Environmental Services Department
Water & Waste Management
On-Site Wastewater Treatment Program

SEEPAGE PIT

Design Guide
For a Conventional*
ON-SITE WASTEWATER TREATMENT FACILITY (OSWTF)

This packet is a guide to design and submit a complete application called the Notice of Intent to Discharge (NOID) for a Conventional OSWTF with Seepage Pit Disposal.

* A conventional OSWTF is a septic tank with Trench, Leach Bed, Seepage Pit or Chamber Technologies for the disposal field. The type of OSWTF selected is based on the Aquifer Protection Permit Rule, Site Investigation – R18-9-A310 and Facility Selection – R18-9-A311.

Water & Waste Management Division, 1001 North Central Ave, Suite 150, Phoenix, Arizona 85004
Office hours 8:00am to 5:00pm Monday through Friday except Holidays
Telephone: (602) 506-6666 FAX (602) 506-6925 Web: www.maricopa.gov/env/svc/ E-mail: septicquestions@mail.maricopa.gov

December 2012

Maricopa County

Environmental Services Department

1001 N. Central Ave. Suite 150
Phoenix, AZ 85004-1940
Phone: (602) 506-6681
Fax: (602) 506-6925
TTD: (602) 506-6704
www.maricopa.gov/envsvc

PERMIT APPLICATION PROCESS NOTICE
Onsite Wastewater Program

Steps required to obtain a Notice of Intent to Discharge (NOID) permit for a conventional or alternative onsite wastewater treatment system are as follows:

1. **Submit** NOID application—signed by the property owner. Include all supporting documentation and applicable fees. The permit/tracking number remains the same for all segments of the project.
2. **Review** of the NOID submission in accordance with applicable rules and regulations is done by MCESD.
3. **A Construction Authorization** is issued for the installation of the on onsite system, citing any required stipulation. MCESD will release the P&D Building Permit, if applicable.
4. **Notification** of the owner by phone, fax or e-mail when the Construction Authorization is ready to be picked up at the office.
5. **A Contractor**, licensed by the State of Arizona, installs the system according to the approved plans.
6. **Submit Request** for Discharge Authorization (Yellow Form) for final inspection.
7. **Final Inspection** by MCESD is to verify the installation has been done as described in the Construction Authorization, the water tightness test on the tank and open trench inspection. Alternative systems, if stipulated, may allow the design engineer to submit as built drawings, stamped and signed for review and approval.
8. **Approved** construction inspection results in a White Tag being placed at the site.
9. **Disapproved** construction inspection results in a Red Tag placed at the site.
10. **Corrections** or deficiencies are completed by the contractor and a request for a re-inspection is made. Alternative system design engineer will submit revised stamped and signed plans for review.
11. **A Discharge Authorization** is issued to the owner by MCESD upon completion of an administrative review.
12. **Operation and Maintenance** by the owner keeps the onsite system in good operational condition for many years.

The Department will approve or deny the application, by type, in the number a business days listed in the table on the following page, excluding any days the application is returned to the applicant for additional information. The licensing timeframes are set by the Arizona Department of Environmental Quality, Delegation Agreement #EV12-0057 as required by A.R.S. §11-1605.

Department contact information regarding your application

Telephone: 602-506-6616, ask for the Onsite Program

E-mail: septicquestions@mail.maricopa.gov
Website: http://www.maricopa.gov/EnvSvc/WaterWaste/OWS/OWS.aspx

You may request a clarification from the Department of its interpretation or application of a statute, ordinance, regulation, delegation agreement or authorized substantive policy statement as provided in A.R.S. §11-1609. Contact us by in by e-mail or telephone, or in person or mail at the address listed at the top of the page, marked attention Onsite Wastewater Program.

Licensing Time Frames
Onsite Wastewater

Permit Category	Overall time (days)
Alteration	30
Alteration with Inspection	30
Composting Toilet <3000 Gal/Day	73
Septic Tank with Additional Alternative Features	95
Septic Tank, Conventional Disposal <3000 Gal/Day	73
Aerobic System with Surface Disposal	95
Onsite Wastewater Treatment Facility, Flow 3000 to <24000	136
Reconnect/Remodel Review (Minor Plan Review)	30
Reconnect/Remodel Review (Minor Plan Review) with Inspection	30

A.R.S. §11-1604. Prohibited acts by county and employees; enforcement; notice

A. A county shall not base a licensing decision in whole or in part on a licensing requirement or condition that is not specifically authorized by statute, rule, ordinance or delegation agreement. A general grant of authority does not constitute a basis for imposing a licensing requirement or condition unless the authority specifically authorizes the requirement or condition.
B. Unless specifically authorized, a county shall avoid duplication of other laws that do not enhance regulatory clarity and shall avoid dual permitting to the maximum extent practicable.
C. This section does not prohibit county flexibility to issue licenses or adopt ordinances or codes.
D. A county shall not request or initiate discussions with a person about waiving that person's rights.
E. This section may be enforced in a private civil action and relief may be awarded against a county. The court may award reasonable attorney fees, damages and all fees associated with the license application to a party that prevails in an action against a county for a violation of this section.
F. A county employee may not intentionally or knowingly violate this section. A violation of this section is cause for disciplinary action or dismissal pursuant to the county's adopted personnel policy.
G. This section does not abrogate the immunity provided by section 12-820.01 or 12-820.02.

Maricopa County

Environmental Services Department

Water and Waste Management Division
Onsite Program
1001 N. Central Avenue #150
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E-mail:septicquestions@mail.maricopa.gov

Notice of Intent to Discharge (NOID) Application

Submittal Checklist for Phase II or Alterations

NOID APPLICATIONS MUST INCLUDE ALL ITEMS ON THIS CHECKLIST

INCOMPLETE OR INACCURATE NOID APPLICATIONS WILL BE PUT ON HOLD UNTIL ALL SUBMISSIONS ARE COMPLETE AND ACCURATE. THE REVIEW AND APPROVAL PROCESS WILL BE DELAYED OR MAY BE CANCELLED IF LICENSING TIME FRAMES ARE EXCEEDED.

- ☐ Complete NOID application signed by owner **OR** ☐ owner's written designation of agent attached to application.
- ☐ Existing Septic Records identified by a Public Records Search Request. Not required for first build or have a copy.
- ☐ Recorded deed with legal description ☐ Parcel number
- ☐ Sewer Availability required for every application. (directions for sewer determination attached)
- ☐ Vicinity map and detailed driving directions to the site, with distance from nearest cross streets.
- ☐ 2 site plans to scale 1"/10; 1"/20, 1"/30 with North Arrow. **NOTE**: Site plans submitted to MCESD must be identical to the site plans submitted to any city, county, or state entity. Any site plans that are not identical will result in additional review and approval fees, delays in the review and permitting process, and possible withdrawal or previously issued approvals or permits.
- ☐ One (1) floor plan with all rooms identified and plumbing fixture clearly labeled (sample attached)
- ☐ Applicable fees, cash, check, Visa, MasterCard, Discover, or American Express due at time of submittal.
- ☐ City, Town or County Building permit number required _____ (DA not issued until supplied)
- ☐ Location of floodway and floodplain (Floodway/Floodplain instructions attached)
- ☐ Copies of soil/site evaluations, percolation tests or seepage pit performance tests
- ☐ Water Source: ☐ Company or City, ☐ Private Well. ☐ Other Submit a Recorded Shared Well Agreement with survey, OR ☐ Recorded Affidavit of Agreement to Encroach.
- ☐ List of estimated materials, components, and equipment for constructing the on-site treatment facility
- ☐ Two (2) complete site plans: with **north arrow,** scale of 1"=30', 1"=20', or 1"=10'. For larger parcels use an appropriate scale to fit parcel on one sheet of paper. Maximum paper size is 24" x 36". The proposed Onsite system, the structure(s) it serves, and the immediate area may be contained within the dimensions of the parcel drawing or on a separate sheet. (Example site plans attached)
- ☐ Information Block with property owner, site address, subdivision name and lot number or legal description, and parcel number.
- ☐ Indicate, in feet, the distance from two adjacent property lines to: test holes, structures, driveways, washes, and/or drainage easements, setbacks, earth fissures, wells, water line from well or meter to building. Show all setbacks from structures, driveways, wells, etc. Also show on bordering lots, vacant or built-on, any feature less than 200' that may impact the locations of the septic tank, distribution box, distribution lines, primary and reserve disposal areas.
- ☐ Revisions must be clearly labeled as a revision and must include the permit number and date.

