



APPLICATION FOR ENDORSEMENT OF 88E INSTRUMENTS

(Forms 13RPA — Restriction on Use of Land & 13PC — Positive Covenant)

Disclaimer: The information provided by you on this form will be used by City of Parramatta Council or its agents to process this application. Once collected by Council, the information can be accessed by you in accordance with Council's Access to Information Policy and Privacy Management Plan or in special circumstances, where Commonwealth legislation requires or where you give permission for third party access.

PART 1 - Property & Applicant Details

1. Property details

Address

unit:	house:
street:	
suburb:	postcode:
lot:	DP/SP:
Application reference # e.g. DA, CC, SC, CD ,etc	

2. Applicant details

Full name/company and contact person

Postal address

Contact details

family name (or company & ABN):	
full given names:	
OR company contact person:	
suburb:	postcode:
home phone:	mobile:
office phone	fax:
email:	date:

PART 2 – Documentation Requirements

3. Indicate documents submitted for endorsement - Please tick (✓)

Type of Restriction or Positive Covenant that is being submitted for endorsement in the s88E Instrument	Copies Required	Applicant (✓)	Officer (✓)
Onsite Detention System (OSD) or Flood Zone			
Restriction on use of land (Form 13RPA) and Annexure(s)	1x PDF of each		
Positive Covenant (Form 13PC) and Annexure(s)	1x PDF of each		
Other (Please Specify):			
Restriction on use of land (Form 13RPA) and Annexure(s)	1x PDF of each		
Positive Covenant (Form 13PC) and Annexure(s)	1x PDF of each		

PART 3 – Fee Requirements

An application fee is required. Council will contact you for payment prior to lodgement of the application. Refer to Council's website for current Fees and Charges.

OFFICE USE ONLY

Receipt: Date Received: Fee: \$

City of Parramatta Council
126 Church Street, Parramatta 2150
PO Box 32, Parramatta 2124

Telephone: 9806 5050



APPLICATION FOR ENDORSEMENT OF 88E INSTRUMENTS

(Forms 13RPA — Restriction on Use of Land & 13PC — Positive Covenant)

Disclaimer: The information provided by you on this form will be used by City of Parramatta Council or its agents to process this application. Once collected by Council, the information can be accessed by you in accordance with Council's Access to Information Policy and Privacy Management Plan or in special circumstances, where Commonwealth legislation requires or where you give permission for third party access.

Part 4 - Accompanying Documentation Checklist

4. The following documents should accompany the application for an OSD System or a Flood Zone

- Please tick (✓)

	Description	Notes	Copies Required	Applicant (✓)	Officer (✓)
OSD WORKS					
1	COLOUR Works-as-Executed Stormwater Plans	Stamped and certified by the registered surveyor <u>Please ensure annotations are in colour and high resolution</u>	1 x PDF		
2	Form B.10A	OSD WAE survey and certification submission form	1 x PDF		
3	Form Attachment B	OSD WAE dimensions	1 x PDF		
4	Form B.11 & B1	Certificate of Hydraulic Compliance Approved vs As Built OSD Calculations Summary Sheet	1 x PDF of each		
5	Structural Engineer's Certificate	For OSD tank structure, basement pump-out tank structure, OSD basin retaining wall (whichever is applicable).	1 x PDF		
FLOOD ZONE					
1	A flood zone map attached as an annexure to the 13PC and 13RPA. (see Council's Flood Zone General Terms for more information)		1 x PDF of each		

PART 5 - Lodgement and Digital Requirements

Council no longer accepts Applications for Endorsement of 88E Instrument over the counter or by post.

Please forward by email the completed Council Application Form along with the 13PC and 13RPA with Annexures and any supporting documents as outlined above directly to planning.certificates@cityofparramatta.nsw.gov.au.

The files must be in **PDF** format and be able to be opened in Council's digital plan system 'Trapeze Desktop'. 13PC and 13RPA documents must be originals and not contain signatures (or bank stamps)



Each document/plan requires a separate PDF file e.g. application form, works-as-executed plan, Form B.10A, Form Attachment B, etc each in separate files.

- Standard documents are not required to be above 400 dpi resolution whether they are single page or multipage documents and must not exceed 500MB in size.
- Please contact Council's Senior Records Officers on 9806 5000 if your document exceeds 500MB.

