

# INFRASTRUCTURE PIPELINE REPORT

DECEMBER 2018



**BUILDING  
QUEENSLAND**





CAIRNS  
CONVENTION  
CENTRE





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## OUR MANDATE

Building Queensland is a statutory body providing independent, expert advice on major infrastructure. Established under the *Building Queensland Act 2015*, Building Queensland's vision is to enhance infrastructure outcomes for Queensland.

Working closely with Queensland Government agencies, including departments, government-owned corporations and nominated statutory authorities, Building Queensland leads the development of detailed business cases for projects with an estimated capital cost of delivery over \$100 million and assists with those between \$50–\$100 million.

All infrastructure proposals led by Building Queensland are developed under our Business Case Development Framework. The framework ensures a consistent and rigorous approach to proposal development.

To assist the Queensland Government in determining the projects that will best address the state's infrastructure priorities, Building Queensland develops the Infrastructure Pipeline Report. The Infrastructure Pipeline Report provides transparency of key government proposals under development.



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# Foreword

Since its inception in June 2016, the purpose of the Infrastructure Pipeline Report has been to inform government decision-making on infrastructure proposals under development. Six editions later, the purpose remains intact with Part 1 firmly focused on informing government's decisions on unfunded proposals and Part 2 on proposals with funding commitments for delivery. Irrespective of funding, Building Queensland's analysis is undertaken based on transparent frameworks to confirm the viability of projects and provide government with an informed evidence base to support infrastructure investment decisions.

The Infrastructure Pipeline Report reflects the work occurring across all government agencies, including government owned corporations and statutory authorities. It demonstrates that projects that will support higher levels of productivity and enhance our social well-being are progressing through the planning stages.

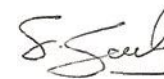
The volume of business cases underway or completed by Building Queensland is considerable. In the past six months, Building Queensland has completed eight detailed business cases—most of these have funding commitments and are reflected in Part 2 of this report. These include: Caboolture Hospital Expansion Stage 1; Five Schools Project; Bruce Highway Upgrade Program—Deception Bay Road Interchange Stage 1 (Package 3); M1 Pacific Motorway upgrades—Varsity Lakes to Tugun and Eight Mile Plains to Daisy Hill; and Cairns Shipping Development Project. In Part 1 of this report, the business cases for the Brisbane Live Entertainment Arena—Roma Street Project and Gold Coast Light Rail Stage 3A—Broadbeach to Burleigh Heads are noted as finalised and are now with the Queensland Government for consideration.

Two new projects have been added to Part 2 of this report. Building Queensland recently commenced detailed business cases for the Cairns Convention Centre and Ipswich Hospital Redevelopment Stage 1A. These are in addition to ongoing business case development for the Logan Hospital Expansion; Inner City South State Secondary College; Nullinga Dam and Mareeba Dimbulah Water Supply Scheme Improvements; and Toowoomba Hospital Redevelopment.

Building Queensland is helping ensure the right settings for infrastructure decision-making. Developed in collaboration with government agencies, Infrastructure Australia and industry partners, the analysis underpinning projects in this report will support the successful delivery of these projects should government decide to proceed with them.



**Alan Millhouse**  
Chair, Building Queensland



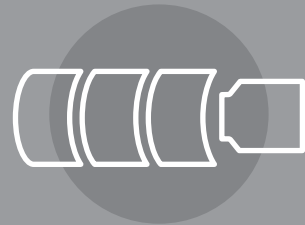
**Damian Gould**  
Chief Executive Officer,  
Building Queensland



# Introduction

The Infrastructure Pipeline Report signals the priority infrastructure proposals under development by the Queensland Government. The report is presented in two parts:

## PART 1 UNFUNDED PROPOSALS



### INFRASTRUCTURE PIPELINE

Part 1 identifies Queensland Government infrastructure proposals that are unfunded for delivery with a minimum capital cost of \$50 million. Some of these proposals are being developed by Building Queensland in partnership with the responsible government agency. Building Queensland recommends that these proposals are further analysed, or are ready for consideration by government.



**Unfunded  
for delivery**



**\$50M  
minimum  
capital cost**

## PART 2 FUNDED PROPOSALS



### DETAILED BUSINESS CASES

Part 2 features the detailed business cases Building Queensland is leading that are supported by Queensland Government funding commitments in part or in full. These proposals are estimated to have a minimum capital cost of \$100 million and delivery is subject to detailed analysis confirming the viability of the proposal. These business cases are out of scope for inclusion in the infrastructure pipeline (Part 1—unfunded proposals).



**Funded  
for delivery**











**\$100M  
minimum  
capital cost**


Building Queensland provides the Queensland Government with analysis to make informed decisions, and invest in the projects that deliver the best outcomes for Queenslanders.

In the past six months, Building Queensland has completed detailed business cases for eight projects. Six of these projects are supported by funding commitments and have previously appeared in Part 2 of the Infrastructure Pipeline Report. These projects include: Caboolture Hospital Expansion Stage 1; Five Schools Project; Bruce Highway Upgrade Program—Deception Bay Road Interchange Stage 1 (Package 3); M1 Pacific Motorway—Varsity Lakes to Tugun; M1 Pacific Motorway—Eight Mile Plains to Daisy Hill; and Cairns Shipping Development. Building Queensland’s business cases for these projects will enable government to make informed investment decisions regarding the timing of delivery, and procurement and delivery models.

The remaining projects, Brisbane Live Entertainment Arena—Roma Street Project and Gold Coast Light Rail Stage 3A—Broadbeach to Burleigh Heads, have been presented to the Queensland Government for consideration. Building Queensland has worked closely with the stakeholders to develop a strong evidence base for government decision making.

| BUILDING QUEENSLAND DETAILED BUSINESS CASES  |   |  |   |
|--|---|--|---|
| COMPLETED IN THE LAST SIX MONTHS   |   |  |   |
| UNFUNDED   | FUNDED  |  |   |
| <br>Brisbane Live Entertainment Arena Roma Street Project        | <br>Caboolture Hospital Expansion Stage 1        | <br>Five Schools Project                                  | <br>Bruce Highway Upgrade Program—Deception Bay Road Interchange Stage 1 (Package 3) |
| <br>Gold Coast Light Rail Stage 3A—Broadbeach to Burleigh Heads | <br>M1 Pacific Motorway—Varsity Lakes to Tugun | <br>M1 Pacific Motorway—Eight Mile Plains to Daisy Hill | <br>Cairns Shipping Development Project  |





Part 1 identifies Queensland Government infrastructure proposals that are unfunded for delivery with a minimum capital cost of \$50 million.

Pictured left to right: Kuraby Station, Toowoomba Hospital, Gold Coast Light Rail



# PART 1

## UNFUNDED PROPOSALS

Infrastructure Pipeline



# Summary of priority proposals

This infrastructure pipeline presents an update of the status of proposals in the June 2018 pipeline. Building Queensland recommends these proposals are further developed or are ready for consideration by government. All proposals are estimated to have a minimum capital cost of \$50 million and are unfunded for delivery.

Credible proposals are progressing through the infrastructure pipeline.

