



TRINITY POINT
LAKE MACQUARIE

Trinity Point Marina and Mixed Use Development

Helipad Proposal

Johnson Property Group

November 2016

Community Information Sheet

Project Profile

Johnson Property Group (JPG) is proposing the inclusion of a helipad as part of its approved Marina and Mixed Use development at Trinity Point.

This booklet describes the proposal and key findings from the planning and environmental assessment studies prepared for the project's Environmental Assessment (to add a helipad to the concept plan).

JPG is committed to ensuring accurate and up to date information about the proposed helipad is available to all interested community members. We have established a Community Information web page <http://trinitypoint.com.au/helipad> that has details around the environmental studies and consultation activities, as well as a series of fact sheets including:

- Fact Sheet 1 – Why a Helipad?
- Fact Sheet 2 – Noise, Helicopter Survey and Flight Paths
- Fact Sheet 3 – Helipad Operations
- Fact Sheet 4 – Public Access and Safety
- Fact Sheet 5 – Community Engagement

We welcome your questions and feedback. Please contact JPG on 8023 8888 or visit the above designated webpage and use the feedback form.

WHAT IS THE TRINITY POINT MARINA AND MIXED USE DEVELOPMENT?

The approved Trinity Point Marina and Mixed Use Concept Plan comprises 188 berth marina, restaurant, café and outdoor dining, function centre, 65 room hotel, up to 250 tourist and residential apartments, and a range of recreational and commercial facilities. Recreational facilities will connect with surrounding Trinity Point reserve and is anticipated to create construction and operational jobs and stimulate the local economy and tourism industry. Trinity Point will deliver Lake Macquarie's first five star luxurious resort.

The development has been in planning and consultation for over 10 years. Development approvals are now in place for the first 94 marina berths, 65 room hotel, restaurant, café and outdoor dining, function centre as well as 93 tourist apartments and 34 residential units. Works on the marina began this year, and will be operational during 2017.

ABOUT THE HELIPAD PROPOSAL

What is the Helipad proposal?

JPG proposes to include a helipad at the Trinity Point Marina and mixed use development site. The proposal, currently on public exhibition by the state government, includes the establishment of a limited use helipad as well as a range of procedures for safe, efficient and responsible operation with minimal disruption to the environment and communities.

How many flights will there be?

JPG is applying to be permitted to make up to maximum of 8 helicopter movements a day (ie 4 landings and 4 take offs), to a maximum of 38 movements a week (ie. 19 landings and 19 take offs). This is considered sufficient for their business purposes and there is likely that there will be some days that there are less helicopter movements, depending upon the demands of customers, the complexities of scheduling and responsivity to community needs (e.g. if there is a special community event on the lake).

It is understood that there is information in the community that JPG seeks to operate 40 flights a day. This is not true. We believe that this might have come from misinterpretation of the preliminary noise findings that we included on a display board at a community open day earlier this year. The display board presented the preliminary findings of the acoustic study which found that the 8 movements proposed by JPG helipad proposal to be well below the amount that would be able to land within one acoustic consideration.

In short, the 40 movements **are not** the number of flights we propose. The information was included to demonstrate the considerable difference between the upper threshold and the number of flights that we actually propose, and therefore the very small risk of noise impact. We acknowledge, however, the challenges of communicating complex findings and the ever-present risk of misinterpretation, especially around issues that are important to people. We also acknowledge our responsibility, as developers, proponents and a good corporate community member, to make sure there is accurate information circulated to inform meaningful discussions and ultimate decision making.

This is the key driver behind all our interactions with the local community, and we continue to endeavour to always get it right. It is also one of the reasons for this community information sheet, and we welcome your thoughts and feedback on it.

What time will flights be?

Helicopter flights, landings and departures will be restricted to **daylight** hours only. The time of operation will start in the morning from 8am on Monday to Saturday, and from 9am on Sundays and public holidays.

Who will use the helipad?

There are a wide range of people who are expected to use the helicopter, including

- hotel guests arriving and departing from the hotel;
- public speakers for conferences or guests for events;
- day trippers to Trinity Point or linking to the Hunter Valley and other regional destinations with Trinity Point as a stop;
- brides and wedding parties arriving for weddings;
- permanent residents undertaking business travel to larger centres; and
- private/corporate transfers for a range of uses.