FOR YOUR USE IN DESIGNING AND SIZING THE ONSITE WASTEWATER TREATMENT FACILITY ARE:

Fixture unit and bedroom Equivalent Determination, SAR and Daily Design Flow for Calculation of System Size, Plan and Profile with pipe elevations of tank and Cross Sections of disposal components.

All Sheets must be signed by the designer and dated (examples attached)

Applicant's Signature _____ Date _____

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

NOTICE OF INTENT TO DISCHARGE (NOID)

Under a General Aquifer Protection Permit for an Onsite Wastewater Treatment Facility (OSWTF)

Web: www.maricopa.gov/EnvSvc/
E-mail: Septicquestion@mail.maricopa.gov

OSWTF Permit # __ __ - __ __ __ __

An application is required to license or permit an activity regulated though statute, rule, code or ordinance may require inspection(s) at the premises. An inspection report is provided as required by A.R.S. §41-1009; in person, via mail, e-mail, or FAX.

THIS IS A TWO (2) PAGE DOCUMENT; BOTH PAGES MUST BE COMPLETED BEFORE SUBMITTING TO MCESD.

NOID Application Instructions: Print or type in **black** or **blue INK** pencil is not acceptable.
To avoid delay in the permitting process**,** complete the NOID fully before submission. Pay applicable fees by cash, check or credit card.

If the NOID review is approved a Construction Authorization will be issued for a conventional or alternative onsite wastewater treatment facility or for an Alteration of an existing system that has the proper Aquifer Protection Permit.

Notes: 1) Alternative onsite wastewater treatment facilities have yearly operating permit review and inspection fee.
2) This application will expire one year from the date of submittal if a Construction Authorization has **not** been issued.

1. Site Location:

Subject Property Address**:** _____ **Maricopa** County, AZ_____
Required at time the Construction Authorization is issued — **Street Name and** — **City (if applicable)** — **Zip Code**

Cross Streets_____Parcel Number _____ - _____- _____

Subdivision Name (if applicable):_____ Lot #(s)_____

Legal Description**:** Section_____ Township_____ Range_____ Acreage_____

2. Property Owner

Name:_____ Phone #_____

Current Mailing Address*:_____ Fax **or** e-mail _____
Street Name and Number

_____ Mobile #_____
City — State — Zip Code

*Any changes to this address shall be submitted in writing to MCESD within 15 days of the change. All documents from MCESD will be mailed to this address unless otherwise noted below. Returned mail will not be forwarded.

3. Authorized Agent for Property Owner, (if none, then leave blank):

Business Name: _____ Contractor License #_____

Agent _____ Phone #_____

Mailing Address: _____ Fax #_____
Street Name and Number

_____ Mobile # _____
City — State — Zip Code

After 30 Days, unclaimed Construction Authorizations will be mailed to the Property Owner. E-mail _____

4. Onsite Installer

Business Name: _____ Contractor License #_____

Agent _____ Phone #_____

Mailing Address: _____ Fax #_____
Street Name and Number

_____ Mobile # _____
City — State — Zip Code

E-mail _____

5. Existing Environmental Permits:

List any state or federal environmental permits issued for, or needed by, this facility, including individual permit, Ground Water Quality Protection Permit, or Notice of Disposal that may have previously authorized the discharge (check all that apply) : ___New installation of an on-site wastewater treatment facility. ___No other environmental permits exist. ____Other environmental permits required (list all):

_____

6. Request to install a system other than septic tank and disposal in R-18-9-E302 with a system in R18-9-E303 through E322:

I, _____(Property Owner), am aware that although a septic tank and disposal works system described in R18-9-E302 is appropriate for the site, I desire to install a treatment works or disposal works authorized under R18-9-E303 through R18-9-E322. (R18-9-A311(D) (1). I am also aware that a treatment works or disposal works authorized under R18-9-E303 through R18-9-E322 may result in higher capital, operation, and maintenance costs. (R18-9-A311(D) (2).

_____ _____
Date — Signature of Owner

OSWTF Permit # __ __ - __ __ __ __

7. Site Details:

WATER SOURCE: **(check one)** ☐ Water Company: Water Company Name _____
☐ Holding Tank (hauling water)

☐ Private Well Well Identification # _____

☐ Shared Well * ☐ Affidavit of Agreement to Encroach *

*One of these documents must be submitted for review of the setback requirement to a property line or property lines.

Shared Well Agreement Recording # _____

OR

Affidavit of Agreement to Encroach into Property Line Setback Recording # _____

8. Narrative Description of Project:

☐ **NEW - General Permit 4.02** (conventional OSWTF which consists solely of a septic tank **AND** disposal field circled below)**:**

(circle one) Trench Seepage Pit Leach Bed Chamber Technology

☐ **ALTERATION - General Permit 4.02** (repair or replacement of the OSWTF septic tank **OR** disposal field circled below)**:**

(circle one) Tank Trench Seepage Pit Leach Bed Chamber Technology

☐ **Any Other OSWTF.** Describe proposed treatment and disposal train and indicate all applicable general permit numbers; indicate design flow and expected date of operation; describe sewage source and characteristics: _____

THE OSWTF WAS DESIGNED USING A SEPTIC TANK SIZE AND A DESIGN FLOW TO:

☐ **Serve a Single-Family Residence** with typical household sewage.

☐ **Serve a Single-Family Residence** with typical household sewage and _____
List all other sources and characteristics of the wastewater

☐ **Serve Other Than a Single-Family Residence** with typical household sewage.

☐ **Serve Other Than a Single-Family Residence** with other than typical household sewage. Provide the following information:

Type of Facility_____ **Number of Employees/Users**_____

Sources and characteristics of the wastewater_____

9. Certification: (READ CAREFULLY AND SIGN BELOW, to be completed by the property owner identified in Item Two (2) on the front of this application:

I _____, certify that this Notice of Intent to Discharge and all attachments were prepared
Print Name

under my direction or authorization and all information is, to the best of my knowledge, true, accurate and complete. I also certify that the on-site wastewater treatment facility described in this form is or will be designed, constructed, and operated in accordance with terms and conditions of the authorized general aquifer protection permit(s) and applicable requirements of A.R.S. Title 49, Chapter 2, the Arizona Administrative Code Title 18, Chapter 9 and the Maricopa County Environmental Health Code. **I am aware that there are significant penalties for submitting false information including permit revocation and the possibility of fine and imprisonment for known violations.**

