

OFFSET STORAGE AREA 9A	
PURPOSE	= ATTENUATION
TOTAL AREA	= 1,200m <sup>2</sup>
1% AEP VOLUME	= 1,613m <sup>3</sup>
1% AEP WSL	= 6.75m
EX GL	= 6-7m
NEW GL	= NO CHANGE
NOTE: VOLUME INCLUDES STORAGE IN UPSTREAM SWALE. STORAGE IS ABOVE GROUND.	

- 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:



Project: **MACKAYS TO PEKA PEKA EXPRESSWAY**

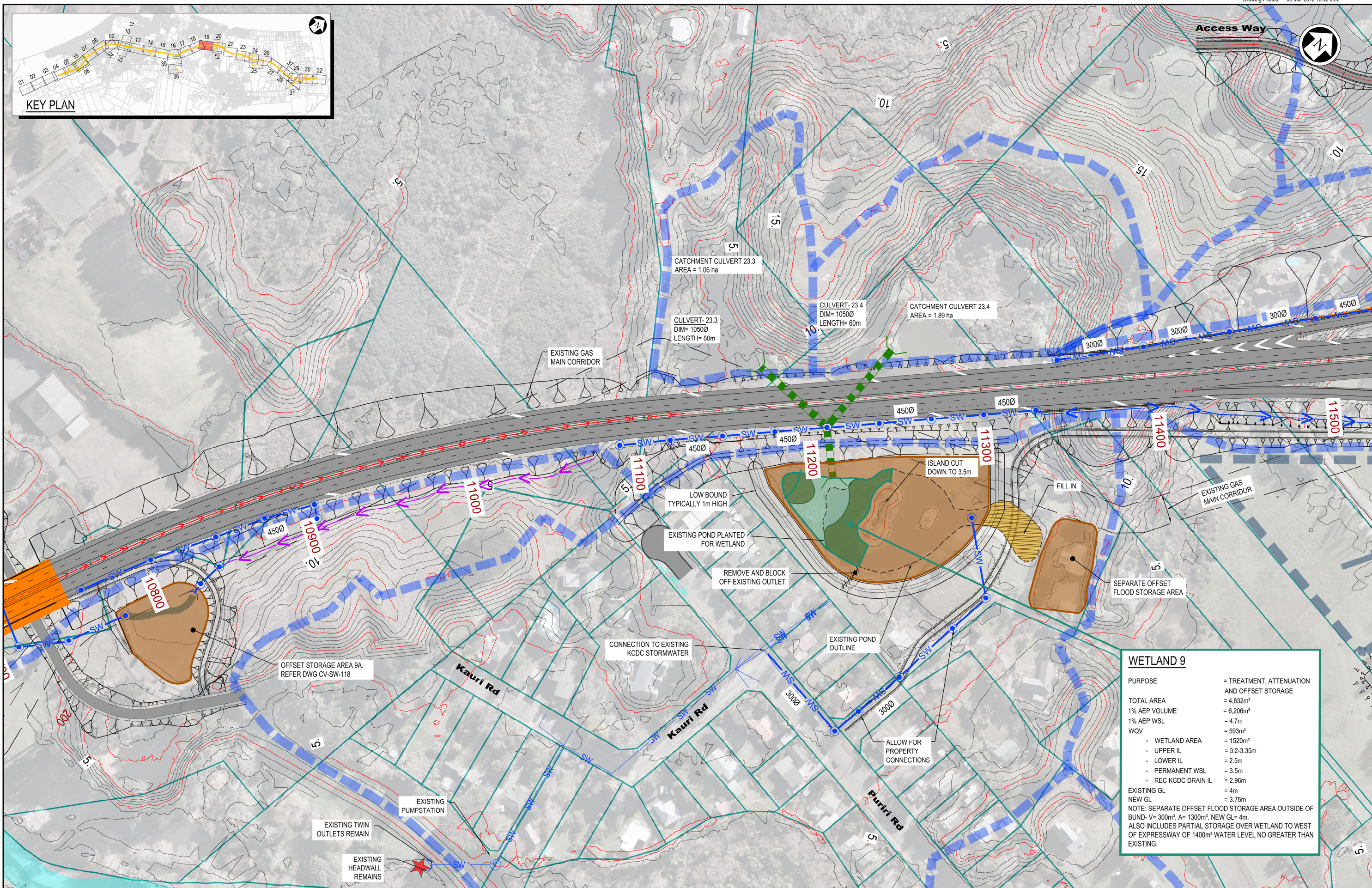
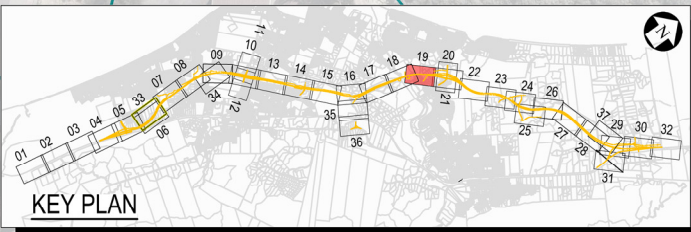
Title: **DRAINAGE LAYOUT SHEET 18 OF 37**

