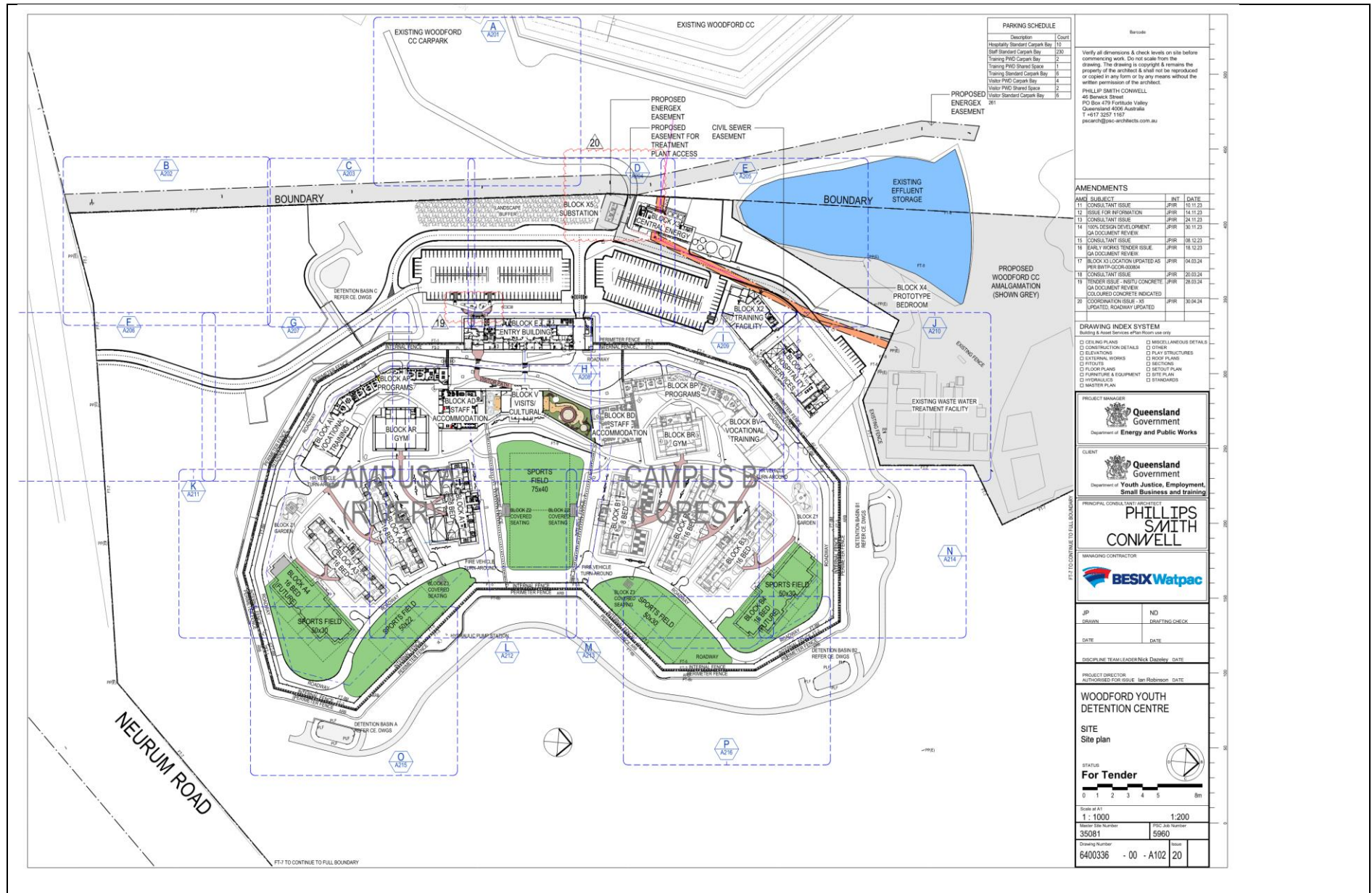


Quality Assurance Plan Template

Project Name: WYDC (Woodford Youth Detention Centre)	
Project address: Neurum Rd Woodford, QLD, 4514	Site Plan attached: Yes
Prepared by: Paul Murray	
Date: 06/06/2024	
Description of project: The new WYDC is a detention facility designed to accommodate 80 young persons. The centre is divided into two separated 40 bed precincts. These precincts each contain their own programs, allied health, recreational and staff accommodation facilities to support day to day operations of each precinct. The precincts share a common visits facility, multi-faith, cultural space, and sports field located centrally on the site for efficiency of development extent. A two-storey Entrance building is located on the secure perimeter and contains the main pedestrian access, vehicle access, processing, medical and central staff accommodation areas. Construction incorporates, site clearing, bulk and detailed earthworks as well as the provision of a series of integrated services reticulations. Aside from the secure perimeter zones (precast and bespoke secure fenced barriers) the project provisions new bespoke sewage pumping stations, potable & fire water infrastructure as well as new HV and LV infrastructure independent of the existing Correctional Facility adjacent to the WYDC complex. SITE PLAN BELOW:	



Site Classification/s:

Site Classification is defined in GEOTECHNICAL REPORT PG-10024 2024-02-23, GR VER 2_GEOTECHNICAL issued by PACIFIC GEOTECH PTY LTD (Consulting Geotechnical Engineers) as being "Class 'P' in accordance with AS 2870-2011 'Residential Slabs and Footings' due to the depth of fill." (Section 9.0 SITE CLASSIFICATION of that report)

Documentation of design and construction (suitability or evidence of suitability)**Site preparation**

Site preparation	NCC / Australian Standards requirements	Compliant Performance solution
