

# Transmission Gully

Monthly Report to WGP

October 2018

TG-CPBH-RPT-ALL-GE-9181 Rev 01



**CPB HEB**  
Joint Venture



## Monthly Report to WGP – October 2018

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

## Monthly Report to WGP – October 2018

### Table of Contents

Executive Summary.....	2
Safety and Health .....	6
Construction.....	11
Environment.....	18
Communications / Stakeholder.....	21
Resources.....	24
Commercial.....	25
Quality.....	28
Appendix A: Media Monitor .....	31
Appendix B: Progress Reporting – Design .....	34
Appendix C: CPBHEB JV Top Risks and Opportunities .....	35
Appendix D: Overall Staging Plan .....	36
Appendix E: TG Notice Registers.....	37
Appendix F: Procurement Status.....	38
Appendix G: Reconciliation of Payment Claims and Invoices to Date.....	39
Appendix H: Monthly Progress Claim Graph .....	40
Appendix I: Revenue Flow Graph / Table.....	41
Appendix J: Cash Received.....	42
Appendix K: Programme Dashboard .....	43
Appendix L: Non-Conformance Reports.....	44
Appendix M: Construction Programme – Key Milestones.....	45
Appendix N: Photos.....	46

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

## Executive Summary

Over 5,042,675 million man hours completed on the Project to date. s 9(2)(b)(ii)

Despite this, several milestones were achieved in October including; Phase 2 traffic switch at Linden, Bridge 19 water diversion works progressing to pre-commissioning stage and 1:1 RSE fills in D3 being achieved at an accelerated rate of two layers each day. Further, the Te Puka stream Sections 4 and 5 were made live.

s 9(2)(b)(ii)

ey is achieving upcoming milestones before Christmas to keep the overall program on track which include:

1. SH 58 traffic switch.
2. Coast Road traffic switch.
3. Piling at bridge 25 and 28 in existing median.
4. Bridge 20 deck launch 1 completion and new beam set to be mobilised.
5. Bridge 20 Pier 2 head falsework erection to commence.
6. Watermain cutovers at Area D.
7. Main Line Pavement commencing in Areas C and E.

### Key Achievements:

- 100% sub-base placed to Coast Road for Stage 4 switch.
- Finishing works commenced on Coast Road.
- Bridge 2 - both abutments poured.
- Cut 5B to 1<sup>st</sup> bench.
- Saddle to 4<sup>th</sup> bench on southbound side, 2<sup>nd</sup> bench on northbound side.
- Te Puka Sections 4 and 5 live.
- 12,500m<sup>3</sup> of fill to SH58 which completed the subgrade required for the switch.
- SH58 Longitudinal drainage is 71% complete with all Western roundabout (K-Lines) completed.
- Fill 30 (1:1 fill) reached the 7m high mark.
- Bridge 26 Collins Ave Bridge demo ready to complete 3 Nov.
- Bridge 25 Pier 2 in central median piling pad commenced.

- Bridge 25A Abutment poured and first span of beams installed from Abutment A to Pier 1.
- Bridge 25B MSE near completion with 2 layers remaining.
- Bridge 27 – Abutment A & B RSE works ongoing. Piling Pad for Pier 3 headstock complete mid-November.
- Bridge 2 – The construction of both Abutments is complete and SuperT erection has commenced.
- Bridge 4 – Continued with Bridge deck and integral pour reinforcement. Anticipated pour date Mid November.
- Bridge 11 – The construction of the structure is complete.
- Bridge 13 – We are on programme to complete the bridge by the end of November 2018, the installation of the Bridge barriers is approximately 50% complete.
- Bridge 18A – All the wall concrete pours have been completed, we have started with the installation of the temporary works to support the roof.
- Bridge 20:
  - Pier 2 – L Wall retaining wall now complete. The next column pour (lift 7) will be done in the first week of November 2018.
  - Pier 1 – Completed the 3<sup>rd</sup> column lift with the 4<sup>th</sup> lift planned for the second week of November 2018.
  - Launch Yard – Sign off and final touch ups of the erected launch nose are nearing completion, we are now in the final stages of the launch preparation with the first launch planned for completion at the end of November 2018.
- Bridge 25 – We have completed the installation of the first span of SuperT girders.

