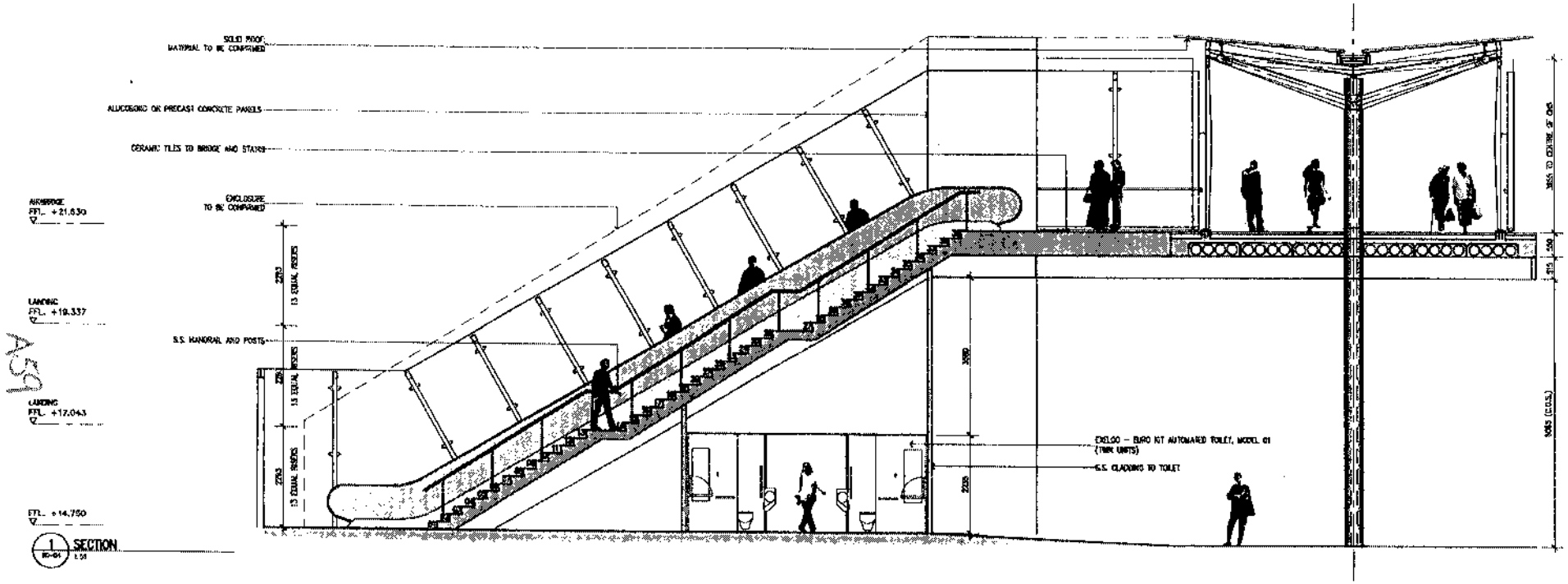
Urban Design
Planning
Interior Architecture



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Henderson Station | Developed Design

NOVEMBER 2004 | Prepared for **WAITAKERE CITY COUNCIL** | Drawing **AIRBRIDGE SECTION** | Scale 1:100 @ A3 | Job no **0355**

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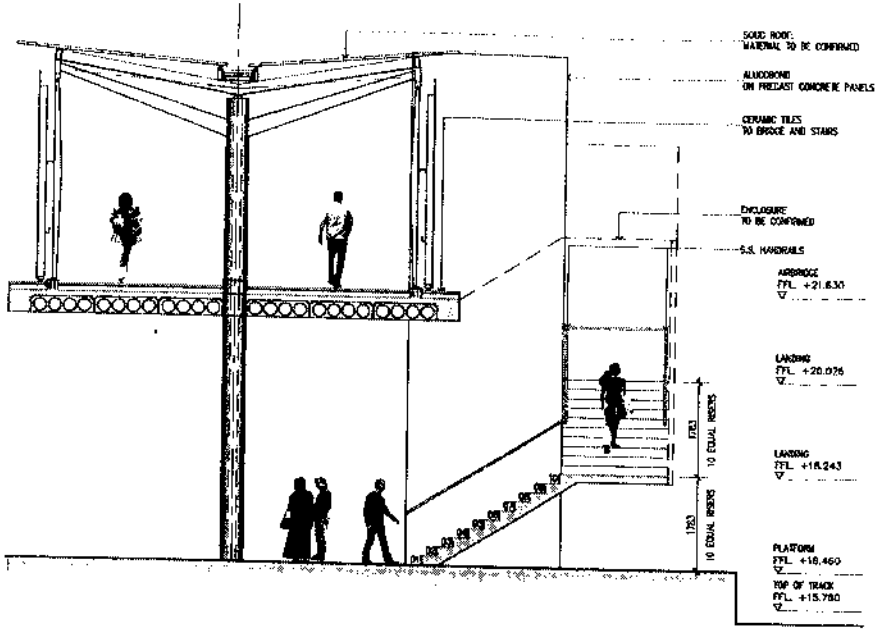

