

WETLAND 10A

PURPOSE	= TREATMENT
AREA	= 450m ²
1% AEP VOLUME	= N/A
1% AEP WSL	= 6.2m
WQV	= 235m ³
- UPPER IL	= 5.2-5.35m
- LOWER IL	= 4.5m
- PERMANENT WSL	= 5.5m
- REC WC WSL	= 5.3m

OFFSET STORAGE AREA 10D

PURPOSE	= OFFSET STORAGE
TOTAL AREA	= 1,250m ²
1% AEP VOLUME	= 500m ³
1% AEP WSL	= 7.84m
EX GL	= 6-10m
NEW GL	= 5-10m

WETLAND 10B

PURPOSE	= TREATMENT
TOTAL AREA	= 1,020m ²
1% AEP VOLUME	= N/A
1% AEP WSL	= 6.2m
WQV	= 534m ³
- UPPER IL	= 5.2-5.35m
- LOWER IL	= 4.5m
- PERMANENT WSL	= 5.5m
- REC WC WSL	= 5.3m

BOX CULVERT- 26
DIM= 3 X 2m
LENGTH= 70m

CULVERT- 27
DIM= 6000
LENGTH= 65m

CATCHMENT CULVERT 27
AREA = 2.21ha

CATCHMENT CULVERT 26
AREA = 164.19ha

NGARARA CREEK

Ngarara Rd

- NOTES:
- REFER DRAWING CV-SW-100 FOR INDEX SHEET AND STORMWATER LEGEND
 - EXISTING DRAINAGE FROM KCDC GIS, GWRC GIS, NZTA RECORDS AND KIWI RAIL RECORDS.
 - GL = GROUND LEVEL
WQV = WATER QUALITY VOLUME
WSL = WATER SURFACE LEVEL
IL = INVERT LEVEL
REC WC WSL = RECEIVING WATER COURSE WATER SURFACE LEVEL.

Original Scale (A3)
1:2000

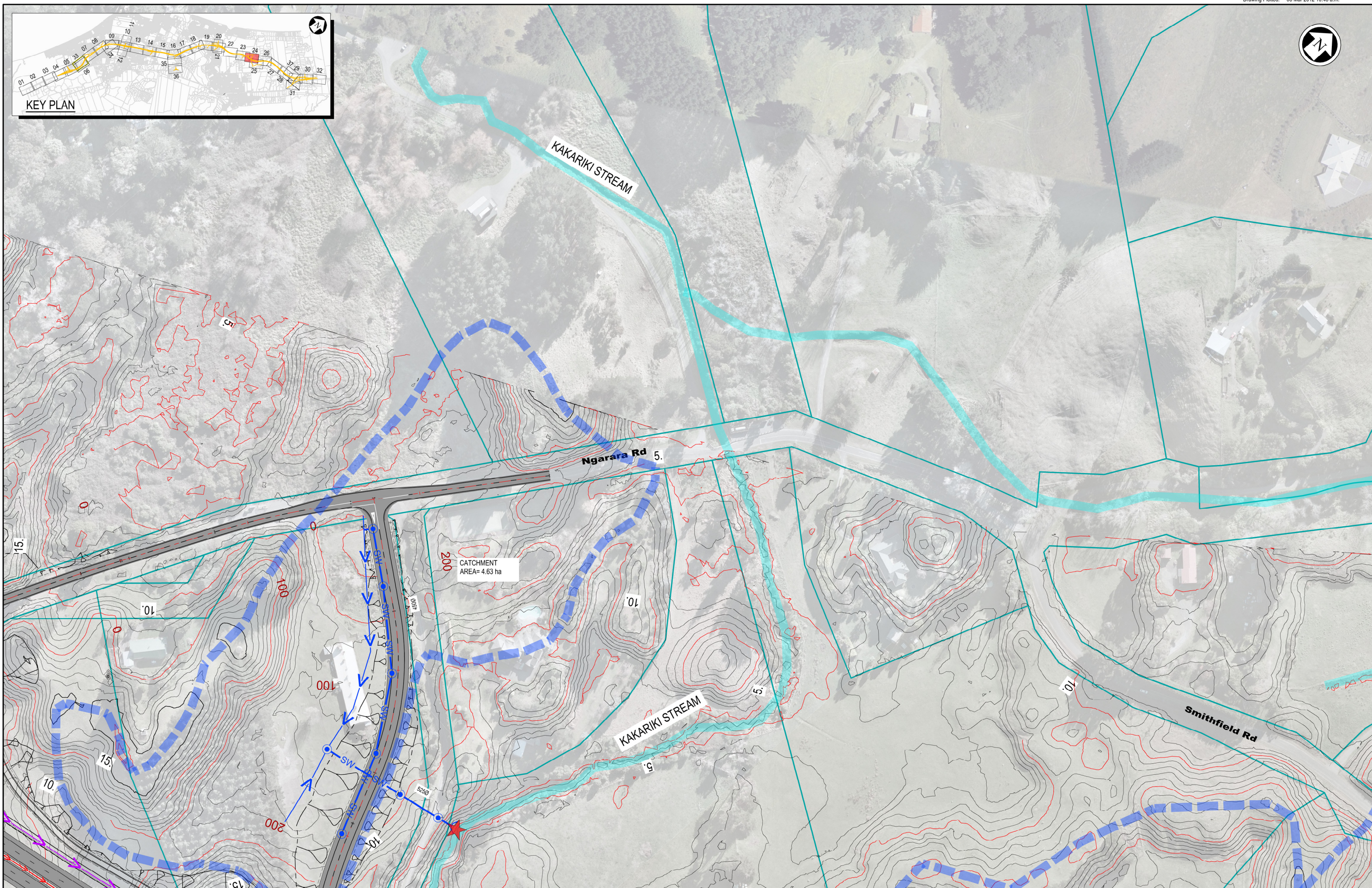
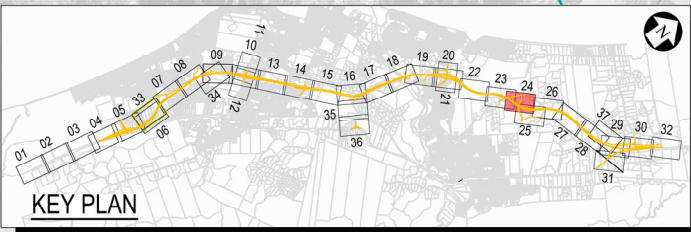
1	AEE LODGEMENT	NRN	15.03.12
Revision:	Amendment	Approved:	Date:



MACKAYS TO PEKA PEKA EXPRESSWAY

DRAINAGE LAYOUT
SHEET 23 OF 37

Status:	FOR CONSENTING
Document ID:	M2PP-AEE-DWG
Drawing No:	CV-SW-123
Rev:	1



- NOTES:**
1. REFER DRAWING CV-SW-100 FOR INDEX SHEET AND STORMWATER LEGEND
 2. EXISTING DRAINAGE FROM KCDC GIS, GWRC GIS, NZTA RECORDS AND KIWI RAIL RECORDS.

Original Scale (A3)
1:2000

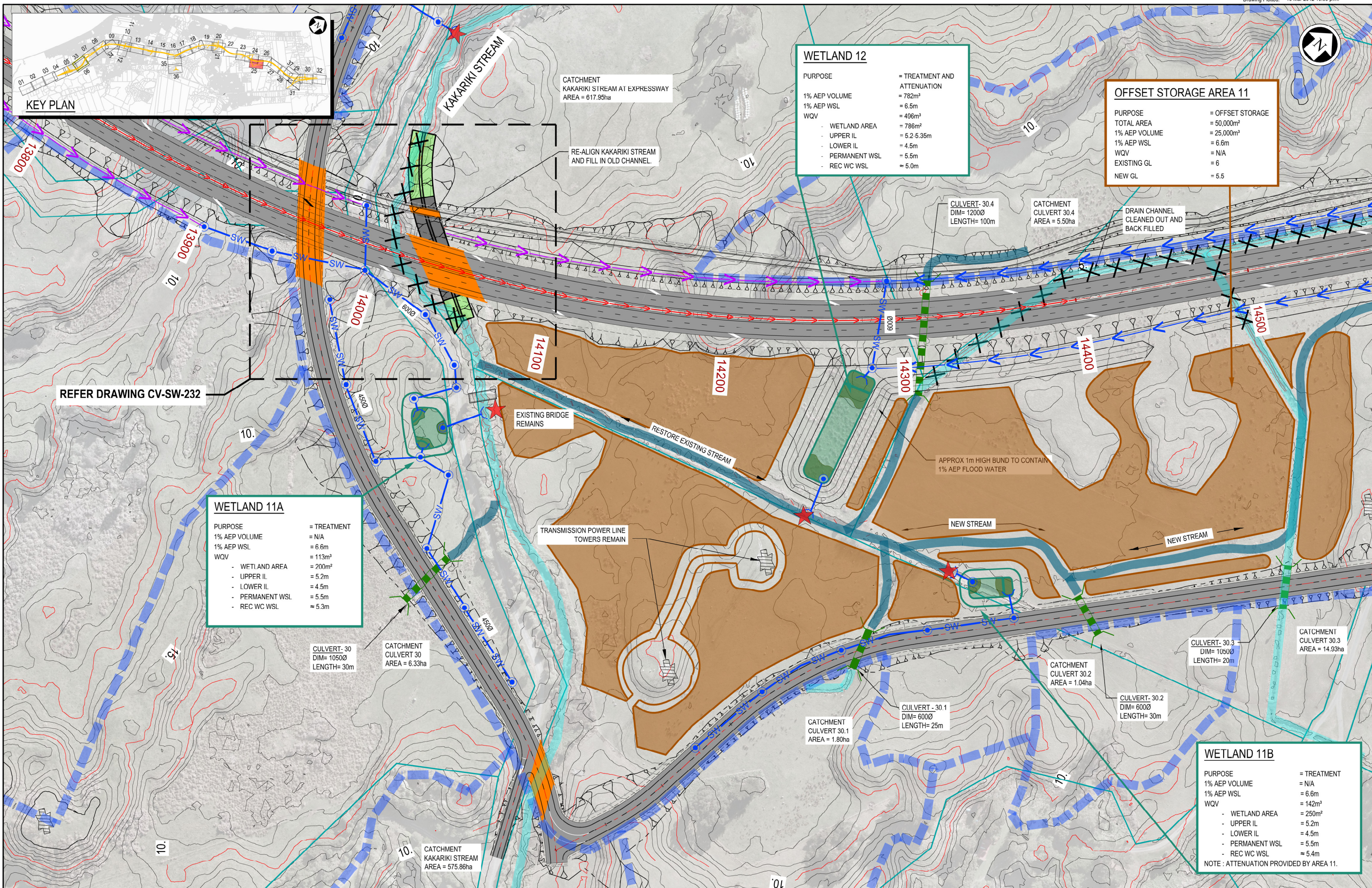
Revision	Amendment	NRN	Date
1	AEE LODGEMENT	NRN	15.03.12
		Approved:	Date:



MACKAYS TO PEKA PEKA EXPRESSWAY

DRAINAGE LAYOUT SHEET 24 OF 37

Status:	FOR CONSENTING
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Drawing No:	CV-SW-124
Rev:	1



WETLAND 12

PURPOSE	= TREATMENT AND ATTENUATION
1% AEP VOLUME	= 782m ³
1% AEP WSL	= 6.5m
WQV	= 496m ³
- WETLAND AREA	= 786m ²
- UPPER IL	= 6.2-5.35m
- LOWER IL	= 4.5m
- PERMANENT WSL	= 5.5m
- REC WC WSL	= 5.0m

OFFSET STORAGE AREA 11

