



Environmental Services Department  
Water & Waste Management  
**On-Site Wastewater Program**  
[www.maricopa.gov/envsvc/WATER/oswtf.asp](http://www.maricopa.gov/envsvc/WATER/oswtf.asp)

# **SITE INVESTIGATION**

## **For an ON-SITE WASTEWATER TREATMENT FACILITY (OSWTF)**

*This guide includes instruction on how to prepare for a site investigation and submit a complete application called the General Application Packet.*

\*\*Design requirements are subject to revision



## Phase I (Site Investigation) Checklist for an Onsite Wastewater Treatment System

### INCOMPLETE OR INCORRECT PHASE I PACKETS WILL NOT BE ACCEPTED FOR SUBMITTAL

- \_\_\_\_\_ Sewer Availability required for every application (See attached sewer determination sheet). **A309.5.b**
  - \_\_\_\_\_ Surface limiting conditions (wash, 100-year floodplain, fill material) **A311.C, A310.C.2**
  - \_\_\_\_\_ Completed General Application.
  - \_\_\_\_\_ Official recorded deed, including legal description, parcel number, address, acreage. **A309.B.2.a**
  - \_\_\_\_\_ Recorded survey of property or any recent lot splits, including dimensions of property
  - \_\_\_\_\_ Site plan drawn to scale (1"=30, 1"=20, 1"=10) with property boundaries and north arrow. **Break lines are prohibited A309.B.2.b**
- Site plan shall include:
- \_\_\_\_\_ Locations of three (3) test holes, minimum depth of 12 feet, two in primary disposal area, one in reserve disposal area. Indicate distance of test holes to property lines. **A309.B.2.b.iv**
  - \_\_\_\_\_ If the proposed disposal method is a seepage pit, follow the procedure for **seepage pit performance testing** in the Phase I application packet. **A310.G**
  - \_\_\_\_\_ Features less than 200' from the proposed site that constrain location of the OSWTF or reserve area. Include bordering lots, vacant or built-on. **A309.B.2.b.ii**
  - \_\_\_\_\_ Dwellings or other buildings, pools, wells, and ponds. **A309.B.2.b.i**
  - \_\_\_\_\_ Surface limiting conditions (such as wash, drainage easement, 100-year floodplain, presence of fill material) **A311.C, A310.C.2**
  - \_\_\_\_\_ Identify all earth fissures (minimum 100' setback)
  - \_\_\_\_\_ Topography with contours, original grades, and final grades **A309.B.2.b.iii**
  - \_\_\_\_\_ Identify all easements and set-backs, indicating distance from property lines; include dimensions of property.
  - \_\_\_\_\_ Location of driveways, porches, other paved or concrete features. **A309.B.2.b.i**
  - \_\_\_\_\_ Location of water line (and where it enters building), water meter, or private well.
  - \_\_\_\_\_ Water company name, if serviced by a water company.
  - \_\_\_\_\_ Recorded Shared Well Agreement with survey OR Affidavit of Agreement to Enroach (otherwise OSWTF must be greater than 50' from property line), if water is not supplied by a common water system. **A312.C;**
  - \_\_\_\_\_ Vicinity map.
  - \_\_\_\_\_ Detailed driving directions.
  - \_\_\_\_\_ Fees: \$325, check or cash only. The fee includes **one (1)** site investigation and/or test hole inspection on **one** specific lot.

Once submitted, you will receive a permit number (to be used on all correspondence with and future submittals to Environmental Services Department), as well as instructions on preparing the site for inspection and Phase II (NOID packet) instructions. **This application will expire: a). one year from the date of application, or b). one year from Phase I site plan approval.**

Applicant Signature \_\_\_\_\_

Date \_\_\_\_\_

(Permit / File #)

## **FLOODWAYS AND FLOOD PLAINS**

### **AUGUST 1, 2005**

#### FLOOD PLAINS = BUILDING PAINS

Due to the increasing numbers of homes being built in and around Floodways and Flood Plains in Maricopa County it is important that you check to insure your parcel is not located in a flood plain or flood way. A septic permit will not be issued for those homes in the Flood Plains and Floodways, without prior approval from Maricopa County Flood Control Department. You can check your parcel on line at <http://www.maricopa.gov/Assessor/> and <http://www.fcd.maricopa.gov/Maps/> to see if you are with in a Flood Plain or Floodway or by telephone at (602) 506-1501. As always each submittal must have:

- ☞ Site plans must identify all washes and drainage patterns with flow rates.
- ☞ Site plans must identify Flood plains, and Flood way boundaries.
- ☞ Drainage and Grading reports must be submitted.

