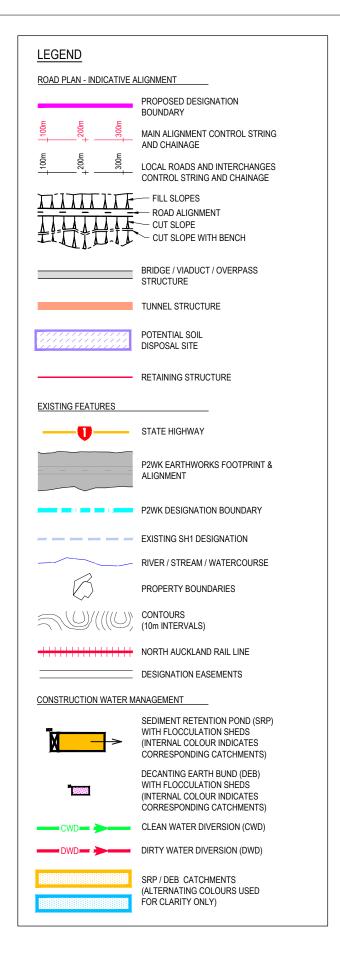
DRAWING NUMBER	DRAWING TITLE
	CONSTRUCTION WATER MANAGEMENT DRAWINGS
CW-001	CONSTRUCTION WATER MANAGEMENT - DRAWING INDEX, NOTES AND LEGEND
CW-011	CONSTRUCTION WATER MANAGEMENT - CONCEPT PLAN - SHEET 1 OF 23
CW-012	CONSTRUCTION WATER MANAGEMENT - CONCEPT PLAN - SHEET 2 OF 23
CW-013	CONSTRUCTION WATER MANAGEMENT - CONCEPT PLAN - SHEET 3 OF 23
CW-014	CONSTRUCTION WATER MANAGEMENT - CONCEPT PLAN - SHEET 4 OF 23
CW-015	CONSTRUCTION WATER MANAGEMENT - CONCEPT PLAN - SHEET 5 OF 23
CW-016	CONSTRUCTION WATER MANAGEMENT - CONCEPT PLAN - SHEET 6 OF 23
CW-017	CONSTRUCTION WATER MANAGEMENT - CONCEPT PLAN - SHEET 7 OF 23
CW-018	CONSTRUCTION WATER MANAGEMENT - CONCEPT PLAN - SHEET 8 OF 23
CW-019	CONSTRUCTION WATER MANAGEMENT - CONCEPT PLAN - SHEET 9 OF 23
CW-020	CONSTRUCTION WATER MANAGEMENT - CONCEPT PLAN - SHEET 10 OF 23
CW-021	CONSTRUCTION WATER MANAGEMENT - CONCEPT PLAN - SHEET 11 OF 23
CW-022	CONSTRUCTION WATER MANAGEMENT - CONCEPT PLAN - SHEET 12 OF 23
CW-023	CONSTRUCTION WATER MANAGEMENT - CONCEPT PLAN - SHEET 13 OF 23
CW-024	CONSTRUCTION WATER MANAGEMENT - CONCEPT PLAN - SHEET 14 OF 23
CW-025	CONSTRUCTION WATER MANAGEMENT - CONCEPT PLAN - SHEET 15 OF 23
CW-026	CONSTRUCTION WATER MANAGEMENT - CONCEPT PLAN - SHEET 16 OF 23
CW-027	CONSTRUCTION WATER MANAGEMENT - CONCEPT PLAN - SHEET 17 OF 23
CW-028	CONSTRUCTION WATER MANAGEMENT - CONCEPT PLAN - SHEET 18 OF 23
CW-029	CONSTRUCTION WATER MANAGEMENT - CONCEPT PLAN - SHEET 19 OF 23
CW-030	CONSTRUCTION WATER MANAGEMENT - CONCEPT PLAN - SHEET 20 OF 23
CW-031	CONSTRUCTION WATER MANAGEMENT - CONCEPT PLAN - SHEET 21 OF 23
CW-032	CONSTRUCTION WATER MANAGEMENT - CONCEPT PLAN - SHEET 22 OF 23
CW-033	CONSTRUCTION WATER MANAGEMENT - CONCEPT PLAN - SHEET 23 OF 23
CW-071	CONSTRUCTION WATER MANAGEMENT - CONCEPTUAL CONSTRUCTION YARD OUTLINE
CW-072	CONSTRUCTION WATER MANAGEMENT - TYPICAL CONCEPT DESIGN DETAILS - SHEET 1 OF 5
CW-073	CONSTRUCTION WATER MANAGEMENT - TYPICAL CONCEPT DESIGN DETAILS - SHEET 2 OF 5
CW-074	CONSTRUCTION WATER MANAGEMENT - TYPICAL CONCEPT DESIGN DETAILS - SHEET 3 OF 5
CW-075	CONSTRUCTION WATER MANAGEMENT - TYPICAL CONCEPT DESIGN DETAILS - SHEET 4 OF 5
CW-076	CONSTRUCTION WATER MANAGEMENT - TYPICAL CONCEPT DESIGN DETAILS - SHEET 5 OF 5
CW-081	SOIL DISPOSAL SITE ESTABLISHMENT CONCEPTUAL - METHODOLOGY STAGING PLAN - SHEET 1 OF 4
CW-082	SOIL DISPOSAL SITE ESTABLISHMENT CONCEPTUAL - METHODOLOGY STAGING PLAN - SHEET 2 OF 4
CW-083	SOIL DISPOSAL SITE ESTABLISHMENT CONCEPTUAL - METHODOLOGY STAGING PLAN - SHEET 3 OF 4
CW-084	SOIL DISPOSAL SITE ESTABLISHMENT CONCEPTUAL - METHODOLOGY STAGING PLAN - SHEET 4 OF 4
CW-086	INDICATIVE ESC MEASURES - BRIDGE 11 - PLAN AND ELEVATION - SHEET 1 OF 2
CW-087	INDICATIVE ESC MEASURES - BRIDGE 11 - PLAN AND ELEVATION - SHEET 2 OF 2



GENERAL NOTES

- 1. THE ALIGNMENT IS INDICATIVE ONLY.
- 2. ALL MEASUREMENTS ARE IN METRES UNLESS OTHERWISE STATED.
- 3. ALL NAMED ROADS ARE ASSUMED TO BE PUBLIC UNLESS STATED OTHERWISE.
- AERIAL IMAGE FROM AUCKLAND COUNCIL AERIAL SURVEY, 2012.
- DIGITAL TERRAIN MODEL IS COMBINED FROM AERIAL SURVEY (AUG 2010) & AUCKLAND COUNCIL LIDAR DATA TO NZTM PROJECTION.
- 6. EXISTING PROPERTY BOUNDARIES SOURCED FROM LINZ, MAY 2019 UPDATE.
- ALL STREAMS WILL BE BRIDGED, CULVERTED AND/OR DIVERTED. REFER SW SERIES FOR INDICATIVE CULVERTS AND DIVERSION LOCATIONS.
- 8. ALL SOIL DISPOSAL SITE LOCATIONS AND SHAPES ARE INDICATIVE ONLY. ALL SOIL DISPOSAL SITE WORKS ARE TO OCCUR OUTSIDE OF ANY STREAM CHANNEL
- NO CULVERTS LONGER THAN 30m WILL BE LOCATED IN A SIGNIFICANT ECOLOGICAL AREA (SEA) AS IDENTIFIED IN THE AUCKLAND UNITARY PLAN.

CONSTRUCTION WATER MANAGEMENT NOTES

- THIS CONSTRUCTION WATER MANAGEMENT PLAN IS CONCEPTUAL ONLY AND IS TO BE UPDATED / AMENDED BY THE CONTRACTOR DURING THE CONSTRUCTION PHASE. STAGING OF WORKS MAY INVOLVE RELOCATION OF THE SEDIMENT RETENTION DEVICES AFTER EACH
- 2. THE CONSTRUCTION WATER MANAGEMENT MEASURES SHOWN ON DRAWINGS CW-011 TO CW-033 ASSUME THE CONSTRUCTION STAGE WHEN CULVERTS AND PERMANENT STREAM DIVERSIONS ARE COMPLETED AND OPERATIONAL.
- 3. THE CONSTRUCTION WATER MANAGEMENT PLANS IN DRAWINGS CW-011 TO CW-087 INCLUSIVE SHOW THE WATER MANAGEMENT CONCEPTS ADOPTED FOR THE 'FLAT FOCUS AREA' OF THE ASSESSMENT AND GENERALLY COVER THE ROAD SECTOR AS SHOWN ON DRAWING ES-011-031. THE PRINCIPLES PROVIDED IN THESE DRAWINGS ARE TO BE APPLIED TO OTHER SECTORS AS APPROPRIATE
- THE CONSTRUCTION WATER MANAGEMENT PLAN FOR SOIL DISPOSAL SITES ON DRAWINGS CW-081 TO CW-085, HAS BEEN PROVIDED AS AN EXAMPLE. THIS METHODOLOGY IS APPLIED TO ALL SOIL DISPOSAL SITES.