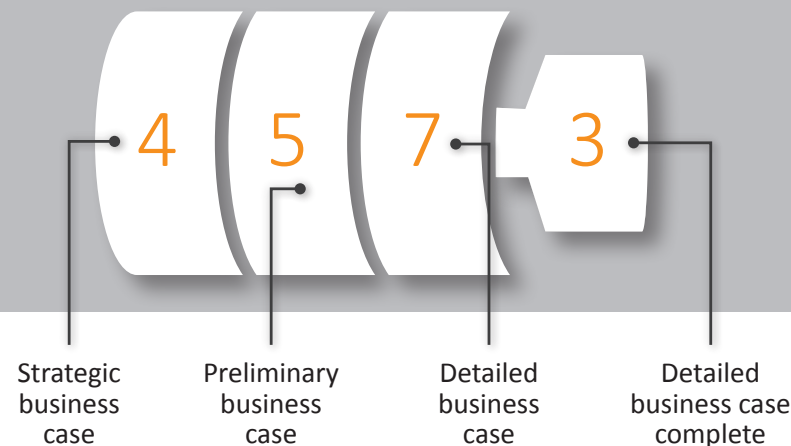
A quarter of the unfunded proposals in Part 1 have progressed to further stages of development since June 2018. Projects that have not moved in the pipeline are advancing within their current stage of development and the analysis for most of these is expected to be completed in the first half of 2019.

Since June 2018, detailed business cases were completed for the Brisbane Live Entertainment Arena—Roma Street Project and Gold Coast Light Rail Stage 3A—Broadbeach to Burleigh Heads. These detailed business cases are now with the Queensland Government for consideration.

Three proposals have progressed to the detailed business case stage including: Integrated Client Management System Replacement—an information technology project to improve the delivery of frontline child safety and youth justice services for at-risk children and young people; Sunshine Motorway—Mooloolah River Interchange; and Toowoomba Hospital Redevelopment. A detailed business case for the Paradise Dam Improvement Project is expected to commence shortly with Building Queensland to lead its development.

Total number of proposals » 19

## Stage of proposals in the pipeline





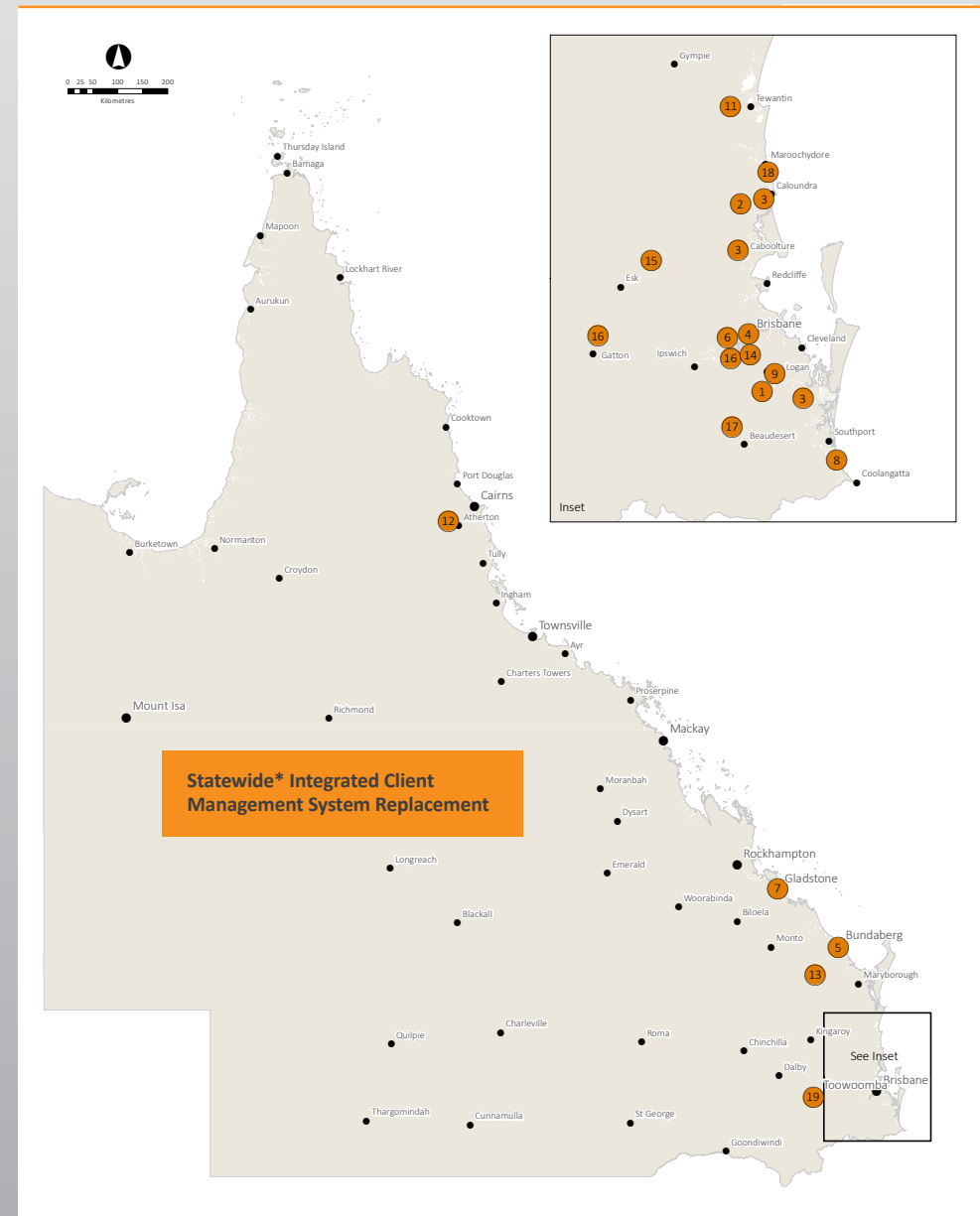
# December 2018 Infrastructure Pipeline of Priority Proposals



# Proposals by location

|     |  |
|-----|--|
| 1   | Additional primary education capacity in Logan                       |
| 2   | Additional education capacity in Southern Sunshine Coast             |
| 3   | Additional special education capacity in South East Queensland       |
| 4   | Brisbane Live Entertainment Arena—Roma Street Project                |
| 5   | Bundaberg Hospital   |
| 6   | Centenary Motorway—Frederick Street to Sumners Road                  |
| 7   | Clinton Vessel Interaction—Port of Gladstone                         |
| 8   | Gold Coast Light Rail Stage 3A—Broadbeach to Burleigh Heads          |
| 9   | Gold Coast Rail Line Capacity Improvement—Kuraby to Beenleigh        |
| 10* | Integrated Client Management System Replacement                      |
| 11  | Lake Macdonald Dam Safety Upgrade                                    |
| 12  | Nullinga Dam and Mareeba – Dimbulah Water Supply Scheme Improvements |
| 13  | Paradise Dam Improvement Project                                     |
| 14  | Princess Alexandra Hospital Rehabilitation Facility                  |
| 15  | Somerset Dam Safety Upgrade  |
| 16  | South Queensland Correctional Facilities Expansion                   |
| 17  | South West Pipeline—Bulk Water Connection to Beaudesert              |
| 18  | Sunshine Motorway—Mooloolah River Interchange                        |
| 19  | Toowoomba Hospital Redevelopment                                     |

Note: Project 10\* is statewide and is not mapped.