**<http://www.maricopa.gov/Assessor/>**

- 1.) Enter parcel number.
- 2.) Click "Submit".
- 3.) Click "View GIS Map".
- 4.) Click "OK" on the disclaimer.
- 5.) Locate menu on the lower right side of screen.
- 6.) Scroll down to "Zoom Selected".
- 7.) Locate the menu on the left hand side of the screen.
- 8.) Click on "down arrow"
- 9.) Scroll all the way down to "FLOODPLAINS", click on it.
- 10.) Print

**<http://www.fcd.maricopa.gov/Maps/>**

- 1.) Click on "100-year FEMA Flood Plain Maps".
- 2.) Click on "OK" on the disclaimer.
- 3.) Locate "Parcel" in the upper right side of the screen.
- 4.) Click on it.
- 5.) In the pop-up box enter parcel number.
- 7.) Click "Find".
- 8.) Print

**For parcels in Rio Verde:**

*(note: all parcels start with Book: 219 and Map: 37 thru 42)*

- 1.) Click on "Rio Verde Preliminary Flood Plains".
- 2.) Click on "OK" on the disclaimer.
- 3.) Locate "Parcel" in the upper right side of the screen.
- 4.) In the pop-up box enter parcel number.
- 5.) Click "Find".
- 6.) Print

## SEWER DETERMINATION

THE OWNER OR PERSON REQUESTING TO INSTALL AN ONSITE SYSTEM MUST DETERMINE THE LOCATION OF THE NEAREST SEWER TAP TO THE PROPERTY. ARIZONA ADMINISTRATIVE CODE R18-9-A309.A.5 SETS REQUIREMENTS FOR HOOK-UP TO SANITARY SEWER.

"A PERSON...SHALL CONNECT TO A SEWAGE COLLECTION SYSTEM IF:

...B. A SEWER SERVICE LINE EXTENSION IS AVAILABLE AT THE PROPERTY BOUNDARY AND BOTH OF THE FOLLOWING APPLY:

- I. THE SERVICE CONNECTION FEE IS NOT MORE THAN \$6000 FOR A DWELLING... AND
- II. THE COST OF CONSTRUCTING THE BUILDING SEWER FROM THE WASTEWATER SOURCE TO THE SERVICE CONNECTION IS NOT MORE THAN \$3000 FOR A DWELLING...."

MARICOPA COUNTY PROVIDES THE PHONE NUMBERS BELOW TO BEGIN YOUR SEARCH. SOME MUNICIPALITIES MAY HAVE MORE STRINGENT REQUIREMENTS AND WILL REQUIRE CONNECTION TO CITY SEWER. A STATEMENT INDICATING THE AVAILABILITY OF THE SEWER IS NEEDED PRIOR TO ANY SUBMITTAL TO THE ENVIRONMENTAL SERVICES DEPARTMENT.

AVONDALE	623-478-3330	<a href="http://www.ci.avondale.az.us">www.ci.avondale.az.us</a>
BUCKEYE	623-386-2487	<a href="http://www.buckeyeaz.gov">www.buckeyeaz.gov</a>
CAVE CREEK	480-488-1400	<a href="http://www.cavecreek.org">www.cavecreek.org</a>
CHANDLER	480-782-3800	<a href="http://www.chandleraz.gov">www.chandleraz.gov</a>
CAREFREE	480-488-3638	<a href="http://www.carefree.org">www.carefree.org</a>
EL MIRAGE	623-933-8318	<a href="http://www.cityofelmirage.org">www.cityofelmirage.org</a>
GILBERT	480-503-6000	<a href="http://www.ci.gilbert.az.us">www.ci.gilbert.az.us</a>
GLENDALE	623-930-2000	<a href="http://www.ci.glendale.az.us">www.ci.glendale.az.us</a>
GOODYEAR	623-932-1637	<a href="http://www.ci.goodyear.az.us">www.ci.goodyear.az.us</a>
MESA	480-644-4273	<a href="http://www.cityofmesa.org">www.cityofmesa.org</a>
PARADISE VALLEY	480-348-3528	<a href="http://www.ci.paradise-valley.az.us">www.ci.paradise-valley.az.us</a>
PEORIA	623-773-7210	<a href="http://www.peoriaaz.com">www.peoriaaz.com</a>
PHOENIX	602-262-6551	<a href="http://www.ci.phoenix.az.us">www.ci.phoenix.az.us</a>
QUEEN CREEK	480-987-0496	<a href="http://www.queenecreek.org">www.queenecreek.org</a>
SCOTTSDALE	480-312-2356	<a href="http://www.ci.scottsdale.az.us">www.ci.scottsdale.az.us</a>
SURPRISE	623-583-0947	<a href="http://www.surpriseaz.com">www.surpriseaz.com</a>
TEMPE	480-350-8341	<a href="http://www.tempe.gov">www.tempe.gov</a>
TOLLESON	623-936-7141	<a href="http://www.tollesonaz.org">www.tollesonaz.org</a>

MARICOPA COUNTY ENVIRONMENTAL SERVICES MAKES EVERY ATTEMPT TO PROVIDE ACCURATE INFORMATION. PHONE NUMBERS MAY CHANGE WITHOUT OUR KNOWLEDGE.

