

Review of Environmental Factors

Environmental Assessment for Council Projects

Insert Project Title Here

Environmental Conditions

For any further information regarding the following conditions please Contact Council Environment Team/Environment officer name on 4221 6014 or Environment Officer mobile number

Insert conditions resulting from Review of Environmental Factors here. See [standard REF conditions](#) and revise or add conditions as required for the proposed activity.

ENVIRONMENT TO COMPLETE

Site Map

Insert site map here. Site map to include location and footprint of works, area of direct impact, environmental values, and environmental control measures such as access points, tree protection or no go zones.

ENVIRONMENTAL ASSESSMENT	
Site Information and SECTIONS A - F to be completed by Applicant Asset Officer, Project Delivery Officer, Design Engineer or Civil Coordinator	
Name of Project	
Type of project <i>eg - stormwater pipe maintenance works, new playground, footpath upgrade</i>	
Description of Proposed Works / Activities <i>Briefly outline:</i> <ul style="list-style-type: none"> • The proposed works/activities • Project site location & footprint • Machinery that will be used • If site storage is required • Types & volume of waste expected • Any ongoing works 	
Is excavation required?	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, what is maximum depth?
Is vegetation removal required?	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe how much and what species.
Section A - Site Identification	
Address	
Lot and DP	
Land Status (Ownership) <i>If the site is Crown Land, Promapp for "Provide Native Title Advice" will need to be undertaken.</i>	
Provide the legislation (including relevant section) that applies to these works? e.g. SEPP 2007 Division 12 clause 66 – (1) – (a) - (vii) play equipment if adequate safety measures (including soft landing surfaces) are provided and, in the case of the construction of such equipment, so long as the equipment is situated at least 1.2m away from any fence.	

LEP Year & Zone: e.g. - LEP 2013 – E3 Is the project consistent with the zone objectives?	
Current use of the site	
Adjoining land uses	
Natural landforms/features <ul style="list-style-type: none"> • <i>Consider the slope of the land, topography</i> • <i>What is the aspect (facing north etc.)?</i> • <i>Is the area mapped for Flooding?</i> 	
Soil type/stability/potential for erosion Check eSPADE for soil landscape, nearest soil profiles, erosion hazard, etc.	
Section B – Reasons for Activity and Options	
Reasons for the activity	
Are there alternative options? Have options to avoid and minimise impacts, such as the following points, been considered? <ul style="list-style-type: none"> • <i>Use of recycled/reused materials like recycled asphalt or concrete over quarried products</i> • <i>Alternatives to increasing the amount of concrete/hard surface</i> • <i>Alternatives to reduce excavation required</i> • <i>Incorporating soil infiltration, fauna habitat into drainage systems</i> 	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, what are they?
Reasons for adopting the preferred option	<input type="checkbox"/> Practicality and functionality <input type="checkbox"/> Cost efficiency <input type="checkbox"/> Environmental sustainability <input type="checkbox"/> To minimise environmental impact
Section C – Constraints	
Vegetation on Site Check Intramaps “Environment” layer, aerial imagery, and site photos Things to note include (if known):	Describe all vegetation present on site Will any vegetation on site be pruned or removed?

