

B 12/07/13 OUTFALL REVISED
A 17/08/12 CONSENT ISSUE

AMENDMENT

SITE LAYOUT AND DESIGNS INDICATIVE ONLY AND SUBJECT TO CHANGE DURING DETAILED DESIGN DEVELOPMENT ASSET MANAGER AEE JULY 2013

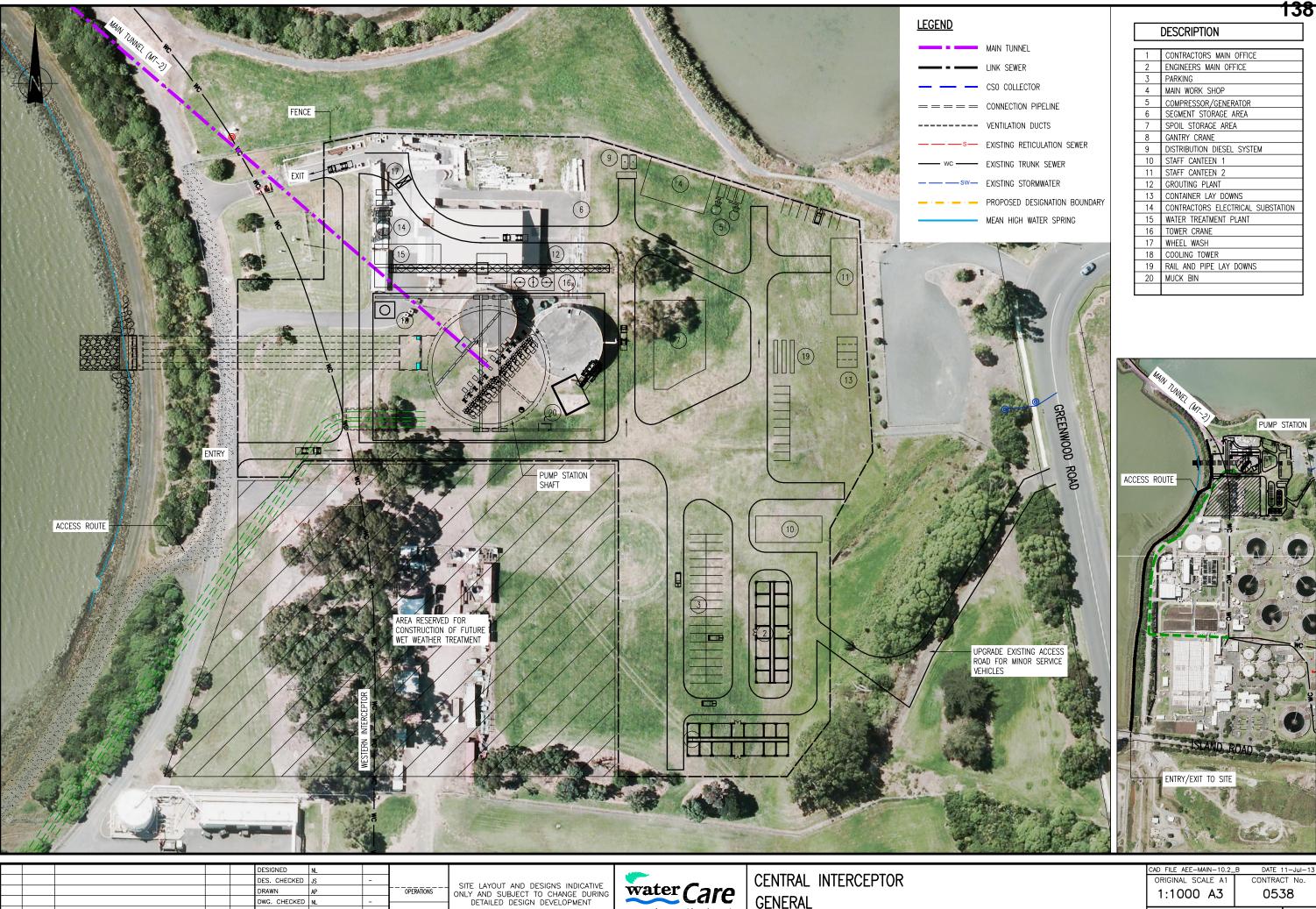
REV'D P.MGR APP'D P.DIR

water Care services limited COPYRIGHT — This drawing, the design and concept, remain the exclusive property of Watercare Services Limited and may not