Signature _____ **Date** _____

THIS SPACE FOR OFFICE USE ONLY

NOID Log in Date_____ By_____

ACR Completed_____ By_____
Paperwork Review

ACR Incomplete/HOLD_____ By_____

SR Pre Const Completed _____ By_____
Plan Review

SR Pre Const -Incomplete/HOLD_____ By_____

SR Post Const Completed_____ By_____
Inspection

Site Code:_____

MC P/D Tracking # B_____

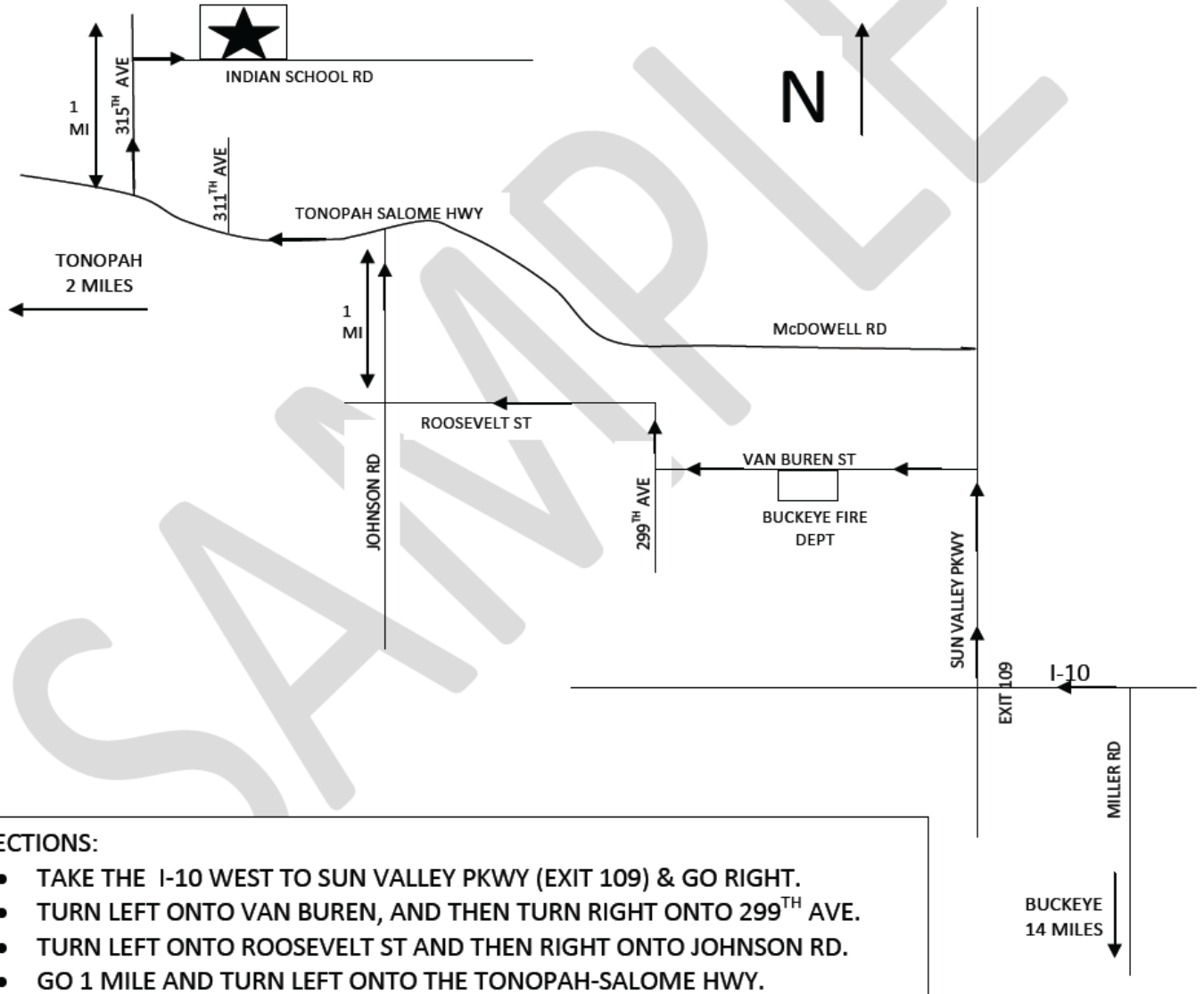
APPROVALS: General Permit (circle one): 4.02 Other_____

Design Flow: _____gpd System Type:_____

BILLING PURPOSE	AMT PD	RECEIPT #	DATE PD
PLAN REVIEW / SITE			
PLAN REVIEW / SITE			
OTHER			

VICINITY MAP
WITH WRITTEN DIRECTIONS

DIRECTIONS TO: 12345 W. INDIAN SCHOOL RD
BUCKEYE, AZ 85326
APN: 504-08-XXX



SAMPLE

DIRECTIONS:

- TAKE THE I-10 WEST TO SUN VALLEY PKWY (EXIT 109) & GO RIGHT.
- TURN LEFT ONTO VAN BUREN, AND THEN TURN RIGHT ONTO 299TH AVE.
- TURN LEFT ONTO ROOSEVELT ST AND THEN RIGHT ONTO JOHNSON RD.
- GO 1 MILE AND TURN LEFT ONTO THE TONOPAH-SALOME HWY.
- GO 1 MILE TO 315TH AVE AND THEN TURN RIGHT ONTO INDIAN SCHOOL RD.
- THE SITE IS THE SECOND ON THE LEFT.
- THE LAST TWO MILES ARE ON DIRT ROAD.

MARICOPA COUNTY ENVIRONMENTAL HEALTH CODE CHAPTER 1
WATER WASTE MANAGEMENT DIVISION-ONSITE WASTEWATER AND WELL PROGRAM
FEE SCHEDULE EXCERPT* EFFECTIVE AUGUST 1, 2010**

BASE ONSITE FEES

Onsite System Site Inspection	$325
Onsite Additional Inspection	$325
*Septic Tank Conventional Disposal, less than 3,000 gal/day	$550
Onsite System Alteration Permit	$205
Onsite System Alteration Permit and One Inspection	$400
Onsite System Reconnect/Remodel Review (Minor Plan Review)	$205
Onsite System Reconnect/Remodel review with one inspection	$400
Aerobic System with Surface Disposal	$1,050
Septic tank with one additional alternative element**	$1,050
Septic tank with more than one additional alternative element**	$1,050
each additional alternative element	$250
Onsite System Design Requiring Interceptor	$200 per interceptor
Onsite Facility with flow from 3,000 to less than 24,000 gal/day	$1,800
Composting Toilet, less than 3,000 gal/day	$400
Onsite System Abandon Site	$175

DOMESTIC WELL APPROVAL

Domestic Well Location Approval (ADWR Form)	$175

REVIEW AND COMPARISON OF REVISIONS TO APPROVED CONSTRUCTION OR DISCHARGE AUTHORIZATION

Onsite System Plan Revision	$205
Planning and Development Plan Review	$80

REQUEST FOR CHANGE PERMITTED BY RULE

Onsite System Request for Alternate Design, Installation or Operational Feature (A 312 G)	$75

TRANSFER OF OWNERSHIP

Onsite System Transfer of Ownership	$50

OPERATING PERMIT FOR OPERATION AND MAINTENANCE RECORD REVIEW AND SYSTEM INSPECTION

Individual Onsite Treatment Plant Operating Permit (Alternative Systems)	$100 per year

INVESTIGATION

Investigation: Onsite	$130 per hour

EXPEDITED PLAN REVIEW

Expedited Plan Review Fees are twice the fee for that category
Expedited Plan Reviews require prior Program Management Approval

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

** These alternative disposal elements are for all systems of less than 3,000 gal/day and include: pressure distribution, gravelless trenches, natural seal evapotranspiration beds, Wisconsin Mounds, engineered pad, intermittent sand filters, peat filters, Ruck® Systems, sewage vaults, aerobic systems with surface or with subsurface disposal, cap systems, constructed wetlands, sand lined trenches, disinfection devices, sequencing batch reactors, and subsurface drip irrigation systems.

***To see the entire fee schedule go to: www.maricopa.gov/envsvc

QUESTIONS REGARDING THESE FEES CONTACT MCESD, WWMD 602-506-6666

Maricopa County

Environmental Services Department

Water and Waste Management Division
Onsite Program
1001 N. Central Avenue #150
Phoenix, Arizona 85004
Phone: (602) 506-6666
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Web: www.maricopa.gov/EnvSvc/
E-mail:septicquestions@mail.maricopa.gov

SEWER DETERMINATION

REQUIRED

- Sewer Determination statement is required if the parcel is within city or town limits.