# Proposal summaries

The following infrastructure proposals are presented in order of their stage of development, with completed detailed business cases appearing first. Proposals are then listed alphabetically within each stage. Proposals are not presented in order of priority. The ultimate decision about the relative priority of proposals rests with the Queensland Government.




















Cost estimates are provided by responsible agencies, with the exception of figures for detailed business cases led by Building Queensland. Proposals with a cost range indicate that several options are still being considered. Proposal locations are broadly identified as South East Queensland (SEQ), regional or statewide.

In accordance with the *Building Queensland Act 2015*, Building Queensland may perform a lead or assist role as indicated in the following proposal summaries. Where a detailed business case commenced prior to Building Queensland's formal establishment, the responsible agency has continued to lead the development of the proposal to avoid delays or additional costs.





## PIPELINE OF PRIORITY PROPOSALS AS AT DECEMBER 2018

| Stage of development                          | Proposal name  | Sector   | Location  | Page |
|---|--|--|-----------|------|
| Ready for Queensland Government consideration | Brisbane Live Entertainment Arena—Roma Street Project              |  Arts, Culture and Recreation | SEQ       | 12   |
|   | Gold Coast Light Rail Stage 3A—Broadbeach to Burleigh Heads        |  Transport—Rail               | SEQ       | 13   |
|   | South Queensland Correctional Facilities Expansion                 |  Justice and Public Safety    | SEQ       | 14   |
| Detailed business case                        | Clinton Vessel Interaction—Port of Gladstone                       |  Transport—Port               | Regional  | 15   |
|   | Integrated Client Management System Replacement                    |  Justice and Public Safety    | Statewide | 16   |
|   | Lake Macdonald Dam Safety Upgrade                                  |  Water                        | SEQ       | 17   |
|   | Nullinga Dam and Mareeba-Dimbulah Water Supply Scheme Improvements |  Water                        | Regional  | 18   |
|   | South West Pipeline—Bulk Water Connection to Beaudesert            |  Water                        | SEQ       | 19   |
|   | Sunshine Motorway—Mooloolah River Interchange                      |  Transport—Road               | SEQ       | 20   |
|   | Toowoomba Hospital Redevelopment                                   |  Health—Built                 | SEQ       | 21   |
| Preliminary business case                     | Bundaberg Hospital   |  Health—Built                 | Regional  | 22   |
|   | Centenary Motorway—Frederick Street to Sumners Road                |  Transport—Road              | SEQ       | 22   |
|   | Gold Coast Rail Line Capacity Improvement—Kuraby to Beenleigh      |  Transport—Rail             | SEQ       | 23   |
|   | Paradise Dam Improvement Project                                   |  Water                      | Regional  | 23   |
|   | Somerset Dam Safety Upgrade  |  Water                      | SEQ       | 24   |
| Strategic business case                       | Additional education capacity in Southern Sunshine Coast           |  Education                  | SEQ       | 25   |
|   | Additional primary education capacity in Logan                     |  Education                  | SEQ       | 25   |
|   | Additional special education capacity in South East Queensland     |  Education                  | SEQ       | 25   |
|   | Princess Alexandra Hospital Rehabilitation Facility                |  Health—Built               | SEQ       | 25   |



# Brisbane Live Entertainment Arena— Roma Street Project

## RESPONSIBLE AGENCY

Cross River Rail  
Delivery Authority

## PROPOSAL STAGE OF DEVELOPMENT

Detailed business case complete

## PLANNED STAGE END DATE

Not applicable

## NEXT STEPS

Ready for Queensland Government  
consideration

## ESTIMATED COST OF DELIVERY

\$2.1 billion<sup>1</sup>

## BUILDING QUEENSLAND ROLE

Led detailed business case

## NEED

The development of the Cross River Rail station at Roma Street has provided the opportunity to redevelop an underutilised section of the Brisbane central business district and the most connected transport precinct in Brisbane to create a world-class entertainment arena for Queensland.

Capitalising on the existing range of sporting, music and arts events occurring in Brisbane, the Brisbane Live Entertainment Arena, with state-of-the-art facilities and technology, would provide Brisbane and Queensland with a world-class facility for premium live events that is highly accessible and well connected to all transport networks.

## PROPOSAL

The proposal is for a new arena of 17,000 to 18,000 seats located on a large deck structure built over railways, roads and property, bounded by Albert Street to the north and Roma Street to the south. The proposal also includes ancillary facilities to support the arena's operation as well as new public spaces and active transport connections with neighbouring central business district locations.

## BENEFITS

Benefits that have been identified include:

- » revitalising an area of the central business district that is underutilised
- » delivering a new music and night-time precinct that contributes to economic development outcomes for Brisbane
- » providing convenient access to state-of-the-art facilities and employment opportunities, particularly by public transport

- » attracting significant international entertainment and investment as a result of the proximity of the arena to the city centre and world-class developments such as Queen's Wharf Brisbane
- » expanding the central business district's appeal as both a business and creative centre through the development of an entertainment hub that is expected to improve opportunities for the surrounding precinct
- » improving the pedestrian access and connectivity between precincts including Suncorp Stadium, Roma Street Parkland, Queen Street Mall, South Bank Parklands and the Cultural Precinct.

## DELIVERY MODEL

A range of delivery models were considered as part of detailed business case development, including:

- » Public-Private Partnership options—Design, Build, Finance and Design, Build, Finance and Maintain
- » Traditional delivery options—Managing Contractor, Design and Construct, and Alliance.

Key considerations in delivery model analysis were interface risks and the potential for synergies with surrounding infrastructure projects such as Cross River Rail, Brisbane Metro, and other major central business district developments.

Final delivery model/s will be confirmed following government consideration of detailed business case outcomes.

<sup>1</sup> Nominal cost in Australian dollars, Building Queensland detailed business case 2018.





# Gold Coast Light Rail Stage 3A— Broadbeach to Burleigh Heads

## RESPONSIBLE AGENCY

Department of Transport and  
Main Roads<sup>2</sup>

## PROPOSAL STAGE OF DEVELOPMENT

Detailed business case complete

## PLANNED STAGE END DATE

Not applicable

## NEXT STEPS

Ready for Queensland Government  
consideration<sup>3</sup>

## ESTIMATED COST OF DELIVERY

\$709 million<sup>4</sup>

## BUILDING QUEENSLAND ROLE

Led detailed business case

## NEED

The Gold Coast is Australia's largest non-capital city and the second largest city in Queensland, with its population forecast to increase by 61 per cent to 928,000 in 2041. The provision of high-capacity public transport will allow the Gold Coast to accommodate forecast growth while preserving the attractiveness and liveability of the southern Gold Coast.

The identified corridor surrounding Stage 3A of the Gold Coast Light Rail is planned to accommodate a significant portion of the city's future residents, dwellings and jobs through urban renewal and economic development. Better public transport services in this growth area will reduce car dependency and traffic congestion.