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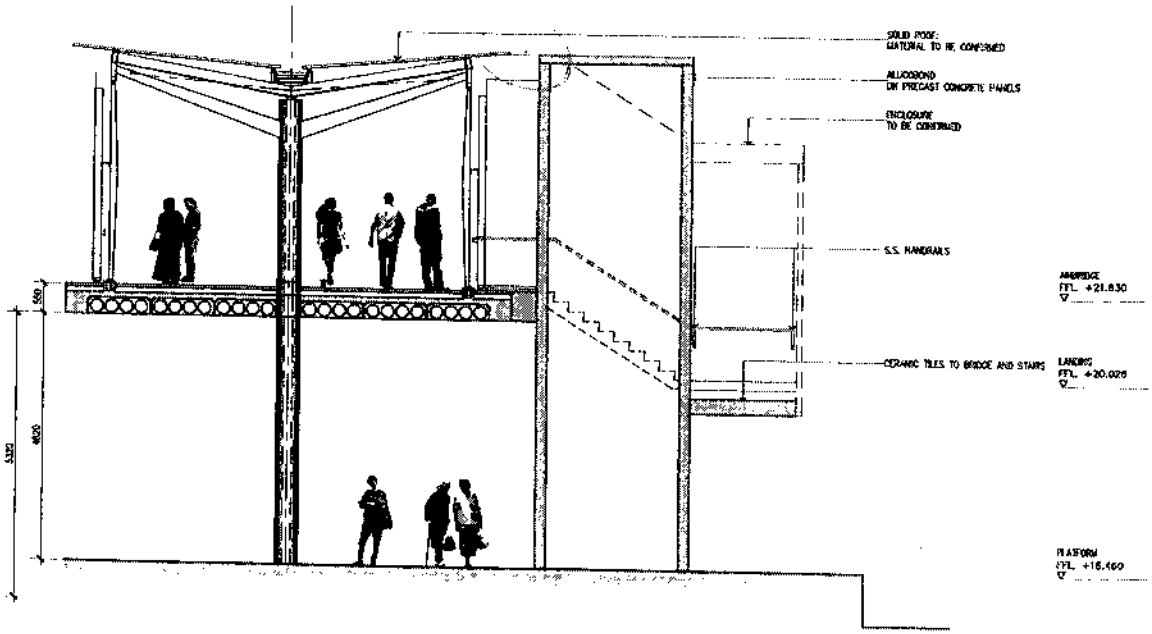

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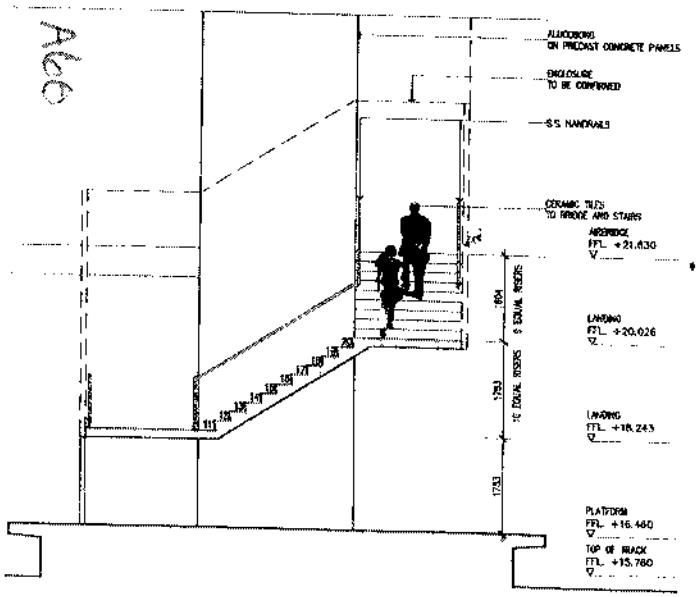

3 SECTION 1:50

Henderson Station | Developed Design

NOVEMBER 2004

View from within the Link Bridge looking towards Railside Avenue.

View from Railside Avenue to Link Bridge.