SUGGESTED

- Applicants living in close approximation to a city or town limits or the boundaries of a sanitary sewer district may want to get the sewer determination statement.
- Sewer Determination statement is suggested if the parcel is a county island within city or town limits.
- Sewer Determination statement is suggested if the parcel is in a sanitary sewer district service area.

OTHER

- During plan review there may be a request for a sewer determination statement on the parcel.

THE ONSITE PROGRAM REQUIRES A SEWER DETERMINATION WITH ALL APPLICATIONS. THIS REQUIREMENT IS TO ASSIST THE APPLICANT/OWNER AVOID DIFFICULTIES WITH A LOCAL SEWER AUTHORITY NOW OR IN THE FUTURE.

Both the Arizona Administrative Code and the Maricopa County Environmental Health Code have provisions where connection to a sewer collection system may be required.

The Maricopa County Environmental Health Code Chapter II, Section 8 Regulation 4 states:

a. When connection may reasonably and practicably be made to an approved municipal, community, or similar sewerage system…..
e. …when an onsite wastewater treatment facility fails, …

The Arizona Administrative Code R 18-9-A309 A. 5 states:

A person constructing a new on-site wastewater treatment facility or replacing the treatment works or disposal works of an existing on-site wastewater treatment facility shall connect to a sewage collection system **if**:

a. **One** of the following applies:
   i. A provision of a Nitrogen Management Area designated under R18-9-A317(C) requires connection;
   ii. A county, municipal, or sanitary district ordinance requires connection; or
   iii. The on-site wastewater treatment facility is located within an area identified for connection to a sewage collection system by a Certified Area-wide Water Quality Management Plan adopted under 18 A.A.C. 5 or a master plan adopted by a majority of the elected officials of a board or council for a county, municipality, or sanitary district; **or**
b. A sewer line extension is available at the property boundary and both of the following apply:
   i. The service connection fess is not more than $6000 for a dwelling or $10 times the daily design flow in gallons for a source other than a dwelling, and
   ii. The cost of constructing the building sewer from the wastewater source to the service connection is not more the $3000 for a dwelling or $5 times the daily design flow for a source other than a dwelling.

NOTE: SOME MUNICIPALITIES HAVE STRINGENT REQUIREMENTS THAT MANDATE CONNECTION TO THE SEWAGE COLLECTION SYSTEM.

TO ASSIST YOU IN SEWER DETERMINATION, MARICOPA COUNTY ENVIRONMENTAL SERVICES IS PROVIDING CONTACTS, PHONE NUMBERS AND E-MAIL ADDRESSES ON THE FOLLOWING PAGE. A STATEMENT FROM THE LOCAL SEWER AUTHORITY INDICATING THEIR DETERMINATION OF CONNECTION OR NO CONNECTION TO THE SEWER IS ADVISED PRIOR TO ANY SUBMITTAL TO THE ENVIRONMENTAL SERVICES DEPARTMENT. MARICOPA COUNTY ENVIRONMENTAL SERVICES MAKES EVERY ATTEMPT TO PROVIDE ACCURATE INFORMATION. CONTACTS, PHONE NUMBERS AND E-MAIL ADDRESSES MAY CHANGE WITHOUT OUR KNOWLEDGE.

If you find errors in this list, please let us know at septicquestions@mail.maricopa.gov. Thank you.

City	Sewer Availability Contact Information	Web/Email Address
AVONDALE	Michael Yracheta, Wastewater Collections Supervisor, 623-333-4414	myracheta@avondale.org
BUCKEYE	Arnold Coronado, Water Distribution Supervisor, 623-349-6104	acoronado@buckeyeaz.gov
CAVE CREEK	Jessica Marlow, PE, Utilities Manager, 480-488-6618,	jmarlow@cavecreek.org
CAREFREE	Black Mountain Sewer Company, 480-488-4152	www.libertywater.com
CHANDLER	Warren White, P.E. Principal Engineer 480-782-3337, fax 480-782-3350	warren.white@chandleraz.gov
EL MIRAGE	Dave Emon, Wastewater Superintendent, 623-876-4251	demon@cityofelmirage.org
GILBERT	Tom Condit, PE, Development Engineer, 480-503-6815	tom.condit@gilbertaz.gov
GLENDALE	Mark Ivanich, Land Development Engineer, 623-930-3654	mivanich@glendaleaz.com
GOODYEAR	Engineering Office: Stephen Scinto or Plan Review Staff, 623-882-3110	gyeng@goodyearaz.gov
MESA	Beth Hughes-Ornelas, 480-644-3254	beth.hughes-ornelas@mesaaz.gov
PARADISE VALLEY	Richard Edwards, Senior Engineering Technician, 480-348-3528	redwards@paradisevalleyaz.gov
	Note: No letter is required for Clearwater Hills Subdivision. No sewer is available.	
PEORIA	Gary Lopez, Plan Review Supervisor, 623-778-7236	engineering.counter@peoriaaz.gov
PHOENIX	Arlene Torres-Guevara, 602-256-4296 or	arlene.torres.guevara@phoenix.gov
	Vern Robins, 602-534-1653	vern.robins@phoenix.gov
	Jesse Flores, 602-256-4149	jesse.flores@phoenix.gov
QUEEN CREEK	Building Department, 480-987-0496	www.queencreek.org
SCOTTSDALE	Ron Dolan, Water Resources Engineer, 480-312-5676	rdol@scottsdaleaz.gov
SURPRISE	James P. Shano, Utilities CIP – Division Manager, 623-222-7000	water@surpriseaz.com
TEMPE	Mark Weber, PE, Water Engineering Manager, 480-350-8526	mark_weber@tempe.gov
TOLLESON	David L. Tyler, Superintendent Wastewater Utilities - (623) 478-8722	dtyler@tollesonaz.org
WICKENBURG	Mark Lemon, Chief WWTP/WS/WD Operator, 928-684-5873	wwtp@ci.wickenburg.az.us

May 2015

FLOODWAYS AND FLOOD PLAINS

The Arizona Aquifer Protection Permit Program (Rule) and the Maricopa County Environmental Health Code (Code) have regulations on where an Onsite Wastewater Treatment Facility, commonly known as a Septic System, can be installed.

It is important to determine if your parcel is in a floodway or floodplain.

Each submittal for a permit to install a septic system must identify all washes, drainage easements, floodway and flood plain boundaries. In some instances Grading and Drainage plans may be required.

No permit for an Onsite Wastewater Treatment Facility will be issued if the proposed structures are in the floodway.

A permit **may** be issued for an Onsite Wastewater Treatment Facility on the parcel if: 1) a flood plain use permit is approved by the Maricopa County Flood Control Department, 2) allowed by cities and towns that conduct their own floodplain management, and 3) the installation will meet all setbacks established by Rule and Code.

The cities and towns that conduct their own floodplain management are: Avondale, Gilbert, Glendale, Goodyear, Peoria, Phoenix, Scottsdale, Tempe and Youngstown. They should be consulted for floodway and floodplain issues for your parcel.

In unincorporated Maricopa County or in cities and towns that do not conduct their own floodplain management, go to the website below or call 602-506-1501 to determine if the parcel is in a floodway or floodplain:

http://www.fcd.maricopa.gov

This opens the Flood Control home page.