Files named as follows: **Document Type - Property Address**

- Restriction on Use of Land (Form 13RPA) - <insert property address>.pdf
- Positive Covenant (Form 13PC) - <insert property address>.pdf
- Works-as-Executed Stormwater Plans - <insert property address>.pdf
- Form B.10A - <insert property address>.pdf
- Form B.11 - <insert property address>.pdf
- Structural Engineer's Certificate - <insert property address>.pdf

PART 6 - Council Officer Declaration

6. Officer declaration

Officer's name

Officer's signature

I declare that this application is, to the best of my knowledge, complete including all accompanying documentation outlined in the checklist above.

date:

General Terms

Positive Covenant

Onsite Detention System (OSD)

ANNEXURE "A"

Property Address:
Lot No. ... , Section.... ; DP.....

Insert the property
Address, Lot and DP
number , (Not the parties).

Terms of Positive Covenant

1. The registered proprietor of the lot(s) hereby burdened will in respect of the system:
 - (a) keep the system clean and free from silt, rubbish and debris.
 - (b) maintain and repair at the sole expense of the registered proprietors the whole of the system so that it functions in a safe and efficient manner.
 - (c) permit the Council or its authorised agents from time to time and upon giving reasonable notice (but at any time and without notice in the case of an emergency) to enter and inspect the land for the compliance with the requirements of this covenant.
 - (d) comply with the terms of any written notice issued by the Council in respect of the requirements of this covenant within the time stated in the notice.
2. Pursuant to Section 88F (3) of the Conveyancing Act 1919 the Council shall have the following additional powers:-

(i) in the event that the registered proprietor fails to comply with the terms of any written notice issued by the Council as set out above the Council or its authorised agents may enter the land with all necessary materials and equipment and carry out any work which the Council in its discretion considers reasonable to comply with the said notice referred to in Part 1 (d) above.

The reference
should match

(ii) the Council may recover from the registered proprietor in a Court of competent jurisdiction:

Insert
(i) the certifier (either council or private certifier) who certified the construction work. "e.g. **XYZ building certification Pty Ltd**".
(ii) Construction Certification no. e.g. "**C000112-2006**" and
(iii) Date when approval/determination (dd/mm/yyyy)

- (a) any expense reasonably incurred by it in exercising its powers under subparagraph (i) hereof. Such expense shall include reasonable wages for the Council's employees engaged in effecting the said work, supervising and administering the said work together with costs, reasonably estimated by the Council, for the use of materials, machinery, tools and equipment in conjunction with the said work.
- (b) legal costs on an indemnity basis for issue of the said notices and recovery of the said costs and expenses together with the costs and expenses of registration of a covenant charge pursuant to Section 88F of the Act or providing any certificate required pursuant to Section 88G of the Act or obtaining any injunction pursuant to Section 88H of the Act.

3. This covenant shall bind all persons who are or claim under the registered proprietor(s) as stipulated in Section 88E(5) of the Act.

For the purposes of this covenant, "the system" means the on-site stormwater detention system constructed on the land as detailed on the plans approved by (i) as Construction Certificate No. (ii) on (iii) including all ancillary gutters, pipes, drains, walls, kerbs, pits, grates, tanks, chambers, basins and surfaces designed to temporarily detain stormwater, as well as all surfaces graded to direct stormwater to the temporary storage.

Insert the DA no.
"e.g.

(Include the following for Privately Certified construction certificate)

A copy of this Construction Certificate is held on Council File No. DA/.....

Write the Page
number

Insert the property
Address, Lot and DP
number , (Not the parties).

ANNEXURE "A" Contd...

Only include Section 4
if a PUMP SYSTEM
has been approved by
Council as part of the
Development Consent.

Property Address:
Lot No. ... , Section.... ; DP.....

4. Terms of Positive Covenant for the PUMP SYSTEM

4.1 The registered proprietor covenants as follows with the Council in respect to the "Pump System" installed on land (which includes pumps, holding tank, delivery lines and electrical works) shown on the plans approved by Council No. DA/...../.....

The registered proprietor will:

- (a) Keep the pump system clean and free of silt, dirt, rubbish and debris.
- (b) Maintain, renew and repair the whole or parts of pump system so that it functions in a safe and efficient manner, and in doing so complete the same within the time and in the manner specified in written notice issued by the-Council.
- (c) Carry out the matters referred in paragraphs (a) and (b).
- (d) Make no alterations to the pump system of elements thereof without prior consent in writing to the Council.
- (e) Permit the Council or its authorised agents from time to time upon giving reasonable notice (but at any time and without notice in the case of an emergency) to enter and inspect the pump system for compliance with the requirements of this Clause.
- (f) Comply with the terms of any written notice issued by the Council in respect to the requirements of this Clause within the time stated in the notice.

