

FLOOD EMERGENCY RESPONSE PLAN

Moorebank Precinct East Stage 1, Package 2

22 OCTOBER 2019

SYDNEY INTERMODAL TERMINAL ALLIANCE

Moorebank Precinct East, Stage 1, Package 2

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REVISIONS

Revision	Date	Description	Prepared by	Approved by
001	22/2/17	First Revision for inclusion into the CEMP	████	████
002	2/3/17	Updated with Tactical comments	████	████
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005	11/01/2019	Minor updates associated with 'non-conformance,' 'non-compliance' and 'corrective and preventative actions'	████	██████████
006	11/07/2019	Revisions associated with RfMA 011	██████████ ██████████	██████████

Revision	Date	Description	Prepared by	Approved by
007	22/10/2019	Minor revisions associated with RfMA 018 – Additional construction compound to enable installation of gantry cranes for the IMEX terminal		

ACRONYMS AND DEFINITIONS

Term	Definition
AHD	Australian Height Datum
ARI	Average Rainfall Intensity
BoM	Bureau of Meteorology
CEMP	Construction Environmental Management Plan
CERP	Construction Emergency Response Plan
CoC	Conditions of Consent
CSWMP	Construction Soil and Water Management Plan
CTAMP	Construction Traffic and Access Management Plan
DECC	Department of Energy and Climate Change
DPE	Department of Planning and Environment
EMS	Environmental Management Systems
EPA	Environment Protection Authority
FERP	Flood Emergency Response Plan
HAZID	Hazardous Substances Identification
HSE	Health Safety and Environment
IMEX	<p>Import Export Terminal. Includes the following key components:</p> <ul style="list-style-type: none"> • Truck processing, holding and loading areas - entrance and exit from Moorebank Avenue • Rail loading and container storage areas – installation of four rail sidings with adjacent container storage area serviced by manual handling equipment initially and overhead gantry cranes progressively • Administration facility and associated car parking- light vehicle access from Moorebank Avenue.
IMT facility	<p>MPE Stage 1 Site including the construction of the following key components together comprising the intermodal terminal (IMT):</p> <ul style="list-style-type: none"> • Truck processing and loading areas. • Rail loading and container storage areas. • Administration facility and associated car parking • Rail Link.
ISO	International Organisation for Standardisation
ITP	Inspection and Test Plan
JSEA	Job Safety and Environmental Analysis

Term	Definition
MPE	Moorebank Precinct East as approved by the Concept Plan (MP_10_0913)
MPE Site	The site at Moorebank as approved by the Concept Plan (MP_10_0913)
MPE Stage 1, Package 1	The construction of the Rail Link connecting the Southern Sydney Freight Line to the IMEX, traversing across the Boot land, RailCorp Land, Moorebank Avenue, the MPW Golf Course, Georges River, and Glenfield Waste Facility
MPE Stage 1, Package 2	Construction of the IMEX Terminal (Figure 1) including the following key components: <ol style="list-style-type: none"> 1. Truck processing, holding and loading areas - entrance and exit from Moorebank Avenue 2. Rail loading and container storage areas – installation of four rail sidings with adjacent container storage area serviced by manual handling equipment initially and overhead gantry cranes progressively 3. Administration facility and associated car parking- light vehicle access from Moorebank Avenue
MPE Stage 1 Project	The whole of the land to which the MPE Stage 1 Project approval SSD 14-6766 relates including both MPE Stage 1 Package 1, and MPE Stage 1 Package 2.
Non-compliance	An occurrence, set of circumstances, or development that results in a non-compliance or is non-compliant with Development Consent 6766 Conditions of Consent or EPBC Act Approval (EPBC 2011/6229) Conditions of Approval but is not an incident
Non-conformance	Non-conformances are observations or actions that are not in strict accordance with the CEMP and the aspect specific sub-plan.
Project, the (site)	The Project is the MPE Stage 1 Package 2 Project i.e. the IMEX Terminal construction site as depicted in Figure 1.
SDS	Safety Data Sheet
SSD	State Significant Development
SCRIM	SIMTA Incident Management Reporting System
SHEMS	Safety Health and Environmental Management System (also known as the Moorebank Intermodal Precinct Incident Management Process)
SIMTA	Sydney Intermodal Terminal Alliance
SWMS	Safe Works Method Statement

COMPLIANCE MATRICES

Table 1 Conditions of Approval (CoC)

CoC	Requirement	Document Reference
E34(f)(iii)	<p>Construction Soil and Water Management Plan to manage surface and groundwater impacts during construction. The plan shall be developed in consultation with, EPA, DPI Water, DPI Fisheries, and relevant Councils, and include, but not necessarily be limited to:</p> <p>(iii) emergency response procedures addressing potential flood impacts or spill incidents;</p>	This plan

Table 2 Final Compilation of Mitigation Measures (FCMM)

FCMM	Requirement	Document Reference
5G	<p>A Flood Emergency Response Plan (FERP) will be developed for the Stage 1 site. The FERP will take into consideration, site flooding and broader flood emergency response plans for the Georges River and Anzac Creek floodplains and Moorebank area.</p> <p>The FERP will also include the identification of an area of safe refuge within the SIMTA site that will allow people to wait until hazardous flows have receded and safe evacuation is possible.</p>	This plan