1. Click on MAPS tab located on the upper task bar to the right of the Flood Control Seal
2. Click on the View Current 100-Year FEMA Effective and Preliminary Flood Plain Maps
3. Click OK on the disclaimer page
4. A large map page will open
5. Click on Search by…on the top task bar
6. The parcel search page will open
7. Enter the parcel number and click on zoom to
8. On the next page on the right side click yes on Highlight Parcel
9. If there are blue, red or purple areas shown they note floodplains or floodways
10. On the top task bar, to the left of search by is the print icon-click, print and include it in the submission package

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	A person may reduce the setback to a minimum of 5 feet from the property line if: 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 b. The arrangements and documentation are approved by the Department. * 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.
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	Measured horizontally between the water line and the wastewater pipe, except that the following are allowed: 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. 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.
11. Downslopes or cut banks greater than 15 percent, culverts, and ditches from:		
a. Treatment works components	10	Measured horizontally from the bottom of the treatment works component to the closest point of daylighting on the surface.
b. Trench, bed, chamber technology, or gravelless trench with:		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.
i. No limiting subsurface condition specified in R18-9-A310(D)(2),	20	
ii. A limiting subsurface condition.	50	
c. Subsurface drip lines.	3	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.
12. Driveway	5	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.
13. Swimming pool excavation	5	Except if soil loading or stability concerns indicate the need for a greater separation distance.
14. Easement (except drainage easement)	5	None
15. Earth fissures	100	None

ENVIRONMENTAL SERVICES
DEPARTMENT

Steven Goode, REHS, MA, Director
1001 North Central, Ste. 150
Phoenix, AZ 85004

DIVISION OF WATER AND
WASTE MANAGEMENT

Kevin S. Chadwick, P.E., Division Manager
(602) 506-6666
FAX (602) 506-6925
TT (506) 6704

SHARED WELL EASEMENTS/AGREEMENTS

Shared well agreements may provide an adjustment to property line setback requirements as stated in the Arizona Aquifer Permit Rule, R-18-9-A312 C.

All shared well agreements MUST be recorded at the county recorder's office and <u>contain</u> the following information:

- Effective date
- Parties involved (Grantor and Grantees; Parties to the Agreement)
- Recorded document number
- Full legal description of all the well site, easement and Servant parcels sharing the well with instrument number (all the parcels benefiting from sharing the well and easements)
- How the agreement will run with the land/deed for the parcels
- The relationship of each parcel to: (construction, operation and expenses)
  - General provisions
  - Management of the provisions of the agreement
  - Percentage ownership
  - Percentage share of cost for operation and maintenance of the well and easements
  - Resolution of conflicts
  - Conditions and Limitations
- Survey map (drawing or graphic showing the impacted parcels with dimensions, well site and easements). Recorded as part of document or as a separate document
- Title and Signature with date, of Grantor/Grantee (Parties to the Agreement) of all parcels
- Notary stamp, signature and date.
- Unofficial document will not be accepted

If you have questions or need additional information please contact us at the numbers listed above.

Maricopa County

Environmental Services Department

Water and Waste Management Division
Onsite Program
1001 N. Central Avenue #150
Phoenix, Arizona 85004
Phone: (602) 506-6666
Fax: (602) 506-6925
TDD 602 506 6704

Instructions for Obtaining an Affidavit of Agreement to Encroach into Property Line Setback (Wastewater Disposal)

A setback of 50 feet from onsite wastewater systems (septic systems) to undeveloped property lines is required in areas where water is supplied by individual wells (a setback of 100 feet is required to all wells). When this setback cannot be met, an alternative is to have your neighbor sign a legal agreement allowing your onsite wastewater system to encroach upon his/her property line. This agreement may have the effect of limiting your neighbor's ability to develop his/her property in the vicinity of your onsite wastewater system, as all wells must be 100 feet from all septic system components.

Procedure:

1. The property owner allowing the encroachment must complete the affidavit. The information requested on lines 1 and 3, applies to the property being encroached upon. The information requested on lines 5 and 7 refer to the property on which the new onsite wastewater system is proposed to encroach into the 50 feet property line setback.
2. In the presence of a public notary, the property owner referenced in lines 1 and 3 must sign at line 20 and date the affidavit on line 22, fill in (print) the name of the property owner on line 25 and address on line 28. The form must be notarized.
3. The completed form is taken to the Maricopa County Recorder's Office at 1111 West Jefferson Street, Phoenix AZ, for recording. There is a fee for this service. The turnaround time for a recorded document varies, and can take up to approximately 6 weeks.
4. If you cannot wait an extended time for the Recorder's Office to send official recorded documents, you can ask for a certified copy at the Recorder's intake counter. The certified copies will have a fee in addition to the recording fee. You may hand-carry the certified copy to us. The Recording Number and/or certificate number and the affidavit will be added to the NOID application file.

Thank you.

Maricopa County

Environmental Services Department

Water and Waste
Management Division
1001 N. Central Avenue #150
Phoenix, Arizona 85004
Phone: (602) 506-6666
Fax: (602) 506-6925
TDD 602 506 6704

AFFIDAVIT OF AGREEMENT TO ENCROACH INTO PROPERTY LINE SETBACK (Wastewater Disposal)

I, _____, owner of record of Assessor's Parcel Number (APN)

_____ and legal description Section _____ Township_____ Range_____

agree to the wastewater disposal system or its replacement serving APN_____

and legal description Section_____ Township_____ Range _____ being placed in such a

manner as to encroach within the property line setback of 50 feet as required by the Arizona Department of Environmental Quality.

I understand that my agreement to this encroachment may limit my ability to install a water well on my property since I will be required by the Arizona Department of Water Resources to maintain a minimum of 100 feet between the well and all sewage disposal systems. Should I sell this property, I agree to inform the purchaser in writing of this limitation.

I have read this affidavit and do understand its meaning and its impact on the potential development of my property.

Signatures: _____

Date: _____

Names(s) _____

Address _____

This instrument was acknowledged before me this _____day of _____, 2_____.

My commission expires: _____

Notary Public: _____

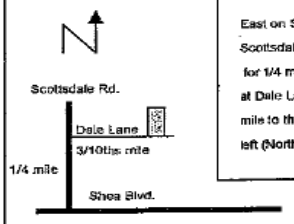
SAMPLE SITE PLAN

PERMIT/FILE # 00-0000

Owner: John Smith
Site Address: 11111 E. Dale Lane
Parcel # 222-22-001B
Subdivision: Lost Acres, Lot 1023
Legal Desc: E1/2, NW1/4, NE1/4, NE1/4, SW1/4 of Sec. 10, T5N, R4E of the Gila and Salt River Base and Meridian, Maricopa County, Arizona

