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## Finance and Performance Committee SUPPLEMENTARY AGENDA

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### Notice of Meeting:

An ordinary meeting of the Finance & Performance Committee will be held on:

**Date:** Thursday 24 March 2022

**Time:** 9.30am

**Venue:** Via Audio/Visual Link

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### Membership

Chairperson	Deputy Mayor Andrew Turner
Deputy Chairperson	Councillor Sam MacDonald
Members	Mayor Lianne Dalziel
	Councillor Jimmy Chen
	Councillor Catherine Chu
	Councillor Melanie Coker
	Councillor Pauline Cotter
	Councillor Mike Davidson
	Councillor Celeste Donovan
	Councillor Anne Galloway
	Councillor James Gough
	Councillor Yani Johanson
	Councillor Aaron Keown
	Councillor Phil Mauger
	Councillor Jake McLellan
	Councillor Tim Scandrett
	Councillor Sara Templeton

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22 March 2022

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/ CFO  
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Note: The reports contained within this agenda are for consideration and should not be construed as Council policy unless and until adopted. If you require further information relating to any reports, please contact the person named on the report.

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Part A	Matters Requiring a Council Decision
Part B	Reports for Information
Part C	Decisions Under Delegation

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		<i>Released from Public Excluded with commercial details removed.</i>	





## 22. Request for drawdown of funds for Major Cycleway Heathcote Expressway Section 2 (Tannery to Martindales)

Reference Te Tohutoro: 22/359228

Report of Te Pou Matua: Donal Hanrahan, Project Manager, Donal.Hanrahan@ccc.govt.nz

General Manager Jane Davis, General Manager Infrastructure,

Pouwhakarae: Jane.Davis@ccc.govt.nz

Secretarial Note: This report has been released from the public excluded agenda and does not include the commercial information contained in public excluded item 22.

### 1. Purpose of the Report Te Pūtake Pūrongo

- 1.1 The purpose of this report is to request a drawdown of additional funds for Major Cycleway – Heathcote Expressway Route Section 2 Tannery to Martindales from the contingency held at a programme level.
- 1.2 This report has been written after the first of two tenders have closed on the project, and prior to award of either tender.
- 1.3 Major Cycleway – Heathcote Expressway Route Section 2 Tannery to Martindales is the last section of the Heathcote Expressway and is one of the projects approved for Shovel Ready funding. Once constructed it will form a continuous cycleway link between the Heathcote Valley and the City.
- 1.4 The decision in this report is of low significance in relation to the Christchurch City Council's Significance and Engagement Policy. The level of significance was determined by Significance Assessment Worksheet. The reason for it being low is that the decision relates to funding rather than the works itself, which have already been consulted on.

### 2. Officer Recommendations Ngā Tūtohu

That the Finance and Performance Committee:

1. Notes the tendered costs of constructing Major Cycleway – Heathcote Expressway Route Section 2 Tannery to Martindales are higher than previously budgeted
2. Approve the drawdown of programme funds to #23100 Major Cycleway – Heathcote Expressway (Section 2) Tannery to Martindales, from the following:
  - a. \$2,999,862 from #1987 Programme – Major Cycleway – Heathcote Expressway,
  - b. \$600,000 from #1983 Programme – Major Cycleway – Rapanui-Shag Rock, and
  - c. \$2,000,000 from #1980 Programme – Major Cycleway – South Express

### 3. Reason for Report Recommendations Ngā Take mō te Whakatau

- 3.1 The purpose of this report is to seek approval for the additional budget from programme contingency funds to allow the project to start construction and receive the \$8.2 million of approved Shovel Ready funding from central Government. The project has been tendered and cannot be awarded without approval of additional funds.

- 3.2 Since the project was put out to tender there have been a number of things that have happened to increase the cost above the pre tender estimate, including cost escalations, confirmation of service relocation requirements and KiwiRail design reviews.
- 3.3 As part of the Shovel Ready agreement Council is required to have contingency available to cover any overspends. This is held at a programme level.

#### 4. Reason for Cost Increase

- 4.1 The Shovel Ready projects were a Central Government response to Covid 19 lockdowns and were designed to kick start infrastructure investment across New Zealand. They were fast tracked through planning and design to meet the relevant timelines for funding. The funding agreement with the Crown became effective on 1<sup>st</sup> July 2020.
- 4.2 Heathcote Expressway Section 2 had a Route Selection phase estimate of \$8.6 million, this was a high level estimate based on typical MCR costs per metre. This estimate was completed in 2016.
- 4.3 Prior to Shovel Ready requests for funding, the consultation for Cumnor Terrace had closed in March 2020 and other work was planned until FY24.
- 4.4 Heathcote Expressway Section 2 was not included in the initial Shovel Ready application due to the Crown requirement for projects to have a value of over \$10 million. The South Express and Norwest Arc Major Cycle Routes had been included in the initial application.
- 4.5 Initial feedback on the MCR Shovel Ready application was positive and Council was asked if there were any more cycleway projects that could be considered for funding. Time constraints meant there was no time for further refinement of the 2016 estimates and the Heathcote Expressway Section 2 was then put forward with the Route Selection phase estimate of \$8.6 million.
- 4.6 The initial funding agreement with Otakaro for the Shovel Ready projects was reported to Council (in public excluded) on 10 September 2020. Section 5.8 of the report states the following:
  - *The co-funding will remain committed for the duration of the projects and contingency will need to be made available at a programme level to ensure Council's obligations under this agreement are achieved.*

The details of this report were released to the public in their entirety (no redactions) in December 2020.

- 4.7 Once the Heathcote Expressway Section 2 was put forward for consideration for Shovel Ready funding, a detailed scheme design estimate was initiated and this came to a revised value of \$10.6 million. Reasons for the increase from the 2016 Route Selection phase estimate were as follows:
  - 4.7.1 Onsite material testing for contamination had indicated much higher levels of contamination than previously expected. This has led to the cost increasing by \$800k. Some areas of contamination had been expected, but affected areas were more widespread than expected.
  - 4.7.2 Although the MCR does not actually cross the railway there is a KiwiRail requirement that a Level Crossing Safety Impact Assessment (LCSIA) is completed for any significant works close to a level crossing. Historically these had only been required when the project actually cross the railway line, not when running parallel. Once completed the LCSIA recommended that a maze be installed rather than gates. The cost of this was estimated to be an additional \$300k. See Attachment A for extract from LCSIA.

- 4.7.3 The additional costs of keeping Cumnor Terrace two way were estimated to be \$500k, to cover footpath removal and adjustment to property entrances along Cumnor Terrace. Original plans were to build closer to the river to reduce the amount of footpath to be removed, but this couldn't be done without significant consent requirements.
- 4.7.4 Other changes made following consultation were, Ferrymead Park's access requirement around their level crossing and entrance from Truscotts Road and Mobil pipeline easement. These led to an additional \$100k of design and construction costs. See Attachment B showing changes to Ferrymead Park crossing and entrance and changes made for Mobil easement.
- 4.7.5 Additional scope added to get the cycleway across Martindales Road was requested following consultation. This has added \$100k.
- 4.7.6 Additional contingency due to the additional works \$200k.
- 4.8 The above anticipated cost increases have been reported to Finance and Performance Committee as part of the regular monthly reporting since October 2020. Staff have been looking for opportunities to reduce costs and try and bring the project in within or near the original budget of \$8.6M. Despite officers' best efforts the complexities of the route and KiwiRail issues have meant it was not possible to find those design savings.
- 4.9 The value of \$10.6 million was included in the final Shovel Ready Due Diligence Information in September 2020, however only the \$8.2 million was approved to be funded by the Crown under the Shovel Ready Agreement. This was based on the initial estimate of \$8.6 million less the \$400k already spent on the project (this had been spent on property purchase, consultation and design).
- 4.10 The anticipated costs of approximately \$11.0m have continued to be reported to the Finance and Performance Committee via the External Funded Projects report each month since November 2020 (14 reports).
- 4.11 The project consents were granted in October 2021, the first contract tender closed in late September 2021. Since then the project costs have been re-calculated taking into account a number of changes. This has resulted in the estimated final cost of the project being \$14.2 million. Reasons for the additional increases are as follows:
  - 4.11.1 KiwiRail have rejected the LCSIA recommendations for a maze configuration to be installed and are insisting on gates being installed. Track replacement and barrier arms are also required to be installed, this was only requested during a detailed design review by KiwiRail. See Attachment C for current design of Scrutton Road level crossing.
  - 4.11.2 During detailed design of Cumnor Terrace onsite service investigation was carried. This investigation undertaken in 2021 indicated the existing Orion 11kV cables along Cumnor Terrace would need to be relocated to the other side of the road. See Attachment D showing location of cables to be relocated.
  - 4.11.3 Following consultation on the one way option for Cumnor Terrace a number of issues with the existing driveways were highlighted, these were going to be made worse by the removal of the footpath, this has meant additional work needs to be carried out to ensure access is maintained. See Attachment F for drawing of works on driveways.
  - 4.11.4 The length of boardwalk required along Cumnor Terrace and through the Kennaway Park drainage reserve has increased.
  - 4.11.5 Consenting requirements around ecology and changes to the MCR alignment following discussion with Kennaway Business Park owner in 2021. Significantly more planting is required than originally expected. This allows for excavation of the full depth of the

plant beds and disposal of contaminated material. See attachment E showing original alignment and additional areas of planting.

4.11.6 Consenting costs were higher than expected. Consenting was more complex than originally expected and with the relocating of the path through Kennaway Reserve additional design was required. This resulted in about \$100k of additional costs for the consent application and redesigns.

4.11.7 Street lighting costs through Ferrymead Park have increased due to Orion no longer undergrounding existing overhead cables in the area. Previously it was planned on installing the lighting cable at the same time as the Orion undergrounding and sharing the costs of the trenching.

4.11.8 Street Lighting design costs have also increased due to changes to Orion planned undergrounding in Ferrymead Park and changes to path design during consenting.

4.11.9 Additional fencing requirements along Tunnel Road, previously only a wire rope barrier was planned to be installed.

## 5. Alternative Options Considered Ētahi atu Kōwhiringa

- 5.1 Discontinuing the project, or reducing scope of the project to deliver within budget – This is not recommended as doing so would require funding received under the Shovel Ready Agreement to be refunded. Additionally, there is a risk funding for the wider Shovel Ready programme may be jeopardised.
- 5.2 Value engineering the current design to reduce the costs has been done and some minor saving have been made.
- 5.3 Officers can explore the possibility of receiving co-funding for the additional expenditure from Waka Kotahi. This could reduce the impact of the funding on Council budgets.