s 9(2)(b)(ii)

s 9(2)(b)(ii)



RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

s 9(2)(b)(ii)



**Justin Redelinghuys**  
Project Director, D&C – Transmission Gully  
CPB HEB Joint Venture

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

## Safety and Health

### Overview

- 161 project inductions conducted during October.
- s 9(2)(b)(ii)
- 33 ConstructSafe assessments undertaken in October.
- Site visit by CPB HS General Manager, s 9(2)(a), to support the investigation for the rockfall incident at cut 5B.
- Final senior management reviews for the Linden switch and BR26 demolition.
- Project SHQ Manager met with NZTA and Saferoads representatives in Tauranga to discuss Mobile Plant standard for NZTA.
- Meeting with Transpower to discuss earthing and bonding requirements for the lifts adjacent to the power lines at BR20.
- Pipeline awareness training undertaken by First Gas representative.

### Project Hours

Project Hours @ October 2018				
Area	Life of Project	Last Month	This Month	12MR*
TG Project Total**	5,042,675	170,440	185,367	1,970,874

\*\* Excludes Early Works Hours

\*12MR = 12 Month Rolling Total

s 9(2)(b)(ii)



s 9(2)(b)(ii)

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

s 9(2)(b)(ii)



RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

s 9(2)(b)(ii)



s 9(2)(b)(ii)



RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

s 9(2)(b)(ii)

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

## Construction

### Overview

s 9(2)(b)(ii)

Over 100mm of rain was recorded in the southern portion of the project over a total of 12 days. Slightly less was experienced in the north. A major highlight of the month was the opening of the Phase 2 traffic switch at Linden on 26 October which was well executed and had minimal impact on traffic flow after the initial settling in period.

In Zone 1, works have continued on the Coast Road pavement, with the sub-base stabilisation trial completed. The team is working hard to achieve a late November switch date and have rescheduled the "Wainui South" widening works on SH1 to achieve this. Dry spells in the month enabled high productivities for day and night shift earthworks which was a main contributor to the month's earthworks tally. Te Puka sections 4 and 5 were lived and Horokiri stream works continue. In the saddle, cuts 5B, 5A and 3 continue to open up with six Geovert crews now working across the site. At BR3, testing and detailed design is under way in order to start strip footings in November.

In Zone 2, the Bridge 16 REL wall construction is now in full swing and bulk earthworks around the JC Interchange are due to recommence in early November following completion of detailed terracing for fill foundations. The Te Marua and Bridge 19 water diversion works have also advanced well and are on target for a mid-November cut over. The actual date for this is pending Wellington Water resources being available.

s 9(2)(b)(ii)

In Zone 3, as mentioned previously, the traffic switch represented a major milestone for the project and has allowed works to progress on barrier movements to widen the existing median space on SH1 for the construction of the Bridges 25 and 27 median piers. In addition, the first span of SuperTs have been erected on Bridge 25. Elsewhere in the zone, MSE walls have progressed well with RW2 nearing completion, RW9 complete and RW7 commenced. The latter two are integral to the next major milestone of construction of the Kenepuru Drive Roundabout.

s 9(2)(b)(ii)

Elsewhere in structures, Bridge 4 deck reinforcement has progressed well, Bridge 2 abutments have been completed, Bridge 11 is now complete and Bridge 18a wall pours are 100%.

Mitigation planting has continued in the Te Puka, Horokiri and Cannons Creek catchments with over 70,000 plants planted in the month, bringing the total project wide planting to 19% complete. Goat culling efforts continue to protect these new plantings.