LIST OF ACRONYMS

CESCP- CONSTRUCTION EROSION AND SEDIMENT CONTROL PLAN

CIS - CONTAINER IMPOUNDMENT SYSTEM

WAR - WATER ASSESSMENT REPORT

CWD - CLEAN WATER DIVERSION - DECANTING EARTH BUND DFB

DWD - DIRTY WATER DIVERSION

ESC - EROSION AND SEDIMENT CONTROL

MHWS - MEAN HIGH WATER SPRINGS

TP90 - TECHNICAL PUBLICATION 90

- SEDIMENT RETENTION POND

- SUPER SILT FENCE

0	ISSUED FOR RMA APPROVALS	WAS	JB*	BN*	07/19
No	Revision Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Checked	Approved	Date



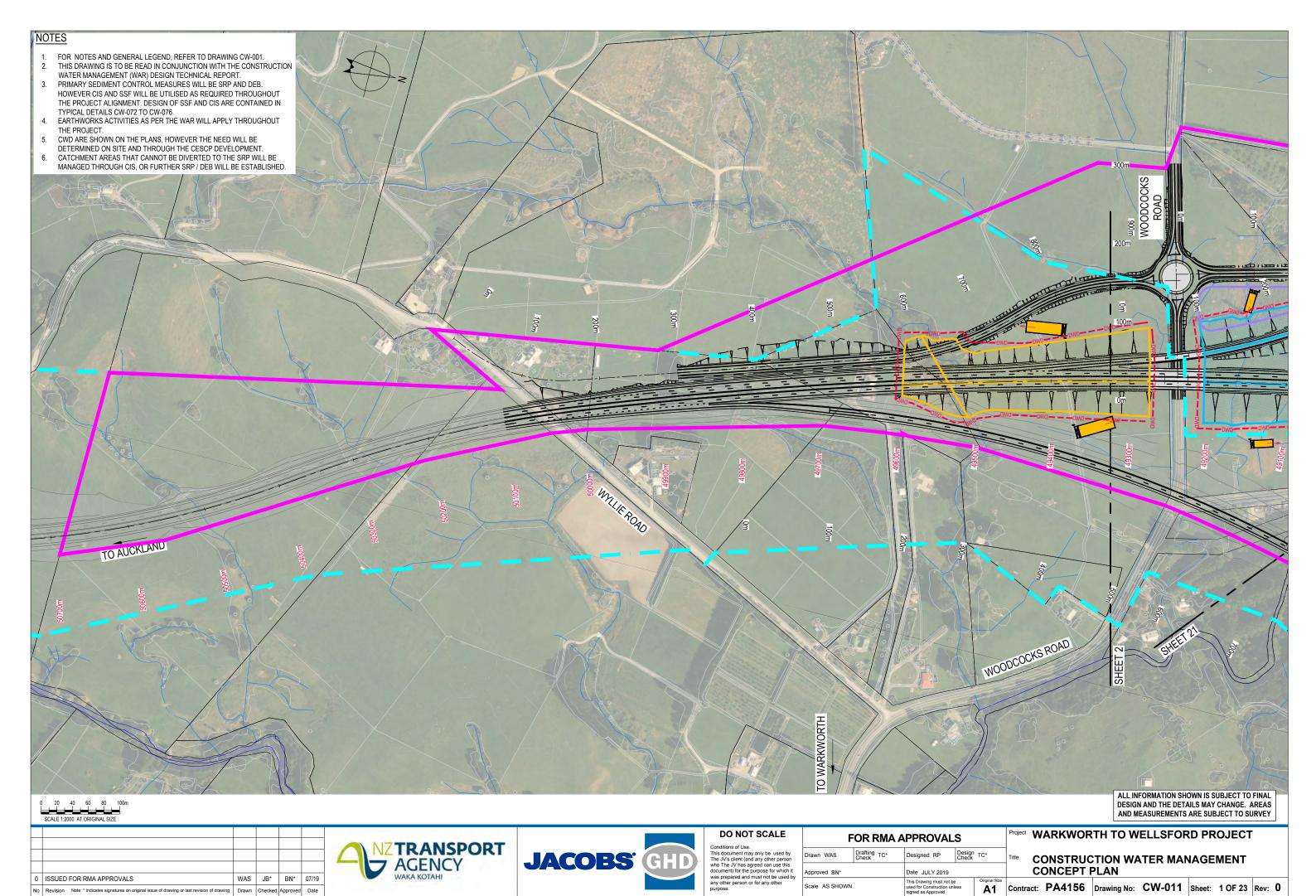


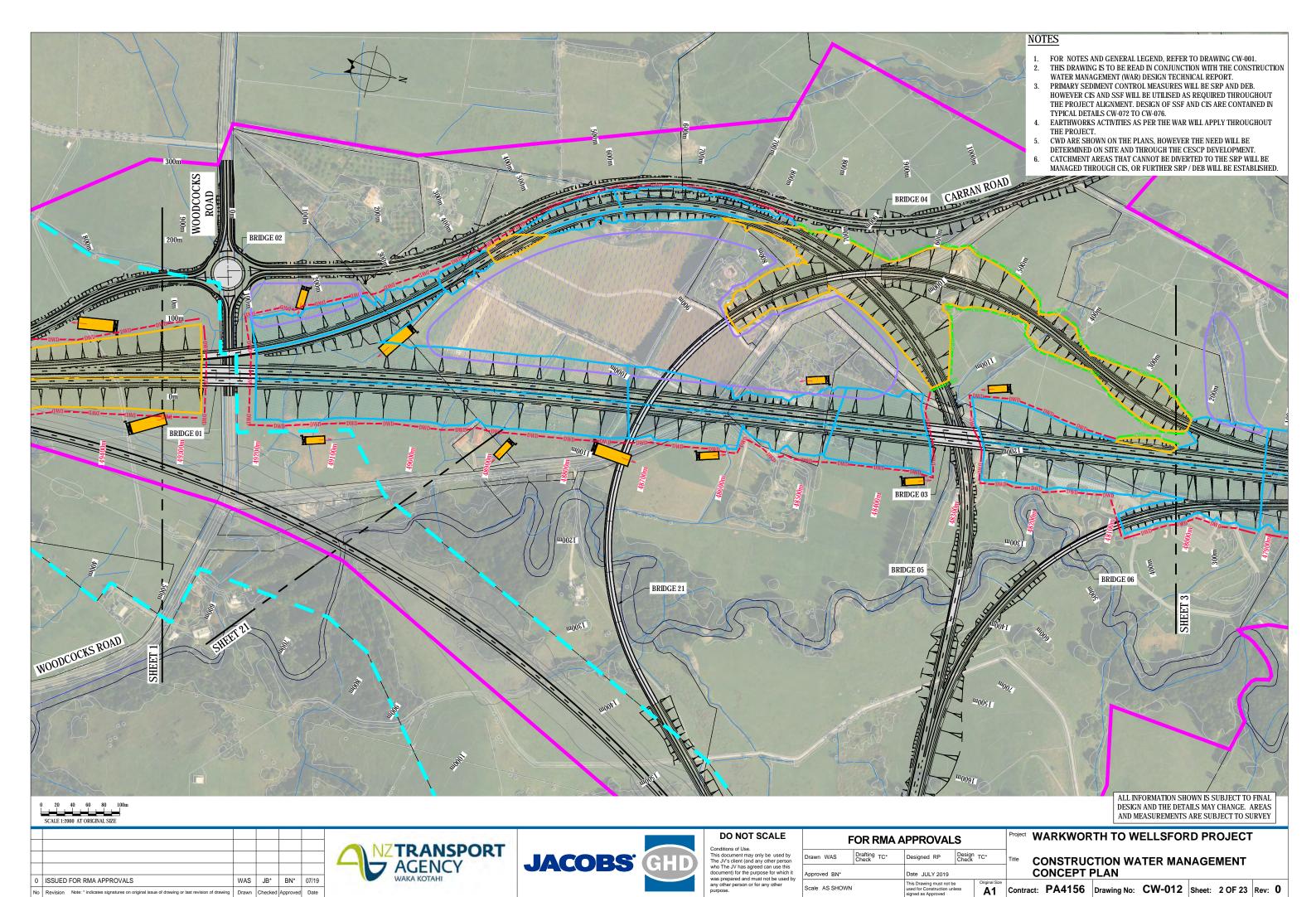
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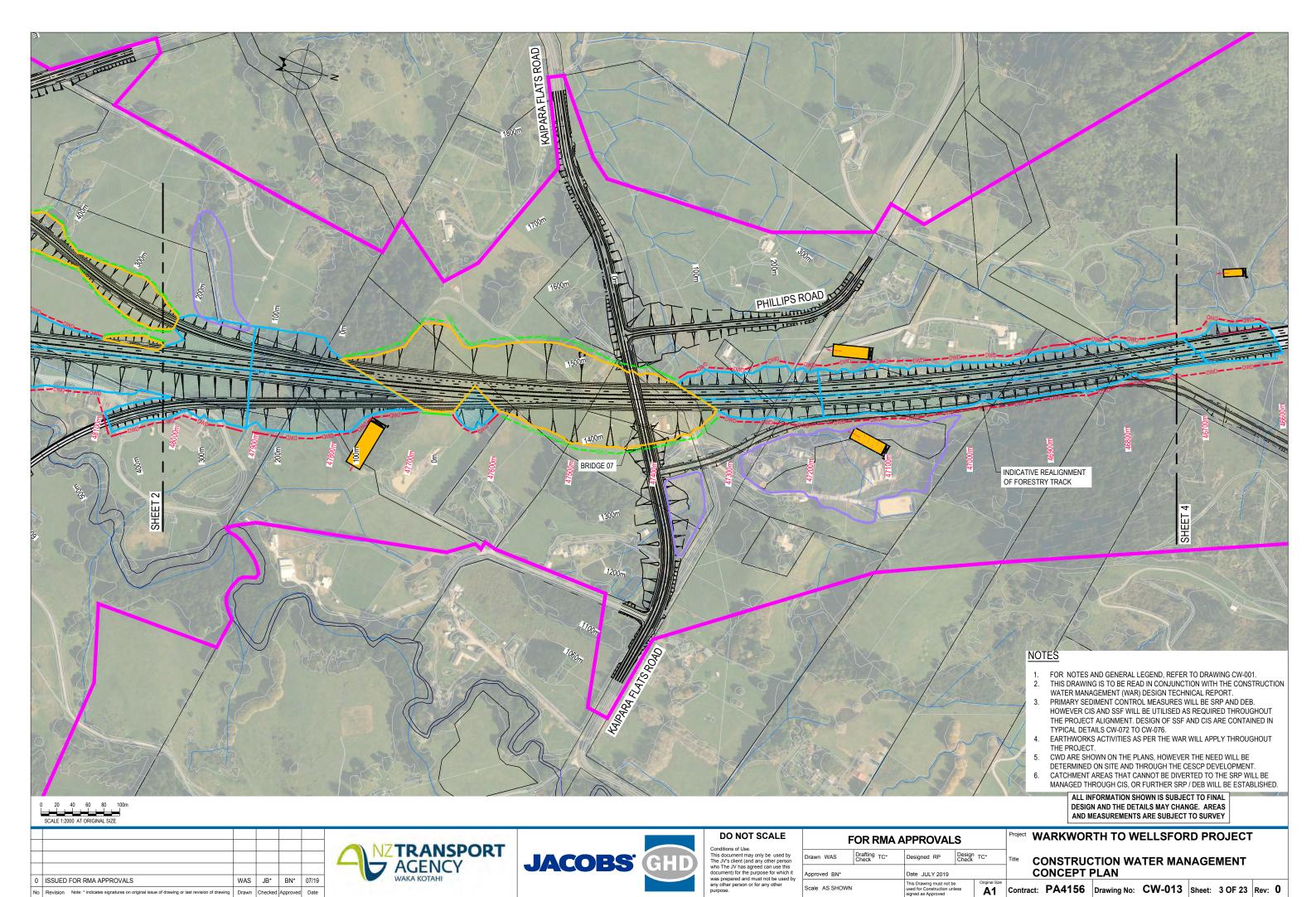
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Drawn WAS Drafting TC*		Designed RP	Design Check	TC*	Title (© CONSTRUCTION WATER MANAGEMEN			CONSTRUCTION WATER MANAGEMENT			CONSTRUCTION WATER MANAGEMENT				
Approved BN* Date JULY 2019				NOTES AN												
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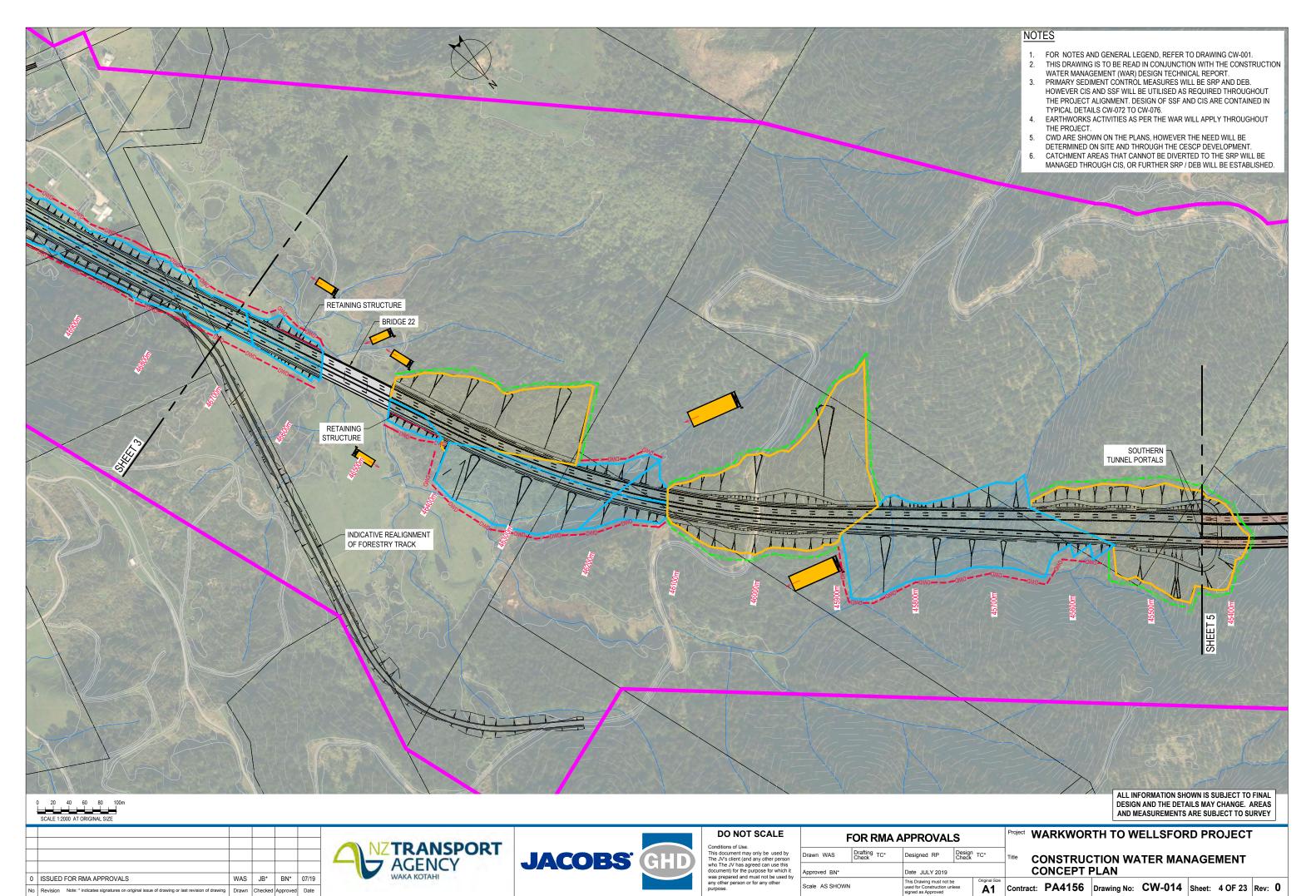