## 6. Detail Te Whakamahuki

- 6.1 Approval of additional funding from the programme contingency does not directly affect the approved plan so no impacts on the community.
- 6.2 The decision affects the following wards/Community Board areas:
  - 6.2.1 Waikura Linwood Central Heathcote Community Board

## 7. Policy Framework Implications Ngā Hīraunga ā- Kaupapa here

### Strategic Alignment Te Rautaki Tīaroaro

- 7.1 Decision relates to completing construction of a section of cycleway. This will increase the safety of cyclists promoting a greater use of cycling which aligns with accelerating the momentum for the City's need for safe active transport options.
- 7.2 This report supports the [Council's Long Term Plan \(2021 - 2031\)](#):
  - 7.2.1 Activity: Transport
    - Level of Service: 10.0.2 Increase the share of non-car modes in daily trips - ≥17% of trips undertaken by non-car modes

### Policy Consistency Te Whai Kaupapa here

- 7.3 The decision is consistent with Council's Plans and Policies.

### Impact on Mana Whenua Ngā Whai Take Mana Whenua

- 7.4 The decision does not involve a significant decision in relation to ancestral land or a body of water or other elements of intrinsic value, therefore this decision does not specifically impact Mana Whenua, their culture and traditions.

### Climate Change Impact Considerations Ngā Whai Whakaaro mā te Āhuarangi

- 7.5 The funding is required to complete a section of cycleway to align with promoting active travel through a safer cycling network resulting in reduced carbon emissions.

### Accessibility Considerations Ngā Whai Whakaaro mā te Hunga Hauā

- 7.6 The cycleway will encourage less confident cyclists to use the cycle network and better serve the cyclist currently using it.

## 8. Resource Implications Ngā Hīraunga Rauemi

### Capex/Opex Ngā Utu Whakahaere

- 8.1 Cost to Implement - \$5,599,862 on top of current approved budget.
- 8.2 Maintenance/Ongoing costs – cost neutral, no change to proposed cycleway.
- 8.3 Funding Sources:
- |   |             |
|---|-------------|
| • #1987 Programme - Major Cycleway - Heathcote Expressway | \$2,999,862 |
| • #1983 Programme – Major Cycleway – Rapanui – Shag Rock  | \$600,000   |
| • #1980 Programme – Major Cycleway - South Express        | \$2,000,000 |

The sources listed above reflect contingency held at a programme level as a requirement under the Shovel Ready Agreement. The drawing down of these funds will reduce the contingency available should other unknown risks materialise within the programme.

## 9. Legal Implications Ngā Hīraunga ā-Ture

### Statutory power to undertake proposals in the report Te Manatū Whakahaere Kaupapa

- 9.1 The Finance and Performance Committee has authority to approve the drawdown of funds.







### Other Legal Implications Ētahi atu Hīraunga-ā-Ture

- 9.2 There is no legal context, issue or implication relevant to this decision.

## 10. Risk Management Implications Ngā Hīraunga Tūraru

- 10.1 If not approved or delayed the contracts cannot be awarded and Council risk losing Crown funding of \$8.2 million.
- 10.2 One of the current tenders includes a water main for 3 Waters along Truscotts Road. If this tender cannot be awarded then the water main will have to be tendered and awarded as a separate contract. This will potentially lead to two construction projects occurring in the same area and associated additional costs.
- 10.3 Maintenance has plans to carry out repairs to a section of Cumnor Terrace in FY23, if the contracts can be awarded there are plans to combine the works, leading to less disruption to the stakeholders and higher quality road finish.

## Attachments Ngā Tāpirihanga

No.	Title	Page
A 	Extract From LCSIA	11
B 	Additional works following consultation with Ferrymead Park and Mobil	13
C 	KiwiRail Scruttons Road Level Crossing	17
D 	Orion Cable Relocation	18
E 	Kennaway Reserve Alignment and Planting Changes	21
F 	Driveway alteration on Cumnor Terrace	26

Additional background information may be noted in the below table:

Document Name	Location / File Link
Nil	Nil

## Confirmation of Statutory Compliance Te Whakatūtutanga ā-Ture

Compliance with Statutory Decision-making Requirements (ss 76 - 81 Local Government Act 2002).

(a) This report contains:

- (i) sufficient information about all reasonably practicable options identified and assessed in terms of their advantages and disadvantages; and
- (ii) adequate consideration of the views and preferences of affected and interested persons bearing in mind any proposed or previous community engagement.

(b) The information reflects the level of significance of the matters covered by the report, as determined in accordance with the Council's significance and engagement policy.

## Signatories Ngā Kaiwaitohu

<b>Author</b>	Donal Hanrahan - Project Manager
<b>Approved By</b>	Oscar Larson - Team Leader Project Management Lynette Ellis - Head of Transport & Waste Management Jane Davis - General Manager Infrastructure, Planning & Regulatory Services

MAJOR CYCLEWAY ROUTE

HEATHCOTE EXPRESSWAY

## 1 EXECUTIVE SUMMARY

Christchurch City Council's (CCC) are designing the Heathcote Expressway (HX) as part of the Major Cycle Route (MCR) project. A new cycle path facility is proposed parallel to the western side of the Main South Rail corridor.

While the HX proposal does not cross the MSL there is expected to be an increase in on road cycle usage of the Scruttons Road crossing for patrons linking to the HX from the greater catchment area. A new pedestrian connection is proposed to link the HX to the existing footpath on Scruttons Road on down side of the road crossing.

The purpose of this Level Crossing Safety Impact Assessment (LCSIA) report is to assess the level of risk in the change in use for the existing road crossing and, also determine what Level Crossing Safety Score (LCSS) is for the proposed pedestrian level crossing and if the concept design proposes appropriate controls to manage the risk.

### 1.1.1 Scruttons Road Level Crossing #2281

The existing protection at the Scruttons Road crossing consists of Flashing Lights & Bells (FLB) Control and a second train approaching warning lights. The new cycleway is expected to generate 160 additional cycle trips (80 each way) at the existing road level crossing for cyclists accessing the HX.

### 1.1.2 Scruttons Pedestrian Level Crossing #4619

A concept design for a new pedestrian crossing has been provided (Figure 3 3: Pedestrian Crossing Concept), and a new ALCAM survey for pedestrian crossing carried out by a third party. **The proposed protection for the pedestrian crossing consists of a Maze with static signage.**

## Conclusion

The Level Crossing Safety Score (LCSS) procedure assesses and scores the risk of level crossings. For level crossings, KiwiRail policy is;

- Criteria 1: The Proposed Design and Future Scores of a level crossing to achieve a "Low" or "Medium-Low" level of risk, as determined by the LCSS.
- Criteria 2: The Proposed Design and future Score of a level crossing to achieve a LCSS number (out of 60) lower than, or equal to the Updated Existing LCSS number.

For a new facility, Criteria 1 must be met.

The LCSS results for the existing situation, proposed shared path crossing are shown below in Table 1-1 and Table below;

- The proposed road crossing has assumed that from opening day an additional 120 on-road cycle movements will occur at the crossing, no additional infrastructure has been proposed for the road crossing.
- The pedestrian volume has been estimate at 20 pedestrians per day after opening. It is recommended that actual pedestrian counts are collected after opening.



Velos MCR Design Team

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MAJOR CYCLEWAY ROUTE

HEATHCOTE EXPRESSWAY

The sensitivity analysis indicates that as expected, volume increases lead to higher LCSS scores, and automated gates reduces LCSS scores.

The existing the proposed maze option would still satisfy KiwiRail criteria 1, even for future volumes up to 100 movements per day, with the alternative design only allowing future growth up to 50 movements per day.

The sensitivity analysis shows that if the pedestrian volumes were to exceed 150 movements per day, then grade separation should be considered.

## 9 CONCLUSIONS & RECOMMENDATIONS

The Heathcote Expressway (HX) Major Cycle Route (MCR) is proposed to be constructed parallel to a portion of the Main South Line (MSL). A new pedestrian level crossing is proposed to be constructed to connect Scruttons Road, while the HX does not physical cross the MSL it is expected that some local residents will cross the rail line and use the new cycleway as a recreational walking path and an expected 160 additional cycle trips (80 each way) will use the existing road level crossing

The proposed design and future with the Scruttons Road Crossing associated with 160 additional cycle path satisfies KiwiRail criteria that achieves a "low" or "medium-low" level of risk as determined by the LCSS.

- The LCSS for the Road Crossing is 13 / 60 (Low Risk)

The concept pedestrian layout with the expected volumes satisfies KiwiRail criteria that achieves a "low" or "medium-low" level of risk as determined by the LCSS.

- The LCSS for the concept design for the pedestrian path is 20 / 60 (Medium-Low Risk)
- The LCSS for the proposed design including the pedestrian gates is 6 / 60 (Low Risk)
- The LCSS for a Safety Review Team (SRT) modified design is 18 / 60 (Low Risk)

The SRT recommend that the final detail design of the shared path crossing includes;

- That SFARP principal is applied in this instance and the SRT modified design with a second train approaching active warning sign is included in favour of the full automatic gates.
- Installation of an adequate length of fencing is provided to ensure that pedestrians do not use the road crossing to 'bypass' the new pedestrian facility.
- Full compliance with NZTA TCD-9;
- Post-construction pedestrian/cyclist counts will provide more accurate ALCAM and LCSS results in the future.
- An alternative 'desire line' approach has been considered to install a smooth, flat pedestrian path close to the desire line but without the maze controls, this was due to the site constraints resulting in limited scope to install wing fencing to encourage pedestrians to use the maze. However, it is not recommended that this option is progressed as the score is at the upper echelon of the Medium-Low risk band and does not meet the minimum protection requirements.



