

RECORDING REQUESTED BY:

(Property Owner's Name)

AND WHEN RECORDED MAIL TO:

(Property Owner's Mailing Address)

SPACE ABOVE THIS LINE FOR RECORDER'S USE

**RECORDING OF A
WATER QUALITY MANAGEMENT PLAN
OPERATION AND MAINTENANCE AGREEMENT
FOR**

(Name of Project)

(Address or Tract Map/Lot No.)

Water Quality Management Plan
Operation and Maintenance Agreement

Property Owner Name: _____

Property Owner Mailing Address: _____

Project Address or Location: _____

Project's Assessor Parcel Number: _____

This Operation and Maintenance Agreement (Agreement) is made in The City of Temecula (City), a municipal agency, located in the County of Riverside, State of California, by (insert property owner) _____ (Owner), this (insert day) _____ of (insert month and year) _____;

WHEREAS, the Owner owns real property (Property) as described in Exhibit "A" and depicted in Exhibit "B", each of which exhibit is attached hereto and incorporated by reference, and has proposed that the Property be developed in accordance with governmental approvals issued by the City and other agencies having jurisdiction over the Property;

WHEREAS, at the time of initial approval of the development project (Project) known as (insert name of project) _____ within the Property, the City required the Project to generate a Water Quality Management Plan (WQMP). The WQMP describes how the Project proposes to remove pollutants and minimize any adverse impacts from the discharge of storm water and non-storm water runoff generated as a result of the Project, and includes structural and non-structural treatment devices, also known as "Best Management Practices" (BMPs), that will be constructed, or installed, or implemented for this purpose. The precise location(s) of these BMPs are depicted in the WQMP, on file with the City;

WHEREAS, the Owner signed and certified the WQMP and accepted the requirement to routinely inspect, clean, maintain, repair, reconstruct, and replace the BMPs associated with the Project in order to retain their original intent and effectiveness;

WHEREAS, this Agreement is transferable onto subsequent owners, heirs, executors, administrators, representatives, and assigns (collectively "Successors") of this Property, Project, and all associated BMPs;

WHEREAS, the Owner and Successors are aware that such operation and maintenance requirements are in accordance with, and enforceable under, the City's Municipal Code and State and Federal environmental laws regulating the discharge of pollutants in storm water and non-stormwater runoff, and may also require compliance with Local, State, and Federal laws and regulations pertaining to confined space entry and waste disposal methods in effect at the time such maintenance occurs;

NOW THEREFORE, the Owner and Successors shall be subject to the following conditions:

1. This Agreement shall be recorded in the Office of the Recorder of Riverside County, California, at the expense of the Owner and shall constitute notice to the Owner and all Successors of the title to said Property of the obligations required by this Agreement. This Agreement shall also be accompanied by a copy of an 'Operation and Maintenance Manual', included in Exhibit "C", providing detailed instructions on how and when each treatment BMP proposed for construction, or installation, or implementation must be inspected, cleaned, maintained, repaired, reconstructed, and replaced, if necessary, (collectively "Maintained") in order to retain their original intent and effectiveness.
2. Owner shall, at their sole cost, expense, and liability, routinely maintain all BMPs in a manner assuring peak performance at all times without request or demand from the City or other agency. All reasonable precautions shall be exercised in the removal of any material(s) from the BMPs and the ultimate disposal of the material(s) in a manner consistent with all relevant laws and regulations in effect at the time of the recording of this Agreement. As may be requested from time to time by the City, the Owner shall provide the City with documentation identifying the inspections, maintenance activities, material(s) and quantity(ies) removed, and disposal destinations.
3. Owner hereby provides the City complete access at any time and of any duration during business hours to the BMPs, their immediate vicinity, and all legally accessible areas draining to them upon reasonable notice, or in case of emergency as determined by the City without advance notice, for the purpose of inspecting the BMPs and/or sampling runoff into and/or from the BMPs. The City shall make every effort to minimize interference with the Owner's use of the Property during these inspections and sampling activities.
4. In the event the Owner fails to accomplish the necessary operation and maintenance obligations required by this Agreement, the Owner hereby authorizes the City to perform any maintenance necessary to restore the BMPs to their original intent and effectiveness. Owner shall reimburse all expenses associated with the City's maintenance activities to the City, including administrative costs, attorney fees, and interest thereon at the maximum rate authorized by the Civil Code. The City may also opt to use the proceeds from any securities posted for the project, or place a lien on the Property in such amount as will fully reimburse the City, to pay for such maintenance in order to guarantee the continued performance of the BMPs.
5. Owner shall notify any successor to title of all or part of the Property about the existence of this Agreement and provide such notice and a copy of this Agreement prior to such Successor obtaining an interest in all or part of the Property.