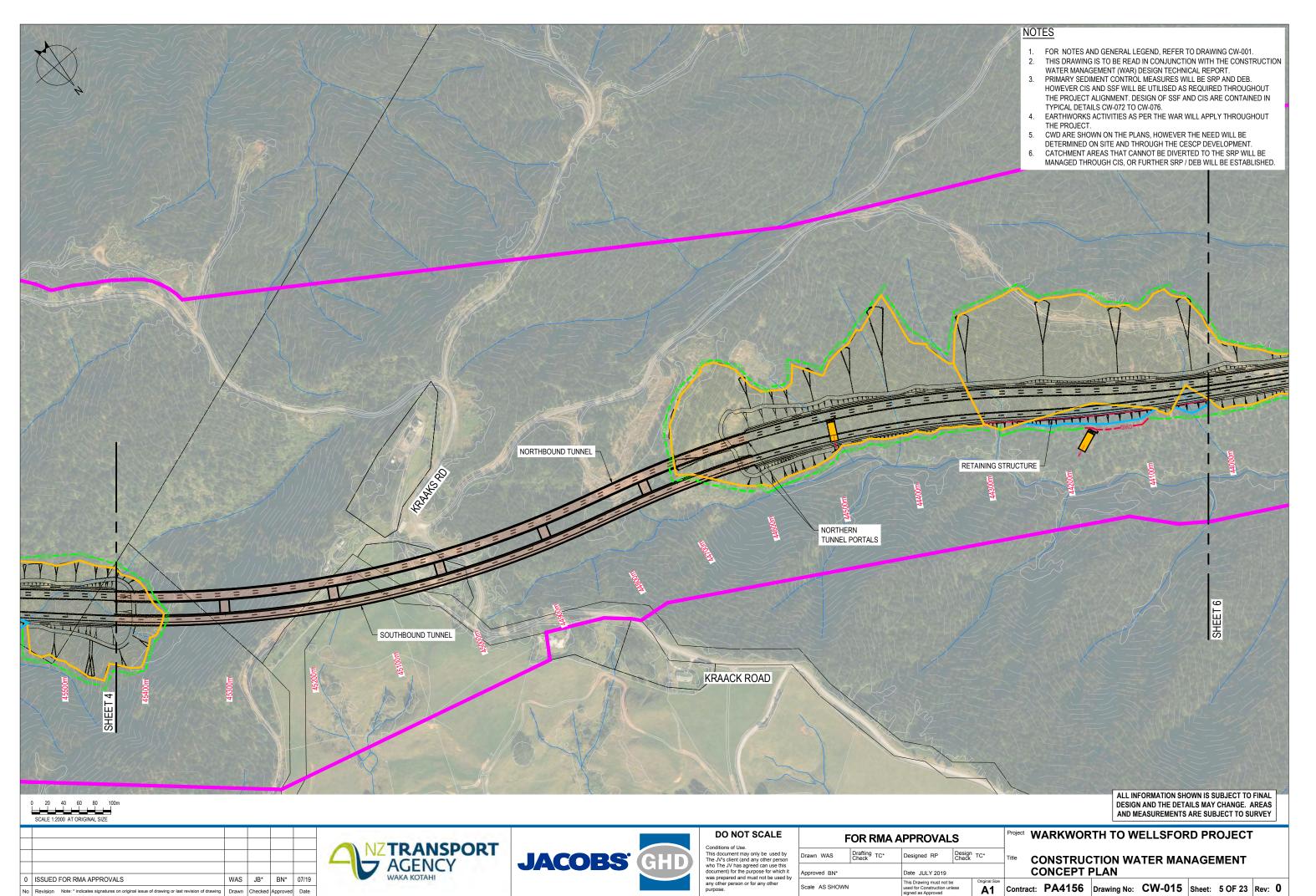
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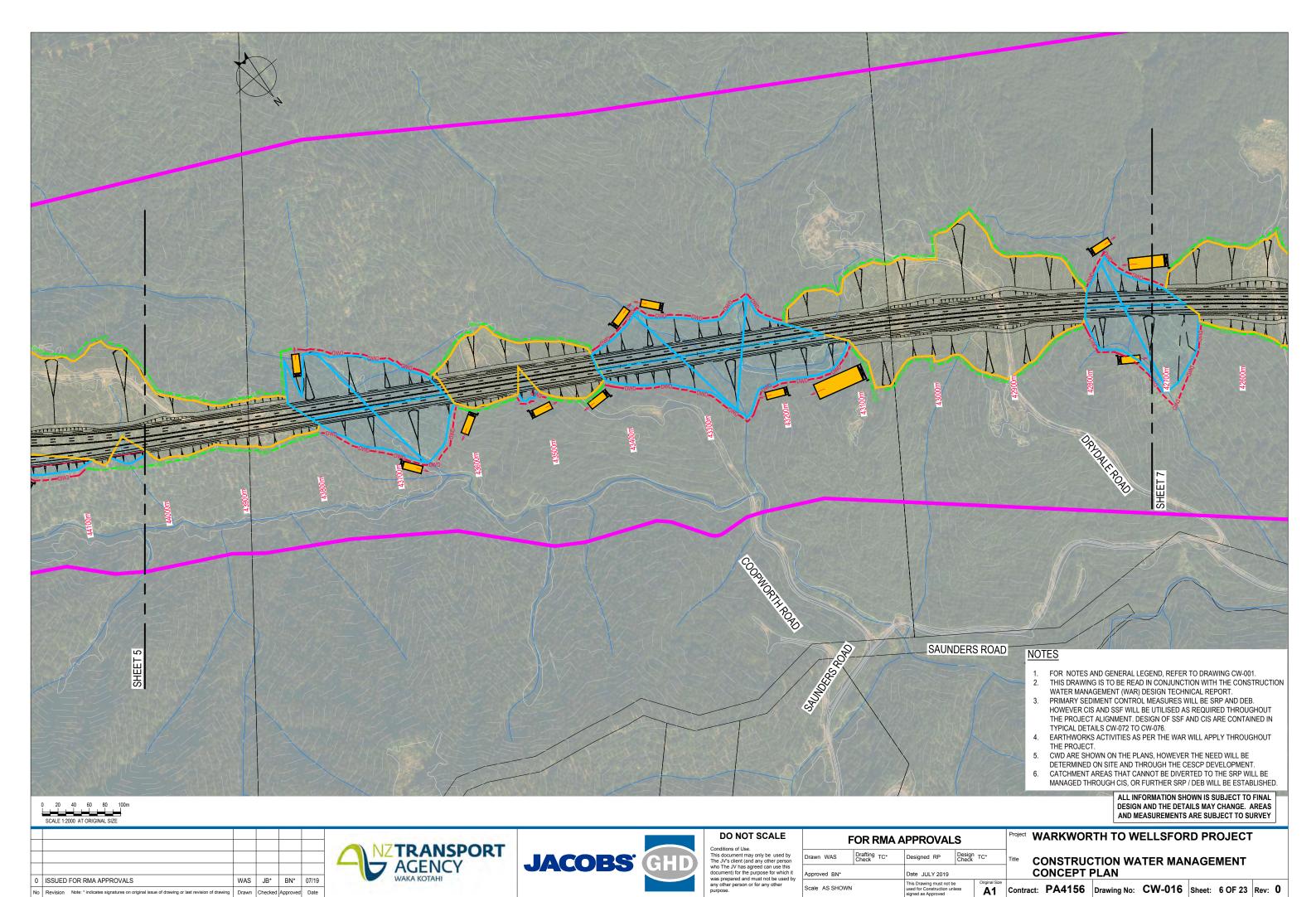
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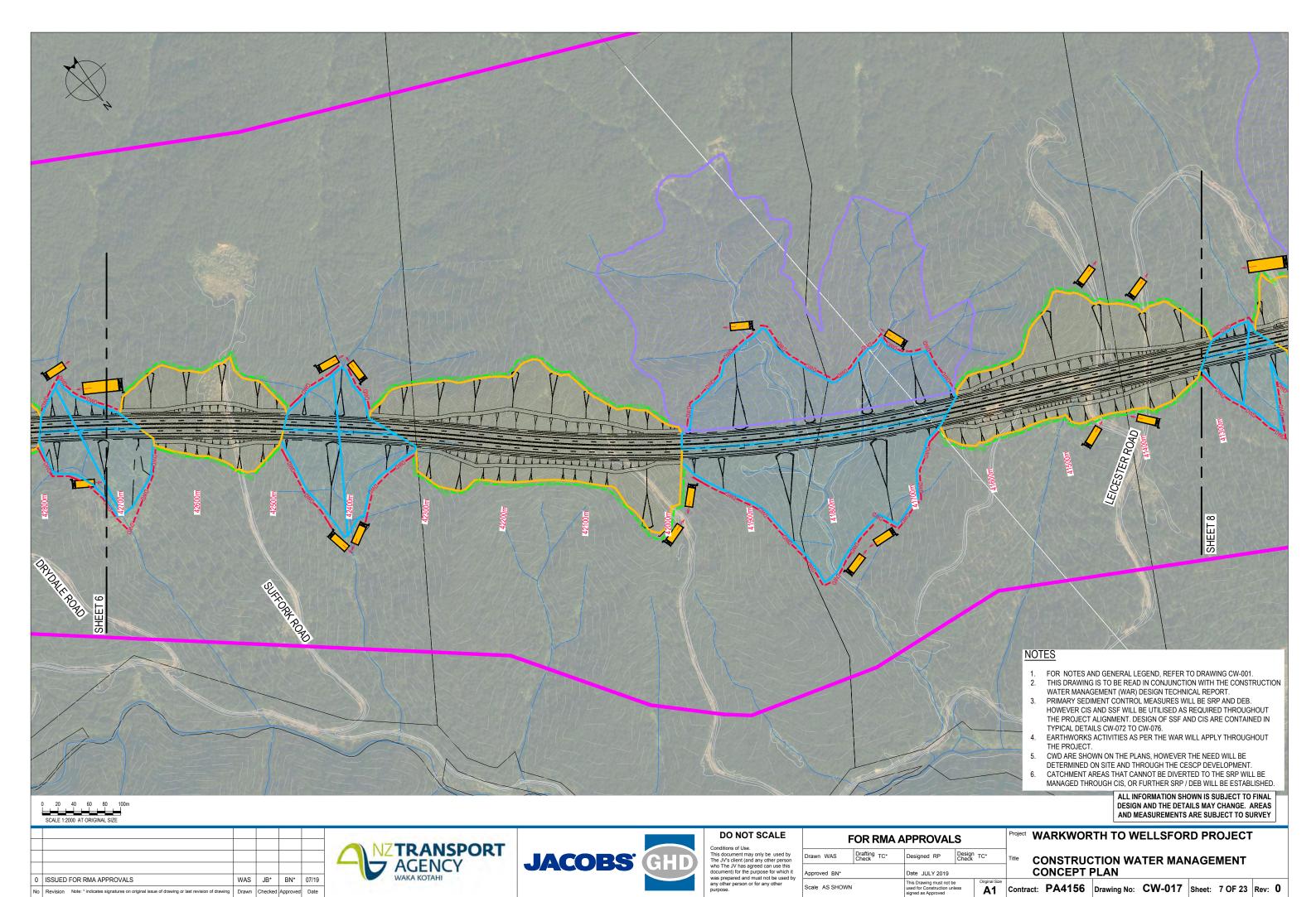