## Zone 1

### Achievements

- 100% sub-base placed to Coast Road for Stage 4 switch.
- Finishing works commenced on Coast Road.
- Bridge 2 - both abutments poured.
- Cut 5B to 1<sup>st</sup> bench.
- Saddle to 4<sup>th</sup> bench on southbound side, 2<sup>nd</sup> bench on northbound side.
- Te Puka Sections 4 and 5 live.

### Upcoming Milestones

- Traffic switch (Stage 4) at Gate 2 in late November.
- BR3 strip footing underway.
- Te Puka Section 7 start.
- Liven Horokiri Section 4.
- Start cut 4c and 4d.

### Challenges and Mitigation

s 9(2)(b)(ii)

## Zone 2

### Achievements

- 12,500m<sup>3</sup> of fill to SH58 which completed the subgrade required for the switch.
- SH58 Longitudinal drainage is 71% complete with all Western roundabout (K-Lines) completed.
- Fill 30 (1:1 fill) is currently at 7m high.
- Cut 34 – Fill 33A is preparing for Subgrade (including cut foundation treatment).
- E1/2 – Over batter works completed.

### Upcoming Milestones

- Completion of Major Headwall 13290 – early December.
- C1 Pavement Handover of Northbound Carriage way – mid-November.
- E1/2 Pavement Handover Stage 1 – mid-November.

- E1/2 Pavement Handover Stage 2 – mid-December.

### Challenges and Mitigation

s 9(2)(b)(ii)

### Zone 3

#### Achievements

- Phase 2 Traffic switch complete, barrier movements to provide wider median for Bridge Pier construction to be complete by mid-November.
- Bridge 26 Collins Ave Bridge demo ready to complete 3 Nov.
- Bridge 25 Pier 2 in central median piling pad commenced.
- Bridge 25A Abutment poured and first span of beams installed from Abutment A to Pier 1.
- Bridge 25B MSE near completion with 2 layers remaining.
- Bridge 27 – Abutment A & B RSE works ongoing. Piling Pad for Pier 3 headstock complete mid-November.
- RW2 complete, and Fill 45B commenced.
- RW7 in Kenepuru has commenced and will be ongoing until the end of November.
- Currently installing Drainage Line O at Kenepuru.
- Subgrade preparation ongoing for 35 Kenepuru Road Access to Bowling Alley.
- Stabilisation Bench 8 at completed at Cut 42 completed, and further works at Cut 42 on hold. Gevert will recommence in Cut 42 towards the end of November.

#### Upcoming Milestones

- Completion of barrier movements and establishment of gates to central median – mid-November.

- Commence piling in the Median for Bridge 25 and Bridge 27.
- Commence Pier 3 casing installation and headstock Bridge 27B – end of November.
- Soil nailing at Bridge 26 for piling platform – November.
- Bridge 28A – Area being cleared to commence foundation preparation for the MSE Wall.
- Bridge 28B – MSE Wall commencing end of November.

### Challenges and Mitigation

s 9(2)(b)(ii)

### Structures

#### Achievements

- **Bridge 2:** The construction of both Abutments is complete and SuperT erection has commenced.
- **Bridge 4:** Continued with Bridge deck and integral pour reinforcement. Anticipated pour date Mid November.
- **Bridge 11:** The construction of the structure is complete.
- **Bridge 13:** We are on programme to complete the bridge by the end of November 2018, the installation of the Bridge barriers is approximately 50% complete.
- **Bridge 18A:** All the wall concrete pours have been completed, we have started with the installation of the temporary works to support the roof.
- **Bridge 20:**
  - Pier 2:
    - L Wall retaining wall which connects the pier footing to the surrounding strata is now complete. The next column pour (lift 7) will be done in the first week of November 2018.
  - Pier 1:
    - The construction of the column has progressed well we have completed the 3<sup>rd</sup> column lift with the fourth lift planned for the second week of November 2018.
  - Launch Yard:



- Sign off and final touch ups of the erected launch nose are nearing completion, we are now in the final stages of the launch preparation with the first launch planed for the end of November 2018.