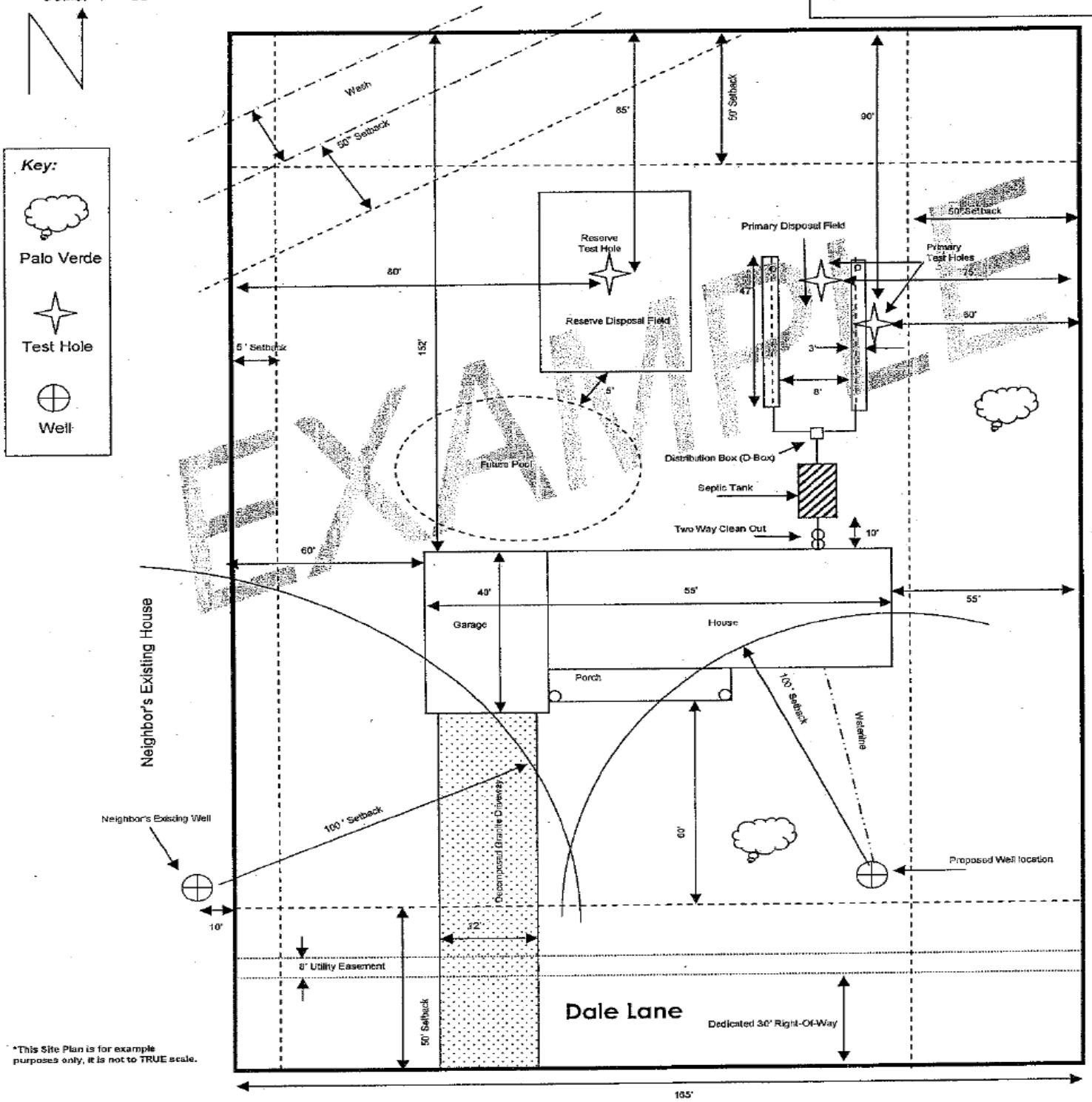
OSWTF Design by: Mary Brown
Hm. Ph. # -602-333-5555
Cell Ph. # - 602-444-9999
Fax # - 623-546-6666
Design/Revision Date: 1/1/10

Vicinity Map and Directions, NTS



East on Shea Blvd. to Scottsdale Rd., turn left (North) for 1/4 mile. Turn right (East) at Dale Ln. Go 3/10th's of a mile to the property on the left (North) side of the road.

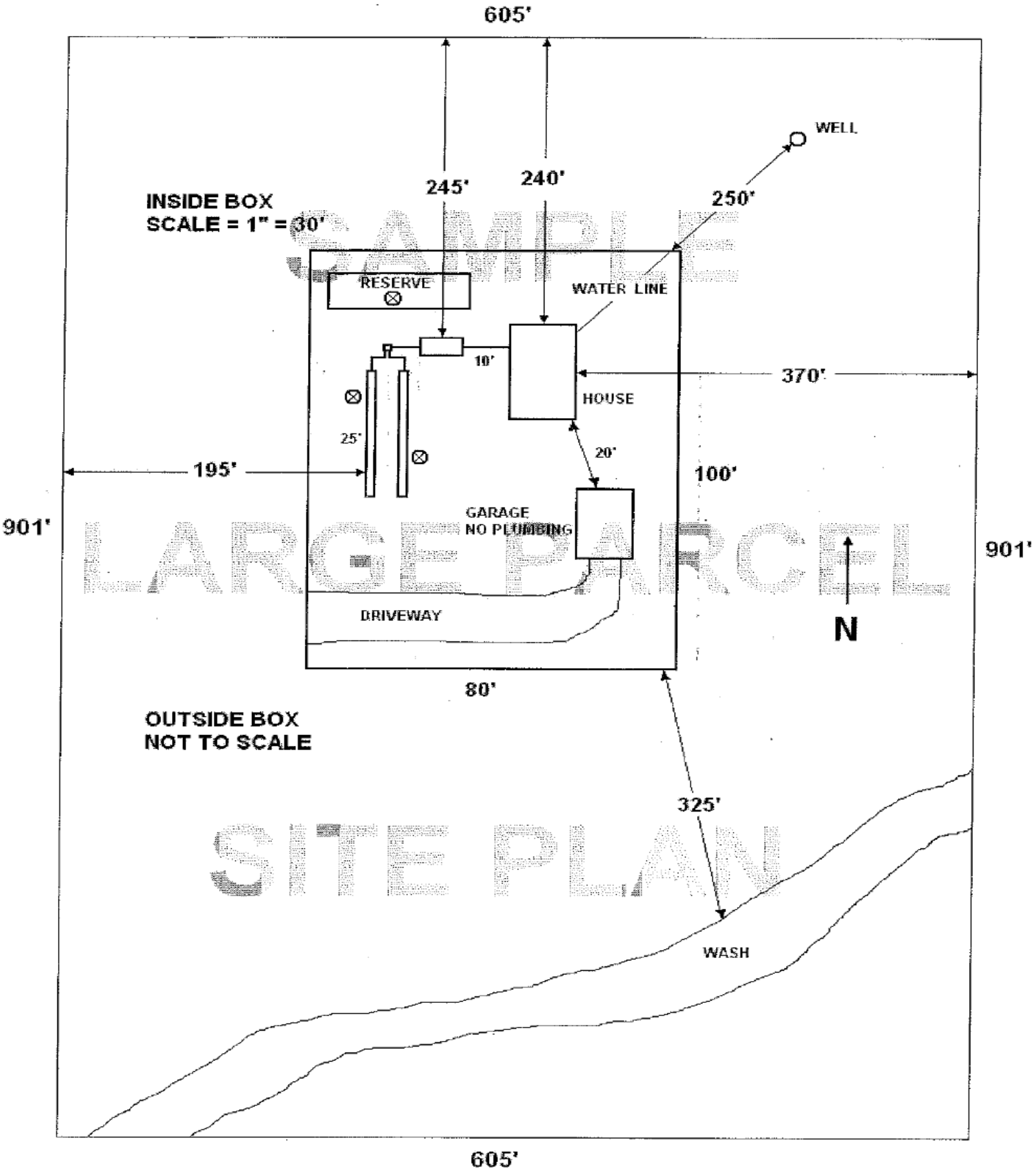
Note: all setbacks are minimums
*Scale: 1" = 30'