Earthworks	NCC Part 3.2 Earthworks All earthworks operations should be carried out in general accordance with AS 3798-2007 "Guidelines on Earthworks for Commercial and Residential Developments". AS 1726 Geotechnical Site Investigations AS 1289 Methods of Testing Soils for Engineering Purposes Subsurface conditions in accordance with AS 1726-2017 Earthquake site factor in accordance with AS 1170.4-2007 No information regarding the compaction status of the encountered fill material is available. On this basis, the existing fill is considered to be uncontrolled in accordance	

	with AS 3798-2007 The deep foundation system should be designed in accordance with the recommendations of AS 2159-2009 'Piling - Design and Installation'. Retaining walls should be specifically engineer designed in accordance with AS 4678-2002 (Ref 9). Additional guidelines on wall drainage are provided in Appendix G of AS 4678-2002. Cone Penetrometer Testing (CPT): in general accordance with AS 1289 6.5.1, 1999. ROCK UNIAXIAL COMPRESSIVE STRENGTH REPORT: Test Method: AS 4133.4.2.2 & 1.1.1	
Site preparation		
Site preparation	NCC / Australian Standards requirements	Compliant Performance solution
Earth retaining structures	NCC Part 3.2 Earthworks AS 4678-2002 Earth-retaining structures AS 2159-2009 Piling - Design and Installation AS 3600:2018 Concrete structures AS 1379-1997 Specification and supply of concrete AS 1012.2-1994 Methods of testing concrete	

Drainage	AS/NZS 3500.3 Plumbing and Drainage – Stormwater Drainage AS/NZS 1254 PVC pipes and fittings for storm and surface water applications AS 1289 Methods of Testing Soils for Engineering Purposes AS/NZS 3725 Loads on buried concrete pipes AS/NZS 3996 Access covers and grates AS/NZS 4058 Precast concrete pipes. AS 4139 Fibre reinforced concrete pipes and fittings.	
Site preparation	NCC / Australian Standards requirements	Compliant Performance solution
Termite risk management	NCC Part 3.4 Termite Risk Management AS 3660.2-2000 Termite Management	
Materials	NCC Part 3.1 NCC BCA Volume 1	
Footings and slabs		
Site classification		