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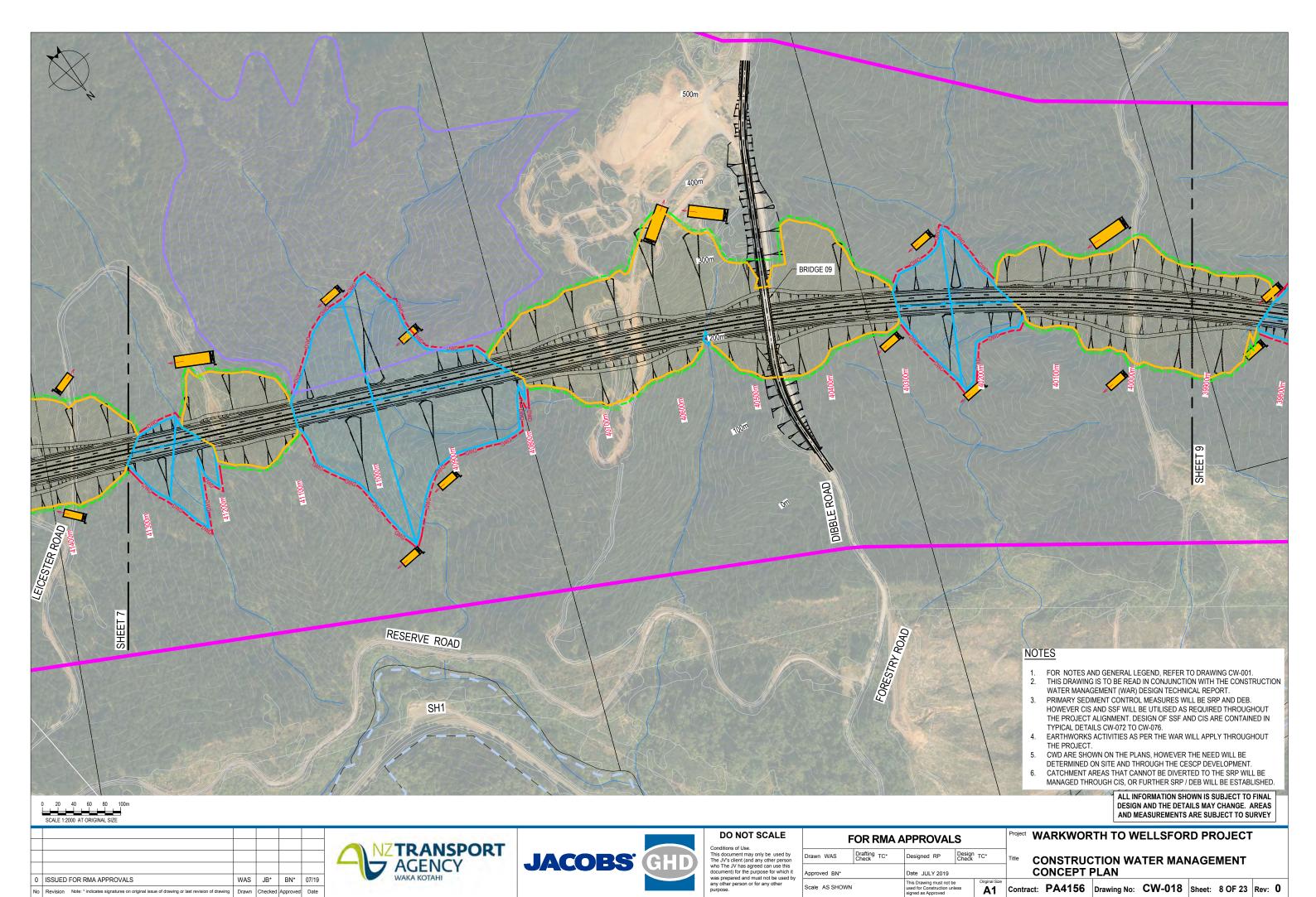