4.2. In the event of the registered proprietor failing to comply with the terms of any written notice served in respect of the matters in Clause 4.1 the Council or its authorised agents may enter with an necessary equipment and carry out any work required to ensure the safe and efficient operation of the pump system and recover from the registered proprietor(s) the cost of carrying out the work, and if necessary, recover the amount due by legal proceedings (including legal costs and fees) and entry of a covenant charge on the land under Section 88F of the Conveyancing Act 1919. In carrying out any work under this Clause, the Council shall take reasonable precautions to ensure that the land is disturbed as little as possible .

Name of Authority having the power to release vary or modify the above mentioned **Positive Covenant** is **City of Parramatta Council.**

Note: the Name has been changed

SIGNED in my presence by

.....
Name of the Registered Proprietor

.....
Signature of the Registered Proprietor

.....
Address of the Registered Proprietor

.....
Name of Witness (BLOCK LETTERS)

.....
Signature of witness

.....
Address & Occupation of Witness

Write the Page
number here

ANNEXURE "A" Contd...

Property Address:
Lot No. ... , Section.... ; DP.....

Insert the property
Address, Lot and DP
number , (Not the parties).

Note: the Name has been changed

Approved by **City of Parramatta Council**

Authorised Officer as Delegate of City of Parramatta Council Pursuant to Section 378 of
Local Government Act 1993.

Name of Delegate

Position of Delegate

Name of Witness

Signature of witness

Address of Witness

Write the Page
number

General Terms

Restriction on the Use of Land

Onsite Detention System (OSD)

ANNEXURE "A"

Property Address:

Lot No. ... , Section.... ; DP.....

Insert the property Address,
Lot and DP number, (Not the
parties.

Terms of "Restriction On the Use of Land":

The registered proprietor shall not make or permit or suffer the making of any alterations to the on-site stormwater detention system which is constructed on the lot(s) burdened without the prior consent in writing of **City of Parramatta Council**. The expression "on site stormwater detention system" shall include all ancillary gutters, pipes, drains, walls, kerbs, pits, grates, tanks, chambers, basins and surfaces designed to temporarily detain stormwater, as well as all surfaces graded to direct stormwater to the temporary storage. Any on site stormwater detention system constructed on the lot burdened is hereafter referred to as "the system". The on-site stormwater detention system is detailed on the plans approved by (i) as Construction Certificate No. (ii) on (iii).
(Include the following additional sentence for Privately Certified Construction certificate only). A copy of this Construction Certificate is held on Council File No. DA..... /

Name of Authority having the power to release vary or modify the above mentioned Restriction is
City of Parramatta Council.

Note: the Name has been changed

Insert the DA no.
"e.g. "DA/1234/2006
"

SIGNED in my presence by

.....
Name of the Registered Proprietor

.....
Signature of the Registered Proprietor

.....
Address of the Registered Proprietor

.....
Name of Witness (BLOCK LETTERS)

.....
Signature of witness

.....
Address & Occupation of Witness

Insert
(i) the certifier (either council or private certifier) who certified the construction work. "e.g. XYZ building certification Pty Ltd".
(ii) Construction Certification no. e.g. "C000112-2006" and
(iii) Date when approval/determination (dd/mm/yyyy)

Write the Page
number

ANNEXURE "A" Contd...

Property Address:

Lot No. ... , Section.... ; DP.....

Insert the property Address,
Lot and DP number, (Not the
parties.

Note: the Name has been changed

Approved by **City of Parramatta Council**

Authorised Officer as Delegate of City of Parramatta Council Pursuant to Section 378 of
Local Government Act 1993.

Name of Delegate

Position of Delegate

Name of Witness

Signature of witness

Address of Witness

Write the Page
number

General Terms

Positive Covenant

Flood Zone

CITY OF PARRAMATTA COUNCIL

Standard Terms for Positive Covenant for Flood Zone commonly imposed by instrument under Section 88E(3) of the Conveyancing Act, 1919 (NSW) as amended.

Note 1: Use above terms on separate page when creating Positive Covenant - via Forms 13PC¹

Note 2: These terms are general guide. Some of the following terms may not be applicable to the application and should be deleted.