## PROPOSAL

The extension of light rail to Burleigh Heads (Stage 3A) involves approximately 6.7 kilometres of dedicated dual light rail track from Broadbeach South station to Burleigh Heads including:

- » light rail tracks running in the centre of the Gold Coast Highway to Burleigh Heads
- » eight new light rail stations
- » five new light rail vehicles and an upgrade to the existing depot facilities
- » a light rail–bus interchange at Burleigh Heads
- » supporting works and improvements, including signalised traffic intersections and upgrades, new

signalised pedestrian crossings and upgraded pedestrian and cycle facilities.

## BENEFITS

The project is expected to provide the following benefits:

- » travel time savings
- » reduced vehicle operating costs
- » improved connectivity to key activity centres
- » active transport benefits from improved active transport infrastructure
- » reduced number and severity of vehicle accidents.

## DELIVERY MODEL

A range of delivery models were considered as part of the detailed business case, taking into account ongoing service delivery requirements. Final delivery model/s will be confirmed following government consideration of the detailed business case outcomes.

<sup>2</sup> Preliminary business case led by the City of Gold Coast. P50 cost estimate — \$670 million.

<sup>3</sup> The detailed business case will also be provided to Infrastructure Australia for assessment, and the Australian Government and City of Gold Coast for funding consideration.

<sup>4</sup> Nominal cost (P90) in Australian Dollars, Building Queensland detailed business case 2018.



# South Queensland Correctional Facilities Expansion

*Combines the former Arthur Gorrie Correctional Centre and Southern Queensland Correctional Precinct (Gatton) proposals*

## RESPONSIBLE AGENCY

Queensland  
Corrective Services

## PROPOSAL STAGE OF DEVELOPMENT

Detailed business case complete

## PLANNED STAGE END DATE

Not applicable

## NEXT STEPS

Ready for Queensland  
Government consideration

## ESTIMATED COST OF DELIVERY

\$1.22 billion

## BUILDING QUEENSLAND ROLE

Led/assisted detailed business case<sup>5,6</sup>

## NEED

All male high-security facilities in south Queensland are exceeding capacity. Between 2012 and 2017, the total number of prisoners in Queensland grew by 46 per cent and the total number of remand prisoners grew by 86 per cent. Subsequently, built capacity at the Arthur Gorrie Correctional Centre and the Southern Queensland Correctional Precinct (Gatton) has been exceeded. The need for a specific capacity increase for remandees as well as a capacity increase for the overall prison population has been identified.

## PROPOSAL

The South Queensland Correctional Facilities Expansion takes a system-wide approach to managing the prisoner population and system overcrowding. As such, the proposal investigated options to relieve capacity constraints at both facilities—the Southern Queensland Correctional Precinct (Gatton) and the Arthur Gorrie Correctional Centre. Several options were explored including:

- » better use of existing infrastructure, including reviewing the roles and functions of southern Queensland correctional centres
- » ways to improve existing infrastructure to expand current capacity, including construction of new cell blocks, and upgraded and expanded prisoner support services facilities
- » construction of cells at a new greenfield site.

## BENEFITS

The projects are expected to:

- » enhance safety between prisoners, and prisoners and staff
- » deliver more flexibility to manage the allocation of prisoners to the most appropriate facility
- » increase access to remand-specific programs and health services to better prepare remandees for potential release following court proceedings
- » increase access to education programs, and prison employment opportunities to provide employable skills and readiness for community reintegration and to lower rates of recidivism
- » reduce future strain on building facilities with less risk of service failures.

## DELIVERY MODEL

A range of delivery models was considered as part of detailed business case development, including:

- » Public-Private Partnership options—Design, Build, Finance and Maintain; Design, Construct, Maintain and Operate; Design, Build, Finance, Operate and Maintain; and Design, Construct and Maintain
- » Traditional delivery options—Managing Contractor, Design and Construct and Construct Only.

Final delivery model/s will be confirmed following government consideration of detailed business case outcomes.

<sup>5</sup> Led Arthur Gorrie Correctional Centre Detailed Business Case and assisted with Southern Queensland Correctional Precinct (Gatton) Detailed Business Case.

<sup>6</sup> No active role during the June to December 2018 pipeline reporting period.





# Clinton Vessel Interaction—Port of Gladstone

## RESPONSIBLE AGENCY

Gladstone Ports Corporation

## PROPOSAL STAGE OF DEVELOPMENT

Detailed business case underway

## PLANNED STAGE END DATE

Q1 2019

## NEXT STEPS

Complete detailed business case

## ESTIMATED COST OF DELIVERY

\$65–\$80 million<sup>7</sup>

## BUILDING QUEENSLAND ROLE

No active role June to December 2018

## NEED

The movement of larger vessels (draft over 14 metres) through the Clinton Channel at the Port of Gladstone is resulting in interaction of forces between the passing vessel and vessels berthed at the RG Tanna Coal Terminal. These forces impact on the safe mooring and operations at the terminal.

## PROPOSAL

The options being investigated in the proposal include:

- » making better use of existing infrastructure, including controlling transit speed and utilising tugs to control vessels berthed at time of transit, and introducing a new mooring system
- » improving existing infrastructure, such as deepening the Clinton Bypass Channel or widening the Clinton Channel.

## BENEFITS

The project is expected to improve the efficiency of:

- » ship loading
- » the allocation of port infrastructure and resources
- » passage through the Clinton Channel.

It is also expected to create a safer environment as these activities will no longer be impacted by the passage of larger vessels.

## DELIVERY MODEL

Delivery model analysis is a key component of the detailed business case. The selection of the preferred delivery model will take into consideration risk, operational impacts, environmental requirements and value for money.

<sup>7</sup> A range is provided by responsible agency as a number of options are still being considered.



# Integrated Client Management System Replacement

## RESPONSIBLE AGENCY

Department of Child Safety,  
Youth and Women

## PROPOSAL STAGE OF DEVELOPMENT

Detailed business case underway

## PLANNED STAGE END DATE

Q2 2019

## NEXT STEPS

Complete detailed business case

## ESTIMATED COST OF DELIVERY

To be determined<sup>8</sup>

## BUILDING QUEENSLAND ROLE

Assisting with detailed business case

## NEED

Appropriate management and sharing of information at the right time is critical to the safety and well-being of at-risk children and young people. At the same time, confidentiality and privacy are essential requirements for information systems.

Despite significant resources being spent on maintaining and upgrading the current Integrated Client Management System (ICMS), several opportunities for improvement have been identified. The technology is reaching the end of its useful life and integration with new technology (e.g. Windows operating systems and productivity tools) is becoming increasingly complex. Furthermore, there are opportunities to enhance information sharing capacity with other government and non-government organisations.

## PROPOSAL

This information technology project is modular and includes investigating sequential tranches of work, each improving the delivery of frontline child safety and youth justice services for at-risk children and young people living in Queensland. In the current stage of development, solutions are being analysed with prototypes from vendors being considered.

