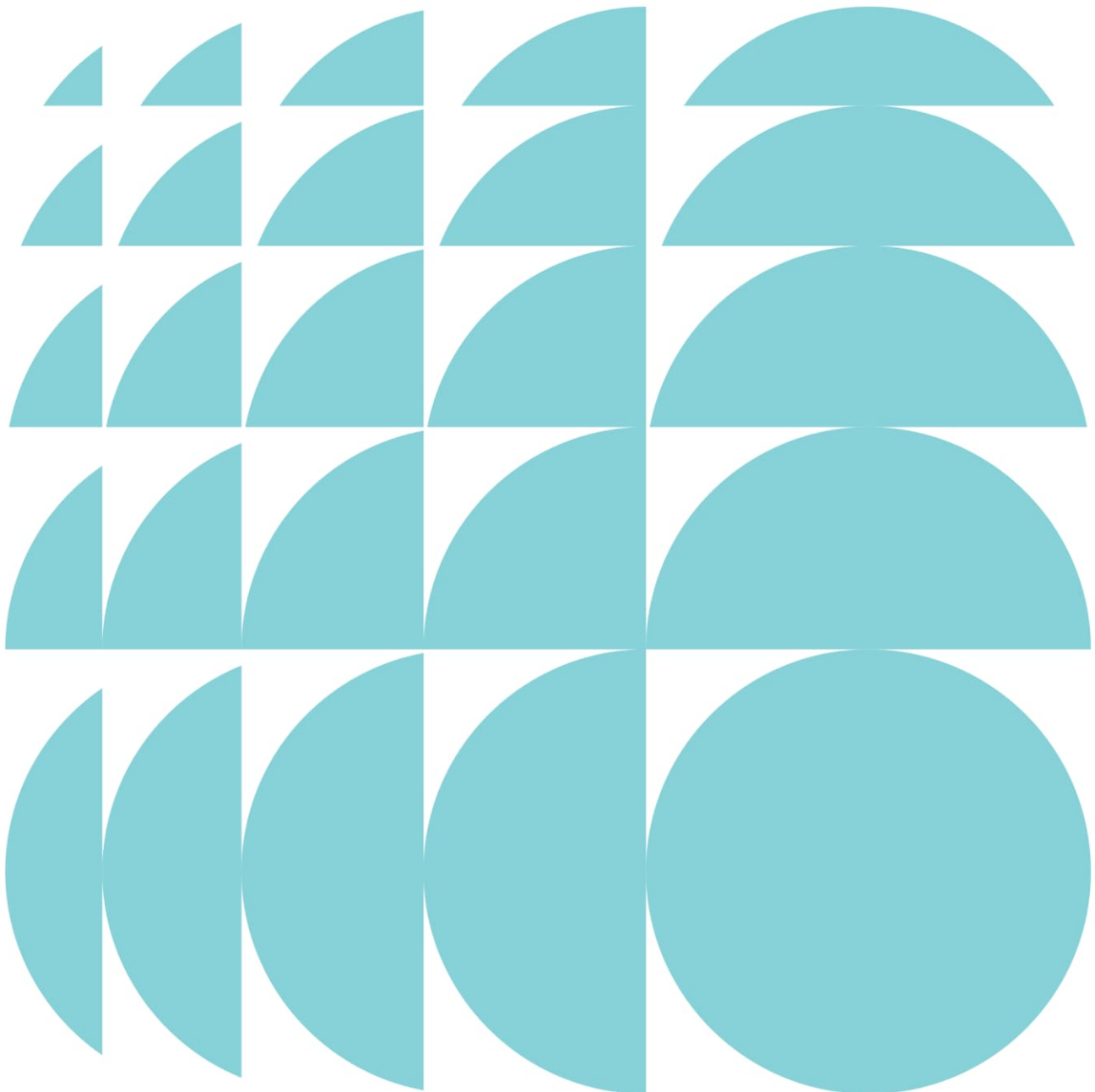


Sancrox Road, Sancrox  
Sancrox Quarry Expansion

Submitted to Department of Planning &  
Environment  
On behalf of Hanson Construction Material Pty  
Ltd.

14 May 2019 | 2190085



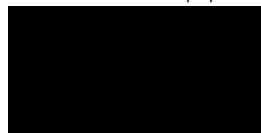
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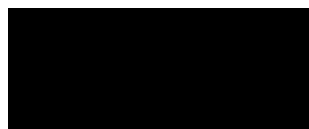
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## Executive Summary

This report provides a Social Impact Assessment and an Economic Assessment for the Sancrox Quarry Expansion Project. These assessments have been prepared by Ethos Urban on behalf of Hanson Construction Materials to accompany the Environmental Impact Statement and in relation to proposed land uses.

Hanson Construction Materials Pty Ltd (Hanson) currently operates a hard rock quarry, known as Sancrox Quarry (the site) on Sancrox Road, Sancrox, located approximately 8km west of Port Macquarie. The Sancrox Quarry is within the Port Macquarie Hastings Council (PMHC) local government area on the Mid North Coast of NSW.

The quarry is a significant economic resource for regional and state development. Hanson proposes to extend the life of the quarry by expanding the approved extraction boundary and increasing the annual extraction limit to facilitate the extraction and distribution of high-quality construction materials for the use of civil infrastructure and road construction projects.

To assess the likely social and economic impacts of the proposed expansion of operations at Sancrox Quarry, this report has reviewed the existing social and economic environments, analysed how the proposal will impact the existing and forecast social and economic environment during construction and operation, and developed mitigation responses should an identified social or economic impact occur.

The report includes two components – a Social Impact Assessment, and an Economic Impact Assessment. This report is based on the NSW DPE *Social Impact Assessment Guideline for state significant mining, petroleum production and extractive industry development*, dated September 2017.

This report has considered a range of social impacts arising from the proposed expansion of operations at Sancrox Quarry, including impacts to way of life, community composition and character, culture, health and wellbeing, surroundings, personal and property rights, decision making systems and access to and use of infrastructure. This report has also considered economic impacts arising from the proposed development, including resource significance, demand considerations, cartage cost considerations, employment and other economic considerations.

The proposed development is likely to have a mixed impact on the existing primary study area and surrounding Port Macquarie-Hastings LGA.

- The social impacts of the proposed expansion of operations at Sancrox Quarry are likely to be generally consistent with existing operations at Sancrox Quarry but increased in line with the increased scale of operations – for example impacts associated with the rise in truck movements.
- There are potential negative social impacts associated with increased traffic and heavy vehicle movements, increased noise and vibration, impacts to air and water quality and clearing of bushland, which will need to be appropriately mitigated to prevent impacts to the sense of place and amenity of the surrounding area. However, the quarry has operated at this location for over 20 years and the expansion of operations at this site does not involve a significant change to land uses at this location.
- There are a range of likely positive economic benefits associated with the expansion of Sancrox Quarry at this location including:
  - Employment growth at the quarry and in the broader community – which also brings potential social benefits to the community associated with increased business expenditures and expanded employment opportunities
  - Efficient and cost-effective delivery of product to customers/end users
  - Environmental benefits through the diversion of used concrete from landfill.
- The expansion of the quarry will also support urban growth resource needs, stimulated by ongoing population expansion and the proposed pipeline of major State Government infrastructure investment projects in the area.

Therefore the overall impact of the proposed development at this location is likely to be positive, provided that the localised potential negative social impacts associated with increased traffic and heavy vehicle movements, increased noise and vibration, impacts to air and water quality and clearing of bushland are appropriately mitigated and monitored, as set out in the Environmental Impact Statement (dated October 2018).

## 1.0 Introduction

This report provides a Social Impact Assessment and an Economic Impact Assessment for the Sancrox Quarry Expansion Project. These assessments have been prepared by Ethos Urban on behalf of Hanson Construction Materials to accompany the Environmental Impact Statement and in relation to proposed land uses.

### 1.1 Background

Hanson Construction Materials Pty Ltd (Hanson) currently operates a hard rock quarry, known as Sancrox Quarry (the site) on Sancrox Road, Sancrox, located approximately 8km west of Port Macquarie. The Sancrox Quarry is within the Port Macquarie Hasting Council (PMHC) local government area on the Mid North Coast of NSW. The current Sancrox Quarry comprises of Lot 353 DP 754434, Lot 1 DP 720807 and Lot 1 DP 704890.

The quarry is a significant economic resource for regional and state development. Hanson proposes to extend the life of the quarry by expanding the approved extraction boundary and increase the annual extraction limit to facilitate the extraction and distribution of high-quality construction materials for the use of civil infrastructure and road construction projects.

### 1.2 Purpose, objectives and scope

#### Social Impact Assessment

The preparation of this SIA has involved a detailed review of the strategic policy context of the proposed development, local demographic and place characteristics; a review of relevant technical reports and community engagement outcomes to date to broadly explore community concerns and aspirations regarding the site and local social context.

The objective of this SIA is to identify, investigate and assess potential impacts to the social environment generated by the Development Application and to recommend mitigation or enhancement responses appropriate to this stage of the land use planning process. To achieve this objective this SIA must:

#### Social assessment

1. Develop an understanding of the existing community and current social environment;
2. Develop a broad understanding of the future community and potential social environment;
3. Review and analyse responses to the community and stakeholder engagement and consultation;
4. Consider how the proposed development will impact the existing and likely social environment during construction and operation;
5. Consider the cumulative impacts of other proposed and committed projects within the community;
6. Assess the likelihood and severity of impact should an identified social impact occur; and
7. Develop mitigation strategies for identified meaningful negative impacts and/or enhancement strategies for identified meaningful positive impacts generated by the proposed development.

#### Economic assessment

8. Develop an understanding of the existing economic environment;
9. Develop a broad understanding of the future economic environment;
10. Consider how the proposed development will impact the existing and likely economic environment during construction and operation; and
11. Address SEARS criteria, including assessing economic impacts and net community benefit outcomes arising from the project.

### 1.3 Assessment framework

This SIA is based on the NSW DPE *Social Impact Assessment Guideline for state significant mining, petroleum production and extractive industry development*, September 2017.

It also draws on guidelines published by the International Association for Impact Assessment (IAIA), *International principles for social impact assessment* (Vanclay 2003), which defines Social Impact Assessment as:

*“the process of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions. Its primary purpose is to bring about a more sustainable and equitable biophysical and human environment”* (2003, p.5).

These detailed frameworks are set out in Section 9, as the basis for this assessment.

### 1.4 Methodology

As outlined in the IAIA Social Impact Assessment Guideline (2015), social impacts vary in their nature and can be positive or negative, tangible or intangible, quantifiable, partly quantifiable or qualitative. Social impacts can also be experienced or perceived differently by different people and groups within a community.

The following methodology employed to prepare this social impact assessment is designed to ensure that the social environment of communities potentially impacted by the project are best accounted for and recorded, and anticipated impacts are adequately considered and assessed.

#### Social assessment

1. Review of existing background studies and technical reports;
2. Review of relevant local and state policy frameworks related to the proposed development;
3. Review of the outcomes of previously completed community consultation and engagement with local residents to ascertain broad attitudes, perceptions and aspirations in relation to the local social and place context;
4. Study area definition, including primary and secondary geographic areas likely to be impacted by the Development Application in terms of social impacts to communities – residents, local businesses and other stakeholders;
5. Analysis of current and forecast communities in identified study areas as per the Australian Bureau of Statistics (ABS) Census of Population and Housing and other data sources;
6. Identification of potential social impacts and opportunities for the local community which may result from the Development Application, and
7. Preparation of preliminary analysis of social impacts and recommended responses to address them in the context of this stage of development.

#### Economic assessment

8. Economic Baseline Study: including economic profile (population and dwelling projections, building approvals, industry structure, occupational structure, business structure and labour market overview) and Sancrox Quarry Operating Overview (production, key markets, competition, employment and local spending); and
9. Economic Impact Assessment: including resource significance, demand outlook, cartage cost considerations, economic benefits (investment, employment, local spending, concrete recycling), tax implication, and macro-economic considerations.

### 1.5 Information sources and assumptions

Information sources used to prepare this SIA include:

- Sancrox Quarry Expansion Project – Environmental Impact Statement, ERM, prepared on behalf of Hanson Construction Materials, October 2018
- ABS Average Weekly Earnings, Australia Nov 2018

- ABS Census of Population and Housing 2016
- ABS Counts of Australian Business, June 2013 to June 2017
- Community.id
- Economy.id
- Forecast.id
- NSW Budget Papers 2018/19

Assumptions applied to complete this SIA include:

- Socio-economic data for each study area accurately reflects the community demographic profile;
- The key findings of the background studies and technical reports are accurate;
- Outcomes of the community consultation and engagement undertaken to date accurately reflect community views, and
- All potential social impacts to the local community and special interest groups are identified.



## 2.0 Site context

### 2.1 The site

The Sancrox Quarry is located on Sancrox Road, Sancrox, approximately 8km west of Port Macquarie. The land is zoned RU1 – Primary Production. The Pacific Highway is approximately 200m to the east of the site, while land to the north, east and south is zoned IN1 – Industrial. Directly south east of the site is an environmental conservation area. The site is within the Port Macquarie Hasting local government area.



**Figure 1 The site**

Source: ERM

### 2.2 Site history

Sancrox Quarry has been owned and operated by Hanson since 1998. Hanson currently has ownership of approximately 145ha of the site, of which approximately 12ha is currently used in the extraction, processing and storage of high-quality aggregate materials.

#### 2.2.1 Approval history

Sancrox Quarry operations are currently approved in accordance with three concurrent development consents, which have been modified by Section 4.55 of the *Environment Planning and Assessment Act 1979* (EP&A Act) at various stages, as outlined in the EIS. Conditions exist within the development consents that should be read in conjunction with one another. The current extraction rate of 455,000 tonnes per annum (tpa) was approved a modification to development consent (DA 1995/0193) under section 4.55(2) of the EP&A Act.

## 2.3 Existing uses

Sancrox Quarry currently operates to the approvals as outlined in **Table 1**, an Environmental Management Plan and Environmental Protection Licence (EPL) (EPL 5298) issued by the Environment Protection Authority (EPA) under the *Protection of the Environment Operations Act 1997*. The current Sancrox Quarry operations are approved in accordance with three concurrent development consents, which have been modified by Section 96 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) at various stages.

The current approval is for extraction of up to 185,000 tpa with a temporary increase of 450,000 tpa via a s96 modification to Council approval in March 2014. This temporary increase concluded in March 2019, with extraction decreasing to the original approval amount of 185,000 tpa.

**Table 1 Current Approved Activities & Hours of Operation**

Hours	Day	Approved Activity
7am – 5pm	Monday – Friday	Normal operations
7am – 1pm	Saturday	Normal operations
7am – 11pm	Every day of the year	Additional activities, including truck movements into, around and out of the Sancrox Quarry, as well as equipment loading
11pm – 7am	Up to 20 occasions	Additional operations

## 2.4 Surrounding development and land uses

The environment surrounding the quarry site includes remnant woodland vegetation immediately adjacent to the north, west and south. The Pacific Highway and Cassegrain Winery are located approximately 175m and 210m to the east, respectively. Sancrox Road is located approximately 230m to the south of the site, with a variety of industrial uses beyond.

The closest residence to the site is located approximately 200m to the south-west, along Sancrox Road. A number of rural residential residences are also located along Bushland Drive to the south-west of the site, the closest being approximately 650m to the southwest. A further rural residence is located approximately 1km to the west.

### Sancrox Interchange and Pacific Highway

The road infrastructure directly adjacent to the Sancrox Quarry has recently undergone redevelopment and improvement.

The Sancrox Interchange connects to the Pacific Highway which services northern, southern and eastern movements from the quarry and was opened to the public on 30 November 2015. The Interchange was designed to cater for the existing industry and businesses in the area, as well as servicing the area which is planned for development as an industrial precinct.

The Pacific Highway in the vicinity of the quarry has recently been upgraded, as part of the Oxley Highway to Kempsey Pacific Highway Upgrade Project. The Highway is a dual carriageway, 110km/hr Motorway class road.

### Sancrox Employment Precinct

To the east of the quarry, construction has commenced on the development of an estate zoned for light industry. The *Greater Sancrox Structure Plan 2014-2034* outlines future development options including rural residential development opportunities to the west of the quarry and south of Sancrox Road.



### 3.0 Proposed development

This section describes the components of the proposed development that are relevant to the assessment of social impacts. Further details regarding the full project description are included in the Environmental Impact Statement (EIS) prepared for the proposed development.

#### 3.1 Description of proposed development

Hanson proposes to extend the life of the quarry by expanding the approved extraction boundary and increasing the annual extraction limit to facilitate the extraction and distribution of construction materials for the use in civil infrastructure and road construction projects. The proposed extraction limit will increase the current annual maximum extraction limit from approximately 455,000 tonnes per annum (tpa) to 750,000 tpa.