Annexure ###: Positive Covenant for Flood Zone

Page ### of ###

Property Address:

Lot..., (Section, ...); DP.....

1. In these terms:

- (a) **“Flood Zone”** means the area affected by an overland flow path or flood storage area; *[delete as appropriate: as shown on the flood map of the 1% AEP flood extent issued by City of Parramatta Council dated and attached to this document at Annexure #. OR as shown on the flood map of the 1% AEP flood extent prepared by xxx consultants on xxx date and attached to this document at Annexure #²] below the level of RL xxx m AHD shown as “Flood Zone” [delete as appropriate: on the Plan of Subdivision to which this 88B Instrument applies OR in Annexure ## of this form].*
- (b) **“Council”** means the City of Parramatta Council and includes its servants and authorised agents;
- (c) **“Owner”** means the registered proprietor for the time being of the lot burdened, their successors and assigns and anyone claiming through the registered proprietor;
- (d) Where there is more than one Owner, the terms of this covenant and restriction bind the Owner jointly and severally; and
- (e) The singular includes the plural and vice versa.

2. The Owner must:

- (a) keep the Flood Zone clean and free from obstructions, rubbish and debris;
- (b) maintain and repair the Flood Zone at the sole expense of the Owner so that it functions (as an overland flow path for the free passage of water) in a safe and efficient manner;
- (c) permit the Council from time to time and upon giving reasonable notice (but in the case of an emergency, at any time and without notice) to enter and inspect the Flood Zone for compliance with the requirements of this covenant;

¹ Similar terms as those listed can be utilised when creating the positive covenant via the 88B process

² The flood zone map attached as an annexure must be a plan that meets the following requirements and those outlined in Schedule 3 of the [Lodgement Rules](#):

- a. The plan shall include the flood extent of the 1% AEP (100 year) flood event consistent with the flood inquiry from Council or the Flood report submitted during the DA. The flood inquiry or page from the flood report cannot be utilised as an annexure.
- b. The plan shall be drawn in a manner and to a scale that allows all details and notations to be clearly read and reproduced
- c. The plan shall have appropriate dimensions that define the extent of the flooding on the site
- d. The plan shall not be in colour

- (d) comply with the terms of any written notice issued by the Council in respect of the requirements of this covenant within the time stated in the notice; and
 - (e) maintain appropriate safety fencing and warning signs, if and as required by any development consent.
3. Without limiting its powers under Section 88F (3) of the Conveyancing Act 1919 (NSW) (the “Act”) the Council shall have the following additional powers:
- (a) In the event that the Owner fails to comply with any written notice from the Council as set out above, the Council may enter the lot burdened with all the necessary materials and equipment and carry out any work which the Council in its discretion considers reasonable to comply with the notice referred to in clause 2(d) above (“Work”);
 - (b) The Council may recover from the Owner in a Court of competent jurisdiction:
 - i. any expense reasonably incurred by it in exercising its powers under sub-paragraph 3(a). Such expense shall include reasonable wages for the Council’s employees engaged in effecting the Work, supervising and administering the Work together with costs, reasonably estimated by the Council, for the use of materials, tools and equipment in conjunction with the Work; and
 - ii. legal costs on an indemnity basis for the issue of the notices and recovery of the costs and expenses together with the costs and expenses of registration of a covenant charge pursuant to Section 88F of the Act or providing any certificate required pursuant to Section 88G of the Act or obtaining any injunction pursuant to Section 88H of the Act.
4. Without limiting any other right of the Council, the Owner indemnifies and agrees to keep indemnified the Council from and against any claim, loss or damage (including legal costs on a full indemnity basis) which the Council may suffer due to, and/or which arises from, the non-compliance with or departure from these terms by the Owner (whether by act or omission).
5. The name of the body empowered to release, vary or modify the restriction or covenant referred to in these terms is the **City of Parramatta Council**.

General Terms

Restriction on the Use of Land

Flood Zone

CITY OF PARRAMATTA COUNCIL

Standard Terms for Restriction on the use of Land for Flood Zone commonly imposed by instrument under Section 88E(3) of the Conveyancing Act, 1919 (NSW) as amended.

Note 1: Use the following terms on a separate page as an Annexure when creating Restriction on Use of Land - via Forms 13RPA¹

Note 2: These terms are general guide. Some of the following terms may not be applicable to the application and should be deleted.