Site Classification is defined in GEOTECHNICAL REPORT PG-10024 2024-02-23, GR VER 2_GEOTECHNICAL issued by PACIFIC GEOTECH PTY LTD (Consulting Geotechnical Engineers) as being "Class 'P' in accordance with AS 2870-2011 'Residential Slabs and Footings' due to the depth of fill." (Section 9.0 SITE CLASSIFICATION of that report)		
Footings and slabs	NCC / Australian Standards requirements	Compliant Performance solution
Footings and slabs	NCC Part 3.2 Footings and slabs AS 2870-2011 Residential slabs and footings AS 1379-1997 Specification and supply of concrete AS 1012.2-1994 Methods of testing concrete	
Footings and slabs	NCC / Australian Standards requirements	Compliant Performance solution
Moisture Barrier	AS 4654.1 AS 2870-2011 Residential slabs and footings NCC Part 3.2.2.6 Vapour Barriers	
Materials	AS 4654 Part 1 Materials AS 4654.1-2012	

Concrete and reinforcement		
Concrete and reinforcement	NCC / Australian Standards requirements	Compliant Performance solution
Concrete and reinforcement	NCC Part 3.2.3 AS 1726 Geotechnical Site Investigations AS 2159-2009 Piling - Design and Installation AS 4678-2002 Earth-retaining structures AS 3600:2018 Concrete structures AS 1379-1997 Specification and supply of concrete AS 1012.2-1994 Methods of testing concrete	
Materials	AS 3600:2018 Concrete structures AS/NZS 4671:2001 Steel reinforcing materials AS/NZS 2425:2015 Bar Chairs in reinforced concrete	
Masonry		
Masonry	NCC / Australian Standards requirements	Compliant Performance solution

Masonry	NCC Part 5.6 Masonry components and accessories AS 3700 2018 Masonry Structures AS/NZS 4455.1:2008 - Masonry units	
Moisture Barrier	AS 3700 2018 Masonry Structures NCC Part 5.7 Weatherproofing of masonry	
Materials	AS 3700 2018 Masonry Structures AS/NZS 4455.1:2008 - Masonry units	5960 TP-G03[B] - TRADE PACKAGE - GENERAL STANDARDS
Framing		
Framing	NCC / Australian Standards requirements	Compliant Performance solution

Framing	NCC Part 3.4.0 Framing AS/NZS 1170 - Structural design actions. AS/NZS 1170.2 - Wind actions. AS 3623 - Domestic metal framing. AS/NZS 4600 - Cold-formed steel structures.	
Materials	NCC Part 3.4.0 Framing AS 3623 - Domestic metal framing. AS/NZS 4600 - Cold-formed steel structures.	6400336-SPC-S06 [A] - SPECIFICATION FOR STRUCTURAL LIGHT STEELWORK FRAMING
Roof and Wall Cladding		
Roof and wall cladding	NCC / Australian Standards requirements	Compliant Performance solution

Roof and wall cladding	NCC Part 7 - Roof and Wall Cladding AS 1562.1:2018 Design and Installation of Sheet Roof and Wall Cladding	
Materials	NCC Part 7 - Roof and Wall Cladding AS 1562.1:2018 Design and Installation of Sheet Roof and Wall Cladding	6400336-TP-360[D] - ROOFING & METAL CLADDING
Glazing		
Glazing	NCC / Australian Standards requirements	Compliant Performance solution

Glazing	NCC Part 8 – Glazing AS 1288:2021 - Glass in Buildings AS/NZS 2208-1996 Safety glazing materials in buildings	
Materials	NCC Part 8 – Glazing AS 1288:2021 - Glass in Buildings AS/NZS 2208-1996 Safety glazing materials in buildings	6400336-TP-G04[C] - GENERAL GLAZING
Fire Safety		
Fire Safety	NCC / Australian Standards requirements	Compliant Performance solution