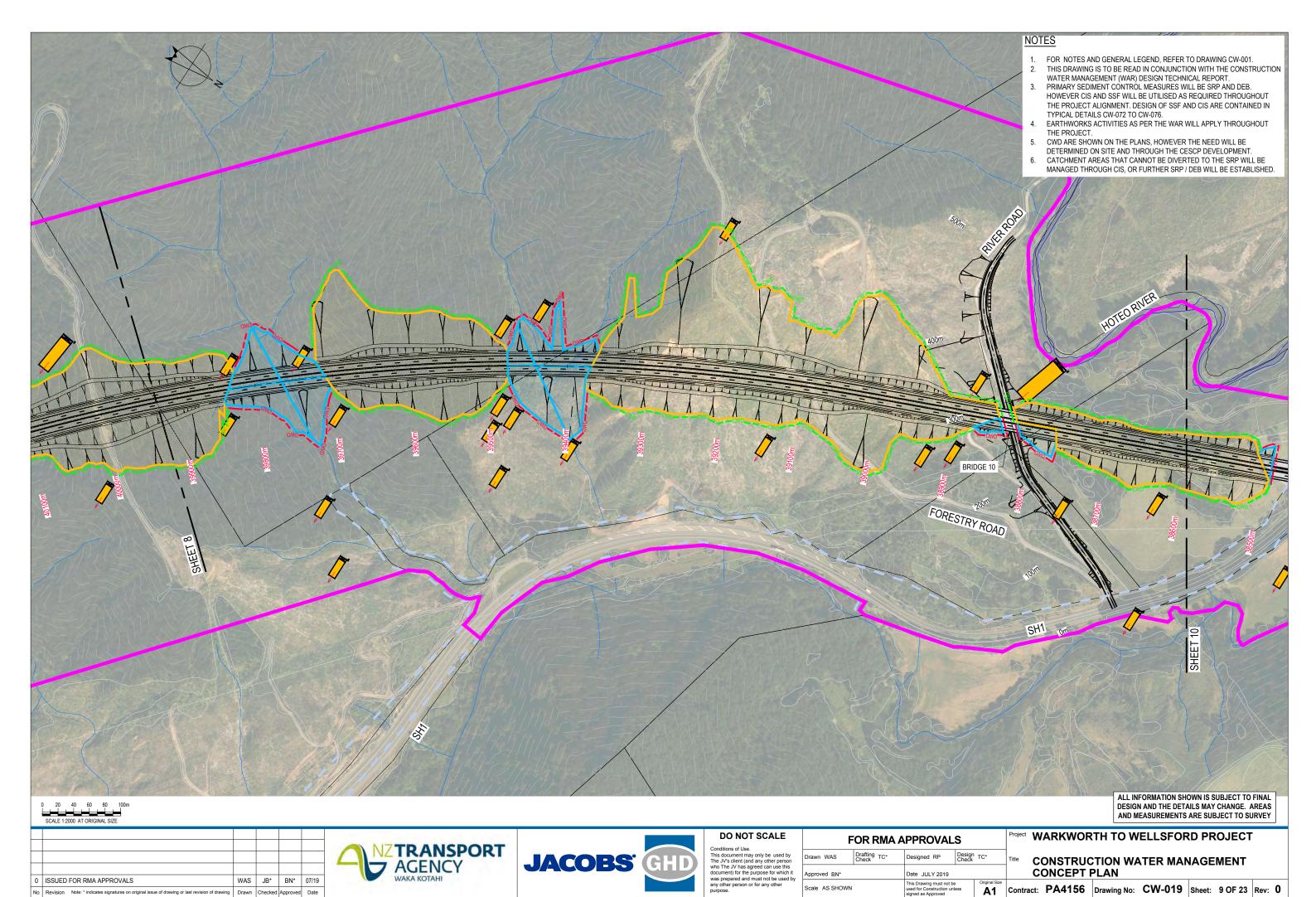
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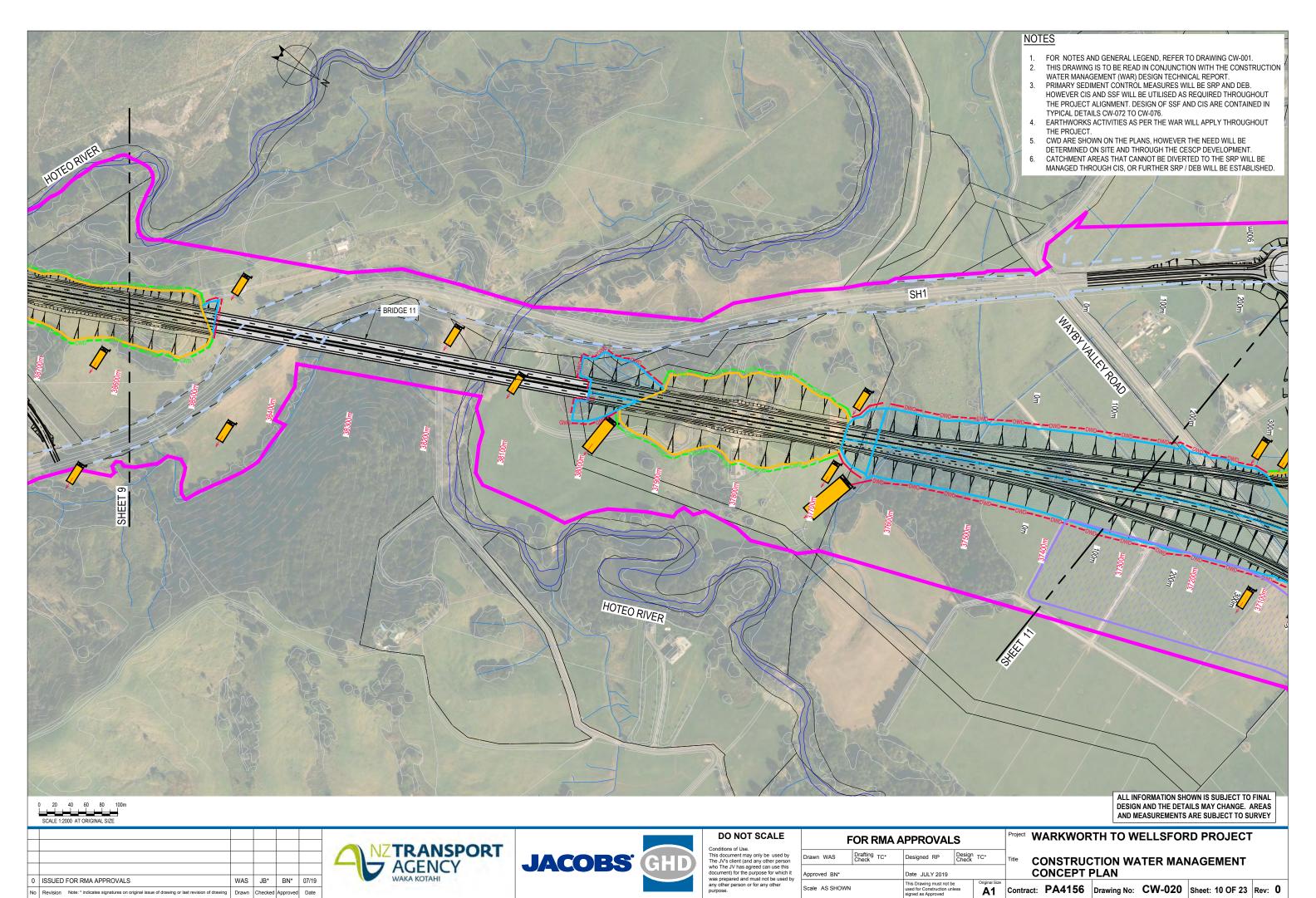