Key operators are expected to be commercial companies running tourism or transfer services, but there may also be private operators who own and fly their own helicopters.

The proposal is not intended for joy flights.

How big with the helicopters be?

Helicopters using the helipad are expected to be able to up cater for typically up to six people (and pilot), although this will be influenced by luggage or other weight constraints, as well as commercial demand.

The helicopters are anticipated to be similar to those used for typical commuter or tourist/corporate transfer and flown predominantly by professional pilots with commercial operators.

See the separate Helicopter Fact Sheet 2 which provides the list of helicopter types. The largest helicopter able to land at Trinity Point Helipad will be the Agusta Westland AW109, a medium sized twin engine helicopter.

How will take offs and landings be managed?

Day to day operation of the helipad will be coordinated by the Trinity Point Marina Manager and a trained helicopter landing officer. Use of the helipad will be by “prior permission” only, where pilots are to receive and agree to helipad protocols, including fly neighbourly procedures, preferred flight paths, times of operation, types of helicopters, and other critical operational, environmental and safety information.

A suite of operational and management procedures will be developed to regulate and coordinate the safe and efficient use of the helipad, and a draft Operational Manual has been prepared and forms part of the Environmental Assessment. See the separate Helicopter Fact Sheet 3 which provides an outline of the draft Operational Manual.

Will there be restricted public access (a ‘no go zone’) in the lake?

The physical structure of the helipad itself will not be fully open to the public and access will be facilitated by prior arrangement with the Marina Manager.

A temporary safety management zone which will include a small part of the lake will be required for a specified time period prior to, during and following landing and take-off, which will be coordinated by the Marina Manager in line with approved operational procedures and licences.

This temporary zone will be 30m from the edge of the helipad pontoon and be required to be in place for approximately 15 minutes before and after departure.

The figure that has been circulating in the community (i.e. 6400m² of lake to be permanently extinguished for public use) is not true. See the separate Helicopter Fact Sheet 4 which provides further information relating to public access and the temporary safety management zone.

How will noise be managed?

The potential for noise from helicopters, particularly on landing and take-off, has been one of the key interests of many community members regarding the helipad, and JPG has made a specific effort to ensure that noise studies associated with the proposal meet, and at times exceed, legislative requirements and community expectations. JPG has also sought to maximise the flight paths to occur predominantly over water, to limit the number of movements, and ensure all helicopter types identified to use the helipad, not just the one used on the helicopter survey, are assessed and considered.

The noise assessment undertaken for the proposal has found that all noise impacts from the helipad will be below relevant acceptable levels.

However, as the perception and interpretation of noise is a particularly personalised impact and influenced by a range of subjectivities and sensitivities, it is possible that some people may experience noise as more of a nuisance, and feel more impacted, than others.

There also may be particular neighbours that, due to their specific uses or sensitivities, may experience noise as more intrusive than others (for example, local school classrooms with children more attuned to noise disruptions or other needs), and JPG is working with these neighbours to discuss the low number of movements across the day, and to allay fears that the constant noise experienced by the helicopter survey (which involved 64 designated movements condensed into 3.5hrs) is not representative of the noise environment under an operational helipad as proposed.

It is also noted that some community concern around noise impacts has been based upon inaccurate information or misunderstanding around key aspects of the helipad proposal, most notably a considerable difference in the number of flights intended by JPG and the adequacy of the helicopter survey. More information about the helicopter survey is provided within Helipad Fact Sheet 2.

Typically the entire landing operation of a helicopter leaving cruise altitude to approach, hover, land and shut down is audible for about 2.5 – 4.5 minutes (depending on where you are and the flight path being used). Videos of example operations are included on the community webpage and are available, and demonstrate the audibility over time. If a maximum of 8 movements occur across any given day, this would represent an audible noise source of approximately 20-36minutes for that day.

What about other impacts?

There has been a range of technical reports prepared to inform development of the helipad and preparation of the Environmental Assessment. The reports look closely at potential impacts and identify ways to remove or lessen the impacts, as well as ways to enhance the positives.

