

UPDATED STATEMENTS OF COMMITMENTS – FOLLOWING REVIEW OF SUBMISSIONS

Statement of Commitments – Concept Plan

<i>Issue</i>	<i>Commitment</i>	<i>Actions and Timing</i>	<i>Responsibility</i>
General	The developer will carry out the development in accordance with this Environmental Assessment Report, prepared by GeoLINK and dated December 2007, as amended by the Preferred Project Report dated May 2008; in accordance with the Concept Plan illustrations C1 – C11; and in accordance with the specialist supporting reports.	Detailed plans will be submitted to Ballina Shire Council for approval prior to issue of a construction certificate for Stage 1, demonstrating compliance as required. Development applications will be submitted to Ballina Shire Council for approval for all subsequent stages. The applications shall demonstrate compliance with the approved Concept Plan and this Statement of Commitments.	Petrac and consultant team
Ecological	<i>Hairy Joint Grass</i> The developer is committed to the implementation of the Hairy Joint Grass Management Strategy, prepared by Cardno and dated September 2007 (see Appendix C of EA documentation), as updated in the Preferred Project Report dated May 2008.	All work will be in accordance with the Conceptual Rehabilitation Plan prepared by Cardno (729621-CRP-01) dated 29 May 2008. Identification and demarcation of Hairy Joint Grass Populations to be retained on site. Manipulation of populations to enhance seedling germination. Translocation of seedlings. Collection of Hairy Joint Grass seed.	Cardno
	A Vegetation Management Plan (VMP) will be prepared for the site that addresses the implementation of the Hairy Joint Grass Strategy. The VMP will also provide management measures for all on-site plantings and vegetation removal. The VMP shall adopt the following principles: <ul style="list-style-type: none"> ▪ A representative and sustainable proportion of the site's degraded threatened species habitats and Endangered Ecological Communities will be preserved and enhanced within the 	The VMP will be submitted to Council for approval prior to the issue of a Construction Certificate for Stage 1.	Cardno

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	<p>Conservation Zone.</p> <ul style="list-style-type: none"> ▪ Where environmentally sensitive areas are not included within the Conservation Zone, appropriate offsets shall be provided in the form of on-site compensatory habitat and off-site reserves. ▪ Areas included within the Conservation Zone and off-site reserves will be rehabilitated and managed in a manner that re-instates ecological values and functions of degraded vegetation and ensures the long-term viability of threatened species populations and Endangered Ecological Communities in the locality. ▪ To ensure the integrity of native vegetation communities included in the Conservation Zones is maintained, Conservation Zones will only be addressed by building frontages, access ways and entries. No back boundary fence will abut a Conservation Zone. ▪ Any vegetation identified as an Endangered Ecological Community on private land will be protected through an Environmental Covenant that will act to prohibit any clearance of this vegetation. 		

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	<p><i>Weed Management</i></p> <p>The VMP will address weed management. Weeds should be controlled in landscaped areas and areas of retained vegetation. Known environmental weeds such as Camphor Laurel within areas of Littoral Rainforest should be gradually removed by stem injection</p>	<p>The VMP will be submitted to Council for approval prior to the issue of a Construction Certificate for Stage 1.</p>	Cardno
	<p><i>Site Plantings</i></p> <p>Vegetation will be established on site as street trees and landscape plantings.</p>	<p>Plantings will occur during construction of all stages. Details to be outlined in the VMP and detailed landscape plans will be submitted to Council with each subsequent DA for subdivision / development.</p>	Cardno
	<p>Vegetation removed during clearing will be retained and mulched for later use on the site to prevent the introduction of weed seed being imported in mulch from offsite.</p>	<p>Vegetation removal will occur during initial construction stages, with mulch used in landscaping for all stages. Details to be outlined in the VMP.</p>	Cardno
	<p><i>Physical Damage during Construction</i></p> <p>Areas of vegetation to be retained will be clearly delineated with temporary fencing during works.</p>	<p>Protective fencing will be erected prior to commencement of construction works, in accordance with the approved VMP</p>	Cardno
	<p>Trees to be removed will be monitored by personnel (with wildlife caring qualifications) immediately prior to, and during removal to ensure that no animals are directly impacted by the works. Any trees containing fauna will be retained until the species leaves the site or the nests have been vacated. If any animals are injured during the proposed works, they will be immediately transported to a wildlife carer for rehabilitation and release.</p>	<p>Monitoring will occur during all construction works, in accordance with specifications established in the approved VMP.</p>	Cardno