**GENERAL** MANGERE PUMP STATION (WS3) - PERMANENT WORKS PLAN

CAD FILE AEE-MAIN-10.1_	DATE 11-Jul-13	
ORIGINAL SCALE A1	CONTRACT No.	
1:1000 A3	0538	
DRAWING No. ISSU		

AEE-MAIN-10.1



DWG. CHECKED

ASSET MANAGER

AEE JULY 2013

REV'D P.MGR

APP'D P.DIR

B 12/07/13 OUTFALL REVISED

A 17/08/12 CONSENT ISSUE

SUE DATE

AMENDMENT

1:1000 A3 0538

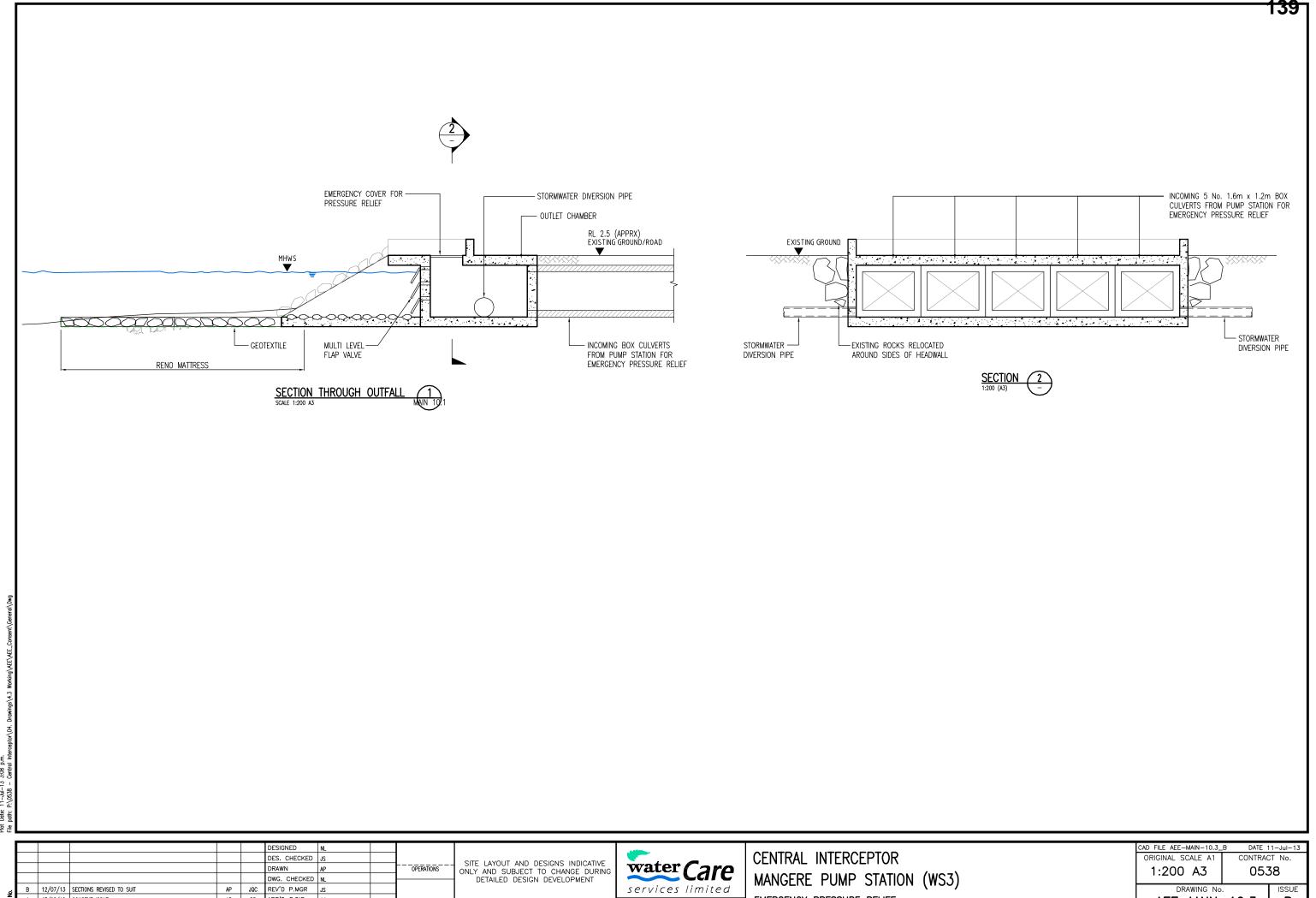
В

MANGERE PUMP STATION (WS3) - CONSTRUCTION WORKS PLAN COPYRIGHT — This drawing, the design and concept, remain the exclusive property of Watercare Services Limited and may not