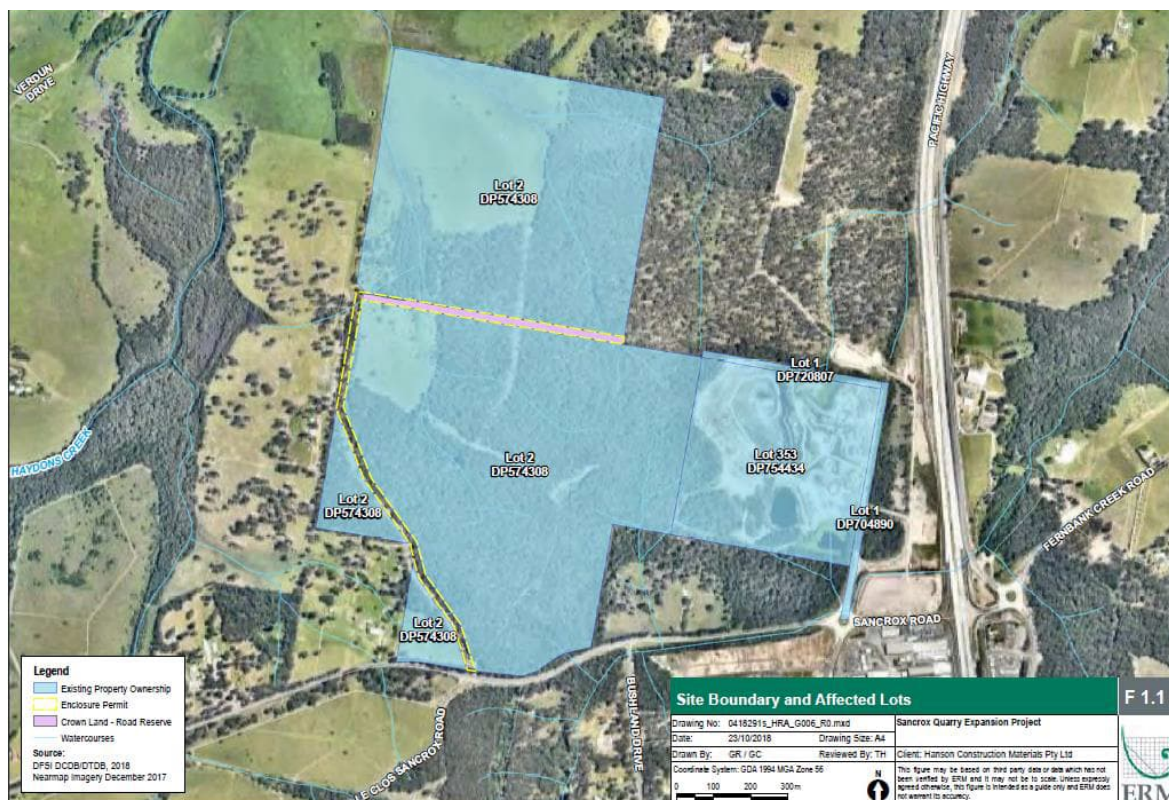
Additionally, the proposed project includes the establishment of a concrete batching plant and recycling facility and an asphalt production plant. The layout of this ancillary development is shown in **Figure 2**.



**Figure 2** Location of the ancillary development

Source: ERM

The project proposes to extend the lateral extent of the quarry westwards into Lot 2 DP 574308, which is owned by Hanson. The project site and Hanson owned lots are shown in **Figure 3**.



**Figure 3** Current lots on site

Source: ERM

### 3.2 Proposed activity

A project description summary is provided in **Table 2**. The proposed extraction footprint and location of the new concrete batching plant, concrete recycling facility and asphalt production plant and the relocated product processing plant (herein referred to as ancillary infrastructure) are shown in **Figure 2** and **Figure 3**

**Table 2** Proposed activity

Project components	Currently approved Sancrox Quarry	Proposed Project
Quarry Life	20 years	30 years
Limits on Production	180,000 tpa (with temporary increase to 450,000tpa between March 2014 and March 2019)	750,000 tpa
Quarry Footprint	17.18ha	48.61ha
Final Quarry Depth	RL – 14 mAHD	RL – 40 mAHD
Product Processing Plant and Stockpile Area	Located in the north-east corner of the site.	To be relocated to the south of the quarry pit.
Site Office, Weigh Bridge and Workshop.	Located near site entrance.	To remain in same location.
Water Holding Dams (WHD)	Two located in the south-east corner of the site.	To remain in same location, additional WHDs will be constructed throughout the various stages of the project to manage sediment.
Concrete Batching Plant	Not currently operating.	20,000tpa, to be located in the north-east corner of the site.

Project components	Currently approved Sancrox Quarry	Proposed Project
Concrete Recycling Facility.	Not currently operating.	20,000 tpa, to be located in the north east corner of the site.
Asphalt Production Plant	Not currently operating.	50,000tpa, to be located south of quarry pit.
Hours of Operation	Quarry operates: <ul style="list-style-type: none"> <li>7am-5pm Monday to Friday.</li> <li>7am-1pm Saturday</li> <li></li> </ul> Truck movements and equipment loading: <ul style="list-style-type: none"> <li>7am-11pm Monday to Friday</li> <li>7am-1pm Saturdays, Sundays and Public Holidays</li> </ul> Operations are permitted between 11:00pm and 7:00am on maximum of 20 occasions within a year.	Quarry operations (incl. production and maintenance): <ul style="list-style-type: none"> <li>24 hours a day, 7 days a week.</li> </ul> Truck movements and equipment loading: <ul style="list-style-type: none"> <li>24 hours a day, 7 days a week.</li> </ul> Blasting: <ul style="list-style-type: none"> <li>8am-5pm Monday to Friday.</li> </ul>
Employee Numbers	15 full time employees (with casual and contractors on an as needed basis).	25

### 3.3 Proposed staging

The proposed quarry expansion will be completed in five separate stages, over the 30 year lifetime of the project. Each stage is described below and shown in **Figure 4** The proposed staging of the quarry expansion.

With the exception of Stage 3, all stages will require clearing of vegetation to allow for the development to progress. The cleared vegetation will be mulched and removed from the site where it cannot be beneficially reused on-site for erosion and sediment controls. Clearing will be undertaken by equipment such as a bulldozer, one to two excavators, a mulcher and haul trucks to convey the mulch off site. It is expected that each stage requiring clearing will take three to four weeks to clear and mulch.

#### Stage 1

Stage 1 involves the expansion of the western side of the quarry into the uncleared area to a depth of RL-14 (AHD). To allow for the construction of ancillary facilities, vegetation clearing, and development of pads will be undertaken during this stage.

#### Stage 2

Stage 2 will further expand the existing western side of the quarry at the same depth of RL-14 (AHD).

#### Stage 3

Stage 3 will widen and deepen the benches towards the western extraction boundary. At this stage, there will be up to four benches (dependant on the topography at the pit void), some of which will be active, and others at progressive or final stages of rehabilitation. The quarry pit floor will be lowered from RL-14 (AHD) to RL-40 (AHD).

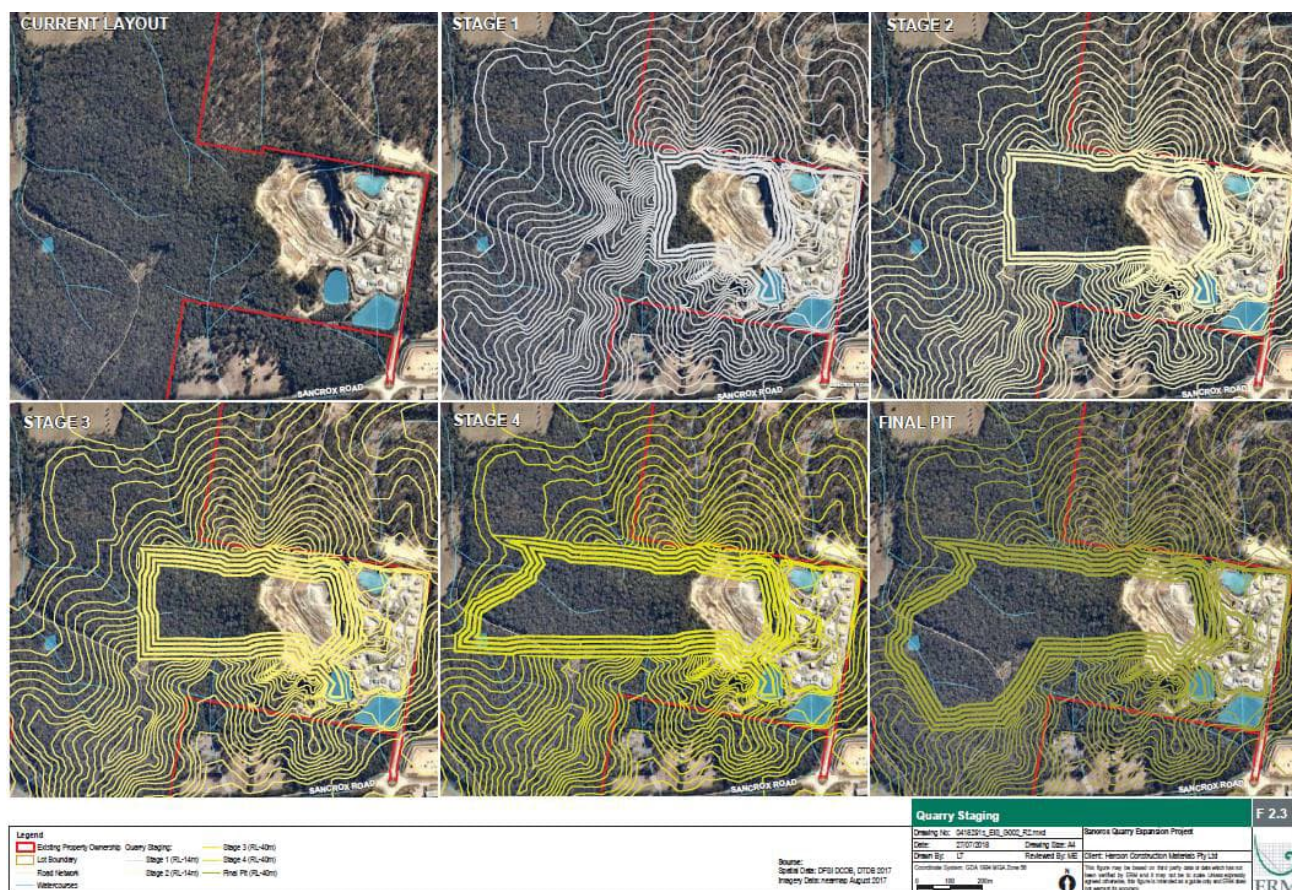
#### Stage 4

Stage 4 involves the expansion of operations to the west of the extraction boundary at the same depth of RL-40 (AHD).

#### Stage 5

The final stage will expand the quarry along the southern extraction boundary at the same depth of RL-40 (AHD).





**Figure 4** The proposed staging of the quarry expansion

Source: ERM

### 3.3.1 Traffic movements

The site currently generates an average of 42 heavy vehicle trips per day. The expanded quarry operations will increase average truck volumes to approximately 200 truck trips per day (a 'trip' is two movements – in and out of the site). This is a significant increase of approximately 158 additional heavy vehicle trips per day on Sancrox Road.

**Table 3** Traffic movements per day

	Quarried product	Asphalt delivery	Concrete delivery	Collection of waste concrete	Import of concrete constituents	Operational workforce
Vehicle type	Truck and dog (mostly)	Truck	Agitator	Truck	Truck	Light vehicle
Average number of trips / days	127	12	11	8	1 (rounded up as assumed at 3 truck trips / week)	25

Source: ERM, Sancrox EIS, p. 183.

The increase in light vehicle trips due to employees will be concentrated around start and finish times of shifts and will have negligible impact due to being a minor input on the overall traffic volume. Light vehicle trips associated with the proposed development will likely coincide with peak times on Sancrox Road, however, will be in the opposite direction of flow to that of other light vehicles utilising the Sancrox Road.

The main markets which the quarry will service are located east of the Pacific Highway, including Port Macquarie and other smaller coastal towns to the north and south. To the west there is considered to be less of a market demand, with the primary location to the west being the township of Wauchope (population of approximately 7,400 residents) and smaller surrounding towns similarly generating little demand.

Access to the Pacific Highway for north and south market locations is provided by the Sancrox Interchange. The northern portion of Port Macquarie can also be accessed by Winery Drive off the north eastern roundabout of the Sancrox Interchange, that links to Hastings River Drive.

Access is provided to the Oxley Highway for east/west movements by the Oxley Highway Interchange to the south. It is predicted that greater than 99% of the product trucks and agitators leaving the Quarry Access Road will travel either south or east at the north western roundabout of the Sancrox Interchange to gain access to these market locations. Trips to the west of the Quarry Access Road on Sancrox Road/Rawdon Island Road are not required due to the more suitable access options provided by the Interchanges and service roads described above. Hence western movements on the Sancrox Road from the Quarry Access Road should be strictly limited to supplying markets within the Sancrox locality, considered to be less than 1% of the total annual truck trips.

Movements on Fernbank Creek Road, east of the north eastern roundabout should be avoided given that the road is narrow and likely of limited structure capacity to receive regular fully loaded truck and dog movements. Similar to Sancrox Road, movements on this road should be strictly limited to local residents requiring product.

### 3.4 Proposed ancillary development

Hanson proposes to construct an asphalt production plant and relocate the existing processing plant and stockpiles into the Infrastructure Area, south of the existing pit, as shown in **Figure 2**. The concrete batching plant and concrete recycling facility will be constructed in the north eastern portion of Lot 353, DP 754434, as shown in **Figure 2**.

#### Concrete batching plant and recycling facility

Hanson is seeking consent to construct and operate a concrete batching plant and recycling facility, capable of producing 20,000 tpa of cement and receiving up to 20,000 tpa of concrete material for recycling. The plant will batch wet cement in agitators for use in regional construction projects. The recycled concrete aggregate will be beneficially reused as a substitute for virgin aggregates in products such as road base and drainage materials. Crushing may be required to size recycled concrete aggregates such that it is suitable for the intended use.

It is anticipated that this facility will generate approximately 11 agitator truck trips per day during operation. These agitator trucks will deliver the concrete from the facility to regional construction projects. The recycling facility will generate approximately 8 truck trips per day.

#### Asphalt production plant

The asphalt production plant will produce asphalt to be used for road construction. The operation of the asphalt production plant requires high quality aggregate and bitumen. The aggregate for asphalt production will be obtained from the rock processed and the processing plant and will be delivered directly to the aggregate storage bins at the asphalt production plant.

The produced asphalt will be loaded into trucks and taken off-site via the weighbridge. The asphalt production is likely to generate approximately 21 truck trips per day.

## 4.0 Strategic policy context

The following section identifies the key social drivers for this site, based on a review of the key state and local policies and strategies relevant to the proposed development.

### Key policy drivers

- It is a state and local priority to enable and encourage vibrant economies and new employment opportunities to support population growth in the Port Macquarie-Hastings LGA.
- In the local area, access to nature and the outstanding natural values of the Port Macquarie landscape are key to community identity. State and local governments have indicated that development needs to be balanced with the natural landscape and consider environmental sustainability and biodiversity.
- It is a state and local priority to ensure that the surrounding community and relevant stakeholders are involved in decision making processes regarding the local area.

### 4.1 Key themes and drivers

The following section includes a review of state and local policies, strategies and documents that articulate the desired social outcomes for the area. The following documents have been reviewed:

- North Coast Regional Plan (NSW Department of Planning and Environment, 2016)
- Mid North Coast Regional Strategy 2006-2031 (NSW Department of Planning and Environment, 2006)
- Towards 2030: Community Strategic Plan (Port Macquarie Hastings Council)
- Biodiversity Strategy 2017-2030 (Port Macquarie Hastings Council)
- Economic Development Strategy 2017-2021 (Port Macquarie Hastings Council)
- Urban Growth Management Strategy 2017-2036 (Port Macquarie Hastings Council)
- Greater Sancrox Structure Plan 2014-2034 (Port Macquarie Hastings Council)

A comprehensive review of the strategic policy context for the development is available at **Table 4**.