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	<i>Impacts on Wetland Vegetation</i> The boundary of the wetland area will be clearly delineated to prevent vehicles or persons entering the wetland area. Fencing will be provided to discourage the dumping or storage of materials within the wetland area. A sediment control plan has been prepared and will be implemented to prevent the input of sediment into the wetland area;	Protective fencing will be erected prior to any construction activities. A detailed sedimentation / erosion plan will be submitted to Council for approval prior to the issue of a Construction certificate for Stage 1.	Cardno, Ardill Payne & Partners
	<i>Impacts on Plant Reproduction</i> Retained areas of vegetation will be rehabilitated and buffered.	Vegetation rehabilitation will be carried out in accordance with the approved VMP	Cardno
	Landscape plantings will include a majority of species that will provide forage habitat for nectarivorous and frugivorous birds and bats.	Details of plantings will be submitted to Council for approval prior to the issue of a Construction certificate for Stage 1. All plantings will be established on site during construction works and will be maintained for a period of 12 months following construction	Deicke Richards / Cardno
Integrated Water Cycle Management	Petrac will commit to constructing the creek corridors to convey major flood waters and to design of the subdivision such that the flood planning levels are set at those recommended within Council's relevant Floodplain Management Plan;	Stormwater management details and details of all earthworks will be submitted to Council for approval prior to the issue of a Construction certificate for Stage 1. Approved stormwater controls / management measures will be constructed prior to the issue of a Subdivision Certificate.	Ardill Payne & Partners
	Petrac will construct WSUD measures, including small dry detention systems up-stream of the Water Quality Control Pond, above the 1% ARI flood extent;	Details will be outlined in the stormwater management plan submitted to Council for approval prior to the issue of a Construction certificate for Stage 1. Approved stormwater controls / management measures will be constructed prior to the issue of a Subdivision Certificate.	Ardill Payne & Partners

Issue	Commitment	Actions and Timing	Responsibility
	Petrac also commit to ongoing monitoring of stormwater quality and continued maintenance of the stormwater treatment train.	Details of monitor regimes will be provided to Council for approval prior to issue of a Construction certificate for Stage 1. Management of the Water Quality Control Pond will be taken over by Council in 2010 whilst management of the stormwater conveyance systems will be split between Council and land owners depending on specific land uses and future titling;	Ardill Payne & Partners
Acid Sulfate Soils	Sampling (at a rate of 1/1000 m ³ of excavated material) and laboratory analysis will be undertaken within areas of the site below RL 10 m, where excavation is proposed below natural ground level. The results will be used to determine appropriate liming rates and management requirements if necessary	An Acid Sulfate Management Plan will be submitted to Council for approval prior to the issue of a Construction certificate for Stage 1.	Ardill Payne & Partners
Infrastructure Provision	Petrac will provide reticulated potable and non-potable water supply, sewerage, telecommunications facilities and underground electricity to all lots.	Details will be provided to Council for approval prior to the issue of a Construction certificate for Stage 1. For all other stages, details will be provided with subsequent Development Applications.	Ardill Payne & Partners
Community Facilities	Petrac will provide a multi-purpose community hall, with a floor space of approximately 300 m ² , located within the neighbourhood centre.	A 'super lot' will be created in Stage 1 (see Project Approval), with an area of approximately 1,990m ² . Subsequent to approval of the Project Application, Petrac will lodge a development application for the Community Hall. Petrac will build the hall and associated car parking following approval and dedicate the land and completed hall to Council at a date to be agreed.	Petrac

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Mosquito Impact	Exposure to <i>Verrallina funerea</i> , <i>Culex annulirostris</i> and <i>Aedes procax</i> will be effectively managed by development of the site eliminating ground pool breeding sites or interposing clear open space between breeding sites and residential allotments;	Details will be provided to Council for approval prior to the issue of a Construction certificate for Stage 1, and with all subsequent Development Applications for future stages of the development	Ardill Payne & Partners; Mosquito Consulting Services
	Street lighting will be provided with shields or yellow filters to minimise artificial light attracting mosquitoes from the Ballina Nature Reserve into residential areas;	Details will be provided to Council for approval prior to the issue of a Construction certificate for Stage 1, and with all subsequent Development Applications for future stages of the development	Ardill Payne & Partners; Mosquito Consulting Services
	Exposure to <i>Aedes vigilax</i> and mosquitoes in general will be effectively managed in residential allotments by standard type mosquito screening fitted to residential dwelling windows and external doors to restrict entry of mosquitoes during occasional periods of high mosquito numbers.	This information will be provided with all future sales information	Petrac
	Mosquito awareness materials should be made available to residents of Pacific Pines.	This information will be provided with all future sales information	Petrac
	Rainwater tanks included (potentially) within the development should be protected by having mosquito proof screens fitted to openings including inspection openings and overflows. Such screens should be made of durable material such as stainless steel. The mesh size should not provide an aperture of more than 1mm.	This detail will be assessed in future development applications. Information will be provided with all future sales information.	Petrac