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Waitakere Central – Henderson Interchange
Developed Design Sign Off

Documents Offered for Sign Off:

SECTION 1 - Introduction

SECTION 2 - Architectural Drawings

Plan Number:	Issue:	Plan Number-	Issue
SD-01	A	SD-07	A
SD-02	A	SD-08	A
SD-03	A	SD-09	A
SD-04	A	SD-10	A
SD-05	A	SK-11	November 2004
SD-06	A	A0-01	1
A0-02.2		A0-02.1	1

- The design needs to be further developed to prevent water ingress, covering the following areas
    1. Due to prevailing winds, there is a possibility of rain water ingress through the top portion of the open glass side structure of the bridge tunnel.
    2. Ensuring adequate weather cover for escalators to ensure reliability i.e. that they are essentially indoor
    3. Gap between airbridge roof structure and lift tower structure

- Please ensure that the correct (to date) underlying plans are used in terms of street layout, in accordance with WCC's Railside Avenue – Henderson Bus Interchange – Proposed Layout Plan (T01) (attached)
- SD-03 future link to Westfield – confirm that it is it high enough above escalators to not cause problems. Is it possible to link at the end of the airbridge to ensure that any future extension does not require work over the rail corridor.
- Sides of escalators/ toilet entrances – provide possible finish options for graffiti minimisation.
- Roof material for overbridge – please provide options and costings for Council decision
- Remove ledge on airbridge. If this impacts on maintenance, please detail.
- Provide written confirmation that the platform meets rail (NZRC/ARTNL) height standards
- Provide written confirmation that lifts and strengthening around them meet NZRC standards
- Park and ride is not signed off. This is subject to the moving of the good sheds off-site. Further work design work is required, once good shed relocation is confirmed.

SECTION 3 - Landscape drawings

- This section can not be signed off at this stage. Additional work is required regarding planting, side walk design, elevations etc. This section is to be further developed. Initial feedback includes:-
    1. Remove beacon lighting
    2. Allow a site for possible electronic bus signage
    3. Landscaping to be revised, following discussion of options with ARTNL, NZRC and WCC

4. Exact retaining wall location and scope, including seating to be confirmed by WCC
5. P17 – fencing – party to provide fencing not yet confirmed
6. Signage – ensure consistent with ARTA
7. Ensure street furniture and finishes are consistent with Henderson Town Centre design.

SECTION 4 – ESD & Service Drawings Revision 2 Appendix drawings

- Lighting Lux levels need to be reviewed to provide adequate levels of light for visually impaired persons and to comply with ARC and ARTNL standards.
- Lighting – can't have sodium lights (red, green etc) within rail corridor
- Scope of amenities and security requirements to be provided to be confirmed by Security Manager, Waitakere City Council (Warren Cornor)

SECTION 5 – Structural & Civil Drawings Revision 15 November 2004-12-20

- Incorporate cabling in airbridge; cabling to civic centre – to be confirmed as part of detailed design.

SECTION 6 - Planning Scoping Report

Signed On Behalf of Waitakere City Council:

Name:..... Signature:.....

Position:..... Date:.....

Waitakere City Council
Te Tatao o Waitakere

Memorandum

To	Kevin Wright
From	Warren Cornor
Date	23 December 2004
Subject	Henderson Interchange

Kevin,

I have reviewed the developed design report on the proposed Henderson Station and Interchange. There are a number of areas of note that I will expand on in greater detail below.

Overall the plan and design are fine. With the clear Adshel shelters and the type of planting in the area it appears from comments in the document, that the principles of Crime Prevention through Environmental Design (CPTED) have been followed, in that there are low plants and then higher trees with clear sight lines through them onto the station etc.

Points of Note:

1. I have concerns about the seating area that are proposed firstly at the bottom of the stairs/escalators near the pedestrian crossing. Transport hubs have a habit worldwide of being an area of congregation of some of the more undesirable element of society and I am sure this will be the same. By placing these seats we are giving people the opportunity to legitimately sit and observe people coming off the trains and we could be giving them an entrapment spot. It would also be very intimidating with youths etc are gathering around these seats and this is right in the only entry to the station and Civic building. With the toilets situated here it is a very likely for this activity. I would strongly advice that these seats be removed.

2. The seating next to Stevies Lane also has the potential for issues. We already have a serious problem in Catherine Mall with youths hanging around and intimidating people as well as an amount of drug dealing and other offences. Again with toilets and escape routes for these types of people, this could take the place of that area by default. Lighting and design of this area needs to be carefully considered to discourage this type of use.

3. While toilets are always a problem area the Exeloo concept is world rated. I am a little confused by the drawings but presume that entry to the toilets is direct from the street? What is the bit between the toilets? The surface claddings needs to be graffiti resistant as this area could be very prone to graffiti. Simple removal is not enough; consideration needs to be given to stopping it in the first place.

The other major concern that I have is the areas where the stairs and escalators join onto the walkway. It appears that the roof sections do not meet and with the open sided nature of the walkway there is a crawl space for someone to get onto the roof of the stairs and slide down. This also provides an area for someone to get onto the roof of the walkway and would provide a target for graffiti etc of the main civic. It could also provide a jump point for people to climb onto the top of trains as is an issue in Wellington. This needs to be clarified.

5. CCTV will need to be budgeted into this project as it is not included in the current Civic costs, Discussions needed to be had with rail provider as to what they are providing and what joint security can be put in place. This includes security patrols security/welfare call points.

6. Lighting is most important and needs to be above just providing the minimum required by standards.

Please feel free to discuss any of the above

Regards

Warren Cornor
Security Manager