**Table 4 Key themes of strategic policy review**

Policy theme	Key implications for social impact assessment	Relevant documents
Vibrant economies	<ul style="list-style-type: none"> <li>• The Port Macquarie Hastings Council (PMHC) area has recently increased its available industrial lands, to diversify possible employment and investment opportunities in the area. The Sancrox Industrial Area was completed in 2011, with the intention to promote industrial activity in the region. The site is included in the Sancrox Industrial area.</li> <li>• The PMHC has recognised that industrial growth in the area is important for larger economic growth in the region. There is strategic policy support for economic growth and development in industrial businesses, including appropriately zoning land and planning precincts effectively to ensure the development of new industries.</li> <li>• Local businesses that employ local people and contribute to local projects are important to the community. Authorities are encouraged to work closely with local business networks to provide appropriate support, emphasising growth and sustainability.</li> </ul>	<ul style="list-style-type: none"> <li>• North Coast Regional Plan 2017-2036</li> <li>• Mid North Coast Regional Strategy 2014-2034</li> <li>• Towards 2030 Community Strategic Plan</li> <li>• Urban Growth Management Strategy 2017-2036</li> <li>• Economic Development Strategy 2017-2036</li> <li>• Greater Sancrox Structure Plan 2014-2034</li> </ul>



Policy theme	Key implications for social impact assessment	Relevant documents
Employment growth	<ul style="list-style-type: none"> <li>• Employment growth and encouraging increased employment in local centres is a state and local priority in the area. New employment opportunities are required to support forecast population growth in the LGA (20,000 new residents by 2036).</li> <li>• Connectivity between employment centres, including freight and transport networks, is important to ensure accessibility for employees and other business users.</li> </ul>	<ul style="list-style-type: none"> <li>• North Coast Regional Plan 2017-2036</li> <li>• Urban Growth Management Strategy 2017-2036</li> <li>• Economic Development Strategy 2017-2036</li> </ul>
Natural environment and community identity	<ul style="list-style-type: none"> <li>• The social identity of the Port Macquarie Hastings LGA is shaped by the natural environment, which is highly valued by local residents and visitors. The natural and built environment is closely linked with the tourism industry of the area, as well as its indigenous heritage.</li> <li>• Development and growth in the Port Macquarie Hastings LGA needs to be balanced with the outstanding natural values of the area. Future development in the Port Macquarie Hastings LGA should be compatible with the natural and built environment, ensuring it aligns with the community's identity.</li> <li>• The natural environment should be protected and restored into the future. Maintaining and improving biodiversity and ecological processes by protecting, rehabilitating and managing important ecological areas is a crucial practice, to ensure the value of these environments is maintained.</li> <li>• Awareness should be raised about the importance of conserving biodiversity and identifying and mitigating threats to the environment. The environmental value of the area has been emphasised in strategic documentation and ensuring that this is communicated in future developments is crucial.</li> </ul>	<ul style="list-style-type: none"> <li>• North Coast Regional Plan 2017-2036</li> <li>• Towards 2030 Community Strategic Plan</li> <li>• Biodiversity Strategy 2017-2036</li> <li>• Greater Sancro Structure Plan 2014-2034</li> </ul>
Community participation and engagement	<ul style="list-style-type: none"> <li>• Involving the community in local democracy and decision making processes is a Council priority.</li> <li>• Creating and maintaining successful relationships with stakeholders in business, industry and government at local, state and federal level is important for the future of the LGA, to ensure the needs of the community and other key stakeholders are considered. This includes working with stakeholders in the implementation of major projects.</li> </ul>	<ul style="list-style-type: none"> <li>• Towards 2030 Community Strategic Plan</li> <li>• Economic Development Strategy 2017-2021</li> </ul>

Source: *Ethos Urban*

## 5.0 Social baseline study: existing social context

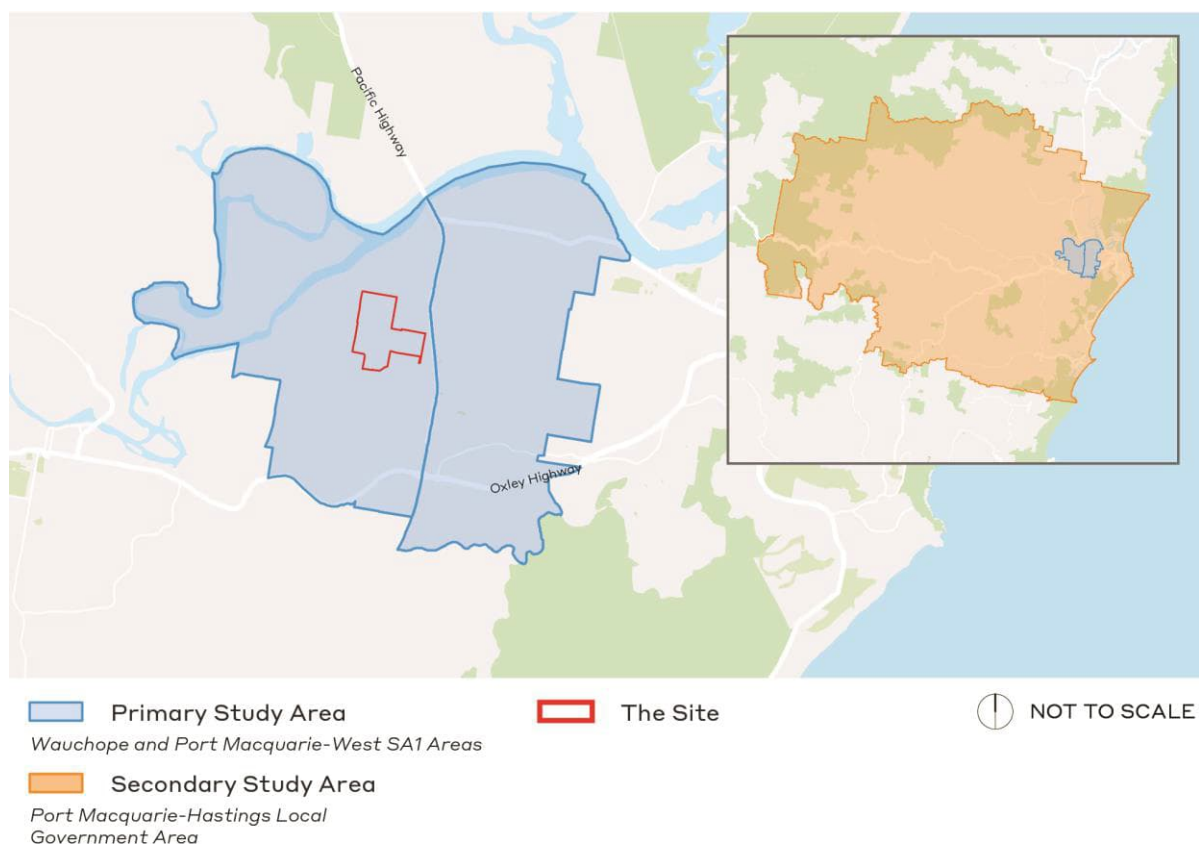
This section provides an overview of the site and the existing social context surrounding the site. It analyses the existing socio-economic characteristics of the community within the identified study areas to better understand the potential characteristics and context of the existing community that may be impacted by the proposed development.

### Key current community characteristics

- The demographic profile of the primary study area (PSA) indicates that the local community residents of the PSA are more likely than the Port Macquarie-Hastings LGA average to be working age adults, living in households with children and born in Australia. They are more likely than the Port Macquarie Hastings average to live-in low-density dwellings (separate housing) and have a mortgage, as well as to not have attained a tertiary education. The PSA is growing at a faster rate than the broader Port Macquarie Hastings LGA.
- As is to be expected for a rural and remote quarry site, there is no social infrastructure within walking distance of the site that will be affected by the expansion of quarry operations.
- The site is located in close proximity to major roads, however, as is to be expected for a rural quarry site, there is limited public and active transport accessible to the site.
- Local social issues and trends in the area, including the prevalence of older people and retirees living in the local area, the importance of tourism in the area and the natural values associated with the area, and the development of a Charles Sturt University campus within Port Macquarie.

### 5.1 Study area definition: area of social and economic influence

The following section defines the study area for the social and economic impact assessment (see **Figure 5**)



**Figure 5 Study area**

Source: Ethos Urban.

## 5.2 Community profile

The following community profile of the primary study area (PSA) uses population and employment data from multiple sources. The results of the 2016 ABS Census of Population and Housing, sourced from ABS Table Builder, have been used to identify key socio-economic and demographic characteristics of the PSA community and broader Port Macquarie-Hastings LGA.

### Population and age structure

The PSA and Port Macquarie-Hastings LGA are experiencing modest population growth:

- Between 2011 and 2016, the population increased by around 450 residents, at an average annual growth rate of 16.2%. This was much greater than the average annual growth rate of Port Macquarie-Hastings LGA at 2.6%. This suggests that the area has undergone transformation in recent years, coinciding with development of rural areas to residential.
- As at the 2016 census, the population of the PSA was approximately 1,000 persons. The population of the Port Macquarie-Hastings LGA was around 78,500 persons, which includes the PSA.

The age profile of the PSA is significantly younger than the Port Macquarie-Hastings LGA, with a higher proportion of working age adults:

- This population of PSA was significantly younger than Port Macquarie-Hastings LGA with a median age of 38 compared to 48. However, both have a much higher median age than Greater Sydney's at 36.
- As illustrated in the graph below, the PSA has a high proportion of working age persons at 64%. This was well above the proportion in Port Macquarie-Hastings LGA at 56%. This suggests that the area has a number of people who could find employment opportunities at the site.

The age structure of the PSA and broader LGA is shown in **Figure 6**



**Figure 6 Age structure by five-year age groups, 2016**

Source: ABS Census 2016, Ethos Urban

## Household and dwelling characteristics

The PSA is characterised by family households and low-density housing:

- In the PSA, there is a high proportion of couple only or couple with children households, accounting for around 83% of all household types, compared with 68% across the LGA. Of the family households, 52% were couple with children. With most of these households located within the locality of Thrumster, to the east of the site.
- The proportion of lone person households in the PSA was quite low at 15%.
- Reflecting the high proportion of family households, the average household size in the PSA was 2.9 persons per dwelling, compared to 2.3 in Port Macquarie-Hastings LGA.
- In the PSA, there were a high number of unoccupied dwellings with the occupancy rate at 82%, which was lower than Port Macquarie-Hastings at 90%. Most of these dwellings were within the new development at Thrumster and a lack of occupation may be explained by dwellings having been recently completed at the time of the 2016 Census collection.
- The PSA is a low-density community, with 97% of households living within a separate house. The remainder of dwellings were medium density. In comparison, across Port Macquarie-Hastings LGA, 74% of occupied dwellings were separate houses, 21% were medium density and 3% were high density.

## Tenure and housing costs

The PSA includes new housing developments on the fringe of Port Macquarie, many of which are currently being purchased with a mortgage. There is a comparatively low proportion of renters, which indicates a more established community in the area:

- In the PSA, a majority of dwellings were owned outright (38%) or with a mortgage (49%) with only a small proportion of dwellings being rented (13%). Compared to Port Macquarie-Hastings LGA, the PSA had less dwellings owned outright or being rented, and more dwellings owned with a mortgage. This is due to the new development that is occurring in the area.
- The median monthly mortgage repayment in the PSA was around \$2,030, well above the Port Macquarie-Hastings LGA median of \$1,380.
- In the PSA, the median weekly rent was \$210, which was below the median weekly rent in Port Macquarie-Hastings LGA at \$320.

## Weekly household income

In comparison to the Port Macquarie-Hastings LGA average, the median weekly household of the PSA is significantly higher:

- In the PSA, the population is relatively wealthier compared to the rest of Port Macquarie-Hastings LGA. The median weekly household income was approximately \$1,700, compared to \$1,042 in Port Macquarie-Hastings.

## Relative socio-economic advantage and disadvantage

The PSA has a higher level of relative socio-economic advantage in comparison with the broader Port Macquarie-Hastings LGA:

- As highlighted in the table below, Port Macquarie-Hastings LGA has a relatively higher level of disadvantage across the four indexes compared with the PSA. Amongst regional NSW LGAs, its score across the four indexes is towards the top third but is considerably lower than the scores of LGAs within Greater Sydney.
- The statistical areas that comprises the PSA all had scores above Port Macquarie-Hastings LGA, suggesting that these areas were relatively less disadvantaged than other areas in Port Macquarie-Hastings LGA.

**Table 5 SEIFA Scores in the PSA and Port Macquarie-Hastings**

Study Area	Index of Relative Socio-economic Disadvantage	Index of Relative Socio-economic Advantage and Disadvantage	Index of Economic Resources	Index of Education and Occupation
<b>Primary Study Area</b>				
<i>Wauchope</i>	1055	1049	1074	1035
<i>Port Macquarie - West</i>	1078	1064	1124	1031
<b>Port Macquarie-Hastings</b>	996	979	1005	967

Source: ABS, 2018; Ethos Urban

### Cultural and linguistic diversity

The majority of residents in the PSA and Port Macquarie-Hastings LGA spoke only English, and were born in Australia:

- In the PSA, a significant proportion of persons spoke only English at home (93%).
- Around 88% of residents in the PSA were born in Australia. This was the same proportion as in Port Macquarie-Hastings LGA.

### Aboriginal and Torres Strait Islander residents

There is a significant proportion of Aboriginal and/or Torres Strait Islander residents living in the PSA:

- In the PSA, approximately 40 residents (4%) identified as being of Australian Aboriginal and/or Torres Strait Islander origin, while the proportion was in the LGA was also around 4%.

### Educational attainment

There are comparatively low levels of educational attainment in both the PSA and the Port Macquarie-Hastings LGA:

- Overall, there were fairly low levels of tertiary education in both the PSA and LGA. Around 18% of residents in the PSA and 20% of residents in the LGA had attended a technical or further educational institution or university of other tertiary institution. Around 56% of residents in the PSA had non-school qualifications. This was greater than the proportion in the LGA at 47%.
- Around a third of residents in the PSA and LGA had completed secondary school.

### Workforce status of residents

In the PSA, the majority of residents were employed in Health Care and Social Assistance (19%) followed by Retail Trade (13%) and construction (9%). The distribution of jobs in the PSA was similar to that of Port Macquarie-Hastings LGA. A very small proportion of residents in the LGA worked in Mining (0.4%).

The majority of residents were employed in white collar occupations (74%) compared to 68% in Port Macquarie-Hastings LGA.

### Method of travel to work

Residents within both the PSA and LGA are highly car dependent. Across both the PSA and Port Macquarie-Hastings LGA, a high proportion of residents travelled to work via private vehicle at 73% and 71%, respectively.

### 5.3 Local community and stakeholder groups

There are a number of businesses, community groups and government agencies that have an interest or could be impacted by the proposed development. Interest groups that have been identified that would have an interest in the proposed development include:

**Table 6 Key Stakeholders**

Identified interest groups	
Business and landowners	Local and special interest groups
<ul style="list-style-type: none"> <li>• Cassegrain Wines</li> <li>• Nearby landowners and residences</li> </ul>	<ul style="list-style-type: none"> <li>• Local Aboriginal Land Council               <ul style="list-style-type: none"> <li>– Birpai Local Aboriginal Land Council</li> <li>– Birpai Traditional Owners</li> <li>– Yangaay</li> <li>– Norm Archibald</li> </ul> </li> <li>• Port Macquarie Chamber of Commerce</li> <li>• Residents Action Network</li> </ul>
Government stakeholders	Other
<ul style="list-style-type: none"> <li>• Department of Planning and Environment</li> <li>• Office of Environment and Heritage</li> <li>• Environment Protection Agency</li> <li>• Department of Primary Industries</li> <li>• Roads and Maritime Service</li> <li>• Port Macquarie Hastings Council</li> <li>• NSW Rural Fire Service</li> <li>• North Coast Local Land Services</li> </ul>	N/A

### 5.4 Social infrastructure context

The following section provides an overview of social infrastructure in the area. An overview of the social infrastructure context is provided in order to assess any potential impact on the access and availability of social infrastructure as a result of the proposed development.

As is to be expected for a rural area such as this, there is limited social infrastructure within a walkable catchment of the site (up to 800m). Therefore, this section provides a broader overview of social infrastructure within 5km and 10km of the site, as appropriate to the context. The map at **Figure 7** shows the range of social infrastructure in proximity to the subject site – within 5km and 10km radius of the site.

#### Public open space

There are 87 parks located within 10km of the site. Sancrox Reserve is located within walking distance of the site.

#### Emergency services

There are a number of emergency services located within 10km of the site, including two ambulance stations at Wauchope and Port Macquarie and ten fire stations, including the Sancrox-Thrumster Rural Fire Brigade, in close proximity to the site.

#### Community facilities

There are a range of community facilities within 10km of the site, concentrated in Port Macquarie and Wauchope, including:

- Six clubs
- 20 community facilities (including community halls, surf life saving clubs, and community centres).

## **Libraries**

There are two libraries located within 10km of the site: Wauchope Library and Port Macquarie Library.

## **Cultural facilities**

There are three cultural facilities within 10km of the site – Port Macquarie Regional Gallery, Mid North Coast Maritime Museum and Port Macquarie Historical Society Museum.

## **Education facilities**

There are several schools within 10km of the site, including:

- Two combined primary and secondary schools;
- Two special schools;
- Eight high schools, including St Joseph's Regional College, which is within 5km of the site;
- 12 primary schools;
- Three TAFE campuses at Wauchope and Port Macquarie; and
- Two university campuses (Charles Sturt University and University of Newcastle).

## **Sports and recreation facilities**

There are a range of sports and recreation facilities within 10km of the site, including:

- Three indoor recreation facilities;
- Two swimming pools;
- 13 outdoor courts, including netball, tennis and croquet courts, bowling greens and croquet courts; and
- 28 sports fields, including Tuffin Lane Sports Fields, located within 5km of the site.

## **Childcare centre**

There are three childcare centres within 10km of the site:

- Port Macquarie Community Preschool;
- St Joseph's Preschool and Long Day Care Centre; and
- Fernhill Road Preschool and Long Day Care Centre.

These facilities are not located within walking distance of the site.