## BENEFITS

This project is expected to deliver:

- » increased efficiency for frontline staff
- » increased ability to measure outcomes and optimise investment
- » improved mandatory reporting
- » better placement decisions
- » improved information access
- » greater stakeholder collaboration across the child safety continuum.

## DELIVERY MODEL

Delivery model analysis is a key component of the detailed business case. The selection of the preferred delivery model will take into consideration risk, operational impacts and value for money.

<sup>8</sup> An estimate will be provided once the proposal has been developed further.





# Lake Macdonald Dam Safety Upgrade

## RESPONSIBLE AGENCY

Seqwater

## PROPOSAL STAGE OF DEVELOPMENT

Detailed business case underway

## PLANNED STAGE END DATE

Q1 2019

## NEXT STEPS

Complete detailed business case

## ESTIMATED COST OF DELIVERY

\$90–100 million<sup>9</sup>

## BUILDING QUEENSLAND ROLE

Assisting with detailed business case

## NEED

Lake Macdonald Dam on Six Mile Creek on the Sunshine Coast requires an upgrade to meet modern standards and the performance requirements of the Queensland dam safety regulations. The drivers for the upgrade include:

- » population growth downstream of the dam
- » advances in dam design and development of consistent methodologies for assessment of dam safety
- » latest estimates of extreme rainfall and the application of best practice hydraulic modelling methods
- » improved understanding of earthquake probabilities and loads.

## PROPOSAL

Lake Macdonald is located approximately 4 kilometres northeast of the township of Cooroy and has a supply capacity of 8,018 megalitres. Lake Macdonald is one of the primary sources of water to the Noosa Water Treatment Plant. The water treatment plant is an important component of the water supply for the Sunshine Coast region, giving Seqwater the option to source water from the Mary River and Lake Macdonald.

The proposal is to upgrade the existing dam to meet the requirements of the Queensland dam safety guidelines. The proposed upgrade will reduce dam safety risks by increasing the spillway capacity and the earthquake stability of the dam while maintaining water supply security.

Studies have considered a range of options including decommissioning of the dam, retrofitting of strengthening works and new build options.

## BENEFITS

The project will ensure the dam meets performance standards outlined in the Queensland dam safety regulations.

## DELIVERY MODEL

Delivery model analysis is a key component of the detailed business case. The selection of the preferred delivery model will take into consideration risk, operational impacts and value for money.

<sup>9</sup> Nominal cost in Australian Dollars 2017, estimate provided by responsible agency.



# Nullinga Dam and Mareeba-Dimbulah Water Supply Scheme Improvements

## RESPONSIBLE AGENCY

SunWater<sup>10</sup>

## PROPOSAL STAGE OF DEVELOPMENT

Detailed business case underway

## PLANNED STAGE END DATE

Q2 2019

## NEXT STEPS

Complete detailed business case

## ESTIMATED COST OF DELIVERY

\$330 million<sup>11</sup>

## BUILDING QUEENSLAND ROLE

Leading detailed business case

## NEED

The limited availability of water allocations for agricultural use in the Mareeba-Dimbulah irrigation area is inhibiting the opportunity for economic development in the region.

## PROPOSAL

The proposed Nullinga Dam site is located on the Walsh River, approximately 55 kilometres south-west of Cairns and 24 kilometres south-south-west of Mareeba. The dam site is within the existing Mareeba-Dimbulah Water Supply Scheme, which is currently supplied by Tinaroo Falls Dam.

The proposal is investigating the following options:

- » augmenting/enhancing the existing water supply system
- » optimising water trading within the catchment and 'repurposing' current water allocations
- » converting water losses from existing water transport infrastructure (e.g. transfer channels) to new water allocations
- » constructing Nullinga Dam.

## BENEFITS

The project is expected to increase availability of water to meet long-term supply across the region and enhance agricultural development opportunities.

## DELIVERY MODEL

The preliminary business case assessed a number of potential delivery models for the delivery of Nullinga Dam. The delivery model assessment concluded that Design and Construct with potential Early Contractor Involvement was the preferred delivery model at this point in time. The preferred delivery model will be investigated further during the development of the detailed business case.

The Nullinga Dam and Other Options Preliminary Business Case is available on the Building Queensland website.

<sup>10</sup> SunWater has assumed responsibility from the former Department of Energy and Water Supply for the delivery of the detailed business case.

<sup>11</sup> Nominal cost in Australian dollars, Building Queensland preliminary business case 2017. Cost estimate being further developed as part of the detailed business case.





# South West Pipeline— Bulk Water Connection to Beaudesert

## RESPONSIBLE AGENCY

Seqwater

## PROPOSAL STAGE OF DEVELOPMENT

Detailed business case underway

## PLANNED STAGE END DATE

Q1 2019

## NEXT STEPS

Complete detailed business case

## ESTIMATED COST OF DELIVERY

\$70 million<sup>12</sup>

## BUILDING QUEENSLAND ROLE

Assisting with detailed business case

## NEED

The projected bulk water peak demand from Beaudesert is expected to begin experiencing capacity constraints by 2021–22 and increase significantly thereafter due to growth in the area, particularly within the Bromelton State Development Area. There is also significant growth predicted in the adjacent Logan City Council area of South Logan (including Yarrabilba and Flagstone).

Water supply to Beaudesert is currently provided by the Beaudesert Water Treatment Plant. The plant is a stand-alone water supply that extracts raw water from the Logan River, which has variable water quality. It is not connected to the South East Queensland Water Grid and will not meet levels of service into the future.

## PROPOSAL

The South West Pipeline will connect the Beaudesert water supply zone to the South East Queensland bulk water supply grid via the Logan City Council water network. The pipeline will pass through the site of the future Wyaralong Water Treatment Plant.

## BENEFITS

The pipeline is expected to meet the near-term water demand of Beaudesert and provide water supply security to growth areas in the Logan City Council area. In the longer term, this pipeline connection also has the strategic benefit of connecting Beaudesert and the Scenic Rim region to the South East Queensland Water Grid, increasing bulk water supply reliability.

## DELIVERY MODEL

Delivery model analysis is a key component of the detailed business case. The selection of the preferred delivery model will take into consideration risk, operational impacts and value for money.

<sup>12</sup> Nominal cost in Australian Dollars 2018, estimate provided by responsible agency.



# Sunshine Motorway — Mooloolah River Interchange

## RESPONSIBLE AGENCY

Department of Transport and Main Roads

## PROPOSAL STAGE OF DEVELOPMENT

Detailed business case underway

## PLANNED STAGE END DATE

Q2 2020

## NEXT STEPS

Complete detailed business case

## ESTIMATED COST OF DELIVERY

\$430 million<sup>13</sup>

## BUILDING QUEENSLAND ROLE

Leading detailed business case

## NEED

The existing Sunshine Motorway, Nicklin Way and Kawana Way are congested and lack capacity to accommodate forecast travel demand.

## PROPOSAL

The proposal is investigating a range of upgrades to the Sunshine Motorway at Mountain Creek to improve safety and provide better connections between existing and planned future arterial roads to form a new Mooloolah River interchange.

