NZ TRANSPORT AGENCY
WAKA KOTAHI

Forms for Use When Constructing or Operating Stormwater Management Practices

Forms for Use When Constructing or Operating Stormwater Management Practices

To facilitate proper construction and operation of stormwater management practices used on NZTA projects, this document has been prepared. The same forms are in the Stormwater Treatment Standard for Highway Infrastructure but they have been placed in this separate document for ease of access.

It is intended that these forms be used whenever there is a stormwater management practice constructed for NZTA. Their use will facilitate proper construction and subsequent operation.

Forms that are included in this document include the following:

- Preconstruction meeting form
- Individual practice construction checklists
  - Swales and filter strips
  - Sand filters
  - Rain gardens
  - Infiltration trenches
  - Ponds and wetlands
- As-built documentation forms
  - Swales and filter strips
  - Sand filter
  - Rain garden
  - Infiltration trench
  - Pond or wetland
- Post construction operation and maintenance forms
  - Swales and filter strips
  - Sand filters
  - Rain gardens
  - Infiltration trenches
  - Ponds and wetlands
  - Oil/water separators

Preconstruction meeting form

STORMWATER MANAGEMENT PRE-CONSTRUCTION MEETING AGENDA

Prerequisites:

- Read consent report and conditions
- Ensure the appropriate people attend: Consent issuance authority representative, Project Engineer, Contractor.
- Prepare copies of New Zealand Transport Agency construction check lists for all stormwater management devices to be used

Site Name: _____ Date: _____
Address: _____ Consent Number: _____

File Number: _____

Contractor contact information:

name: _____
mailing address _____
_____
phone no. _____
email _____

Stormwater project engineer contact information (individual responsible for inspecting and signing off key construction milestones and providing final as-builts):

name: _____
mailing address _____
_____
phone no. _____
email _____

Consent issuance authority representative contact information:

name: _____
mailing address _____
_____
phone no. _____
email _____

Other attendees at the meeting _____
_____
_____
_____

Purpose

To coordinate stormwater management construction activities of the contractor with the project inspection staff and other interested parties such as the appropriate consenting authority, utility contractors, and sub-contractors. This meeting is to be held between all parties prior to any construction work on the project.

A pre-construction meeting provides the opportunity for all parties involved to discuss roles and responsibilities on the project. The importance of stormwater management should be discussed and the importance of proper construction of stormwater management practices should be emphasized. Having a pre-construction meeting is invaluable in preventing issues that may arise later. It also establishes good communication at the beginning of a project to prevent potential problems, potential enforcement and corrections to practice construction that may not otherwise have been done correctly.

Key discussion points

The following items need to be discussed so that a clear understanding of project elements, time frames and important project components are understood by all attendees.

1. Project Description. Make sure that the development and the proposed stormwater practice construction agrees with the approved plan or plans

_____
_____
_____
_____
_____
_____

2. Delineation of lines of authority. Names and telephone numbers for the Contractor, New Zealand Transport Agency and others will be entered into the record. In addition, the individual designated by the contractor for construction of stormwater management practices shall be identified.

Name	Cell phone number
_____	_____
_____	_____
_____	_____
_____	_____

3. Proposed Starting Dates - Contractors and subcontractors - lead-in time and number of shifts or extra hours they propose to be working, any variation to normal working hours, etc.

Starting date _____

Unusual working times or days

_____
_____
_____

4. Intended project schedule and overall time frame

_____
_____
_____
_____

5. Project phases in chronological order.

	Approximate Date
• Project initiation,	_____
• Implementation of erosion and sediment control,	_____
• Mass earthworks,	_____
• Final grade establishment,	_____
• Road construction,	_____
• Drainage system construction,	_____
• Construction of sediment controls to protect stormwater devices	_____
• Stormwater management device construction,	
Critical Stages:	
➢ _____	_____
➢ _____	_____
➢ _____	_____
➢ _____	_____
• Final stabilisation.	_____
• Removal of sediment controls	_____
• Utility construction	_____

6. Stormwater management issues:

- Are the approved plans and consent on-site? Yes ☐ No ☐
  If not, why? _____
- Stormwater Management Practices need to be gone over. The New Zealand Transport Agency construction checklists should be used to detail key stages of construction. Those practices on this project include:

  _____
  _____
  _____
  _____
  _____

- Stormwater consent requirements need to be gone over
- Time frame for construction of stormwater management practices

_____

- Who will submit As Built Plans? _____
- Who will submit Operation and Maintenance Plans

  _____

  The relationship between the contractor's as-builts and the stormwater project engineers as-builts to be discussed and agreed
- Who will submit the Planting Plan (if appropriate)

  _____
- There is a requirement that an inspection be done at key stages of construction for stormwater management practices. These stages can be found on the "as-built" requirements forms and the key stages should be specifically identified and discussed,
- Overall stormwater management practice sizing done according to approved plans?

  Yes ☐ No ☐

  If not, what is the variance from the approved plans?

  _____

  _____

  _____

  _____
- Construction methodology and materials used to construct stormwater management practices shall be discussed. This would apply to embankment materials and compaction, filter media, vegetation, stone or gravel sizing, etc.,
- Outfall structure construction proposed with suitable energy dissipation,
- Site stabilisation requirements,
- Any variation from plans that have been approved,
- Routine inspections to check construction progress,
- Final inspection requirements,
- As built certification requirement including overland flow path dimensions,
- New Zealand Transport Agency inspection and enforcement policies.

7. Utility locations. Discussion needs to be held with utility contractors to determine where utilities are/will be located and when they will be constructed. In addition, it would be good if the names and phone numbers of utility contact persons could be obtained. Who is responsible for stabilizing areas disturbed by utility construction?

8. Plan errors and omissions. The contractor should discuss errors and omissions in the plans that are known to exist. Pre-construction minutes should reflect the Contractor's knowledge of errors or omissions in detail. Errors or omissions identified include:

_____

_____

_____

_____

_____

9. Conversion of sediment control structures to stormwater management structures. Is there a relationship between erosion and sediment control and storm water management (use of stormwater practices for erosion and sediment control). Procedures should be gone over for final maintenance before handing the practice over to the responsible maintenance entity, if applicable.

