



Part 5 Assessment Review of Environmental Factors – Worksheet for Smaller Scale Council Projects

Project Name: Stockdale
Reserve Detention Basin
Upgrade Project at Abbotsbury
NSW 2176

Date: March 2024

Preliminary Assessment of Planning Issues, Approvals, Consultation Requirements and Acknowledgement

Council has a duty to consider the environmental impact of activities under Part 5 of the Environmental Planning and Assessment Act 1979.

A Review of Environmental Factors (REF) is required to ensure the protection and enhancement of the environment. The assessment must take into account to the fullest extent possible all matters affecting or likely to affect the local environment, community and economy because of the activity.

REF assessments are also undertaken for exempt development under the State Environmental Planning Policy (SEPP) Transport and Infrastructure 2021 as part of good practice rather than it being a requirement of the SEPP.

The Project Manager responsible for completing the REF is to sign that:

- the 'Part 5 Assessment Guide for Project Managers' (Objective Reference A1906281) has been read, and requirements are understood, prior to commencing REF process.
- Council's Development Engineer has reviewed the proposal and is satisfied it meets standards relating to drainage system performance, pavement design and construction, and any other relevant civil works associated with the project.
- Strategic Land Use Planning team has been consulted and has reviewed the following preliminary assessment.

Activity description and location	
Activity description	Stockdale Reserve Detention Basin Upgrade Works: <ul style="list-style-type: none"> • Raising the existing basin wall embankment up to 1.5 meters including deeper excavation on embankment on eastern side to remove existing animal burrows • construct spillway at 2 locations • new footpath construction • new levee around pond
Address	Stockdale Crescent Abbotsbury NSW 2176
Lot/ Sec/DP	Lot 1 D.P. 775855 Lot 166 D.P. 709688 Lot 4 D.P. 38579 Lot 5 D.P. 38579 Lot 2 D.P. 817661
Locational Map	

Activity permissibility and approvals
<p>Land use zoning under Fairfield Local Environmental Plan 2013 (FLEP 2013)</p> <p><i>RE1 – Public Recreation</i> <i>C2 – Environmental Conservation</i></p> <p>Is the development permitted in the zone?</p> <p>RE1 – Public Recreation</p> <p><u>Development Permitted with Consent</u></p> <p>Flood Mitigation Works</p> <p>C2 – Environmental Conservation</p> <p><u>Development Permitted with Consent</u></p> <p>Flood Mitigation Works, and recreation facilitates outdoor</p>

<u>FLEP 2013 Clause 6.8 – Infrastructure Development – Council</u>	Yes	No
<p>Does the scope of works have a value less than one million dollars</p> <p>Clause 6.8 infrastructure development –Council of Fairfield LEP 2013 allows certain development without consent to be carried out by or on behalf of Council</p>		No

<u>Development type under State Environmental Planning Policy (SEPP) Transport and Infrastructure 2021</u>
<p>Division 7 – Flood Mitigation Works Section 2.55 - Definition</p> <p>In this Division— <i>flood mitigation work</i> has the same meaning as it has in the Standard Instrument.</p> <p>Note— The Standard Instrument defines <i>flood mitigation work</i> as follows— <i>flood mitigation work</i> means work designed and constructed for the express purpose of mitigating flood impacts. It involves changing the characteristics of flood behavior to alter the level, location, volume, speed or timing of flood waters to mitigate flood impacts. Types of works may include excavation, construction or enlargement of any fill, wall or levee that will alter riverine flood behaviour, local overland flooding, or tidal action so as to mitigate flood impacts.</p> <p>Note— Examples of flood mitigation work include levees, barrages, causeways, cuttings, embankments, floodgates and detention basins.</p> <p>Section 2.56 - Development permitted without consent</p> <p>(1) Development for the purpose of flood mitigation work may be carried out by or on behalf of a public authority without consent on any land.</p> <p>(2) A reference in this section to development for the purpose of flood mitigation work includes a reference to development for any of the following purposes if the development is in connection with flood mitigation work—</p> <p>(a) construction works, (b) routine maintenance works, (c) environmental management works.</p>

Division 20 - Stormwater Management Systems - 2.137 Development permitted without consent

- (1) Development for the purpose of stormwater management systems may be carried out by or on behalf of a public authority without consent on any land.
- (2) A reference in this section to development for the purpose of stormwater management systems includes a reference to development for any of the following purposes if the development is in connection with a stormwater management system—
 - (a) construction works,
 - (b) routine maintenance works, including maintenance dredging to remove sediment build-up in a stormwater canal or at exit points into natural waterways that affects the efficiency of the stormwater management system,
 - (c) environmental management works,
 - (d) buildings, including buildings containing amenities for staff, that have a height of not more than 12m above ground level (existing)

Conditions for development:

1. Aboriginal Heritage Impact Permit

- A. An application for an Aboriginal Heritage Permit Application (AHIP) should be lodged with Heritage NSW once the present Aboriginal Cultural Heritage Assessment Report authored by Coast History and Heritage Dated January 2024 has been finalised and REF approved.
- B. Works with the potential to result in harm to Aboriginal objects should not commence until the AHIP has been issued and the works should then be undertaken in accordance with the AHIP conditions.
- C. Per figure 21 of Coast History and Heritage ACHAR report dated January 2024, the AHIP will cover:
 - AHIMS #45-5-5437 (Stockdale Reserve IF1)
 - AHIMS #45-5-5439 (Stockdale Reserve IF2)

Note: The AHIP will cover any other similar sites found to be present within the works footprint

2. Community Collection

- A. Prior to the commencement of site works, the locations of the two sites AHIMS#45-5-5437 (Stockdale Reserve IF1) and AHIMS #45-5-5439 (Stockdale Reserve IF2) should be inspected, and the artefacts should be collected if they can be found. The inspection should also cover the whole of the works footprint, and any additional artefacts should also be recorded and collected.
- B. The site inspection and artefact collection will be undertaken by an experienced RAP representative (s). If possible, the collected artefacts will be analyzed and recorded in the field, by a suitably qualified archaeologist in conjunction with the RAP representative(s).

3. Aboriginal Heritage Induction

- A. All workers involved in excavation and construction works onsite will undertake an Aboriginal Cultural Heritage Induction as part of their overall site induction. The induction must explain the nature of the study area and the types of features that are being looked for, the legislative requirements associated with Aboriginal Heritage, and the procedures for archeological management that are to be followed. The induction is to be developed and delivered by a RAP representative, in conjunction with a suitably qualified archaeologist if required.

4. Inspection of Earthworks

- A. An opportunity must be provided to allow RAP representatives to inspect the initial stages of earthworks. If artefacts are identified at this time, they will be managed in accordance with Task 2 community collection.

5. Stop Work Provision

- A. The AHIP will not allow the removal of Aboriginal human remains. If any bone is found which may possibly be human, all works will immediately cease in that area. A specialist physical

anthropologist will be called in to determine whether the remains are definitely human. In the event that the bones are human, the NSW police will be contacted and any further investigations will be undertaken under their guidance.

If the bone is found to be deposited within the last 100 years, whether if Aboriginal or Non-Aboriginal origin, the NSW police will determine further actions to be taken as it may be a historical matter. If the NSW police are satisfied that the bone is that of an Aboriginal person not suspected of being buried within the last 100 years, Heritage NSW will be notified and a determination made in consultation with the RAP's as to the appropriate management of the remains. Works are not to recommence in the vicinity of the find unless authorized in writing by Heritage NSW or (if applicable) NSW police.