<ul style="list-style-type: none"> ▪ <i>Mapped vegetation community</i> ▪ <i>Endangered Ecological Communities</i> ▪ <i>Threatened flora species records</i> ▪ <i>Unmapped vegetation present onsite</i> ▪ <i>Condition of vegetation ie good, moderate, low.</i> ▪ <i>Density</i> ▪ <i>Other observations - recent fire, clearing</i> ▪ <i>Weeds on site?</i> 	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>If yes, provide details</i></p> <p><i>Will footprint of works occur within the Structural Root Zone or Dripline of any trees?</i></p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>If yes to either of the above questions, a report from a suitably qualified Arborist may be required; contact Environment team for advice.</i></p>
<p>Fauna Habitat Check Intramaps Environment layer for any threatened species records in or near the site.</p> <p><i>Other things to note include (if known):</i></p> <ul style="list-style-type: none"> ▪ <i>Brief description of fauna habitat present, e.g.: hollows in trees, rocks, dense vegetation, waterways, etc.</i> ▪ <i>Species likely to occur within the site, e.g.: birds, frogs, reptiles, bats, seabirds.</i> 	
<p>Water Bodies How far is the activity from a water body (including a drain, creek, river, lake or the ocean)?</p> <p>Include name of creek/waterbody</p> <p><i>Will works or project impact waterways with increased runoff or contamination?</i></p>	
<p>Fish Habitat Is the site designated Fish Habitat or adjacent to Fish Habitat?</p> <p><i>Check Intramaps "Constraints" layer</i></p> <p>DPI outlines a list of activities requiring a permit in designated Fish Habitat.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>If yes, will the project include any activities requiring a permit?</i></p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>If yes, a Fisheries permit may be required. Contact Environment team or DPI Fisheries Officer.</i></p>
<p>Coastal Management Is the proposal within any Coastal management areas, such as Coastal Environment Area, Coastal Use Area, Coastal Wetlands, Coastal Rainforests, or Proximity Areas?</p> <p><i>If so, it will be required to address the Coastal Management Act 2016 and SEPP</i></p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>If yes, provide details (i.e. which Coastal areas) and further information addressing Coastal Management; using the table templates provided here, copy, paste, and complete the relevant tables.</i></p>

<p>(Coastal Management) 2018. Check Intramaps and NSW State mapping:</p> <p><i>Note that if the proposal is within a Coastal Wetland or Littoral Rainforest, an REF may not be the appropriate approval pathway, and a DA may be required.</i></p>	
<p>Contamination</p> <p>Is the site listed as contaminated?</p> <p><i>Check Intramaps Environment layer and see details under the Information tool</i></p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>If yes provide detail:</i></p> <p><input type="checkbox"/> Landfill</p> <p><input type="checkbox"/> Petrol Station</p> <p><input type="checkbox"/> Extractive industry</p> <p><input type="checkbox"/> Other, please specify:</p> <p><i>If no a Contamination Unexpected Finds Protocol must be included within the conditions. See standard conditions.</i></p>
<p>Acid Sulphate Soils</p> <p>Are Acid Sulphate Soils mapped as being likely to occur?</p> <p>Note:</p> <ul style="list-style-type: none"> • Class 1 indicates Acid sulphate Soil at the ground surface; • Class 2 indicates Acid sulphate Soil just below the surface; • Class 3 indicates Acid sulphate Soil from 1m below the surface; • Class 4 indicates Acid sulphate Soil from 2m below the surface. 	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>If yes, what class?</i></p> <p><i>Are excavation works proposed to the depth of mapped Acid Sulphate Soil?</i></p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>If yes, an Acid Sulphate Soil Management Plan must be completed and included as an appendix to this document.</i></p> <p><i>If no, an Acid Sulphate Soil Unexpected Finds protocol must be included within the conditions. See standard conditions.</i></p>
<p>Cultural Heritage</p> <p>Does the proposed works require a Preliminary Aboriginal Cultural Heritage Assessment?</p> <ol style="list-style-type: none"> 1. Is there potential for the site to have cultural heritage values? 2. Will the proposed works potentially impact cultural heritage values? <p>If the answer is yes to both of these questions a Preliminary Aboriginal Cultural Heritage Assessment is required.</p> <p><i>Refer to the REF guidelines for detail on:</i></p>	<p>The Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (The Code) has been applied to assess any potential cultural heritage impacts that may arise as a result of this project, with the following result:</p> <p><i>Select one of the following from the drop-down box:</i></p> <p>Choose an item.</p> <p><i>Is the site listed as a heritage item or does it contain any heritage items (Aboriginal or non-Aboriginal) listed in the LEP?</i></p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>