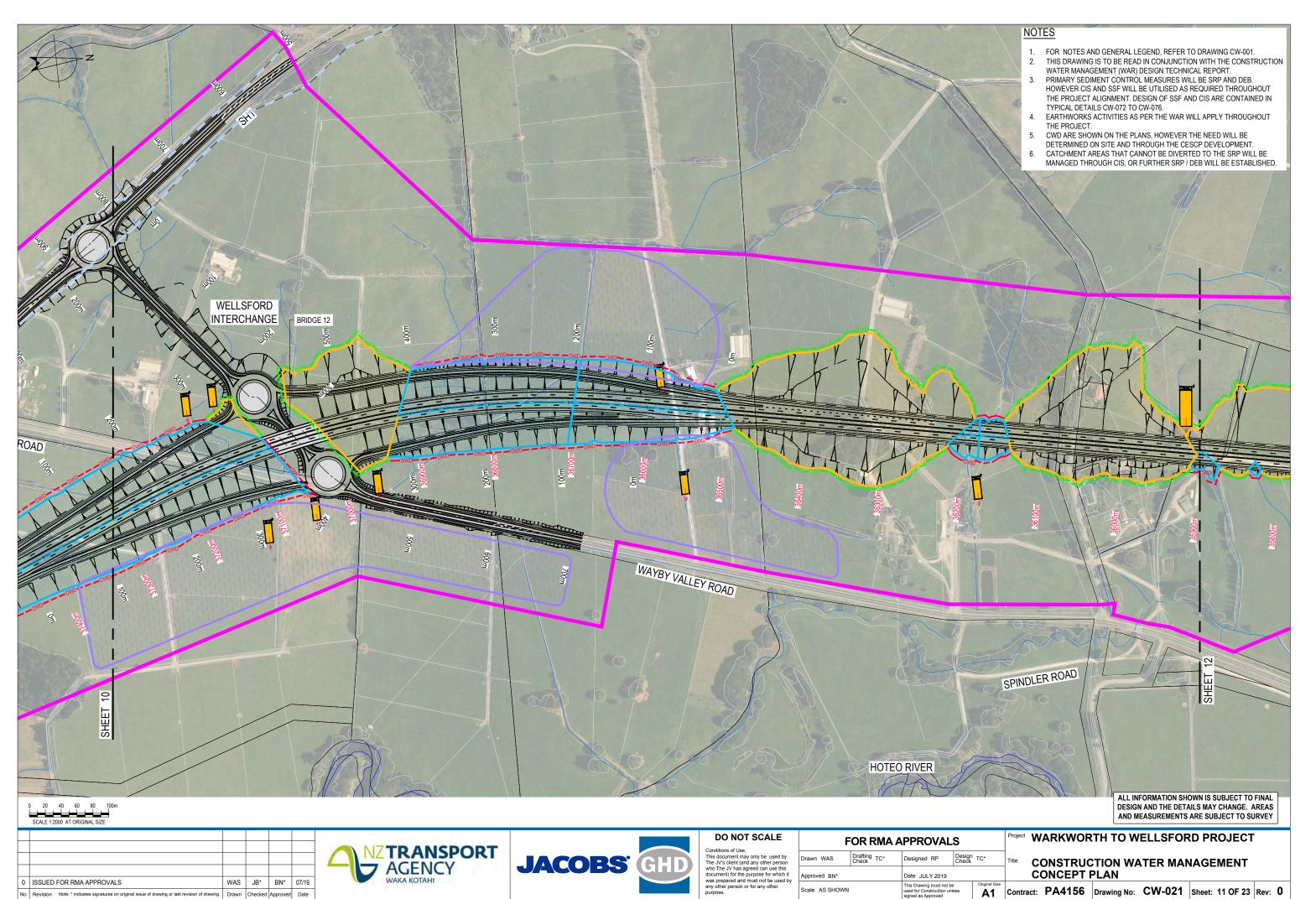
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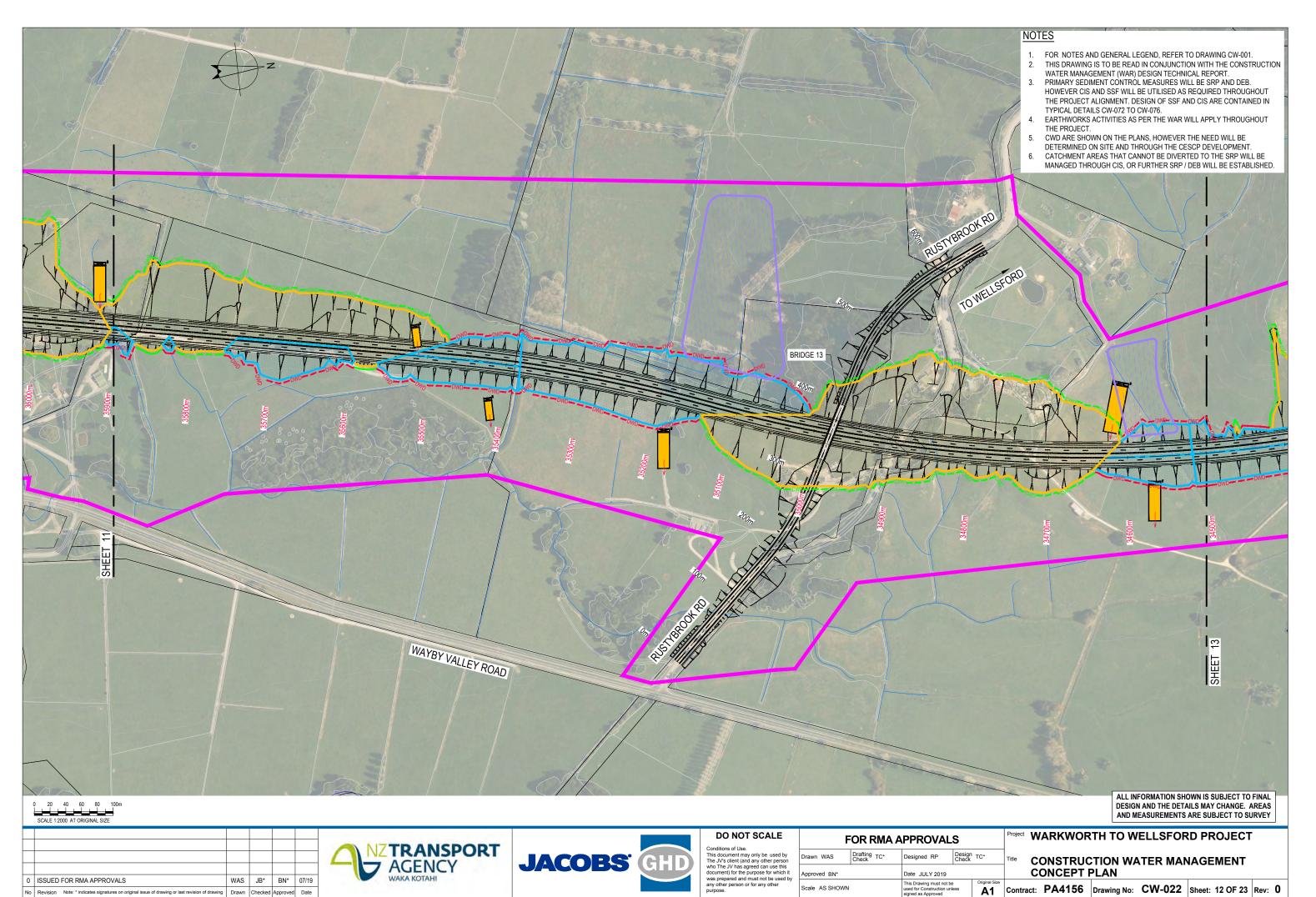