10. Other consents review and discussion. Are there other consents that need to be discussed (sediment control, stream works, dam consent, etc.)? Those consents include the following:

_____

_____

_____

_____

11. Sensitive environmental issues. Discussion of any sensitive environmental issues (contaminated soils, stream protection, and coastal management areas. Listing of sensitive issues includes:

_____

_____

_____

_____

12. Time extensions for work. Submittal procedure for and needed time extensions.

13. Consultant interaction. If a Consultant is providing the construction engineering and inspection or materials testing; discuss the procedures, relationships and responsibilities that exist between the Consultant, New Zealand Transport Agency and the Contractor.

14. Consent transfer. Transfer of consent to the responsible maintenance entity:

When _____

How _____

Additional Notes:

_____
_____
_____
_____

_____ _____

New Zealand Transport Agency Representative Date

Construction forms for the following:

- Swales and filter strips
- Sand filters
- Rain gardens
- Infiltration trenches
- Ponds and wetlands

The oil/water separators are prefabricated units so it is not necessary to have a separate inspection form for them.

NZ TRANSPORT AGENCY
WAKA KOTAHI

STORMWATER SWALES AND FILTER STRIP INSPECTION ADVICE

Responsible Person:

Date:

Time:

Weather: Rainfall over previous 2-3 days?

Person contacted during visit:

SWALE & FILTER STRIP CONSTRUCTION INSPECTION FORM	✕	Needs immediate attention	✓	Okay	?	Clarification Required
	–	Not Applicable				

Swale & Filter Strip Components:

Items Inspected	Checked		Satisfactory	Unsatisfactory		Checked		Satisfactory	Unsatisfactory
PRE-CONSTRUCTION	Y	N			12. Flow bypasses installed correctly	Y	N		
1. Runoff diverted	Y	N			13. Pretreatment devices installed	Y	N		
2. Practice area cleared	Y	N			14. Curb cuts installed per plans	Y	N		
3. Practice location staked out	Y	N			**VEGETATION**	Y	N		
4. Practice not in heavily shaded area	Y	N			15. Complies with planting specification	Y	N		
EXCAVATION					16. Topsoil adequate in composition & placement	Y	N		
5. Size & location	Y	N							
6. Lateral slopes completely level	Y	N			17. Adequate erosion control measures in place	Y	N		
7. Longitudinal slopes within design range	Y	N			**FINAL INSPECTION**				
CHECK DAMS & LEVEL SPREADERS					18. Dimensions	Y	N		
					19. Check Dams & level spreaders	Y	N		
8. Dimensions, spacing, & materials	Y	N			20. Proper outlet	Y	N		
9. Compaction	Y	N			21. Effective stand of vegetation & stabilisation	Y	N		
10. Level spreaders are completely level	Y	N			22. Construction generated sediment removed	Y	N		
STRUCTURAL COMPONENTS									
11. Inlets & outlets installed correctly	Y	N							

RESPONSIBLE PERSON'S REMARKS:

ACTION TO BE TAKEN:

No action necessary. Continue routine inspections? Y / N

Correct noted site deficiencies by

_____

1st Notice:

_____

2nd Notice:

_____

Submit plan modifications as noted in written comments by

_____

Other action taken to obtain needed corrections

_____

Final inspection, project completed

_____

Responsible person's signature: _____

NZ TRANSPORT AGENCY
WAKA KOTAHI

STORMWATER SAND FILTER INSPECTION ADVICE

Responsible person:

Date:

Time:

Weather: Rainfall over previous 2-3 days?

Person contacted during visit:

SAND FILTER CONSTRUCTION INSPECTION CHECKLIST	✕ _	Needs immediate attention Not Applicable	✓	Okay	?	Clarification Required

Filtration Practice Components:

Items Inspected	Checked		Satisfactory	Unsatisfactory		Checked		Satisfactory	Unsatisfactory
Pre-construction	Y	N			**Completed Practice Components**	Y	N		
1. Runoff diverted					13. 24 hour water filled test (if applicable)				
2. Practice area cleared									
3. Practice location staked out					14. Contributing area stabilised				
Excavation					15. Filter material per specification				
4. Size and Location									
5. Side slopes stable					16. Underdrains installed to grade				
6. Foundation cleared of debris									
7. Foundation area compacted					**Final Inspection**				
Structural Components					17. Dimensions				
8. Dimensions and materials					18. Structural Components				
9. Forms adequately sized					19. Proper outlets				
10. Concrete meets standards					20. Effective site stabilisation				
11. Prefabricated joints sealed									
12. Underdrains (size, materials)									

RESPONSIBLE PERSON'S REMARKS:

ACTION TO BE TAKEN:

No action necessary. Continue routine inspections? Y / N

Correct noted site deficiencies by

_____

1st Notice: _____

2nd Notice: _____

Submit plan modifications as noted in written comments by _____

Final inspection, project completed

_____

Responsible person's signature: _____

NZ TRANSPORT AGENCY
WAKA KOTAHI

STORMWATER RAIN GARDEN INSPECTION ADVICE

(Under Section 332 of the Resource Management Act 1991)

Responsible person:

Date:

Time:

Weather: Rainfall over previous 2-3 days?

Person contacted during visit:

RAIN GARDEN CONSTRUCTION INSPECTION FORM	✕	Needs immediate attention	✓	Okay	?	Clarification Required
	–	Not Applicable				

Rain Garden Construction Components:

Items Inspected	Checked		Satisfactory	Unsatisfactory
PRE-CONSTRUCTION				
1. Runoff diverted	Y	N		
2. Practice area cleared	Y	N		
3. Practice location staked out	Y	N		
4. Contributing drainage are stabilised	Y	N		
EXCAVATION				
5. Size & location	Y	N		
6. Excavated to appropriate grade	Y	N		
7. Appropriate liners placed as required	Y	N		
UNDERDRAINS & FILTER MEDIA				
8. Perforated underdrain installed correctly	Y	N		
9. Storm drain system installed & connected	Y	N		
10. Gravel, sand, & planting soil backfilled	Y	N		

STRUCTURAL COMPONENTS	Checked		Satisfactory	Unsatisfactory
11. Inflow & outlets installed correctly	Y	N		
12. Overflow system installed correctly	Y	N		
13. Pretreatment devices installed	Y	N		
VEGETATION				
11. Complies with planting specification	Y	N		
12. Topsoil adequate in composition & placement	Y	N		
13. Mulch laid	Y	N		
FINAL INSPECTION				
14. Dimensions	Y	N		
15. Proper outlet	Y	N		
16. Effective stand of vegetation & stabilisation	Y	N		
17. Construction generated sediments removed	Y	N		

RESPONSIBLE PERSON REMARKS:

ACTION TO BE TAKEN:

Correct noted site deficiencies by _____

1st Notice: _____

2nd Notice: _____

Submit plan modifications as noted in written comments by _____

Final inspection, project completed _____

Responsible person's signature: _____

NZ TRANSPORT AGENCY
WAKA KOTAHI

STORMWATER INFILTRATION TRENCH INSPECTION ADVICE

Responsible person:

Date:

Time:

Weather: Rainfall over previous 2-3 days?