<ul style="list-style-type: none"> • How to assess potential for the site to have cultural heritage values; and, • What is included within a Preliminary Aboriginal Cultural Heritage Assessment? 	<p>If yes, provide details; advice must be sought from Council's Heritage Officer.</p>
<p>Section D - Planning Controls and Approvals</p>	
<p>Will the proposed works potentially impact any Threatened Species, Endangered Ecological Communities or Populations listed under the <i>NSW Biodiversity Conservation Act 2016</i>?</p> <p><i>Any works that may potentially impact threatened flora or fauna species, endangered populations or endangered ecological communities must be assessed according to the Test of Significance criteria included in Section 7.3 of the BC Act 2016.</i></p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>If yes refer to the Environment Team to assess and if required conduct a Test of Significance.</i></p>
<p>Will the proposed works potentially impact any Threatened Species, Endangered Ecological Communities or other matters listed under the Commonwealth <i>Environment Protection Biodiversity Conservation Act 1999</i>?</p> <p><i>Check Commonwealth status using the information tool on Intrapaps or the Australian Government Protected Matters Search Tool for any Commonwealth threatened species recorded or predicted to occur within or near the site.</i></p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>If yes refer to the Environment Team to assess and if required conduct an EPBC Significant Impact Criteria Assessment.</i></p>
<p>Are any other approvals, permits or licences required for this project?</p> <p><i>If yes provide detail, for example:</i></p> <ul style="list-style-type: none"> • Department of Primary Industries (DPI) Fisheries Permit; • Hazard Reduction Certificate. <p><i>Note:</i></p> <ul style="list-style-type: none"> • Activities assessed under an REF do not require a Scientific Licence under Part 2.8 of the BC Act, • Public Authorities are exempt under Clause 41 of the Water Management Regulation (2018) from requiring a Controlled Activity Approval for works on water front land 	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>If yes, please specify and attach any approvals/permits/licences as an appendix to this document</i></p>
<p>Section E - Environmental Impact Assessment: What are the impacts and how will they be avoided, minimised, mitigated or offset.</p>	

Refer to guide for examples: [G:\Environment Team\Environmental Assessment\REF\Guide to preparing a REF.doc](#)

a	<p>Will there be any social environmental impact on a community?</p> <p><input type="checkbox"/> n/a or negligible <input type="checkbox"/> positive <input type="checkbox"/> low adverse <input type="checkbox"/> medium adverse <input type="checkbox"/> high adverse</p> <p>Details:</p>
b	<p>Will there be any transformation of a locality?</p> <p><input type="checkbox"/> n/a or negligible <input type="checkbox"/> positive <input type="checkbox"/> low adverse <input type="checkbox"/> medium adverse <input type="checkbox"/> high adverse</p> <p>Details:</p>
c	<p>Will there be any environmental impact on the ecosystems of the locality?</p> <p><input type="checkbox"/> n/a or negligible <input type="checkbox"/> positive <input type="checkbox"/> low adverse <input type="checkbox"/> medium adverse <input type="checkbox"/> high adverse</p> <p>Details:</p>
d	<p>Will there be any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality?</p> <p><input type="checkbox"/> n/a or negligible <input type="checkbox"/> positive <input type="checkbox"/> low adverse <input type="checkbox"/> medium adverse <input type="checkbox"/> high adverse</p> <p>Details:</p>
e	<p>Will there be any effect upon a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations?</p> <p><input type="checkbox"/> n/a or negligible <input type="checkbox"/> positive <input type="checkbox"/> low adverse <input type="checkbox"/> medium adverse <input type="checkbox"/> high adverse</p> <p>Details:</p>
f	<p>Will there be any impact on the habitat of protected animals (within the meaning of the <i>Biodiversity Conservation Act 2016</i>)?</p> <p>(This includes all native animals)</p> <p><input type="checkbox"/> n/a or negligible <input type="checkbox"/> positive <input type="checkbox"/> low adverse <input type="checkbox"/> medium adverse <input type="checkbox"/> high adverse</p> <p>Details:</p>
g	<p>Will there be any endangering of any species of animal, plant or other form of life whether living on land, in water or in the air?</p> <p><input type="checkbox"/> n/a or negligible <input type="checkbox"/> positive <input type="checkbox"/> low adverse <input type="checkbox"/> medium adverse <input type="checkbox"/> high adverse</p> <p>Details:</p>
h	<p>Will there be any long-term effects on the environment?</p> <p><input type="checkbox"/> n/a or negligible <input type="checkbox"/> positive <input type="checkbox"/> low adverse <input type="checkbox"/> medium adverse <input type="checkbox"/> high adverse</p> <p>Details:</p>