Fire Safety	MCC Part 9 – Fire Safety AS 2118.1:2017 - Automatic fire sprinkler systems AS/NZS 1530.3:1989 - Methods for fire tests on building materials AS ISO 7240.24:2018 Fire detection and alarm systems AS 1670.1:2018 - Fire detection, warning, control and intercom systems AS 2419.1-2005 - Fire hydrant installations AS 2441-2005 - Installation of fire hose reels AS/NZS 1850:2009 - Portable fire extinguishers AS 4214:2018 - Gaseous fire-extinguishing systems AS/NZS 3504:2006 - Fire blankets AS 1851-2012 - Routine Service of Fire Protection Systems and Equipment AS 1905.1:2015 - Fire-resistant doorsets AS 3772:2020 Pre-engineered fire protection systems for cooking equipment AS 1170.4-2007 - Earthquake Structural Design AS 5637.1:2015 - Determination of fire hazard properties Wall and ceiling linings	Below is an example of one of many performance solutions associated with the project – these can be referenced in the current FER Ref: WSP_PS209343-FSE-FER-CN-01_WYDC as well as the architectural design development report Ref: 5960 WYDC DESIGN DEVELOPMENT REPORT - Table 18.2
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6 PERFORMANCE SOLUTIONS

6.1 Non-Compliant Open Space

6.1.1 Introduction

The following assessment addresses departure **Item '1'**.

Dis Clause	D1.2, D1.4	Performance Requirements	DP4	Compliance and Assessment Methods	A0.3(a)(i) A0.5(b)(ii)
Description	Non-compliant open space provision as a direct connection to a road will not be provided, with controlled access within the Centre.				
Analysis Methodology	Qualitative analysis method based on the safe evacuation of building occupants.				
Acceptance Criteria	Acceptance will be demonstrated where the non-compliant open space provision will not unduly impact on the safe evacuation of building occupants.				

6.1.2 Relevant Fire Engineering Provisions

As part of the Performance Solution, the following is recognised:

- The NCC requires that exits discharge evacuating occupants to an 'open space' from which occupants finally leave the building to reach a road or open area. Given the security requirements, the exits have controlled access.
- Travel Distances comply with the NCC Dis requirements from the new accommodation buildings, except in the roof space plantroom, and occupants have alternative means of escape, as evident from the drawings provided.
- Occupants if necessary, will be directed to discharge onto open grounds to sky within the confines of the secure fences where they will be able to move away from the building on fire and be assembled at a place of safety.
- Escape is also possible into the Fernery enclosed with chain wire fences and naturally ventilated, which can act as a refuge and will allow occupants to be away from immediate danger of an internal building fire for the period it takes for the occupants to be extracted from the Fernery by emergency responder staff prior to Fire Brigade arrival.

6.1.3 Assessment

Clause D1.4 stipulates that in a Class 3 building the travel distance from an SOU door to an exit must not exceed 6 m to a point of choice, or 20 m to a single exit serving the story at the level of egress to a road or open space.

In the context of the Performance Solution for this Centre, the intent of Performance Requirement DP4 is to allow occupants to evacuate the building to a place of safety.

Exit is a defined term in the NCC, with meaning as follows:

- Any, or any combination of the following, if they provide egress to a road or open space:
 - an internal or external stairway
 - a ramp
 - a fire-isolated passageway
 - a doorway opening to a road or open space.
- A horizontal exit or a fire-isolated passageway leading to a horizontal exit.