## **Aged care facilities**

There are a relatively large number of aged care facilities, nursing homes, retirement villages and hostels located within 10km of the site, including:

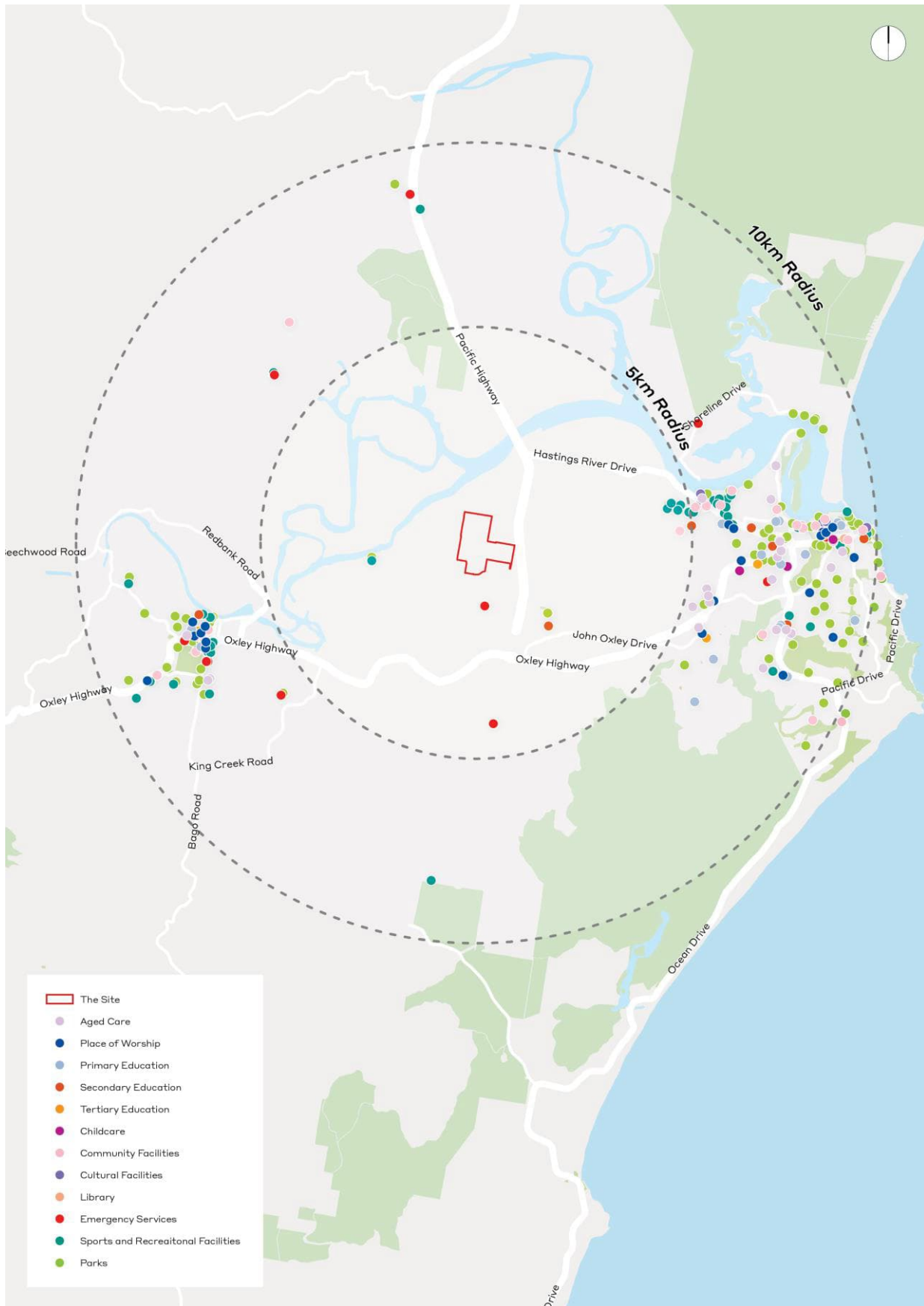
- Nine community homes and nursing homes; and
- Thirteen retirement villages.

These facilities are not located within walking distance of the site.

## **Health facilities**

There are two medical centres located within 10km of the site, at Wauchope and Port Macquarie. Port Macquarie Base Hospital is also located within 10km of the site.





**Figure 7 Social infrastructure context**

Source: Ethos Urban.



## 5.5 Transport and access

The following section identifies the provision of active and public transport in proximity to the site, as well as major roads. As is typical of a rural area such as this, there are limited public and active transport options within vicinity of the site. As identified above, the local community of the PSA is highly car dependent and most trips are undertaken by private vehicle.

### Rail services

Wauchope Station is the closest station to the site. The station is on the NSW Train Link Regional train and coach service, which links regional centres in NSW. Services from Wauchope run to and from Sydney and Brisbane. A coach service runs between Wauchope Station and Port Macquarie.

There is no rail service at Sancro.

### Bus services

There are a number of bus services in close proximity to the site, including:

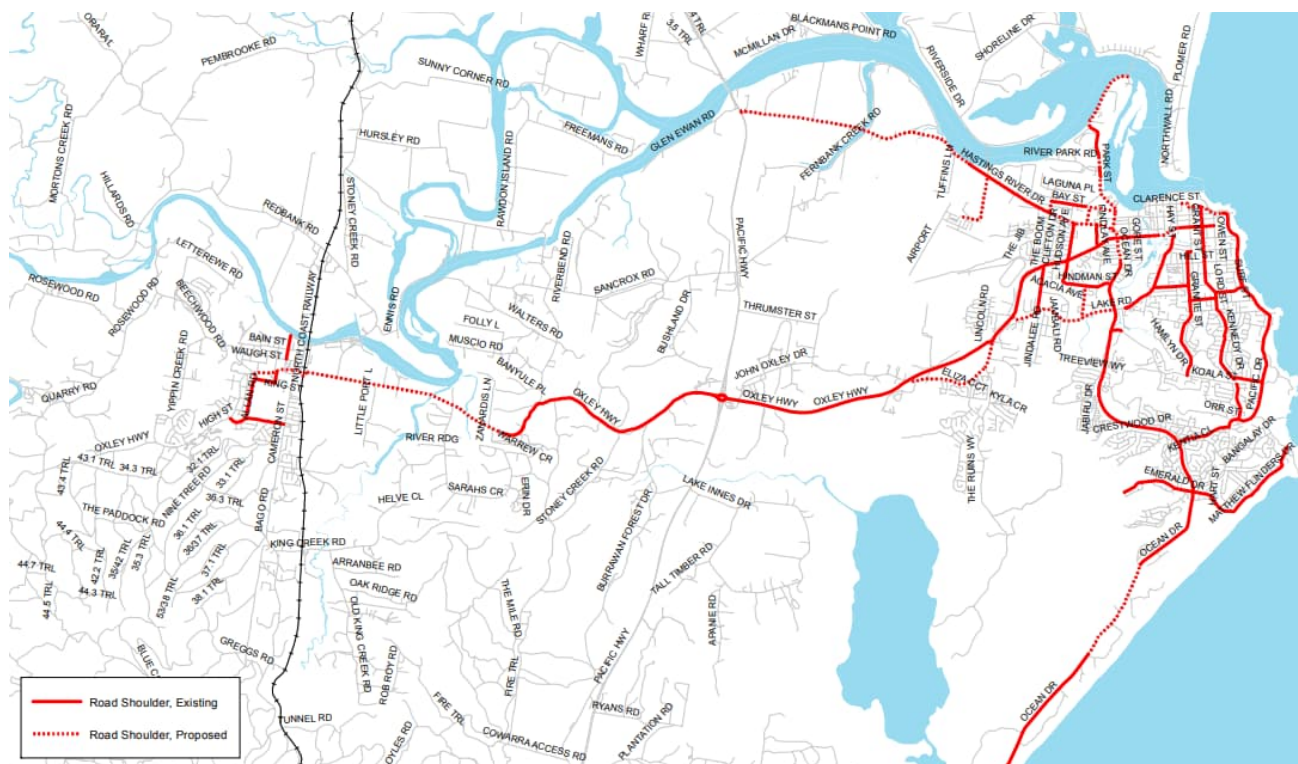
- Route 335W – Wauchope to Port Macquarie, which runs along the boundary of the PSA.
- Route 340 – Kempsey to Port Macquarie, which runs close to the northern edge of the PSA.

There are also a number of bus services within Port Macquarie which are accessible to the site:

- Route 322 – Lighthouse Plaza to Port Macquarie via Shelly Beach;
- Route 324 – Lighthouse Plaza to Port Macquarie via Private Hospital;
- Route 325 – The Ruins Way to Port Macquarie;
- Route 327 – The Settlement City Shopping Centre to St Agnes Village (Loop Service);
- Route 328 – Settlement Point to Base Hospital; and
- Route 329 – Settlement City Shopping Centre to Waniora Parkway at Koala St (Loop Service).

### Active transport

There is an inter-town bicycle path along the road shoulder of Oxley Highway which connects Wauchope and Port Macquarie, as show in **Figure 8**. There are no publicly available cycle paths which traverse the site.



**Figure 8 Inter-town bicycle network - North**

Source: Port Macquarie Hastings Council, 2015.

## 5.6 Local social issues and trends

The following section provides a brief overview of the key social issues and trends that impact Port Macquarie-Hastings including the prevalence of sea changers and retirees, as well as Port Macquarie's status as a major tourism destination.

### Tourism destination and natural values

Port Macquarie is a well-established tourism and holiday destination, with tourists and visitors attracted by the region's natural values, beaches and attractive climate.

In recent years there has been significant investment in improving facilities that enhance the visitor economy, including the development of the Glasshouse art, cultural and heritage centre, the redevelopment of Port Macquarie Airport and enhancing Council's major events portfolio. According to Port Macquarie-Hastings Council's *Destination Management Plan* the strongest attractions in the Greater Port Macquarie region are: water experiences, nature, heritage and culture and sports.<sup>1</sup>

The majority of visitors to the region come from regional NSW (47%) or Sydney (35%). The majority of visitors travel to the region via car (89%). The domestic family market comprises 33% of all visitors, and 32% of all visitors are travelling as couples without children.

### Establishment of CSU Port Macquarie campus

A new Port Macquarie campus of Charles Sturt University has been established, offering courses in accounting, applied science (with a focus on recreation and ecotourism), environmental science management and health services (with a focus on gerontology and healthy ageing).

<sup>1</sup> Port Macquarie-Hastings Council 2017, Port Macquarie Destination Management Plan <<https://www.pmhc.nsw.gov.au/Culture-Sport-Leisure/Tourism/Destination-Management-Plan>>

### **Sea changers and retirees**

Port Macquarie-Hastings LGA is home to a relatively large number of older people – 48.7% of the resident population of Port Macquarie-Hastings was aged over 50 years in 2016. Many of these older people live in retirement villages and aged care facilities in the local area and have been attracted to the area by the Port Macquarie Base Hospital, which is a major referral hospital and provides the majority of specialist and medical surgical services for the broader region. Some of these older people may be experiencing health and wellbeing challenges.

The Port Macquarie State electorate has an estimated 1,857 residents with dementia, which is the third highest prevalence in NSW. Port Macquarie-Hastings Council is also a “dementia friendly community” that regularly coordinated events and programs to create dementia-friendly activities and build greater awareness, acceptance and understanding of dementia in the community.

## 6.0 Economic baseline study: existing economic context

### 6.1 Economic profile

The following section provides a brief overview of the economic profile of the broader Port Macquarie-Hastings LGA.

#### Building approvals

The value of building approvals in the Port Macquarie-Hastings LGA over the 2017/18 financial year was \$315.5 million, which accounts for 0.92% of the total value of building approvals in NSW (Australian economic indicators, .id Consulting). Compared to 2015/16 data, this represents an increase in the value of LGA building approvals from \$250.5 million (+\$65.0 million) and the NSW share from 0.73% (+0.19%) over the period.

#### Industry of employment

The largest employment sectors for Port Macquarie-Hastings LGA residents in 2016 were 'Health care and social assistance' and 'Retail trade' representing shares of 17.5% and 11.5% of working residents respectively. A marginal increase in persons employed in the mining industry was observed between the years 2011 and 2016. Over the same period, employment in the following industries declined:

- Manufacturing (-1.6%);
- Retail Trade (-2%);
- Electricity, Gas, Water and Waste Services (-1.3%);
- Wholesale Trade (-0.7%);
- Financial and Insurance Services (-0.4%); and
- Information Media and Telecommunications (-0.2%).

Compared with Regional NSW, the Port Macquarie-Hastings LGA has a higher percentage of residents employed in the following industries:

- Electricity, Gas, Water and Waste Services;
- Construction;
- Retail Trade;
- Accommodation & Food Services;
- Rental, Hiring and Real Estate Services;
- Administrative and Support Services;
- Education and Training;
- Health Care and Social Assistance; and
- 'Other services'

These industries are largely blue collar in nature, although the LGA's share of employment in the mining industry (0.4%) is significantly smaller than the Regional NSW percentage (2.4%). In contrast, Port Macquarie-Hastings LGA has a strong construction base with 10.6% (or 3,150 residents) employed in this sector compared to 8.7% for Regional NSW.

An overview of the 2016 employment by industry data for the Port Macquarie-Hastings LGA is presented in **Table 7**.

**Table 7 Port Macquarie-Hastings LGA – Industry of employment, 2016**

Industry of Employment	Port Macquarie-Hastings		Regional NSW	
	Number	%	Number	%
Mining	128	0.4%	26,924	2.4%
Information Media and Telecommunications	227	0.8%	9,915	0.9%
Arts and Recreation Services	370	1.2%	13,706	1.2%
Rental, Hiring and Real Estate Services	542	1.8%	15,417	1.4%
Financial and Insurance Services	559	1.9%	22,350	2.0%
Wholesale trade	570	1.9%	22,173	2.0%
Agriculture, Forestry and Fishing	756	2.5%	62,558	5.7%
Electricity, Gas, Water and Waste Services	870	2.9%	14,090	1.3%
Inadequately described or not stated	985	3.3%	42,465	3.8%
Transport, Postal and Warehousing	1,053	3.6%	43,991	4.0%
Administrative and Support Services	1,103	3.7%	35,930	3.3%
Manufacturing	1,116	3.8%	66,323	6.0%
Other Services	1,232	4.2%	43,469	3.9%
Professional, Scientific and Technical Services	1,236	4.2%	50,137	4.5%
Public Administration and Safety	1,620	5.5%	79,528	7.2%
Accommodation and Food Services	2,702	9.1%	86,996	7.9%
Education and Training	2,817	9.5%	99,607	9.0%
Construction	3,153	10.6%	95,768	8.7%
Retail Trade	3,424	11.5%	114,265	10.3%
Health Care and Social Assistance	5,192	17.5%	158,552	14.4%
<b>Total employed persons aged 15+</b>	<b>29,655</b>	<b>100.0%</b>	<b>1,104,164</b>	<b>100.0%</b>

Source: Profile id. Employment by Industry (Port Macquarie-Hastings LGA and Regional NSW)

### Occupational structure

Port Macquarie-Hastings LGA, in which the project is located, has 9,080 residents occupied in construction-related activities such as trades and technicians, machinery operators and drivers and labourers. As **Table 8** shows, resident workers occupied in construction-related activities account for 31% of the LGA's workforce and this highlights the potential of the project to provide new employment opportunities for local workers, especially in the construction phase of the project.

**Table 8 Port Macquarie-Hastings LGA – Occupation of employment, 2016**

Occupation	Number	%	Regional NSW %
Managers	3,339	11.3	13.0
Professionals	5,822	19.6	18.1
Technicians and Trades Workers	4,376	14.8	14.8
Community and Personal Service Workers	3,815	12.9	11.9
Clerical and Administrative Workers	3,915	13.2	12.4
Sales Workers	3,239	10.9	9.6

Occupation	Number	%	Regional NSW %
Machinery Operators and Drivers	1,618	5.5	7.1
Labourers	3,081	10.4	11.4
Not stated or inadequately described	441	1.5	1.6
<b>Total employed persons aged 15+</b>	<b>29,646</b>	<b>100.0</b>	<b>100.0</b>

Source: Community id. Occupation of Employment (Port Macquarie-Hastings LGA and Regional NSW)

### Business structure

Port Macquarie-Hastings LGA's business structure, which is outlined in **Table 9** highlights the strong construction base that exists across the municipality. The construction sector represents the largest business sector in the LGA, comprising approximately 1,290 businesses or 20.4% of total businesses. Additionally, 310 transport-related businesses (transport, postal and warehousing) are located in the municipality representing a further 4.9% of total businesses. Transportation of products to and from the site will be an important activity during both the construction and operational phases of the project.