# **TYPES OF CONVENTIONAL ON-SITE WASTEWATER DISPOSAL SYSTEMS**

Referenced from R18-9-E302, 4.02 general permit

**General Information:** Sewage disposal of individual homes that lie outside a public sewer district can be accomplished by on-site wastewater treatment facilities commonly called septic systems. A conventional septic system will consist of two parts: a tank to capture the solids and grease, and a drainfield or disposal area to dispose of the liquid. The type of drainfield will depend on the soil characteristics and site conditions. The most common type of drainfield for disposal of wastewater from septic tanks are trenches, seepage pits, leach beds and chamber technology.

**ALL DISPOSAL FIELDS LISTED IN 2 THROUGH 4 BELOW REQUIRE A MINIMUM OF THREE (3) TEST HOLES, MINIMUM 12' DEEP, DUG OUT BY A BACKHOE. SOILS ANALYSIS AND/OR PERCOLATION TESTS MUST BE COMPLETED AND PASS ALL CRITERIA FOR A CONVENTIONAL SYSTEM. TWO (2) TEST HOLES SHALL BE EXCAVATED IN THE PROPOSED PRIMARY DISPOSAL AREA AND ONE (1) TEST HOLE EXCAVATED IN THE PROPOSED RESERVE AREA. SEE THE APP RULE OR THE NOID DESIGN PACKETS FOR ADDITIONAL REQUIREMENTS.**

1. **SEEPAGE PITS, R18-9-A312(E)(1):** A seepage pit is a drilled pit, no less than 48" in diameter that is filled with aggregate. The depth of the pit, or pits, is based on the design flow and soil absorption rate (SAR) for that particular site. (Design flow means the daily flow rate a facility is designed to accommodate. See R18-9-101 for further definition). The seepage pit may only be installed in valley-fill sediments in a basin and range alluvial (moved by water) basin. It must also be established that the site satisfies the minimum vertical separation test. Once these criteria have been proven acceptable, the pit must then pass a seepage pit performance test. For a seepage pit to be considered for disposal, the following documentation must be submitted with the NOID:
  - a) A detailed engineered report, prepared by an Arizona-registered Engineer or Geologist, certifying the site has sufficient valley-fill sediments in a basin & range alluvial (moved by water) basin for the seepage pit to perform properly.
  - b) Written test procedures and results from a seepage pit performance test conducted in accordance with R18-9-A310. See R18-9-A312E for more information.
  - c) Site Investigation Report identifying any limiting conditions
  - d) Drill logs, well logs or records from Arizona Department of Water Resources identifying the depth of seasonal high water.
2. **TRENCHES, R18-9-E302(A)(2) and (C)(2):** One or more trenches filled with aggregate. Trenches may be 12" to 36" wide, have a maximum overall depth 5' less than the depth of the test holes and a maximum length of 100'. MCESD highly recommends that trenches over 50' in length be split into two or more trenches of lengths less than 50' to provide a more even distribution of wastewater and better absorption by the soils. Minimum separation between trench edges (undisturbed soil) is twice the effective depth (the distance between the bottom of the distribution pipe and the bottom of the trench) or 5', whichever is greater. See R18-9-A312(D) for more information.
3. **LEACH BED, R18-9-E302(A)(2) and (C)(3):** A shallow disposal field, which is filled with aggregate. The bed width is between 10' and 12' with 2 distribution lines. The maximum overall depth is 60" and the maximum length is 100'. MCESD highly recommends splitting up the system into multiple, shorter beds to provide more suitable distribution of wastewater than one long bed. In calculating the size of the leach bed use the soil absorption rate specified in R18-9-A312(D) for "SAR, Bed."
4. **CHAMBER TECHNOLOGY, R18-9-E302(A)(2) and (C)(4):** This method of disposal uses an ADEQ approved chamber as the filter media rather than aggregate. The chambers are placed in very shallow trenches. All chambers must be installed per Arizona Department of Environmental Quality approved directions.

## **SITE/SOILS TESTING TYPES DESCRIPTION**

Referenced from R18-9-A310

**NOTE:** For site investigations and test hole evaluations conducted by persons other than MCESD staff, use the ADEQ Site Investigation Report. This form may be obtained at:

<http://www.azdeq.gov/envIRON/water/permits/download/investigation.pdf>

**SITE INVESTIGATION R18-9-A310(C) and (D):** A site investigation will consist of a visual examination identifying any surface or subsurface limiting site conditions, as stated in R18-9-A310(B), that may interfere with the operation of an on-site wastewater disposal system. The information obtained from a site investigation is used in conjunction with the soil analysis to locate, select and design an on-site wastewater disposal system.