Velos MCR Design Team

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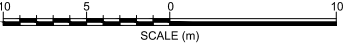
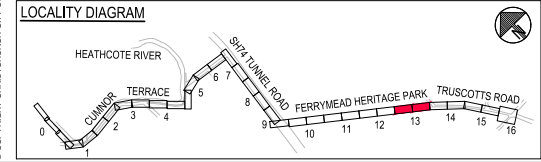




LEGEND	
LANDSCAPE GENERAL ARRANGEMENT	
[P01] ASPHALTIC CONCRETE FOOTPATH OR CYCLEWAY CONSTRUCTION	[P09] PROPOSED TREE / PROPOSED TREE WITH ROOT BARRIER (ROOT BARRIER IS INDICATIVE)
[P02] APPLE GREEN CYCLEWAY PAINT	[X] EXISTING TREE TO BE REMOVED
[P03] ASPHALTIC CONCRETE DRIVEWAY	[O] EXISTING TREE TO BE RETAINED & PROTECTED
[P05A] HOLLAND® TEXTURED 'BLACK SANDS' PAVERS (HERRINGBONE)	[P09] TACTILE PAVERS
[P05B] HOLLAND® TEXTURED 'BLACK SANDS' PAVERS (HEADER COURSE)	[P09A] GREEN TACTILE PAVERS
[P07] HOLLAND® SET 'BLACK SANDS' PAVERS (HERRINGBONE)	[P09B] DIRECTIONAL TACTILE PAVERS
[P08A] ASPHALTIC CONCRETE ROAD CONSTRUCTION	[>] OVERLAND FLOW CHANNEL
[P13] GRAVEL SURFACE	[>] EXISTING OVERLAND FLOW CHANNEL
[P14] COLOURED TEXTURED SURFACE	[A02B] 1.8m MESH FENCE
[P08B] ASPHALTIC CONCRETE RAMP CONSTRUCTION	[V01A] GRASS BERM REINSTATEMENT
[A06] CYCLE STAND	[V01B] NEW GRASS BERM
[A08] BENCH SEAT	[V02] LOW SHRUB AND GROUND COVER PLANTING
[A10] LITTER/ RECYCLING BINS	

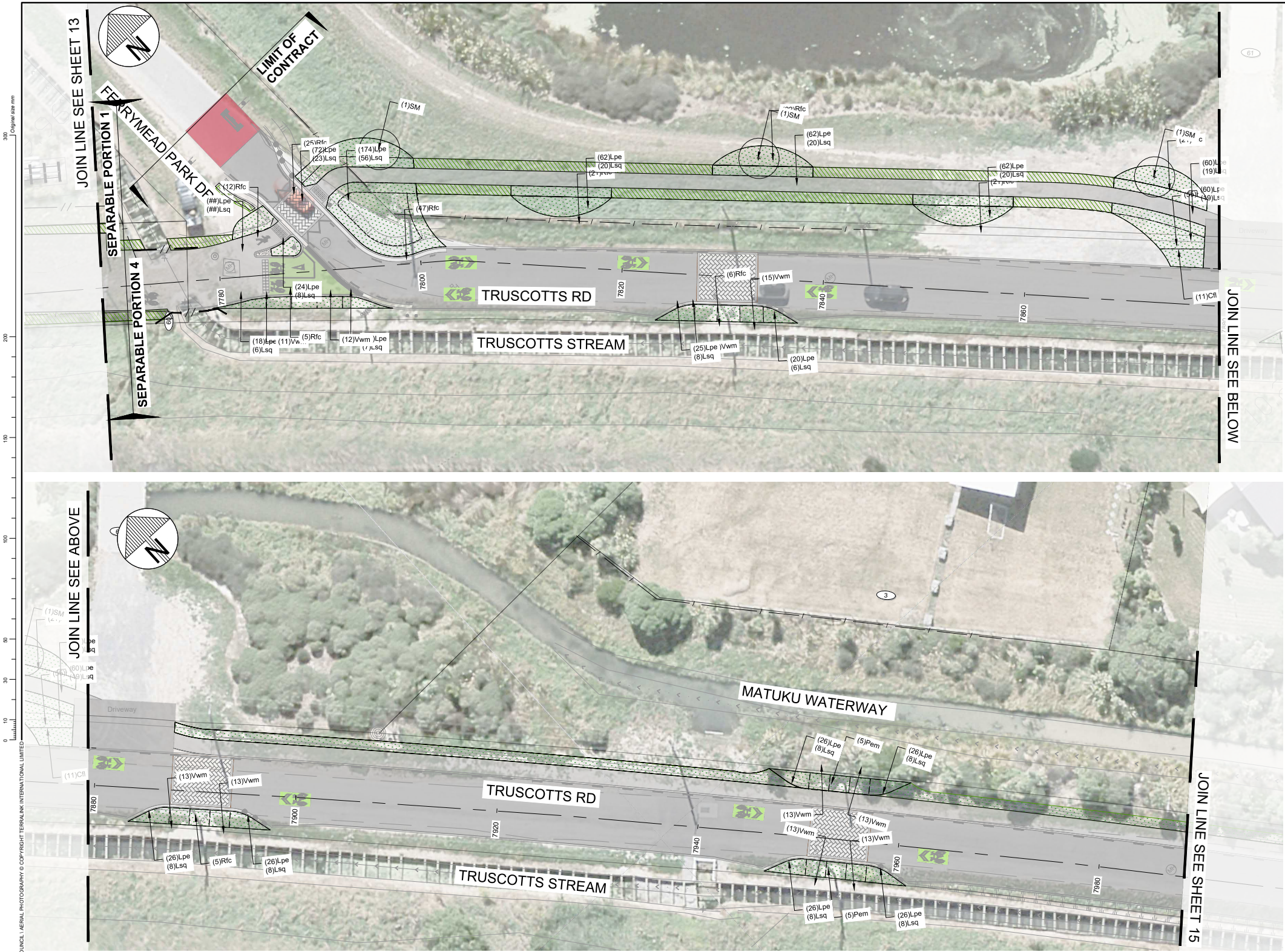
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3. REFER TO SHEET 0010 FOR GENERAL NOTES.			
E	ISSUED FOR INFORMATION	WR	04/02/2021
D	ISSUED FOR INFORMATION	WR	12/03/2019
C	ISSUED FOR RESOURCE CONSENT	WR	02/10/2018
F	S201 ISSUED FOR TENDER	WR	23/07/2021
ISSUE	AMENDMENTS	SIGNED	DATE
CONTRACT NUMBER 15/16-111			
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CPS PROJECT FILE NUMBER CP502843/02		SHEET 5013	OF -

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<div>Christchurch City Council</div> <div>CAPITAL PROGRAMME GROUP</div>		<div><div><div>DATUM</div><div>C.D.D.</div></div><div><div>BENCH MK.</div><div>RL</div></div><div><div>SURVEY</div><div>SURVEY LB</div></div><div><div>DRAIN. REF.</div><div>SAP WBS</div></div></div> <div><div><div>DESIGNED</div><div>DES. REVIEW</div><div>DRAWN</div><div>DRW. CHECK</div><div>FILE LOCATION</div><div>MCR_HEW_S2_LD_5006-5016.dwg 5013</div></div><div><div>NAME</div><div>JT</div><div>LE</div><div>BM</div><div>M1150 - CAD\06_HEW - S201_Drawing</div><div>BY McNeil, Brendan</div></div></div> <div><div><div>SIGNED</div><div>JT</div><div>LE</div><div>BM</div><div></div><div></div></div><div><div>DATE</div><div>XX/XX/2019</div><div>XX/XX/2019</div><div>XX/XX/2019</div><div>23/07/2021 12:28:45 pm</div><div></div></div></div> <div><div><div>APPROVED</div><div>FOR TENDER</div><div>DATE</div><div>SIGNED</div><div>FOR CONSTRUCTION</div><div>DATE</div><div>SIGNED</div></div><div><div>CONSULTANT PROJECT REF.</div><div>6-DHLIG.64</div></div><div><div>CONSULTANT FILE REF.</div><div>5013</div></div></div> <div><div>CONSULTANT</div><div>VELOSO</div><div>PROJECT TITLE</div><div>MCR HEATHCOTE EXPRESSWAY SECTION 2 CURRIES ROAD TO MARTINDALES ROAD</div></div> <div><div>DRAWING TITLE</div><div>TREES AND UNDERPLANTING PLANS SHEET 13</div></div> <div><div><div>CONTRACT NUMBER</div><div>15/16-111</div><div>CAD DRAWING FILE REF.</div><div>RD365202</div><div>CPS PROJECT FILE NUMBER</div><div>CP502843/02</div></div><div><div>ORIGINAL SHEET SIZE</div><div>A1</div><div>SHEET</div><div>5013</div></div><div><div>SCALES</div><div>1:200 (A1) 1:400 (A3)</div><div>OF</div><div>-</div></div></div>
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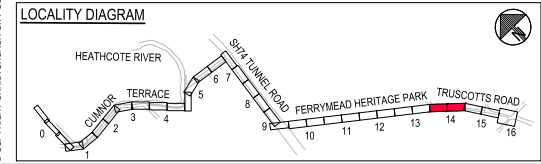


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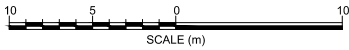
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  - REFER TO SHEET 0010 FOR GENERAL NOTES.



E	ISSUED FOR INFORMATION	WR	04/02/2021
D	ISSUED FOR INFORMATION	WR	12/03/2019
C	ISSUED FOR RESOURCE CONSENT	WR	02/10/2018
F	S201 ISSUED FOR TENDER	WR	23/07/2021
ISSUE	AMENDMENTS	SIGNED	DATE

CONTRACT NUMBER	15/16-111	ORIGINAL SHEET SIZE	A1	SCALES	1:200 (A1) 1:400 (A3)
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CPS PROJECT FILE NUMBER	CP502843/02	SHEET	5014	OF	-