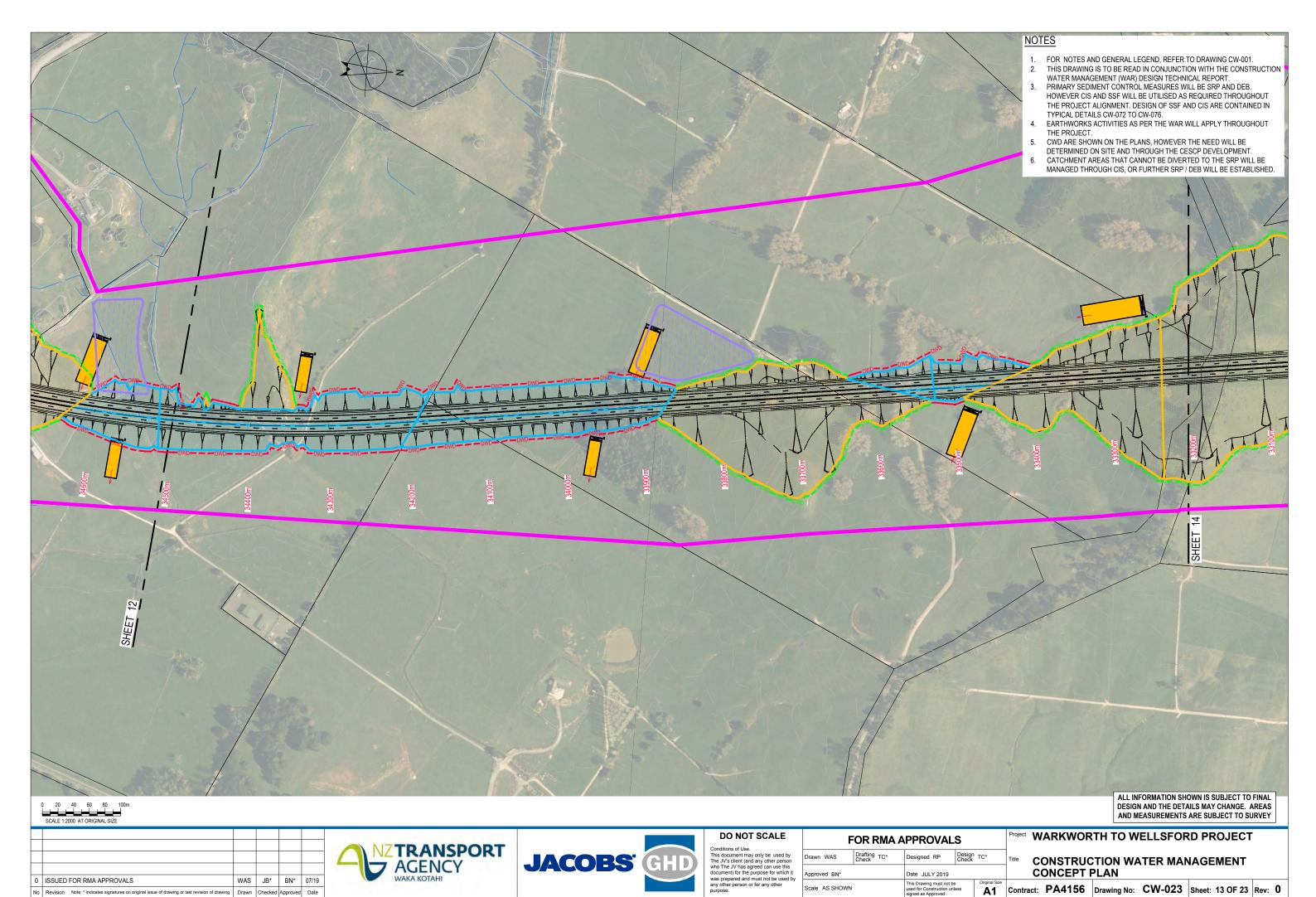
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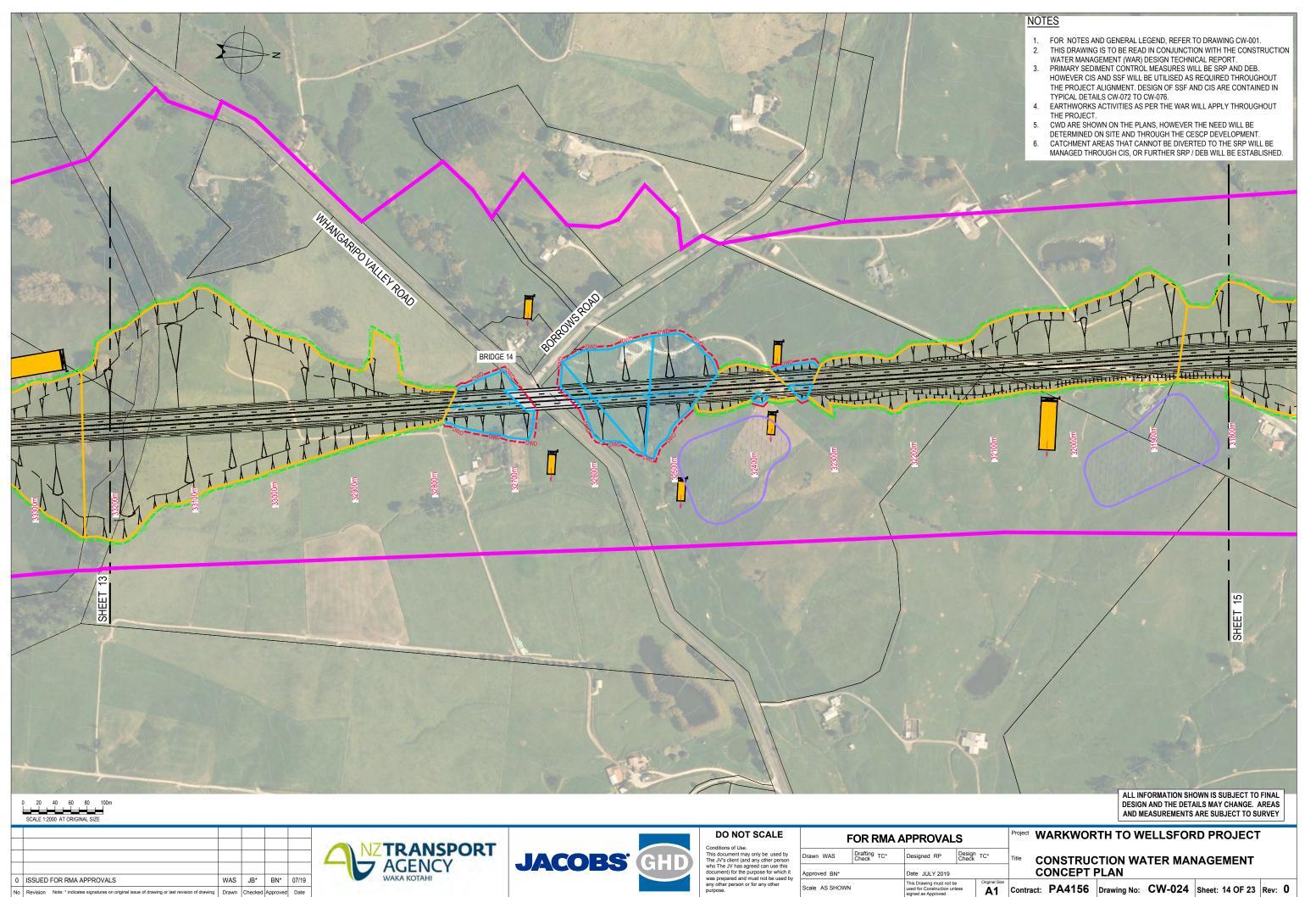
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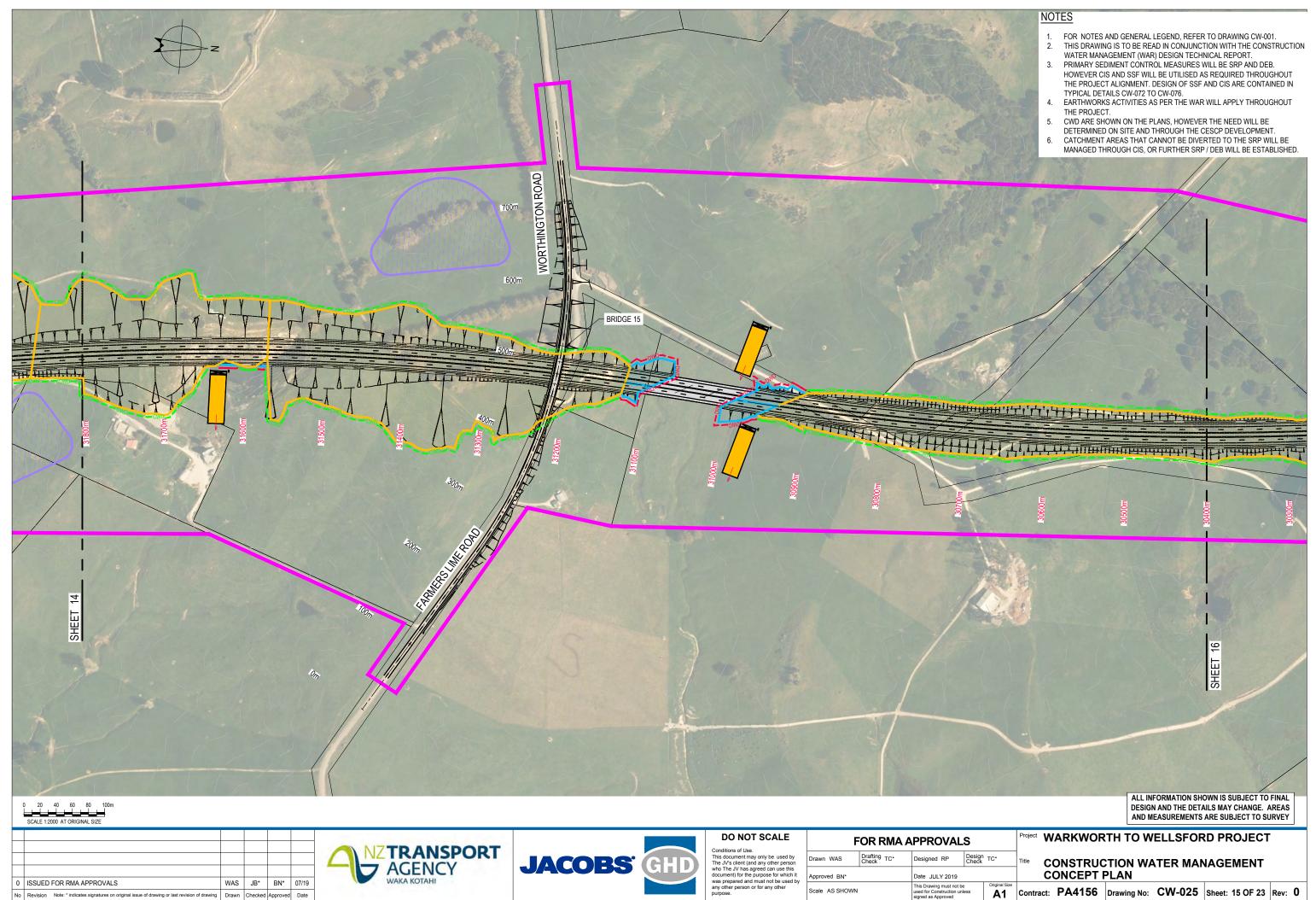
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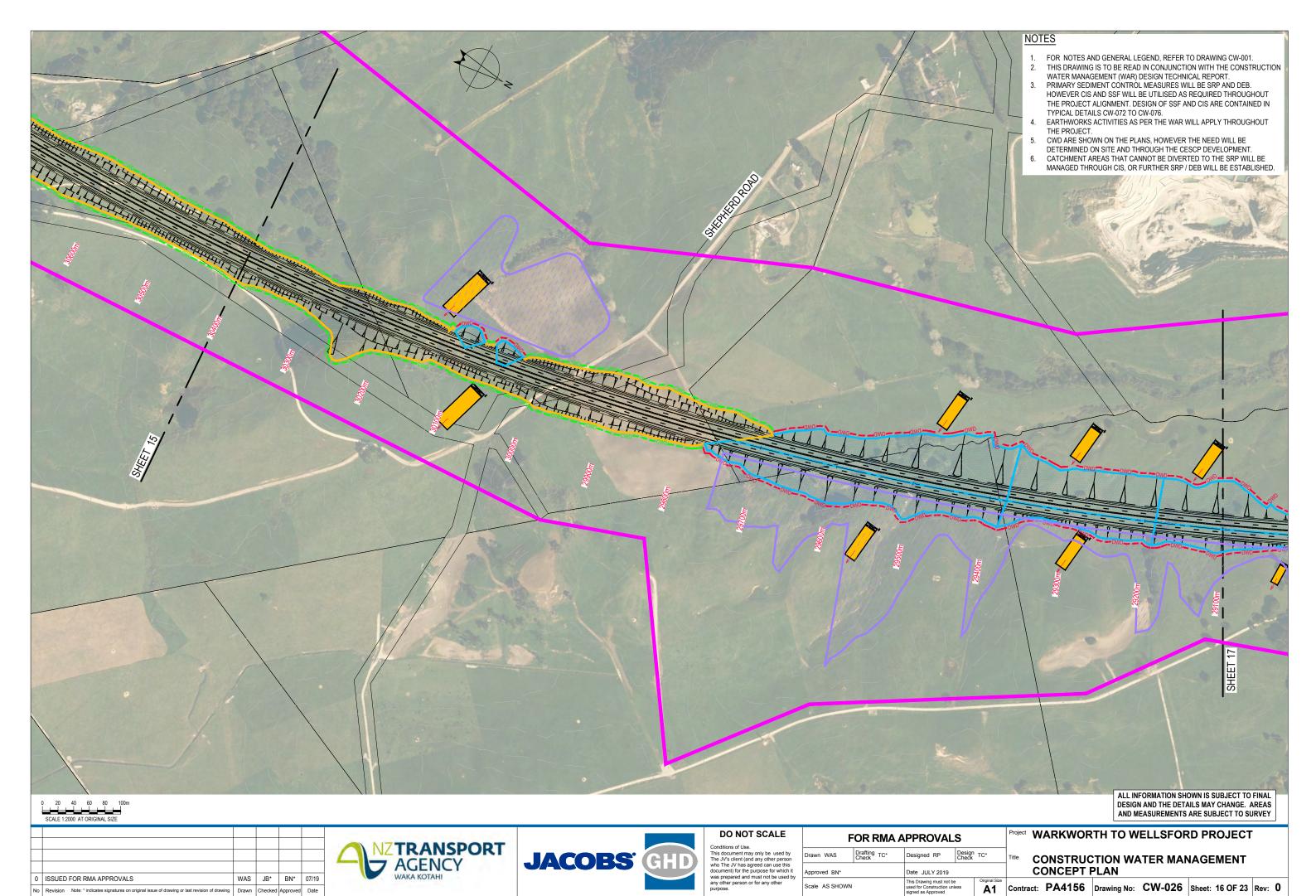