**Table 9 Port Macquarie-Hastings LGA – Business structure, 2017**

Sector	No.	Share
Agriculture, Forestry and Fishing	643	10.2%
Mining	16	0.3%
Manufacturing	229	3.6%
Electricity, Gas, Water and Waste Services	9	0.1%
Construction	1,294	20.4%
Wholesale Trade	132	2.1%
Retail Trade	415	6.6%
Accommodation and Food Services	322	5.1%
Transport, Postal and Warehousing	312	4.9%
Information Media and Telecommunications	29	0.5%
Financial and Insurance Services	520	8.2%
Rental, Hiring and Real Estate Services	650	10.3%
Professional, Scientific and Technical Services	546	8.6%
Administrative and Support Services	209	3.3%
Public Administration and Safety	13	0.2%
Education and Training	84	1.3%
Health Care and Social Assistance	481	7.6%
Arts and Recreation Services	85	1.3%
Other Services	298	4.7%
Currently Unknown	44	0.7%
<b>Total</b>	<b>6,331</b>	<b>100.0%</b>

Source: ABS Counts of Businesses, 2017

### Labour force structure

Port Macquarie-Hastings LGA has a Labour force of 38,270 persons, of which 1,250 persons are unemployed (September 2018). As highlighted in **Table 10**, this represents an unemployment rate of 3.3%, which is significantly

lower than the Regional NSW rate of 5.6%. This relatively buoyant labour market highlights a strong local economy underpinned by a high level of ongoing construction activity (refer to building approvals data above), which is forecast to continue driven by population growth and demand for new dwellings and local infrastructure and services.

**Table 10 Port Macquarie-Hastings LGA – Labour force structure, September quarter 2018**

	Employed	Unemployed	Labour Force	Unemployment Rate
Port Macquarie Hastings LGA	37,020	1,250	38,270	3.3%
<b>Regional NSW</b>	1,274,100	75,500	1,349,600	5.6%

Source: Department of Employment and Jobs – Small Area Labour Markets, September Quarter 2018  
 Note: Figures rounded

## 6.2 Sancrox Quarry operating overview

The following section provides a brief overview of the operations of Sancrox Quarry.

### Output

Sancrox Quarry currently provides the following products:

- Concrete grade aggregates
- Fill material
- Manufactured sand
- Pre-coated aggregates
- Road base
- Gabion and armour rock
- Drainage materials

Existing output is estimated at 180,00 tonnes pa, after temporarily increasing to 450,000 tonnes pa due to a Council modification (between March 2014 and March 2019). The existing resource life of the quarry is estimated to be approximately three years, with pit development beyond the current extraction limit required to access higher quality rock.

### Key markets

As **Table 11** highlights, products from Sancrox Quarry are extensively used by public and private customers, especially for State/major projects and for commercial development projects. Combined, these two key markets accounted for approximately 70% of product sales in 2018.

**Table 11 Sancrox Quarry – Key Customer Markets (by share), 2017 and 2018**

Customer	2017	2018
Private developers	30%	35%
State/major projects	31%	33%
Concrete aggregates	15%	15%
Port Macquarie- Hastings LGA	14%	8%
Wholesale/retail	10%	8%
<b>Total</b>	<b>100%</b>	<b>100%</b>

Source: Sancrox Quarry  
 Note: Figures rounded

## Competition

A number of operating quarries are located in the Port Macquarie-Hastings LGA, and the broader region (e.g. Kempsey LGA and Mid-Coast LGA). These quarries are listed in **Table 12** and identified in **Figure 9**.

While no data is available on the resource capacity at these quarries, in a locational sense it is important to recognise that Sancrox Quarry is the closest facility to Port Macquarie which is the region's major population centre. In this regard, ongoing and increased production from Sancrox Quarry provides an efficient outcome in terms of cartage costs to customers given the facility's proximate location to urban growth areas and its ease of access to major road infrastructure.

**Table 12 Location of Quarries in Relation to Port Macquarie**

Quarry Name	Location	Distance from Port Macquarie
<b>Hanson Quarries</b>	<b>Sancrox Road, Sancrox</b>	<b>10km</b>
Coastal Quarry Products	Milligans Road, Wauchope NSW 2446	20km
Hy-tec Concrete and Aggregates	Grant's Head, Ocean Drive, Bonny Hills, NSW 2445	24km
Hy-tec Concrete and Aggregates	Yarrabee Road, Cooperabung, NSW 2441	26km
CTK Quarry	Bago NSW 2446	26km
Hy-tec Concrete and Aggregates	Lot 132 Diamond Head Rd, Dunbogan, NSW 2443	36km
Boral Quarries	Bulleys Rd, Johns River NSW 2443	47km
Pacific Blue Metal	Farrawells, Pacific Highway, South Kempsey NSW 2440	47km
NSW Quarry Services	Gowing Hills Road, Dondingalong NSW 2440	58km
Pacific Blue Metal	113 Possum Brush Rd, Possum Brush NSW 2430	96km
Boral Quarries	13 Pacific Highway, Way NSW 2447	98km
Holcim Australia	Jandra Quarry, 15284 Pacific Highway, Possum Brush NSW 2430	98km

Source: Sancrox Quarry

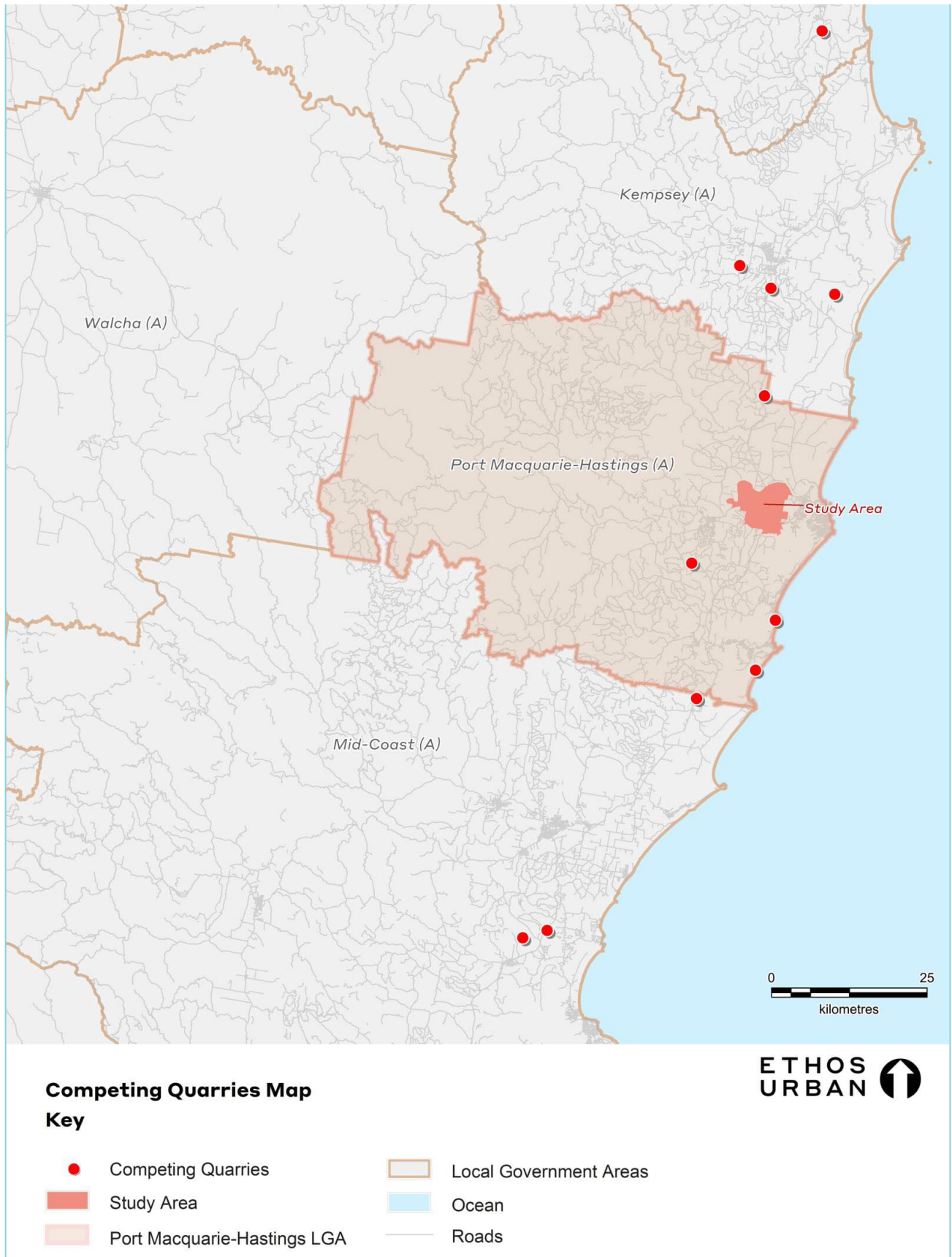
## Employment

Sancrox Quarry currently employs 14 staff, including 13 full time positions and 1 casual position. Additionally, an estimated 20 drivers are contracted by haulage companies to transfer quarry products from Sancrox to local and regional customers (note, the number of drivers varies and is based on market demand).

## Local spending

An estimated \$2.1 million pa in quarry operational expenditure is retained in the Port Macquarie-Hastings LGA economy through local wages and on costs (\$1.0 million), and suppliers and services (\$1.1 million). These figures relate to year ending 2018.





**Figure 9** Location of Competitor Quarries in Relation to Sancrox Quarry

Source: Sancrox Quarry

## 7.0 Forecast future social and economic context

### Key forecast community characteristics

- The PSA is forecast to undergo significant growth by 2036, predominantly in the locality of Thrumster, to the east of the site. However, the community profile of the area is currently forecast to remain consistent with the existing community in the area.
- The project is expected to broadly support economic growth in the area through the construction and operation phases, and through supplying materials to facilitate construction in the surrounding region.

The following section outlines how the PSA and Port Macquarie-Hastings is forecast to change between 2016 and 2036.

The purpose of this section is to better understand how the social context of the site is expected to change in the future by analysing population and employment forecasts and identifying major developments likely to have an impact on the study area. Examining the future social context of the development helps to identify whether the proposed development will reinforce or hinder forecast change in the social environment.

Due to limitations in availability of population forecast data, the definition of the study area is slightly larger than that of the PSA defined in the section above. The PSA in this section also includes the areas of Lake Innes, Riverside and North Shore. To address this, the projected growth rates have been used and applied to the 2016 figures for the PSA.

### 7.1 Forecast community profile

The following section describes the forecast community profile for the area, based on both forecasts that do not take account of the proposed, and forecasts that reflect the growth and development associated with the proposed development. The forecast growth rates from are sourced from forecast.id.

#### Forecast growth and development

The PSA is forecast to undergo significant growth to 2036, generally associated with new development in the locality of Thrumster, in close proximity to the site.

- Between 2016 to 2036, the population of the PSA is forecast to increase by around 9,000 persons to 13,300 persons by 2036. This implies an average annual growth rate of 5.9%, this projected growth rate is much higher than Port Macquarie-Hastings, which is forecast to be 1.3% over this same period. Most of this population growth is forecast to occur within the locality of Thrumster, which is directly south-east of the site.
- In the PSA, the number of dwellings is projected to increase by around 720, to around 1,100 by 2036. The number of households are expected to increase by 700.
- The average household size of the PSA is forecast to increase slightly to 2.84 by 2036. While the average expected household size of the LGA is expected to be 2.61. The increase in average household size is driven by an increase in family households occurring in new developments within the PSA.
- The population of the PSA is expected to age slightly, with an increase in the proportion of persons aged 64 and over. However, this will be offset slightly by an expected increase in persons aged 18 and below. The population of the PSA is expected to age at a greater rate than the LGA.

#### Change arising from proposed development

There is no population change forecast to arise from the proposed development, as it does not include a residential component. There may be some change to the area's economic profile associated with the proposed development, which is discussed in **Section 7.2**.

## Population projections

The population of the Port Macquarie-Hastings LGA is forecast to increase from 79,900 persons in 2016 to 103,990 persons by 2036 (Forecast id. - figures rounded). This represents an increase of +24,090 persons over the 20-year period. Average annual population growth between 2016-2036 is forecast to occur at a rate of 1.3% or +1,200 persons per annum.

## Household and dwelling projections

Between 2016 to 2036, the number of households in the Port Macquarie-Hastings LGA is forecast to increase from 34,100 households to 44,80 households (at a growth rate of +1.3% per annum), while the average household size is forecast to remain at 2.31 persons per household over the period.

The number of dwellings in the Port Macquarie-Hastings LGA is forecast to increase from 37,020 dwellings in 2016 to 47,500 dwellings in 2036 representing a dwelling growth rate of 1.3% per annum over the period. The dwelling occupancy rate over the 20-year period is expected to remain constant at 92%, with 10,480 new dwellings required between 2016 to 2036 to meet population growth demand.

## 7.2 Forecast economic profile

The proposed project will support both business and employment growth in Port Macquarie-Hastings LGA, due to the following factors including:

- Construction phase of the project, which will directly employ local contractors and workers with indirect benefits accumulating through the supply chain some of which will accrue locally.
- Operational phase of the project, which will expand onsite and subcontractor employment; as well as local supply and service purchases which will support business growth.
- Long-term surety of materials supply which will underpin forecast dwelling growth and major infrastructure projects associated with urban growth. This will support construction-related businesses and jobs growth, both directly and indirectly through the supply chain.

These factors are quantified, where possible, Section 10.0 (Economic Impact Assessment).

## 8.0 Community engagement

### Key consultation findings

- To date, a range of engagement methods have been undertaken to gather information from relevant stakeholders, residents and interest groups, including: written correspondence with government and Aboriginal stakeholders and the establishment of a Community Consultative Committee (CCC).
- A Community Consultative Committee has been established and one meeting has to date taken place, at which following issues were raised by community representatives: environmental impacts associated with expanded quarry operations, increased dust, potential land acquisition and the future rehabilitation of the site. A further meeting of the CCC is planned during the exhibition of the EIS (post lodgement), as is the preference of the CCC.

The following section summarises the method and outcomes of community and stakeholder engagement to date, including key issues and aspirations.

Due to the location of the site, and the lack of adjoining communities, there is a limited range of community consultation outcomes.

To date, Hanson has undertaken various consultation activities with the local community and relevant stakeholders. Relevant ongoing consultation and engagement for the Sancrox Quarry and proposed development have included written correspondence with relevant government stakeholders and establishment of a Community Consultation Committee for the project. These activities have enabled Hanson to understand the community's perceptions and values about their environment, their community, Sancrox Quarry and the proposed development.

Consistent with the community consultation objectives of the DP&E's SIA Guideline (Section 2.1) the objective of recent consultation has been to reach a wide variety of stakeholders who are likely to be affected or have an interest in the proposal, increase awareness and understanding of the proposed development, and seek input on issues of concern to guide the ongoing development/refinement of project parameters and inform the impact assessment.

### 8.1 Engagement methods

To date, a number of methods have been used to gather information from the relevant interest groups, stakeholders and local residents about their attitudes regarding the proposed development. These methods included:

- Written correspondence with relevant government stakeholders, including Department of Planning and Environment, Office of Environment and Heritage, Environmental Protection Authority, Department of Primary Industries, Roads and Maritime Services, Port Macquarie Hastings Council, NSW Rural Fire Service, North Coast Local Land Services.
- Written correspondence with Aboriginal stakeholders
- Phone calls with Aboriginal stakeholders
- Establishment and meetings of a Community Consultation Committee (CCC) for the project, including community representatives, a representation from the Port Macquarie Chamber of Commerce, Council, Residents Action Group Network and representatives from Hanson. CCC members are consulting members of the community, and do not have decision-making powers or act as a regulatory body.

Information gathered by the above methods has helped to identify potential impacts to the social environment from the proposed development and their level of significance to the community and stakeholders. These consultation activities provide a context for a further discussion of the outcomes of the consultation process.

Further community and stakeholder engagement are planned in association with the public exhibition of the Planning Proposal. A further CCC meeting is also planned during the exhibition of the Planning Proposal (after lodgement).

## 8.2 Engagement outcomes

A desktop review of previous community and stakeholders' consultation processes has been undertaken to inform this Social Impact Assessment.

### Outcomes of stakeholder engagement

According to the EIS, no issues were raised by government stakeholders.

### Outcomes of community engagement

Community engagement has been coordinated through the establishment of a Community Consultation Committee for the project. Members of the CCC are consulting members of the community, and their discussion around impacts is speculative. It is noted that all mitigation measures that Hanson have agreed to within the EIS mitigate potential impacts explored within the relevant impact assessments.

One meeting has been held on Friday 6 July 2018, and another is planned to be undertaken during the exhibition period for the EIS. The minutes available from this meeting were reviewed, and the following key themes identified:

- Hanson noted that minimal complaints have been received since the Sancrox Quarry was established in 1983. The site has been managed by Hanson since 1996.
- Community representatives raised concerns around the environmental impacts generated by the expanded quarry operations and requested that environmental monitoring requirements be explained regarding air quality, noise, water quality, blasting/fly rock and dust. These issues have also been addressed in the EIS.
- Community representative raised issues regarding potential land acquisition to facilitate the expansion of Sancrox Quarry. Hanson has responded that the project is being planned to prevent land acquisition of surrounding properties.
- Community representatives noted concerns around dust and that residents are concerned with dust generated by the quarry settling on surrounding vegetation and in waterways, and potential impacts on surrounding oyster farms. These issues have been addressed in the EIS.
- Community representatives raised questions regarding rehabilitation of the site and Hanson has invited feedback from the community regarding potential options for future land use at the site.
- Community representatives raised concerns regarding employee safety. Hanson noted that employee safety is highly regulated due to legislation.
- Community representatives requested further information regarding concrete batching plant and concrete recycling plant. Hanson noted that Port Macquarie-Hastings Council already practices concrete recycling, and that the concrete recycling plant on site will not be bringing in demolition waste from beyond the Sancrox Quarry site. Instead, it will recycle waste by-products from the on-site concrete batching plant.