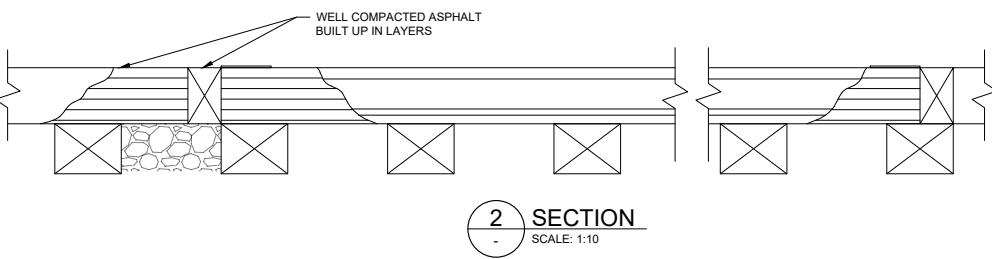
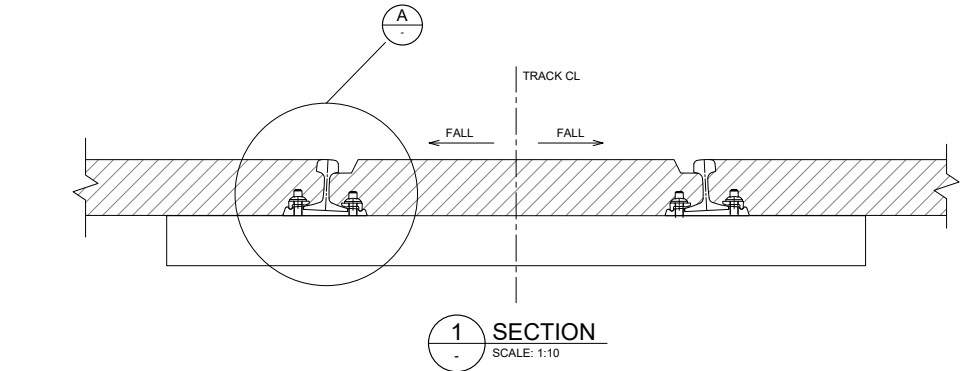
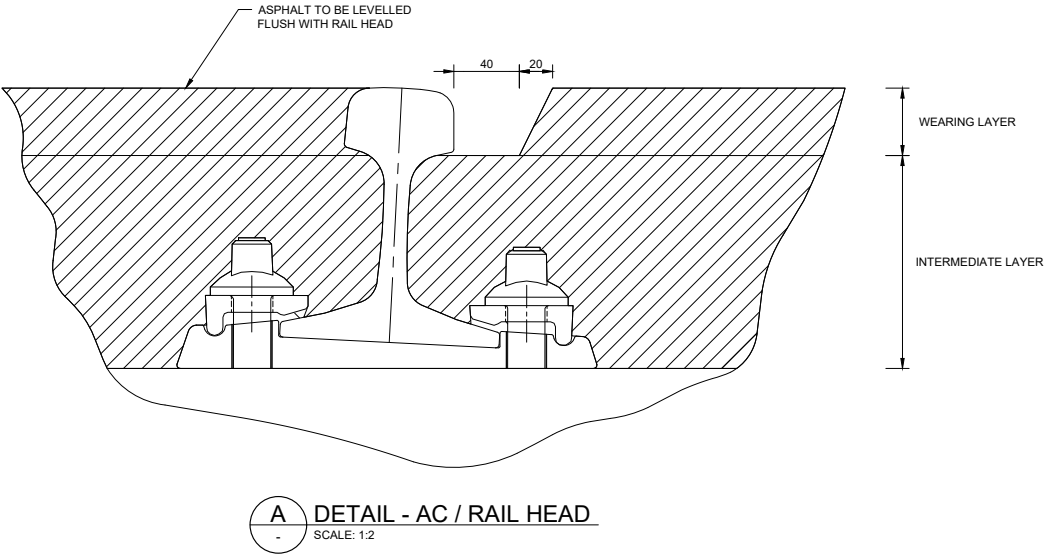
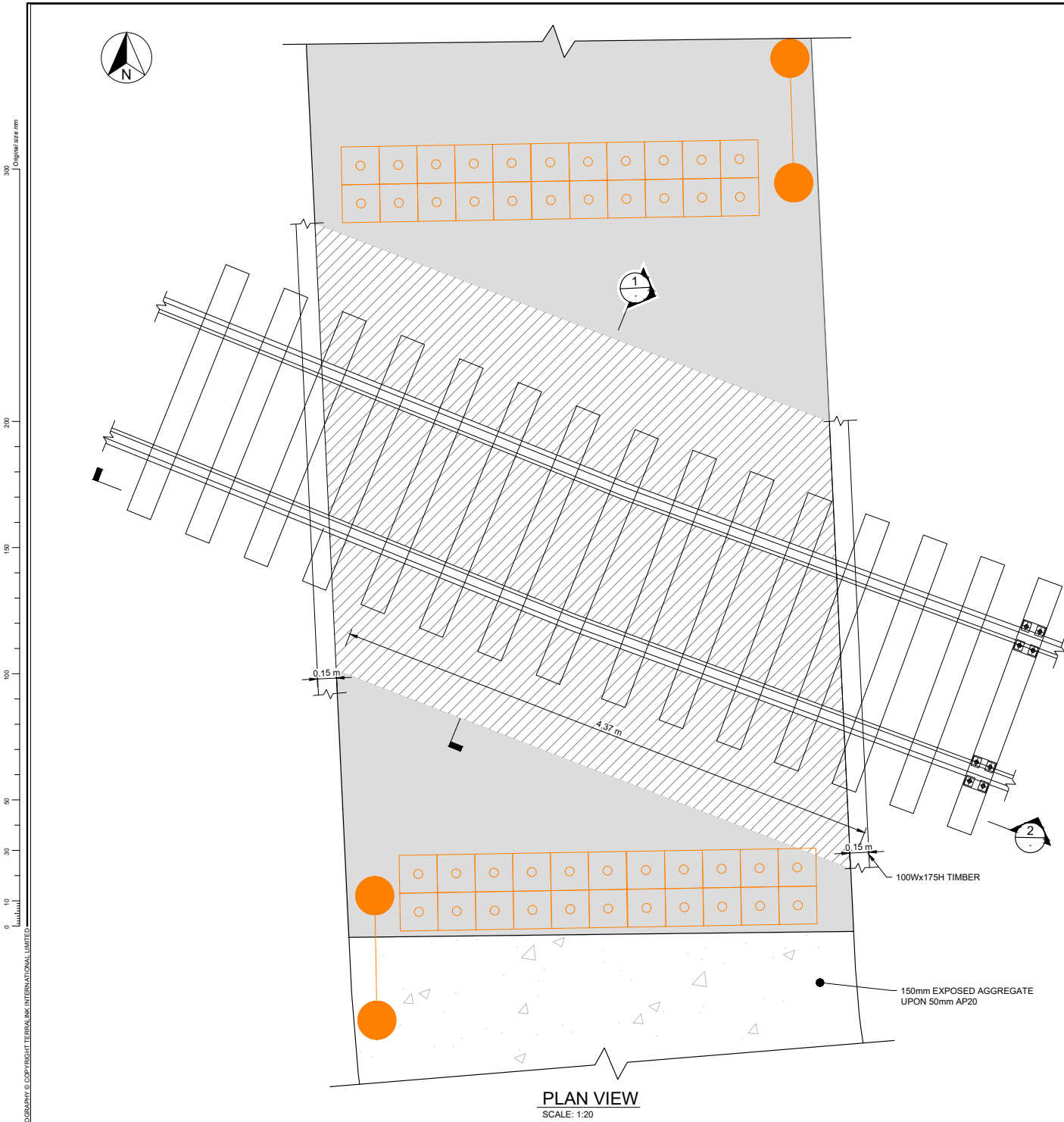


FOR TENDER  
PURPOSES ONLY



<div><div>Christchurch City Council</div><div></div></div> <div>CAPITAL PROGRAMME GROUP</div>	DATUM	C.D.D.	DESIGNED	NAME	SIGNED	DATE	APPROVED	CONSULTANT	<div></div>	PROJECT TITLE <div>MCR HEATHCOTE EXPRESSWAY SECTION 2 CURRIES ROAD TO MARTINDALES ROAD</div>	DRAWING TITLE <div>TREES AND UNDERPLANTING PLANS SHEET 14</div>	CONTRACT NUMBER	15/16-111	ORIGINAL SHEET SIZE	A1	SCALES	1:200 (A1) 1:400 (A3)		
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	RL	12.340, 11.80, 14.10	JT	JT	JT	XXXX/2019	DATE	SIGNED											
	SURVEY		DRAWN	LE	LE	XXXX/2019	23/07/2021	K Eveleigh											
	SURVEY LB	1015, 1016, 1017, 1018	DRW. CHECK	BM	BM	XXXX/2019	FOR CONSTRUCTION												
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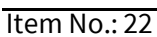
- STANDARD DRAWING NOTES**
- DRAWING IS INDICATIVE ONLY. DO NOT SCALE OFF DRAWING. ALL MEASUREMENTS TO BE CONFIRMED ON SITE PRIOR TO THE COMMENCEMENT OF WORKS.
  - DRAWING IS TO BE READ IN CONJUNCTION WITH ALL REFERENCE DRAWINGS AND RELEVANT DESIGN DOCUMENTS.
  - REFER TO SHEET 0010 FOR GENERAL NOTES.