Studies include visual, environment, ecological, social impact, noise and safety. Findings indicate that all potential impacts are below relevant threshold modelling and impacts will be appropriately managed.

This includes things like pollution, which found that there were limited pathways for pollution, especially given the lack of refuelling and that comprehensive operational procedures would be in place to manage other risks.

Areas for potential impact mirror areas of key community concern and focus on noise.

Economic impacts were considered positive although mainly limited to strengthening or enhancing the benefits accruing from the wider Marina and mixed use development, or enhancing regional connections and tourism options, rather than creating additional significant income streams or employment.

Who has JPG consulted with for the proposal?

JPG has consulted widely, including meetings, telephone calls, letters, newspaper advertisements, mail outs, social media, response to enquiries and an Information Day.

People and organisations that JPG has discussed the helipad with during development and refinement of the helipad proposal include:

- Lake Macquarie City Council staff;
- Political representatives –state and Councillors;
- State Government agencies including, NSW Maritime, OEH, DPI, Planning and Environment, and EPA;
- Commonwealth Government agencies including Civil Aviation Safety Authority (CASA) and Department of Environment;
- Mine Subsidence Board;
- Aboriginal stakeholders;
- Utility providers, such as Hunter Water Corporation and Ausgrid;
- Lake Macquarie management committees;
- Community groups, including Morisset Park and District Action Group, Sunshine Progress Association and Bonnells Bay Progress Association;
- Commercial helicopter operators and existing tourist establishments with helipads;
- Local schools - Bonnells Bay Public School and Brightwaters Christian College; and
- Residents and businesses within the suburbs on the Morisset Peninsula and parts of Summerland Point and Mannering Park – notifications, information session.

How does the helipad fit in with the Trinity Point reserve?

The helipad is not located on Reserve land or related to the Trinity Point Reserve Management Plan. It is noted the Reserve has considerable social, recreational, ecological, tourist and cultural values, and the proposal will not impact on these values.

Why do you want to include a helipad?

JPG's reasons for seeking approval of the helipad are many. The helipad will diversify ways to get to the hotel, bringing in a particular hotel guest profile that might otherwise not visit the Marina. It will increase connectivity with the wider region, particularly on a tourism and economic level, something identified in various regional planning documents as a need. Whilst not directly increasing employment (beyond the new jobs already accounted for under the Trinity Point Concept Plan), it will strengthen site employment and enhance the economic benefits already identified to accrue.

We believe it will add a heightened sense of prestige to the development – take it up a level in attractiveness and desirability (and, we hope, tourism rankings) with associated benefits for business as well as marketing opportunities. Connected to this, are the comments that we have said previously about making it more attractive for investors – by which we mean we believe it will increase the attractiveness of the marina to top end operators and the types of quality business that can only add positive value to the site. See Helipad Fact Sheet 1 – Why a Helipad?

What is the approval process from here?

The helipad proposal has been prepared to best meet the needs of both the Department of Planning and Lake Macquarie City Council approval processes and requirements for community engagement and public exhibition. For example, the Social Impact Assessment (SIA) prepared by Key Insights for the helipad is provided as an additional document not required by the Departments requirements, but created to include a social impact matrix to meet a discussion of the ‘social considerations’ identified as useful to consider in Council SIA guidance.

However, in discussion with government agencies and following on from concerns expressed during initial consultation with the community, the first process is the application to Department of Planning and Environment (DPE) for the addition of a helipad to the concept plan (as a s75w modification to MP 06_0309, referred to as “MOD 3”). The Environmental Assessment has been prepared and is now on public exhibition by DPE until **16 December 2016**. Lake Macquarie City Council, like all other stakeholders in the process, will be invited to provide comment and input. NSW DPE may request further information or responses to submission once public exhibition is complete and will undertake the assessment of MOD 3. The determining body is likely to be the Planning and Assessment Commission (PAC).

If supported and approved, the proposal will be refined and repackaged for submission to Lake Macquarie City Council under existing DA 1176/2014, where it will be assessed by officers, put on public display, and have a decision made by Councillors informed by advice from key staff. That assessment will be generally guided by any concept plan determination.

How can I comment during public exhibition – its only 30 days and a lot to get through?