IN WITNESS THEREOF, the Owner hereto affixes their signature as of the date first written above.

OWNER 1:

Name

Signature

Title

OWNER 2 (If more than one owner):

Name

Signature

Title

A notary acknowledgement is required for recordation (attach appropriate acknowledgement).

EXHIBIT A
(Legal Description of Property)

EXHIBIT B
(WQMP Exhibits)

Exhibits shall include: a) a BMP site layout that clearly depicts the location of each BMP, and b) legible construction details of each BMP. Ensure all exhibits are 8.5"X11". Do not include color exhibits.

EXHIBIT C
(Operation and Maintenance Manual)

Please refer to the attached example.
It shows the necessary requirements for the O&M Manual.

Exhibit "C" Operation and Maintenance Manual

1. Purpose of the Infiltration Trench Maintenance Manual

The purpose of this manual is to provide maintenance instructions for the infiltration trenches located along the east, west and south side of the project, just north of Rancho California Road. The infiltration trenches is a pollution control device designed to treat urban runoff before it enters in to the storm drain systems located on the project site. Regular maintenance will help to ensure that the infiltration trenches functions as it has been designed.

This manual will serve as a reference guide and filed manual to assist the property owner with:

- An overview of the infiltration trenches and how it functions
- A description of the location of infiltration trenches
- An understanding of the procedures required to effectively maintain the infiltration trenches on a regular basis
- Reproducible copies of the forms, logs and guidance sheets necessary for recording maintenance activities associated with the Infiltration trenches.

2. General Description and function of the infiltration Trenches

The infiltration trenches are long, narrow basin comprised of layers of porous materials that allow collective urban runoff to infiltrate into the ground. From the top of the trench to the bottom, the porous materials consist of

- Varying depth layer of mulch (minimum depth of 3")
- 12" of 3/8" Gravel (Pea Gravel)
- 30" of 1.5"-2.5" Dia. Washed Drain Rock
- Impermeable Liner on the sides of the Basin

A 4" diameter perforated pvc will be installed at the bottom of the 30" (1.5"-2.5") layer. This pipe connects to a storm drain box and serves to provide a positive outlet for collected water that has built up into the trench as the rate of inflowing runoff exceeds the infiltration rate of the trench. This prevents standing water from occurring in the trench, which in turn could create vector concerns.

Pollution is mitigated through infiltration of runoff into the porous materials within the trenches and ultimately through infiltration in to the ground below the trench.

3. Maintenance Responsibility

The property Owner, Pk 1 Palomar Village Sc Lp, a Delaware Partnership is ultimately responsible for maintaining the infiltration trenches. The goal in maintaining the trenches is to ensure that infiltration is occurring. Regular inspection and replacement of materials within the trenches once they become ineffective in performing as designed are the major components in the maintenance program. In order to achieve this, the following general procedures shall be followed:

- Qualified maintenance personnel should periodically inspect the trench at least twice a year. The first inspection should happen prior to August 1 and the subsequent inspection should happen during the period between February 1 and March 31.
- If a problem is identified, it should be rectified as soon as possible to ensure that the trench functions as designed.
- Regular removal of trash and debris should occur as needed. Trash and debris, visible along the surface of the trench shall be promptly removed.

Detailed maintenance procedures are outlined in section 5.

4. Maintenance Indicators and Activities

Functional Maintenance:

Regular functional maintenance is required to ensure that the infiltration trenches perform in an effective manner functional maintenance consists of both preventative and corrective activities. Logs and guidance sheets are contained herein to use in recording vital information while performing operation inspection and other infiltration trench maintenance activities. Maintenance records shall be maintained by the property owner for a minimum of five years. The proper use and subsequent storage of these records will assure the City of Temecula that the infiltration trenches are functioning as designed.

Preventative Maintenance:

Preventative maintenance shall be performed on a regular basis. Checklists are included herein to track and record preventative maintenance activities. These activities include trash and debris removal and sediment management.

Trash and debris removal shall be performed to ensure that runoff has adequate surface area to infiltrate through the various layers that comprise the cross section of the trench.

Sediment management will occur when testing indicates that the infiltration rate has diminished below the stated acceptable rate.

Corrective Maintenance:

Corrective maintenance will be required on an emergency or non-routine basis to correct problems and restore the intended operation and safe function of the infiltration trench.