Annexure ###: Restriction on the Use of Land for Flood zone

Page ### of ###

Property Address:.....

Lot....., (Section,.....); DP.....

1. In these terms:

- (a) **“Flood Zone”** means the area affected by an overland flow path or flood storage area; *[delete as appropriate: as shown on the flood map of the 1% AEP flood extent issued by City of Parramatta Council dated and attached to this document at Annexure #. OR as shown on the flood map of the 1% AEP flood extent prepared by xxx consultants on xxx date and attached to this document at Annexure #²] below the level of RL xxx m AHD shown as “Flood Zone” [delete as appropriate: on the Plan of Subdivision to which this 88B Instrument applies OR in Annexure ## of this form].*
- (b) **“Council”** means the City of Parramatta Council, and includes its servants and authorised agents;
- (c) **“Owner”** means the registered proprietor for the time being of the lot burdened, their successors and assigns and anyone claiming through the registered proprietor;
- (d) Where there is more than one Owner the terms of this covenant and restriction bind the Owner jointly and severally; and
- (e) The singular includes the plural, and vice versa.

2. The Owner must not:

¹ Similar terms as those listed can be utilised when creating the Restriction on the Use of Land via the 88B process

² The flood zone map attached as an annexure must be a plan that meets the following requirements and those outlined in Schedule 3 of the [Lodgement Rules](#):

- a. The plan shall include the flood extent of the 1% AEP (100 year) flood event consistent with the flood inquiry from Council or the Flood report submitted during the DA. The flood inquiry or page from the flood report cannot be utilised as an annexure.
- b. The plan shall be drawn in a manner and to a scale that allows all details and notations to be clearly read and reproduced
- c. The plan shall have appropriate dimensions that define the extent of the flooding on the site
- d. The plan shall not be in colour

- (a) erect, construct or place on or within the Flood Zone or permit or suffer to be erected constructed or placed on or within the Flood Zone any building, structure, fence, retaining wall, obstruction of any nature that will impede the free flow of water without the prior consent in writing of the Council;
 - (b) alter or permit or suffer any alteration to the surface level of the Flood Zone, including changing surface levels, removing any associated drainage structures and flood protection devices without the prior written approval of Council;
 - (c) place or allow construction of any dwelling house or other structure with a finished floor level lower than the levels defined in the ##### (*provide reference to the undertaken Flood Risk Management report including author, revision and date*) and held on Council File DA/####/##### for habitable floors, non-habitable floors and the driveway levels/crest;
 - (d) make or permit or suffer the making of any alterations to the section of the building that is designed with an open subfloor, that is suspended on piers/beams;
 - (e) make or permit or suffer the replacement or modification or enclosing of the open subfloor except with open-style panels; and
 - (f) not place or allow construction of any structure, wall, fill or other items beneath or around the open subfloor
3. The name of the body empowered to release, vary or modify the restriction or covenant referred to in these terms is **City of Parramatta Council**.

**Onsite Detention System (OSD) Works Documents
to accompany an Endorsement of 88E Application for
an OSD System**

B10. OSD WAE SURVEY AND CERTIFICATION SUBMISSIONⁱⁱ

The following checklists have been provided to assist designers/surveyors to confirm that all necessary information has been provided to confirm the as built OSD facility complies with the design. The first WAE checklist is a shorter version of the second. The first list (B10A) is to be completed by the stormwater consultant and submitted to Council together with the plan/s and any necessary attachments.

The second more comprehensive checklist (B10B) may be used as an aid to ensure that all relevant information has been provided. It may also be submitted to Council instead of the shorter form if desired.

ⁱ Shorter checklist added in third edition

B10A**OSD WAE SURVEY AND CERTIFICATION
SUBMISSIONⁱⁱ**

This form is to be completed and submitted to Council/Principal Certifying Authority (PCA) together with the plan/s and any necessary attachments.

