

TABLE OF CONTENTS

DOCUMENT CONTROL	1
TABLE OF CONTENTS	9
LIST OF ABBREVIATIONS	14
LIST OF FIGURES	15
1.0 INTRODUCTION	19
1.1 BACKGROUND	19
1.2 OBJECTIVES OF THE PROPOSAL	19
1.3 COMPLIANCE WITH THE DIRECTORS-GENERAL'S REQUIREMENTS (Ref: MP 10_0185)	20
2.0 DESCRIPTION OF THE PROPOSED DEVELOPMENT	21
2.1 DESCRIPTION OF DEVELOPMENT	21
2.1.1 <i>Summary Description</i>	21
2.1.2 <i>Detailed Description of Proposal</i>	23
2.1.3 <i>Detailed Description of Components</i>	23
2.2 CONSIDERATION OF ALTERNATIVES	34
3.0 SITE ANALYSIS & OVERVIEW OF THE EXISTING ENVIRONMENT	37
3.1 INTRODUCTION	37
3.2 PROPERTY DESCRIPTION AND OWNER DETAILS	37
3.3 THE SITE AND LOCALITY	37
3.4 CURRENT USES ON THE SITE	38
3.5 ADJOINING LANDS	38
3.6 SITE IMPROVEMENTS & SITE PHOTOS	42
3.7 TOPOGRAPHY, VEGETATION & FAUNA	44
3.8 FLOODING	46
3.9 BUSHFIRE	46
3.10 TRAFFIC & ACCESS	47
3.11 GEOTECHNICAL	49
3.12 ACID SULPHATE SOILS & CONTAMINATION	49
3.13 ABORIGINAL ARCHAEOLOGY AND HERITAGE	49
3.14 DRAINAGE	53
3.15 UTILITIES	53
3.16 EASEMENTS & ROAD WIDENING	53
3.17 OBSERVATIONS FROM ANALYSIS OF SITE AND CONTEXT	56
4.0 PLANNING & RELATED STATUTORY PROVISIONS	57
4.1 INTRODUCTION	57
4.2 COMMONWEALTH LEGISLATION	57
4.2.1 <i>Environment Protection and Biodiversity Conservation Act 1999</i>	57
4.3 STATE LEGISLATION AND PLANS	57
4.3.1 <i>Environmental Planning and Assessment Act 1979 & Regulation 2000</i>	57
4.3.2 <i>Threatened Species Conservation (TSC) Act 1995</i>	60
4.3.3 <i>NSW Heritage Act 1977</i>	60
4.3.4 <i>Hunter Water Regulation 2010</i>	60

4.3.5	<i>Protection of the Environment Operations Act 1997</i>	60
4.3.6	<i>Contaminated Land Management Act 1997</i>	61
4.3.7	<i>National Parks and Wildlife Act 1974</i>	61
4.3.8	<i>Rural Fires Act 1997</i>	61
4.3.9	<i>Water Management Act 2000</i>	61
4.3.10	<i>NSW 2021 Plan</i>	62
4.4	STATE ENVIRONMENTAL PLANNING POLICIES.....	64
4.4.1	<i>SEPP (Major Development) 2005</i>	64
4.4.2	<i>SEPP (Infrastructure) 2007</i>	67
4.4.3	<i>SEPP 33 Hazardous and Offensive Development</i>	67
4.4.4	<i>SEPP 55 Remediation of Land</i>	67
4.4.5	<i>SEPP 71 Coastal Protection</i>	67
4.5	REGIONAL ENVIRONMENTAL PLANS AND STRATEGIES	70
4.5.1	<i>Lower Hunter Regional Strategy</i>	70
4.6	LOCAL ENVIRONMENTAL PLANS	71
4.6.1	<i>Port Stephens Local Environmental Plan 2000</i>	71
5.0	IDENTIFICATION OF ISSUES & STAKEHOLDER CONSULTATION	72
5.1	INTRODUCTION.....	72
5.2	OVERVIEW OF THE METHODOLOGY.....	72
5.3	STAKEHOLDER CONSULTATION	73
5.3.1	<i>Commonwealth Department of Sustainability, Environment, Water, Population and Communities (former Department of Environment, Water, Heritage and the Arts)</i>	73
5.3.2	<i>NSW Roads & Maritime Services (RMS)</i>	73
5.3.3	<i>NSW Environment Protection Authority (EPA)</i>	74
5.3.4	<i>NSW Heritage Office</i>	76
5.3.5	<i>Hunter Water Corporation</i>	77
5.3.6	<i>Ausgrid</i>	78
5.3.7	<i>Jemena (Gas Supply)</i>	79
5.3.8	<i>Port Stephens Council</i>	79
5.3.9	<i>Newcastle City Council</i>	80
5.3.10	<i>NSW Department of Primary Industries</i>	80
5.3.11	<i>Kooragang Wetland Rehabilitation Project (Hunter-Central Rivers Catchment Management Authority)</i>	81
5.3.12	<i>Friends of Tomago House and National Trust</i>	83
5.3.13	<i>Tomago Aluminium</i>	84
5.3.14	<i>Hunter Bird Observers Club</i>	85
5.3.15	<i>Community Group Members from Adjoining WesTrac Project Approval</i>	85
5.3.16	<i>Adjoining / Nearby Land Owners</i>	85
5.3.17	<i>Public Newspaper Notification</i>	87
5.4	THE PROJECT TEAM.....	87
6.0	ENVIRONMENTAL ASSESSMENT	89
6.1	INTRODUCTION.....	89
6.2	DISCUSSION OF RELEVANT LEGISLATION	89
6.3	ECOLOGY.....	90
6.3.1	<i>Flora & Fauna</i>	90
6.3.2	<i>Aquatic Ecology</i>	97