**GENERAL** 

services limited

AEE-MAIN-10.2

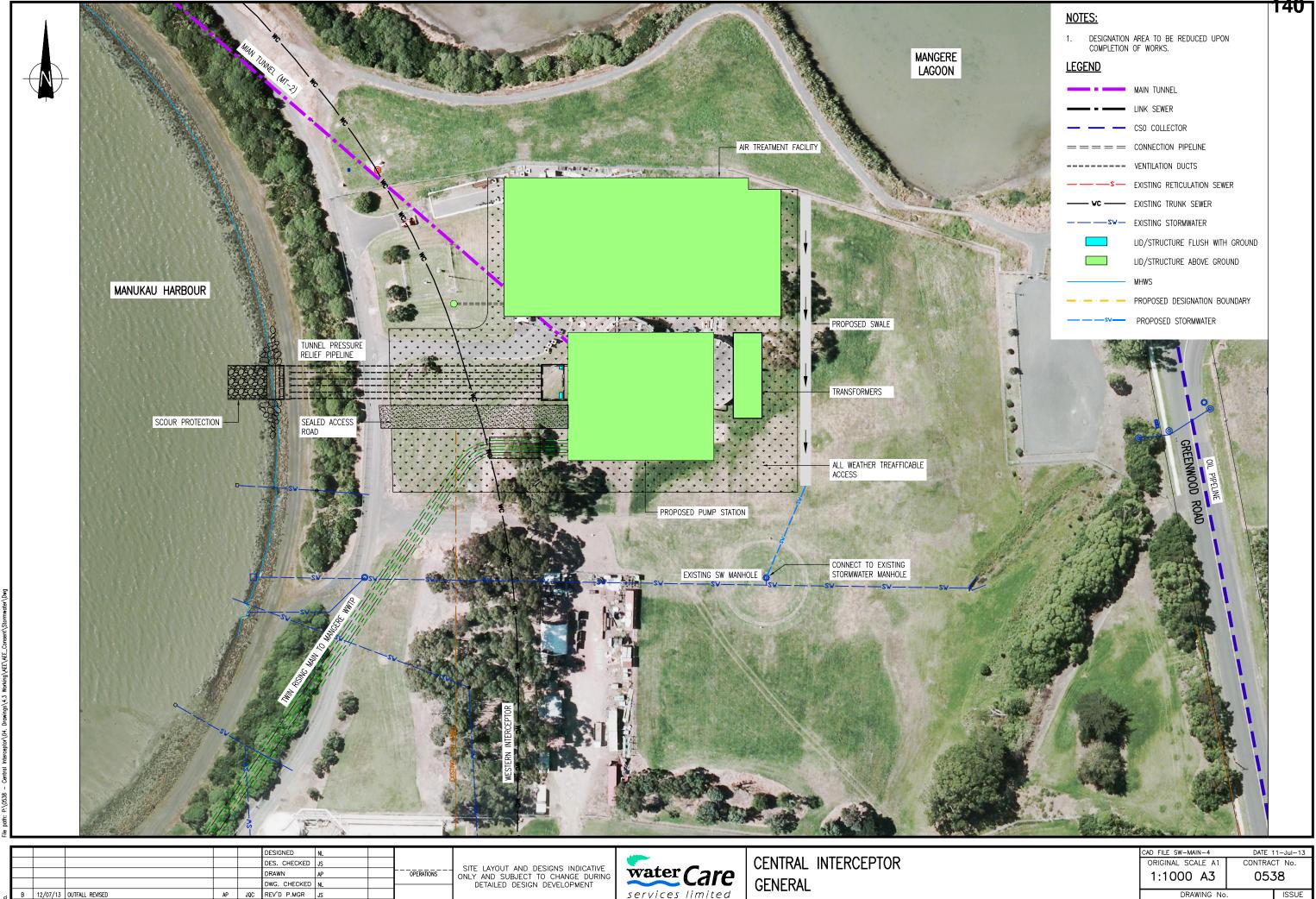


B 12/07/13 SECTIONS REVISED TO SUIT
A 17/08/12 CONSENT ISSUE AP PR APP'D P.DIR ASSET MANAGER AEE JULY 2013 AMENDMENT BY APPD. SSUE DATE

,	water Care	
	services limited	
	COPYRIGHT - This drawing, the design and concept, remain the exclusive property of Watercare Services Limited and may not	

EMERGENCY PRESSURE RELIEF

DRAWING No. ISSUE	1:200 A3   0538	1.000 AZ   0EZ0	7,200 7,0		
	I I	1:200 A3   0538	5.0		ISSUE
		1:200 A3 0538	DRAWING No.  AEE-MAIN-10.3		ISSUE <b>R</b>
ORIGINAL SCALE A1 CONTRACT No. 1:200 A3 0538	ORIGINAL SCALE A1 CONTRACT No.		CAD FILE AEE-MAIN-10.3_	B DATE 1	1 – Jul – 13



B 12/07/13 OUTFALL REVISED
A 17/08/12 CONSENT ISSUE

AMENDMENT

AEE JULY 2013

ASSET MANAGER

APP'D P.DIR

services limited COPYRIGHT — This drawing, the design and concept, remain the exclusive property of Watercare Services Limited and may not

**GENERAL** 

MANGERE PUMP STATION (WS3) - STORMWATER WORKS PLAN

CAD FILE SW-MAIN-4	DATE 11-Jul-13	
ORIGINAL SCALE A1	CONTRACT No.	
1:1000 A3	0538	
DDAWWIN N	ICCLIE	

SW-MAIN-4

В





These graphics have been produced as a result of information provided by the client and/or sourced by or provided to Boffa Miskell Limited by a third party for the purposes of providing the services. No responsibility is taken by Boffa Miskell Limited for any liability or action arising from any incomplete or inaccurate information provided to Boffa Miskell Limited (whether from the client or third and the light of the client of the or a third party). These graphics are provided to the client for the benefit and use by the client and for the purpose for which it is intended.