JPG acknowledges that people have a range of access and that it can be challenging to access and interpret exhibited material, as well as gain a complete understanding of technical issues. To assist community input and understanding, JPG will be holding a community information session during the exhibition period where people can access copies of the Environmental Assessment and key fact sheets. Notice of the session will be circulated by mail, and in the Lakes Mail and Newcastle Herald, and will be on Monday 5 December 2016 at the Bonnells Bay Youth & Community Centre (275 Fishery Point Road, Bonnells Bay) between 3pm and 6.30pm.

JPG have also prepared a community information website and a series of fact sheets (details of which appear on the first page of this handout).

The NSW DPE is seeking public comment on this proposal up until **Friday 16 December 2016**.

The EAR can be found by searching for Trinity Point (Modification to Mixed use marina/tourist/residential (Concept Plan) (06_0309 MOD 3) at <http://majorprojects.planning.nsw.gov.au/page/on-exhibition/>. Alternatively, hardcopies of the material can be viewed at Morisset Library, Lake Macquarie City Council chambers, Wyong Shire Council chambers, and DPE offices in Newcastle and Sydney. Electronic feedback can be made via this link directly to the NSW DPE.

Alternatively, if you are unable to lodge your feedback online, written submissions can be made to The Director, Modification Assessments, NSW Department of Planning and Environment, GPO Box 39, Sydney NSW 2001 and must be received by **Friday 16 December 2016**.

Please note that formal written submissions on the proposal will need to be made via the NSW Department of Planning and Environment as detailed above. Johnson Property Group are offering links and information with the view to aiding community review of our proposal and to assist inform any formal written submission the community may choose to make.

Perceived impacts versus Technical Impacts

The Trinity Point helipad proposal has considerable community interest and there are strong feelings in support and also in concern for the proposal. The Social Impact Assessment for the proposal found that much of the concern has revolved about themes of noise, frequency, public access, safety, pollution, effects to wildlife and concern that there is insufficient economic argument to justify a local impact on the community.

These concerns are important and JPG takes thoughts and feedback from local residents very seriously. As the developers, it is our responsibility to ensure that people have sufficient and accurate information and we have been striving to this end at all stages of the approval process.

To continue this, in an effort to help ensure that perceptions are based on accurate information, and avoid contributing to misunderstandings, the Social Impact Assessment by Key Insights (Appendix I to the Social Impact Assessment) offers a table of community concerns and finding of the technical reports or correct information related to the proposal. This is provided within this information sheet.

Theme	Perception or Concern	Technical Finding or Impact
Number of helicopter movements	There may be 40 helicopter movements a day	JPG is applying for approval of up to 8 helicopter movements daily (4 in / 4 out), and up to 38 movements weekly. It is possible that the misunderstanding has originated from information that JPG included on an Open Day board that detailed the upper limit of flights that the acoustic survey determined would be permitted before a specific noise threshold would be reached (which was 40 movements). It is understood that JPG's intention of including that information was to demonstrate the considerable gap between the numbers that JPG proposed (i.e. 8 movements) and the actual numbers that would be required to be flown to impact noise thresholds (40 movements), in that particularly instance.
Poor methodology for helicopter survey	The survey used the wrong helicopter – the real helicopters that will be used will be bigger, louder and carry more people	JPG has informed stakeholders that the acoustic testing for the helipad was undertaken based on the most common helicopter likely to use the helipad. Discussions with the helicopter survey operator affirm that considerable discussion was made about the choice of helicopter with the selection influenced by JPGs desire not to use the quietest or least intrusive helicopter and to not cut corners. Loading of the helicopter was calculated according to the specific mix of people, equipment and fuel being carried so to equate to a full load. For the survey, there were three people on board, a half load of fuel, helicopter safety equipment – with the load calculated for a full load.