Table 3 Revised Statement of Commitments (RSoC)

RSoC	Requirement	Document Reference
Stormwater and Flooding	<p>The Proponent will prepare and update a flood emergency response plan as necessary to address the staged development of the site. Details are to be provided prior to the construction of each of the three major stages of the development.</p>	This plan

Table 4 Commonwealth Mitigation Measures (CMM)

CMM	Requirement	Document Reference
5G	A Flood Emergency Response Plan (FERP) will be developed for the Stage 1 site. The FERP will take into consideration, site flooding and broader flood emergency response plans for the Georges River and Anzac Creek floodplains and Moorebank area. The FERP will also include the identification of an area of safe refuge within the SIMTA site that will allow people to wait until hazardous flows have receded and safe evacuation is possible.	This plan

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APPENDIX A

ANZAC CREEK CULVERT – PROBABLE MAXIMUM FLOOD DEPTH

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1 INTRODUCTION

The Sydney Intermodal Terminal Alliance (SIMTA) received approval for the construction and operation of Stage 1 of the Moorebank Precinct East (MPE) Project, comprising an Intermodal (IMT) Facility including a rail link (Package 1) and Import Export (IMEX) Terminal (Package 2) on 12 December 2016 (SSD 6766). The construction and operation of the MPE Stage 1 project was subject to an appeal in September 2017 (Appeal Number 2017/00081889). The approval was upheld and the revised Conditions of Consent (CoC) were released on 13 March 2018.

Within this plan, a strategy has been established to demonstrate the contractor's approach to the emergency response during flooding.

This Flood Emergency Response Plan (FERP) addresses the relevant requirements of the Project Approvals, including the EIS, Submissions Report and Minister's Conditions of Consent (CoC), and all applicable guidelines and standards specific to the management of flooding emergency response during construction of the Project

1.1 Background and Scope

The MPE Project site is located approximately 27 kilometres (km) south-west of the Sydney Central Business District (CBD) and approximately 26 km west of Port Botany and includes the former Defence National Storage and Distribution Centre (DNSDC) site.

The MPE Project involves the development of an intermodal facility, including warehouse and distribution facilities, freight village (ancillary site and operational services), stormwater, rail link, landscaping, servicing and associated works on the eastern side of Moorebank Avenue, Moorebank. It is to be developed in three key stages:

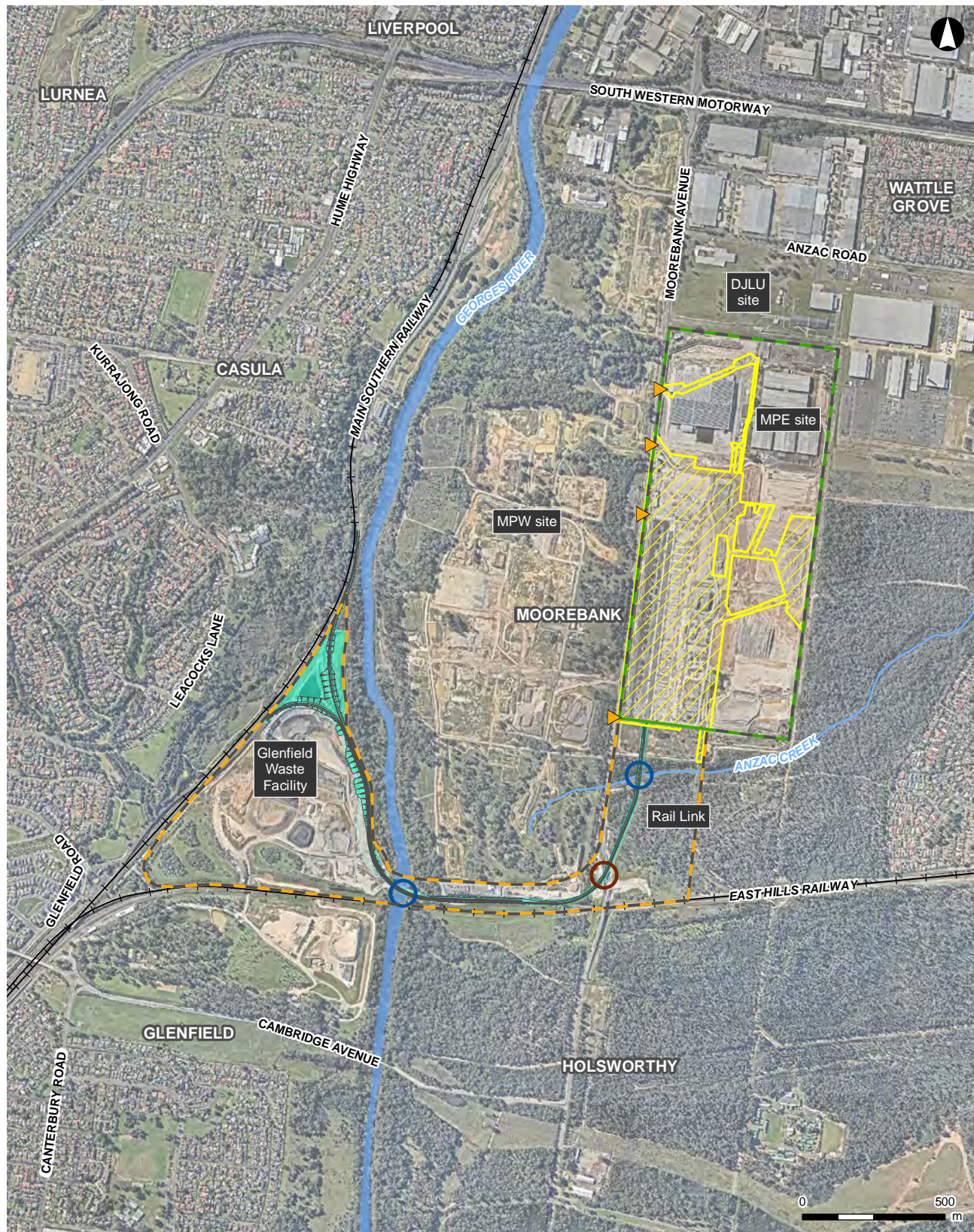
- Stage 1 - Construction of the IMT
- Stage 2 - Construction of warehouse and distribution facilities
- Stage 3 - Extension of the IMT and completion of warehouse and distribution facilities.