6. Reporting

- A. Following completion of the fieldwork, Aboriginal Site Impact Recording Forms will be prepared and submitted to AHIMS detailing the impact to and current condition of the sites AHIMS#45-5-5437 (Stockdale Reserve IF1) and AHIMS #45-5-5439 (Stockdale Reserve IF2). Site cards will be prepared and submitted to AHIMS for any additional sites that are identified during the course of works.

7. Long-term management of archeological remains

- A. Any Aboriginal archeological remains retrieved during the community collection will be relocated to a location within Stockdale reserve that will be protected from future impact per the recommendations of the Aboriginal Cultural Heritage Report Authored by Coast History and heritage dated January 2024.

8. Approved Plans

- A. The development shall take place in accordance with the REF approved development plans as prepared and assessed in Appendix B.

9. Mitigation Measures, Ameliorative Measures, and recommendations

- A. The construction contractor must carry out the works in line with the comments provided from internal sections of Council placed in the relevant appendices to this approval and the ameliorative measures and recommendations of the following technical reports.

- Preliminary Site Investigation Authored by JK Environments Dated 20 October 2020
- Supplementary Contamination Screening – Proposed Detention Basin Upgrades Authored by JK Environments Dated 10 November 2022
- Additional Geotechnical Investigation - Animal Burrows Report – Authored by JK Geotechnics Dated 14 May 2021.
- Arboricultural Impact Assessment and Tree Protection Plan Authored by Tree Survey Dated 25 January 2024
- Flora and Fauna Assessment Report Authored by East Coast Ecology Dated January 2024.
- Stockdale Reserve Detention Basin Investigation and Detailed Design Report Authored by NSW Public Works – Department of Regional NSW dated December 2023.

10. Waste Classification

- A. Soil sampling, testing and classification of the fill onsite is required to be undertaken prior to offsite disposal in accordance with the National Environmental Protection Measures (NEPM) guidelines to obtain a %W/W result. Any asbestos that remains onsite above a 0.1%w/w will trigger Environmental Planning Requirements for a Remediation Action Plan or WHS Regulations for an Asbestos Management Plan. Assessment of Asbestos risk must be undertaken in line with the Western Australian Department of health Guidelines for the assessment, remediation, and management of asbestos contaminated sites in Western Australia dated July 2022.

11. Further Investigations Asbestos

- A. Prior to works, several trenches must be excavated to the full depth of the fill, to allow proper inspection, photographs, and measurement of the fill as well as further soil sampling to determine the presence/absence of asbestos.
- B. A trenching investigation report and General Immobilization Approval 1999/05 must be prepared including contract conditions, schedule of rates items and transfer of contractual risk of friable asbestos, unexpected contamination, and contaminated water from the principal to the civil contractor.
- C. Prior to commencement of works a Detailed Site Investigation (DSI) report must be prepared by a suitably qualified professional.

12. Unexpected Asbestos Finds Protocol

- A. An unexpected, contaminated land and asbestos finds procedure must be prepared by the contractor before the commencement of work and must be followed should unexpected, contaminated land or asbestos (or suspected contaminated land or asbestos) be excavated or otherwise discovered during work. The procedure must include details of who will be responsible for implementing the unexpected finds procedure and the roles and responsibilities of all parties involved. This procedure must be in place for the duration of works.

13. Tree Removal

- A. All tree removal work is to be carried out by an arborist with a minimum AQF Level 3 qualification in Arboriculture, in accordance with Australian Standard AS4373-2007, Pruning of Amenity Trees (AS4373), the Work Health and Safety Act 2011, and Work Health and Safety Regulation 2017.
- B. Any habitat trees must be felled using a slow drop technique. This involves knocking the tree to encourage any in situ fauna to vacate the tree (e.g. using an excavator bucket) before slowly pushing the tree to the ground. Logs and log piles should be relocated outside of impact areas to minimise any loss of habitat.

14. Tree Pruning

- A. Pruning must not exceed 10% of the overall canopy volume
- B. No limbs greater than 150mm in diameter are to be removed
- C. The final pruning cut shall be at the branch collar or growth point in accordance with AS4373
- D. All tree pruning work is to be carried out by an arborist with a minimum AQF Level 3 qualification in Arboriculture, in accordance with AS4373 and the NSW Work Cover Code of Practice for the Amenity Tree Industry 1998.
- E. If the proposed vegetation trimming does not meet the specifications outlined above, the project arborist must undertake and assessment of impacts on a case by case basis.

15. Tree Protection Fencing

- A. Tree protection fencing must be established at the locations shown in the Tree Protection Plan authored by Tree Survey dated 25 January 2024.
- B. Tree protection fencing must be installed prior to site establishment and remain intact until completion of works
- C. Once erected protective fencing must not be removed or altered without the approval of the project arborist.
- D. Specifications for tree protection fencing are as follows:
 - i. Temporary mesh panel fencing (minimum height of 1.8 metres)
 - ii. Certified and inspected by the project arborist
- E. Specifications for tree protection barriers are as follows:
 - i. Star pickets spaced at 2m intervals
 - ii. Connected by a continuous high visibility barrier /hazard mesh or flagging rope
 - iii. Maintained at a minimum height of 1m

16. Mulch

- A. The area within the TPZ should be mulched (where practical) with good quality composted wood chip/leaf mulch and should be maintained at a depth of 150mm – 200mm.

17. Excavations

- A. The project arborist must supervise and certify that all excavations and root pruning are in accordance with AS4373 and AS4970. All excavations (including root excavation) within the TPZ must be carried out using tree sensitive methods under the supervision of the project arborist. These may include Manual Excavation, Air spade and Hydro-Vacuum excavation.

18. Root Pruning

- A. Any conflicting roots greater than 50mm in diameter identified during the supervised excavations shall be pruned using clean, sharp secateurs or a pruning saw to ensure a clean cut, free from tears. All root pruning (>50mm) must be documented and carried out by the project arborist.

19. Site inspections

- A. In accordance with AS4970, inspections must be conducted by the project arborist at the following stages:
 - o Prior to any work commencing onsite
 - o During any excavation
 - o A minimum of once per 12 weeks
 - o After all major construction has ceased, following the removal of tree protection

The project manager must notify the project arborist at a minimum 48 hours' notice prior to any works within the TPZ of any tree.

20. Construction

- A. **Construction Waste Management Plan** – Prior to works commencing the contractor must prepare a construction waste management plan to the satisfaction of Councils waste team. A copy of the waste management plan is to be referred to Council for reference.
- B. **Construction Traffic Management Plan** – Prior to works commencing a construction traffic management plan is to be prepared by the contractor and referred to Councils traffic management team for assessment and approval. The plan must include details of construction vehicle routes, number of trucks, hours of operation, access arrangements, traffic controls, storage locations and details and number of vehicles accessing the site including parking and works locations.
- C. **Pedestrian and Traffic Safety Management Plan** – Prior to commencement of any works, the applicant must submit for approval a pedestrian and traffic management plan detailing all traffic safety measures proposed to control both vehicular and pedestrian traffic during construction. The pedestrian and safety traffic management plan shall be lodged with Council for approval at least (2) weeks prior to commencement of day works.
- D. **Construction and Environment Management Plan** – Detailing but not limited to an erosion and sedimentation control plan, storage of construction materials/ machinery and site remediation works.
- E. **Hours of work** – Construction works are to be undertaken between the hours of 7am to 5pm Monday to Friday and 7am to 1pm Saturdays. No work is permitted on Sundays.