Open space is defined by the NCC as:

PS202533 FER Issue CN-01
Fire Engineering Report
Woodford Youth Detention Centre
QBuild Queensland Government Department of Energy and Public Works

WSP
Page A-35

Access/Stairs/Lifts/Ramps

Access/Stairs/Lifts/Ramps	NCC / Australian Standards requirements	Compliant Performance solution
	NCC Part 11 - Safe movement and access NCC Part E3 - Lift installations NCC Section D - Access and egress • Part D1 Access and egress • Part D2 Provision for escape • Part D3 Construction of exits • Part D4 Access for people with a disability AS 1428.1-2009 - Design for access and mobility AS 1657:2018 - Fixed Platforms, Walkways, Stairways & Ladders AS 1735.1:2016 Lifts, Escalators & Moving Walks Disability Discrimination Act 1992	Given the secure nature of the development and the classification of the accommodation blocks as detention facilities, there are performance based departures from the standard evacuation procedures as defined in the fire engineering report FER Ref: WSP_PS209343-FSE-FER-CN-01_WYDC as well as the architectural design development report Ref: 5960 WYDC DESIGN DEVELOPMENT REPORT - Table 18.2
Health and Safety		

Work Health and Safety Act 2011

A515-WYDC Health and Safety Management Plan – Rev 4

5960 Woodford - Safety In Design Report [A]

A515-WYDC Project Environmental Management Plan – Rev 3

ISO 45001 Occupational Health and Safety Management System

Consultation

The Preface to the BESIX Watpac WYDC Project Safety Management Plan provides a consultative synopsis of the adopted work health and safety approach as follows:

Preface

Within this BESIX Watpac Project Safety Management Plan (PSMP) there could be numerous references to OHS (Occupational Health and Safety) and WHS (Work Health and Safety). It is the intent of BESIX Watpac throughout the document to use these terms interchangeably when describing our commitment to the health and safety of all workers, visitors to our sites and those impacted by our construction activities.

The PSMP as part of the BESIX Watpac National Safety Management System (NSMS) has been developed to not only comply with the requirements of ISO 45001, and Federal/State requirements (as required) but to provide a framework such that our activities align to the Work Health and Safety; and Occupational Health and Safety Legislation requirements in force in the States/Territories across Australia.

BESIX Watpac has been appointed Principal Contractor on behalf of Queensland Government for the Woodford Youth Detention Centre (WYDC).

Brett Rosenthal has been appointed as the Project Director by BESIX Watpac, and as such is the Senior Manager allocated who has overall WHS responsibility for the WYDC project.

This PSMP has been developed in consultation with the project team and authorised by Fran Diaz. The plan has also been reviewed and signed off for implementation by the General Manager – Wade Cummins, Operations Manager – Brad Ross and WHS Manager – Luke Shipperley.

This plan provides specific information regarding the management of project-related works and attempts to ensure that a uniform approach to health and safety is adopted.

A copy of the plan shall be readily available. Workers, subcontractors, consultants and clients associated with the project will be made aware of the location of the plan at induction will be available for inspection, upon request by any interested stakeholder.

This plan may be amended where deficiencies are identified, changes occur in BESIX Watpac's NSMS or project works change such that the information contained in the plan is no longer accurate or valid. Those amendments will be authorised by the Project Manager.

All parties affected by any alterations shall be provided with an amended copy of the plan.

Policies

From Appendix C of the BESIX Watpac WYDC Project Safety Management Plan:

HEALTH, SAFETY, ENVIRONMENT AND QUALITY (HSEQ) POLICY

BESIX Watpac considers excellence in health, safety and environmental performance, our quality of service and client satisfaction, essential components to the long-term sustainability of its business.

Our goal is to achieve a high level of HSEQ performance for the benefit of all stakeholders, including employees, subcontractors, suppliers, clients and the local communities in which we work.

Our Values

BESIX Watpac promotes an organisational culture in which the principles of HSEQ are highly valued and upheld through the BESIX Watpac core values:

- Excellence
- Passion
- Respect
- Co-creation
- Unity

Our Commitments

BESIX Watpac is committed to:

- Providing a high standard of service.
- Conducting our activities in a safe and sustainable manner which includes protection of the environment.
- Mitigating foreseeable hazards through proactive risk management practices.
- Continual improvement of our health, safety, environmental and quality management systems.
- Consistently meeting stakeholder expectations.
- Compliance to applicable legal and other requirements and voluntary commitments.
- Providing effective HSEQ information, instruction and training to our employees and sub-contractors.