## 9.0 Social impact assessment

### 9.1 Social impact assessment framework

This SIA has been prepared on the basis of the NSW DPE *Social Impact Assessment Guideline for state significant mining, petroleum production and extractive industry development* (September 2017). This assesses social impacts in the context of the following factors:

- Way of life including:
  - How people live, e.g. how they get around, access to adequate housing
  - How people work, for example access to adequate employment, working conditions and/or practices
  - How people play (e.g. access to recreational activities)
  - How people interact with one another on a daily basis)
- Community, including its composition, cohesion, character, how it functions and sense of place
- Access to and use of infrastructure, services and facilities, whether provided by local, state, or federal governments, or by for-profit or not-for-profit organisations or volunteer groups
- Culture, including shared beliefs, customs, values and stories, and connections to land, places, and buildings (including Aboriginal culture and connection to country)
- Health and wellbeing, including physical and mental health
- Surroundings, including access to and use of ecosystem services, public safety and security, access to and use of the natural and built environment, and its aesthetic value and/or amenity
- Personal and property rights, including whether their economic livelihoods are affected, and whether they experience personal disadvantage or have their civil liberties affected
- Decision making systems, particularly the extent to which they can have a say in decisions that affect their lives, and have access to complaint, remedy and grievance mechanisms
- Fears and aspirations related to one or a combination of the above, or about the future of their community

This SIA also responds to the intent, objectives and principles outlined in the International Association for Impact Assessment's (IAIA) International Principles for Social Impact Assessment guideline (2003), which defines Social Impact Assessment as:

*“the process of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions. Its primary purpose is to bring about a more sustainable and equitable biophysical and human environment” (2003, p.5).*

As outlined in the IAIA guideline, social impacts vary in their nature and can be positive or negative, tangible or intangible, quantifiable, partly quantifiable or qualitative. Social impacts can also be experienced or perceived differently by different people and groups within a community.

### 9.2 Scope of this assessment

This social impact analysis assesses the level of potential impact on the community and social environment should the social impacts occur, compared to the baseline scenario of the existing use of the site and future profile of the community.

The purpose of this social impact analysis is to:

- Assess the significance of the identified potential social impacts generated by the proposed development based on the potential frequency and severity of the impact, should it occur;
- Develop social impact mitigation and enhancement options for any identified significant social impacts; and
- Advise Hanson of potential social impact mitigation and enhancement options to help finalise the EIS.



Ultimately there are two main types of social impacts that will arise as a result of the proposed development. First, there are direct impacts caused by the project and which cause changes to occur within the existing community, as measured through the use of social indicators, such as population, health, and employment. Second, there are indirect impacts that are generally less tangible and more commonly relate to matters such as community values, identity and sense of place.

The primary focus of this assessment is the primary study area, which is expected to experience social impacts associated with the proposed development most directly. Impacts to the broader locality will likely to be less pronounced or are likely to involve a particular issue that will also be present within the surrounding site context.

### 9.3 Impact assessment matters and responses

The following section sets out the assessment of social impacts arising from the proposed development and recommended responses, including measures to enhance social benefits and mitigate potentially negative impacts. It includes a risk assessment of the degree of significance of risk, including the envisaged duration, extent, and potential to mitigate/enhance and likelihood of each identified impact. It also sets out recommended mitigation, management and monitoring measures for each identified matter.

Some of the social impacts identified in the DP&E's SIA Guideline are more pertinent to the proposed development than others and have been discussed in greater detail below.

#### 9.3.1 Way of life

DP&E's SIA Guideline defines "way of life" as comprising:

- How people live, for example, how they get around, access to adequate housing;
- How people work, for example, access to adequate employment, working conditions and/or practices;
- How people play, for example, access to recreational activities, and
- How people interact with one another on a daily basis

The proposed development may result in changes to the local population and their way of life due to:

- Increased employment opportunities associated with the construction and operation phases of the project, and
- Increased traffic associated with increased truck movements due.

There is no social infrastructure within walking distance of the site that is likely to be impacted by the expansion of the quarry.

Sancrox Quarry currently employs 14 staff, including 13 full time positions and 1 casual position. Additionally, an estimated 20 drivers are contracted by haulage companies to transfer quarry products from Sancrox to local and regional customers (note, the number of drivers varies and is based on market demand).

The construction workforce for the proposed development is anticipated to be locally sourced from contractors and contracting businesses within the Port Macquarie-Hastings LGA. The local sourcing of construction employees would provide a temporary increase in employment opportunities for businesses in the region, and should the proposed development successfully source future employees locally, there will be no expected increase in local population induced by the project. There would therefore be unlikely to be substantial changes to the demographics of the local community as a result of the project.

The economic baseline assessment also identifies that a high proportion of workers in the Port Macquarie-Hastings LGA are employed in construction-related industries, and it is therefore likely that the workforce skills required during construction are available in the area.

Sancrox Quarry has been operating at this location for over 20 years, and the proposed development would provide continued employment for a further ten years. Should the proposed development not proceed, the resource life of the quarry will end in approximately three years.

## Potential impacts

The proposed development may have the following potential social impacts with relation to way of life in the PSA and broader locality:

- Increased employment opportunities associated with expanded operations at the quarry. Preliminary modelling has suggested that the proposed development will generate 10 new jobs in the PSA. Sancrox Quarry currently employs 14 staff, including 13 full time positions and 1 casual position. Additionally, an estimated 20 drivers are contracted by haulage companies to transfer quarry products from Sancrox to local and regional customers (note, the number of drivers varies and is based on market demand). The strategic policy context has identified that it is a state and local government priority to develop vibrant economies and enhance employment opportunities within the local area, and over a third of resident workers within the Port Macquarie-Hastings LGA are employed in construction related employment.
- Increased diversity of employment opportunities. Currently the economic profile of the area indicates that the largest sectors of industry employment for residents in the area construction, agriculture, fishing and forestry. This proposal is likely to generate new employment opportunities in the mining and resource extraction industry.
- Potential impacts to the way people move through the PSA and surrounding areas due to increased traffic and congestion associated with increased truck movements due to the construction phase and expansion of quarry operations, including both increases in light vehicles delivering construction staff to site and heavy vehicles. During operation, typical daily traffic movements are likely to include:
  - Light vehicle trips transporting staff to and from site concentrated at the start and end times of shifts,
  - Truck trips delivering quarried product and asphalt,
  - Concrete agitator trips to deliver concrete to construction sites,
  - Import of concrete constituents (sand and cement) and
  - Truck trips delivering waste concrete to site for recycling.

The proposed development proposes truck movements and equipment loading 24 hours a day, 365 days a year. If approval is granted, operational traffic associated with the proposed development can take place outside of the daytime period, thus reducing the cumulative impact on traffic during higher volume periods.

The local community of the PSA is highly car dependents and most trips are made by private vehicle – a significant increase in truck and vehicle movements associated with the proposed development may have an impact on residents' ability to access daily living needs, such as local schools, shops and employment centres.

- Demographic change and housing shortages associated with an increased number of workers associated with the expanded quarry operations. This is unlikely due to the limited number of jobs likely to be generated by the development.
- Potential negative social impacts associated with loss of employment at closure of quarry if it is closed within three years – as the existing resource life of the quarry is estimated to be approximately three years, with pit development beyond the current extraction limit required to access higher quality rock.

## Responses / mitigation measures

- Maximise positive social impacts of increased employment opportunities within the PSA through practices that encourage the employment of local residents within the PSA, such as training programs to ensure that local residents have the skills required to take advantage of new employment opportunities.
- The Traffic and Access Assessment completed by ERM identifies that the design capacity, intersection types and standards of the recently completed Sancrox Interchange and Pacific Highway is sufficient to accommodate existing traffic on Sancrox Road (including quarry product delivery trucks that will continue during construction) and the short-term increase traffic associated with the construction phase.
- The Traffic and Access Assessment completed by ERM also identifies that the proposed development will result in an increase in light and heavy vehicle movements during the operational phase, but these trips will be spread over a longer period and so reduce the cumulative impact on traffic during higher volume periods.



- Employment generation opportunities associated with the proposed development are to be realised in line with the recommendations in Section 10.0- Economic Impact Assessment.

Summary	
Overall impact	Mixed
Likelihood	Very high
Duration	Long – over the life of the project
Extent	PSA / Surrounding locality
Severity	Low
Sensitivity	Low
Potential to mitigate/enhance	Medium

### 9.3.2 Community, including its composition, cohesion, character, how it functions and sense of place

The local residents of the PSA have a consistent demographic profile. Residents of the PSA are more likely than the Port Macquarie-Hastings LGA average to be working age adults, living in households with children and born in Australia. They are more likely than the Port Macquarie Hastings average to live in low-density dwellings (separate housing) and have a mortgage, as well as to not have attained a tertiary education. There is a comparatively low proportion of renting households in the PSA, indicating that many residents in the area are established and unlikely to move away from the area in the short term.

The local area is transitioning from a predominantly rural area to a more residential area. Between 2011 and 2016, the PSA grew significantly (16.2%) in comparison with the broader Port Macquarie-Hastings LGA. New development in the area will be concentrated within the Thrumster neighbourhood. It is likely that the new community moving into this area will share many characteristics with the demographic profile of the existing residents of the PSA. As the proposed development does not include a residential component, it is unlikely to significantly impact the composition, cohesion or character of the local community as it does not comprise a residential component and is likely to generate a limited number of additional jobs in the local area (10 new jobs in total).

Sancrox Quarry has operated at this location for over 20 years; it is an established part of the existing community and land use in the area. The proposed development enables the expansion of existing operations significantly but will not change the character or land use of the site. The proposed development also does not create an access barrier between existing communities. Therefore, it is unlikely to significantly affect how the local community functions.

Expanded quarry operations will result in increased dust, noise, truck movements and other disruptions to the natural landscape that may impact sense of place. New ancillary development is also proposed in association with the expansion of quarry operations, including a new concrete batching and recycling facility, and an asphalt production plant. This has the potential to impact on the sense of place of the area, which is closely tied to the local community's relationship to nature and the natural landscape surrounding the Port Macquarie area.

A number of measures have been taken to limit impacts to the environment, and consequently, sense of place in the study area. Specialist technical assessments have been completed for all key impacts associated with the proposed development against current NSW assessment standards and requirements to ensure that the environmental impacts of the proposal can be managed within acceptable limits so as not to pose unacceptable risks or impacts to surrounding receivers. In addition, a range of mitigation measures and management responses have been proposed as part of the technical assessments to manage the environmental impacts of the proposal. These mitigation measures are outlined in detail within the EIS.

New employment opportunities at the site generated through the proposed development have the potential to attract new workers with a different demographic profile into the PSA, however, there are likely to only be ten new jobs generated by this proposed development, which is unlikely to have a significant impact on the community composition of the area.

During the CCC meeting held on 6 July 2018, community representatives raised the issue of the rehabilitation of the site when operations have ceased. Hanson responded that community feedback on the rehabilitation of the site is

welcome. The future rehabilitation of the site has the potential to enhance the community's sense of place associated with the site.

### Potential impacts

The proposed development may have the following potential social impacts with relation to community composition, cohesion, character and sense of place in the PSA and broader locality:

- Potential positive impacts associated with the ongoing operation of the quarry would include the continuation of Hanson's contribution towards the community via ongoing employment opportunities and economic contribution to the broader Port Macquarie-Hastings LGA and region.
- Potential negative impacts to existing residents' "sense of place". The strategic policy review highlighted that residents' sense of place is closely tied to the natural beauty of the Port Macquarie area. The loss of bushland and natural landscapes at the site, the establishment of new surface infrastructure and increased dust, noise and pollution associated with expanded operations at the site, has the potential to disrupt this sense of place. It is a state and local priority to ensure that future development in the local area is balanced with environmental sustainability and biodiversity.

However, it is noted that the Sancrox Quarry has operated at this location for over twenty years and is an established part of the existing community and land use in the area. Although the proposed development will involve increased operations and new infrastructure over a larger site area, it is not a significant change to land use at the site.

### Responses / mitigation measures

- Plan community engagement to specifically address sense of place within the local community, to assist in defining sense of place to be reflected in future planning stages. For example, a community survey, or specific discussion of sense of place with the Community Consultative Committee established for the project.
- Confirm ongoing operation of the Community Consultative Committee as a conduit between the broader community and Hanson.
- Maintain the existing complaints register to continue to monitor issues raised by the community related to community composition, cohesion, character, how it functions and sense of place.
- Actively engage the CCC and broader community to develop a plan for the rehabilitation of the site to maximise community

### Summary

<b>Overall impact</b>	Mixed
<b>Likelihood</b>	Low
<b>Duration</b>	Long
<b>Severity</b>	Low
<b>Sensitivity</b>	Low
<b>Extent</b>	Port Macquarie-Hastings LGS
<b>Potential to mitigate/enhance</b>	Medium

### 9.3.3 Culture, including shared beliefs, customs, values and stories, and connections to land, places, and buildings

ERM was engaged by Hanson to undertake a Heritage Assessment to inform the EIS for the Project, which considered both Aboriginal and non-Aboriginal historic heritage values. The Heritage Assessment provides a combined assessment of the tangible and intangible heritage values relating to the site, as identified during desk-based assessment and field surveys undertaken in November 2017. The Assessment aims to meet the requirements of the SEARs, the Heritage Council of NSW and the NSW Office of Environment and Heritage.

The assessment was undertaken using desktop analysis, archival research, field survey and Aboriginal stakeholder consultation. The assessment was undertaken in accordance with relevant legislative requirements and guidelines as listed in the assessment.

Searches of the local and state heritage registers were conducted in order to identify any historic heritage sites located within the site. A search of the Aboriginal Heritage Information Management System (AHIMS) site register was also conducted, to determine the location of any Aboriginal heritage sites within or surrounding the site.

Based on the desktop assessment, any surviving sites and features of non-Indigenous cultural heritage value within the site would be limited to portable domestic and rural artefacts, or features associated with grazing and timber extraction activities.

The archaeological survey did not result in the identification or recording of Aboriginal archaeological or cultural sites within the proposed extraction area, except for one potential scar tree located to the north of a small farm dam at the western extent.

### Potential impacts

The proposed development may have the following potential social impacts with relation to culture, including shared beliefs, customs, values and stories, and connections to land, places, and buildings (including Aboriginal culture and connection to country):

- Potential negative impacts associated with the unexpected disruption of Aboriginal heritage sites within or surrounding the site. The Heritage Assessment completed by ERM did not result in the identification of any Aboriginal archaeological or cultural sites within the proposed extraction area, apart from one potential scar tree located to the north of the site.
- Potential negative impacts associated with the unexpected disruption of non-Aboriginal heritage sites within or surrounding the site. The Heritage Assessment did not identify any non-Aboriginal historic heritage values associated with the site.

### Responses / mitigation measures

The Heritage Assessment report identifies mitigation measures and responses to the potential impacts outlined above. These mitigation measures have been summarised in the EIS and include:

- In the unlikely event that historic or Aboriginal heritage items are found during works, the Unexpected Finds Protocol outlined in the EIS should be followed.
- In order to comply with best practice principles, all employees and subcontractors will undergo environmental awareness training as part of the site induction to ensure they understand their obligations and responsibilities.

### Summary

<b>Overall impact</b>	Mixed
<b>Likelihood</b>	Low
<b>Duration</b>	Long
<b>Severity</b>	Low
<b>Sensitivity</b>	Low
<b>Extent</b>	PSA
<b>Potential to mitigate/enhance</b>	High

### 9.3.4 Health and wellbeing

Expanded quarry operations at the Sancrox Quarry have the potential to impact the health and wellbeing of residents of the PSA and broader locality through increased environmental emissions associated with the development, including air quality (particulates and odour), noise and water quality. These impacts also have the potential to raise concerns and anxiety within the community regarding health impacts (actual and perceived).

Specialist technical assessments have been completed for all key impacts associated with the proposed development against current NSW assessment standards and requirements to ensure that the environmental impacts of the proposal can be managed within acceptable limits so as not to pose unacceptable risks or impacts to surrounding receivers. In addition, a range of mitigation measures and management responses have been proposed as part of the technical assessments to manage the environmental impacts of the proposal. These mitigation measures are outlined in detail within the EIS.

During the CCC meeting held on 6 July 2018, community representatives raised concerns around the environmental impacts generated by the expanded quarry operations and requested that environmental monitoring requirements be explained regarding: air quality, noise, water quality, blasting/fly rock and dust.

Noise and air quality emissions and surface water discharge from the proposed development would be managed in accordance with regulatory limits placed on the site.

Ongoing consultation and engagement would be carried out to keep the community up to date with activities and management measures at the mine to alleviate and respond to concerns.