21. Erosion and Sediment Control Plan

- A. The principal contractor shall prepare an erosion and sediment control plan in accordance with the requirements of the Fairfield City Councils erosion and sediment control plan policy. The erosion and sediment control plan must clearly demonstrate how erosion is to be minimized and how sediments are to be trapped on the site and prevented from escaping, transported, carried or discharged across and outside the boundaries of the site of the development area.

22. Dial before you Dig

- A. Councils project management team is required to conduct a dial 1100 before you dig search to determine the location of the services in Stockdale Reserve prior to commencement of any works onsite.

23. Amenities

- A. Toilet Flushing facilities and handwashing facilities are to be provided to workers onsite.

24. Pedestrian and Cyclist Access

- A. Safe pedestrian and cyclist access must be maintained around work sites during work. In circumstances where pedestrian and cyclist access is restricted or removed due to work, an alternate route which complies with the relevant standards must be provided and sign posted.

25. Filling Within a Site

- A. Any excess fill or fill imported into the site to fill within the proposed works site must meet the criteria of "Virgin Excavated Natural Material" as defined in the NSW EPA Environmental Guidelines – and written verification provided to Council

26. Notification and Signage

- A. Councils' business operator is to be advised of the period of construction to inform casual and regular hirers of the works period.
B. Councils place team is to be contacted regarding placement of an information sign which is to be displayed on the construction fencing to inform the community of the upgrade works.

27. Assigning a Project Ecologist for Vegetation Clearing

- A. Prior to construction a qualified and experienced (minimum 3 years' experience) project ecologist must be commissioned. The ecologist must be licensed with a current Department of Primary Industries Animal Research Authority Permit and New South Wales Scientific License issued under the Biodiversity Conservation Act 2016.
B. The ecologist will be commissioned to implement the following measures in accordance with best practice guidelines:
- Pre-clearing surveys will be undertaken in accordance with Guide 1:Pre-clearing process of biodiversity Guidelines: Protecting and managing biodiversity on RTA projects (RTA,2011).
 - Vegetation and habitat removal must be undertaken in accordance with Guide 4: Clearing of vegetation and removal of bush rock of the Biodiversity Guidelines: Protecting and managing biodiversity on RTA projects (RTA, 2011).
 - Fauna will be managed in accordance with Guide 9: Fauna handling of the Biodiversity Guidelines: Protecting and managing biodiversity on RTA projects (RTA,2011)
 - Any habitat removed will be replaced or re-instated in accordance with Guide 5:Reuse of woody debris and bushrock and guide 8: Nest boxes of the Biodiversity Guidelines: Protecting and managing biodiversity on RTA projects (RTA,2011).

28. Edge Effects on Adjacent Native Vegetation and Habitat

- A. Exclusion zones will be set up at the limit of clearing in accordance with Guide 2: Exclusion zones of the Biodiversity Guidelines: Protecting and managing biodiversity on RTA projects (RTA,2011).

29. Storage and Stockpiling (soil and materials)

- A. Allocate all storage, stockpile and laydown sites away from any vegetation that is planned to be retained. Avoid importing any soil from outside the site in order to avoid the potential of incurring indirect impacts on biodiversity values as this can introduce weeds and pathogens to the site. If materials are required to be imported for landscaping works, they are to be sterilized according to industry standards prior to importation to site.

30. No weeds or pathogens imported on to the subject Land or into Adjacent Areas

<p>A. No priority or environmental weeds, pathogens or other biosecurity issues (e.g fire ants) are to be imported on to the site prior to or during construction works.</p> <p>31. Replacement Planting</p> <p>A. All native trees that are removed should be replaced at 1:1 ratio within the broader site area. Species to be planted should be representative of Cumberland Plain Woodland.</p> <p>32 Community Consultation</p> <p>A. A community consultation plan is to be developed by Councils project manager, specifically writing to those residents impacted, including separate letters to those residents that are impacted by the raised embankment at the southern side of the eastern embankment. Should concerns with amenity be raised by residents, the council is to consider suitable mitigation measures in consultation with directly affected property owners.</p>
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<p>Classification of Council owned land (if relevant) – community or operational</p> <p>All lots identified in the scope of works (below) are in Council ownership and classified as community land</p> <p>Lot 1 D.P. 775855 - Zone RE1 Public Recreation</p> <p>Lot 166 D.P. 709688 - Zone C2 Environmental Conservation</p> <p>Lot 4 D.P. 38579 - Zone RE1 Public Recreation</p> <p>Lot 5 D.P. 38579 - Zone RE1 Public Recreation</p> <p>Lot 2 D.P. 817661 - Zone RE1 Public Recreation</p>
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Plan of Management (POM)													
Title	Stockdale Reserve Abbotsbury Plan of Management (March 2001)												
Objective id reference	A82741												
Is activity authorised by the POM? (include relevant reference/extract(s))	<p>The detention basin upgrade achieves the objectives of the POM through upgrading the detention basin in line with recommendations from Dams Safety NSW. This is in line with “Objective 4 -management of natural areas watercourse” of the Plan of Management. The detention basin upgrade will enhance the environmental and recreation value of the area through ensuring better drainage of the fields and safety to nearby homes in a flood event. Upgrading the existing floodway between the existing detention basin and the wetland will ensure that seepage from the wetland into the public recreation area will no longer occur. Construction of a path is in line with the provision of appropriate access to the wetland and creek as required under the means to achieve the management action See relevant extract from the POM.</p> <table border="1"> <thead> <tr> <th>Performance Target</th> <th>Means to Achieve</th> <th>Timeframe/ Department</th> <th>Performance Assessment</th> </tr> </thead> <tbody> <tr> <td colspan="4">Objective 4: The objectives for management of Natural Areas – Watercourse.</td> </tr> <tr> <td>The section of Orphan School Creek through Stockdale Reserve is a well-maintained creek area with healthy locally indigenous vegetation.</td> <td> <ul style="list-style-type: none"> Protect and enhance the environmental, recreational and educational values of the creek area Encourage locally indigenous species Undertake regular maintenance. Conduct regular inspections and ensure that the creek is free of rubbish. Control major weeds with consideration to habitat values Manage on a catchment basis and liaise with adjacent landowners as appropriate Install signage and interpretation as appropriate Provide appropriate access to the creek area with consideration to the potential for disturbance Enhance linkages where possible Liaise with other authorities as appropriate (eg Liverpool Council) Consider the recommendations of NPWS Recovery Plans and Fairfield City Council’s Five Creeks Study (2001) and implement actions as appropriate </td> <td>LT and ongoing CSD</td> <td> Community feedback and satisfaction Monitor water quality and erosion effects Bushland is protected Monitor native species numbers and variety Numbers increase over time Monitor weed species and coverage – numbers decline Monitor reports of dumping </td> </tr> </tbody> </table>	Performance Target	Means to Achieve	Timeframe/ Department	Performance Assessment	Objective 4: The objectives for management of Natural Areas – Watercourse.				The section of Orphan School Creek through Stockdale Reserve is a well-maintained creek area with healthy locally indigenous vegetation.	<ul style="list-style-type: none"> Protect and enhance the environmental, recreational and educational values of the creek area Encourage locally indigenous species Undertake regular maintenance. Conduct regular inspections and ensure that the creek is free of rubbish. Control major weeds with consideration to habitat values Manage on a catchment basis and liaise with adjacent landowners as appropriate Install signage and interpretation as appropriate Provide appropriate access to the creek area with consideration to the potential for disturbance Enhance linkages where possible Liaise with other authorities as appropriate (eg Liverpool Council) Consider the recommendations of NPWS Recovery Plans and Fairfield City Council’s Five Creeks Study (2001) and implement actions as appropriate 	LT and ongoing CSD	Community feedback and satisfaction Monitor water quality and erosion effects Bushland is protected Monitor native species numbers and variety Numbers increase over time Monitor weed species and coverage – numbers decline Monitor reports of dumping
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Licences/consultation required with State Agencies (include copy of advice provided)