© Boffa Miskell 2013



150m Scale: 1:5000 @ A3 Data Sources: Site LIDAR (Nov. 2010), Aerials (2012) - AECOM Auckland Council aerials (2010), BML Projection: NZTM



Open Space Business

Designation

walkways Water Course CENTRAL INTERCEPTOR AND ASSOCIATED WORKS

Mangere Pump Station (WS 3)

Location and Context - Plan

Date: 05 July 2013 | Revision: D |

Graphic prepared for Watercare Services Ltd by Boffa Miskell Limited  $Author: {\bf bernie.ranum@boffamiskell.co.nz} \ | \ Checked: J. Goodwin$  Figure 47



View of existing outlet & WWTP from Coastal Walkway



Existing outlet structure intergrated with rock rip-rap sea wall



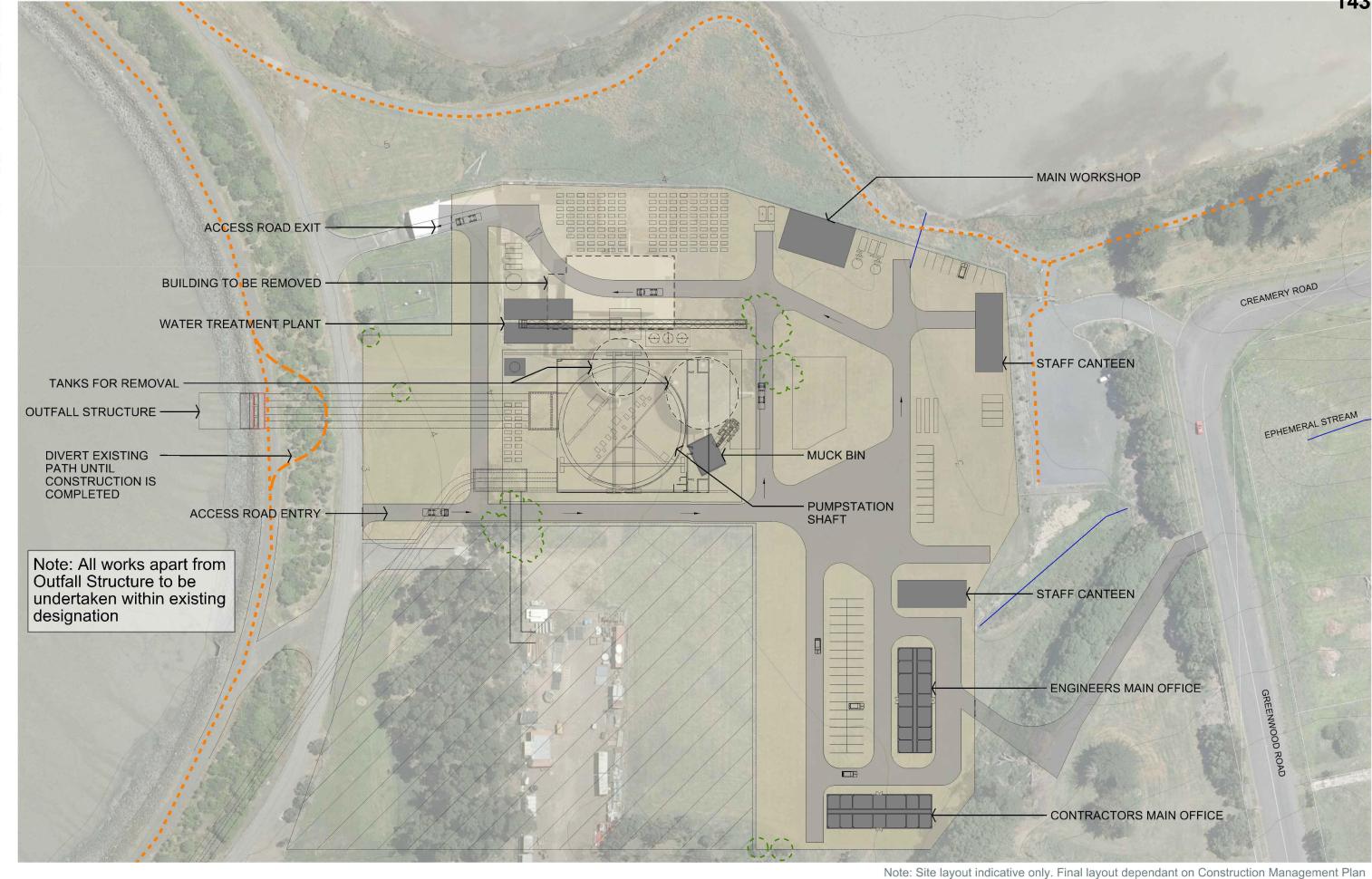
View of WWTP & Coastal Walkway



View of Proposed Emergency Pressure Relief Site



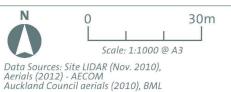
These graphics have been produced as a result of information provided by the client and/or sourced by or provided to Boffa Miskell Limited by a third party for the purposes of providing the services. No responsibility is taken by Boffa Miskell Limited for any liability or action arising from any incomplete or inaccurate information provided to Boffa Miskell Limited (whether from the client or a third party). These graphics are provided to the client for the benefit and use by the client and for the purpose for which it is intended. © Boffa Miskell Limited 2013



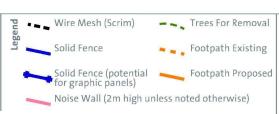
Boffa Miskell
www.boffamiskell.co.nz

These graphics have been produced as a result of information provided by the client and/or sourced by or provided to Boffa Miskell Limited by a third party for the purposes of providing the services. No responsibility is taken by Boffa Miskell Limited for any liability or action arising from any incomplete or inaccurate information provided to Boffa Miskell Limited (whether from the client or a third party). These graphics are provided to the client for the benefit and use by the client and for the purpose for which it is intended.

© Boffa Miskell 2013



Projection: NZTM



CENTRAL INTERCEPTOR AND ASSOCIATED WORKS
Mangere Pump Station (WS3)
Construction Site and Works
| Date: 05 July 2013 | Revision: D |

Graphic prepared for Watercare Services Ltd by Boffa Miskell Limited Author: bernie.ranum@boffamiskell.co.nz | Checked: J.Goodwin Figure 48