- Bridge 25: We have completed the installation of the first span of SuperT girders.

### Upcoming Milestones

- Bridge 2: Complete the installation of the girders in early November.
- Bridge 4: Bridge deck pours in mid-November.
- Bridge 13: Construction complete for the SH58 switch.
- Bridge 14: Completion of Bridge deck.
- Bridge 14A – Complete the construction of Abutment A.
- Bridge 18A: Complete the construction of the Bridge.
- Bridge 20:
  - Pier 1 – Complete the 6<sup>th</sup> column pour by the end of November 2018.
  - Pier 2 – Complete the 9<sup>th</sup> column pour by the end of November 2018.
  - Complete the first bridge launch.
- Bridge 26: Complete the 2<sup>nd</sup> stage Bridge demolition.

### Challenges and Mitigation

s 9(2)(b)(ii)

### Utilities and ITS

#### Achievements

- Street light installation commenced at Kenepuru, Coast Road and SH58
- Bulk Water relocation continuing at BR19 (360 m) and Te Marua (50 m).
- ITS integration workshops continue.
- Chorus relocation complete (SH58).

#### Upcoming Milestones

- 30% ITS design due 20 November, target submission to NZTA 23 November.
- Bridge 19 and Te Marua permanent water relocation, cut over date in mid to late November pending Wellington Water resources.

## Challenges and Mitigation

s 9(2)(b)(ii)

### Project-Wide Works

#### Achievements

- Keystone Block MSE walls 48% complete across the Project. Four crews working concurrently on Bridge 12, Bridge 25B, RW 2 and RW7.
- REL walls 52% complete across the Project. Bridge 15A was handed over to the Structures team mid-October. Works currently underway on 15 and 16 Walls.
- Reinforced Earth commenced Bridge 3 panel production. 17% complete to date.
- Bridge 19 design: IFC issued for review by NZTA.
- Mitigation planting continued in Te Puka, Horokiri and Cannons Creek catchments with approx. 70,000 plants planted in October. Overall, project-wide, planting is 19% complete.
- 27 wild sheep were culled in October. 250 goats have been culled to the end of October in B1/B2. Lizard habitat protection continued with trapping of rats, mice and stoats.
- Barrier installation continued in Zone F for the traffic switch. 180m concrete barriers and 410m of w-section guardrail has been installed in October.

#### Upcoming Milestones

- Commence Bridge 11; Bridge 19 and Bridge 28 MSE Walls in November. Complete Bridge 12, Bridge 15B and Retaining Wall 2 in November.

## Challenges and Mitigation

s 9(2)(b)(ii)

### Pavements / Stage 2 Earthworks

#### Achievements

- Linden Switch Complete.

- 
- Sub-base insitu stabilisation complete on Coast Road.

#### **Upcoming Milestones**

- Approval of Willowbank Quarry consent – Second S92 request has been answered.
- Coast Road chip seal surfacing complete by 22 November.
- SH58 Traffic switch completed on 9 December.

#### **Challenges and Mitigation**

s 9(2)(b)(ii)



RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

s 9(2)(b)(ii)

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

s 9(2)(b)(ii)

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

There were one (1) G.10 incident recorded during October 2018.

s 9(2)(b)(ii)



RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

## Communications / Stakeholder

### Community and Stakeholder Engagement

In the month of October, provided a presentation to WelTec engineering students and had a stand at “Spring into Tawa”, Tawa’s annual Spring festival. We hosted a group of Ngati Toa elders who made a blessing on the new sections of Te Puka stream before their livening.

Much of our focus has been on the communications for the Linden traffic switch and subsequent bridge demolition. We worked closely with NZTA and had radio advertising as well as social media via NZTA’s Wellington Facebook page and Twitter.