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Liaised with TfNSW– Response email included Attachment F
 Liaised with Fisheries - not fisheries habitat – confirmation received via email.
 ACHAR study undertaken and once the REF is approved, will submit AHIP application to DEECCW Sydney Water – Major Projects to liaise with during Tendering process if required

Total Project Cost	Yes	
Up to \$500,000		
Up to \$2,000,000		
Over \$2,000,000		Yes
Is a cost report or Quantity Surveyors Report attached?	Yes	No
Details of cost report:	Yes	

Internal Council consultation required	Yes	No
Traffic and Transport Branch	✓	
Catchment Planning Branch	✓	
Senior Natural Resources Officer	✓	
Environmental Management	✓	
Development Engineer	✓	
Building Control & Compliance		✓
Other City Assets Branch Parks Asset Branch Community Facilities Coordinator – Assets Management	✓ ✓ ✓	
Community consultation required	Yes	No
If yes, describe how consultation will be conducted	✓	
Council will have information about the works on the Web Page under “Your Council/Major Projects”. Council will also send information flyers to residents.		
The contractor undertaking the works will advise the local community, businesses, schools, SES and all NSW emergency services of the impending works and dates.		

Does the development required to be published onto Council’s website or the NSW Planning Portal?	Yes	No
If: <ul style="list-style-type: none"> • the activity has a capital investment value of more than \$5 million, • The activity requires an approval or permit as referred to in any of the following provisions before it may be carried out— <ul style="list-style-type: none"> - Fisheries Management Act 1994, sections 144, 201, 205 or 219 - Heritage Act 1977, section 57 - National Parks and Wildlife Act 1974, section 90 - Protection of the Environment Operations Act 1997, sections 47–49 or 122, or • the determining authority considers that it is in the public interest to publish the review 	Yes	

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Development Engineer Review	I raise no objection to the update, or any additional comments to my initial response.		
	Reviewing Officer's Name	Antonio Inzitari	
	Position	Coordinator Engineering Assessment – Development Planning	
	Signed		Date

Project Manager Acknowledgement of REF Requirements	I confirm that:		
	<ul style="list-style-type: none"> • land where project is located is owned by Fairfield City Council • an adopted Plan of Management is in place for land classified as "community" • the proposal is an "activity" for which development consent is not required • the activity is a small scale project • external, internal and community consultation requirements have been determined • the Strategic Land Use Planning Team has been consulted in regard to the above. 		
	Project Manager's Name	Erensa Shrestha	
	Position	Professional Engineer	
Signed		Date	12/3/2024

Strategic Planning Approval to Proceed with REF Assessment	Note delegations for approval		
	<ul style="list-style-type: none"> • Up to \$500,000 – Executive Strategic Planner/Coordinator Strategic Planning • Up to \$2,000,000 – Manager Strategic Land Use Planning • Over \$2,000,000 or where lesser value with probity/community conflict/political issues – Group Manager City Strategic Planning or Group Manager City Development 		
	Planning Officer's Name	Patrick Warren	
	Position	Senior Strategic Land Use Planner	
Signed		Date	12.03.2024

Part 5 Environmental Assessment for Small Projects

1.0 Introduction

Project Name:	Stockdale Reserve Detention Basin Upgrade
Council Department:	Catchment Planning Branch
Project Management:	Erensa Shrestha
Council Objective File No:	qA270447
Document Objective Reference No.	A5755388
Owner of land	Fairfield City Council

1.2 Authority to Undertake Activity

Project reference within FCC Delivery Plan	Theme 3 – Environmental Sustainability
Project reference within FCC Operational Plan	MPFMP2412 - Flood detention basin upgrade, Stockdale Reserve
Project commencement authority – date of Council decision, item no.	Major Projects to prepare report to Council
Previous reports to Council – list meeting dates and item no.:	N/A
Requirement for activity (eg. decision of Council or requisition by another government agency)	N/A
Final approval required from (e.g Council, Director etc)	Director City Development

2.0 Activity description, plans and drawings, operating parameters and construction phase activity.

2.1 Activity description

<p>Activity description - detailing all its parts.</p>	<ul style="list-style-type: none"> • Raising the existing embankment (approximately 468 metres in length) generally by 0.67 m to a maximum of 1.5 m at the southern end of the eastern embankment commencing close to the middle of the existing basin southern cut, continuing around the existing eastern and northern embankment, then at upstream pond turning towards north all the way to the back fence of the northern property. • Construction of a 50m length spillway on the north-eastern corner of the main embankment. • Reconstruction of separation bund to address the current seepage issue through the existing pond separation bund between upstream pond and the basin <p>The Stockdale Reserve detention basin is a Declared basin, and it is a mandatory requirement by Dams</p>
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	Safety NSW for Council to undertake upgrade works of this detention basin.
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2.2 Plans and drawings

Plan(s) which shows the intended development.	Appendix A – Prepared by Public Works
Plan which shows surrounding land uses, including distances to adjoining residences and sensitive land uses	Appendix B

2.3 Operating parameters

Activity operating parameters – eg, hours of operation, expected patron numbers	Detention Basin open to the public 24/7. No expected increase in patron numbers once work is complete as they are for flood mitigation purposes and will not increase recreational attractiveness of the park.
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2.4 Construction phase activity

Factor	Comment
Description of activity associated with project's construction/delivery:	The detention basin works will provide protection to downstream properties up to and during the 1% AEP storm event with the two spillways to control overflows from the detention basin. The detention basin will comply with the Declared dam requirements of Dams Safety NSW.
Proposed commencement and completion dates:	1/6/2024 to 31/12/2025
Proposed work days and hours to undertake work:	Monday–Friday, 7am-6pm and Saturdays 7am-1pm. Only inaudible work will be permitted on Saturdays 7am-1pm (due to the soccer fields being used). No work is permitted on Sundays or public holidays.
Number of workers required on-site:	Approximately 15-20 workers on site
Work equipment and machinery required on-site:	Work equipment and machinery required include small excavators, crane, long reach excavators, articulated dump truck, tipper trucks, various tools and digital surveying system, site sheds, drum and/or plate compactor, pugmill.
Requirement for temporary facilities - car parking	Existing parking on Stockdale Crescent
Requirement for temporary facilities - toilets	As required, to be decided prior to construction by successful tenderer
Requirement for temporary facilities – temporarily diverting existing pedestrian and cycleways during construction	N/A- no formal pedestrian access or cycleway present in construction site. A fence will be installed around the site for public to stay out of the site.
Other	NO

3.0 Site analysis, locality analysis, and catchment analysis**3.1 Site analysis**

This section assesses environmental constraints.