Designed by: Mary Brown Date: 01/01/2010

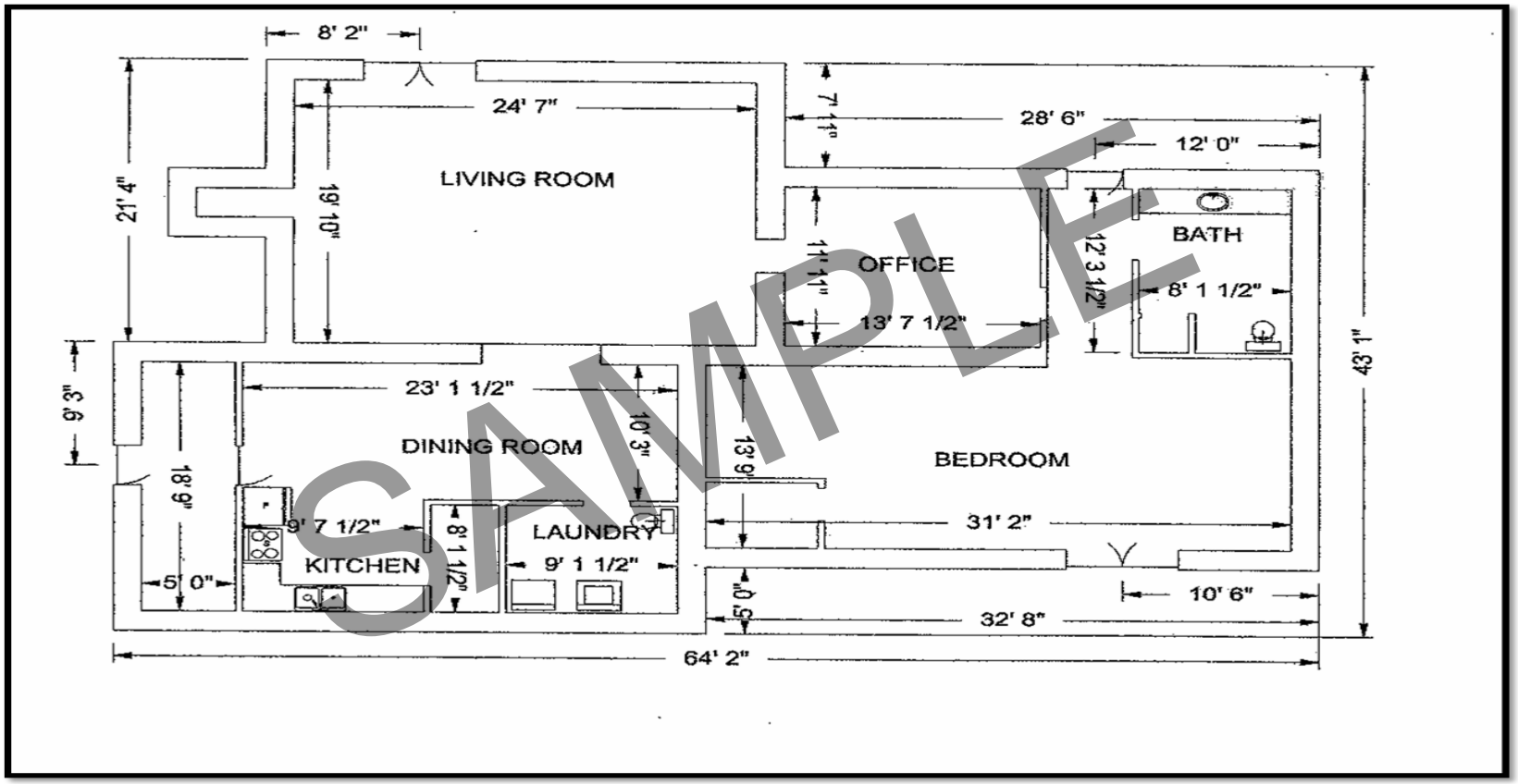
*This Site Plan is for example purposes only, it is not to TRUE scale.

02/15/2005



SAMPLE
LARGE PARCEL
SITE PLAN

DEC 2010



Floor plan with dimensions and all rooms and plumbing fixtures clearly labeled.

ENVIRONMENTAL SERVICES DEPARTMENT
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1001 North Central, Ste. 150
Phoenix, AZ 85004

DIVISION OF WATER AND WASTE MANAGEMENT
Kevin S. Chadwick, PE, Division Manager
(602) 506-6666
FAX (602) 506-6925

PERMIT: _____

MATERIALS LIST FOR ON-SITE WASTEWATER TREATMENT FACILITY

OWNER: _____

ADDRESS: _____

_____Zip_____

TANK MANUFACTURER: _____

TANK SIZE: _____gallons.
- **A. Concrete: _____**
- **B. Fiberglass: _____**
- **C. Polyethylene: _____**

D-BOX: _____4 hole. _____6 hole._____Other:_____
Material: _____Concrete _____Polyethylene

TYPE OF AGGREGATE TO BE USED: _____. ____tons.

WASHED RE-CYCLED CONCRETE: _____. ____tons.

LENGTH OF PIPE:
- **A. SOLID: ___Feet**
- **B. PERFORATED ___Feet**
- **C. SDR 35: _____YES ____NO**

CHAMBERS:
- **A. TYPE: _____**
- **B. NUMBER: _____**

OTHER COMPONENTS:
- **A. GEO-TEXTILE _____Feet.**
- **B. OTHER NON-POROUS MATERIAL: Type:_____. ____Feet.**

ALTERNATIVE SYSTEMS:
Describe materials list in detail-attach separate sheet

PRESSURE DRIP SYSTEMS:
Materials and quantity-attach separate sheet

PRINT DESIGNER NAME: _____

PRINT INSTALLER NAME: _____ROC:_____

SEPTIC SYSTEM SIZING CHARTS

Use the charts below to complete the Design Worksheet on the following page.

SELECTING THE PROPER SIZE SYSTEM			
*No. of Bedrooms**	*Fixture Count*	*Minimum Septic Tank Size (gallons)*	*System Daily Design Flow (gallons per day)*
1	7 or less	1000	150
	more than 7	1000	300
2	14 or less	1000	300
	more than 14	1000	450
3	21 or less	1000	450
	more than 21	1250	600
4	28 or less	1250	600
	more than 28	1500	750
5	35 or less	1500	750
	more than 35	2000	900
6	42 or less	2000	900
	more than 42	2500	1050
7	49 or less	2500	1050
	more than 49	3000	1200
8	56 or less	3000	1200
	more than 56	3000	1350

For a single residence with more than 8 bedrooms, use either the bedroom count or the fixture count, whichever is greater, and the following formulas:* **For Septic Tank Size: multiply the number of bedrooms by 150, then multiply that total by 2.1. This will equal the minimum septic tank size in gallons. OR multiply the total fixture units by 25, then multiply that total by 2.1. **For System Daily Design Flow**: multiply the number of bedrooms by 150, this will equal the minimum Design Flow in gallons per day. OR multiply the total fixture units by 25.

Obtain perc rate from soil report. Use the chart below to determine Soil Absorption Rate (SAR). Then, use the Design Flow determined from the above chart. The formula used to determine the required square footage of disposal area is: DESIGN FLOW SAR. (Example: 600 ÷ 0.63 = 952 sqft)

DESIGN FLOW CALCULATION TABLE-SEEPAGE PIT								
		Design Flow--Gallons per Day						
		450	600	750	900	1050	1200	1350
PERC RATE (min/inch)	**SAR (gpd/sqft)**	**Required Square Footage of Disposal Area**						
<1	NOT ALLOWED FOR CONVENTIONAL DISPOSAL							
1 to <3	1.2	375	500	625	750	875	1000	1125
3	1.1	409	545	682	818	955	1091	1227
4	1	450	600	750	900	1050	1200	1350
5	0.90	500	667	833	1000	1167	1333	1500
7	0.75	600	800	1000	1200	1400	1600	1800
10	0.63	714	952	1190	1429	1667	1905	2143
15	0.50	900	1200	1500	1800	2100	2400	2700
20	0.44	1023	1364	1705	2045	2386	2727	3068
25	0.40	1125	1500	1875	2250	2625	3000	3375
30	0.36	1250	1667	2083	2500	2917	3333	3750
35	0.33	1364	1818	2273	2727	3182	3636	4091
40	0.31	1452	1935	2419	2903	3387	3871	4355
45	0.29	1552	2069	2586	3103	3621	4138	4655
50	0.28	1607	2143	2679	3214	3750	4286	4821
55	0.27	1667	2222	2778	3333	3889	4444	5000
55 to<60	0.25	1800	2400	3000	3600	4200	4800	5400
60 to<120	0.20	2250	3000	3750	4500	5200	6000	6750
>120	NOT ALLOWED FOR CONVENTIONAL DISPOSAL							

SEEPAGE PIT WORKSHEET

(to be submitted with NOID Application Packet)

FIXTURE COUNT CALCULATION CHART					
FIXTURE TYPE	FIXTURE UNIT		# OF FIXTURES		TOTAL UNITS
Bath Tub	**2**	X		=	
Bidet	2	X		=	
Clothes Washer	**2**	X		=	
Dishwasher (separate from kitchen)	2	X		=	
Lavatory (bathroom sink), single	**1**	X		=	
Lavatory, double in master bedroom	**1**	X		=	
Shower, single stall	**2**	X		=	
Sink, bar	**1**	X		=	
Sink, kitchen (including dishwasher)	**2**	X		=	
Sink, service	3	X		=	
Utility tub or Sink	**2**	X		=	
Water Closet (toilet), 1.6 GPF	**3**	X		=	
Water Closet (toilet), >1.6-3.2 GPF	4	X		=	
Water Closet (toilet), >3.2 GPF	6	X		=	
				TOTAL FIXTURE UNITS	

Items in BOLD are the most commonly used fixtures.