i	<p>Will there be any degradation of the quality of the environment?</p> <p><input type="checkbox"/> n/a or negligible <input type="checkbox"/> positive <input type="checkbox"/> low adverse <input type="checkbox"/> medium adverse <input type="checkbox"/> high adverse</p> <p>Details:</p>
j	<p>Will there be any risk to the safety of the environment?</p> <p><input type="checkbox"/> n/a or negligible <input type="checkbox"/> positive <input type="checkbox"/> low adverse <input type="checkbox"/> medium adverse <input type="checkbox"/> high adverse</p> <p>Details:</p>
k	<p>Will there be any reduction of the range of beneficial uses of the environment?</p> <p>(For example, recreation, educational or biodiversity)</p> <p><input type="checkbox"/> n/a or negligible <input type="checkbox"/> positive <input type="checkbox"/> low adverse <input type="checkbox"/> medium adverse <input type="checkbox"/> high adverse</p> <p>Details:</p>
l	<p>Will there be any pollution of the environment?</p> <p>(For example, air, water, soil, noise)</p> <p><input type="checkbox"/> n/a or negligible <input type="checkbox"/> positive <input type="checkbox"/> low adverse <input type="checkbox"/> medium adverse <input type="checkbox"/> high adverse</p> <p>Details:</p>
m	<p>Will there be any environmental problems associated with the disposal of waste?</p> <p><input type="checkbox"/> n/a or negligible <input type="checkbox"/> positive <input type="checkbox"/> low adverse <input type="checkbox"/> medium adverse <input type="checkbox"/> high adverse</p> <p>Details:</p>
n	<p>Will there be any increased demands on resources (natural or otherwise) which are, or are likely to become, in short supply?</p> <p><input type="checkbox"/> n/a or negligible <input type="checkbox"/> positive <input type="checkbox"/> low adverse <input type="checkbox"/> medium adverse <input type="checkbox"/> high adverse</p> <p>Details:</p>
o	<p>Will there be any cumulative environmental effect with other existing or likely future activities?</p> <p><input type="checkbox"/> n/a or negligible <input type="checkbox"/> positive <input type="checkbox"/> low adverse <input type="checkbox"/> medium adverse <input type="checkbox"/> high adverse</p> <p>Details:</p>
p	<p>Will there be any impact on coastal processes and coastal hazards, including those under projected climate change conditions?</p> <p><input type="checkbox"/> n/a or negligible <input type="checkbox"/> positive <input type="checkbox"/> low adverse <input type="checkbox"/> medium adverse <input type="checkbox"/> high adverse</p> <p>Details:</p>
<p>Have the principles of Ecologically Sustainable Development been</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	

considered in your design and execution plans? (a) <i>The precautionary principle</i> (b) <i>Inter-generational equity</i> (c) <i>Conservation of biological diversity and ecological integrity</i> (d) <i>Improved valuation, pricing and incentive mechanisms</i>	<i>If yes, how? If no, why not?</i>
Summary of potential impacts:	
<input type="checkbox"/> Removal of native vegetation	<input type="checkbox"/> Downstream contamination from fuels or chemicals
<input type="checkbox"/> Impact to retained trees /vegetation	<input type="checkbox"/> Erosion
<input type="checkbox"/> Impact to native fauna / fauna habitat	<input type="checkbox"/> Sediment
<input type="checkbox"/> Impacts to adjacent areas	<input type="checkbox"/> Acid sulphate soils
<input type="checkbox"/> Impact to creek or creek banks, lake or coast foreshore	<input type="checkbox"/> Impacts to European or Aboriginal Cultural Heritage
<input type="checkbox"/> Dust	<input type="checkbox"/> Construction Noise
Other impacts:	
Section F – Project Design and Approval Pathway Assessment	
Name of person completing this assessment	
Position	
Date	
End of Applicant Section	
Please register the Draft REF in CiAnywhere and task to the Environment Team Task Group. Please include in the registered document any associated design/construction plans, maps or other supporting documentation. A list of attachments can be included at the end of this form.	
List of Attachments to REF	
1. Attachment 1 – Acid Sulphate Soil Unexpected Finds Protocol 2. Attachment 2 - Plan 7B020 Erosion & Sediment Control Measures 3. Attachment 3 - <Title> (Doc Number in ECM, if applicable) 4. Attachment 4 - <Title> (Doc Number in ECM, if applicable)	
Section G - Conditions and Environmental Mitigation Measures (Environment to complete)	
Has a site visit been conducted?	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes add date and attendees</i>