All questions must be answered after checking layers on Council's Land Information System "Enlighten"

Part 5 Assessment Review of Environmental Factors – Worksheet for Smaller Scale Council Projects

Feature	Description or Not Applicable	Enlighten Check
Aboriginal Significance	<p>The works are within an Aboriginal PIA area. Multiple artefacts have been identified in the area of works and will be subject to an Aboriginal Heritage Permit application Coast – History and Heritage have carried out a 'Due Diligence' report A4389744.</p> <p>Coast History have been engaged to prepare an 'Aboriginal Cultural Heritage Assessment Report'. This report will outline the process to remove the artifacts which will include the lodgment and approval of an 'Aboriginal Heritage Impact Permit' under the National Parks and Wildlife Act.</p>	Checked
Acid Sulphate Soils	Layer checked. There is no Acid Sulphate Soil classes within, or nearby, the works area.	Checked
Contamination	The land is affected by the Fill layer in Enlighten, this flags potential contamination on the site.	See "Environment" tab for contaminated land
Drainage, flooding	The project site is affected from mainstream flooding and is located partly in the High/Medium/Low flood risk precincts, and partly not flood affected. A5707201	Checked
Easements	There are no easements located in the project area.	Checked
Heritage	No European heritage located within proximity to the site. One aboriginal archeological site located in works area	Checked
Road Constraints:	<p>There is an "Access Denied" coding for Cowpasture Road.</p> <p>A road closure coding applies along Cowpasture Road.</p> <p>A road widening affectation code applies along Cowpasture Road.</p>	Checked
Slope	0.5%	See "Contour" tab
Vegetation	<p>The Detention Basin is predominately clear of vegetation.</p> <p>There are some trees located on the detention basin bank which will be required to be removed these are classified as low significance under the Enlighten layers for CSA Map.</p>	Checked

3.2

Locality analysis

Land use in locality

(within 400 metres – eg residential, commercial, industrial, open space, bushland – refer to zoning map within Enlighten – see 'LEP 1994' for Bonnyrigg Town Centre and 'LEP 2013' tab for rest of City)

North of site	R2 Low Density Residential
East of site	R2 Low Density Residential; RE1 – Public recreation;
South of site	R2 Low Density Residential; E1 Local Centre
West of site	R2 Low Density Residential; Riparian land and waterways; Terrestrial biodiversity

Character of development

(eg. high density buildings, newly developed area, established area, commercial town centre, active open space etc – refer to 'Aerial' tab within Enlighten and site inspection)

North of site	Low density single and double storey brick and weatherboard houses.
East of site	Single and double storey brick and weatherboard houses.
South of site	Low density single and double storey brick and weatherboard houses.
West of site	Low density single and double storey brick and weatherboard houses.

3.3 Catchment analysis

The established urban areas (east of the Western Sydney Parklands) of Fairfield City are located within the catchment of the Georges River. The Georges River Coastal Zone Management Plan (GRCZMP) requires Council to take into consideration the aims, objectives and actions of the plan aimed at protecting water quality, enhancing access to foreshores, protecting natural and cultural heritage and adapting to the potential impacts of sea level rise.

The proposal will address the above matters as follows:	
Does the proposal impact on or reduce existing public access to a waterway or its tributary	The design does not impact on or reduce the public access to the creek environment. It will enhance it through the construction of a pathway extending across the top of the northern section of the detention basin wall extending from the existing pathway. During construction works access will be limited.
During construction phase, how will appropriate measures be included to mitigate the potential for erosion and sediment runoff from the site	Sedimentation and erosion control measures will be implemented to minimise any sediment runoff. Including sandbagging, erosion traps, wetting techniques and jute matting.
Other impacts	It is proposed to remove multiple Aboriginal Archeological relics from the site. This is to ensure their protection and ultimately they are proposed to be preserved offsite. Removal of these relics will ensure their preservation however it is acknowledged that there is a loss of connection to place which is a negative impact of the project.

4. Environmental Impact Assessment & Ameliorative Measures

For the purposes of Part 5 of the Act, the factors to be taken into account when consideration is being given to the likely impact of an activity on the environment include those specified by Environmental Planning and Assessment Regulation 2021 (Clause 171)).

- (a) the environmental impact on the community,
- (b) the transformation of the locality,
- (c) the environmental impact on the ecosystems of the locality,
- (d) reduction of the aesthetic, recreational, scientific or other environmental quality or value of the locality,
- (e) the effects on any locality, place or building that has—
- (f) aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance, or
- (g) other special value for present or future generations,
- (h) the impact on the habitat of protected animals, within the meaning of the *Biodiversity Conservation Act 2016*,
- (i) the endangering of a species of animal, plant or other form of life, whether living on land, in water or in the air,
- (j) long-term effects on the environment,
- (k) degradation of the quality of the environment,
- (l) risk to the safety of the environment,
- (m) reduction in the range of beneficial uses of the environment,
- (n) pollution of the environment,
- (o) environmental problems associated with the disposal of waste,
- (p) increased demands on natural or other resources that are, or are likely to become, in short supply,
- (q) the cumulative environmental effect with other existing or likely future activities,
- (r) the impact on coastal processes and coastal hazards, including those under projected climate change conditions,
- (s) applicable local strategic planning statements, regional strategic plans or district strategic plans made under the Act, Division 3.1,
- (t) other relevant environmental factors.

Ameliorative Measures

Outline any ameliorative measure proposed to address potential impacts. Note these measures will be considered to form part of the proposed activity and must be undertaken.

Note: Ameliorative measure will form requirements for the project to proceed

Prompts are provided to identify types of potential impacts, their size, scope and intensity, and duration. After considering these criteria, an assessment is required as to the severity of potential impacts as follows:

- NA** – Not applicable
- P** – Positive impact
- 1** – Minor negative impact
- 2** – Potentially significant negative impact requiring further assessment
- 3** – Significant negative impact

Impact and Impact Assessment NA – Not applicable P – Positive impact 1 – Minor negative impact controlled with ameliorative measure 2 – Potentially significant negative impact requiring further assessment 3 – Significant negative impact	Summary of impact	Ameliorative measure
Example	Score	If applicable, and will form condition of approval
<i>Social factor – Noise during construction.</i>	1 Noise will likely be audible above background noise levels from adjoining residential properties during construction period only – 3 months.	Prepare and implement Noise Management Plan, with work only permitted between 7am and 5pm, Monday to Friday and between 9 am and 12 noon on Saturdays. No work on public holidays. A council contact will be provided to affected residents ensuring appropriate feedback and complaints mechanism.
4.1 Community	Score	
Social factors impacting upon individuals	1 The existing Stockdale Reserve sporting fields will be restricted for sports events and individual exercise for the duration of the works.	No machinery works are to be undertaken on Saturday or Sundays.
Social factors impacting upon communities	2 The existing Stockdale Reserve sporting fields will be restricted for sports events and individual exercise for the duration of the works. The eastern soccer field and the cricket closed will be closed during the construction works.	All effort will be taken not to disturb events on the soccer field. No works are to be undertaken on Saturday or Sundays. Machinery on those fields may have fencing around them when they are not in use.
Social factors that address inclusion for people with disability and their carers through wide continuous paths of travel that allows people to pass freely in both	NA A new footpath proposed will connect to the existing footpath on site.	Additional footpath access to the community.