Stage 1 of the MPE Project comprises, and will be constructed across, two packages:

- Package 1: The Rail Link (not included within this FERP) includes a connection to the IMEX Terminal, and traverses across Moorebank Avenue, Anzac Creek and Georges River prior to connecting to the Southern Sydney Freight Line (SSFL) (refer to Figure 1).
- Package 2: The IMEX Terminal (subject of this FERP) includes the following key components:
 - Truck processing, holding and loading areas - entrance and exit from Moorebank Avenue
 - Rail loading and container storage areas – installation of four rail sidings with adjacent container storage area serviced by manual handling equipment initially and overhead gantry cranes progressively
 - Administration facility and associated car parking- light vehicle access from Moorebank Avenue

The layout of the IMEX Terminal generally comprises operational areas, an administration area, rail sidings, utilities and drainage infrastructure, landscaping and signage. The operational areas of the IMEX Terminal consist of the primary and secondary container loading / unloading areas and container storage areas, and the truck holding area. Within these areas containers will be stacked up to five high.

MPE Stage 1 FERP



LEGEND

- | | |
|-----------------------------------|----------------------|
| Project site | Creek/river crossing |
| Construction footprint | Road crossing |
| MPE site | Rail link |
| Rail corridor | Existing railway |
| MPE Stage 1 Package 1 (Rail Link) | Watercourse |
| Construction access | |

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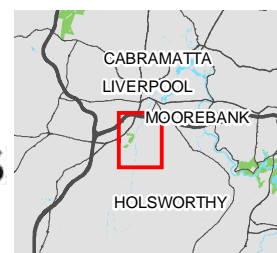


Figure 1: MPE Site Overview

The SIMTA site is located entirely within the catchment area of the Georges River, which lies approximately 750 m to the west of the site. The rail corridor is located within the mid-Georges River catchment and is a Liverpool District sub-catchment. The Georges River enters the Liverpool LGA from the south on the western side of the Defence Lands at Holsworthy and flows to the north, meeting with Glenfield Creek at Casula. The river then continues to flow north past the Liverpool City Centre, under Newbridge Road, past Lighthorse Park and over the Liverpool Weir. Downstream of the Liverpool Weir, the Georges River becomes brackish and is subject to tidal influences.

1.1.1 Environmental Planning Approval

The MPE Stage 1 Project has been assessed by the Department of Planning and Environment (DP&E) under Division 4.7 (Division 4.1 prior to March 2018) of the *Environmental Planning and Assessment Act 1979* (EP&A Act) as State Significant Development (SSD). The Planning Assessment Commission (PAC) granted Approval for the MPE Stage 1 Project on 12 December 2016 and is subject to the Minister's Conditions of Consent (CoC, 18 December 2016 (ref SSD-6766)). The MPE Stage 1 Project, its impacts, consultation and mitigation were documented in the following suite of documents:

- State Significant Development Application SSD 6766 (as amended in the Land and Environment Court 13 March 2018)
- SIMTA Intermodal Terminal Facility – Stage 1 – Environmental Impact Statement (Hyder Consulting Pty Ltd, May 2014)
- SIMTA Intermodal Terminal Facility – Stage 1 – Response to Submissions (Hyder Consulting Pty Ltd, September 2015)
- *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) Approval (No. 2011/6229) granted on March 2014.

1.2 Purpose and Application

This plan provides methods to manage the impact of flooding during the construction of the Project.

Specifically, the purpose of this FERP is to provide key information and instructions to respond to flood hazards during the construction phase of IMEX.

Within the submission of planning approval for the MPE Stage 1, Arcadis (then Hyder Consulting) undertook a Flood Impact Assessment Report (Hyder 2012). SIMTA have developed this report based on the initial flood impact assessment, and to address the final compilation of mitigation measures within the EIS and revised statement of commitments. This plan aims to demonstrate how flood emergency response will be managed during construction of the Project.

The FERP has been developed to support the Construction Emergency Response Plan (CERP) which will be developed by the Construction Contractor prior to works commencement. It should be noted that the final approved CERP will prescribe all emergency response procedures, based on hazards and risk identified within the Risk Assessment (Contractor), and where any conflict or confusion arises with this FERP, the CERP shall apply. This FERP will be revised and updated immediately upon completion of the CERP to ensure compliance and conformance with overall emergency response management.