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		<p>The acoustic test is only one component of the methodology and helicopters of all sizes have been factored into the noise assessment. Refer Fact Sheet 2 that provides more information on the helicopter survey.</p>
	<p>The helicopter did not land or take off at full thrust</p>	<p>On the day of the acoustic testing, 3 landings on the Trinity Site (on land) were carried out, and a number of low-hovers over the proposed helipad sites were undertaken.</p>
<p>Experience of helicopter survey</p>	<p>Bonnells Bay school lessons were disrupted during the survey</p>	<p>Discussions with Bonnells Bay School representatives (Principal and Acting Principal) identified that Bonnells Bay School was not affected by the helicopter survey. However, in order to fully investigate reported community concern regarding school disruptions, Key Insights also contacted Brightwaters Christian College which is located on Morisset Peninsula.</p> <p>Discussions with Brightwaters Christian College confirm that the classrooms experienced 'disruption' from the survey (sound was constant, needed to close doors and windows), and that learning on the day was considered to have been temporarily affected, particularly for students with special needs. A key theme of the experience was the constancy of the survey noise, and a concern for student learning should the actual helicopter operations replicate the regularity and intensity of the helicopter survey.</p> <p>The Acoustic Survey shows the school is located immediately adjacent to one of the 7 key attended monitoring points for the helicopter survey (location 4) and therefore experiences at the school can be considered to have been duly captured and fed into analysis.</p> <p>Review of the acoustic report shows that the school will be located in close vicinity to the proposed northern flight path. However, it also shows that the movements experienced by the school in full operations by the school will be greatly different to those experienced during the survey.</p> <p>Records from the acoustic report show that there were approximately 20 movements on Northern flight path within the 3.5-hour period of the helicopter survey. This is considerably greater than what will be allowed during operations (up to 8 movements allowed per day across ALL flightpaths, with a lower proportion anticipated on the northern path than the southern path).</p> <p>Brightwater College has 26 children aged from Kindergarten to Year 6.</p> <p>Discussions with Brightwaters Christian College will continue.</p>
	<p>There was considerable disturbance to residents, schools and businesses under the flight paths of the survey</p>	<p>As discussed above, Brightwater Christian College reported experiencing some disturbance from the constancy of the noise generated on the helicopter survey.</p> <p>JPG received 2 complaints about the helicopter survey on the day. It is also understood that Council received 2 calls.</p> <p>Facebook comments responding to JPG's posting about the survey were either explicitly positive or neutral about the noise (e.g. could hear it but was not a concern).</p>

Theme	Perception or Concern	Technical Finding or Impact
		<p>The constancy of the helicopter survey (which continued for over 3.5 continuous hours) will be different in quality and quantity to the schedule of the proposed helicopter service.</p>
	<p>Helicopters need to circle at 1.5 kilometres from the landing zone to view the wind sock to allow them to land into the wind and need to take off into the wind – this will mean that they need a wider flightpath than communicated, and will need to fly over residential properties.</p> <p>Or more simply, Wind directions mean that helicopters will require wide landing paths which will require flying over residential areas.</p>	<p>The Helicopter Landing Site (HLS) study analysed the seasonal wind data for the Lake, including analysing samples taken from July 1969 – 2004. It identified a predominate southerly wind direction in all seasons and proposes paths considered achievable without overflying built up areas, and one alternative that uses a northerly flight path (in the case of strong southerly and south-westerly winds).</p> <p>The study found the second most prevalent wind direction appears to be from the North East, and identified a flight path to meet this wind condition that could be achievable without over-flying build up areas.</p> <p>The study also noted that there would be periods of no wind (calm) when helicopters can operate over water and in line with Fly Neighbourly procedures.</p> <p>The preferred flight paths and the ‘fly neighbourly’ methodology including noise sensitive areas to avoid where possible will be communicated with pilots as part of the prior permission protocol for the HLS operation, as with all planned paths it will be up to the pilot on the day to conform with these preferred flight paths as much as safety will permit.</p> <p>The proposed flight paths to the south do not overfly resident areas below cruise altitude by 1000ft (permitted by air navigation procedures). The northerly flight path (Alternative Path C) does overfly residential properties at the northern end of Bardens Bay and that forms part of the acoustic assessment.</p> <p>The flight tracks that have been nominated do not involve circling over residential areas for approach and departure, adopt fly neighbourly procedures and the use of flight paths are specified in the helipad operations.</p> <p>Advice in the acoustic report from the EPA indicates that regulation of all aircraft noise, even when it on the ground, is regulated by Air Services Australia not Council or the EPA. The Acoustic report has based its criteria on ANEF 20 which is a noise criteria based on socio-acoustic studies. However, the Acoustic Assessment expands its assessment to also consider criteria related to the existing acoustic environment of Barden’s Bay.</p>
<p>Loss of public access to, or navigation of, large parts of the lake</p>	<p>CASA requires that the helipad requires a ‘no go’ permanent exclusion zone which will extinguish that part of the lake for community uses.</p>	<p>CASA does not require the proposal to have a permanent exclusion zone, however there will be a requirement to temporarily restrict access to the helipad site for a 30m radius around the proposed pontoon upon helicopter landing and lift off. It is also proposed to include a new cardinal marker adjacent to the pontoon.</p> <p>Refer Fact Sheets 3 and 4 that provides more information on the temporary safety management zone and helipad operations.</p> <p>The Environmental Assessment concludes that the addition of the helipad would not significantly impact the navigation of the lake, or ‘prejudice’ other lake users, especially in the context of the wider changes associated</p>