**FOR TENDER  
PURPOSES ONLY**

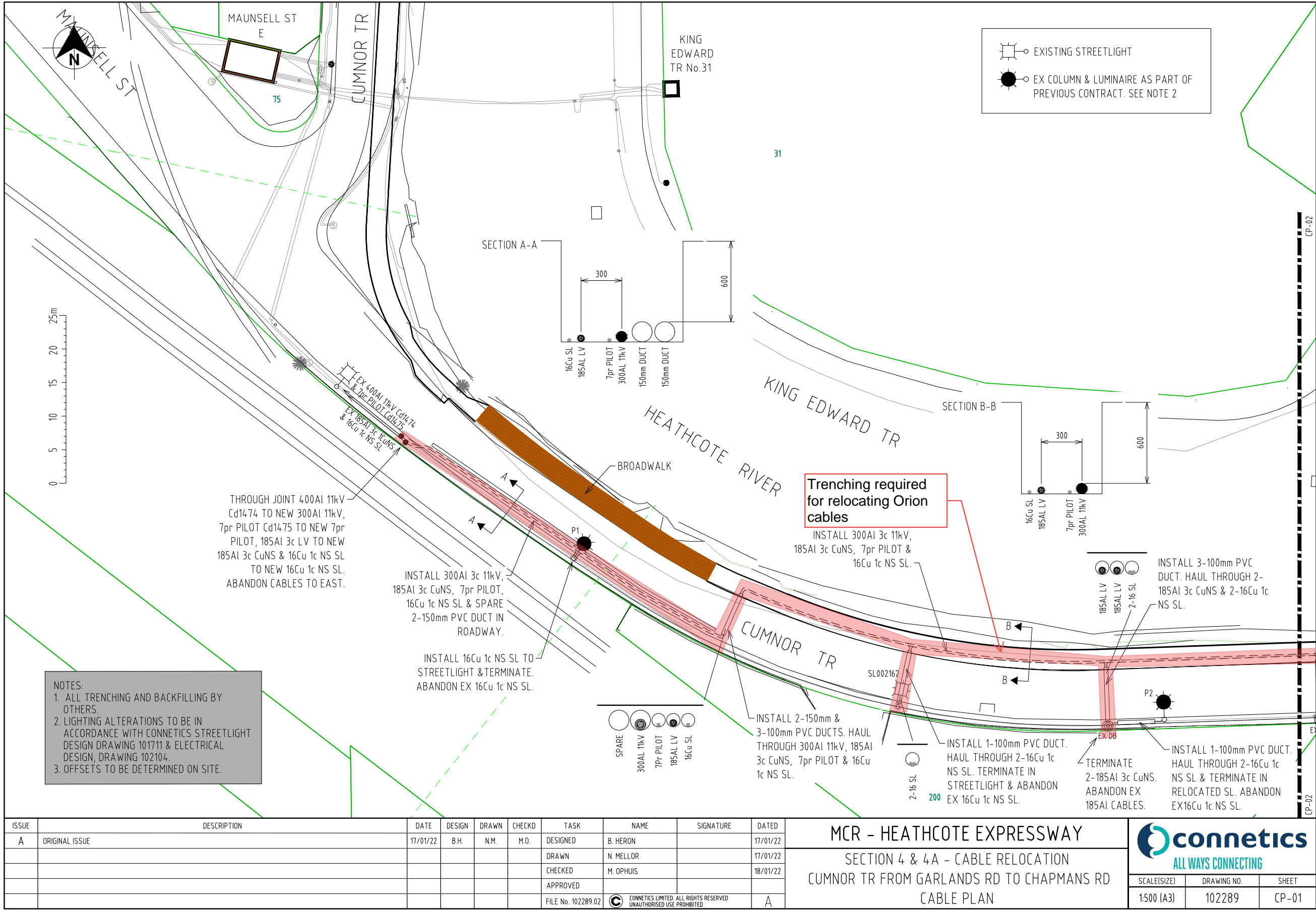
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SUSE	AMENDMENTS		SIGNED	DATE
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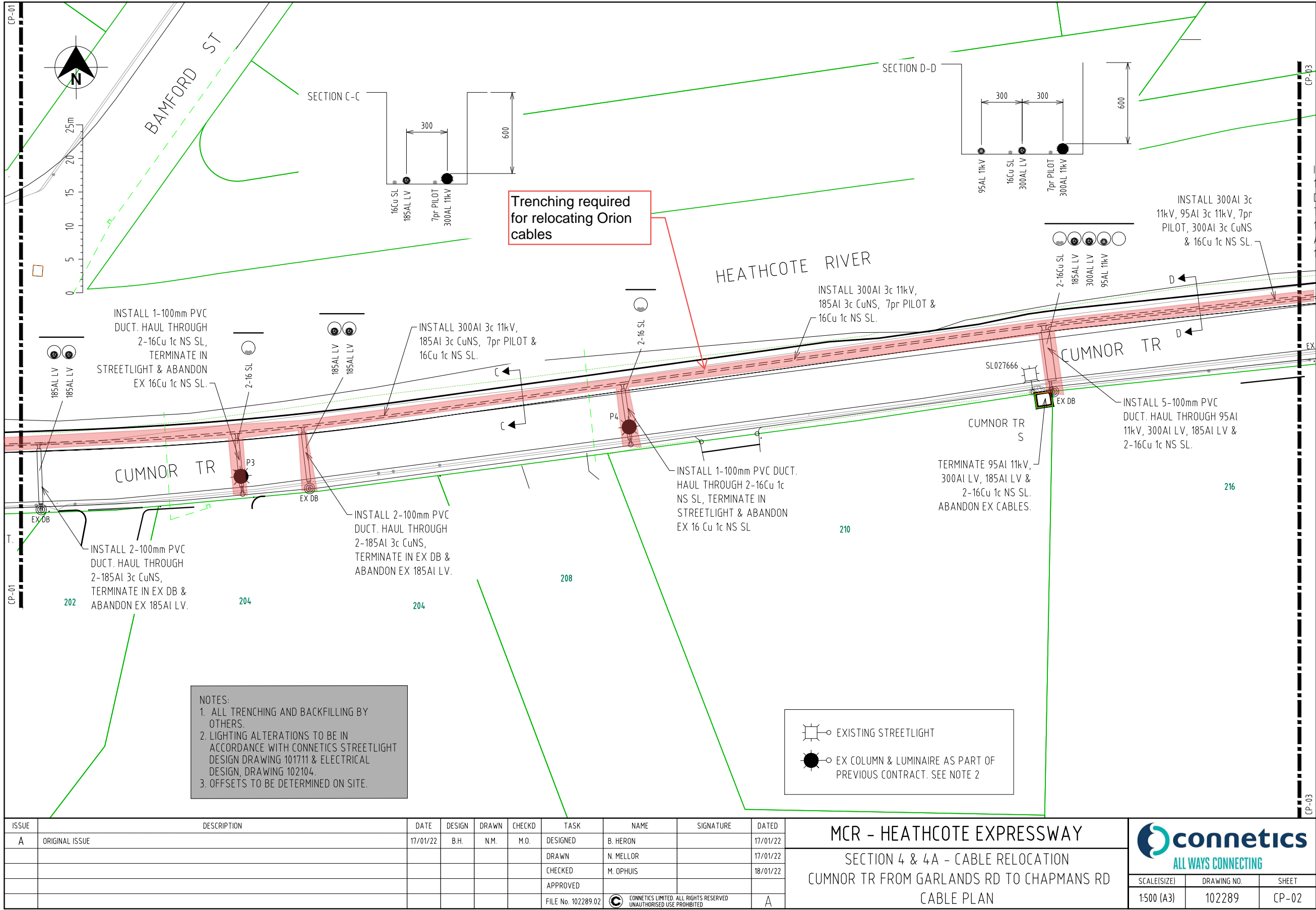
<b>Christchurch City Council</b>		<b>VELIOS</b>		<b>MCR HEATHCOTE EXPRESSWAY SECTION 2 CURRIES ROAD TO MARTINDALES ROAD</b>		<b>ROADING DETAILS SHEET 4</b>	
<b>CAPITAL PROGRAMME GROUP</b>		CONSULTANT PROJECT REF. 6-DHLIG.64		CONSULTANT FILE REF. 2354			