Implementing the FERP effectively will ensure that the Project team meets regulatory policy, legislative requirements and SIMTA's Safety Health and Environment policy in a systematic manner and continually improves its performance.

1.3 Objectives and Targets

The following high level objectives and targets are set for the Project for the management of emergency flood response:

Table 5 Objectives and Targets

Objectives	Performance Indicators
<ul style="list-style-type: none"> Minimise impacts or environmental consequences Mitigate site surface flow contributing to localised flooding via installation of appropriate stormwater management devices (as per approved ESC Plan) 	<ul style="list-style-type: none"> No death or injury to personnel during flood event No avoidable release of a prescribed contaminant to the environment during flood event

This IMEX Flood Emergency Response Plan (FERP) has been prepared to address:

- Condition 5G** (FCMM) – Flood Emergency Response Plan:
“A Flood Emergency Response Plan (FERP) will be developed for the Stage 1 site. The FERP will take into consideration, site flooding and broader flood emergency response plans for the Georges River and Anzac Creek floodplains and Moorebank area. The FERP will also include the identification of an area of safe refuge within the SIMTA site that will allow people to wait until hazardous flows have receded and safe evacuation is possible.”

1.4 Context of the Report

This Flood Emergency Response Plan is site specific to construction of Stage 1 Package 2 IMEX Facility, and should be read in conjunction with the final and approved Contractor’s Emergency Response Plan (to be developed and approved prior to commencement), and other related studies including, SIMTA Flood Study Stage 1A, NSW State Flood Plan (March 2015 v1.0) and Anzac-Creek-Study-2009 Liverpool Council.

1.5 Interface with other Plans & Requirements

This FERP is to be read in conjunction with the Construction Emergency Response Plan, Construction Project Management Plan, Construction Environmental Management Plan and the Construction Health & Safety Management Plan.

1.6 Access

Access to the Project site would be to and from Moorebank Avenue, as detailed within the Construction Traffic and Access Management Plan, and Environmental Control Plan(s).

The main construction compound would be accessed and egressed directly to and from Moorebank Avenue via internal haul roads through the Project site. The compound will utilise the existing main central entrance (from Moorebank Avenue) and transition to use of the proposed main entrance (from Moorebank Avenue) once this has been constructed.

MPE Stage 1 FERP



LEGEND

- Project Site
- Construction footprint
- Compound and stockpile area
- Emergency assembly area
- Construction access
- Watercourse

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Figure 2: Site Layout with Emergency Access Point and Flood Emergency Assembly Area

2 ENVIRONMENTAL OBLIGATIONS

2.1 Compliance Requirements

The Final Compilation of Mitigation Measures condition 5G requires that a Flood Emergency Response Plan is prepared as follows:

- Condition 5G (FCMM)** – Flood Emergency Response Plan:
“A Flood Emergency Response Plan (FERP) will be developed for the Stage 1 site. The FERP will take into consideration, site flooding and broader flood emergency response plans for the Georges River and Anzac Creek floodplains and Moorebank area. The FERP will also include the identification of an area of safe refuge within the SIMTA site that will allow people to wait until hazardous flows have receded and safe evacuation is possible.”

2.2 Relevant Legislation

Table 6 Relevant legislation below details the legislation, planning instruments and guidelines considered during development of this sub-plan.

Table 6 Relevant legislation

Legislation	Description	Relevance to this FERP
<i>Environmental Planning and Assessment Act 1979</i>	This Act establishes a system of environmental planning and assessment of development proposals for the State.	The DA conditions and obligations are incorporated into this FERP.
<i>Environment Protection and Biodiversity Conservation Act 1999 (Cwth)</i>	The main purpose of this Act is to provide for the protection of the environment especially those aspects that are of national environmental importance and to promote ecological sustainable development. The Act binds the Crown. Do not take, use, keep or interfere with “nationally significant” cultural and natural resources, protected wildlife and protected plants without Approval.	The project as a whole is a controlled action under the EPBC Act with controlling provisions related mainly to the Rail connection.
<i>Fisheries Management Act 1994</i>	This Act is applicable to all waters within the state including private and public waters and all permanent and intermittent waters. The Act is most relevant in respect to maintaining water quality and ensuring no polluted water from site works enters streams, creeks and waterways.	Water discharging from the Project site must not pollute the adjacent streams or watercourses.

2.3 Guidelines

Guidelines that have specific requirements relating to Flood Emergency Response include:

- NSW Government’s Floodplain Development Manual, DIPNR 2005.
- Flood Study, Impact Assessment Report for SIMTA Sydney Intermodal Terminal Alliance, Hyder Consulting Pty Ltd, August 2010.

- Anzac Creek Floodplain Risk Management Study and Plan for Liverpool City Council, BMT WBM Pty Ltd, May 2008
- New South Wales State Disaster Plan (DISPLAN 2010), State Emergency Management Committee, 2010.
- Flood Emergency Response Planning Classification of Communities, Floodplain Risk Management Guideline, DECC 2007.
- Australian Emergency Manuals Series, Manual 20: Flood Preparedness, Commonwealth of Australia 2009.
- Australian Emergency Manuals Series, Manual 21: Flood Warning, Commonwealth of Australia 2009.
- Australian Emergency Manuals Series, Manual 22: Flood Response, Commonwealth of Australia 2009.
- NSW State Flood Plan (March 2015 V1.0)
- Anzac-Creek-Study-2009 Liverpool Council

2.4 Permits and Licenses

No additional permits and licenses are expected to be required for the management of flood emergencies.