PURPOSE	= OFFSET STORAGE
TOTAL AREA	= 50,000m ²
1% AEP VOLUME	= 25,000m ³
1% AEP WSL	= 6.6m
WQV	= N/A
EXISTING GL	= 6
NEW GL	= 5.5

WETLAND 11A

PURPOSE	= TREATMENT
1% AEP VOLUME	= N/A
1% AEP WSL	= 6.6m
WQV	= 113m ³
- WETLAND AREA	= 200m ²
- UPPER IL	= 5.2m
- LOWER IL	= 4.5m
- PERMANENT WSL	= 5.5m
- REC WC WSL	= 5.3m

WETLAND 11B

PURPOSE	= TREATMENT
1% AEP VOLUME	= N/A
1% AEP WSL	= 6.6m
WQV	= 142m ³
- WETLAND AREA	= 250m ²
- UPPER IL	= 5.2m
- LOWER IL	= 4.5m
- PERMANENT WSL	= 5.5m
- REC WC WSL	= 5.4m

NOTE: ATTENUATION PROVIDED BY AREA 11.

NOTES:

- REFER DRAWING CV-SW-100 FOR INDEX SHEET AND STORMWATER LEGEND
- EXISTING DRAINAGE FROM KCDC GIS, GWRC GIS, NZTA RECORDS AND KIWI RAIL RECORDS.
- GL = GROUND LEVEL
WQV = WATER QUALITY VOLUME
WSL = WATER SURFACE LEVEL
IL = INVERT LEVEL
REC WC WSL = RECEIVING WATER COURSE WATER SURFACE LEVEL.