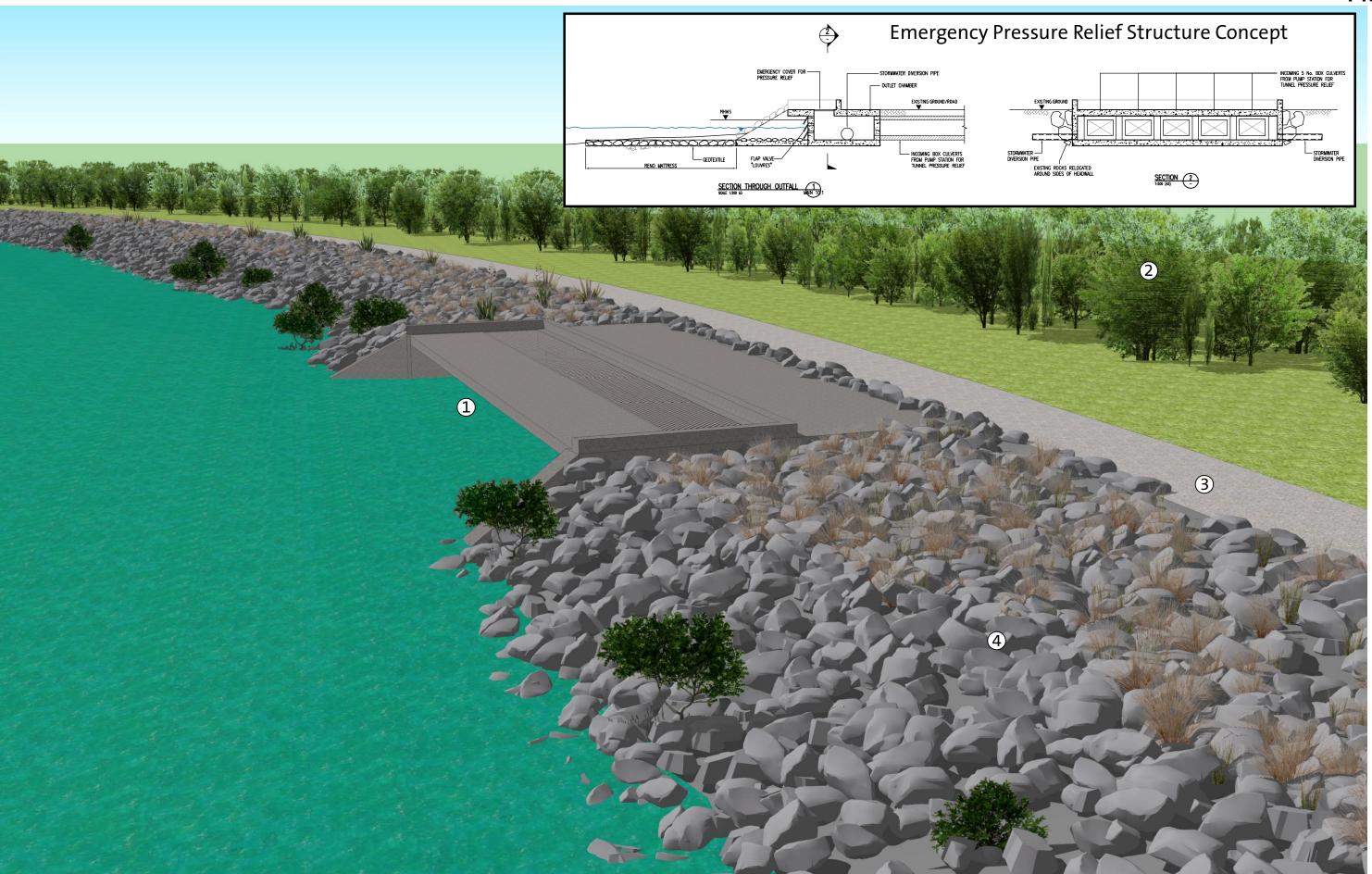
These graphics have been produced as a result of information provided by the client and/or sourced by or provided to Boffa Miskell Limited by a third party for the purposes of providing the services. No responsibility is taken by Boffa Miskell Limited for any liability or action arising from any incomplete or inaccurate information provided to Refs. Miskell Limited (whether from the client provided to Boffa Miskell Limited (whether from the client or a third party). These graphics are provided to the client for the benefit and use by the client and for the purpose for © Boffa Miskell 2013





CENTRAL INTERCEPTOR AND ASSOCIATED WORKS Mangere Pump Station (WS3) Permanent Works Concept Date: 05 July 2013 | Revision: D

Graphic prepared for Watercare Services Ltd by Boffa Miskell Limited  $Author: {\bf bernie.ranum@boffamiskell.co.nz} \ | \ {\it Checked: J.Goodwin}$  Figure 49





These graphics have been produced as a result of information provided by the client and/or sourced by or provided to Boffa Miskell Limited by a third party for the purposes of providing the services. No responsibility is taken by Boffa Miskell Limited for any liability or action arising from any incomplete or inaccurate information provided to Boffa Miskell Limited (whether from the client or a third party). These graphics are provided to the client for the benefit and use by the client and for the purpose for which it is intended. © Boffa Miskell Limited 2013

Key:

- 1. Proposed Outflow.
- 2. Existing Vegetation.
- 3. Existing Walkway.
- 4. Existing bank and Rip Rap rocks.

**Note:** Indicative design only. Final layout and details subject to technical requirements, including safety features such as hand rails.

## CENTRAL INTERCEPTOR AND ASSOCIATED WORKS

Emergency Pressure Relief Structure | Perspective Sketch | Date: 05 July 2013 | Revision: D |

Graphic prepared for Watercare Services Ltd by Boffa Miskell Limited Author: deborah.dewhirst@boffamiskell.co.nz | Checked: J. Goodwin