PROJECT ADDRESS: _____

WAE PLAN DETAILS:

Company

Name: _____

Name of surveyor: _____ **Date of WAE Plan:** _____

Telephone No.: _____ **Fax No:** _____

Items submitted:

- Signed WAE Plans
- Certificate of Hydraulic Compliance (Form B11)
- Certificate of Structural Compliance
- OSD WAE Volume Calculations

Yes No NA

☐☐☐☐☐☐☐☐☐

COUNCIL REVIEW DETAILS:

Reviewer's Name: _____ **Date:** _____

ⁱⁱ Form number changed to reflect new shorter checklist in third edition
Upper Parramatta River Catchment Trust

OSD WAE & CERTIFICATION CHECKLIST			COUNCIL AGREES	
	Yes	No	Yes	No
1. WAE Plans: (Section 4.3.3)				
Are there any major variations from the approved plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If so, is a Section 96 (EP&A Act) modification required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the WAE plan superimposed on an approved design plan in red ink?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has a WAE level boxed in red ink been shown at each design level?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have WAE dimensions been shown adjacent to design dimensions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do the WAE plans show the following information:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• finished floor levels of dwellings and garages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• levels of overland flow paths	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• area and flows from external catchment or reason why its ignoredt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
For the Discharge Control Pit (DCP):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• internal pit dimensions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• diameter and centre line of orifice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• location, dimensions, distance from orifice for fitted screen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• levels of top and invert of pit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• levels of maximum water level and water level at HED	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Internal diameter of outlet pipe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
For each storage:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• type of storage (roof, above ground, below ground, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• sufficient levels and dimensions to verify storage volumes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• calculations of actual volume achieved	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• level, dimensions and location of overflow between DCP and storage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• site gradings and areas draining to or bypassing the storage(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Certification: (Section 4.3.4 & 4.3.5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has revised design summary sheet (Form B1) based on WAE been submitted?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have upstream flows been ignored, and if so Why?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are WAE calculations sufficient to show storage & PSD are satisfactory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the WAE volume agree with design volume for each storage?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does OSD system function correctly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have structural certificates been submitted?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

B10B. OSD WAE SURVEY AND CERTIFICATION SUBMISSIONⁱⁱⁱ

This form may to be completed by the stormwater designer and submitted to Council/Principal Certifying Authority (PCA) if Form B10A is not used.

PROJECT ADDRESS: _____

DEVELOPER: _____

OSD DESIGNER DETAILS:

Company Name: _____

Address: _____

Telephone No.: _____ **Fax No:** _____

Accreditation Organisation: _____

Accreditation Reference: _____

Name and signature of designer: _____

(Print Name)

Date: _____

(Signature)

Items submitted: **

- | | |
|---|---------------|
| • WAE Plan/s | Yes / No |
| • Certificate of Hydraulic Compliance | Yes / No |
| • Certificate of Structural Compliance | Yes / No / NA |
| • WAE Survey and Certification Checklist | Yes / No |
| -- Attachment A: OSD Volume Calculations | Yes / No |
| -- Attachment B: OSD WAE Dimensions, etc. | Yes / No |

COUNCIL REVIEW DETAILS:

Council Review Officer's Name: _____

Review officer's comments: _____

Signature of Review Officer: _____ **Date:** _____

** The above items are to be submitted in a single bound form — a 'loose leaf' format is unacceptable.

ⁱⁱⁱ Form altered to reflect shorter checklist in third edition

OSD WAE &**CERTIFICATION****CHECKLIST**

ITEM	DESIGNER		COUNCIL REVIEW	
	YES	NO	YES	NO
1. The WAE plan/s has/have been prepared				
If YES, see Plan No/Nos prepared by and dated				
1(a) The WAE plan or Attachment B provides the following information about each discharge control pit, DCP (refer Section 4.3.3)				
- internal pit dimensions				
- diameter of fitted orifice plate				
- location, dimensions, distance from orifice for fitted screen				
- levels of top and invert of pit				
- Internal diameter of outlet pipe				
1(b) The WAE survey provides the following information about each storage (ref Section 4.3.3)				
- type of storage (roof, above ground, below ground, etc.)				
- sufficient levels and dimensions to verify storage volumes				
- calculations of actual volume achieved, see Attachment A				
- level, dimensions and location of overflow structure between DCP and storage				
1(c) The WAE plans provide the following information on internal drainage (ref Section 4.3.3)				
- pit lid types and surface levels				
- invert levels and diameters of pipes				
- location, dimensions and levels of any floodways and/or overland flowpaths				
- sufficient spot levels to show site gradings and extent of areas draining and not draining to the storage(s)				
1(d) The WAE plan provides finished floor levels of dwellings and garages (refer Section 4.3.3)				
2. The following drainage-related structural elements have been constructed in accordance with the design (refer Section 4.3.5)				
2(a) Free standing walls (see certificate of structural compliance)				
2(b) Retaining walls (see certificate of structural compliance)				
2(c) Underground storages (see certificate of structural compliance)				

Final site inspection details: By..... Date:.....