Person contacted during visit:

INFILTRATION TRENCH CONSTRUCTION INSPECTION FORM	✕	Needs immediate attention	✓	Okay	?	Clarification Required
	–	Not Applicable				

Infiltration Trench Components:

Items Inspected	Checked		Satisfactory	Unsatisfactory		Checked		Satisfactory	Unsatisfactory
PRE-CONSTRUCTION					10. Clean / washed material	Y	N		
1. Runoff diverted	Y	N			11. Placed properly	Y	N		
2. Area stabilised	Y	N			**OBSERVATION WELL**				
EXCAVATION					12. Pipe size	Y	N		
3. Size & location	Y	N			13. Removable cap / footplate	Y	N		
4. Side slope stable	Y	N			14. Initial depth = _____m	Y	N		
5. Soil Permeability	Y	N			**FINAL INSPECTION**				
6. Groundwater / Bedrock	Y	N			15. Pretreatment practice in place	Y	N		
FILTER FABRIC PLACEMENT					16. Stabilisation	Y	N		
7. Fabric specification	Y	N			17. Outlet	Y	N		
8. Placed on bottom, sides, & top	Y	N							
AGGREGATE MATERIAL									
9. Size as specified	Y	N							

RESPONSIBLE PERSON REMARKS:

1st Notice: _____

2nd Notice: _____

Submit plan modifications as noted in written comments by _____

Final inspection, project completed _____

Responsible person's signature: _____

NZ TRANSPORT AGENCY
WAKA KOTAHI

STORMWATER POND AND WETLAND INSPECTION ADVICE

Responsible person:

Date:

Time:

Weather: Rainfall over previous 2-3 days?

Person contacted during visit:

SEDIMENT / STORMWATER MANAGEMENT POND CONSTRUCTION CHECKLIST

✕	Needs immediate attention	✓	Okay	?	Clarification Required
–	Not Applicable				

Pond and Wetland Components:

Items Inspected	Checked		Satisfactory	Unsatisfactory
MATERIALS AND EQUIPMENT	Y	N		
Pipe & appurtenances on-site prior to construction and dimensions checked.				
1. Material (including protective coating, if specified)	Y	N		
2. Diameter	Y	N		
3. Dimensions of riser or pre-cast concrete outlet structure	Y	N		
4. Required dimensions between water control structures (orifices, weirs, etc.) are in accordance with designed plans	Y	N		
5. Barrel stub for prefabricated pipe structures at proper angle for design barrel slope	Y Y	N N		
6. Number & dimensions of prefabricated anti-seep collars	Y Y	N N		
7. Watertight connectors and gaskets	Y	N		
8. Outlet drain valve	Y	N		
9. Appropriate compaction equipment available, including hand & small power tamps	Y	N		
10. Project benchmark near pond site	Y	N		
12. Equipment for temporary de-watering	Y	N		
SUBGRADE PREPARATION				
13. Area beneath embankment stripped of all vegetation, topsoil, and organic matter	Y	N		
14. Cut-off trench excavated a minimum of 1 metre below subgrade and minimum 1 metre below proposed pipe invert, with side slopes no steeper than 1:1	Y	N		
15. Impervious material used to backfill cut-off trench	Y	N		
PIPE SPILLWAY INSTALLATION	Y	N		
16. Method of installation detailed on plans	Y	N		
17. Bed Preparation	Y	N		
i) Installation trench excavated with 1:1 side slopes	Y	N		
ii) Stable, uniform, dry subgrade of relatively impervious material (If subgrade is wet, contractor shall have to defined steps before proceeding with installation)	Y	N		
iii) Invert at proper elevation and grade	Y	N		
18. Pipe placement – Metal / Plastic pipe	Y	N		
i) Watertight connectors & gaskets properly installed	Y	N		

	Checked		Satisfactory	Unsatisfactory
ii) Anti-seep collars properly spaced & having watertight connections to pipe	Y	N		
iii) Backfill placed & tamped by hand under "haunches" of pipe	Y	N		
iv) Remaining backfill placed in max. 200mm lifts using small power tamping equipment until 600mm cover over pipe is reached	Y	N		
19. Pipe placement – Concrete pipe	Y	N		
i) Pipe set on blocks or concrete slab for pouring of low cradle	Y	N		
ii) Pipe installed with rubber gasket joints no spalling in gasket interface area	Y	N		
iii) Excavation for lower half of anti-seep collar(s) reinforcing steel set	Y	N		
iv) Entire area where anti-seep collar(s) will come in contact with pipe coated with mastic or other	Y	N		
vi) Low cradle & bottom half of anti-seep collar installed	Y	N		
vii) Upper half of anti-seep collar(s) formed with reinforcing steel set	Y	N		
viii) Concrete for collar of an approved mix & vibrated into place (Protected from freezing while curing, if necessary)	Y	N		
ix) Forms striped & collar inspected for honeycomb prior to backfilling. Parge if necessary	Y	N		
20. Pipe placement - Backfilling				
i) Fill placed in maximum 200mm lifts	Y	N		
ii) Back fill taken minimum 600mm above top of anti-seep collar elevation before traversing with heavy equipment	Y	N		
RISER / OUTLET STRUCTURE INSTALLATION				
21. Pre-cast concrete structure				
i) Dry and stable subgrade	Y	N		
ii) Riser base set to design elevation	Y	N		
iii) If more than one section, no spalling in gasket interface area: gasket or approved caulking material placed securely	Y	N		