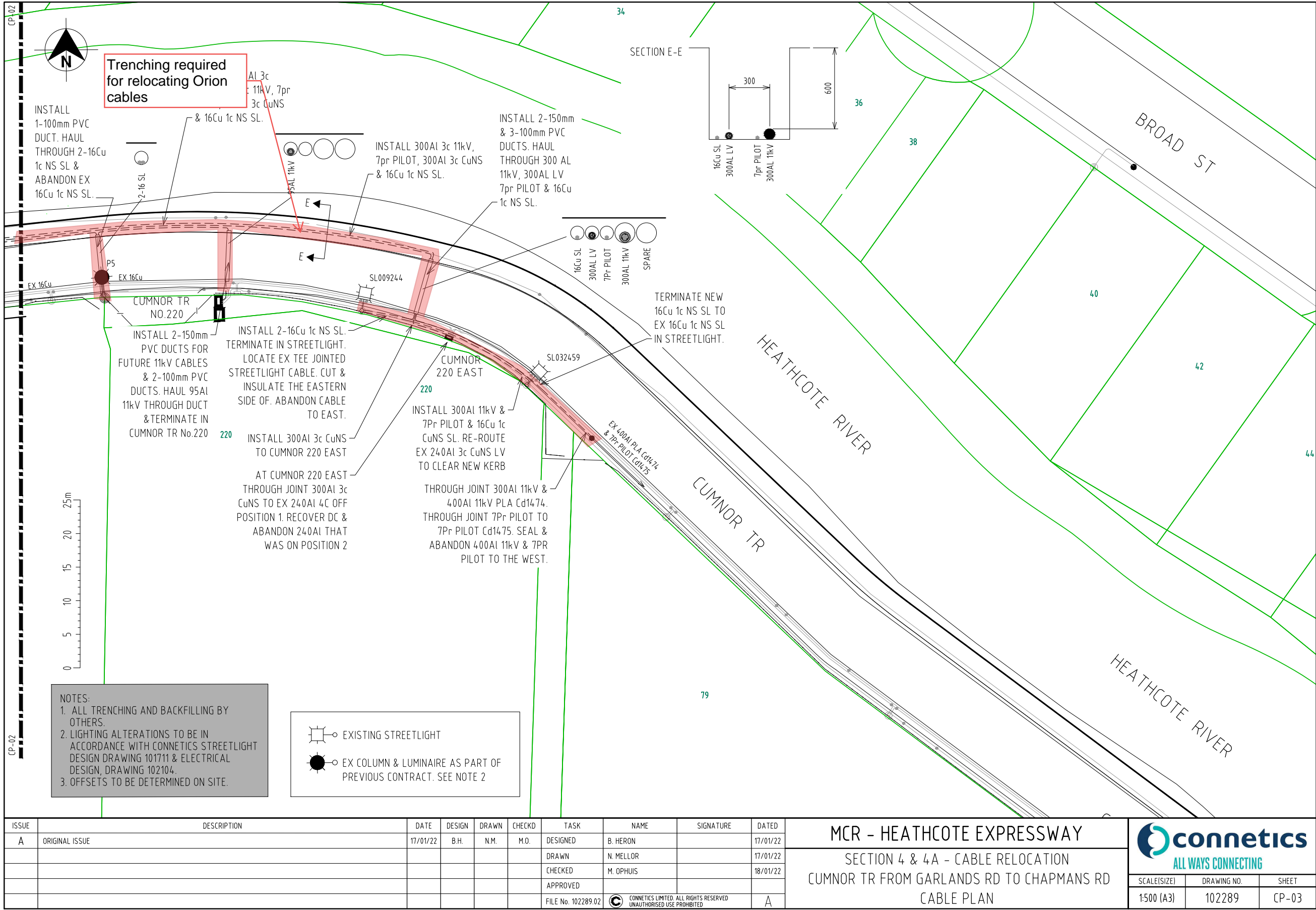




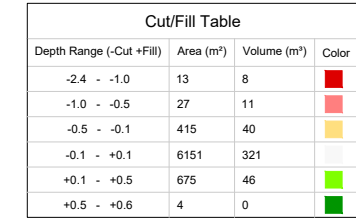












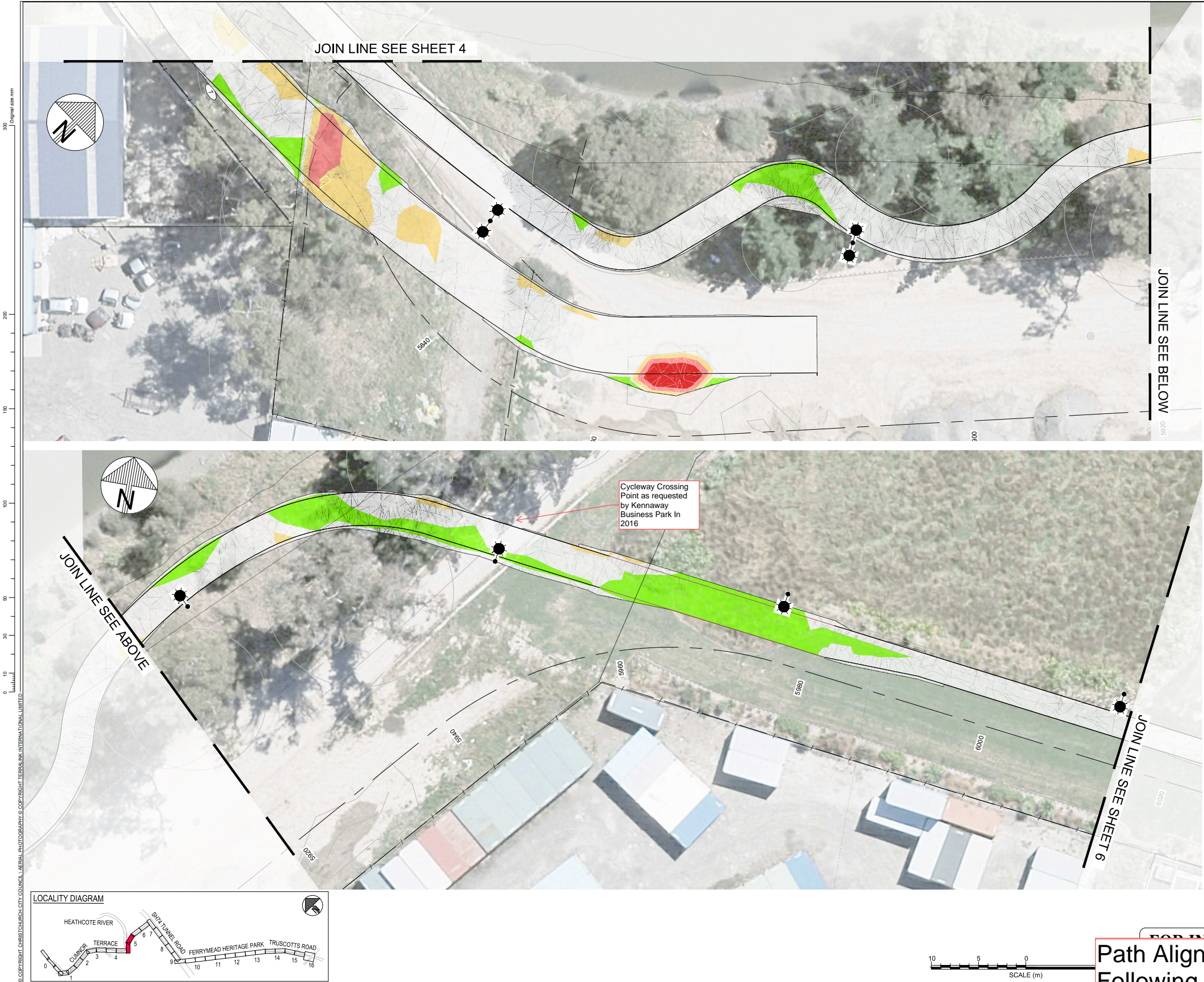
**NOTES:**

1. CURRENT CUT / FILL VOLUMES SHOWN ARE FROM PRELIMINARY DESIGN STAGE AND ARE SUBJECT TO CHANGE.

## Path Alignment following Consultation in 2016

A	FOR INFORMATION		KE	24/07/2020	
ISSUE	AMENDMENTS		SIGNED	DATE	
CONTRACT NUMBER		ORIGINAL SHEET SIZE	SCALES		
15/16-111					
CAD DRAWING FILE REF.		A1	1:200 (A1)		
RD365202			1:400 (A3)		
CPG PROJECT FILE NUMBER			SHEET		
CP502843/02			7154 OF -		





Cut/Fill Table			
Depth Range (-Cut +Fill)	Area (m²)	Volume (m³)	Color
-2.4 - -1.0	13	8	Red
-1.0 - -0.5	27	11	Red
-0.5 - -0.1	415	40	Orange
-0.1 - +0.1	6151	321	Yellow
+0.1 - +0.5	675	46	Green
+0.5 - +0.6	4	0	Green

NOTES:

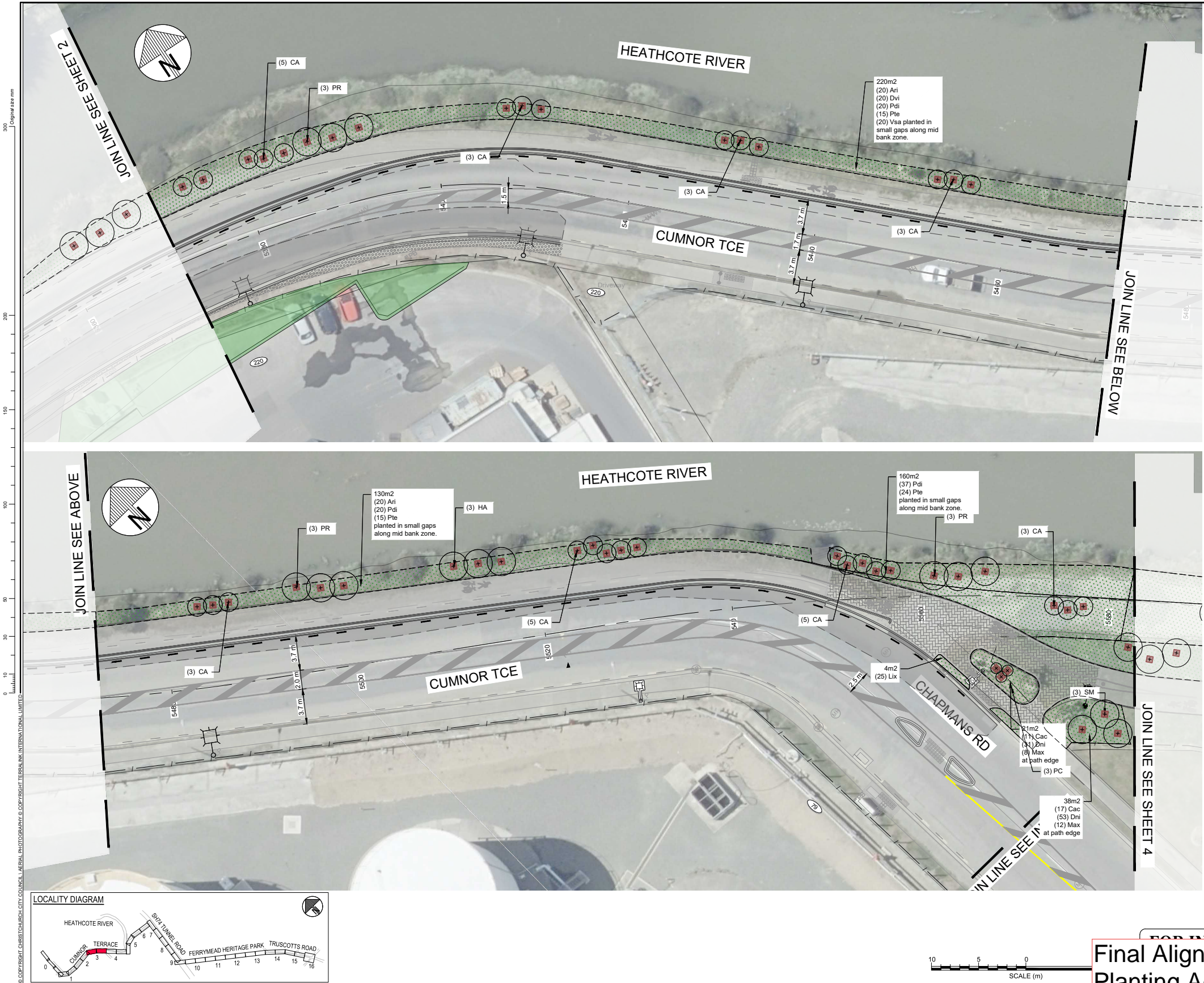
1. CURRENT CUT / FILL VOLUMES SHOWN ARE FROM PRELIMINARY DESIGN STAGE AND ARE SUBJECT TO CHANGE.

A	FOR INFORMATION	KE	24/07/2020
SUBSE	AMENDMENTS	SIGNED	DATE
CONTRACT NUMBER		ORIGINAL SHEET SIZE	SCALES
15/16-111			
CAD DRAWING FILE REF.		A1	1:200 (A1)
RD365202			1:400 (A3)
CPS PROJECT FILE NUMBER		SHEET	
CP502843/02		7155	OF -

FOR INFORMATION

Path Alignment  
Following  
Consultation in 2016





LEGEND	
LANDSCAPE GENERAL ARRANGEMENT	
[P01] ASPHALTIC CONCRETE FOOTPATH OR CYCLEWAY CONSTRUCTION	[A15] BOULDERS OF VARIOUS SIZES FOR LIZARD GARDENS
[P02] APPLE GREEN CYCLEWAY PAINT	[+/-] PROPOSED TREE WITH MULCH RING
[P03] ASPHALTIC CONCRETE DRIVEWAY	[X] PROPOSED TREE WITH ROOT BARRIER (ROOT BARRIER IS INDICATIVE)
[P04] EXPOSED AGGREGATE	[O] EXISTING TREE TO BE REMOVED
[P05A] HOLLAND® TEXTURED 'BLACK SANDS' PAVERS (HERRINGBONE)	[O] EXISTING TREE TO BE RETAINED & PROTECTED
[P05B] HOLLAND® TEXTURED 'BLACK SANDS' PAVERS (HEADER COURSE)	[P09] TACTILE PAVERS
[P08A] ASPHALTIC CONCRETE ROAD CONSTRUCTION	[P09B] DIRECTIONAL TACTILE PAVERS
[P10] HOLLAND® PERMEABLE PAVERS (HERRINGBONE)	[V01A] GRASS BERM REINSTATEMENT
[P13] ASPHALT SHARED PATH CONSTRUCTION (MODIFIED)	[V01B] NEW GRASS BERM
[P14] BOARDWALK	[V02] LOW SHRUB AND GROUND COVER PLANTING
[A02] 0.6M POST & CABLE FENCE	
[A06] CYCLE STAND	
[A08] BENCH SEAT	
[A10] LITTER/ RECYCLING BINS	