ITEM	DESIGNER		COUNCIL REVIEW	
	YES	NO	YES	NO
3(a) Each discharge control pit complies with the following requirements (refer Section 4.3.4). See also Attachment B				
- DCP dimensions and levels comply with design parameters				
- material, thickness, diameter and sharp edge of fitted orifice plate				
- the orifice plate is securely fitted				
- the orifice is screened and the screen is properly fixed, located and able to be easily removed				
- outlet pipe is the correct diameter, level and grade (to ensure there is free discharge through the orifice)				
- the levels of the top water surface, storage invert and DCP are such that the design discharge from the storage is achieved				
- in design cases of 'high early discharge', runoff from sufficient areas of the site is directed to the DCP				
- the specified flap valve is fitted correctly				
3(b) Each storage complies with the following requirements (refer Section 4.3.4), see also Attachment B				
- the actual volume achieved is adequate				
- the actual top water level will not result in either unintended surcharge of the internal drainage system and/or inundation or inadequate freeboard to finished floor levels				
- the base of the storage is well graded and drains to the DCP				
- Spillways and overflow paths are constructed to the correct levels and are free from obstructions				
3(c) The internal drainage complies with the following requirements (refer Section 4.3.4)				
- site gradings are in accordance with the design expectation (regarding areas to be commanded by each storage)				
- the internal drainage lines are of a sufficient size, level and grade to convey the flows to the storage				
- storages cannot be by-passed by overflows from the internal system or by overflows from any surface area designed to drain to the storages				
- floodways and/or overland flowpaths designed to divert flows around the basin have been properly constructed and will function as designed				
- general workmanship is adequate to prevent long-term failure of the system				
3(d) The finished levels of structures (e.g. dwellings, garages) are sufficiently above the as-constructed maximum water surface levels in the storage and flowpaths (refer Section 4.3.4)				
3(e) An emergency spillway or overflow path has been provided so that surcharge will not cause stormwater to enter buildings where significant damage would occur				
3(f) All drainage pits, pipes, storages are in a clean condition and free of building materials,				

ATTACHMENT B: OSD WAE DIMENSIONS, ETC.

DESCRIPTION	APPROVED	WAE	CERTIFIER'S COMMENTS
DISCHARGE CONTROL PIT:			
(a) Orifice diameter (mm)			
(b) Orifice plate material			
(c) Pit width (m)			
(d) Pit breadth (m)			
WEIR:			
(a) Reduced level			
(b) Width			
(c) Height (mm)			
DCP invert level			
Access grate dimensions			
STORAGE:			
(a) Top water level			
(b) Storage volume (m ³)			
(c) Freeboard to F.F.L. (mm)			
(i) Habitable area			
(ii) Garage			
Maximum depth of water (mm)			

CERTIFIER'S NAME:

SIGNATURE:

DATE:

Form B1ⁱ DRAINAGE DESIGN SUMMARY SUB/DA

No. _____

Project: _____ Location: _____

Designed by: _____ Company: _____ Phone: _____

SITE AREA _____ ha *See Section 3.4.3 for dual occupancy DESIGNED [A] INSTALLED [A]

Upstream catchment draining through site = _____ ha [AA] = _____ ha [AA]

See Section 4.1.3 for assessment of external flows.

Basic storage volume 470 x [A] = _____ m³ [B] = _____ m³ [B]Basic discharge = 0.08 x [A] = _____ m³/s [C] = _____ m³/s [C]

Area of site drained to storage = _____ ha [D] = _____ ha [D]

(Must be as much as possible and not be less than 85% of the total site without written Council approval).

[D] / [A] x 100 = _____ % [E] = _____ % [E]

Storage per ha. of contributing area = [B] / [D] = _____ [F] = _____ [F]

Enter volume/PSD adjustment chart (Fig 5.1) using [F], and Read new PSD in litres/second/ha (l/s/ha). = _____ l/s/ha [G] = _____ l/s/ha [G]

Determine PSD = [G] x [D] x _____ = _____ l/s [H] = _____ l/s [H]

Maximum head to orifice centre = _____ m [K] = _____ m [K]

Weir flow to storage $Q^{Weir} = CL(H^{Weir})^{1.5}$ H^{Weir} = _____ m [I] = _____ m [I]Selected orifice diameter: $d = (0.464 \times Q / \sqrt{h})^{0.5} = (0.464 \times [H] / \sqrt{[K]})^{0.5} =$ _____ m [J] = _____ m [J]