Status: **FOR CONSENTING**

Document ID: M2PP-AEE-DWG Rev: 1

Drawing No: **CV-SW-118**

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WETLAND 9	
PURPOSE	= TREATMENT, ATTENUATION AND OFFSET STORAGE
TOTAL AREA	= 4,832m <sup>2</sup>
1% AEP VOLUME	= 6,206m <sup>3</sup>
1% AEP WSL	= 4.7m
WQV	= 593m <sup>3</sup>
- WETLAND AREA	= 1520m <sup>2</sup>
- UPPER IL	= 3.2-3.35m
- LOWER IL	= 2.5m
- PERMANENT WSL	= 3.5m
- REC KCDC DRAIN IL	= 2.96m
EXISTING GL	= 4m
NEW GL	= 3.75m
NOTE: SEPARATE OFFSET FLOOD STORAGE AREA OUTSIDE OF BUND- V= 300m <sup>3</sup> , A= 1300m <sup>2</sup> , NEW GL= 4m. ALSO INCLUDES PARTIAL STORAGE OVER WETLAND TO WEST OF EXPRESSWAY OF 1400m <sup>2</sup> WATER LEVEL NO GREATER THAN EXISTING.	

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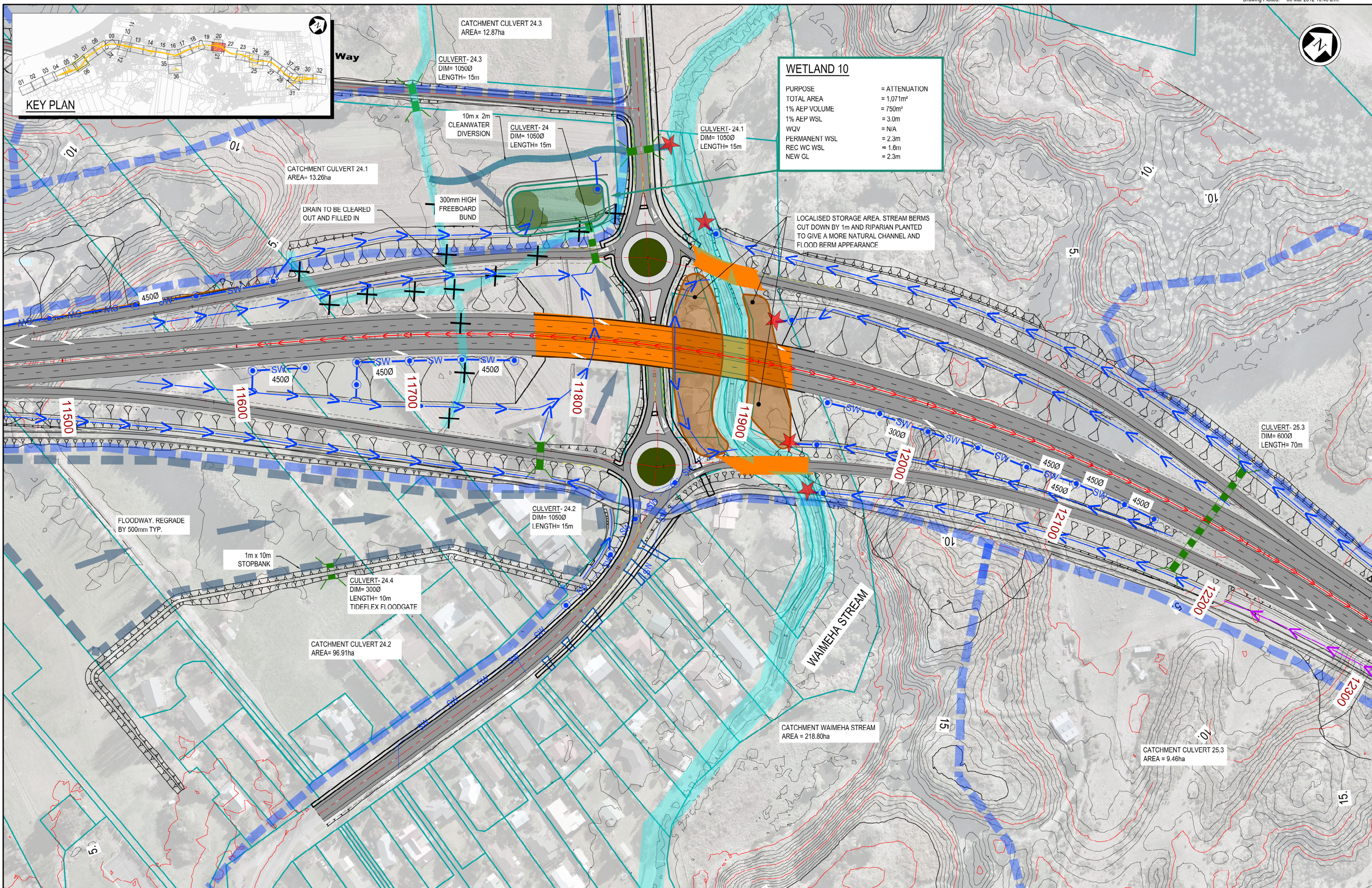
1	AEE LODGEMENT	NRN	15.03.12
Revision:	Amendment	Approved:	Date:



**MACKAYS TO PEKA PEKA EXPRESSWAY**

DRAINAGE LAYOUT  
SHEET 19 OF 37

Status:	FOR CONSENTING
Document ID:	M2PP-AEE-DWG
Drawing No:	CV-SW-119
Rev:	1



**NOTES:**

- REFER DRAWING CV-SW-100 FOR INDEX SHEET AND STORMWATER LEGEND
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Original Scale (A3)  
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1	AEE LODGEMENT	NRN	15.03.12
Revision:	Amendment	Approved:	Date:



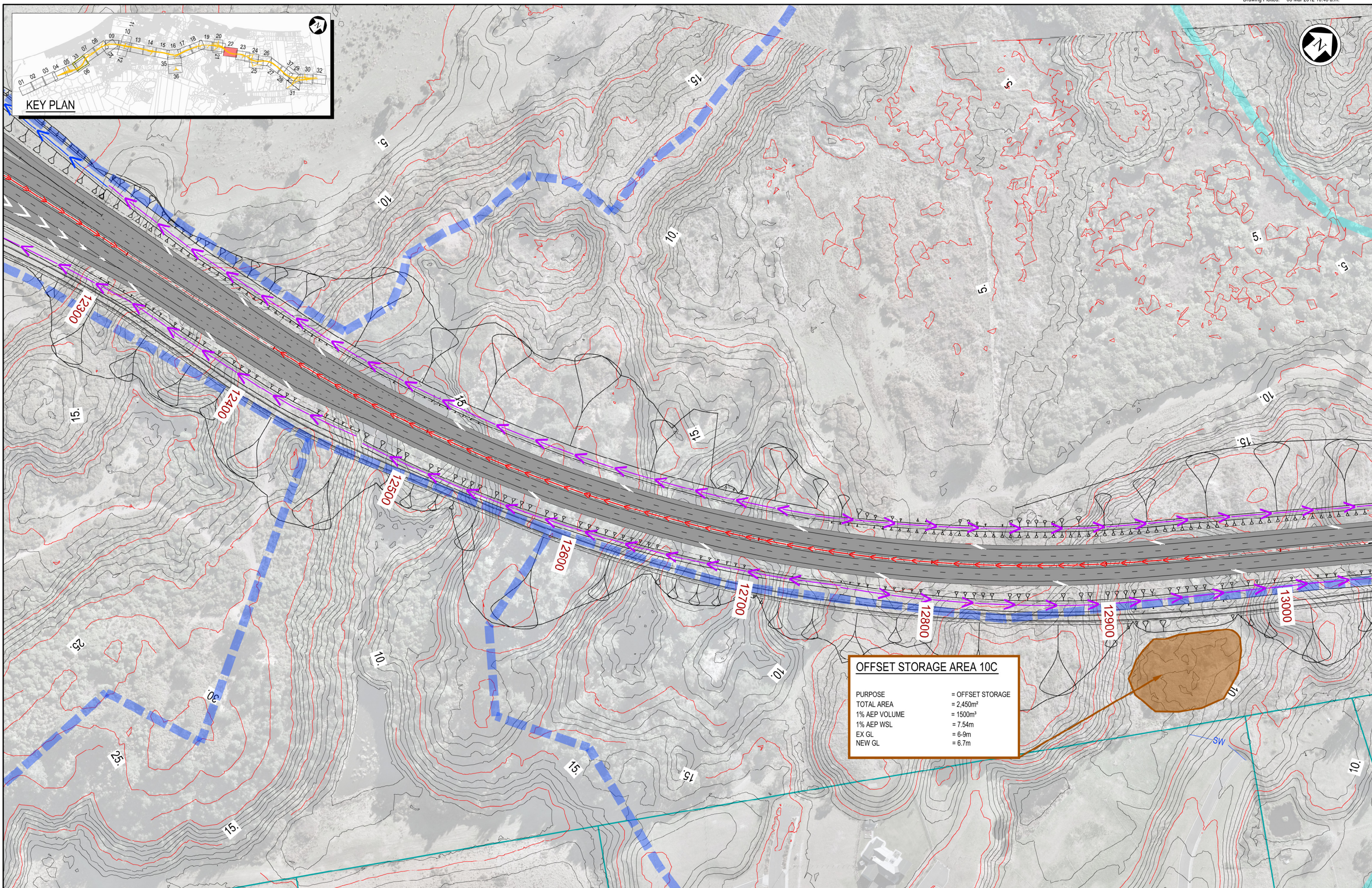
**Project:** MACKAYS TO PEKA PEKA EXPRESSWAY

**Title:** DRAINAGE LAYOUT SHEET 20 OF 37

Status: FOR CONSENTING

Document ID: M2PP-AEE-DWG Rev: 1

Drawing No: CV-SW-120



**OFFSET STORAGE AREA 10C**

PURPOSE	= OFFSET STORAGE
TOTAL AREA	= 2,450m <sup>2</sup>
1% AEP VOLUME	= 1500m <sup>3</sup>
1% AEP WSL	= 7.54m
EX GL	= 6.9m
NEW GL	= 6.7m

- 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.
  3. GL = GROUND LEVEL  
 WQV = WATER QUALITY VOLUME  
 WSL = WATER SURFACE LEVEL  
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Original Scale (A3)			
1:2000			
1	AEE LODGEMENT	NRN	15.03.12
Revision:	Amendment	Approved:	Date:



Project: **MACKAYS TO PEKA PEKA EXPRESSWAY**

Title: **DRAINAGE LAYOUT SHEET 22 OF 37**

Status:	FOR CONSENTING
Document ID:	M2PP-AEE-DWG
Drawing No:	<b>CV-SW-122</b>
Rev:	1