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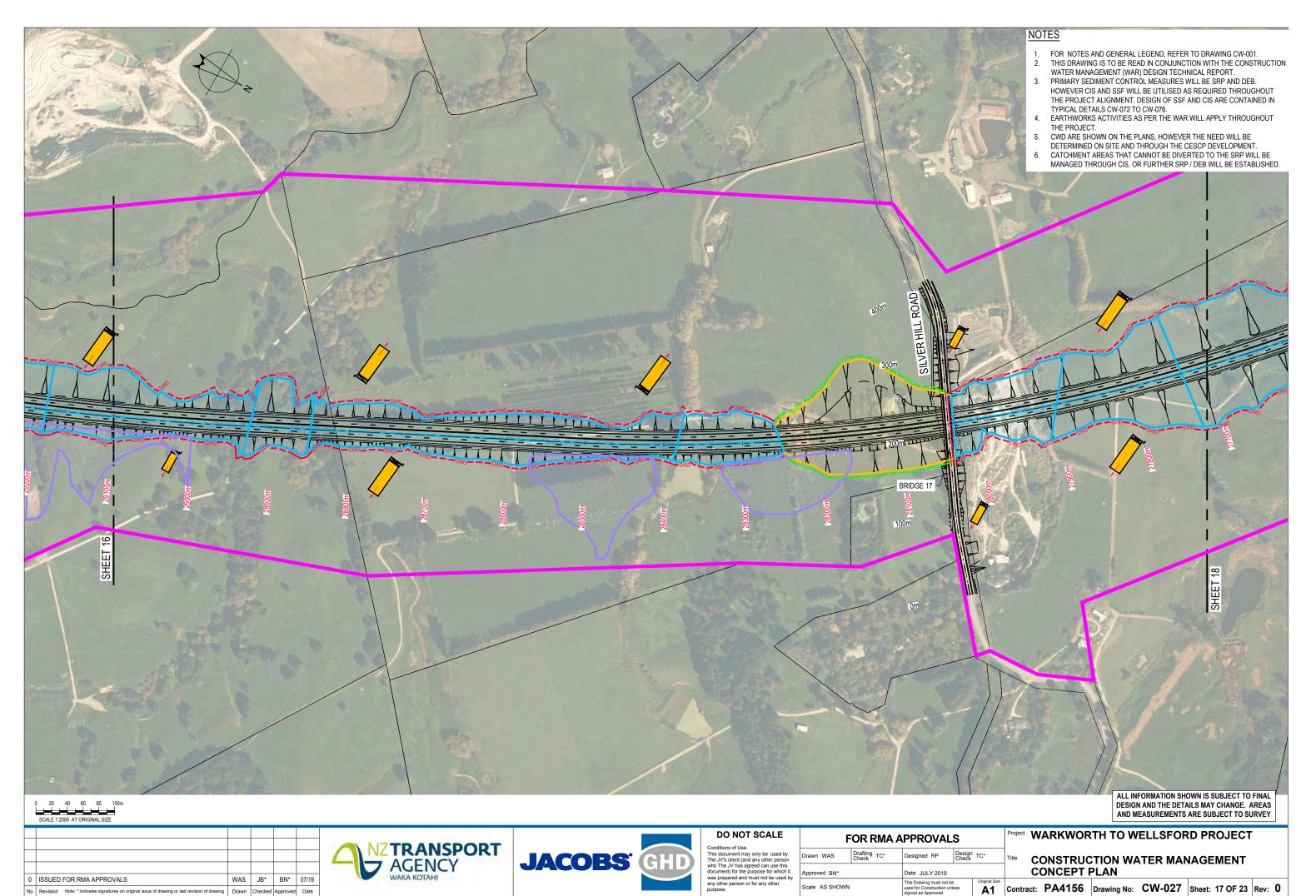
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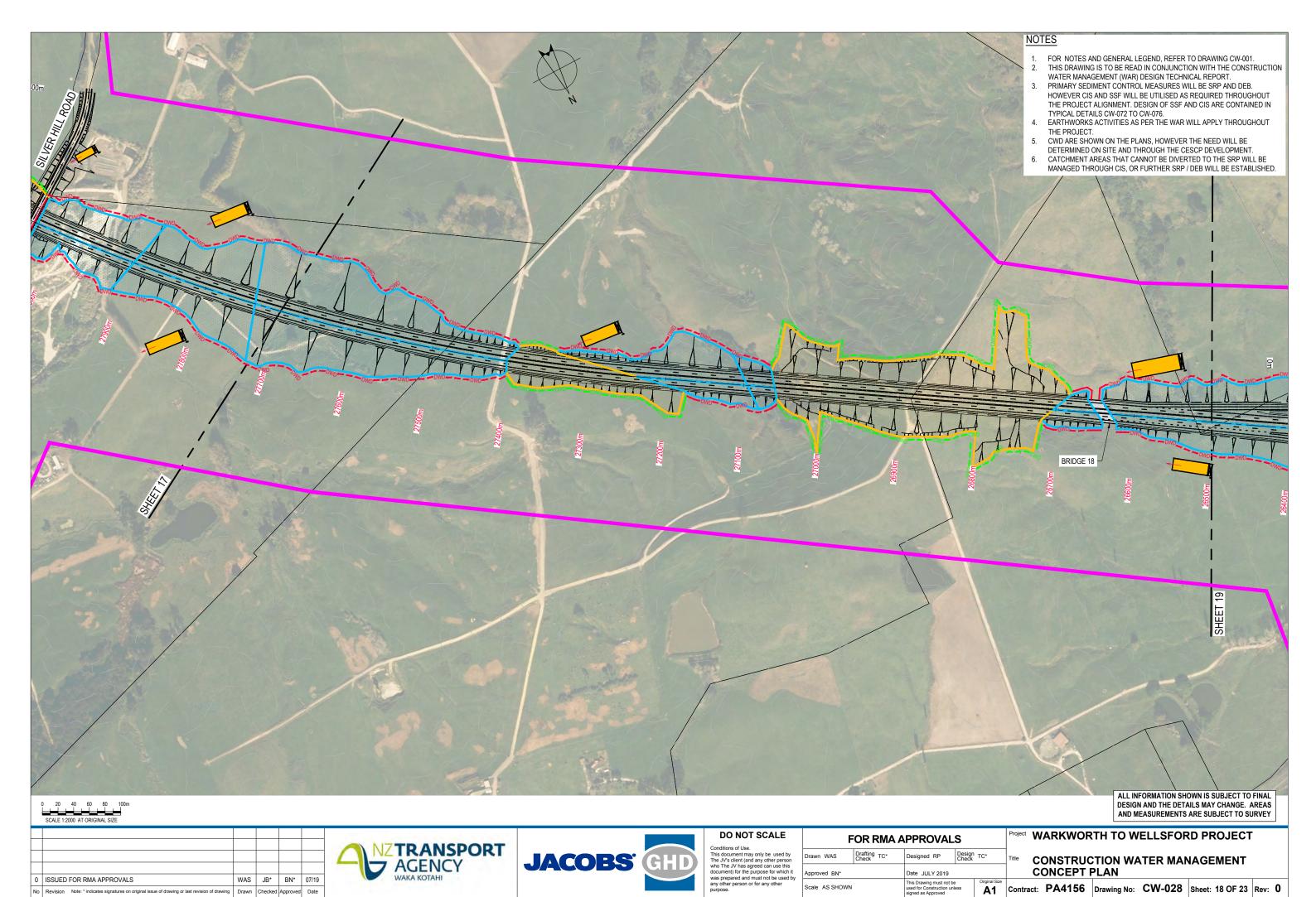
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