Part 5 Assessment Review of Environmental Factors – Worksheet for Smaller Scale Council Projects

Impact and Impact Assessment		Summary of impact	Ameliorative measure
NA – Not applicable P – Positive impact 1 – Minor negative impact controlled with ameliorative measure 2 – Potentially significant negative impact requiring further assessment 3 – Significant negative impact			
directions			
Social factors that address continuous paths of travel to and from accessible car parking spaces to the destination	NA	NA	NA
Social factors that address inclusion for people's need to access shade along walking paths	P	A new footpath proposed will connect to the existing footpath on site.	Additional footpath access to the community.
Social factors that address inclusion for people's needs to sit and rest in shade	NA	NA	NA
Social factors that address inclusion for people's needs to use accessible toilet facilities	NA	NA	NA
Social factors that address inclusion for people's needs to access adult change facilities	NA	NA	NA
Social factors that address inclusion for all people to be able to access drinking water	NA	NA	NA
Social factors that address community perceptions of safety or other exclusion that may limit use	NA	NA	NA
Social factors that address people's needs in having access to quiet, sensory, reflective spaces (people with anxiety, depression, autism spectrum etc)	NA	NA	NA
Social factors that encourages people's active travel options (walking, cycling, public transport etc)	1	The existing Stockdale Reserve sporting field being closed, or partially closed, for individual exercise for the 3-month period of construction.	No works are to be undertaken on Saturday or Sundays
Social factors that allows inclusion of all people through	NA	NA	NA

Impact and Impact Assessment NA – Not applicable P – Positive impact 1 – Minor negative impact controlled with ameliorative measure 2 – Potentially significant negative impact requiring further assessment 3 – Significant negative impact		Summary of impact	Ameliorative measure
accessible recreational facilities – BBQ's, picnic tables, play equipment etc			
Social factors that include the need to fence play areas on roads with speed limits of 60km/h or more, play equipment to promote safety of young children	NA	NA	NA
Social factors that promote physical activity and social activity which is inclusive and accessible including fitness equipment and play equipment	2	<p>The existing Stockdale Reserve sporting fields will be restricted for sports' events and individual exercise for the duration of the construction works.</p> <p>The eastern soccer field will be closed during the construction works. Cricket will also not be able to be played.</p>	<p>All effort will be taken to minimise disturbing events on the Stockdale Reserve sporting fields. Only inaudible work will be permitted on Saturdays 7am-1pm (due to the soccer fields being used). No work is permitted on Sundays or public holidays.</p> <p>Machinery on those fields may have fencing around them when they are not in use.</p> <p>Sporting groups to be notified of closures</p>
Social factors that address the ability of facilities to be accessed after dark in winter	NA	NA	NA
Social factors that preference pedestrian crossings on major movement corridors and limit traffic speed to promote safety	NA	NA	NA
Social factors that address the need for tactical ground surface indicators (TGSi) at critical crossing/conflict points?	NA	NA	NA
Social factors that address the need for way finding	NA	NA	NA

Impact and Impact Assessment NA – Not applicable P – Positive impact 1 – Minor negative impact controlled with ameliorative measure 2 – Potentially significant negative impact requiring further assessment 3 – Significant negative impact	Summary of impact	Ameliorative measure	
signage to promotes clearly directions to facilities (eg within a 400 metre radius for neighbourhood facilities)			
Economic factors impacting upon individuals, businesses or communities	NA	NA	NA
Property factors including easements	NA	NA	NA
4.2 Locality		Score	
Land use compatibility with existing or planned land use, character of locality, or streetscape	P	The works are limited to the re-construction of the existing detention basin wall including the wetland pond. During construction there will be visible signs of earthworks.	The works will enhance the amenity of the area by including additional footpaths and formalizing the spillway of the detention basin.
Traffic during construction	1	The construction works will have minor impacts on the movement of vehicular traffic, pedestrians and cyclists.	Traffic control will be employed to regulate the movement of construction vehicles, general vehicles, including pedestrians and cyclists on the surrounding roads. Comments have been sought from Council's Traffic Section.
Traffic during ongoing operation	NA	Any ongoing operational management traffic requirements will be discussed with the contractor.	Plans will be in place if required
4.3 Ecosystems		Score	
Potential direct impacts (eg removal of vegetation, disturbance of existing watercourses or water bodies etc)	NA	Existing vegetation in and around the basin is being removed.	Flora and Fauna report is prepared and will be followed to reduce impact on remaining vegetation

Impact and Impact Assessment NA – Not applicable P – Positive impact 1 – Minor negative impact controlled with ameliorative measure 2 – Potentially significant negative impact requiring further assessment 3 – Significant negative impact	Summary of impact	Ameliorative measure
Potential indirect impacts (eg. overshadowing vegetation, discharge of stormwater etc)	NA	NA
4.4 Environmental quality or value of a locality (aesthetic, recreational, scientific or other) Score		
Views from a public place or private property	2 Due to the raised embankment, people may stand and view into adjacent properties from the top of the detention basin.	Council officers will come up with a community consultation plan specifically writing to those residents impacted, including separate letters to those residents that are impacted by the raised embankment at the southern side of the eastern embankment. Should concerns with amenity be raised by residents, the council is to consider suitable mitigation measures in consultation with directly effected property owners.
Impacts on the scenic or environmental quality or value of the locality	p The works consist of upgrading the existing detention basin wall. Including footpath extension. However 56 trees will be removed on the eastern embankment.	Additional footpath works will provide linkages around the detention basin enhancing access to the local wetland. Tree protection measures to be provided and replacement planting may be provided where possible.
Inclusion of landscape/tree clusters to promote the City's tree canopy	NA Removal of 56 trees as a result of development. The trees are Cumberland Plain Woodland Species that have been planted in the previous 25 years. Replacement Planting is to occur at a ratio of 1:1 and be of a Cumberland Plain woodland derived species.	Replacement Planting is to occur at a ratio of 1:1 and be of a Cumberland Plain Woodland Species.

Part 5 Assessment Review of Environmental Factors – Worksheet for Smaller Scale Council Projects

Impact and Impact Assessment NA – Not applicable P – Positive impact 1 – Minor negative impact controlled with ameliorative measure 2 – Potentially significant negative impact requiring further assessment 3 – Significant negative impact	Summary of impact		Ameliorative measure
Inclusion of landscaping within roundabouts to address neighbourhood aesthetic as well as slow down traffic	NA	NA	NA
4.5 Heritage (locality, place or building having aesthetic, anthropological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations) Score			
Effect on a local heritage item	N/A	N/A	N/A
Effect on the archaeological or cultural heritage value of any aboriginal object or place	2, P	1. Conduct a search of AHIMS register to determine whether site is located within proximity to an Aboriginal heritage item. 2. Check in Enlighten whether the site is located within an Aboriginal Potential Investigation Area (PIA). 3. Discuss with Strategic Planning whether a detailed investigation into Aboriginal Heritage may be required The site has historical records of having Aboriginal artifacts located within the proposed construction area. Coast History prepared a 'Due Diligence Aboriginal Heritage Assessment Report' A4389744.	Coast History and Heritage have been engaged to prepare an 'Aboriginal Cultural Heritage Assessment Report'. This report will outline the process to remove the artifacts which will include the lodgment and approval of an 'Aboriginal Heritage Impact Permit'.
4.6 Habitat of Protected Fauna (within the meaning of the Biodiversity Conservation Act 2016) Note: Liaise with Senior Natural Resources Officer to determine whether a 5 Part Test in accordance with Environment Planning Assessment Act 1979 Part 1, Cl 1.7 is required. Score			
Direct impact on the habitat (by removal of vegetation etc) of protected fauna as defined under the Biodiversity Conservation Act 2016	NA	No threatened flora or fauna species were identified within the Subject Land and based on the minor nature of the works, the	Follow Impact Mitigation and Minimisation Recommendations from the Flora and Fauna Assessment Report