Proposed works include a new direct connection to the Sunshine Coast University Hospital precinct via a new two-lane road connecting Kawana Way at Parrearra and crossing the Mooloolah River to the planned Mooloolah River interchange. A new direct connection for northbound traffic from Nicklin Way to Brisbane Road and Mooloolaba is also being investigated, along with an upgrade of the east-west section of the Sunshine Motorway from two to four lanes between Kawana Way interchange and the upgraded Mooloolah River interchange. A new link to accommodate local traffic movements between Brisbane Road and Karawatha Drive is also being investigated.

## BENEFITS

This project is expected to deliver:

- » improved safety by reducing crashes and weaving behaviours
- » better connections between existing and planned future arterial roads
- » increased capacity for future traffic demand.

## DELIVERY MODEL

Delivery model analysis is a key component of the detailed business case. The selection of the preferred delivery model will take into consideration risk, operational impacts and value for money.

<sup>13</sup> Nominal cost in Australian dollars 2015, estimate provided by responsible agency based on preliminary business case.



# Toowoomba Hospital Redevelopment

## RESPONSIBLE AGENCY

Queensland Health, Darling Downs Hospital and Health Service

## PROPOSAL STAGE OF DEVELOPMENT

Detailed business case underway

## PLANNED STAGE END DATE

Q1 2020

## NEXT STEPS

Complete detailed business case

## ESTIMATED COST OF DELIVERY

\$450–\$750 million<sup>14</sup>

## BUILDING QUEENSLAND ROLE

Leading detailed business case

## NEED

The infrastructure at Toowoomba Hospital is operating at capacity in a number of areas and the hospital currently faces long emergency department waiting times and overcrowding. Forecast demand, driven by a growing and ageing population and high levels of chronic disease, is expected to place further pressure on the hospital.

The current asset condition and functionality is not supporting the efficient and effective delivery of contemporary health services at the hospital.

## PROPOSAL

The proposal is investigating a staged relocation of healthcare services to the Baillie Henderson Hospital site in Cranley Street which is 6.5 kilometres north of the existing hospital.

## BENEFITS

This project is expected to deliver:

- » improved equity of access to healthcare for the Darling Downs community
- » reduced patient travel costs and time
- » improved morbidity and mortality rates
- » increased staff attraction and retention rates.

## DELIVERY MODEL

Delivery model analysis is a key component of the detailed business case. The selection of the preferred delivery model will take into consideration risk, operational impacts and value for money.

<sup>14</sup> Nominal cost in Australian Dollars 2016, estimate provided by responsible agency. Cost estimate to be further developed as part of the detailed business case.





## Bundaberg Hospital

### RESPONSIBLE AGENCY

Queensland Health,  
Wide Bay Hospital and  
Health Service

### PROPOSAL STAGE OF DEVELOPMENT

Preliminary business  
case underway

### PLANNED STAGE END DATE

Q2 2019

### NEXT STEPS

Complete preliminary  
business case

### ESTIMATED COST OF DELIVERY

To be determined<sup>15</sup>

### BUILDING QUEENSLAND ROLE

Assisting with  
preliminary  
business case

### NEED

The current Bundaberg Hospital site is adjacent to the Burnett River and is vulnerable to flooding. During the 2013 flood, electrical switchboards and diesel generators were compromised and patients were evacuated.

There is also an increase in demand for hospital capacity driven by a growing and ageing population in the region and high levels of chronic disease.

### PROPOSAL

The proposal will develop a plan for future growth of hospital services so it can deliver the appropriate volume and range of inpatient services to the regional population. The preliminary business case is investigating a range of options to meet the service need including flood resilience and capacity improvements at the current Bundaberg Hospital, increased capacity at existing Wide Bay health sites or a new hospital at a new site.

<sup>15</sup> An estimate will be provided once the proposal has been developed further.



## Centenary Motorway— Frederick Street to Sumners Road

### RESPONSIBLE AGENCY

Department of Transport  
and Main Roads

### PROPOSAL STAGE OF DEVELOPMENT

Preliminary business  
case complete

### PLANNED STAGE END DATE

Not applicable

### NEXT STEPS

Commence detailed  
business case

### ESTIMATED COST OF DELIVERY

To be determined<sup>16</sup>

### BUILDING QUEENSLAND ROLE

No active role June to  
December 2018

### NEED

The Centenary Motorway from Frederick Street to Sumners Road carries a mix of commuter, commercial, freight and public transport traffic.

This section of the motorway currently carries traffic volumes that exceed capacity, resulting in daily periods of congestion which increase travel times, reduce reliability and increase the risk of accidents.

The congestion in this section is forecast to increase because of further traffic demand driven by growth in the western corridor.

### PROPOSAL

The proposal is considering a staged approach to upgrading the corridor with the first stage including a three-lane northbound bridge connecting to the existing motorway alignment.

<sup>16</sup> An estimate will be provided once the proposal has been developed further.



## Gold Coast Rail Line Capacity Improvement— Kuraby to Beenleigh

### RESPONSIBLE AGENCY

Department of Transport  
and Main Roads

### PROPOSAL STAGE OF DEVELOPMENT

Preliminary business  
case underway

### PLANNED STAGE END DATE

Q2 2019

### NEXT STEPS

Complete preliminary  
business case

### ESTIMATED COST OF DELIVERY

To be determined<sup>17</sup>

### BUILDING QUEENSLAND ROLE

No active role June to  
December 2018

### NEED

The current track configuration of the Gold Coast Rail Line between Kuraby and Beenleigh is limiting the ability for express trains to effectively pass all stops during peak periods. This is limiting the capacity of the corridor and impacting on service reliability.

### PROPOSAL

The proposal is investigating the following options:

- » signalling updates to safely increase the number of services and improve reliability
- » amendment of stopping patterns to reduce conflicts between different train services
- » construction of new passing loops to provide more opportunities for express services to pass
- » development of a partial or full third track
- » consideration of corridor preservation activities for a fourth track
- » targeted track realignments to improve travel time
- » station upgrades and higher-capacity trains.

The options will be packaged to form a preferred solution which will be developed into a staged implementation plan as part of detailed business case development.

<sup>17</sup> An estimate will be provided once the proposal has been developed further.



## Paradise Dam Improvement Project

### RESPONSIBLE AGENCY

SunWater

### PROPOSAL STAGE OF DEVELOPMENT

Preliminary business  
case complete

### PLANNED STAGE END DATE

Not applicable

### NEXT STEPS

Commence detailed  
business case

### ESTIMATED COST OF DELIVERY

To be determined<sup>18</sup>

### BUILDING QUEENSLAND ROLE

No active role June to  
December 2018

### NEED

Paradise Dam is located approximately 80 kilometres south west of Bundaberg on the Burnett River. It is a key component of the Bundaberg Water Supply Scheme—holding up to 300,000 megalitres of water for the city of Bundaberg and farmland irrigation.

During the 2013 floods, extensive scour occurred downstream of the primary spillway. SunWater immediately repaired the scour and downstream toe of the dam, and investigated options to prevent scour occurring in future extreme weather events.

This investigation identified necessary improvements to the primary and secondary spillways. Improvement works are being proposed to maintain efficient and safe operation of the primary and secondary spillways during extreme weather events.