Items Inspected	Checked		Satisfactory	Unsatisfactory
iv) Watertight & structurally sound collar or gasket joint where structure connects to pipe spillway	Y	N		
22. Poured concrete structure				
i) Footing excavated or formed on stable subgrade, to design dimensions with reinforcing steel set	Y	N		
ii) Structure formed to design dimensions, with reinforcing steel set as per plan	Y	N		
iii) Concrete of an approved mix & vibrated into place (protected from freezing while curing, if necessary)	Y	N		
iv) Forms stripped & structure inspected for "honeycomb" prior to backfilling. Parge if necessary	Y	N		
EMBANKMENT CONSTRUCTION				
23. Fill material				
i) Soil engineer's test	Y	N		
ii) Visual test by responsible person	Y	N		
24. Compaction				
i) Soil engineer's test	Y	N		
ii) Visual test by responsible person	Y	N		
25. Embankment				
i) Fill placed in maximum 200mm lifts & compacted with appropriate equipment	Y	N		
ii) Constructed to design cross-section, side slopes & top width	Y	N		
iii) Constructed to design elevation plus allowance for settlement	Y	N		
IMPOUNDED AREA CONSTRUCTION				
26. Excavated/grade to design contours & side slopes	Y	N		
27. Inlet pipes have adequate outfall protection	Y	N		
28. Forebay(s)	Y	N		
29. Wet pond requirements				
i) 1.3 metre reverse slope bench 100mm above normal pool elevation (optional)	Y	N		
ii) 2.3 metre wide level bench 300mm below normal pool elevation	Y	N		
EARTH EMERGENCY SPILLWAY CONSTRUCTION				
30. Spillway located in cut or structurally stabilised with riprap gabions, concrete...	Y	N		
31. Excavated to proper cross-section, side slopes & bottom width	Y	N		

	Checked		Satisfactory	Unsatisfactory
32. Entrance channel, crest, & exit channel constructed to design grades & elevation	Y	N		
OUTLET PROTECTION				
33. End section securely in place & properly backfilled	Y	N		
34. Endwall				
i) Footing excavated or formed on stable subgrade, to design dimensions & reinforcing steel set, if specified	Y	N		
ii) Endwall formed to design dimensions with reinforcing steel set as per plan	Y	N		
iii) Concrete of an approved mix & vibrated into place (protected from freezing, if necessary)	Y	N		
iv) Forms stripped & structure inspected for "honeycomb" prior to backfilling. Parge if necessary	Y	N		
35. Riprap outlet / channel				
i) Outlet / channel excavated to design cross-section with proper transition to existing ground	Y	N		
ii) Filter fabric in place	Y	N		
iii) Stone sized as per plan & uniformly placed at the thickness specified	Y	N		
VEGETATIVE STABILISATION				
36. Approved seed mixture or sod	Y	N		
37. Proper surface preparation & required soil amendments	Y	N		
38. Excelsior mat or other stabilisation materials, as per plan	Y	N		
MISCELLANEOUS				
39. Toe drain	Y	N		
40. Temporary dewatering device installed as per plan with appropriate fabric, stone size & perforation if included	Y	N		
41. Drain for ponds having a permanent pool	Y	N		
42. Trash rack / anti-vortex device secured to outlet structure	Y	N		
43. Trash protection for low flow pipes, orifices, etc	Y	N		
44. Fencing (when required)	Y	N		
45. Access road	Y	N		
46. Set aside area for clean-out maintenance	Y	N		

RESPONSIBLE PERSON'S REMARKS:

ACTION TO BE TAKEN:

No action necessary. Continue routine inspections? Y / N

Correct noted site deficiencies by

_____

1st Notice:

_____

2nd Notice:

_____

Submit plan modifications as noted in written comments by

_____

Final inspection, project completed

_____

Responsible person's signature: _____

As-built documentation

Individual As-Built documentation of stages of construction is provided for each practice other than the oil/water separator. That practice does not have an “As-Built” plan requirement as they are pre-fabricated units and the only item of concern is the elevation they are placed at.

The “forms” for each practice are provided on individual sheets for ease of reproduction.

As-Built Certification for Completed Stormwater Management Practices – Swale and/or Filter Strip

Site Name
Address
Engineer

Consent Number
Date

The following information must be completed and submitted with the As-Built drawing of the stormwater management swales or filter strips.

Stormwater Management Swale or Filter Strip As-Built Items to be included in the As-Built Plan submission as required by New Zealand Transport Agency.

It is necessary that photographic evidence be submitted to document stages of construction. Where large boxes are provided, please place an image or submit pictures of that stage to verify that construction was done according to the plan.

	Yes	No
1. Is the size and location of the swale or filter strip according to the approved plans	☐	☐
2. Are the lateral slopes completely level	☐	☐
3. Are the longitudinal slopes within the design range	☐	☐
3. Are check dams and level spreaders Installed and spaced correctly	☐	☐
4. Are level spreaders constructed completely level	☐	☐
5. Are all inlets, outlets and bypasses installed correctly	☐	☐

6. Are kerb cuts installed per plans

Yes ☐ No ☐

7. Does the vegetation comply with planting Specifications and is topsoil adequate in Composition and placement

Yes ☐ No ☐

8. Are erosion control measures in place and adequate To protect the swale from excess sedimentation

Yes ☐ No ☐

5. Is overall construction done according to plans

Yes ☐ No ☐

Insert a photograph to show the completed swale or filter strip

8. Verify locations and locate on as-built plans all utilities that may impact on future maintenance.

Yes ☐ No ☐

For all those items listed above where “No” has been marked, please provide a discussion of the variation of those items from the consented design and why they are at variance. It is also requested that you state that the exceptions to the approved design do not adversely affect the intended performance or safety of the swale or filter strip. If you cannot state that there is no adverse affect, you must also note to that effect.

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The exceptions to the approved design do not adversely affect the intended performance or safety of the swale or filter strip.

I certify that this stormwater management swale or filter strip is constructed according to the consented design. This statement has been based upon on-site observation of the swale or filter strip conducted by me or by my designee under my direct supervision. The as-built plan accurately reflects site conditions.

_____	_____
Name (printed)	Signature
_____	_____
Date	Qualification

As-Built Certification for Completed Stormwater Management Practices – Sand Filter

Site Name
Address
Engineer

Consent Number
Date

The following information must be completed and submitted with the As-Built drawing of the stormwater management sand filter.

Stormwater Management Sand Filter As-Built Items to be included in the As-Built Plan submission as required by New Zealand Transport Agency.

It is necessary that photographic evidence be submitted to document stages of construction. Where large boxes are provided, please place an image or submit pictures of that stage to verify that construction was done according to the plan.