Running alongside those broader regional communications, we had a targeted communications strategy for the local community affected by the closure of Collins Avenue for the bridge demolition which included a letter drop out to the surrounding suburbs, messaging via the local schools and on social media via Wellington City Council and other local community groups such as the Linden Appreciation Society and Vibrant Tawa.



s 9(2)(a)



s 9(2)(a)

## Visitor Centre

The visitor centre has been refreshed with updated interchange graphics and the information boards re-ordered. It is now located at Civic Square in Wellington.



## Communications

### Construction Updates / Quarterly e-Newsletter

The October Construction Update was published on 31 October. Given the importance and impact of the upcoming traffic switches (Linden, MacKays Crossing and SH58) it was agreed that the October Construction Update would focus solely on this information for road users. The Spring Newsletter covered much of the construction activity for both September and October so it was considered more relevant to use this month's edition for the traffic switches.

The link is → <http://createsend.com/t-6233C25649DFED852540EF23F30FEDED>

### Newsletter Stats (1 – 31 October):

- 48 new subscribers.
- 13 unsubscribed (no reason given).
- 2,656 total subscribers.



- 68.8% of recipients opened the newsletter.

### Website

- We had 14,955 page views in the month of October.
- 7,680 people found the website through a Google search.
- 2,560 were referred via campaign monitor (people who received the electronic newsletter shared the email with others).

Wellington topped the list of visitors with 5509 visitors, and Auckland as the next highest with 3194. The remainder of the visitors were from Porirua, Christchurch, Hamilton, Palmerston North and Sydney.

The most popular pages included:

- The project's home page, with 4,626 visitors,
- The maps had 1,363 visits.
- The gallery page received 1,356 visitors.
- The Cannons Creek Bridge milestone story received 811 visitors.

### Radio Interviews

Darren Utting – pre-recorded re traffic switches.

### *Upcoming:*

Robert Poole – Project Engineer for BR2 and BR3.

### Photography

October aerials completed and will be loaded onto the website gallery once approvals completed.

Time lapse and photography completed for the BR25 girder install and BR26 demolition – will be available once editing is complete.

s 9(2)(b)(ii)



**Staff Turnover**

Rolling average for period November 2017 to November 2018 is 14.4%.

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

s 9(2)(b)(ii)

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

s 9(2)(b)(ii)

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

s 9(2)(b)(ii)



RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

s 9(2)(b)(ii)



RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

s 9(2)(b)(ii)



RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

s 9(2)(b)(ii)



RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982



## Appendix A: Media Monitor



### [Plan for thousands of new houses being nailed down in Porirua](#)

Stuff.co.nz-30/10/2018

**Transmission Gully** motorway looks likely to be user-pays after ... it will connect Porirua to the major **Transmission Gully** motorway project due ...



### [\\$1.5b revitalisation of Porirua will see thousands of new state and ...](#)

Independent Community Newspaper-31/10/2018

**Transmission Gully** motorway looks likely to be user-pays after Labour ... that will connect Porirua with the big **Transmission Gully** project east of ...

### [Council welcomes \\$1.5 billion investment in Porirua City](#)

Local Source-Scoop.co.nz-31/10/2018

#### Social Media:



#### [NZ Transport Agency - Wellington](#)

27 October at 06:00

#### SH1 PORIRUA TO TAWA – BRIDGE DEMOLITION – AVOID THE AREA

Transmission Gully is now progressing rapidly but as with any change, a little bit of pain should be expected to make room for long term gain.

With the traffic switch now complete at the Linden worksite, a section of the Collins Avenue Overbridge will be demolished next weekend. Expect significant delays on Saturday 3 November between Porirua and Tawa. If the weather is bad, the work will be postponed until Sunday 4 No...