Theme	Perception or Concern	Technical Finding or Impact
		with the approved marina.
Impact on environment and wildlife	Downward thrust will create waves and water turbulence which will affect lake life and sea grasses	<p>The Coastal report does not identify any impact from downward draft on the generation of local wave energy or impact. The 30m exclusion zone includes the area anticipated by aviation consultants to experience rotor disturbance.</p> <p>The Acoustic report says that helicopter noise is less likely to impact water life than boat noise, which is endorsed by the ecology report.</p> <p>The ecological report says that sea grass, which lies in shallower water closer in shore, will not be affected by the proposal.</p>
	Air turbulence and noise will impact birds	Interviews from existing establishments suggest that birds and wildlife are not visibly affected by helicopters. Kangaroo populations grazing directly under helicopter landing paths have been observed to not be disturbed. Birds that have been observed to scatter quickly return (e.g. swallows in Mascot fig trees, lake birds in Hunter Valley). This is also confirmed in the Ecological Report.
	Helicopter operations will pollute the lake	<p>There will be no re-fuelling on the helipad permitted.</p> <p>The Coastal Study prepared for the EA found a negligible likelihood of water quality impacts associated with spills or leaks of hydrocarbons from helicopters due to</p> <ol style="list-style-type: none"> there being no refuelling undertaken at the helipad, safety checks for helicopters, including regarding fuel containment, are very regular and stringent, and fuel leakage would likely be identified during take-off or early stages of the flight and the helicopter would return to the airport rather than continuing to the marina. <p>To address residual low risk, the report promotes management options including bunding the deck, providing readily accessible spill kits and a “first flush treatment” for the deck of the pontoon structure.</p>
Health and safety risks	Avgas will spray all over residential areas	Avgas will not spray all over residential areas.
	There is a likelihood of a helicopter accident occurring.	<p>According to CASA data, across Australia, there were 42 fatal accidents involving helicopters in the 10 years between 2004 and 2013. A similar statistic is that there were 37 helicopter accidents per million hours flown over the period between 2004-2012.</p> <p>Helicopters have been involved in about 28% of all general aviation accidents and 29% of all fatal accidents in the last 10 years. At the same time, they account for 14% of all registered aviation fleet and flew far less hours than aeroplanes.</p> <p>However, there is a considerable difference in accident rates for different types of helicopter operations or uses – for example, there were only 2.5 fatal accidents per million hours for charter helicopters compared to 11.1 for aerial work, 8.7 for flying training, and 37 for private/business travel.</p> <p>Helicopters used for aerial work (e.g. surveys, emergency, photography</p>