1. Were the dimensions of the sand filter (length, width and depth) as detailed on the approved plans sized appropriately in the field. For a prefabricated unit, is the unit sized to approved plans

Yes	No
☐	☐

2. Was the foundation area compacted to meet minimum specifications

Yes	No
☐	☐

Insert a photograph of the foundation area of the sand filter prior to placement of the filter

3. Are the underdrains sized and placed correctly to the correct grade

Yes	No
☐	☐

Provide a photograph showing the underdrains

3. Does the filter media meet TP 10 specification Yes ☐ No ☐

4. Are all joints and pipe connections sealed and joined properly Yes ☐ No ☐

5. Inflow and overflow systems installed correctly Yes ☐ No ☐

8. Verify locations and locate on as-built plans all utilities that may impact on future maintenance. Yes ☐ No ☐

9. Constructed related sediments removed Yes ☐ No ☐

For all those items listed above where “No” has been marked, please provide a discussion of the variation of those items from the consented design and why they are at variance. It is also requested that you state that the exceptions to the approved design do not adversely affect the intended performance or safety of the sand filter. If you cannot state that there is no adverse affect, you must also note to that effect.

_____

_____

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_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

The exceptions to the approved design do not adversely affect the intended performance or safety of the sand filter.

I certify that this stormwater management sand filter is constructed according to the consented design. This statement has been based upon on-site observation of the sand filter conducted by me or by my designee under my direct supervision. The as-built plan accurately reflects site conditions.

_____	_____
Name (printed)	Signature
_____	_____
Date	Qualification

As-Built Certification for Completed Stormwater Management Practices – Rain Garden

Site Name
Address
Engineer

Consent Number
Date

The following information must be completed and submitted with the As-Built drawing of the stormwater management rain garden. If there are multiple rain gardens, one form can be used but the individual rain gardens should be numbered on the plans so that reference to them in comments can be related to the specific one in the field.

Stormwater Management Rain Garden As-Built Items to be included in the As-Built Plan submission as required by New Zealand Transport Agency.

It is necessary that photographic evidence be submitted to document stages of construction. Where large boxes are provided, please place an image or submit pictures of that stage to verify that construction was done according to the plan.

1. Were the dimensions of the rain garden (length, width and depth) as detailed on the approved plans constructed in the field

Yes ☐ No ☐

2. Was a liner placed as required

Yes ☐ No ☐

Insert picture of liner placement in excavation

3. Perforated underdrain installed correctly according to standard engineering principles

Yes ☐ No ☐ NA ☐

Insert picture of underdrain placement

3. Storm drain system installed and connected

Yes ☐ No ☐

4. Gravel, sand and planting media backfilled correctly and meets compaction specifications

Yes ☐ No ☐

Insert a photograph showing the planting media prior to placement in the excavation area

5. Inflow and overflow systems installed according to design — Yes ☐ No ☐

6. Vegetation complies with planting specifications — Yes ☐ No ☐

7. Groundcover or mulch laid to specification — Yes ☐ No ☐

8. Verify locations and locate on as-built plans all utilities that may impact on future maintenance. — Yes ☐ No ☐

9. Catchment contributing to rain garden stabilised — Yes ☐ No ☐

10. Constructed related sediments removed — Yes ☐ No ☐

11. Has access for maintenance been provided — Yes ☐ No ☐

12. Rain garden completed according to plan

Yes ☐ No ☐

Insert a picture of the completed rain garden here

For all those items listed above where “No” has been marked, please provide a discussion of the variation of those items from the consented design and why they are at variance. It is also requested that you state that the exceptions to the approved design do not adversely affect the intended performance or safety of the rain garden. If you cannot state that there is no adverse affect, you must also note to that effect.

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The exceptions to the approved design do not adversely affect the intended performance of the rain garden.

I certify that this stormwater management rain garden is constructed according to the consented design. This statement has been based upon on-site observation of the rain garden conducted by me or by my designee under my direct supervision. The as-built plan accurately reflects site conditions.

Name (printed) Signature

Date Qualification

As-Built Certification for Completed Stormwater Management Practices – Infiltration Trench

Site Name
Address
Engineer

Consent Number
Date

The following information must be completed and submitted with the As-Built drawing of the stormwater management drywell or infiltration trench.

Stormwater Management Dry Well or Infiltration Trench As-Built Items to be included in the As-Built Plan submission as required by New Zealand Transport Agency.

It is necessary that photographic evidence be submitted to document stages of construction. Where large boxes are provided, please place an image or submit pictures of that stage to verify that construction was done according to the plan.

1. Is the size and location of the infiltration trench according to the approved plans

Yes ☐ No ☐

2. Was filter fabric placed on the bottom and sides of the trench according to the approved plans

Yes ☐ No ☐

3. Are the aggregate materials sized according to the approved plans

Yes ☐ No ☐

Insert a photograph of the trench being filled to show aggregate and filter fabric

3. Has an observation well been installed

Yes ☐ No ☐

4. Does the aggregate filter course meet size Specifications and is clean, washed stone

Yes ☐ No ☐

5. Has the porous surface material been placed

properly

Yes ☐ No ☐

Insert a photograph to show the completed infiltration trench

8. Verify locations and locate on as-built plans all utilities that may impact on future maintenance. Yes ☐ No ☐

For all those items listed above where "No" has been marked, please provide a discussion of the variation of those items from the consented design and why they are at variance. It is also requested that you state that the exceptions to the approved design do not adversely affect the intended performance or safety of the dry well or infiltration trench. If you cannot state that there is no adverse affect, you must also note to that effect.

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The exceptions to the approved design do not adversely affect the intended performance or safety of the infiltration trench.

I certify that this stormwater management infiltration trench is constructed according to the consented design. This statement has been based upon on-site observation of the dry well or infiltration trench conducted by me or by my designee under my direct supervision. The as-built plan accurately reflects site conditions.

_____ _____

Name (printed) Signature

_____ _____

Date Qualification

As-Built Certification for Completed Stormwater Management Practices – Stormwater Management Pond or Wetland

Site Name
Address
Engineer

Consent Number
Date

The following information must be completed and submitted with the As-Built drawing of the stormwater management pond.

Stormwater Management Pond or Wetland As-Built Items to be included in the As-Built Plan submission as required by New Zealand Transport Agency.

It is necessary that photographic evidence be submitted to document stages of construction. Where large boxes are provided, please place an image or submit pictures of that stage to verify that construction was done according to the plan.