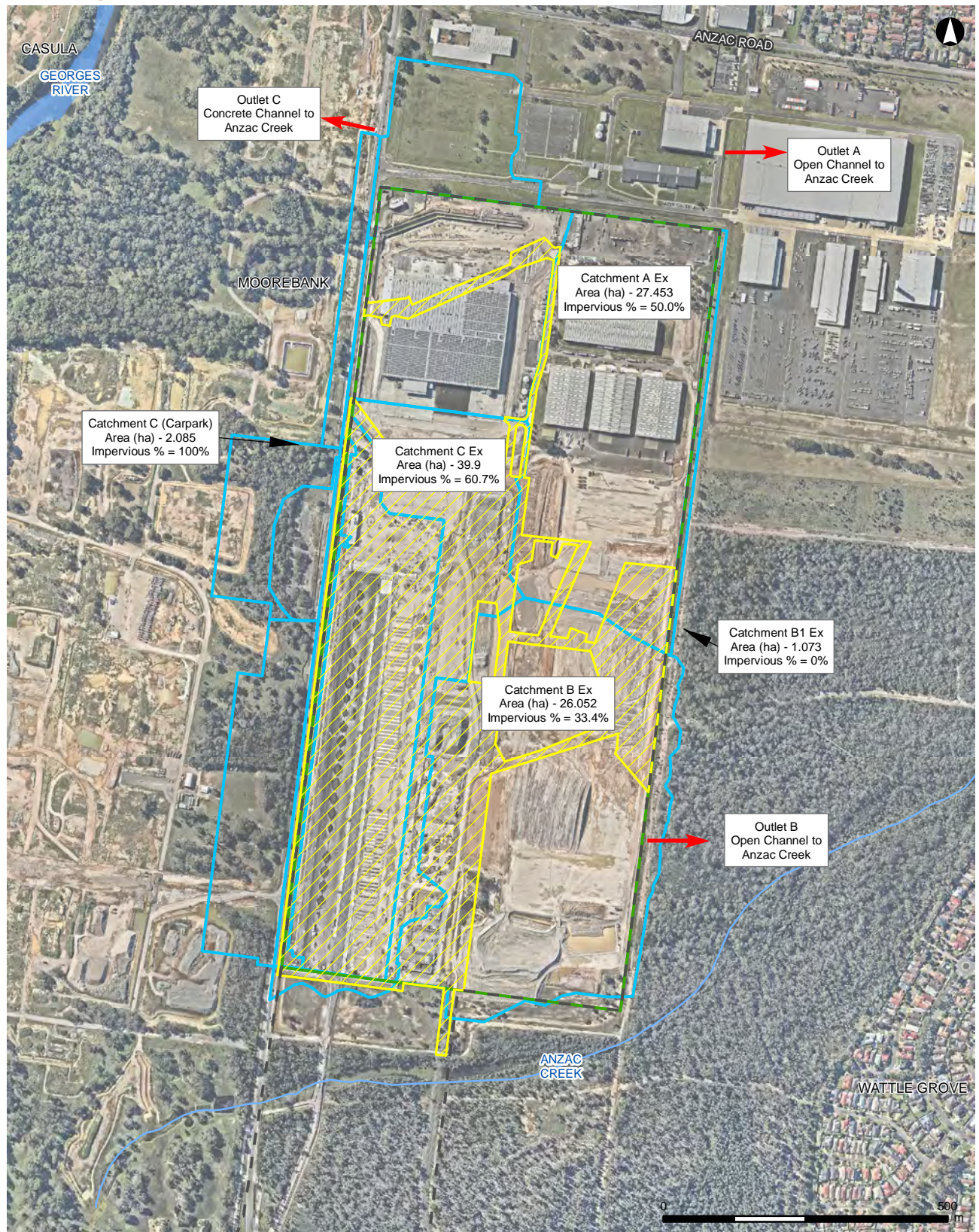
3 EXISTING ENVIRONMENT

As described within Section 2.1 of SIMTA Flood Study Stage 1:

“The topography of the SIMTA site is relatively flat, with reduced levels (RLs) ranging between 14 and 16 metres Australian Height Datum (mAHD). Along the western site boundary, the land rises from about RL14 mAHD at each end to a localised peak of RL22 mAHD about midway along the length. There are three internal catchments within the SIMTA site and a number of small external catchments that discharge into the site, (see Figure 3).

There are three existing stormwater culvert outlets from the site. Two outlets discharge eastward to Anzac Creek and cross under the Greenhills Road formation via pipes and headwalls (Outlets A and B). Stormwater to these two culvert outlets is conveyed through the site via formal open grass lined channels. On the western portion of the site water from both the site and the eastern side of Moorebank Avenue is collected in a formal concrete lined channel which runs within the site parallel to Moorebank Avenue. These channel flows discharge via a culvert under Moorebank Avenue (Outlet C) into a channel which leads to Georges River.”