**TEST HOLE EVALUATION R18-9-A310(C), (D) and (G):** A minimum of **three (3)** holes, minimum 12' deep shall be excavated by a backhoe on the lot. Test holes must be examined to a depth of at least 5' deeper than the overall installation of the disposal field. Two test holes are to be dug in the proposed primary disposal area and one in the proposed reserve area. A reserve area is an area equal to the primary area to be set aside for use at a later date should the primary area fail or need to be abandoned. These holes are to be analyzed and tested by an Arizona-registered Professional Engineer, Arizona-registered Geologist, Arizona-registered Sanitarian with soils background or experience in the on-site wastewater disposal field, a person who holds a certificate of training from a soils and site investigation course recognized by the Department, or a person who qualifies under another category designated in writing by the Department (R18-1-310(H)). Currently, the Department accepts soils evaluations from Arizona-registered Professional Engineers, Arizona-registered Geologists, Arizona-registered Sanitarians (after a minimum of four joint investigations with MCESD staff) or staff of Maricopa County Environmental Services Department. The analysis will determine the characterization of the soils and will establish a soil absorption rate (SAR) to be used in calculating the size of the septic system. The Aquifer Protection Permit Rule describes the approved methods for determining soil characteristics.

**PERCOLATION TESTS R18-9-A310 (F):** A percolation test is a water absorption test conducted in the primary disposal (two test holes) and reserve disposal (one test hole) areas. Percolation tests are to be conducted by an Arizona-registered Professional Engineer, Arizona-registered Geologist, Arizona-registered Sanitarian with soils background or experience in the on-site wastewater disposal field, a person who holds a certificate of training from a soils and site investigation course recognized by the Department, or a person who qualifies under another category designated in writing by the Department (R18-1-310(H)). Currently, the Department accepts percolation test results from Arizona-registered Professional Engineers or Arizona-registered Geologists. Percolation tests must be performed at each horizon (soil change) of the test hole. The percolation test hole shall be 12"x12" square or 15" round, presoaked with clean water 16 to 24 hours in advance of the actual test as stated in Rule. This test may be used solely or in conjunction with a test hole analysis to determine the soil absorption rate (SAR) to be used in calculating the size of the disposal system. Report in minutes per inch.

**SEEPAGE PIT PERFORMANCE TEST R18-9-A310 (G):** This test is conducted for seepage pits only. Seepage pit tests are to be conducted by an Arizona-registered Professional Engineer, Arizona-registered Geologist, Arizona-registered Sanitarian with soils background or experience in the on-site wastewater disposal field, a person who holds a certificate of training from a soils and site investigation course recognized by the Department, or a person who qualifies under another category designated in writing by the Department (R18-1-310(H)). Currently, the Department accepts seepage pit performance tests conducted by Arizona-registered Professional Engineers or Arizona-registered Geologists. Identify the primary and reserve disposal areas on the site plans. In the primary area only, conduct the test in a hole, a minimum 18" in diameter and at least 30' deep, or to the depth of the proposed seepage pit, whichever is greater. Presoak the hole with clean water to a point 36" below the land surface. Observe as per R18-9-A310(G)(2). Conduct the actual test by refilling the hole with clean water to the same point as for the presoak and measure how far the water level drops in 10-minute increments. The final numbers will represent a soil absorption rate (SAR) to be used in calculating the size and number of seepage pits to be installed at the site.

## R18-9-A310(G). Seepage Pit Performance Testing\*

An investigator shall test seepage pits described in R18-9-E302 as follows:

1. Planning and Preparation. The investigator shall:
  - a. Identify primary and reserve disposal areas at the site. A test hole at least 18 inches in diameter shall be drilled in the primary disposal area to the depth of the bottom of the proposed seepage pit, at least 30 feet deep.
  - b. Scarify soil surfaces within the test hole and remove loosened materials from the bottom of the hole.
2. Presoaking procedure. The investigator shall: **(include details with the NOID submittal)**
  - a. Fill the bottom six inches of the test hole with gravel, if necessary, to prevent scouring;
  - b. Fill the test hole with clean water up to three feet below the land surface.
  - c. Observe the decline of the water level in the hole and determine the time in hours and minutes for the water to completely drain away.
  - d. Repeat the procedure if the water drains away in less than four hours. If the water drains away the second time in less than four hours, then the seepage pit performance test shall be conducted following subsection (G)(3).
  - e. Add water to the hole and maintain the water at a depth that leaves at least the top three feet of hole exposed to air for at least four more hours if the water drains away in four or more hours;
  - f. Not remove the water from the hole before the seepage pit performance test if there is standing water in the hole after at least 16 hours of presoaking.
3. Conducting the test. The investigator shall: **(include details with the NOID submittal)**
  - a. Fill the test hole with clean water up to three feet below land surface.
  - b. Observe the decline of the water level in the hole and determine and record the vertical distance to the water level from a fixed reference point every 10 minutes. The investigator shall ensure that the method for measuring water level depth is accurate and does not significantly affect the rate of fall of the water level in the test hole.
  - c. Measure the decline of the water level continually until three consecutive 10-minute measurements indicate that the infiltration rates are within 10%. If measurements indicate that infiltration is not approaching a steady rate or if the rate is close to a numerical limit specified in R18-9-A312(E), an alternate method based on a graphical solution of the test data shall be used to approximate the final stabilized infiltration rate.
  - d. Submit the seepage pit performance test results to the Department, including: \*
    - i. Data, calculations, and findings and all supporting on a form provided by the Department.
    - ii. The log of the test hole indicating lithologic characteristics and points of change; and
    - iii. The location of the test hole on the site investigation map.
  - e. Fill the test hole so that groundwater quality and public safety are not compromised if the seepage pit is drilled elsewhere or if a seepage pit cannot be sited at the location because of unfavorable test results.

\* In addition, MCESD requires that the following items are included with the seepage pit test results:

1. The field worksheets recording all procedures in detail.
2. Identification on the site plan where the seepage pit performance test(s) were conducted, including measurements to at least two adjoining property lines.

# Test Hole Instructions for a Soil Evaluation

**NOTE:** For site investigations and test hole evaluations conducted by persons other than MCESD staff, use the ADEQ Site Investigation Report. This form may be obtained at:

<http://www.azdeq.gov/environ/water/permits/download/investigation.pdf>

- Excavate or contract to have three test holes excavated on the site, two located in the proposed primary disposal area and one located in the proposed reserve disposal area. Stockpile the tailings from each of the test holes in two separate piles. The top 1/2 of the excavation must be placed closest to the hole and the bottom 1/2 of the excavation must be placed farthest from the hole, (a total of six stockpiles). Mark each stockpile to indicate at what depth the material was excavated. Minimum overall depth must be 5' deeper than the proposed overall depth of the disposal field (12' minimum depth). If test holes have not been excavated to at least 5' deeper than the installed disposal field, **ADDITIONAL TESTING AND FEES WILL BE REQUIRED** that may delay the approval process. If you encounter refusal, contact this office for further instructions.
- Clearly stake the corners of the property with markers that can be seen from the proposed disposal areas.
- Clearly stake corners of the proposed structure(s). Stake-off, secure, and protect the test hole area with caution ribbon, flags, wood planks, plywood, chain link fencing or any similar material which can be easily removed for the inspection and will keep animals or humans from harm. Both the contractor and property owner are responsible for keeping the construction site safe.
- If required, stake the proposed well site with a marker that can be seen from the proposed disposal areas.
- Post a sign, minimum of 3' square with 4"-6" lettering. The lettering must state the owner's name, street address if available, and the septic permit number at the entrance to the property.
- When ready for inspection call 602-506-6666, option 1 for English, option 5 the option 3 to record your request for an inspection. Have the permit number and address ready. After 5:00 pm call 602-506-0505.
- If you have questions please call 602-506-6666, option 1, option 5, option 7.

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## TYPICAL APPROVAL PROCESS FOR A CONVENTIONAL ONSITE SYSTEM ON A LEVEL LOT

1. Property owner or agent: Submit Phase I application.
2. Install a sign at the property and boldly mark the property corners, proposed house corners and, if applicable, well sites.
3. Call MCESD for a test hole inspection at 602-506-6666, 1, 5, 3 during business hours. After 5:00 pm call 602-506-0505.
4. MCESD conducts soil evaluation and establishes soil absorption rate (SAR). Inspector will leave a yellow tag at the site when finished.
5. MCESD notifies homeowner of the SAR and any other limiting conditions relating to the selection, design, and layout of the onsite system.
6. Select, design, and lay out the septic tank and disposal area on 2 site plans.
7. Submit Phase II (NOID) with all supporting documentation and applicable fees. **Application must be signed by property owner.**
8. MCESD will review the NOID packet in accordance to applicable rules and regulations.
9. MCESD issues a Construction Authorization permit for the onsite system, citing any required stipulations. MCESD will release P&D number, if applicable.
10. MCESD notifies customer when the permit is ready to pick up at the office.
11. Licensed contractor installs the tank and disposal system according to approved plans.
12. MCESD will verify the water tightness test on the tank and an open trench inspection.
13. Licensed contractor completes the installation.
14. Submit Request for Discharge Authorization (Yellow Form) for final inspection.
15. MCESD conducts final inspection.
16. If construction is approved a white tag is placed at the site, if disapproved a red tag remains. Contractor corrects deficiencies and requests a re-inspection.
17. MCESD issues the Discharge Authorization to owner upon completion of an administrative review. Property owner operates and maintains the onsite system and records, following appropriate Operation and Maintenance procedures.