1. All pipes, their sizing and associated structures are those specified on design drawings

Yes ☐ No ☐

2. Cut-off trench excavated a minimum of 1 metre below subgrade and minimum of 1 metre below proposed pipe invert, with side slopes no steeper than 1:1

Yes ☐ No ☐

Insert picture of cut-off trench here

3. Pipe placement done according to sound engineering practices and uses water tight connections when pipes are joined together

Yes ☐ No ☐

4. Anti-seep collars or other seepage properly spaced having properly spaced, having water tight connections to pipe and installed properly

Yes ☐ No ☐

Insert picture of anti-seep collars or here

5. Embankment properly compacted around pipe and fill placed in maximum 200 mm lifts

Yes ☐ No ☐

Insert picture of embankment during construction

6. Riser base set to design elevation

Yes ☐ No ☐

7. Principal spillway meets design specifications and elevations

Yes ☐ No ☐

8. Pond toe drain installed correctly according to standard engineering principles

Yes ☐ No ☐

Insert picture of pond or wetland toe drain here

10. Impounded area meets design contours and side slopes. This includes any benches both above and below the permanent pool elevation

Yes ☐ No ☐

10. Forebay is constructed according to design plans meeting depth and area requirements with appropriate energy dissipation

Yes ☐ No ☐

Insert picture of forebay clearly showing configuration and any energy dissipation

11. Emergency spillway is excavated to

Yes ☐ No ☐

proper cross-section, side slopes and bottom width and armoured according to the design plans

12. Outlet protection installed according to detailed design plans in terms of materials and configuration — Yes ☐ No ☐

13. Site vegetatively stabilized, landscaping plants and any wetland plants planted — Yes ☐ No ☐

14. Maintenance access provided

Yes ☐ No ☐

Insert picture of maintenance access point clearly showing any gates, fencing and means of entry..

15. Set aside areas provided for sediment clean-out maintenance — Yes ☐ No ☐

16. Verify locations and locate on as-built plans all utilities that may impact on future maintenance — Yes ☐ No ☐

For all those items listed above where “No” has been marked, please provide a discussion of the variation of those items from the consented design and why they are at variance. It is also requested that you state that the exceptions to the approved design do not adversely affect the intended performance or safety of the pond. If you cannot state that there is no adverse affect, you must also note to that effect.

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The exceptions to the approved design do not adversely affect the intended performance or safety of the pond.

I certify that this stormwater management pond is constructed according to the consented design. This statement has been based upon on-site observation of the pond conducted by me or by my designee under my direct supervision. The as-built plan accurately reflects site conditions.

_____ _____

Name (printed) Signature

_____ _____

Appendix C

Operation and maintenance forms for the following practices:

- Swales and filter strips
- Sand filters
- Rain gardens
- Infiltration trenches
- Ponds and wetlands
- Oil/water separators

NZ TRANSPORT AGENCY
WAKA KOTAHI

STORMWATER MAINTENANCE INSPECTION FORM

Inspector:
Date:
Time:
Weather: Rainfall over previous 2-3 days?

File No:

Site Name:		ID No:	
Location		Catchment:	
		Needs immediate attention	
		Not Applicable	

SWALE AND FILTER STRIP PRACTICE MAINTENANCE INSPECTION CHECKLIST	✕ –	Required Y / N	✓	Okay	?	Clarification Required

"As builts"	Required Y / N	Available Y / N	Adequate Y / N	Approx. check to verify vol(s). Y / N
"Operation & Maintenance Plan"	Required Y / N	Available Y / N	Adequate Y / N	
"Planting Plan"	Required Y / N	Available Y / N	Adequate Y / N	

Swale And Filter Strip Components:

Items Inspected	Checked		Maintenance Needed		Inspection Frequency		Checked		Maintenance Needed		Inspection Frequency
DEBRIS CLEANOUT	Y		Y	N	**M**	**CHECK DAMS / ENERGY DISSIPATORS / SUMPS**	Y	N	Y	N	**A**
1. Swales and filter strips and contributing areas clean of debris											
2. No dumping of wastes into swales or filter strips											
3. Litter (branches, etc) have been removed											
VEGETATION					**M**						
4. Plant height not less than design water depth											
5. Fertilised per specifications											
6. No evidence of erosion											
7. Grass height not greater than 250mm											
8. Is plant composition according to design plans											
9. No placement of inappropriate plants											
DEWATERING					**M**						
10. Swales and filter strips dewater between storms											
11. No evidence of standing water											

Inspection Frequency Key **A = Annual, M = Monthly**

INSPECTOR REMARKS:

OVERALL CONDITION OF PRACTICE:

In accordance with approved design plans? Y / N In accordance with As Built plans? Y / N

Maintenance required as detailed above? Y / N Compliance with other consent conditions? Y / N

Comments: _____

Dates by which maintenance must be completed: / /

Dates by which outstanding information as per consent conditions is required by: / /

Inspector's signature: _____

NZ TRANSPORT AGENCY
WAKA KOTAHI

STORMWATER MAINTENANCE INSPECTION FORM

Inspecting individual:
Date:
Time:
Weather: Rainfall over previous 2-3 days?

File No:

Site Name:		ID No:	
Location		Catchment:	
		Needs immediate attention Not Applicable	

SWALE AND FILTER STRIP PRACTICE MAINTENANCE INSPECTION CHECKLIST	✕ –	Required Y / N	✓	Okay	?	Clarification Required

"As builts"	Required Y / N	Available Y / N	Adequate Y / N	Approx. check to verify vol(s). Y / N
"Operation & Maintenance Plan"	Required Y / N	Available Y / N	Adequate Y / N	
"Planting Plan"	Required Y / N	Available Y / N	Adequate Y / N	

Swale And Filter Strip Components:

Items Inspected	Checked		N		Inspection Frequency		Checked		Maintenance Needed		Inspection Frequency
DEBRIS CLEANOUT	Y		Y	N	**M**	**CHECK DAMS / ENERGY DISSIPATORS / SUMPS**	Y	N	Y	N	**A**
1. Swales and filter strips and contributing areas clean of debris											
2. No dumping of yard wastes into swales or filter strips											
3. Litter (branches, etc) have been removed											
VEGETATION					**M**						
4. Plant height not less than design water depth											
5. Fertilised per specifications											
6. No evidence of erosion											
7. Grass height not greater than 250mm											
8. Is plant composition according to design plans											
9. No placement of inappropriate plants											
DEWATERING					**M**						
10. Swales and filter strips dewater between storms											
11. No evidence of standing water											

Inspection Frequency Key **A = Annual, M = Monthly**

INSPECTORS REMARKS:

OVERALL CONDITION OF PRACTICE:

In accordance with approved design plans? Y / N In accordance with As Built plans? Y / N

Maintenance required as detailed above? Y / N Compliance with other consent conditions? Y / N

Comments: _____

Dates by which maintenance must be completed: / /

Dates by which outstanding information as per consent conditions is required by: / /

Inspector's signature: _____

NZ TRANSPORT AGENCY
WAKA KOTAHI

STORMWATER MAINTENANCE INSPECTION FORM

Inspector:

Date:

Time:

Weather: Rainfall over previous 2-3 days?