<i>Issue</i>	<i>Commitment</i>	<i>Actions and Timing</i>	<i>Responsibility</i>
Traffic and Access	Petrac will construct the extension of Hutley Drive, from the northern boundary of the site to a point approximately 50m south of the intersection with Main Street (i.e. southern boundary of Lot 234).	Details will be provided to Council for approval prior to the issue of a Construction certificate for Stage 1. Hutley Drive will be constructed in accordance with approved plans prior to the release of a Subdivision Certificate and will be maintained by the developer for a period of 12 months following completion of construction.	Ardill Payne & Partners
	All internal roads will be constructed in accordance with the road types identified in Appendix F of the EA documentation and in accordance with relevant local and Australian Standards.	Details will be provided to Council for approval prior to the issue of a Construction certificate for Stage 1. Internal roads will be constructed in accordance with approved plans prior to the release of a Subdivision Certificate and will be maintained by the developer for a period of 12 months following completion of construction.	Ardill Payne & Partners
Cultural Heritage	Nominated representatives from Jali LALC will be engaged to monitor initial excavations.	Monitoring will be carried out by strip sampling by grader scrape of the lower slopes. The Proponent/Project Managers must give prior warning of at least two weeks of the programme of works to the Jali LALC. The costs of monitoring are to be negotiated between the Proponent and the Jali LALC.	Petrac; Everick Heritage Consultants

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	<p>If, in the process of works within the site, that at any time it is believed materials of an Aboriginal origin are found, works at the location must stop immediately. The NSW DECC Regional Office – Coffs Harbour and Jali LALC must be advised and advice sought as to the most appropriate course of action to follow. Jali LALC may also wish to inform Traditional Owner respondents and seek their views as to how cultural heritage values might be impacted and to how best to mitigate potential impacts. Works must not proceed in the specific location without written consent of the DECC and Jali LALC.</p>	<p>A protocol relating to this requirement will be developed and all site construction staff will be trained in the protocol</p>	<p>Petrac</p>
	<p>Prior to any vegetation clearing and initial earthworks contractors be advised of the statutory requirements of the <i>National Parks and Wildlife Act 1974</i> (NSW) that in regard to Aboriginal sites or relics: it is an offence to knowingly disturb, deface, damage or destroy, or to permit the disturbance, defacement, damage or destruction of a relic without first obtaining written consent to do so from the Director General of the DECC.</p>	<p>A protocol relating to this requirement will be developed and all site construction staff will be trained in the protocol</p>	<p>Petrac</p>

Statement of Commitments – Project Plan

<i>Issue</i>	<i>Commitment</i>	<i>Timing</i>	<i>Responsibility</i>
General	The developer will carry out the development in accordance with this Environmental Assessment Report, prepared by GeoLINK and dated December 2007; in accordance with plans prepared by Deicke Richards; and in accordance with the specialist supporting reports.	Engineering design plans and drawings will be provided to Council with an application for a Construction Certificate.	Petrac and consultant team
Ecological	<p><i>Hairy Joint Grass</i></p> <p>The developer is committed to the implementation of the Hairy Joint Grass Management Strategy, prepared by Cardno and dated September 2007 (see Appendix C of EA documentation), as updated in the Preferred Project Report dated May 2008.</p> <p>A Vegetation Management Plan (VMP) will be prepared for the site that addresses the implementation of the Hairy Joint Grass Strategy. The VMP will also provide management measures for all on-site plantings and vegetation removal. The VMP shall adopt the following principles:</p> <ul style="list-style-type: none"> ▪ A representative and sustainable proportion of the site's degraded threatened species habitats and Endangered Ecological Communities will be preserved and enhanced within the Conservation Zone. ▪ Where environmentally sensitive areas are not included within the Conservation Zone, appropriate offsets shall be provided in the form of on-site compensatory habitat and off-site reserves. ▪ Areas included within the Conservation Zone and off-site reserves will be rehabilitated and managed in a manner that re-instates ecological values and functions of degraded vegetation and ensures the long-term viability of threatened species populations and Endangered Ecological Communities in the 	<p>The VMP will be submitted to Council for approval prior to the issue of a Construction Certificate for Stage 1.</p>	<p>Petrac</p> <p>Cardno</p>