Maximum discharge = _____ l/s [L] = _____ l/s [L]

Head for high early discharge = _____ m [M] = _____ m [M]

High early discharge $\{ [L] \times \sqrt{[M] / [K]} \}$ (min 75% of [L]) = _____ l/s [N] = _____ l/s [N]Approximate mean discharge = $([L] + [N]) / 2$ = _____ l/s [P] = _____ l/s [P]Average discharge/ha = $[P] / [D] =$ _____ l/s/ha [Q] = _____ l/s/ha [Q]Enter volume/P.S.D. adjustment chart (Fig 5.1) using [Q] And read off final storage volume per hectare = _____ m³/ha [R] = _____ m³/ha [R]Determine final SSR = $[R] \times [D] =$ _____ m³ [S] = _____ m³ [S]Primary storage proportion = $[S] \times$ _____ % = _____ m³ [T] = _____ m³ [T]Secondary storage proportion = $[S] \times$ _____ % = _____ m³ [U] = _____ m³ [U]Tertiary storage proportion = $[S] \times$ _____ % = _____ m³ [V] = _____ m³ [V]Check $[T] + [U] + [V] = [S]$ = _____ m³ = _____ m³

SIGNATURE: _____ DATE: _____

ⁱ Revised for third edition to include flow from upstream and revised by pass flows

FORM B.11
UPPER PARRAMATTA RIVER CATCHMENT TRUST
ON-SITE STORMWATER DETENTION SYSTEM
CERTIFICATE OF HYDRAULIC COMPLIANCE

**BAULKHAM HILLS/BLACKTOWN CITY/HOLROYD CITY/PARRAMATTA CITY
COUNCIL**
(delete not applicable)

JOB NO: _____ DA NO: _____ BA NO: _____

PROJECT: _____

LOCATION: _____

DESIGNED BY: _____

CONSTRUCTION

CERTIFIED BY: _____

QUALIFICATIONS: _____

TELEPHONE: _____

1.0 WORKS CONSTRUCTED IN ACCORDANCE WITH DESIGN. (Delete if not applicable)

I _____ of _____ (accredited professional being competent to practice in the field of stormwater drainage design) have inspected the above on-site stormwater detention system and certify that the works have been constructed and can be maintainedⁱ in accordance with the approved design details for the above mentioned project.

Signature: _____ Date: _____

2.0 CONSTRUCTION VARIATIONS NOT AFFECTING DESIGN PERFORMANCE. (Delete if not applicable)

I _____ of _____ (accredited professional being competent to practice in the field of stormwater drainage design) have inspected the above on-site stormwater detention system and certify that the works have been constructed and can be maintained in accordance with the approved design details for the above mentioned project, except for the variations listed below which do not affect the performance of the system, subject to satisfactory maintenance.

Variations:

Signature: _____ Date: _____

3.0 AUTHORITY TO RELEASE PLANS TO FUTURE OWNERS OF THE PROPERTY

As the copyright owner of the drainage plans, I hereby authorise release of the approved plans/attached sketch plan to future owners of the property to assist in the maintenance of the On-site Stormwater Detention system.

Signature: _____ Date: _____

Name: _____ (Print)

ⁱ Maintainability added for third edition

- a. **Structural Engineer's Certificate for the OSD tank structure/
Basement pump-out tank structure/ OSD basin retaining wall
etc.**

The Structural Certificate should provide statement of Structural stability and soundness of the OSD basin retaining wall, which requires withholding ponding water within the respective OSD basins (see sample wordings below).

***Sample statement in the STRUCTURAL CERTIFICATE
FOR OSD BASIN WALLS/ TANK STRUCTURE***

..... ..The depth and bearing of the piers, pads and footings of the OSD tank structure/ OSD basin retaining wall are such that the safe allowable bearing pressure shown in table B 1.101 of the Building Code of Australia (Current edition) will not be exceeded by the loads of the proposed structure.

The preparations and reinforcement in the footings have been assessed and complies with the approved details.

We hereby certify that the completed construction at the above-mentioned project is structurally adequate to support all loads as specified in AS1170.1 & 2 (Loading Code). All works were found to be generally in accordance with the BCA requirements, AS 2870 (Residential Slabs & Footings) and AS 3600 (Concrete Structure)