MPE Stage 1 FERF



LEGEND

- Project site
- MPE site
- Construction footprint
- Existing catchment
- Watercourse
- Existing railway

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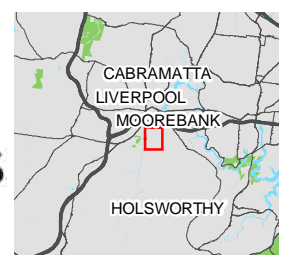


Figure 3: Site catchments

3.1 Modelling Probable Maximum Flood (PMF)

As described within Section 6 of SIMTA Flood Study Stage 1A the southern-most section of the construction area would be impacted during the modelled maximum flood condition. Appendix A shows probable maximum flood extent.

4 ASPECTS AND IMPACTS

The key aspects and impacts for the construction of the Project are outlined below.

Table 7 Aspects and Impacts Related to Flooding

Aspects	Impacts and Opportunities
Altered surface water flow conditions due to earthworks	<ul style="list-style-type: none"> Localised flooding of site including excavations Diversion of water flows into sediment controls Restricted access to work areas Safety issues related to standing water
Extreme rainfall	Overland flows from the topping of Anzac Creek causing flooding of worksite
Direct heavy rainfall on worksites	Soil erosion and sedimentation of waterways including Anzac Creek and Georges River

5 EMERGENCY RESPONSE

The overall approach to flood emergency response is the consideration of evacuation and refuge. As identified by Council Probable Maximum Flood (PMF) mapping, the Project site is not impacted by regional flooding, therefore this FERP is based upon the assessed local area PMF flow regimes.

Section 6 of the SIMTA Flood Study Stage 1A states that the Project site resides within a small urban catchment development. As such, there would be no adequate warning of extreme flooding for the site. With no response time for very short duration storms that would potentially produce significant flood flows in this area, the only realistic safe option in extreme flood events is for persons to remain on site. With respect to evacuation, since hazardous flows would subside with the storm duration, the form of the development would not impede evacuation.

The below sections outline flood emergency response including measures to be taken if adequate response time could be obtained.

5.1 Site Preparation

Construction compounds and stockpile areas are to be located outside the Flood Planning Area shown in Appendix A, to mitigate the impact of potential flooding during construction. The Flood Planning Area is the equivalent to the PMF level as per Liverpool Council (www.liverpool.nsw.gov.au).

The following list of measures will be implemented to reduce the likelihood of damage to site equipment and the environment and to protect the safety of personnel:

- Daily monitoring of weather forecasts using the Bureau of Meteorology (BoM)
- Monitoring of the BoM warning website daily <http://bom.gov.au/nsw/warnings/index.shtml>

5.2 Flood Response

Flood response operations will begin on receipt of Bureau of Meteorology advice, or when other evidence leads to an expectation of flooding, as detailed below. It is noted that Section 6 of the SIMTA Flood Study Stage 1A report specifically identified that site conditions made it impossible to have adequate warning.

Table 8 Flood Emergency Response alert and activation levels

Response Item	Action	Procedures	Responsibility
Monitor	Daily weather (intense heavy rainfall) / precipitation forecast monitoring	Monitor Bureau of Meteorology (BOM) on daily basis.	Construction Manager
Flood Alert	Increase level of alert	Notify all on-site supervisors of flood alert, watch or advice. Monitor Bureau of Meteorology (BOM) website.	Construction Manager
Flood Watch	Increase level of alert, prepare for activation of FERP	Notify all on-site supervisors of flood alert, watch or advice	Construction Manager
Severe Weather Warning for flash flooding	Increase level of alert, prepare for activation of FERP	Notify all on-site supervisors of flood alert, watch or advice.	Construction Manager

Response Item	Action	Procedures	Responsibility
		Monitor Bureau of Meteorology (BOM) website.	
Severe Thunderstorm Warning for flash flooding	Increase level of alert, prepare for activation of FERP	Notify all on-site supervisors of flood alert, watch or advice. Monitor Bureau of Meteorology (BOM) website.	Construction Manager
ACTIVATION Occurrence of localised intense rainfall with associated observation of rising water levels on-site or adjacent waterways.	Mobilise site personnel to designated emergency assembly area or evacuation assembly area. Close site to external visitors	Immediately notify all personnel of the activation of flood emergency response plan.	Construction Manager

Within 24 hours prior to a predicted flood impacting the Project site, the requirements set out in the CERP will be implemented including the following general requirements:

- All staff to be alerted of the impending flood conditions
- Mobile construction equipment, excess material, skips and hazardous substances will be removed from the flood prone area to areas of higher ground
- Power will be turned off until such a time that it is deemed safe to turn it back on
- Site toilets and septic tanks to be pumped out into tankers
- Loose materials to be moved out of flood prone area or secured
- Emergency erosion and sediment controls will be implemented. This may include temporary bunds to divert water around key areas such as stockpiles and reduce risk to surrounding properties which might otherwise be affected
- Evacuation of staff to a refuge location safe from flood prone areas

Monitoring of BoM will continue throughout this process to ensure up to date information is available.