Impact and Impact Assessment NA – Not applicable P – Positive impact 1 – Minor negative impact controlled with ameliorative measure 2 – Potentially significant negative impact requiring further assessment 3 – Significant negative impact	Summary of impact	Ameliorative measure
	degraded condition of vegetation within the Subject Land and/ or a lack of habitat constraints no threatened species were considered likely to be impacted by the proposed activity.	
Potential indirect impacts to the habitat of the same protected fauna? (eg overshadowing, water run-off)	NA No threatened flora or fauna species were identified within the Subject Land and based on the minor nature of the works, the degraded condition of vegetation within the Subject Land and/ or a lack of habitat constraints no threatened species were considered likely to be impacted by the proposed activity.	Follow Impact Mitigation and Minimisation Recommendations from the Flora and Fauna Assessment Report
4.7 Endangering of any species or animal, plant or other form of life whether living on land, in water or in the air Note: Liaise with Senior Natural Resources Officer to determine whether a 5 Part Test in accordance with Environment Planning Assessment Act 1979 Part 1, Cl 1.7 is required.		
Score		
Direct effect on critical habitat, threatened species, population or ecological communities and their habitats, or any other protected fauna as defined under the Biodiversity Conservation Act 2016.	NA No threatened flora or fauna species were identified within the Subject Land and based on the minor nature of the works, the degraded condition of vegetation within the Subject Land and/ or a lack of habitat constraints no threatened species were considered likely to be impacted by the proposed activity.	Follow Impact Mitigation and Minimisation Recommendations from the Flora and Fauna Assessment Report
Indirect effect on critical habitat, threatened species, population or ecological communities and their habitats, or any other protected fauna as defined by the Biodiversity Conservation Act 2016	NA No threatened flora or fauna species were identified within the Subject Land and based on the minor nature of the works, the degraded condition of vegetation within the Subject Land and/ or a lack of habitat	Follow Impact Mitigation and Minimisation Recommendations from the Flora and Fauna Assessment Report

Impact and Impact Assessment NA – Not applicable P – Positive impact 1 – Minor negative impact controlled with ameliorative measure 2 – Potentially significant negative impact requiring further assessment 3 – Significant negative impact		Summary of impact	Ameliorative measure
		constraints no threatened species were considered likely to be impacted by the proposed activity.	
Direct or indirect potential impact upon other important flora or fauna habitat	NA	No threatened flora or fauna species were identified within the Subject Land and based on the minor nature of the works, the degraded condition of vegetation within the Subject Land and/ or a lack of habitat constraints no threatened species were considered likely to be impacted by the proposed activity.	Follow Impact Mitigation and Minimisation Recommendations from the Flora and Fauna Assessment Report
4.8 Long term effects on the environment		Score	
Long term impacts associated with other factors not discussed elsewhere	NA	NA	NA
4.9 Degradation of the quality of the environment		Score	
Potential impacts not discussed elsewhere	NA	NA	NA
4.10 Risk to safety		Score	
Asset subject to mainstream flooding risk (confirmed by Enlighten and Catchment Planning email advice)	1	The site is affected by High Risk, Medium Risk and Low Risk from mainstream flooding.	All machinery, stockpile sites and staff should not be working within the detention basin on impending rainfall event.
Asset subject to overland flooding risk (confirmed by Enlighten and Catchment Planning email advice)	NA	Stockdale basin is coded as part or all from overland flooding.	All machinery, stockpile sites and staff should not be working within the detention basin on impending rainfall event.

Impact and Impact Assessment NA – Not applicable P – Positive impact 1 – Minor negative impact controlled with ameliorative measure 2 – Potentially significant negative impact requiring further assessment 3 – Significant negative impact		Summary of impact	Ameliorative measure
Asset subject to acid sulphate soils (confirm with Enlighten for suburbs of Canley Vale, Carramar, Fairfield, Fairfield East, Lansvale and Villawood)	NA	NA	If acid sulphate soils are found, lime should be readily available to be used.
Site subject to any potential land contamination (confirmed by Environmental Standards email advice)	P	Asbestos has been identified being present on site	A Geotech investigation is being undertaken by Major Projects to find out the scale of potential land contamination prior to commencement of work. An “Asbestos Management Plan” and an “Unidentified Finds Protocol” is to be followed.
4.11 Beneficial uses	Score		
Access to public open space (existing or potential)	P	Construction of a new footpath/cycleway	The new footpath/cycleway will provide additional linkages throughout Stockdale Reserve. Footpath to be provided details in design drawings attached.
Place making opportunities inclusive of public art, sculptures and the like to promote association with place	NA	NA	NA
4.12 Pollution of the environment	Score		
Air quality impacts (eg dust)	1	The construction works may generate dust whilst excavating.	The contractor will monitor site conditions and have a water truck available to wet down any areas requiring dampening. Dust suppression techniques to be incorporated.
Water quality impacts (eg spoil, sediment, sewage or waste)	1	The site construction works will create exposed soil areas.	Sediment and erosion control fencing will be placed downstream of the works.

Impact and Impact Assessment NA – Not applicable P – Positive impact 1 – Minor negative impact controlled with ameliorative measure 2 – Potentially significant negative impact requiring further assessment 3 – Significant negative impact	Summary of impact	Ameliorative measure	
Noise impacts (eg on neighboring educational, hospitals, residential uses)	1	The construction works will create audible noise from machinery during the day.	The construction works are to be limited from Monday–Friday, 7am-6pm and Saturdays 7am-1pm. Only inaudible work will be permitted on Saturdays 7am-1pm (due to the soccer fields being used). No work is permitted on Sundays or public holidays.
Other physical or pollution impacts	1	Asbestos contamination confirmed on the site	Contaminated land consultant to prepare a preliminary and detailed site investigation to determine the contamination type , quantity and location. A RAP is to be prepared by a suitably qualified consultant. In addition an unexpected asbestos finds protocol is to be conditioned in the REF. A long term environmental management plan is to be provided detailing how contaminated land will be managed onsite into the future. An asbestos management plan is to be prepared by a suitably qualified professional and implemented during construction. The Section 10.7 part 5 Planning certificates are to be updated identifying the site as being contaminated.
4.13 Disposal of waste		Score	
Soil material excavated, moved off site or deposited on site	1	Where practicable soil will be re-used on site.	Excess spoil is to be taken to a licensed landfill facility. A waste management plan and construction management plan is to

Impact and Impact Assessment NA – Not applicable P – Positive impact 1 – Minor negative impact controlled with ameliorative measure 2 – Potentially significant negative impact requiring further assessment 3 – Significant negative impact	Summary of impact		Ameliorative measure
			be provided to manage this. An asbestos management plan will also be provided to manage identified asbestos on the site.
Demolition work be undertaken in accordance with Australian Standard AS2601-1991 The Demolition of Structures	NA	NA	NA
Materials associated with the project to be recycled	NA		
Any contaminated material required to be removed and disposed	1	Any contaminated material will be treated in accordance with the Australian Standards and an 'Unexpected Finds Protocol'.	Major Projects will liaise with Council's Public Health and Environment team on how to treat any contaminated material if found.
Adequate area available on the site for the management of waste during the undertaking of the activity	1	A secure stockpile site will be required to manage accumulated waste during the construction period.	A suitable area has been identified on the engineering design plans as a stockpile site for the management of waste.
Waste appropriately removed and disposed of at the completion of the project	1	Left over spoil or construction materials	The contractor needs to provide details on how this will be managed under the waste management plan. The site is to be handed over in the same condition as it was prior to construction.
Need for on-going waste management measures	NA	NA	NA
4.14 Increased demands on resources (natural or otherwise) that are likely to become in short supply Score			
Significant resource use impacts (during operation and construction) including any significant increase in the demand for services and infrastructure resources including roads, power, water supply and drainage,	NA	NA	NA