### PROPOSAL

The proposal is investigating options to maintain the efficiency and further assist the safe operation of Paradise Dam. Improvements to the primary and secondary spillways are proposed to prevent significant scour occurring downstream of the toe of the dam in major flood events. Proposed upgrade options being investigated include improving dam stability, addressing energy dissipation and stability in the primary spillway, and constructing a side channel spillway downstream of the existing secondary spillway to address the potential for scour.

<sup>18</sup> An estimate will be provided once the proposal has been developed further.



## Somerset Dam Safety Upgrade

### RESPONSIBLE AGENCY

Seqwater

### PROPOSAL STAGE OF DEVELOPMENT

Preliminary business  
case underway

### PLANNED STAGE END DATE

Q1 2019

### NEXT STEPS

Complete preliminary  
business case

### ESTIMATED COST OF DELIVERY

To be determined<sup>19</sup>

### BUILDING QUEENSLAND ROLE

No active role June to  
December 2018

### NEED

Somerset Dam, located on the Stanley River, is required to comply with the provisions of the Queensland Guidelines on Acceptable Flood Capacity for Water Dams. In order to comply with these guidelines and other dam safety standards, Somerset Dam requires an upgrade.

### PROPOSAL

The proposal includes undertaking an options study to develop a shortlist of potential upgrade options prior to the selection of a preferred option for preliminary design. To inform the development of upgrade options, further geotechnical investigations are required for the dam foundation and its characterisation. Large-scale physical hydraulic modelling is also required to assess the hydraulic performance of both the existing dam and upgrade concept options.

Once a preferred upgrade option has been identified, preliminary design will be undertaken to develop construction cost estimates, a detailed project scope and program, and inform the business case necessary for project approval.

<sup>19</sup> An estimate will be provided once the proposal has been developed further.



Somerset Dam (Image courtesy of Seqwater)



# Strategic business cases

Development of a strategic business case is the first stage of the business case development process. A strategic business case aims to ensure the service need is substantiated and effectively articulated, and that the benefits sought can be achieved through proposed initiatives. Completing a strategic business case supports the integrity and quality of any subsequent preliminary business case and/or detailed business case.



## Education

The Department of Education has completed a number of strategic business cases to investigate either an identified regional demand for additional educational capacity or to address a specific educational need.

The strategic business cases address:

- » additional education capacity in Southern Sunshine Coast
- » additional primary education capacity in Logan
- » additional special education capacity in South East Queensland.

These strategic business cases have demonstrated a clear and compelling need to increase education services in relevant areas. The Department of Education is continuing to develop these proposals and it is anticipated that these education facilities will open in the early 2020s.



## Health

A strategic business case for the Princess Alexandra Hospital Rehabilitation Facility is being developed by the Metro South Hospital and Health Service to provide statewide spinal cord and brain injury rehabilitation services. Land use impacts from Cross River Rail are being explored to improve precinct master planning to optimise the provision of services.



Plenary Schools



Princess Alexandra Hospital (Image courtesy of CFL Photography)





Part 2 features the detailed business cases Building Queensland is leading that are supported by Queensland Government funding commitments.

Pictured left to right: Cairns Convention Centre,  
Ipswich Hospital, M1 Pacific Motorway





# PART 2

## FUNDED PROPOSALS

Detailed business cases

# Detailed business cases

Part 2 of the Infrastructure Pipeline Report contains proposals that have received full or partial funding commitments from the state government. Since June 2018, six detailed business cases from the transport, education and health sectors have been completed. Building Queensland has commenced the development of detailed business cases for two new funded projects, with a further four underway.

## ARTS, CULTURE & RECREATION



Cairns Convention Centre

NEW

### BUSINESS CASE COMPLETION

Q2 2019

## HEALTH - BUILT



Ipswich Hospital Redevelopment Stage 1A

NEW

Q1 2019

Logan Hospital Expansion

Q1 2019

Caboolture Hospital Expansion Stage 1

COMPLETED

## EDUCATION



Inner City South State Secondary College

Q1 2019

Five Schools Project

COMPLETED

## ENERGY



Burdekin Falls Hydro-electric Power Station\*

PROGRESSING

\* The progression of the Burdekin Falls Dam Hydro-electric Power Station proposal is dependent on other Burdekin Falls Dam investigations; specifically the Saddle Dam and Monolith Improvements and the Burdekin Falls Dam Raising proposals.

## TRANSPORT - ROAD



Bruce Highway Upgrade Program

PROGRESSING

Bruce Highway – Deception Bay Road Interchange Stage 1 (Package 3)

COMPLETED

M1 Upgrades – Varsity Lakes to Tugun

COMPLETED

M1 Upgrades – Eight Mile Plains to Daisy Hill

COMPLETED

## TRANSPORT - PORT



Cairns Shipping Development Project

COMPLETED





## Cairns Convention Centre

An upgrade and expansion of the convention centre is proposed to meet potential unmet demand for national and international conventions in Cairns.

Further to this, there may be opportunity to leverage other anticipated precinct developments, such as the Queensland Government's planned Global Tourism Hub, to enhance state and regional economic outcomes.

The 2016-17 State Budget allocated \$176 million over two years to extend the existing Cairns Convention Centre, following consideration of a business case.

Building Queensland is leading the detailed business case in partnership with the Department of Housing and Public Works. The detailed business case is scheduled for completion by mid-2019.



## Ipswich Hospital Redevelopment Stage 1A

The Queensland Government has committed to expand the scope and scale of services offered at Ipswich Hospital.

In support of this commitment, Building Queensland is partnering with the Department of Health and West Moreton Hospital and Health Service to develop a detailed business case for the Ipswich Hospital Redevelopment Stage 1A proposal.

The stage 1A expansion is the first of a planned multi-staged expansion of the Ipswich Hospital. It includes construction of a new acute mental health unit to replace the existing ward, commissioning of a Magnetic Resonance Imaging service, and development of a community health precinct.

Key areas of focus for the Building Queensland-led detailed business case include detailed needs and benefits analysis, social impact and economic analysis. The proposal is being considered at a system-wide level, particularly in respect to planning, operational and capital funding, financial sustainability and integration with eHealth initiatives. The detailed business case is expected to be completed in Q1 2019.

This project is being developed under the Building Better Hospitals policy.



## Logan Hospital Expansion

The Logan Hospital was officially opened in February 1990 and was designed as a low-dependency facility with a focus on Health Village/Community Health Service for the developing Logan area.

The catchment area for the Logan Hospital has experienced rapid growth. At present, Logan Hospital is providing a similar number of services as larger and more specialised hospitals without key physical infrastructure to support this activity.

The Queensland Government has committed to expanding Logan Hospital as part of a broader funding package for South East Queensland hospitals in growth corridors. The planned expansion of the Logan Hospital will bring bed numbers into better alignment with the population in the catchment area.

Building Queensland expects to complete the detailed business case for the Logan Hospital Expansion by Q1 2019. Key areas of focus for the Building Queensland-led detailed business case include assessment of adequate capacity for increased service provision in the short and medium term, significant improvement in building safety and accessibility, improved clinical and operational efficiencies via enhanced patient flows, and increased workforce productivity and efficiency.