Our Actions

BESIX Watpac will achieve this by:

- Providing visible support and leadership, with clear accountabilities and expectations that encourages employee, subcontractor and supplier participation in achieving our HSEQ goal.
- Establishing and maintaining documented and communicated HSEQ management systems certified to AS/NZS 45001, ISO 14001 and ISO 9001.
- Providing and maintaining a proactive HSEQ risk management framework across all aspects of our business.
- Ensuring effective consultation and communication strategies and processes are in place which allows all stakeholders to have input and provide feedback on HSEQ matters.
- Setting clear, achievable and measurable objectives and targets that promote continual improvement of our HSEQ management systems and performance.

BESIX Watpac empowers, promotes and supports all personnel in making the necessary decisions to ensure the intent of this policy is upheld.



MARK BAKER
Chief Executive Officer

Date: 15/03/2023



Procedures

BESIX Watpac WHS procedures are available on the BW Intranet platform “Watkins” accessible to all BW employees:

Key Areas

 S01 Management Commitment & Accountability	 S02 Legal & Record Management	 S03 Consultation & Communication	 S04 Training & Competency
 S05 Design & Risk Management	 S06 Purchasing	 S07 Contractor Management	 S08 Operations Management
 S09 Health & Wellbeing	 S10 Incident & Emergency Management	 S11 Continuous Improvement	 Life Saving Rules
 A Safe Day	 State Specific (Safety Documents)		

Quality objectives aligned to workplace objectives and procedures																														
Quality items	Measures for each quality item	Units to measure each item	Existing project tools that will provide quality data	Timing of measurement																										
Section 3 of the BESIX Watpac QMP ref: A515-WYDC PM-PLA-002 Project Quality Plan provides all relevant detail for this section																														
3 Project Quality Objectives <table> <tr> <th>Policy</th><th>Objective</th><th>Measurement Basis</th><th>Target</th><th>Responsibility</th></tr> <tr> <td rowspan="2">Customer Satisfaction</td><td>Deliver Project on time</td><td>As per the updated and approved Contract Program.</td><td>Project is completed on or before forecast date for Practical Completion.</td><td>Project Manager</td></tr> <tr> <td>Deliver Project on budget</td><td>Final figures are as per Contract Sum and approved variations.</td><td>Stated cost achieves completion and post-completion obligations to the satisfaction of the Principal.</td><td>Project Manager</td></tr> <tr> <td rowspan="2">Compliance</td><td rowspan="2">Minimise deviation from company procedures</td><td rowspan="2">Internal audits conducted by Management.</td><td>No more than 10 Corrective Action items issued to the project resulting from internal audits.</td><td>Project Manager</td></tr> <tr> <td>Zero Non-Conformances issued to a project as a result of not closing out CARs from an internal audit.</td><td>Project Manager</td></tr> <tr> <td>Continual Improvement</td><td>Early identification of correct course towards a high quality outcome</td><td>Internal audits conducted by Management.</td><td>All projects are internally audited within 6 months of being established on site.</td><td>Project Manager</td></tr> </table>					Policy	Objective	Measurement Basis	Target	Responsibility	Customer Satisfaction	Deliver Project on time	As per the updated and approved Contract Program.	Project is completed on or before forecast date for Practical Completion.	Project Manager	Deliver Project on budget	Final figures are as per Contract Sum and approved variations.	Stated cost achieves completion and post-completion obligations to the satisfaction of the Principal.	Project Manager	Compliance	Minimise deviation from company procedures	Internal audits conducted by Management.	No more than 10 Corrective Action items issued to the project resulting from internal audits.	Project Manager	Zero Non-Conformances issued to a project as a result of not closing out CARs from an internal audit.	Project Manager	Continual Improvement	Early identification of correct course towards a high quality outcome	Internal audits conducted by Management.	All projects are internally audited within 6 months of being established on site.	Project Manager
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Communication procedures and methods to be applied
Communication to Client: ORACLE Aconex is the contract document and communication platform
Communication to management: Communication with management is through Microsoft Share Point & Outlook as well as ORACLE Aconex platforms.
Communication to work teams: Communication with work teams is through Microsoft Share Point & Outlook as well as ORACLE Aconex platforms.
Communication Plan established: The BESIX Watpac Project Communications Plan is being employed as a standard for the WYDC Project.