5.3 Evacuation

As the site characteristics preclude adequate warning lead-time, the initial response of all site personnel will be to ensure safe mobilisation to high ground (refuge), beyond the reach of hazardous flows, to the nominated flood emergency assembly area (Figure 2). This assembly area location is provisional only, with the actual location determined on-site as per Contractor Emergency Response Plan. Evacuation from site will be determined from this point based on available information from emergency services. This procedure will be detailed within the Contractor's Construction Emergency response plan (CERP).

As per the NSW State Flood Plan (2015) guideline evacuation procedures:

Any evacuation operation will have the following stages:

- *Decision to evacuate*
- *Mobilisation (mobilisation may begin prior to the decision to evacuate)*
- *Evacuation Warning delivery*
- *Evacuation Order delivery*

- *Withdrawal*

5.4 Post-Storm Response

Following flooding of the site, the initial response will be to determine whether or not it is safe to return to work. A safety walk through will be conducted by senior staff including the safety representative, the Project Director, Construction Manager and a qualified electrician to identify danger areas. The team will assess the following:

- Likelihood of flood damage to access roads
- Determine whether flood waters have receded
- The electrician is to check any inundated or water affected power boxes and electrical equipment. The power is to remain off until assessed by the electrician

Once it is deemed after to return to site, the following will be undertaken:

- Any equipment, materials or debris moved by the flood water should be returned to rightful area or discarded if damaged beyond repair/use
- Check stockpiles for erosion or losses. Restore erosion and sediment control devices as per the relevant Erosion and Sediment Control Plan
- Temporary onsite structures or partly constructed structures should be checked for erosion or other water damage prior to entering them or continuing work.
- Check portable waste water systems on site and schedule maintenance/servicing
- Determine whether any water held in excavations can be pumped to sediment basins/holding tanks for treatment prior to discharge. Undertake water testing/sampling in line with the Soil and Water Management Plan.

5.5 Notification

The contractor will inform the client and relevant statutory and regulatory authorities (such as the EPA) in the event of an incident as necessary.

Environmental emergencies will be handled by the contractor in accordance with the Safety Health and Environmental Management System (SHEMS) (also known as the Moorebank Intermodal Precinct Incident Management Process) and CERP as follows:

- Immediately report all incidents to the Project Manager / Construction Manager who will assess the situation and manage the following steps:
 - Immediately take all reasonable steps to contain further damage or danger to personnel and the environment
 - Inform relevant authorities in accordance with the regulatory requirements provided in Section 19 below.
 - Contact emergency service personnel as necessary (e.g. fire dept., spill clean-up services, etc.). Site emergency response team will also be contacted.
 - Where there is potential for the community to be impacted by an incident, any response or notification required will be undertaken in coordination with the appropriate emergency services
 - Inform the Client's Representative as necessary and in accordance with contractual requirements
 - Complete a detailed report of the emergency incident using ICAM
 - Liaise with the Client's Representative regarding corrective and preventive actions required and the timeframes within which these actions must occur.
 - The designated personnel will undertake the corrective and preventive actions.

Information on the handling of hazardous materials is contained in the SDS register.

Project Emergency contact numbers are included below.

Table 9 Emergency Contact details

Contact name	Telephone number	Address
OEH Pollution Hotline	131 555 or (02) 9995 5555 (if calling from outside NSW).	N/A
Ministry of Health	(02) 9391 9000	N/A
WorkCover	13 10 50	N/A
Fire and Rescue NSW	000	N/A
Liverpool City Council	Customer Contact Centre for NSW residents: 1300 36 2170 Calling from interstate: (02) 9821 9222 National Relay Service (NRS) for hearing and speech impaired customers: 133 677	Ground Floor, 33 Moore St, Liverpool NSW 2170
Principal's Representative	Tactical Group [REDACTED] [REDACTED]	Level 15, 124 Walker Street, North Sydney, NSW, 2060
Contractor's Construction Manager	Contacts details to be confirmed	Nominated 24-hour contact
Contractor's Environmental Manager	[REDACTED] [REDACTED]	Back-up 24-hour contact
Contractor's Project Manager	Fulton Hogan [REDACTED] [REDACTED]	Nominated 24-hour contact
Contractor's Health & Safety Manager	Fulton Hogan [REDACTED] [REDACTED]	Back-up 24-hour contact
Contractor's Community Liaison Manager	Contact details to be confirmed	Back-up 24-hour contact
State Emergency Service	www.ses.nsw.gov.au	
NSW Police	000	
Emergency Services General	000	

6 COMPLIANCE MANAGEMENT

6.1 Roles and Responsibilities

Table 10 Roles and Responsibilities in Relation to Flood Emergency Response

Role	Responsibility
Contractor's Project Manager	Manage the delivery of the Project including overseeing implementation of the FERP Oversee the implementation of all flood management initiatives
Contractor's Construction Manager	Oversee the implementation of all flood management initiatives Monitor weather forecasts and conditions for potential flooding and notify relevant site personnel
Contractor's Environmental Manager	Monitor compliance and conformance with this Plan Manage review and continual improvement of this Plan Inspecting and reporting on compliance Monitor weather forecasts and conditions for potential flooding
Supervisors	Assist the Construction Manager in implementing this Plan Monitor weather forecasts and conditions for potential flooding
Contractor's Health and Safety Manager	Assist the Construction Manager in implementing this Plan Responsible for day to day implementation of health and safety procedures Monitor weather forecasts and conditions for potential flooding Assist the Contractor's Project Manager in the implementation of flood management initiatives
Contractor's Community Liaison Manager	Communicate and liaise with neighbours if any risk of impact from project flooding

6.2 Monitoring

Monitoring of controls will be undertaken as outlined within the Soil and Water Management Plan; daily by the site supervisor and weekly by the environmental manager, as well as prior to predicted heavy rainfall to determine adequacy of environmental controls.