<i>Issue</i>	<i>Commitment</i>	<i>Timing</i>	<i>Responsibility</i>
	<p>locality.</p> <ul style="list-style-type: none"> To ensure the integrity of native vegetation communities included in the Conservation Zones is maintained, Conservation Zones will only be addressed by building frontages, access ways and entries. No back boundary fence will abut a Conservation Zone. <p>Any vegetation identified as an Endangered Ecological Community on private land will be protected through an Environmental Covenant that will act to prohibit any clearance of this vegetation.</p>		
	<p><i>Weed Management</i></p> <p>The VMP will address weed management. Weeds should be controlled in landscaped areas and areas of retained vegetation. Known environmental weeds such as Camphor Laurel within areas of Littoral Rainforest should be gradually removed by stem injection</p>	The VMP will be submitted to Council for approval prior to the issue of a Construction Certificate for Stage 1.	Cardno
	<p><i>Site Plantings</i></p> <p>Vegetation will be established on site as street trees and landscape plantings.</p>	Plantings will occur during construction of all stages. Details to be outlined in the VMP and detailed landscape plans will be submitted to Council with each subsequent DA for subdivision / development.	Cardno
	Vegetation removed during clearing will be retained and mulched for later use on the site to prevent the introduction of weed seed being imported in mulch from offsite.	Vegetation removal will occur during initial construction stages, with mulch used in landscaping for all stages. Details to be outlined in the VMP.	Cardno
	<p><i>Physical Damage during Construction</i></p> <p>Areas of vegetation to be retained will be clearly delineated with temporary fencing during works.</p>	Protective fencing will be erected prior to commencement of construction works, in accordance with the approved VMP	Cardno
	Trees to be removed will be monitored by personnel (with wildlife caring qualifications) immediately prior to, and during removal to ensure that no animals are directly impacted	Monitoring will occur during all construction works, in accordance with specifications established	Cardno

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	<p>by the works. Any trees containing fauna will be retained until the species leaves the site or the nests have been vacated. If any animals are injured during the proposed works, they will be immediately transported to a wildlife carer for rehabilitation and release.</p> <p><i>On-site Protection</i> Bulk earthworks within the parkland proposed as part of the retirement community super lot will be design to maximise the protection of existing Hairy Joint Grass</p>	<p>in the approved VMP.</p> <p>Detailed earthworks plans will be submitted to Council prior to the issue of the Construction certificate. The plans will include survey results highlighting the location of all Hairy Joint Grass in this area, describing and quantifying both the removal and protection of the species in this area.</p>	Cardno, Ardill Payne & Partners
	<p><i>Impacts on Plant Reproduction</i> retained areas of vegetation will be rehabilitated and buffered.</p>	<p>Vegetation rehabilitation will be carried out in accordance with approved Vegetation Management Plans, with all stages of construction.</p>	
	<p>landscape plantings should include a majority of species that will provide forage habitat for nectarivorous and frugivorous birds and bats.</p>	<p>Details of all plantings will be provided to Council for approval with all future applications for the site. All plantings will be established on site during construction works and will be maintained for a period of 12 months following completion of construction.</p>	Deicke Richards / Cardno
Integrated Water Cycle Management	<p>Petrac will commit to constructing the creek corridors to convey major flood waters and to design the subdivision such that the flood planning levels are set at those recommended within Council's relevant Floodplain Management Plan;</p>	<p>Details of all stormwater management measures will be provided to Council for approval with the Construction Certificate application. Approved stormwater controls / management measures will be constructed prior to the issue of any Subdivision Certificate for the relevant stage.</p>	Ardill Payne & Partners

Issue	Commitment	Timing	Responsibility
	Petrac commit to the continued use of the existing Water Quality Control Pond as a tertiary treatment system and main detention dam/recycling source for the proposed development;	Details of all stormwater management measures will be provided to Council for approval with an application for a Construction Certificate. Approved stormwater controls / management measures will be constructed prior to the issue of any Subdivision Certificate for the relevant stage.	Ardill Payne & Partners
	Petrac will construct WSUD measures, including small dry detention systems up-stream of the Water Quality Control Pond, above the 1% ARI flood extent;	Details of all stormwater management measures will be provided to Council for approval with the application for Construction Certificate. Approved stormwater controls / management measures will be constructed prior to the issue of any Subdivision Certificate for the relevant stage.	Ardill Payne & Partners
	Petrac also commit to ongoing monitoring of stormwater quality and continued maintenance of the stormwater treatment train.	Details of all stormwater management measures will be provided to Council for approval with the application for Construction Certificate. Management of the Water Quality Control Pond will be taken over by Council in 2010 whilst management of the stormwater conveyance systems will be split between Councils and land owners depending on specific land uses and future titling;	Ardill Payne & Partners
Acid Sulfate Soils	Sampling (at a rate of 1/1000 m ³ of excavated material) and laboratory analysis will be undertaken within areas of the site below RL 10 m, where excavation is proposed below natural ground level. The results will be used to determine appropriate liming rates and management requirements if necessary. It is not proposed to sample material	An Acid Sulfate Soils Management Plan will be provided to Council for approval with the application for Construction Certificate.	Ardill Payne & Partners