Original Scale (A3)
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1	AEE LODGEMENT	NRN	15.03.12
Revision:	Amendment	Approved:	Date:



MACKAYS TO PEKA PEKA EXPRESSWAY

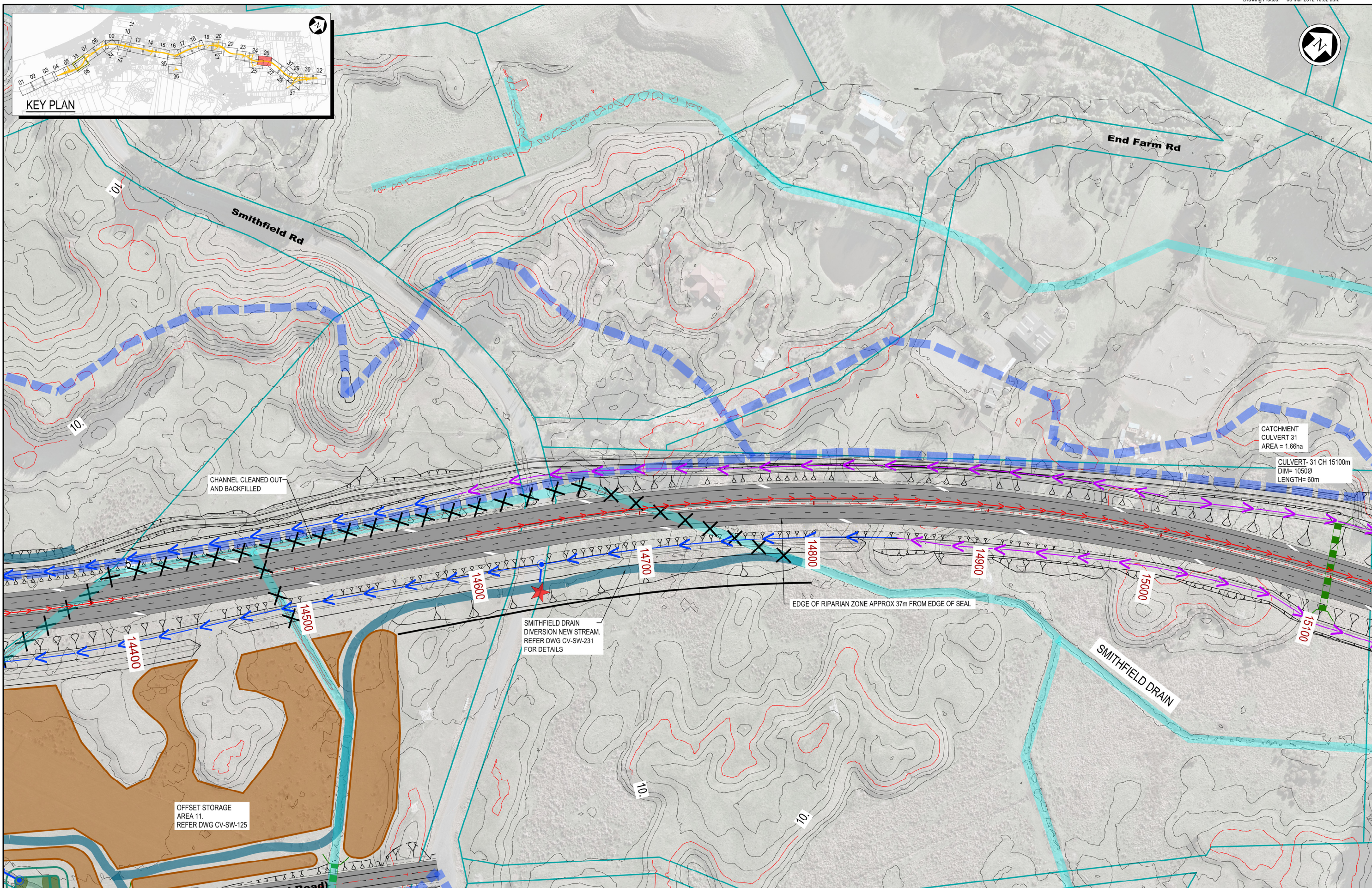
DRAINAGE LAYOUT SHEET 25 OF 37

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Drawing No: CV-SW-125

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NOTES:
 1. REFER DRAWING CV-SW-100 FOR INDEX SHEET AND STORMWATER LEGEND
 2. EXISTING DRAINAGE FROM KCDC GIS, GWRC GIS, NZTA RECORDS AND KIWI RAIL RECORDS.

Original Scale (A3)
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Project: **MACKAYS TO PEKA PEKA EXPRESSWAY**

Title: **DRAINAGE LAYOUT SHEET 26 OF 37**

Status: FOR CONSENTING

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