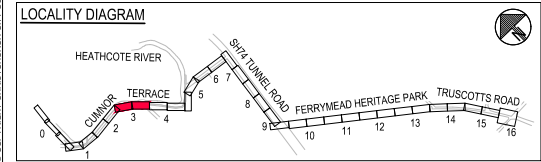
PLANTING NOTES

1. PLANT LOCATIONS APPROXIMATE PENDING CONFIRMATION OF WATER LEVELS INCLUDING MHWS LEVEL IN DETAILED DESIGN PHASE.
2. SET OUT TO BE CONFIRMED ONSITE BY LANDSCAPE ARCHITECT PRIOR TO PLANTING.
3. RETAIN ALL EXISTING PLANTING UNLESS SPECIFICALLY NOTED FOR REMOVAL

STANDARD DRAWING NOTES

1. DRAWING IS INDICATIVE ONLY. DO NOT SCALE OFF DRAWING. ALL MEASUREMENTS TO BE CONFIRMED ON SITE PRIOR TO THE COMMENCEMENT OF WORKS.
2. DRAWING IS TO BE READ IN CONJUNCTION WITH ALL REFERENCE DRAWINGS AND RELEVANT DESIGN DOCUMENTS.
3. REFER TO SHEET 0010 FOR GENERAL NOTES.

A ISSUE	ISSUED FOR INFORMATION			-	26/01/2022
	AMENDMENTS			SIGNED	DATE
CONTRACT NUMBER			ORIGINAL SHEET SIZE	SCALES	
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CPG PROJECT FILE NUMBER			SHEET		
CP502843/02			7873	OF	



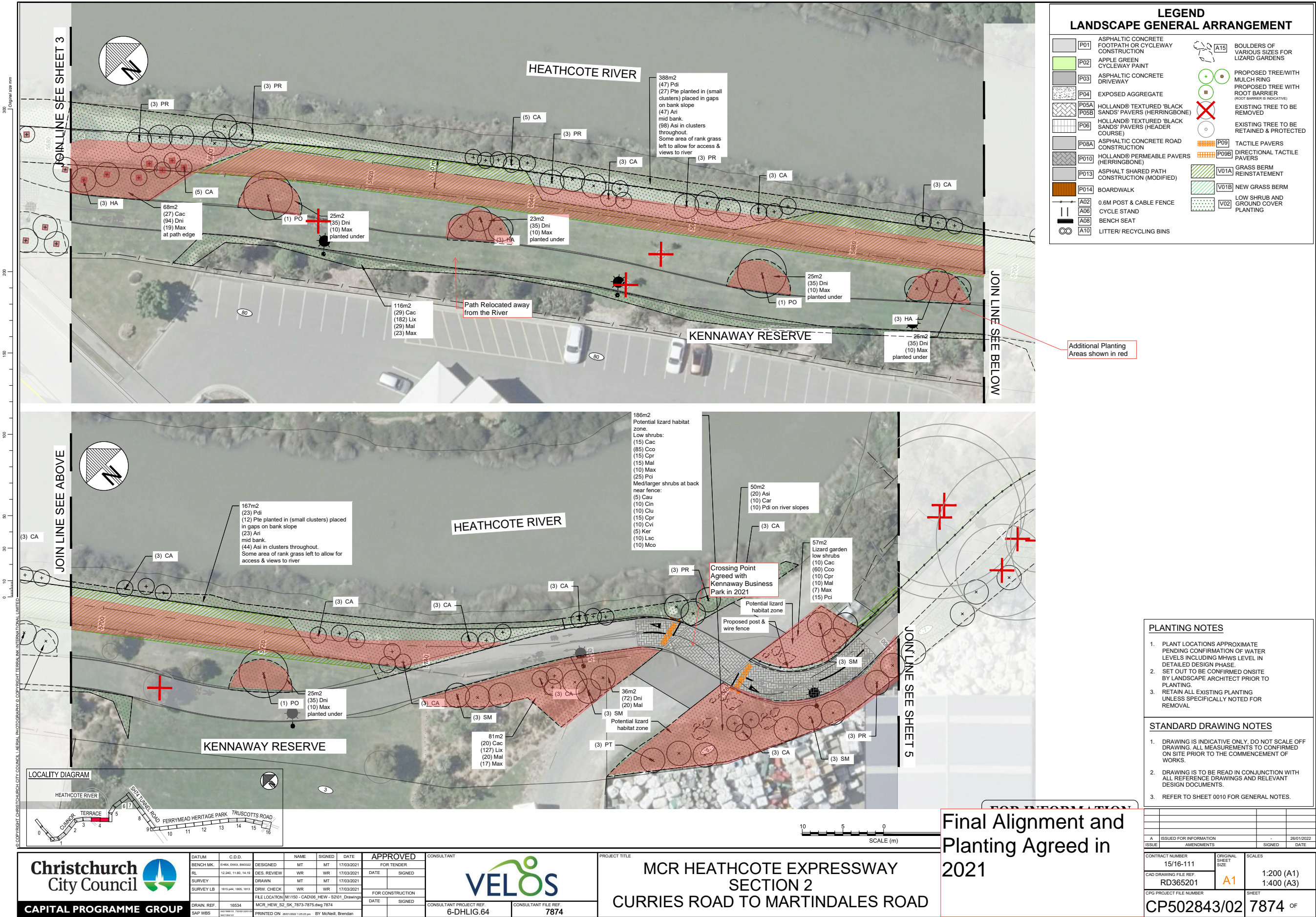
DATUM	C.D.D.	DESIGNED	MT	MT	DATE	APPROVED
BENCH MK.	EH&B, 6900, 880302	DES. REVIEW	WR	WR	17/03/2021	FOR TENDER
SURVEY	12.240, 11.80, 14.10	DRAWN	MT	MT	17/03/2021	DATE
SURVEY LB	1615.044, 1805, 1811	DRW. CHECK	WR	WR	17/03/2021	SIGNED
FILE LOCATION	M:\150 - CAD\06_HEW - S2\01_Drawing					FOR CONSTRUCTION
DRAIN REF.	16534					DATE
SAP WBS	MCR_HEW_S2_SK_7873-7875.dwg 7873					SIGNED
PRINTED ON	2021/03/22 1:25:52 pm					
BY	McNeill, Brendan					

CONSULTANT	PROJECT REF.	CONSULTANT FILE REF.
VELOSO	6-DHLIG.64	7873

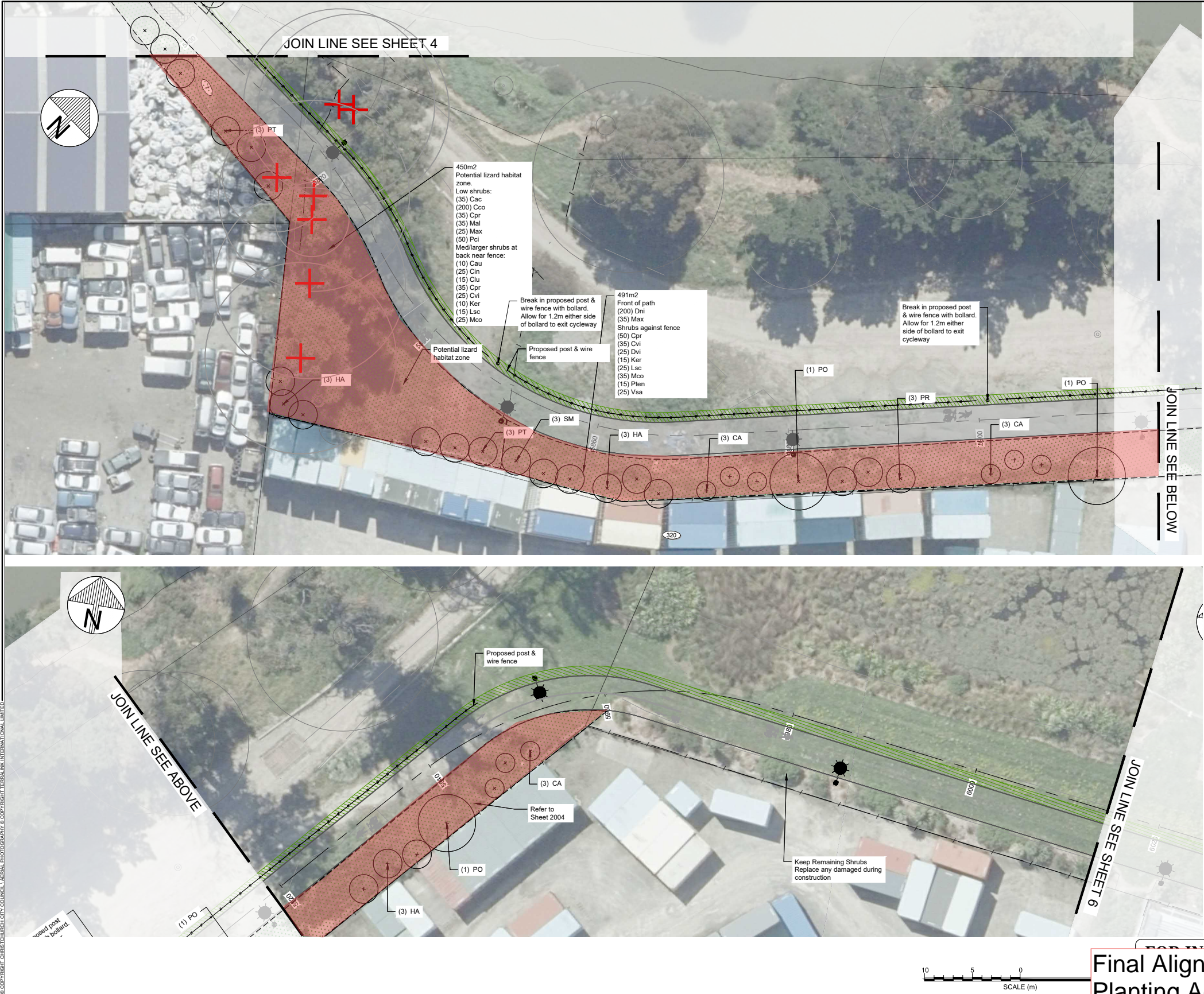
PROJECT TITLE
MCR HEATHCOTE EXPRESSWAY SECTION 2 CURRIES ROAD TO MARTINDALES ROAD