#### Potential impacts

The proposed development may have the following potential social impacts with relation to health and wellbeing, including physical and mental health:

- Potential negative impacts to health and wellbeing associated with increased anxiety around perceived and health impacts associated with air quality, noise and water quality impacts.
- Potential negative impacts to health and wellbeing associated with increased dust associated with the expansion of quarry operations, the establishment of a concrete batching plant and recycling facility. The Air Quality and Greenhouse Gas Assessment prepared by ERM has identified the potential for ambient air quality impacts and greenhouse gas emissions from the construction and operation phases. If unmitigated, this has the potential to impact respiratory health of residents and visitors surrounding the site. Additionally, during the 6 July 2018 meeting, the CCC raised concerns that increased dust may also settle on vegetation and waterways in the area.
- Potential negative impacts to health and wellbeing associated with increased noise and vibration associated with the expansion of quarry operations, the establishment of a concrete batching plant and recycling facility and increased construction road traffic. Increased noise and vibration has the potential to create annoyance, interfere with daily activities, interfere with concentration and memory particularly with regard to children's school performance and business activity that depends on quiet surroundings, disrupt sleep and rest patterns and create or exacerbate health concerns such as hearing impairments and cardiovascular health (elevated blood pressure). The assessment completed by ERM identified that without suitable mitigation, "both construction and operational noise levels have the potential to exceed the applicable criteria, limits and thresholds of the INP and ICNG if they are not suitably mitigated. The assessment also identified the blasting overpressure and vibration levels have only a limited potential to exceed the applicable AS2187 criteria and thresholds, as long as normal blast design planning and consideration for potential environmental impacts occurs" (p.xvi). A range of mitigation measures have therefore been identified and are summarised below.
- Potential negative health and wellbeing impacts associated with employee safety during the operation of the quarry, e.g. risk of injury.

#### Responses / mitigation measures

- Water quality – A Hydrology Assessment was conducted by ERM to inform the EIS and identified the potential soil and water impacts related to the proposed development and design predominant mitigation measures, including to manage sediment-laden run-off generated by the site.

A surface water monitoring program has been prepared and the site EPL will need to be varied to incorporate the proposed revision to current water monitoring. The program outlines the proposed surface water monitoring regime for the sediment basins that will be installed as the staged expansion progresses. The EIS notes that “with the implementation of sediment basins, the utilisation of mitigation measures and the development on a SWMP and PESCPs, the potential soil and water impacts of the Project can be effectively managed so that there is no significant, negative impact to the environment.” (p.ix).

Monitoring requirements will also be developed to manage the potential impacts to groundwater, and a groundwater monitoring plan should be developed.

- Air quality – An Air Quality and Greenhouse Gas Assessment has been prepared to support the EIS, which considers all reasonable and feasible mitigation measures to minimise the emissions from the proposed activities at the site, including a range of mitigation measures identified in Section 11 of the EIS.
- Construction noise – The EIS identifies that construction noise impacts may not be reduced to imperceptible or negligible levels for all receptors during all construction activities. However, the recommendations presented in Section 10.5 of the EIS will minimise residual construction noise impacts.
- Operational noise – The EIS identifies that operational noise levels are predicted to exceed the applicable INP operational noise criteria and limits. Therefore, noise reduction and mitigation measures have been established to assist in achieving compliance with relevant guidelines. These measures are outlined in Section 10.5 of the EIS.

#### Summary

<b>Overall impact</b>	Negative
<b>Likelihood</b>	Low
<b>Duration</b>	Long
<b>Severity</b>	Low
<b>Sensitivity</b>	Low
<b>Extent</b>	PSA and surrounding locality
<b>Potential to mitigate/enhance</b>	High

### 9.3.5 Surroundings – amenity

Amenity refers to the way a community experiences a place, including its appearance and is connected to a community's identity and its sense of place. Aesthetic qualities are an important part of amenity, but the broader concept of amenity is determined also by the physical design of a place and the human activity that takes place within it.

Amenity impacts include any factors that affect local residents' and visitors experience of their homes and daily activities, for example, noise, vibration, changes to views or changes to air quality. Changes in amenity may also conflict with community values, contributing to a loss of or change in a community's sense of place, and subsequently a community's perceived identity.

The proposed development has the potential to affect social amenity as a result of changes to the following factors:

- Noise and vibration,
- Air quality and odour,
- Visual impacts,
- Traffic and congestion,
- Biodiversity,
- Water quality, and
- Rehabilitation of the site.

There is only a relatively small residential population associated with the PSA, however, this has grown significantly between 2011 and 2016 as the area transitions from rural to residential. New development in the area will be concentrated within the Thrumster neighbourhood. New residents moving into this area have the potential to be affected by amenity impacts over the stages of the project.

The existing Sancrox Quarry operations form part of the surroundings for the proposed development, as the area has been operating as a quarry for over 20 years. There are no negative social impacts associated with changes to land use at the site, as the proposed development will not result in changes to the land use of the area.

#### Potential impacts

The proposed development may have the following potential social impacts with relation to surroundings, including access to and use of ecosystem services, public safety and security, access to and use of the natural and built environment, and its aesthetic value and/or amenity:

- Potential negative social impacts associated with increased operational and construction noise. Increased noise and vibration has the potential to create annoyance, interfere with daily activities, interfere with concentration and memory particularly with regard to children's school performance and business activity that depends on quiet surroundings, disrupt sleep and rest patterns and create or exacerbate health concerns such as hearing impairments and cardiovascular health (elevated blood pressure). The assessment completed by ERM identified that "both construction and operational noise levels have the potential to exceed the applicable criteria, limits and thresholds of the INP and ICNG if they are not suitably mitigated. The assessment also identified the blasting overpressure and vibration levels have only a limited potential to exceed the applicable AS2187 criteria and thresholds, as long as normal blast design planning and consideration for potential environmental impacts occurs" (p.xvi). Increases to existing noise is likely to be perceived negatively by the surrounding community.
- Potential negative social impacts associated with reduced air quality due to expanded quarry operations, the establishment of a concrete batching plant and recycling facility. If unmitigated, this has the potential to impact respiratory health of residents and visitors surrounding the site. Additionally, increased dust may also settle on vegetation and waterways in the area, as identified by the CCC during the 6 July 2018 meeting. This is likely to reduce the overall amenity of the area.
- Potential negative social impacts associated with visual impacts related to the proposed development:

- Existing landforms and vegetation will continue to screen the project site from the views of rural residential properties located to the north, south and west of the proposed development, resulting in no change to visual amenity.
- Nearby commercial and industrial areas to the east of the site have the potential to be affected due to the removal of a vegetative buffer to the east of the site, which will result in greater exposure of the site to passing traffic along the Pacific Highway and Cassegrain Wintery. However, the EIS identifies that the speed of traffic and interrupted view across the highway is unlikely to result in substantial change to visual amenity in the area.
- Potential negative social impacts associated with increased traffic associated with both the construction and operational phases. The site currently generates an average of 42 heavy vehicle trips per day. The expanded quarry operations will increase average truck volumes to approximately 200 truck trips per day (a 'trip' is two movements – in and out of the site). This is a significant increase of approximately 158 additional heavy vehicle trips per day on Sancrox Road. It is noted that surrounding road upgrades have assisted in transport managements, but increased traffic and congestion is likely to have an impact on the surrounding area.
- Potential negative social impacts associated with loss of biodiversity at the site due to the clearing of 48 hectares of bushland.
- Potential negative social impacts associated with pollution of surface and ground water associated with the site, if unmitigated.
- Potential negative social impacts associated with the inappropriate rehabilitation of the site when operations have ceased.

#### Responses / mitigation measures

- Air quality – An Air Quality and Greenhouse Gas Assessment has been prepared to support the EIS, which considers all reasonable and feasible mitigation measures to minimise the emissions from the proposed activities at the site, including a range of mitigation measures identified in Section 11 of the EIS.
- Construction noise – The EIS identifies that construction noise impacts may not be reduced to imperceptible or negligible levels for all receptors during all construction activities. However, the recommendations presented in Section 10.5 of the EIS will minimise residual construction noise impacts.
- Operational noise – The EIS identifies that operational noise levels are predicted to exceed the applicable INP operational noise criteria and limits. Therefore, noise reduction and mitigation measures have been established to assist in achieving compliance with relevant guidelines. These measures are outlined in Section 10.5 of the EIS.
- Undertake consultation with the CCC and broader community regarding options for the potential future rehabilitation of the site when operations have ceased, to maximise the positive social benefits to the local community.
- During operation, the above potential impacts will be managed at the site via the following management plans: Air Quality Management Plan, Noise and Blast Management Plan, Site Water Management Plan and Rehabilitation Management Plan.

Summary	
Overall impact	Negative
Likelihood	Medium
Duration	Long
Severity	Low
Sensitivity	Medium
Extent	PSA
Potential to mitigate/enhance	Medium



### 9.3.6 Personal and property rights

Impacts associated with personal and property rights, including whether economic livelihoods are affected, and whether they experience personal disadvantage or have their civil liberties affected will be minimal.

The possibility of land acquisition being triggered by the proposed development was raised by the CCC, and Hanson has responded that the project is being specifically engineered to avoid this possibility.

These impacts are considered to be possible but minimal in consequence.

#### Potential impacts

The proposed development may have the following potential social impacts with relation to personal and property rights, including whether their economic livelihoods are affected, and whether they experience personal disadvantage or have their civil liberties affected:

- Potential impacts to surrounding businesses and residents associated with increased congestion and traffic movements due to expanded operations.
- Potential environmental impacts related to water quality, noise and vibration and air quality that may affect surrounding landowners.

#### Responses / mitigation measures

- As discussed in Section 9.0 above, the above impacts would be managed in accordance with regulatory requirements to ensure acceptable limits are met at nearest receptors.

#### Summary

<b>Overall impact</b>	Negative
<b>Likelihood</b>	Medium
<b>Duration</b>	Long
<b>Severity</b>	Low
<b>Sensitivity</b>	Low
<b>Extent</b>	PSA



### 9.3.7 Decision making systems

Impacts associated with decision making systems, and the extent to which stakeholders and the community can have a say in decisions that affect their lives, and have access to complaint, remedy and grievance mechanisms are limited. Environmental regulation at the quarry would be governed by its development consent and associated management framework, including complaint handling mechanisms to address and remedy issues raised by the community.

Hanson will continue to engage with the community and affected stakeholders via the Community Consultative Committee and other mechanisms to ensure that stakeholders are aware of their rights under the development consent and have the opportunity to provide feedback on the project during construction and operational phases.

Impacts to individual's decision-making capacity and systems are considered possible but minimal in consequence.

#### Potential impacts

The proposed development may have the following potential social impacts with relation to decision making systems, particularly the extent to which they can have a say in decisions that affect their lives, and have access to complaint, remedy and grievance mechanisms:

- Potential impacts associated with residents and stakeholders being unaware of their rights and/or anxiety associated with feeling they are unable to provide feedback on the proposed development.

#### Responses / mitigation measures

- Ongoing operation of the Community Consultative Committee throughout the life of the project.

#### Summary

<b>Overall impact</b>	Mixed
<b>Likelihood</b>	Low
<b>Duration</b>	Medium
<b>Severity</b>	Low
<b>Sensitivity</b>	Low
<b>Extent</b>	PSA and Port Macquarie Hastings LGA
<b>Potential to mitigate/enhance</b>	High

### 9.3.8 Access to and use of infrastructure, services and facilities

As is to be expected with a quarry site located in a rural area, the proposed development is not within walking distance to any social infrastructure. There are a limited number of social infrastructure assets within 5km of the site, including emergency services, reserves and sports fields. These facilities will not be affected by expanded operations at Sancrox Quarry.

#### Potential impacts

The proposed development may have the following potential social impacts with relation to access to and use of infrastructure, services and facilities within the surrounding locality, whether provided by local, state, or federal governments, or by for-profit or not-for-profit organisations or volunteer groups include:

- Potential negative impacts associated with increased traffic and congestion for residents seeking to access social infrastructure in the surrounding locality.

#### Responses / mitigation measures

- The Traffic and Access Assessment completed by ERM identifies that the design capacity, intersection types and standards of the recently completed Sancrox Interchange and Pacific Highway is sufficient to

accommodate existing traffic on Sancrox Road (including quarry product delivery trucks that will continue during construction) and the short-term increase traffic associated with the construction phase.

- The Traffic and Access Assessment completed by ERM also identifies that the proposed development will result in an increase in light and heavy vehicle movements during the operational phase, but that these trips will be spread over a longer period and thus reduce the cumulative impact on traffic during higher volume periods.

Summary	
Overall impact	Mixed
Likelihood	Low
Duration	Medium
Severity	Low
Sensitivity	Low
Extent	PSA and Port Macquarie Hastings LGA
Potential to mitigate/enhance	High

### 9.3.9 Fears and aspirations

The proposed development has the potential to result in impacts related to fears and aspirations regarding one or a combination of the above social impacts, as outlined in **Sections 9.3.1 to 9.3.8** or about the future of the community.

Potential impacts
The proposed development may have the following potential social impacts with relation to fears and aspirations about social impacts or about the future of the community, including:
<ul style="list-style-type: none"> <li>Potential negative impacts associated with community opposition to extractive industry projects in general (e.g. related to greenhouse gas and climate change impacts) and concern regarding the cumulative impacts of extractive industries on the broader Port Macquarie-Hastings LGA landscape.</li> </ul>

Responses / mitigation measures
<ul style="list-style-type: none"> <li>The EIS outlines a number of management and mitigation measures related to the above social impacts and aims to minimise these issues, as discussed above.</li> </ul>

Summary	
Overall impact	Mixed
Likelihood	Low
Duration	Medium
Severity	Low
Sensitivity	Low
Extent	PSA and Port Macquarie Hastings LGA
Potential to mitigate/enhance	High

## 10.0 Economic impact assessment

### 10.1.1 Resource significance

The expansion of Sancrox Quarry, as per the proposed project, will increase resource supply considerably at the facility over the coming years. While actual annual production levels will be subject to market conditions, Hanson estimate:

- Production of concrete grade aggregates, fill material, manufactured sand, pre-coated aggregates, road base, gabion and armour rock, drainage materials etc of up to 750,000 tonnes pa
- Asphalt production of up to 50,000 tonnes pa
- Recycled concrete production of up to 20,000 tonnes pa
- Gross market value of available resource is estimated at approximately \$24 million pa (2019 dollars), based on annual production of 750,000 tonnes.

These resources will be important in supporting strong urban and infrastructure growth forecast in the Port-Macquarie-Hastings LGA and broader region over the coming decades. The role of Sancrox Quarry in supporting major projects is highlighted by the product provided for the now completed Sancrox Interchange and Oxley Highway to Kempsey Pacific Highway Upgrade projects.

### 10.1.2 Demand considerations

Resource demand will be driven by increased sub-divisions for residential and industrial developments across the Mid-North Coast region, and major infrastructure projects (e.g. roads). This will include concrete aggregate supply to Port Macquarie and Taree Concrete plants for construction, as well as road base and fill material.

Examples of development and potential development are as follows:

- Port Macquarie: Ascot Park, Thrumster, Sovereign Hills, Ocean Drive upgrade, Port Macquarie Ring Road, Lake Cathie, Bonny Hills, Rainbow Beach development, Lakewood.
- Sancrox: Expressway, Spares industrial development, Le Clos and Freeman residential developments
- Wauchope: Crosslands and Beechwood residential developments, road developments to Walcha.

Additional production capability will provide improved efficiencies and allow Sancrox Quarry to support developments beyond Taree and Kempsey, with an estimated range of 100km.

### 10.1.3 Cartage costs considerations

The central location of Sancrox Quarry to major urban development, transportation infrastructure and customers allows for distribution of product in an efficient and cost-effective manner. Should the proposed project not proceed, and the existing resources were to be exhausted, this would likely lead to a scenario where similar resources would need to be sourced from more distant locations leading to an increase in cartage costs, which would generally be passed on to the end customer (e.g. Council, developers, wholesalers etc).

### 10.1.4 Benefit Assessment

#### Project investment

Project investment of \$12.5 million will be required to complete the expansion of Sancrox Quarry, with this investment likely to benefit the regional economy in terms of employment, business contracts and supply chain impacts. This is evidenced by the strong construction-related business and workforce base available in Port Macquarie-Hastings LGA to service the project (refer to Chapter 6).

Based on similar projects undertaken by Hanson, the project has the potential to be 70%-90% locally sourced (90% represents a local company securing the contract to build and design the plant, using domestic steel).

## Employment generation

Employment generation will occur during both the construction and operational phases of the project, which is estimated as follows:

- Construction employment of 80 direct Full Time Equivalent (FTE) jobs over the development phase. This is based on allocating 50% of investment on labour and applying an average of \$80,000 per FTE construction job (ABS Average Weekly Earnings, Australia Nov 2018). In addition to direct employment, 130 further FTE jobs will be supported in the wider economy through the employment multiplier effect (based on the ABS multiplier for 'other construction' of 2.6). In total 210 FTE jobs will be generated through the construction phase of the project on a direct and indirect basis.
- Operational employment of +10 new FTE jobs (compared to the existing situation), comprising:
  - Shift supervisor: 1 FTE Job
  - Operators: 5 FTE jobs
  - Truck drivers: 2 FTE jobs
  - Weighbridge operator: 1 FTE job
  - Fitter: 1 FTE job

In addition to direct employment, 35 further FTE jobs (rounded) will be supported in the wider economy through the employment multiplier effect (based on the ABS multiplier for 'other mining' of 4.3). It total 45 FTE jobs will be generated through the operational phase of the project on a direct and indirect basis.