## SETBACK DISTANCE CHART

The design of the On-Site Wastewater Treatment Facility shall comply with the setbacks indicated below.

Features Requiring Setbacks	Setback For An On-Site Wastewater Treatment Facility, Including Reserve Area (In Feet)	Special Provisions
1. Building	10	Includes porches, decks, and steps (covered or uncovered), breezeways, roofed patios, carports, covered walks, and similar structures and appurtenances.
2. Property line shared with any adjoining lot or parcel not served by a common drinking water system* or an existing drinking water well	50	<p>A person may reduce the setback to a minimum of 5 feet from the property line if:</p> <ul style="list-style-type: none"> <li>a. The owners of any affected undeveloped adjacent properties agree, as evidenced by an appropriately recorded document, to limit the location of any new well on their property to at least 100 feet from the proposed treatment works and primary and reserve disposal works; and</li> <li>b. The arrangements and documentation are approved by the Department.</li> </ul> <p>* A "common drinking water system" means a system that currently serves or is under legal obligation to serve the property and may include a drinking water utility, a well-sharing agreement, or other viable water supply agreement.</p>
3. All other property lines.	5	None
4. Public or private water supply well.	100	None
5. Perennial or intermittent stream	100	Measured horizontally from the high water line of the peak streamflow from a 10-year, 24-hour rainfall event.
6. Lake, reservoir, or canal	100	Measured horizontally from the high water line from a 10-year, 24-hour rainfall event at the lake or reservoir.
7. Drinking water intake from a surface water source (includes an open water body, downslope spring or a well tapping streamside saturated alluvium)	200	Measured horizontally from the on-site wastewater treatment facility to the structure or mechanism for withdrawing raw water such as a pipe inlet, grate, pump, intake or diversion box, spring box, well, or similar structure.
8. Wash or drainage easement with a drainage area more than 20 acres	50	Measured horizontally from the nearest edge of the defined natural channel bank or drainage easement boundary. A person may reduce the setback to 25 feet if natural or constructed erosion protection is approved by the appropriate floodplain administrator.
9. Water main or branch water line	10	None

10. Domestic service water line	5	<p>Measured horizontally between the water line and the wastewater pipe, except that the following are allowed:</p> <ul style="list-style-type: none"> <li>a. A water line may cross above a wastewater pipe if the crossing angle is between 45 and 90 degrees and the vertical separation distance is 1 foot or more.</li> <li>b. A water line may parallel a wastewater pipe with a horizontal separation distance of 1 foot to 5 feet if the bottom of the water line is 1 foot or more above the top of the wastewater pipe and is in a separate trench or on a bench in the same trench.</li> </ul>
<p>11. Downslopes or cut banks greater than 15 percent, culverts, and ditches from:</p> <ul style="list-style-type: none"> <li>a. Treatment works components</li> <li>b. Trench, bed, chamber technology, or gravelless trench with: <ul style="list-style-type: none"> <li>i. No limiting subsurface condition specified in R18-9-A310(D)(2),</li> <li>ii. A limiting subsurface condition.</li> </ul> </li> <li>c. Subsurface drip lines.</li> </ul>	<p>10</p> <p>20</p> <p>50</p> <p>3</p>	<p>Measured horizontally from the bottom of the treatment works component to the closest point of daylighting on the surface.</p> <p>Measured horizontally from the bottom of the lowest point of the disposal pipe or drip lines, as applicable, to the closest point of daylighting on the surface.</p> <p>Measured horizontally from the bottom of the lowest point of the disposal pipe or drip lines, as applicable, to the closest point of daylighting on the surface.</p>
12. Driveway	5	<p>Measured horizontally to the nearest edge of an on-site wastewater treatment facility excavation. A person may place a properly reinforced and protected wastewater treatment facility, except for disposal works, at any location relative to a driveway if access openings, risers, and covers carry the design load and are protected from inflow.</p>
13. Swimming pool excavation	5	<p>Except if soil loading or stability concerns indicate the need for a greater separation distance.</p>
14. Easement (except drainage easement)	5	None
15. Earth fissures	100	None

**CHAPTER I  
MARICOPA COUNTY HEALTH CODE  
WATER & WASTE MANAGEMENT DIVISION  
ON-SITE WASTEWATER PROGRAM AND WELL PROGRAM  
FEE SCHEDULE (excerpt)\*\*\* - Effective July 21, 2006**