Final Alignment and  
Planting Agreed in  
2021

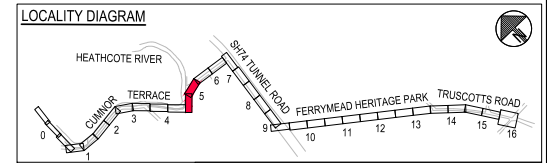








LEGEND	
LANDSCAPE GENERAL ARRANGEMENT	
[P01] ASPHALTIC CONCRETE FOOTPATH OR CYCLEWAY CONSTRUCTION	[A15] BOULDERS OF VARIOUS SIZES FOR LIZARD GARDENS
[P02] APPLE GREEN CYCLEWAY PAINT	[+ ] PROPOSED TREE/WITH MULCH RING
[P03] ASPHALTIC CONCRETE DRIVEWAY	[X ] PROPOSED TREE WITH ROOT BARRIER (ROOT BARRIER IS INDICATIVE)
[P04] EXPOSED AGGREGATE	[O ] EXISTING TREE TO BE REMOVED
[P05A] HOLLAND® TEXTURED 'BLACK SANDS' PAVERS (HERRINGBONE)	[O ] EXISTING TREE TO BE RETAINED & PROTECTED
[P05B] HOLLAND® TEXTURED 'BLACK SANDS' PAVERS (HEADER COURSE)	[P09] TACTILE PAVERS
[P06A] ASPHALTIC CONCRETE ROAD CONSTRUCTION	[P09B] DIRECTIONAL TACTILE PAVERS
[P06B] HOLLAND® PERMEABLE PAVERS (HERRINGBONE)	[V01A] GRASS BERM REINSTATEMENT
[P06C] ASPHALT SHARED PATH CONSTRUCTION (MODIFIED)	[V01B] NEW GRASS BERM
[P06D] BOARDWALK	[V02] LOW SHRUB AND GROUND COVER PLANTING
[A02] 0.6M POST & CABLE FENCE	
[A06] CYCLE STAND	
[A08] BENCH SEAT	
[A10] LITTER/ RECYCLING BINS	



- PLANTING NOTES**
1. PLANT LOCATIONS APPROXIMATE. PENDING CONFIRMATION OF WATER LEVELS INCLUDING MHWS LEVEL IN DETAILED DESIGN PHASE.
  2. SET OUT TO BE CONFIRMED ONSITE BY LANDSCAPE ARCHITECT PRIOR TO PLANTING.
  3. RETAIN ALL EXISTING PLANTING UNLESS SPECIFICALLY NOTED FOR REMOVAL.

- STANDARD DRAWING NOTES**
1. DRAWING IS INDICATIVE ONLY. DO NOT SCALE OFF DRAWING. ALL MEASUREMENTS TO BE CONFIRMED ON SITE PRIOR TO THE COMMENCEMENT OF WORKS.
  2. DRAWING IS TO BE READ IN CONJUNCTION WITH ALL REFERENCE DRAWINGS AND RELEVANT DESIGN DOCUMENTS.
  3. REFER TO SHEET 0010 FOR GENERAL NOTES.

A	ISSUED FOR INFORMATION			-	25/01/2022
SUB	AMENDMENTS			SIGNED	DATE
CONTRACT NUMBER		ORIGINAL SHEET SIZE	SCALES		
15/16-111					
AD DRAWING FILE REF					
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			1:400 (A3)		
PG PROJECT FILE NUMBER			SHEET		
CP502843/02			7875 OF		

Christchurch  
City Council

CAPITAL PROGRAMME GROUP

DATUM  
BENCH MK.  
E1481, 8902, 8903, 8904  
RL  
12.340, 11.80, 14.10  
SURVEY  
SURVEY LB  
1915, 1916, 1917, 1918  
FILE LOCATION  
M:\150 - CAD\06\_HEW - S201\_Drawing.dwg  
DRAWN  
17/03/2021  
DESIGNED  
17/03/2021  
NAME  
MT  
SIGNED  
MT  
DATE  
17/03/2021  
APPROVED  
FOR TENDER  
DATE  
17/03/2021  
FOR CONSTRUCTION  
DATE  
17/03/2021  
CONSULTANT  
VELOSO  
CONSULTANT PROJECT REF.  
6-DHLIG.64  
CONSULTANT FILE REF.  
7875  
PROJECT TITLE  
MCR HEATHCOTE EXPRESSWAY  
SECTION 2  
CURRIES ROAD TO MARTINDALES ROAD

Final Alignment and  
Planting Agreed in  
2021

Christchurch  
City Council

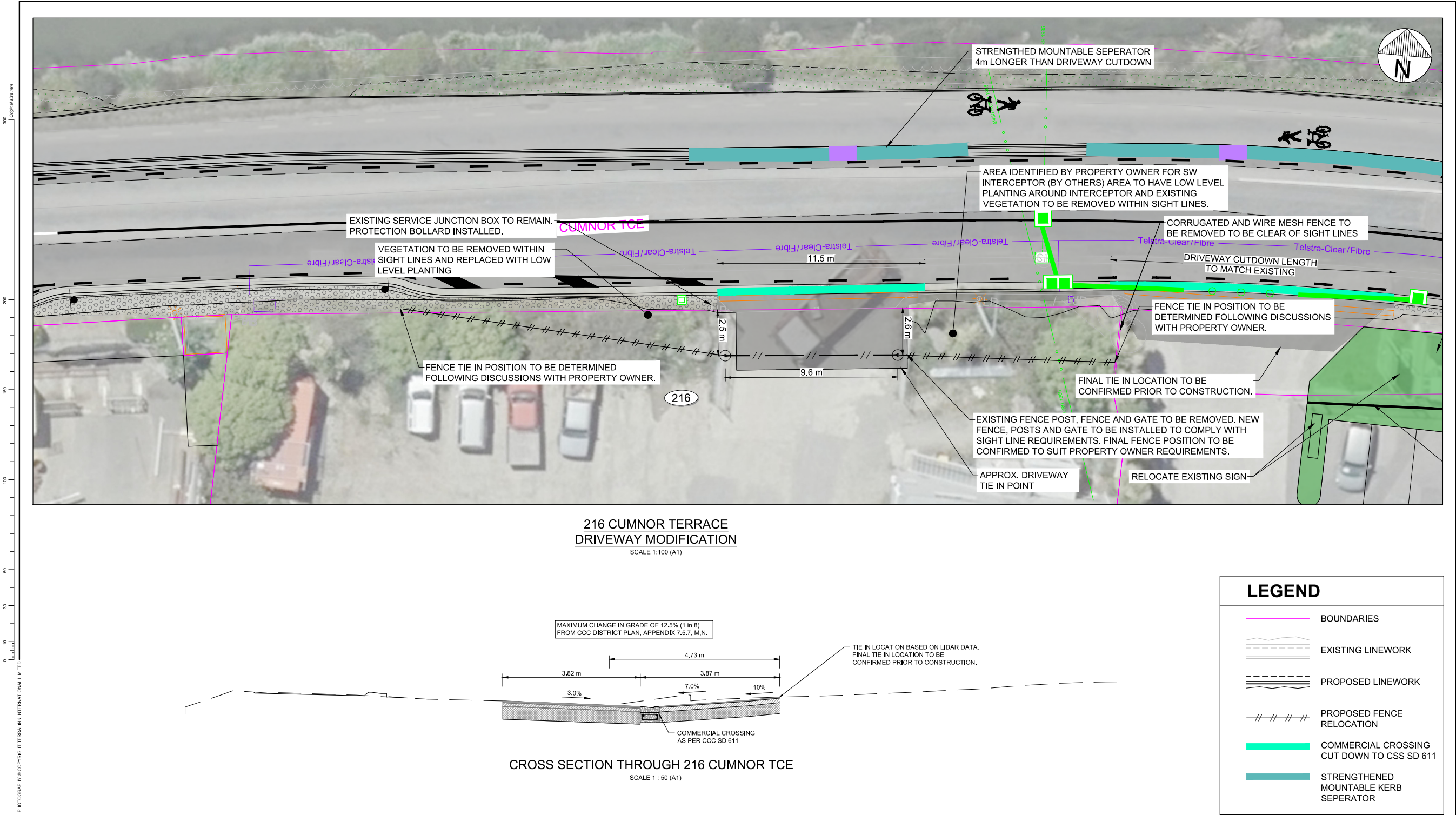
CAPITAL PROGRAMME GROUP

Item No.: 22

Page 25







**DRAWING IN PROGRESS**  
PLOTTED ON 14-Jan-22 AT 12:30 pm

**FOR INFORMATION ONLY**

ISSUE	AMENDMENTS	SIGNED	DATE
C	FOR INFORMATION	-	14/01/2022
B	FOR INFORMATION	-	08/04/2021
A	FOR INFORMATION	-	19/03/2021

<div><div>Christchurch City Council</div><div></div></div> <div>CAPITAL PROGRAMME GROUP</div>	DATUM	C.D.D.	DESIGNED	NAME	SIGNED	DATE	APPROVED	<div></div>	CONSULTANT	PROJECT TITLE <div>MCR HEATHCOTE EXPRESSWAY SECTION 2 CURRIES ROAD TO MARTINDALES ROAD</div>	DRAWING TITLE <div>CUMNOR TERRACE PROPERTY 216 DRIVEWAY</div>	CONTRACT NUMBER	ORIGINAL SHEET SIZE	SCALES	
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	SURVEY		DRW. CHECK												
SURVEY LB	1915.044, 1905, 1913		FILE LOCATION	M\150 - CAD\06_HEW - S2\01_Drawings			FOR CONSTRUCTION					CPS PROJECT FILE NUMBER	SHEET		
DRAIN. REF.	16534		MCR_HEW_S2_SK_7973-7975_Cumnor Driveway Change				DATE	SIGNED	CONSULTANT PROJECT REF.			CP502843/02	7973	OF	
SAP WBS	16534		PRINTED ON: 14/01/2022 12:30:25 pm BY: McNeill, Brendan				09/10/2021		6-DHLIG.64	7973					