Site Name:		File No:	
Location:		Consent No:	
		Catchment:	

RAIN GARDEN MAINTENANCE INSPECTION CHECKLIST	✕	Needs immediate attention	✓	Okay	?	Clarification Required
	–	Not Applicable				

"As builts"	Required Y / N	Available Y / N	Adequate Y / N	Approx. check to verify vol(s). Y / N
"Operation & Maintenance Plan"	Required Y / N	Available Y / N	Adequate Y / N	
"Planting Plan"	Required Y / N	Available Y / N	Adequate Y / N	

Rain Garden Components:

Items Inspected	Checked		Maintenance Needed		Inspection Frequency		Checked		Maintenance Needed		Inspection Frequency
DEBRIS CLEANOUT	Y	N	Y	N	**M**	**OUTLETS/OVERFLOW SPILLWAY**	Y	N	Y	N	**A, AMS**
1. Rain gardens and contributing areas clean of debris						13. Good condition, no need for repair					
2. No dumping of yard wastes into rain garden						14. No evidence of erosion					
3. Litter (branches, etc) have been removed						15. No evidence of any blockages					
VEGETATION					**3M**	**INTEGRITY OF BIOFILTER**					**A**
4. Planting height not less than design water depth						16. Rain garden has not been blocked or filled inappropriately					
5. Fertilised per specifications						17. Mulch layer still in place					
6. No evidence of erosion						18. Noxious plants or weeds removed					
7. Is plant composition still according to approved plans											
8. No placement of inappropriate plants											
DEWATERING AND SEDIMENTATION											
9. Rain garden dewaters between storms					**3M**						
10. No evidence of standing water											
11. No evidence of surface clogging											
12. Sediments should not be > than 20% of rain garden design depth											

Inspection Frequency Key **A = Annual, M = Monthly, AMS = After Major Storm**

INSPECTOR REMARKS:

OVERALL CONDITION OF PRACTICE:

In accordance with approved design plans? Y / N In accordance with As Built plans? Y / N

Maintenance required as detailed above? Y / N Compliance with other consent conditions? Y / N

Comments: _____

Dates by which maintenance must be completed: / /

Dates by which outstanding information as per consent conditions is required by: / /

Inspector's signature: _____

NZ TRANSPORT AGENCY
WAKA KOTAHI

STORMWATER MAINTENANCE INSPECTION FORM

Inspector:

Date:

Time:

Weather: Rainfall over previous 2-3 days?

Site Name:		File No:	
Location		Consent No:	
		Catchment:	

INFILTRATION TRENCH MAINTENANCE INSPECTION CHECKLIST	✕ –	Needs immediate attention Not Applicable	✓	Okay	?	Clarification Required

"As builts"	Required Y / N	Available Y / N	Adequate Y / N	Approx. check to verify vol(s). Y / N
"Operation & Maintenance Plan"	Required Y / N	Available Y / N	Adequate Y / N	
"Planting Plan"	Required Y / N	Available Y / N	Adequate Y / N	

Infiltration Trench Components:

Items Inspected	Checked		Maintenance Needed		Inspection Frequency		Checked		Maintenance Needed		Inspection Frequency
DEBRIS CLEANOUT	Y	N	Y	N	**M**	**INLETS**	Y	N	Y	N	**A**
1. Trench surface clear of debris						13. Good condition					
2. Inlet areas clear of debris						14. No evidence of erosion					
3. Inflow pipes clear of debris						**OUTLETS/OVERFLOW SPILLWAY**					**A**
4. Overflow spillway clear of debris						15. Good condition, no need for repair					
SEDIMENT TRAPS, FOREBAYS, OR PRETREATMENT SWALES					**A**	16. No evidence of erosion					
5. Obviously trapping sediment						**AGGREGATE REPAIRS**					**A**
6. Greater than 50% of storage volume remaining						17. Surface of aggregate clean					
VEGETATION					**M**	18. Top layer of stone does not need replacement					
7. Mowing done when needed						19. Trench does not need rehabilitation					
8. Fertilized per specifications						**VEGETATED SURFACE**					**M**
9. No evidence of erosion						20. No evidence of erosion					
DEWATERING					**3M**	21. Perforated inlet functioning adequately					
10. Trench dewaters between storms						22. Water does not stand on vegetative surface					
SEDIMENT CLEANOUT OF TRENCH					**A**	23. Good vegetative cover exists					
11. No evidence of sedimentation in trench											
12. Sediment accumulation does not yet require cleanout											

Inspection Frequency Key **A = Annual, M = Monthly**

INSPECTORS REMARKS:

OVERALL CONDITION OF PRACTICE:

In accordance with approved design plans? Y / N In accordance with As Built plans? Y / N

Maintenance required as detailed above? Y / N Compliance with other consent conditions? Y / N

Comments: _____

Dates by which maintenance must be completed: / /

Dates by which outstanding information as per consent conditions is required by: / /

Inspector's signature: _____

NZ TRANSPORT AGENCY
WAKA KOTAHI

STORMWATER MAINTENANCE INSPECTION FORM

Inspector:
Date:
Time:
Weather: Rainfall over previous 2-3 days?