## Local spending stimulus

The additional employment generation associated with the operations of the expanded quarry, represents a 75% uplift in labour (from 13 jobs to 23 jobs) which will have a flow on stimulus impact to the Port Macquarie-Hastings economy (assuming these new employees are resident workers). Additionally, increased local purchases of goods and services are likely to occur due to the expanded operations.

Based on existing wage/purchase stimulus of \$2.1 million pa (refer to Section 6.2) and applying a 75% uplift, an additional \$1.6 million pa (2019 dollars) will be generated in local stimulus through the operational phase of the project.

## Concrete recycling

The expansion of Sancrox Quarry will include the development of a recycled concrete processing plant which has the capacity to produce up to 20,000 tonnes of concrete pa. The concrete recycling facility will therefore contribute to positive environmental benefits by diverting concrete waste product from landfill.

## Tax implications

Sancrox Quarry will be liable for higher State land taxes once the operational phase of the expanded quarry commences. The uplift in land taxes will be based on the higher extraction levels from the site.

Additional revenues may also be payable to Council associated with increased road maintenance costs for the local road network due to higher truck volumes to and from the quarry.

## Macro-economic considerations

As with all commodities, macro-economic factors such as economic growth, changes in market prices and movements in interest rates can affect demand for product.

With regard to the types of product to be sourced from the expanded Sancrox Quarry, it is unlikely demand for these products will be impacted significantly by such macro-economic factors for the following reasons.

- Products from the expanded quarry will be focused entirely on the domestic market (principally local/regional markets); therefore, output will not be subject to the type of volatility often associated with export-focused commodities (e.g. metals, coal)

- Population and dwelling growth forecasts remain strong at a local and regional level (refer to section 6.1), underpinning significant demand for quarry resources into the future – which includes infrastructure projects which support urban growth.

- NSW economic growth remains strong, with the 2018-19 NSW Budget noting:

*“The New South Wales economy has been exceptionally strong over the last few years with the outlook for growth to remain above trend this year and for the next two years”.*

The more recent 2018/19 NSW Budget Half-Yearly Review, forecasts employment to increase at between 1.25% to 1.50% pa to 2021/22, while unemployment is expected to remain at approximately 4.5%. Gross State Product (GSP) is projected to remain steady (and above long-term trends) at 2.50% between 2018/19 and 2021/22. The Half-Yearly Review also notes the State Government's infrastructure investment pipeline is \$89.7 billion over the next four years, which represents an upward revision of \$2.5 billion since the Budget.

- Interest rates have been at historical lows and stable for some time, with the Reserve Bank of Australia's official cash rate pegged at 1.5% since August 2016. The RBA's outlook indicates further stability, with only minor movements in the base rate (up or down) likely in the short-medium term.



## 11.0 Concluding comments

This report has considered a range of social impacts arising from the proposed expansion of operations at Sancrox Quarry, including impacts to way of life, community composition and character, culture, health and wellbeing, surroundings, personal and property rights, decision making systems and access to and use of infrastructure. This report has also considered economic impacts arising from the proposed development, including resource significance, demand considerations, cartage cost considerations, employment and other economic considerations.

As identified in Section 9.0 and Section 10.0, the proposed development is likely to have a mixed impact on the existing primary study area and surrounding Port Macquarie-Hastings LGA.

- The social impacts of the proposed expansion of operations at Sancrox Quarry are likely to be generally consistent with existing operations at Sancrox Quarry but increased in line with the increased scale of operations – for example impacts associated with the rise in truck movements.
- There are potential negative social impacts associated with increased traffic and heavy vehicle movements, increased noise and vibration, impacts to air and water quality and clearing of bushland, which will need to be appropriately mitigated to prevent impacts to the sense of place and amenity of the surrounding area. However, the quarry has operated at this location for over 20 years and the expansion of operations at this site does not involve a significant change to land uses at this location.
- There are a range of likely positive economic benefits associated with the expansion of Sancrox Quarry at this location including:
  - Employment growth at the quarry and in the broader community – which also brings potential social benefits to the community associated with increased business expenditures and expanded employment opportunities
  - Efficient and cost-effective delivery of product to customers/end users
  - Environmental benefits through the diversion of used concrete from landfill.
- The expansion of the quarry will also support urban growth resource needs, stimulated by ongoing population expansion and the proposed pipeline of major State Government infrastructure investment projects in the area.

Therefore the overall impact of the proposed development at this location is likely to be positive, provided that the localised potential negative social impacts associated with increased traffic and heavy vehicle movements, increased noise and vibration, impacts to air and water quality and clearing of bushland are appropriately mitigated and monitored, as set out in the Environmental Impact Statement (dated October 2018).

## Appendix A. Strategic Policy Context

North Coast Regional Plan 2036	
NSW Department of Planning and Environment	
Purpose and vision	<p>The Department of Planning and Environment's <i>North Coast Regional Plan 2036</i> identifies a high-level vision for the North Coast region. The plan intends to make the North Coast of NSW the <i>"best region in Australia to live, work and play thanks to its spectacular environment and vibrant communities"</i>. The purpose of the plan is to provide a strategic overview of the future of the North Coast region, which will in turn inform more specific and local strategic plans.</p> <p>The plan recognises the importance of Port Macquarie as a significant regional centre of the North Coast, which provides a primary anchor for growth, new jobs and more diverse housing and services. Furthermore, this plan intends to support and upgrade infrastructure, such as the Pacific Highway, connecting Port Macquarie to the rest of the North Coast Region and other major cities.</p> <p>The North Coast Regional Plan identifies that the area is likely to experience significant growth in population and construction, and that the associated infrastructure necessary to support this growth needs to be well planned and staged.</p> <p>The plan also emphasises a variety of regional priorities for the Port Macquarie area. These are:</p> <ul style="list-style-type: none"> <li>• Manage and support growth in Port Macquarie;</li> <li>• Deliver housing and job opportunities in Port Macquarie, Wauchope, Lake Cathie, Bonny Hills and Camden Haven;</li> <li>• Protect environmental assets and important farmland areas that sustain the agricultural and tourism industries;</li> <li>• Maximise opportunities associated with growth in the Hunter region and the increased connectivity provided by the Pacific Highway upgrade and digital technology.</li> </ul>
Key actions	<p>The following key actions of the North Coast Regional Plan are relevant to the proposed development:</p> <p><i>Goal 1: The most stunning environment in NSW</i></p> <ul style="list-style-type: none"> <li>• <i>Direction 1: deliver environmentally sustainable growth,</i></li> </ul> <p><i>Goal 2: A thriving interconnected economy</i></p> <ul style="list-style-type: none"> <li>• <i>Direction 6: Develop successful centres of employment</i></li> <li>• <i>Direction 9: Strengthen regionally significant transport corridors</i></li> <li>• <i>Direction 13: Sustainably manage natural resources</i></li> </ul> <p><i>Goal 3: Vibrant and engaged communities</i></p> <ul style="list-style-type: none"> <li>• <i>Direction 21: Coordinate local infrastructure delivery</i></li> </ul>

## Mid North Coast Regional Strategy 2006-2031

### NSW Department of Planning and Environment

Purpose and vision	<ul style="list-style-type: none"> <li>The <i>Mid North Coast Regional Strategy 2006-2031</i> was prepared by the NSW Department of Planning and Environment to provide an outline for the future of the Mid North Coast region of NSW.</li> <li>The strategy intends to continue and protect the environment, cater to increased housing and employment land demand, encourage the growth of regional centres in the area, and protect the character and community on the Mid North Coast.</li> <li>The plan emphasises the need to capitalise on the opportunities and prosperity of the communities, while promoting healthy and sustainable communities and environments.</li> </ul>
Key actions	<p>The following actions from the Mid North Coast Regional Strategy 2006-2031 directly relate to the proposal:</p> <ul style="list-style-type: none"> <li><i>Ensure an adequate supply of land exists to support economic growth and the capacity for an additional 48,500 jobs in the Region by protecting existing commercial and employment areas and securing sufficient land to support new employment opportunities.</i></li> <li><i>Encourage the growth and redevelopment of the Region's four major regional centres and six major towns as a means of protecting sensitive coastal and natural environments and strengthening the economic and administrative functions of these centres as well as meeting increased housing density targets.</i></li> </ul>

## Towards 2030: Community Strategic Plan

### Port Macquarie Hastings Council

Purpose and vision	<p><i>Towards 2030</i> is Port Macquarie Hasting Council's Community Strategic Plan (CSP), setting out the community's vision for the area over the next 10 years, and identifies key strategies and goals to achieve this vision. The CSP is based on extensive community consultation undertaken in 2008 and 2009.</p> <p>By 2030, this plan envisages that the community will be engaged with local democracy, accessing quality infrastructure, benefiting from well designed and connected urban areas and enjoying economic prosperity and adequate educational resources and training.</p> <p>This CSP informs the operational and development plan implemented by the Port Macquarie Hastings Council. In turn, the operational and development plan are updated annually to ensure the CSP continues to be implemented within the given timeframe and budget.</p>
Key actions	<p>The following key actions of the <i>Towards 2030 CSP</i> are relevant to the proposed development:</p> <p><i>Theme 1: Leadership and Governance</i></p> <ul style="list-style-type: none"> <li><i>1.1 Maintain strong partnerships between all stakeholders – local, state and federal – so that they are effective advocates for the community</i></li> <li><i>1.4 Use innovative, efficient and sustainable practices</i></li> </ul> <p><i>Theme 2: Your Community Life</i></p>

## Towards 2030: Community Strategic Plan

- 2.4 Empower the community through encouraging active involvement in projects, volunteering and events
  - 2.5 Promote a creative and culturally rich community
- Theme 3: Your Business and Industry*
- 3.1 Embrace business and stronger economy
  - 3.2 Create vibrant and desirable places
  - 3.3 Embrace opportunity and attract investment to support the wealth and growth of the community
  - 3.4 Partner for success with key stakeholders in business, industry, government, education and the community.
- Theme 4: Your Natural and Built Environment*
- 4.3 Facilitate development that is compatible with the natural and built environment
  - 4.6 Restore and protect natural areas
  - 4.8 Increase awareness of issues affecting our environment, including the preservation of flora and fauna

## Urban Growth Management Strategy

### Port Macquarie Hastings Council

Purpose and vision	<p>The Urban Growth Management Strategy was prepared by the Port Macquarie Hastings Council to provide a plan that identifies opportunities for new economic development and housing that will meet future needs of the growing Port Macquarie Community. Specifically, this strategy aims to provide a framework for decisions related to business, housing and infrastructure.</p> <p>The plan identifies some key areas for growth, including housing supply and type, economic development and employment, health and education opportunities, tourism and infrastructure.</p>
Key actions	<p>The following key actions of the <i>Urban Growth Management Plan</i> are relevant to the proposed development:</p> <p><i>Principles for economic growth</i></p> <ul style="list-style-type: none"> <li>• <i>Principle 5 – Connectivity: Promote connectivity between employment centres, accessibility for the users of business and employment areas and take advantage of freight and transport networks.</i></li> <li>• <i>Principle 6 – Industry: Provide a generous supply of industrial land to cater for a range of industry types to meet the forecast needs of the Port Macquarie-Hastings community to 2036.</i></li> </ul>

## Economic Development Strategy

### Port Macquarie Hastings Council

Purpose and vision	<p>The Economic Development Strategy prepared by Port Macquarie Hastings Council envisages the region to be “a successful place that has a vibrant, diversified and resilient regional economy for people to live, learn, work, play and invest.” The plan</p>
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Economic Development Strategy	
	<p>aims to “lead, create and proactively support an environment that simulates sustainable industry, business and investment growth”.</p> <p>This plan also outlines key actions for council and their role in meeting the plan’s objectives.</p> <p>The plan has five outcomes to reflect the strategic objectives of the plan:</p> <ul style="list-style-type: none"> <li>• Embracing business and a strong economy;</li> <li>• Providing the foundations;</li> <li>• Creating vibrant and desirable places;</li> <li>• Driving opportunity; and</li> <li>• Partnering for success.</li> </ul>
Key actions	<p>The following key actions of the <i>Economic Development Plan</i> are relevant to the proposed development:</p> <p><i>Embracing business and a stronger economy</i></p> <ul style="list-style-type: none"> <li>• 2. <i>Economic considerations are central to the activities of Council.</i></li> </ul> <p><i>Providing the foundations</i></p> <ul style="list-style-type: none"> <li>• 5. <i>Ensure appropriately zoned land and precinct planning to encourage business investment and the development of new industries</i></li> <li>• 6. <i>Prioritise, advocate and provide leadership in the delivery of infrastructure projects that will make Port Macquarie-Hastings the premier place to live, learn, work, play and invest on the North Coast</i></li> <li>• 7. <i>Work with key stakeholders to implement major capital works projects.</i></li> </ul> <p><i>Driving Opportunities</i></p> <ul style="list-style-type: none"> <li>• 16. <i>Plan for current and future workforce needs</i></li> <li>• 17 <i>Identify and secure grant funding to support economic development initiatives</i></li> </ul> <p><i>Partnering for Success</i></p> <ul style="list-style-type: none"> <li>• 19. <i>Provide timely support to existing and emerging industries in a partnership capacity to encourage growth and sustainability.</i></li> <li>• 20. <i>Work closely with local business networks and organisations to build their capacity and facilitate the growth of existing enterprises.</i></li> </ul>

Biodiversity Strategy 2017-2030	
Port Macquarie Hastings Council	
Purpose and vision	<p>The <i>Biodiversity Strategy 2017-2030</i> was prepared by Port Macquarie Hastings Council, and aims to address the environmental concerns within the Towards 2030 CSP.</p> <p>This strategy identifies the most important biological areas in the LGA and identifies key linkages and connections between these areas. Furthermore, the plan categorizes the threats to biodiversity, and defines actions that need to be undertaken to protect priority areas.</p>

Biodiversity Strategy 2017-2030	
	<p>The <i>Biodiversity Strategy 2017-2030</i> directly links to the key goals outlined in the <i>Towards 2030 Community Strategic Plan</i>, including:</p> <ul style="list-style-type: none"> <li>• Goal 4.6 Restore and Protect Natural Areas</li> <li>• Goal 4.3 Facilitate development that is compatible with the natural and built environment</li> <li>• Goal 4.8 Increase awareness of issues affecting our environment including preservation of flora and fauna</li> </ul>
Key actions	<p>The following actions from the <i>Biodiversity Strategy 2017-2030</i> relate to the proposal.</p> <p><i>Objectives of the Strategy</i></p> <ul style="list-style-type: none"> <li>• 1. Maintain and improve biodiversity and ecological processes by protecting, rehabilitating and managing native vegetation across all land tenures, particularly those area with high biological value.</li> <li>• 3. Contribute to identifying and mitigating threats acting on biodiversity values.</li> <li>• 6. Work cooperatively with regional, state and federal stakeholders on biodiversity conservation initiatives.</li> </ul>



Greater Sancrox Structure Plan 2014-2034	
Port Macquarie Hastings Council	
Purpose and vision	<ul style="list-style-type: none"> <li>The <i>Greater Sancrox Structure Plan 2014-2034</i> was prepared by the Port Macquarie Hastings Council to investigate and plan for the future desired character of the area. It intends to provide a coordinated direction for land use, environmental management and service infrastructure planning for the area at a strategic level.</li> <li>The key objective of the plan is to ensure adequate land is made available to facilitate growth for urban/residential, rural/residential, employment/residential and tourist development in the Port Macquarie-Hastings LGA to 2031 in a planned and sustainable manner.</li> <li>The plan envisages that the Greater Sancrox Area will be set within a network of vegetation and habitat linkages, while land use and development will maintain the area's important biodiversity and waterways. Furthermore, the area is serviced by an effective road network that provides adequate connectivity.</li> </ul>
Key actions	<p>The following objectives of the <i>Greater Sancrox Structure Plan 2014-2034</i> directly relate to the proposal:</p> <p><i>Environment</i></p> <ul style="list-style-type: none"> <li><i>Protect, maintain and enhance significant vegetation communities and fauna, habitat areas and wildlife corridors</i></li> <li><i>Ensure environmental hazards are avoided and adequately managed</i></li> </ul> <p><i>Social</i></p> <ul style="list-style-type: none"> <li><i>Minimise potential for future land use conflict</i></li> <li><i>Ensure adequate access and connectivity is provided to the future users of the GSA</i></li> </ul> <p><i>Economic</i></p> <ul style="list-style-type: none"> <li><i>Ensure land use does not restrict or prohibit the development potential of extractive resources</i></li> <li><i>Ensure a suitable supply of future rural-residential, urban and employment lands which complement the future growth plans for the Port Macquarie-Hastings region</i></li> </ul>

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