Has a BC Act Test of Significance been completed and attached?	<input type="checkbox"/> Not required <input type="checkbox"/> Yes
Has an EPBC Act Assessment been completed and attached?	<input type="checkbox"/> Not required <input type="checkbox"/> Yes
Environmental Determination <i>Select one of the following from the drop-down box:</i> Choose an item.	
Is a site environment orientation by a suitably qualified consultant required to prior to commencement of works? <i>(where specific environmental constraints must be identified)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes fill out details in Section L below</i>
Is a site environment inspection required during works or after completion of works?	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes fill out details in Section M below</i>
<i>Plus:</i> <input type="checkbox"/> The proposed activity complies with and/or is consistent with relevant specific requirements in the following planning instruments or approvals/licenses required: <i>List any licences/permits/approvals identified as being required from Section D.</i>	
Section H - Environment Officer Sign Off	
Name of Environment Officer reviewing assessment	
Date	
Action to be taken <input type="checkbox"/> Return for alterations <input type="checkbox"/> Elevate for determination	<i>Environment signature</i>
Section J – Project Approval To be signed by the Director or Group Manager authorising the works (or other delegated authority)	
<input type="checkbox"/> I endorse the recommendation – this provides project approval, and the project can proceed.	
Name	
Position	
Signature	
Date	

Section K – Acknowledgement of and Commitment to Comply with Conditions

To be signed by the Manager/Supervisor authorising the works
(will be responsible for ensuring compliance with the conditions)

☐ I accept and endorse the determination - the project can proceed. I am aware that it is my responsibility to convey any conditions placed on this activity to the site supervisor for enforcement. Failure to do so may result in me being found negligent in this regard.

☐ All necessary parties will be informed of any conditions placed on this activity.

Name

Position

Signature

Date

Section L – Site Induction – Environment Officer

To be conducted by the Environment Officer on site prior to commencement of works for staff or contractors undertaking the works, if required

Name of Environment Officer

Signature

Date

Names of staff inducted

Signatures of staff inducted

Section M – Site Inspection – Environment Officer

To be conducted by the Environment Officer on site during works or after completion of works as relevant, if required

Name of Environment Officer conducting inspection

Are works compliant with relevant conditions?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Notes/Details:	
Signature	
Date	

List of Attachments to REF

1. Attachment 1 – Acid Sulphate Soil Unexpected Finds Protocol
2. Attachment 2 - Plan 7B020 Erosion & Sediment Control Measures
3. Attachment 3 - <Title> (Doc Number in ECM, if applicable)
4. Attachment 4 - <Title> (Doc Number in ECM, if applicable)

Attachment 1 – Acid Sulphate Soil Unexpected Finds Protocol

Acid Sulphate Soil Unexpected Finds Protocol

Where service trenches can be refilled within 24 hours, excavated Acid Sulphate Soil (ASS) material should be separated from overlying topsoil and temporarily stockpiled. Once trenching and laying of services is completed, ASS material should be returned to the trench first followed by the topsoil. Where ASS burial cannot be completed within 24 hours, or if there is surplus of ASS material, a liming procedure should be adopted.

Liming and Treatment Procedure for Acid Sulphate Soil (ASS)

1. Lime the base of the stockpile pad 5 mm thick layer of fine grade-1 agricultural lime;
2. Spread excavated ASS onto the pad in layers 10 – 30cm thick;
3. Apply lime at a standard rate of 25 kg of lime (1 bag) per cubic metre of soil. Windy conditions should be avoided for safety and efficiency;
4. Cultivate lime into the ASS layer well, preferably using a rotary hoe. Ensure an even homogenous mix of soil and lime is created before spreading the next soil layer;
5. Repeat steps 2 – 4 as required.

ASS treated in this way can be used as fill.