This project is being developed under the Building Better Hospitals policy.



## Caboolture Hospital Expansion Stage 1

The Queensland Government has committed to expand the number of beds at Caboolture Hospital as part of a broader funding package for South East Queensland hospitals in growth corridors.

In support of this commitment, Building Queensland has finalised a detailed business case for the Caboolture Hospital Expansion Stage 1.

Building Queensland worked in partnership with the Department of Health and Metro North Hospital and Health Service to develop the detailed businesses case for Stage 1, which will deliver the following additional capacity:

- » 16 spaces for the patient transit hub
- » 27 treatment spaces in the emergency department
- » 5 medical imaging rooms
- » 2 operating theatres
- » 130 acute and sub acute beds.

This detailed analysis is leading to better outcomes for the community by ensuring that fit-for-purpose infrastructure will be delivered.

This project is being developed under the Building Better Hospitals policy.



## Inner City South State Secondary College

The Inner City South State Secondary College will service the educational needs of the growing local community in and around south Brisbane and is designed to relieve enrolment pressure on Brisbane State High School.

Funding for the development of the Inner City South State Secondary College forms part of the Queensland Government's \$800 million Building Future Schools Fund.

Building Queensland assisted the Department of Education in developing a precinct selection process for the new college. The outcomes from this process provided input into the comprehensive community consultation program undertaken by the Department of Education.

The college is expected to adopt a vertical design. This concept has been successfully implemented around Australia and overseas to provide 21st century learning environments within developed communities. The design process has commenced and will inform the detailed business case.

Building Queensland is leading the detailed business case for the Inner City South State Secondary College in partnership with the Department of Education. The detailed business case is scheduled for completion in Q1 2019. Construction is expected to commence on the Inner City South State Secondary College in mid-2019, with the school to be completed in time for the start of school in 2021.



## Five Schools Project

Building Queensland led the development of the Five Schools Project Detailed Business Case in partnership with the Department of Education.

The detailed business case investigated the delivery of new schools in the following high growth areas: Ripley Valley (primary and secondary schools), Mango Hill (secondary school), Coomera (secondary school) and Yarrabilba (secondary school).

The detailed business case re-confirmed that growing education demand in Ripley Valley, Yarrabilba, Mango Hill and Coomera cannot be adequately accommodated by the existing local schooling networks. In addition, existing schools in the Ripley primary, Ripley secondary and Yarrabilba secondary networks are distant from the emerging population growth. This distance would impose extended travel time and costs on new residents accessing the schools. The scale and location of the unmet demand supports the case for the five proposed schools.

Funding for the construction of the five schools was announced as part of the Building Future Schools Fund. It is planned that the schools will open for the start of the 2020 school year.





## Burdekin Falls Hydro-electric Power Station

Burdekin Falls Dam is located 210 kilometres south west of Townsville on the Burdekin River. The dam is owned and operated by SunWater and comprises a mass gravity main dam and three earth and rock-fill saddle dams.

On 30 April 2017, the Premier, the Honourable Annastacia Palaszczuk announced the government's commitment to develop a detailed business case for a hydro-electric power station at Burdekin Falls Dam.

Subsequently, on 2 June 2017, the Queensland Government released the Powering North Queensland Plan, a \$386 million investment to unlock energy proposals to power the North Queensland economy and support jobs. The plan included a \$100 million reinvestment of Stanwell dividends to help fund the proposed hydro-electric power station at Burdekin Falls Dam, subject to feasibility investigations.

The progression of the proposal is dependent on other Burdekin Falls Dam investigations, namely:

- » Burdekin Falls Dam–Saddle Dam and Monolith Improvement Project: Investigations to improve the risk profile of the dam for the impact of increased weather events.
- » Burdekin Falls Dam Raising: Investigations into the long-term water supply requirements and options for raising the Burdekin Falls Dam wall.

While these are separate proposals and not included in the scope of the Burdekin Falls Hydro-electric Power Station, coordination and regular consultation between the proposals is being undertaken to ensure optimal long-term outcomes are achieved for the Burdekin Falls Dam.



## Bruce Highway Upgrade Program

The 10-year Bruce Highway Upgrade Program is Queensland's largest road infrastructure program.

Jointly funded by the Australian and Queensland governments (2013–14 to 2022–23), this \$8.5 billion program (\$6.7 billion in federal funding and \$1.8 billion in state funding)<sup>20</sup> aims to improve safety, flood resilience and capacity on the Bruce Highway between Brisbane and Cairns.

All detailed business cases developed under the program with an estimated capital cost of delivery over \$100 million are led by Building Queensland in partnership with the Department of Transport and Main Roads.

The following detailed business case, part of the overall upgrade program, was completed by Building Queensland during the June to December 2018 period:

- » Deception Bay Road Interchange Stage 1 (Package 3).

Building Queensland will lead the development of further detailed business cases for specific proposals once they reach the detailed business case stage.

<sup>20</sup> The Queensland Government has announced additional funding of \$200 million per annum on a 80 federal: 20 state funding split upon completion of the existing Bruce Highway Upgrade Program. The Australian Government has announced funding of \$3.3 billion beyond 2022–23.



## M1 Pacific Motorway Upgrades

The M1 Motorway is Queensland's busiest road, with traffic volumes exceeding capacity causing extended delays daily.

Forecast increases in travel demand will further exacerbate delays, increasing travel times, decreasing reliability and risking road safety.

Building Queensland partnered with the Department of Transport and Main Roads to finalise detailed business cases for the Varsity Lakes to Tugun and Eight Mile Plains to Daisy Hill sections of the M1 Pacific Motorway.

The detailed business cases investigated road widening and the implementation of managed motorways technology.

The Eight Mile Plains to Daisy Hill detailed business case also investigated the expansion of the South East Busway to Springwood, including a new busway station and a park and ride facility at Rochedale, and new dedicated cycling infrastructure.

Based on 50:50 funding arrangements, the Australian Government committed up to \$1 billion towards these two M1 Pacific Motorway upgrades. The Queensland Government has provided \$897.5 million towards the estimated cost of these projects.



## Cairns Shipping Development Project

The Cairns Shipping Development Project proposes widening and deepening the Trinity Inlet navigation channel at the Port of Cairns to allow cruise ships up to 300 metres long to berth at the Cairns Cruise Liner Terminal.

The infrastructure proposal includes an upgrade of the wharf infrastructure in Trinity Inlet to cater for the larger vessels.

The proposed works are to accommodate the forecast increased demand for larger cruise ships. These works will enable growth at the HMAS Cairns naval base and improve access efficiency for bulk cargo ships.

As part of the 2017–18 Queensland Budget, the government committed a contribution of \$60 million over the two years from 2018–19 towards the Cairns Shipping Development Project.

The detailed business case has been approved by the Queensland Government.

Ports North is progressing the detailed planning, design and associated approvals in preparation for project delivery. Initial dredging and wharf upgrade works are scheduled to commence in 2019 with final project completion in 2020.





Burdekin Falls Dam (Image courtesy of SunWater)







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