[See more](#)



[138 Comments](#)

[144 shares](#)



NZ Transport Agency - Wellington

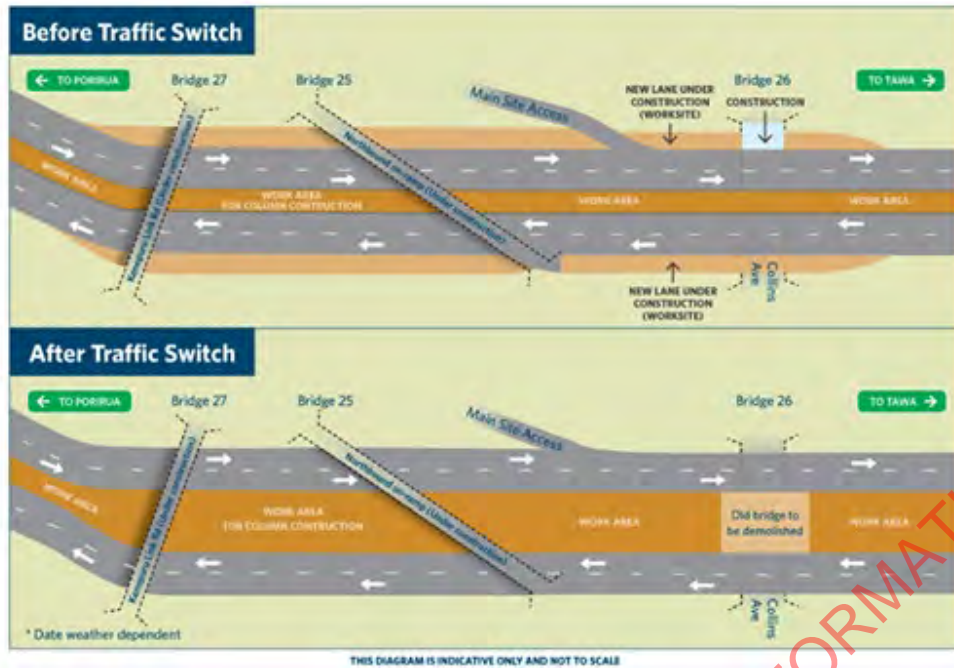
23 October at 06:13 ·

### SH1 PORIRUA TO TAWA – NEW ROAD LAYOUT AND BRIDGE DEMOLITION

To allow the Transmission Gully team to start the demolition of the old Collins Ave bridge the southbound lanes between Porirua and Tawa will be shifted onto the newly built bridge by Saturday 27 October.

This traffic switch will be carried out overnight on Friday 26 October to minimise disruption. If you're going to be travelling southbound expect some delays.

...[See more](#)



Open in Messenger

Send Message

28 Comments

70 shares

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

---

## Appendix B: Progress Reporting – Design

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

---

## Appendix C: CPBHEB JV Top Risks and Opportunities

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

s 9(2)(b)(ii)

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

s 9(2)(b)(ii)

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982



---

## Appendix D: Overall Staging Plan

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

---

## Appendix E: TG Notice Registers

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

---

## Appendix F: Procurement Status

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982



RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

---

**Appendix G: Reconciliation of Payment Claims and Invoices  
to Date**

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

s 9(2)(b)(ii)

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

---

## Appendix H: Monthly Progress Claim Graph

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

---

## Appendix I: Revenue Flow Graph / Table

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982



RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

---

## Appendix J: Cash Received

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

---

## Appendix K: Programme Dashboard

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982



RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

---

## Appendix L: Non-Conformance Reports

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

---

## Appendix M: Construction Programme – Key Milestones

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

## Appendix N: Photos

### South – Linden Interchange



RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982



Transmission Gully – South



Saddle



Bridge 4



Bridge 8



Cut 26



Bridge 19



Pier 2

RELEASED UNDER THE OFFICIAL INFORMATION ACT 982





Te Puka 4 and 5



Transmission Gully – North



Scrapers – Fill 43



Headstock False Work



Launch Yard



Cut 35





Lanes Flat



Zone C – Earthworks

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982





C2 – Earthworks



B2

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982





Saddle



Cut 3

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982





Coast Road



Coast Road