Site Name:		File No:	
Location:		Consent No:	
		Catchment:	

STORMWATER POND/WETLAND MAINTENANCE INSPECTION CHECKLIST	✕ –	Needs immediate attention / Not Applicable	✓	Okay	?	Clarification Required

	Required Y / N	Available Y / N	Adequate Y / N	Approx. check to verify vol(s). Y / N
"As builts"	Required Y / N	Available Y / N	Adequate Y / N	
"Operation & Maintenance Plan"	Required Y / N	Available Y / N	Adequate Y / N	
"Planting Plan"	Required Y / N	Available Y / N	Adequate Y / N	

Pond/Wetland Components:

Items Inspected	Checked Y	Checked N	Maintenance Needed Y	Maintenance Needed N	Inspection Frequency
EMBANKMENT & EMERGENCY SPILLWAY					**A,S**
1. Is the spillway level?					
2. Adequate vegetation & ground cover?					
3. Appropriate plants / weeds?					
4. Adequate freeboard?					
5. Embankment erosion evident?					
6. Cracking, bulging or sliding of dam					
a) Upstream embankment					
b) Downstream embankment					
c) At or beyond toe upstream					
d) At or beyond toe downstream					
e) Emergency spillway					
7. Pond & toe drains clear & functioning?					
8. Evidence of animal burrows?					
9. Seeps/leaks on downstream face?					
10. Vertical & horizontal alignment of top of dam as per As-Built plans?					
11. Emergency spillway clear of obstructions & debris					
12. Provision of access for maintenance?					
a) By hand?					
b) For machinery?					
13. Other?					
RISER & SERVICE SPILLWAY					**A**
Type: Reinforced concrete					
Metal pipe					
Masonry					
14. Low flow orifice obstructed?					
15. Low flow trash rack:					
a) Is debris removal necessary?					
b) Is corrosion evident?					
16. Weir trash rack maintenance					
a) Is debris removal required?					
b) Is corrosion evident?					
17. Is there excessive sediment accumulation inside the riser?					
18. Metal pipe condition	Good		Fair		Poor
19. Outfall channels functioning?					

	Checked Y	Checked N	Maintenance Needed Y	Maintenance Needed N	Inspection Frequency
20. Concrete/Masonry condition Riser and barrels:					
a) Cracks or displacement?					
b) Minor spalling (.0.25mm)?					
c) Major spalling (rebars exposed)?					
d) Joint failures?					
e) Water tightness adequate?					
21. Pond drain valve:					
a) Operational / exercised?					
b) Chained and locked?					
22. Slope protection or rip-rap failures?					
23. Other?					
PERMANENT POOL (WET POND)					**3M**
24. Undesirable vegetative growth?					
25. Removal of floating debris required?					
26. Visible pollution?					
27. Evidence of 'edge' erosion?					
28. Other?					
DRY POND					**3M**
29. Adequate vegetation cover?					
30. Presence of undesirable vegetation / woody growth?					
31. Standing water or wet spots?					
32. Sediment and/or trash accumulation?					
33. Low flow channels unobstructed?					
34. Other?					
SEDIMENT FOREBAYS					
35. Is sediment accumulation > 50% (maintenance req'd immed. If Yes)					
36. Provision of access for maintenance:					
a) By hand?					
b) For machinery?					
OUTFALLS INTO PONDS					**A,S**
37. Riprap failures?					
38. Condition of endwalls / headwalls	Good		Fair		Poor
39. Evidence of slope erosion?					
40. Condition of any inflow pipes.	Good		Fair		Poor
41. Other?					

Items Inspected	Checked Y	Checked N	Maintenance Needed Y	Maintenance Needed N	Inspection Frequency
OTHER					**6M**

	Checked Y	Checked N	Maintenance Needed Y	Maintenance Needed N	Inspection Frequency
CONSTRUCTED WETLAND AREAS					**A**

41. Encroachments on pond or easement area?						45. Vegetation healthy and growing?						
42. Complaints from residents?						46. Evidence of invasive species?						
43. Aesthetics						47. Excessive sedimentation in wetland area?						
a) grass mowing required?												
b) graffiti removal needed?												
c) other (specify)?												
44. Any public hazards (specify)?												

Inspection Frequency Key **A = Annual, M = Monthly, S = after monthly storm**

INSPECTOR REMARKS:

OVERALL CONDITION OF PRACTICE:

In accordance with approved design plans? Y / N In accordance with As Built plans? Y / N

Maintenance required as detailed above? Y / N Compliance with other consent conditions? Y / N

Comments: _____

Dates by which maintenance must be completed: / /

Dates by which outstanding information as per consent conditions is required by: / /

Inspector's signature: _____

NZ TRANSPORT AGENCY
WAKA KOTAHI

STORMWATER MAINTENANCE INSPECTION FORM

Inspector:

Date:

Time:

Weather: Rainfall over previous 2-3 days?

Site Name:		File No:	
Location:		Consent No:	
		Catchment:	

OIL/WATER OPERATION & MAINTENANCE INSPECTION CHECKLIST	✕ –	Needs immediate attention / Not Applicable	✓	Okay	?	Clarification Required

"As builts"	Required Y / N	Available Y / N	Adequate Y / N	Approx. check to verify vol(s). Y / N
"Operation & Maintenance Plan"	Required Y / N	Available Y / N	Adequate Y / N	
"Planting Plan"	Required Y / N	Available Y / N	Adequate Y / N	

API Components:

Items Inspected	Checked		Maintenance Needed		Inspection Frequency		Checked		Maintenance Needed		Inspection Frequency
DEBRIS CLEANOUT	Y	N	Y	N	**M**		Y	N	Y	N	**A**
1. Contributing areas clean of debris						**STRUCTURAL COMPONENTS**					**A**
2. API clean of debris						8. No evidence of structural deterioration					
3. Inlets and outlets clear of debris						9. Any grates are in good condition					
OIL AND SLUDGE					**M**	10. No evidence of spalling or cracking of structural parts					
4. Oil layer does not exceed 3 mm depth						**OUTLETS / OVERFLOW SPILLWAY**					**A**
5. Sludge deposits do not exceed 150 mm						11. Good condition, no need for repair					
WATER RETENTION					**6M**	12. No evidence of erosion (if draining into a natural channel)					
6. Water holding at normal pool depth?						**OVERALL FUNCTION OF API**					**A**
7. No evidence of leakage						13. No evidence of flow bypassing facility					
						14. No noticeable odours outside API					

Inspection Frequency Key **A = Annual, M = Monthly**

<u>Warning:</u> APIs have watertight covers; be careful regarding the possibility of flammable gases within them. Care should be taken lighting a match or smoking while inspecting practices that are not vented.

INSPECTORS REMARKS:

OVERALL CONDITION OF PRACTICE:

In accordance with approved design plans? Y / N In accordance with As Built plans? Y / N

Maintenance required as detailed above? Y / N Compliance with other consent conditions? Y / N

Comments: _____

Dates by which maintenance must be completed: / /

Dates by which outstanding information as per consent conditions is required by: / /

Inspector's signature: _____