Issues to be addressed and consultation				
Issue	Who to consult	Improvements for consideration	Feedback following consideration	Supporting Resources
Ongoing and managed through the above-listed platforms and protocols				

Describe how each of the following aspects of quality management will be addressed on this project:

Quality Control

Control item	Measure	Project Stage
The BESIX Watpac A515-WYDC PM-PLA-002 Project Quality Plan (the QMP) Section 5 addresses quality control related items		
5 BESIX Watpac Quality Controls 13 5.1 Quality Control Master Schedule (QCMS).....13 5.2 Checklists/ITPs – Standard Subcontractor Trade Checklists.....14 5.3 Lot Register14 5.4 Calibration and Control of Monitoring and Measuring Devices14 5.5 Control of Non-conforming Product.....14 5.6 Site Supervision Inspections15 5.7 Progress Photos16 5.8 Consultant Inspections.....16 5.9 Receipt of Supplied Product.....17 5.10 Material Traceability17		

Quality Assurance processes used
Training The BESIX Watpac A515-WYDC PM-PLA-002 Project Quality Plan (the QMP) Section 6.15 Subcontractor Training and Competence addresses TRAINING related items
Monitoring and maintenance of information sources The BESIX Watpac A515-WYDC PM-PLA-002 Project Quality Plan (the QMP) Section 7 Digital Communication and Records addresses information management related items
Resource availability and access within timeframe Project resourcing for management across design, commercial and site related activities fall within the purview of BESIX Watpac Operations Manager and the Project Director and which is staged to suit the various phases of the project implementation. The professional design and engineering team was established by the client in the tendering phase whereafter this team was novated to BESIX Watpac in the interests of knowledge-transfer continuity. They remain under contract through the design, construction and commissioning & handover phases of the project. Installation-related resourcing (trades and suppliers) is managed through the individual trade package tendering and letting process and suitable resourcing evaluated during the tender adjudication phase in concert with the client and their appointed agents to meet the appropriate program and budget constraints. The BESIX Watpac team has multi-faceted contributions from all disciplines from design to services management to contract administration and ultimately project and operations management.
Records management The BESIX Watpac A515-WYDC PM-PLA-002 Project Quality Plan (the QMP) Section 7 Digital Communication and Records addresses information management related items

Quality Improvement / amendments to be instigated

BESIX WATPAC'S QUALITY RELATED ETHOS IS SUMMARISED AS FOLLOWS:

BESIX WATPAC IS FULLY COMMITTED TO THE ESTABLISHMENT AND MAINTENANCE OF A QUALITY MANAGEMENT SYSTEM, PLANNED AND DEVELOPED WITH ALL THE MANAGEMENT FUNCTIONS IN ACCORDANCE WITH AS/NZS ISO 9001 TO ENSURE THE EFFECTIVE DELIVERY OF OUR OBJECTIVES, INCLUDING REGULAR REVIEWS TOWARD SYSTEM ENHANCEMENT AND CONTINUAL IMPROVEMENT. ADHERENCE TO THE QUALITY MANAGEMENT SYSTEM IS A REQUIREMENT OF ALL BESIX WATPAC PERSONNEL AND CULTIVATES DILIGENCE TOWARDS A HIGH-QUALITY PRODUCT.