Impact and Impact Assessment NA – Not applicable P – Positive impact 1 – Minor negative impact controlled with ameliorative measure 2 – Potentially significant negative impact requiring further assessment 3 – Significant negative impact	Summary of impact	Ameliorative measure		
waste (including sewage) management				
4.15 Cumulative environmental effect with other existing or likely future activities				
Significant cumulative effects of the activity	<table border="1"> <tr> <td data-bbox="875 533 952 574">NA</td> <td data-bbox="952 533 1525 574">NA</td> </tr> </table>	NA	NA	NA
NA	NA			

Authorisation of Review of Environmental Factors for Small Scale Project and Approval

Project Manager REF Assessment Complete For Approval

I confirm that:

- external, internal and community consultation requirements have been undertaken and issues raised considered and addressed;
- key impacts have been assessed and where necessary ameliorative measures identified;
- the worksheet is complete and all necessary attachments included; and
- the Strategic Land Use Planning Team has been consulted where necessary to ensure compliance with the above.

Project Manager

Project Manager's Name	Erensa Shrestha		
Position	Professional Engineer		
Signed		Date	12/3/2024

Division Manager Review and Approval

I confirm that I have reviewed and discussed this Part 5 Assessment Review of Environmental Factors – Worksheet and am satisfied that the project concept and current information is complete.

Division Manager's Name	Leonie Gray		
Position	Catchment Planning Manager		
Signed		Date	12/03/2024

Strategic Land Use Planning Review and Approval

I confirm that the environmental impact of the proposed activity is not considered to be significant and may proceed in its present form noting any ameliorative measures identified.

Planning Officer's Name	Patrick Warren		
Position	Senior Strategic Landuse Planner		
Signed		Date	11.03.2024

Group Manager or delegate approval

Select level of delegation “x”

- Up to \$500,000
Executive Strategic Planner/Coordinator Strategic Planning
- Up to \$2,000,000
Manager Strategic Land Use Planning
- Over \$2,000,000 or where lesser value with probity/community conflict/political issues
Director City Planning or Director City Development

I approve the activity as described and assessed within this Part 5 Assessment Review of Environmental Factors – Worksheet

George Vlamis
DIRECTOR CITY DEVELOPMENT

Signed  _____

Date 27/3/2024

**The authorisations provided above are in regard to the content and conclusion of this Review of Environmental Factors. Separate approval is required to authorise the undertaking of the activity.*

APPENDICES

Attachment A – Locality Map

Attachment B – NSW Coastal Design Guidelines Assessment Table

Attachment A: Locality Map



Attachment B – Assessment Table – Coastal Design Guidelines

For the purpose of part 5 of the Act, the factors relating to coastal design are to be taken into account when consideration is being given to likely impact of an activity on the environment including those specified by the Environmental Planning and Assessment Regulation 2021 (Clause 171)) (R) including the impact on “coastal processes” and “coastal hazards”, including those under projected climate change conditions.

Further to this the relevant Section 9.1 Planning direction, 4.2 Coastal Management triggers requirements to address the Coastal Design Guidelines which provides an assessment table in relation to the relevant sections of the guidelines. An assessment table has been prepared below to assess the impacts on the coastal management areas relevant to the proposed part 5 Activity.

Coastal Design Guideline Assessment Table - Review of Environmental Factors

Hierarchy of coastal management areas:

1. CWLRA = coastal wetlands and littoral rainforests area
2. CVA = coastal vulnerability area
3. CEA = coastal environment area
4. CUA = coastal use area

Requirement	Relevant Coastal Management Areas	Applicable to Part 5 Activity(Y/N)	The Design is consistent with guidelines (Y/N) - justify
<p>Outcome E.1 Respond to coastal processes</p> <p>E.1b Exclude development in areas affected by a current or projected future coastal hazard that is likely to increase the risk of coastal hazards on that land or other land.</p>	<p>CWLRA, CVA, CEA, CUA</p>	<p>Yes - CWLRA</p>	<p>N/A – Stockdale detention basin is not subjected to coastal hazards or tidal inundation. The stockdale wetland is inland from the coast and is subject to mainstream flooding from Orphan School Creek. The coastal wetland proximity area impacts the center of the</p>

Requirement	Relevant Coastal Management Areas	Applicable to Part 5 Activity(Y/N)	The Design is consistent with guidelines (Y/N) - justify
			development site including the separation bund between the northern and southern sports fields. The development is not proposing to divert the flow of flood waters upstream as such the development is not considered to increase the risk of coastal hazards rather it will improve the existing flood storage area within the basin.
E.1c Locate or consolidate development in areas with little or no exposure to current and projected future coastal hazards, to ensure public safety and prevent risks to life.	CWLRA, CVA, CEA, CUA	Yes - CWLRA	N/A – Stockdale detention basin and wetlands are isolated and located inland and is not subject to coastal hazards. The works do not result in a risk to public safety or increase risk to life.
E.1d Do not increase development potential or intensify land uses in a coastal hazard or risk area.	CWLRA, CVA, CEA, CUA	Yes - CWLRA .	N/A – REF does not result in increase in development potential. Works relate to public works in relation to flood storage and detention basin capacity. No land use changes or amendment to LEP.
Create Spatial Frameworks that are resilient to coastal hazards			
4.3.4a Locate development, essential services and infrastructure away from coastal hazard and risk areas wherever possible.	CVA, CEA, CUA	Yes - CEA applicable to the area	N/A – No coastal hazards impact development

Requirement	Relevant Coastal Management Areas	Applicable to Part 5 Activity(Y/N)	The Design is consistent with guidelines (Y/N) - justify
4.3.4b Accommodation, services and facilities for vulnerable communities must be located landward of coastal hazard and risk areas.	CVA, CEA, CUA	Yes - CEA applicable to the area	N/A – No coastal hazards impact development and no proposed services or facilities are proposed as part of REF.
4.3.4c Ensure that the location and design of development reduces exposure to risks from coastal hazards over the life of the development.	CVA, CEA, CUA	Yes - CEA applicable to the area	N/A – No coastal hazards applicable
4.3.4d Ensure service and infrastructure design considers risk to life, evacuation of public property and safety from coastal hazards, without relying on emergency responses, particularly during periods of peak demand.	CVA, CEA, CUA	Yes - CEA applicable to the area	N/A – No coastal hazards applicable
4.3.4f Allow for temporary, seasonal and low-impact uses in coastal hazard and risk areas, maintaining the land in public ownership.	CVA, CEA, CUA	Yes - CEA applicable to the area	N/A – area is not defined as coastal hazard area or coastal risk area.
4.3.4g Prioritise actions that support the continued functionality of essential infrastructure during and immediately after a coastal hazard emergency.	CVA, CEA, CUA	Yes - CEA applicable to the area	N/A – Area not effected by Coastal Hazards.