Theme	Perception or Concern	Technical Finding or Impact
		<p>fire control, mustering), pilot training or private/business flying had a higher chance of accident.</p> <p>Flights by commercial operators had the lowest accident rates. Flights by private operators had higher, but not as high as those used for aerial work</p> <p><u>Minimising Risks</u></p> <p>According to the Helicopter Landing Site assessment prepared for the Environmental Assessment, the smaller the landing site and the less known about the hazards presented by the obstacles and surface conditions, the greater the risk associated with its use.</p> <p>Landing risks are reduced when:</p> <ul style="list-style-type: none"> • the size of the landing area is greater than the minimum size • the pilot has access to accurate update to information about the site, and • there are sufficient visual information, cues and positional markings present. <p>The Trinity Point helipad is appropriately sized, a new cardinal marker will be put in place, a comprehensive manual for operation will be developed and distributed, and regular direct contact will be initiated and maintained with pilots and operators, in the days prior the flights (when planning) right up until they are coming in to land. A trained helicopter landing officer will manage these matters as part of the marina operation.</p> <p>This is consistent with experiences of operators in the Hunter Valley establishments who report positive relationships and proactive communication with operators.</p>
	The more landings the more chances there are of an accident.	The CASA data report confirms that, across all aircraft, most accidents occur on departure or approach. See response above.
Impacts from downward draft	Downward draft will create large waves that impact lake and lake edge, including contributing to coastal erosion	The Coastal report does not identify any impact from downward draft on the generation of local wave energy or impact. Videos from test day demonstrate visually that there are not large waves created.
	Severe downwash will upset small craft	The Coastal report does not identify any impact from downward draft on the generation of local wave energy or impact.
Lack of economic justification	There appears to be insufficient economic rationale for the helicopter	JPG regards the inclusion of a helipad an important addition to the tourism options and service mix of the development and it is considered to add and enhance value in a number of ways. Whilst not directly creating employment or new income streams, a helipad is considered to diversify access, increase connectivity, strengthen benefits and enhance economic streams.
	The helipad is required by “investors”	The helipad is considered to increase the attractiveness of the development to commercial operators or partners for a number of reasons including increased access, profile, marketing options and

Theme	Perception or Concern	Technical Finding or Impact
		prestige. Refer Helipad Fact Sheet 1 – Why a Helipad?
Other landing options	There are other options to “helicopter in” to the site, for example, landing at Pelican	<p>It is understood that helipad facilities may be available to commercial operators as part of Pelican Aerodrome (Lake Macquarie Airport) at Marks Point/Belmont.</p> <p>Pelican Aerodrome is located approximately 45km/40 mins by vehicle to Trinity and a significant boat ride across the full breadth of the Lake.</p> <p>It is unknown if there is operating or commercial constraints regarding access for helicopter operators to the Aerodrome; however, landing at the Aerodrome and transferring by boat defeats the ease of access purpose of a helipad at the Marina and adds little to the prestige or sustainability of resort and marina facilities.</p>
Use by emergency rescue helicopter	The Helipad will be able to be used for emergency services landing –e.g. Westpac Rescue service	While the Helipad will not be restricted from use by emergency services, it is of smaller dimensions than that typically used for emergency services helicopters; any decision to use would be subject to individual pilot or service discretion. It is not promoted by JPG as a public benefit.
Downwash	Downwash will be a nuisance, including for people on boats	<p>According to the HLS study, the downwash from a charter helicopter may cause movement of loose items if they are not secured prior to flight operation, and CASA guidelines state that no person is to be within 30m of the closest point of a hovering or taking helicopter except those required to be there for its safe operation or who have been trained in safety procedures.</p> <p>As such, there will be planned 30m temporary safety and rotor management area, and a procedure to ensure the one is clear the exclusion zone is free of watercraft.</p>

Why do you keep changing your mind?

Planning, designing and navigating the approvals for a large scale multi-million dollar Marina and Mixed Use Development hasn't always been easy, and we would be the last ones to say that we have always got it exactly right or that things always work out the way we want them too. We began consultation around Concept Planning in 2008, and we passed through several design changes, approval processes and financial crisis challenges in that time. One of our key aims has been to be balanced, to be fair, to be viable and to be responsive – to the expectations of community, the demands of government, the opportunities of the market and the needs of JPG as a company. At the base of it is our intention to get the best development that responds to what we know already, and that can adapt to the things we don't as they come our way.

In 2008, when we included the original helipad, community members expressed concern regarding noise, amongst other things about the development (such as scale of the berths). We made the changes that were right at the time, and the concept plan was eventually approved. During that time, we looked ahead and saw that our thinking around a helipad was not complete, and submitted the relevant documentation to enable us to keep it as an option, where it could be considered in the future on its own merits or impact.