6.3 Non-compliances, Non-conformance and Actions

It is the responsibility of all site personnel to report non-compliances and non-conformances to the Site Supervisor and/or the Contractor's EM.

Non-compliances, non-conformances and corrective and preventative actions will be managed in accordance with Section 9.2.1 of the CEMP.

6.4 Review and Improvement

This plan will be reviewed on an annual basis or after a flood emergency has occurred. Updates to this plan will be briefed to all site personnel through toolbox talk or prestart briefings.

Regular assessment of current earthworks and relative ground levels and impacts to surface flows, etc., will be undertaken. A revised risk assessment will then be completed, and the Emergency Response Plan updated accordingly to reflect any changed conditions.

APPENDIX A

ANZAC CREEK CULVERT – PROBABLE MAXIMUM FLOOD DEPTH

MPE Stage 1 FERP

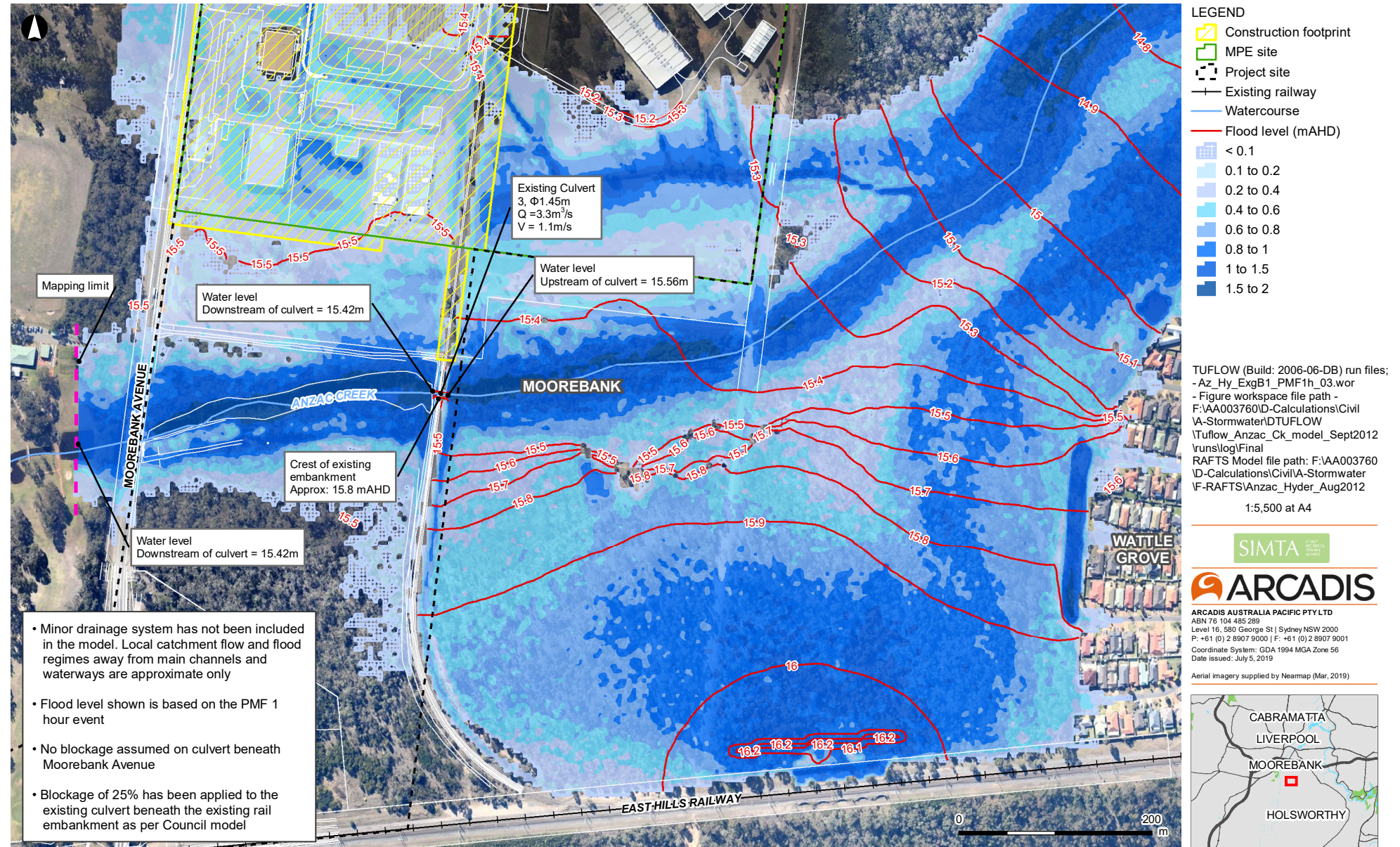


Figure 2: Anzac Creek (Culvert) – Probable maximum flood depth and level contours - existing conditions