Attachment 2 –Plan 7B020 Erosion & Sediment Control Measures

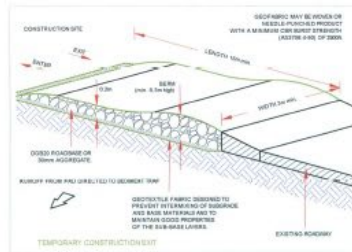


Fig 1A

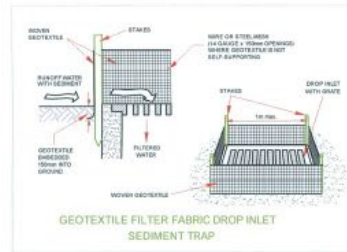


Fig 2A

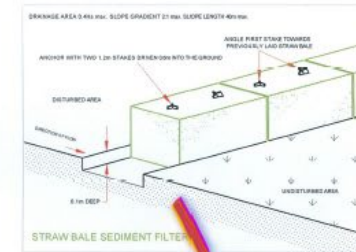


Fig 3A

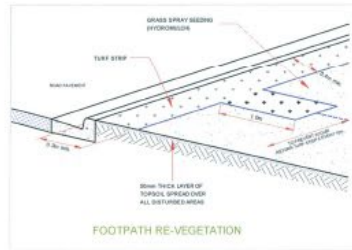


Fig 1B

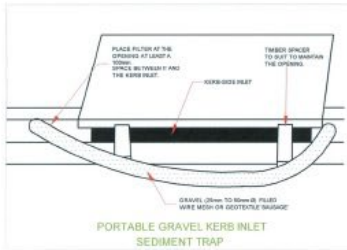


Fig 2B

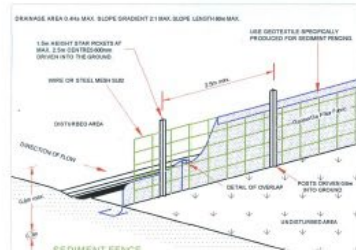


Fig 3B



Fig 1C



Fig 2C

- NOTES:**
1. THE SUPERVISOR IS TO ENSURE THAT ALL NECESSARY ENVIRONMENTAL CONTROLS ARE ESTABLISHED PRIOR TO COMMENCEMENT OF WORKS.
 2. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE MAINTAINED THROUGHOUT THE CONSTRUCTION AND INCLUDE REPAIR AND/OR REPLACEMENT OF DAMAGED SECTIONS.
 3. INSPECTION OF THE EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE MADE PERIODICALLY AND AFTER STORM EVENTS.

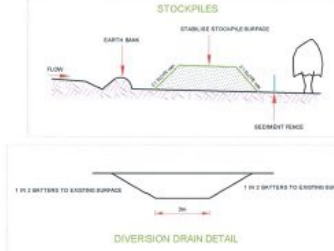


Fig 3C

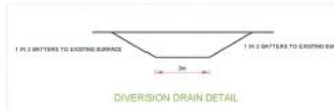


Fig 3D

SCALE		DATE		ORIGIN OF LEVELS		SERVICE LOCATIONS		EROSION CRITERION		DESIGN ENGINEER		SHEET No.	
N.T.S.		OCT 2014		P.M.		S.S.M.		B.M.		FILE		1 of 1	
DATUM		SURVEYED		DESIGNED		DRAWN		P.O.		REVISION		PLAN No.	
FIELD BOOK										O		7B020	



SHELLHARBOUR CITY COUNCIL
ADMINISTRATION CENTRE
LAKESIDE HOUSE, LAKESIDE RESIDENT
P.O. Box 135, SHELLHARBOUR SQUARE
SHELLHARBOUR CITY CENTRE, 2525
Ph: 02 420 0111
Fax: 02 420 0109
25 JAMES SHELLHARBOUR SQUARE

PLAN DETAILS
EROSION & SEDIMENT CONTROL MEASURES
IN ACCORDANCE WITH
THE DEPARTMENT OF ENVIRONMENT, CONSERVATION,
CLIMATE CHANGE & WATER - NSW GUIDELINES

DESIGN ENGINEER
FILE
W. George Projects/Shellharbour
Coastal/Climate Change
Sediment Control Eng.

REVISION
O

SHEET No.
1 of 1
PLAN No.
7B020