Infiltration Trench Maintenance

- Inspect a minimum of twice a year, before and after the rainy season, after large storms or more frequently as needed.
- Clean the trench when the loss of infiltrative capacity is observed. When the standing water is present for a period of time in excess of 72 hours, removal of sediment may be necessary. This is an expensive activity and the need for it may be minimized through the prevention of upstream erosion.
- Control mosquitoes as necessary.
- Remove litter and debris from surface as required.

Design Criteria and Routine Actions	Maintenance Indicator	Inspection Frequency	Maintenance Activity
Inspection for standing water in the infiltration trench.	Presence of water that has been standing for 72 hours.	Annually and 72 hours after a storm event.	Check the 4" pvc drain pipe for blockages and unclog.
Inspect for sediment buildup within the 4" underdrain.	Sediment depth within 2" of the bottom of basin	Bi-Annually	Remove and replace top layer of infiltration trench materials (12" of 3/8" Gravel (Pea Gravel)

Maintenance Indicators:

Maintenance indicators are signs or triggers that indicate that maintenance personnel need to check the infiltration trenches for maintenance needs. The most common triggers include warnings or accounts of standing water and sediment accumulation. The preceding Table 1 shows conditions and criteria that trigger the need for some specific routine infiltration trench maintenance activities. Emergencies may occasionally arise that would require a more urgent, critical response.

Sediment Removal:

The types of storm water pollutants that accumulate in sediment varies, but may include contaminants such as heavy metals, petroleum hydrocarbons, and other organic compounds such as pesticides or solvents. When the sediment reaches a level within 2: of the invert of the 4: pvc underdrain, the sediment must be removed.

Sediment Disposal:

Several methods for disposal are available depending on the concentration of toxins in the waste. Methods can range from recycling the material, to depositing the sediment into appropriate landfills.

At the time of disposal, if the wastes are deemed to be unfit for disposal in a municipal landfill, a full and comprehensive testing program should be run by a qualified person to test for all the constituents outlined under California code of Regulations (CCR) Title 22. Title 22 list concentrations of certain chemicals and their soluble threshold limit concentrations (STLC's) and their total threshold limit concentrations (TTLC's). Chemicals that exceed the allowable concentrations are considered hazardous wastes and must be removed from the sediment.

5. Inspection and Maintenance Checklist

Infiltration Trench Inspection and Maintenance Checklist

Date of Inspection: _____

- Type of Inspections: Monthly Pre-Wet Season
 After Heavy Runoff (1" or greater)
 End of Wet Season
 Other _____

Defect	Conditions When Maintenance is Required	Maintenance Needed (yes/no)	Comments (Describe maintenance completed and if needed maintenance was not conducted, note when it will be done)	Results Expected when Maintenance is Performed
Standing Water	When water stand in the infiltration trench longer than 72 hours			There should be no standing water in excess of 72 hours.
Trash and Debris Accumulation	Visible confirmation of accumulated trash and debris			Trash and debris removed from infiltration trench and disposed of properly.
Sediment	Evidence of sedimentation in trench			Materials removed and disposed of properly so that there is no standing water.
Bedding Layers / Side slopes	Visual inspection reveals material is not uniform or has been dug up			Uniform graded surfaces, no erosion apparent.
Miscellaneous	Any condition not covered above that needs attention to ensure proper function of the infiltration trench.			Meet the design specifications.

Water Quality Management Plan (WQMP)
PM No. 234472, Parcel 2

Structural Treatment BMPs	Quantity Costs	Capital	Annual O&M Costs (\$)	Start-Up Dates	O&M Frequency (weekly/monthly/quarterly)	Responsible Funding Party for Installation	Responsible Funding Party for Long-Term O&M
BMP Infiltration Drainage Trench	16 ft W X 62 ft L X 3.75' D	\$2500.00	\$800.00	Prior to Occupancy	Monthly	Developer	Developer
BMP Infiltration Drainage Trench	8.2 ft W X 98 ft L X 3.75' D	\$2200.00	\$500.00	Prior to Occupancy	Monthly	Developer	Developer
BMP Infiltration Drainage Trench	8.4 ft W X 24 ft L X 3.75' D	\$1600.00	\$500.00	Prior to Occupancy	Monthly	Developer	Developer
BMP Infiltration Drainage Trench	5 ft W X 29 ft L X 3.75' D	\$1000.00	\$200.00	Prior to Occupancy	Monthly	Developer	Developer