<b>BASE PLAN REVIEW FEE SCHEDULE</b>	
*Septic Tank Conventional Disposal, less than 3000 gal./day	\$550.00
Aerobic System with Surface Disposal	\$1050.00
Composting Toilet, less than 3000 gal/day	\$400.00
Septic tank with one additional alternative element**	\$1050.00
Septic tank with >one additional alternative element**	\$1050 plus \$250 per additional element
On-site wastewater treatment facility with flow from 3000 gal/day to less than 24,000 gal/day	\$1800.00
**These alternative disposal elements are all for systems of less than 3000 gal/day and include the following: pressure distribution systems, gravelless trenches, natural seal evapotranspiration beds, Wisconsin mounds, engineered pad systems, intermittent sand filters, peat filters, textile filters, Ruck® Systems, sewage vaults, aerobic systems/subsurface disposal, aerobic systems/surface disposal, cap systems, constructed wetlands, sand lined trenches, disinfection devices, sequencing batch reactors, subsurface drip irrigation systems.	
On-Site System Site Inspection	\$325.00
On-Site System Site Inspection and Domestic Well Approval	\$375.00
On-Site System Alteration Permit	\$75.00
On-Site System Alteration Permit and One Inspection	\$400.00
On-Site System Reconnect/Remodel Review	\$135.00
On-Site System Reconnect/Remodel Review and One Inspection	\$400.00
On-Site System Plan Revision	\$100.00
On-Site System Request for Alternate Design, Installation, or Operational Feature	\$75.00
On-Site System Design Requiring Interceptor	\$200.00 per Interceptor
On-Site System Transfer of Ownership	\$50.00
On-Site System Abandoned Site	\$175.00
Domestic Well Approval	\$65.00

\*Gravity-fed trenches, seepage pits, leach beds, or chambers. Includes up to two (2) plan reviews and three (3) construction inspections.

\*\*\* To see the fee schedule in its entirety go to:

[www.maricopa.gov/envsvc/BUSINESS/hlthcode.asp](http://www.maricopa.gov/envsvc/BUSINESS/hlthcode.asp)

The Expedited Plan Review Fee is twice the fee for that category.