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	borrowed from areas above the 10m AHD contour as these are unlikely to contain PASS.		
Heritage and Archaeology	The Jali LALC will be engaged to monitor initial investigations; a recommended protocol will be adopted if any materials of an Aboriginal origin are found on the site during excavation works; and contractors will be advised of the statutory requirements of the National Parks and Wildlife Services Act 1974 in regard to any items / relics found during construction.	Representatives of Jali will be engaged prior to the commencement of construction for all future stages.	Petrac
	If, in the process of works within the site, that at any time it is believed materials of an Aboriginal origin are found, works at the location must stop immediately. The NSW DECC Regional Office – Coffs Harbour and Jali LALC must be advised and advice sought as to the most appropriate course of action to follow. Jali LALC may also wish to inform Traditional Owner respondents and seek their views as to how cultural heritage values might be impacted and to how best to mitigate potential impacts. Works must not proceed in the specific location without written consent of the DECC and Jali LALC.	A protocol relating to this requirement will be developed and all site construction staff will be trained in the protocol	Petrac
	Prior to any vegetation clearing and initial earthworks contractors be advised of the statutory requirements of the <i>National Parks and Wildlife Act 1974</i> (NSW) that in regard to Aboriginal sites or relics: it is an offence to knowingly disturb, deface, damage or destroy, or to permit the disturbance, defacement, damage or destruction of a relic without first obtaining written consent to do so from the Director General of the DECC.	A protocol relating to this requirement will be developed and all site construction staff will be trained in the protocol	Petrac

<i>Issue</i>	<i>Commitment</i>	<i>Timing</i>	<i>Responsibility</i>
Infrastructure Provision	Petrac will provide reticulated potable and non-potable water supply, sewerage, telecommunications facilities and underground electricity to all lots.	Servicing plans will be provided to Council for approval with the application for Construction Certificate. All services will be constructed prior to the issue of any Subdivision Certificate for the relevant stage.	Ardill Payne & Partners
Traffic and Access	All internal roads will be constructed in accordance with the road types identified in Appendix F of the EA documentation and in accordance with relevant local and Australian Standards.	Road layout plans will be provided to Council for approval with the application for Construction Certificate. Internal roads will be constructed prior to the issue of any Subdivision Certificate for the relevant stage. Roads will be maintained by the developer for a period of 12 months following completion of construction.	Ardill Payne & Partners
Community facilities	Petrac will provide a multi-purpose community hall, with a floor space of approximately 300 m ² and associated car parking, located within the neighbourhood centre.	A 'super lot' will be created in Stage 1 (see Project Approval), with an area of approximately 1,990 m ² . Following approval of the Project Application, a Development Application will be prepared and lodged with Ballina Shire Council seeking approval for the construction of the community building, and associated car parking, within the 'super lot' created during Stage 1B.	Petrac
Mosquito Management	<p>The proposed watercourse engineering specifications should include the following criteria within its design and also generally comply with The Constructed Wetland Manual Vol 1 Chap 13:</p> <ul style="list-style-type: none"> ▪ The edge of the constructed watercourse should be as steep as practical (within the design standards for public safety) to minimise shallow water (< 500mm) suited to mosquito breeding. ▪ Normal water levels within the 	Detail plans for this watercourse treatment will be provided to Ballina Shire Council prior to the issue of a Construction Certificate	Ardill Payne & Partners; Mosquito Consulting Services

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	<p>watercourse ponds should maintain at a minimum of 500mm water depth except for the margins.</p> <ul style="list-style-type: none"> ▪ Open pond areas should be maintained free of emergent vegetation used by mosquito larvae as harbourage and protection from predator species such as fish. <p>Monitoring of mosquito production should be undertaken periodically to assess the performance of these mosquito management criteria.</p>		