6.4	FLOODING	100
6.4.1	<i>Regional Flooding</i>	100
6.4.2	<i>Local Flooding</i>	104
6.5	STORMWATER, WATER QUALITY & WATER BALANCE	105
6.6	EROSION & SEDIMENT CONTROL	109
6.7	EUROPEAN HERITAGE	114
6.8	HISTORICAL ARCHAEOLOGICAL ASSESSMENT	121
6.9	ABORIGINAL ARCHAEOLOGY	123
6.10	TRAFFIC, ACCESS & PARKING	138
6.11	INFRASTRUCTURE	150
6.12	LANDSCAPING	156
6.13	GEOTECHNICAL, ACID SULPHATE SOILS & GROUNDWATER MODELLING	163
6.13.1	<i>Preliminary Fill Methods</i>	163
6.13.2	<i>Acid Sulphate Soils</i>	166
6.13.3	<i>Groundwater Modelling</i>	167
6.14	CONTAMINATION	170
6.15	NOISE	179
6.16	AIR QUALITY & GREENHOUSE GAS	197
6.17	WASTE MANAGEMENT	199
6.18	HAZARDS AND RISK (SEPP 33)	199
6.19	LIGHTING	199
6.20	SOCIAL & ECONOMIC	200
6.21	CUMULATIVE IMPACTS	202
6.22	WETLANDS INTERFACE STRATEGY	203
7.0	DRAFT STATEMENT OF COMMITMENTS	223
7.1	PLANS, DOCUMENTS AND APPROVALS	223
7.2	SUMMARY OF MANAGEMENT PLANS	223
7.3	ECOLOGY	224
7.3.1	<i>Flora & Fauna</i>	224
7.3.2	<i>Aquatic Ecology</i>	226
7.4	TRAFFIC & ACCESS	226
7.5	WATER QUALITY – GROUNDWATER AND STORMWATER	227
7.6	SOIL EROSION & SEDIMENTATION	231
7.7	ACID SULPHATE SOILS	232
7.8	EUROPEAN HERITAGE	232
7.9	HISTORICAL ARCHAEOLOGY	234
7.10	ABORIGINAL ARCHAEOLOGY	235
7.11	UTILITIES	235
7.12	ACOUSTICS	236
7.13	AIR QUALITY	238
7.14	GEOTECHNICAL	239
7.15	CONTAMINATION	240
7.16	WASTE MANAGEMENT	240
7.17	HAZARDOUS MATERIAL	241
7.18	OUTDOOR LIGHTING	241
7.19	LANDSCAPING	241
7.20	VECTOR MANAGEMENT PLAN	241

7.21 WETLANDS INTERFACE.....	241
8.0 CONCLUSION	242
APPENDIX A	
Director – General’s Major Project Confirmation	
APPENDIX B	
Copy of Director – General’s Requirements and Compliance Table	
APPENDIX C.....	
Development Plans.....	
APPENDIX D.....	
Flora and Fauna Report – Ecobiological.....	
APPENDIX E	
Aquatic Assessment – Coast Ecology	
APPENDIX F	
Flood Reports – BMT WBM Pty Ltd.....	
APPENDIX G	
Stormwater Assessment – BMT WBM Pty Ltd.....	
APPENDIX H	
Concept Civil Engineering & Infrastructure Servicing Report – ADW Johnson Pty Ltd.....	
APPENDIX I	
Heritage Impact Statement & Addendum Letter Dated 23 April 2012 – EJE Architecture	
APPENDIX J.....	
Historical Archaeological Assessment – Austral Archaeology	
APPENDIX K	
Archaeological Assessment – McCardle Cultural Heritage	
APPENDIX L.....	
Traffic Impact Assessment – TPK & Associates	
APPENDIX M	
Landscape Report – Terras Landscape Architects	
APPENDIX N.....	
Development Controls and Guidelines for Future Development of the Site	
APPENDIX O	
Contamination Reports – Douglas Partners	
APPENDIX P	
Preliminary Geotechnical Report – Douglas Partners.....	

APPENDIX Q
Acoustic Report – Spectrum Acoustics

APPENDIX R
Public & Authority Consultation

APPENDIX S.....
Certificate of Title and Deposited Plan

APPENDIX T.....
Design Alternatives – Suters Architects

APPENDIX U
Groundwater Modelling Report – ENVIRON AUSTRALIA PTY LTD

APPENDIX V
Acid Sulphate Soils Management Plan – Douglas Partners PTY LTD

APPENDIX W
Background Water Quality Data