**Expedited Plan Reviews require prior Management approval.**

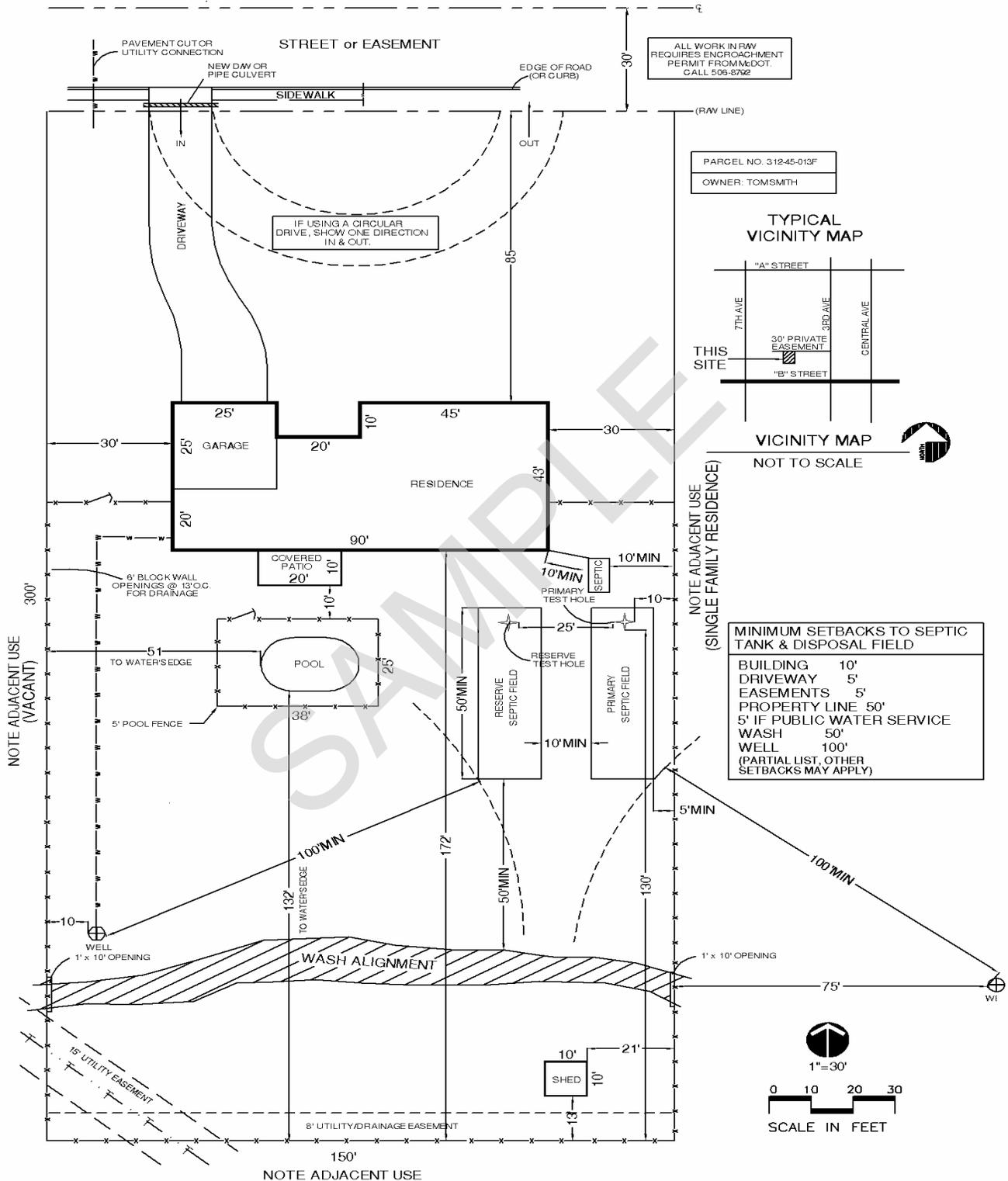
10



# Planning & Development Department



## TYPICAL RESIDENTIAL SITE PLAN



SAMPLE ONLY (DRAWING SHOWN IS NOT TO SCALE)  
ADDITIONAL DETAILED PLANS MAY BE REQUIRED.

Maricopa County Environmental Services Department  
 Water & Waste Management Division  
 (Delegated Authority for ADEQ)  
 1001 N Central Ave, Suite 150  
 Phoenix, AZ 85004  
 Phone: (602) 506-6666  
 Fax: (602) 506 6925



**GENERAL APPLICATION  
 FOR AN ONSITE WASTEWATER  
 TREATMENT FACILITY**

The undersigned hereby requests that MCESD/Water and Waste Management Division conduct the appropriate review or inspection for the procedure selected below for the site named and supplies the undersigned with the associated results.

- (Check one):  Site Investigation--\$325 per visit  
 Site and Test Hole Inspection--\$325 per visit  
 Misc. Review/Reconnect Plan Review, existing permit # \_\_\_\_\_--\$135  
 Septic System Abandonment/Closure--\$175 inspection fee

**Site Information**

Property Address: \_\_\_\_\_ Maricopa County, AZ \_\_\_\_\_  
If no address has been assigned, leave blank Street Name and Number City (if applicable)  
 Cross Streets \_\_\_\_\_ Parcel Number \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

Subdivision Name (if applicable): \_\_\_\_\_ Lot#(s) \_\_\_\_\_

Legal Description: Section \_\_\_\_\_ Township \_\_\_\_\_ Range \_\_\_\_\_ Acreage \_\_\_\_\_

Sewer (circle one) **IS / IS NOT** available within 400' from the property.

**Identified as (check one):**

- Single Family Residence  
 Commercial  
 Type of Establishment: \_\_\_\_\_  
 Maximum number of users: \_\_\_\_\_  
 (Customers, employees, members, etc.)

**Water Service will be provided by (check all that apply):**

- Water Company—Name \_\_\_\_\_  
 Existing Well ID Number: \_\_\_\_\_  
 Shared? Yes  No   
 Proposed/Future Well Shared? Yes  No   
 Holding Tank

**For a Review/Reconnect, indicate reason for request:**

\_\_\_\_\_  
 \_\_\_\_\_

MC P/D Tracking # B \_\_\_\_\_

Site Code: \_\_\_\_\_

(Permit / File #)

**Owner and Agent Information**

Property Owner Name: \_\_\_\_\_

Complete Mailing Address: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Owner's Phone: \_\_\_\_\_ Owner's Fax: \_\_\_\_\_

Applicant/Agent Name: \_\_\_\_\_ Attention: \_\_\_\_\_

Complete Mailing Address: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Mobile: \_\_\_\_\_

**Applicant Signature**

I, the undersigned, do hereby agree to assume complete responsibility for full compliance with all applicable statues, rules and regulations for the work requested. Safety is the property owner (or agents) responsibility, but they must also provide access for the inspection. Request for the inspection may be called in on the Inspection Request Line at 602-506-6666, option 1 then option 5, then option 3. All notification of completed procedures will be done through facsimile or mail. Per Maricopa County Health Code, this application will expire: a) one year from date of application, or b) one year from Phase I site plan approval.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**For Office Use Only**

Amount: \$ \_\_\_\_\_ Date Issued \_\_\_\_\_ Issue Status \_\_\_\_\_ By: \_\_\_\_\_ Expiration Date: \_\_\_\_\_