"Bedroom" means, for the purposes of determining design flow for an on-site wastewater treatment facility for a dwelling, any room has:

a). A floor space of at least 70 square feet in area, excluding closets;
b). A ceiling height of at least 7 feet;
c). Electrical service and ventilation;
d). A closet or area where a closet could be constructed;
e). At least one window capable of being opened and used for emergency egress; and
f). A method of entry and exit into the room which allows it to be considered distinct from other rooms in the dwelling to afford a level of privacy customarily expected for such a room.

Bedroom / Equivalent Worksheet	
Room Type	**Number of Rooms**
Bedroom	
Den	
Office	
Other:	
Other:	
Other:	
Total:	

A SEEPAGE PIT HAS AN OVERALL DEPTH OF TEN FEET (10') TO FIFTY FEET (50')

Fill in the TANK SIZE from the OSWTF Sizing Chart Worksheet. **TANK SIZE** = _____

Fill in the DESIGN FLOW from the OSWTF Sizing Chart Worksheet. **DESIGN FLOW** = _____

Fill in the PERCOLATION RATE from the Soils Report **PERC. RATE** = _____

Divide DESIGN FLOW by the SAR from the Conversion Chart. **SAR** = _____

This equals the total square footage of disposal area required.

TOTAL SQUARE FOOTAGE OF DISPOSAL AREA REQUIRED = _____

DIVISOR USED (3.14 x diameter) = _____

Divide the total square footage by the divisor, this will equal the effective depth required.

TOTAL EFFECTIVE DEPTH OF PIT = _____

If the total effective depth of seepage pit is greater than 50' it is recommended that the total depth is divided into more than one pit of equal size separated by a distribution box.

Separation between the edges of the pits is twelve feet (12') or three times the diameter of the pit, whichever is greater.

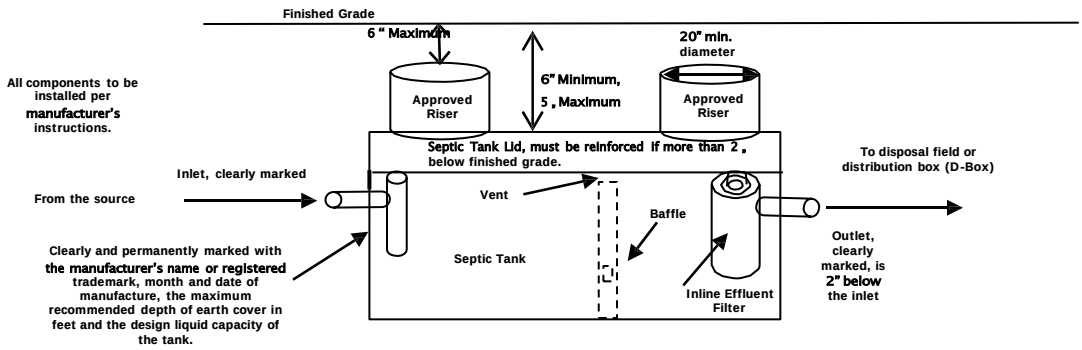
Effective depth of The Pit(s)	
Number of Pits	
Diameter of Pit (s)	
Overall depth of Pit(s)	
Separation between pits when more than one	
Depth to Groundwater	

File #) Designed by: _____ Date: _____ / /

SEPTIC TANK AND DISTRIBUTION BOX (D-BOX) TIPS

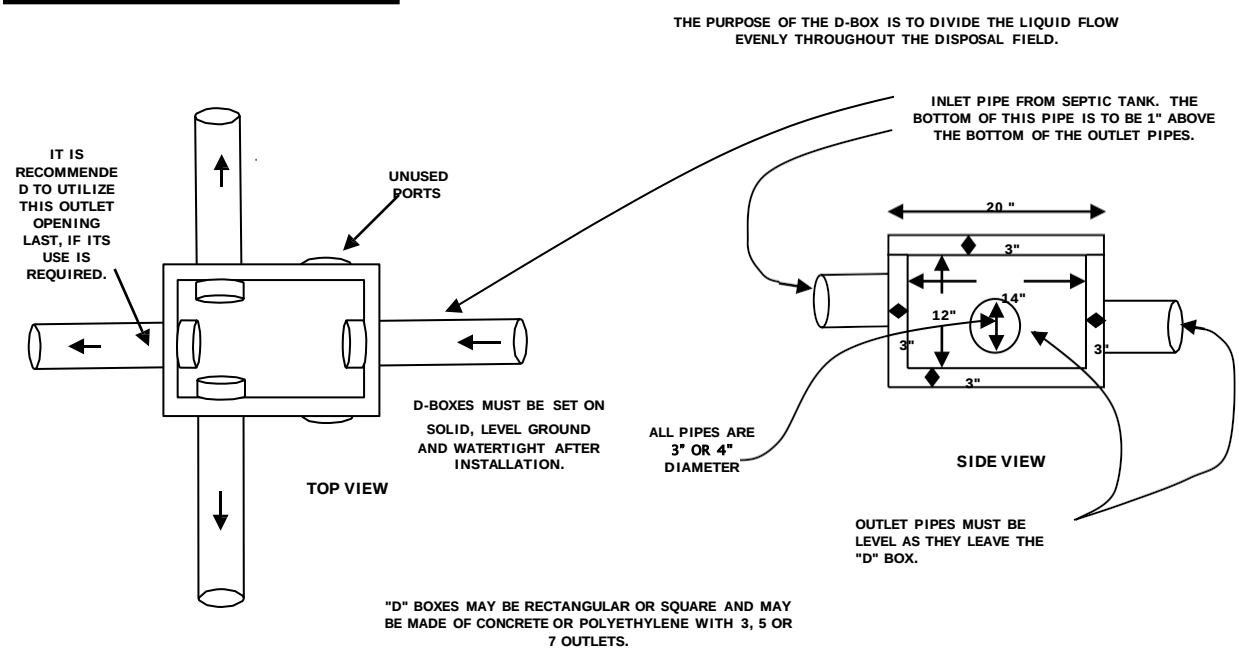
(to be submitted with NOID Application Packet)

Consideration of how deep the plumbing stub-out is at the proposed septic tank location will determine how deep the tank and disposal field must be. Septic tanks that are installed so the top of the tank is two feet (2') to five feet (5') below finished grade will require additional reinforcement in the lid and risers. Tank lids that are greater than six inches (6") below finished grade are required to have risers installed so access openings on the top of the tank are within six inches (6") of finished grade. **Tanks that are installed so the top of the tank is greater than five feet (5„) deep are not allowed**. In cases where the plumbing stub out is too deep to install the tank as described above the sewage may have to be pumped up to the tank from the source. If the designated reserve disposal field is at a higher elevation than the septic tank, across a wash or too far away (100' is the maximum separation between septic tank and disposal field), it may be required to have a lift station engineered and approved prior to utilizing the primary or reserve disposal fields.



It is recommended that the OSWTF be installed as shallow as possible to utilize the benefit of evaporation through the top soils.

TYPICAL DISTRIBUTION, "D", BOX



(Permit / File #)_____

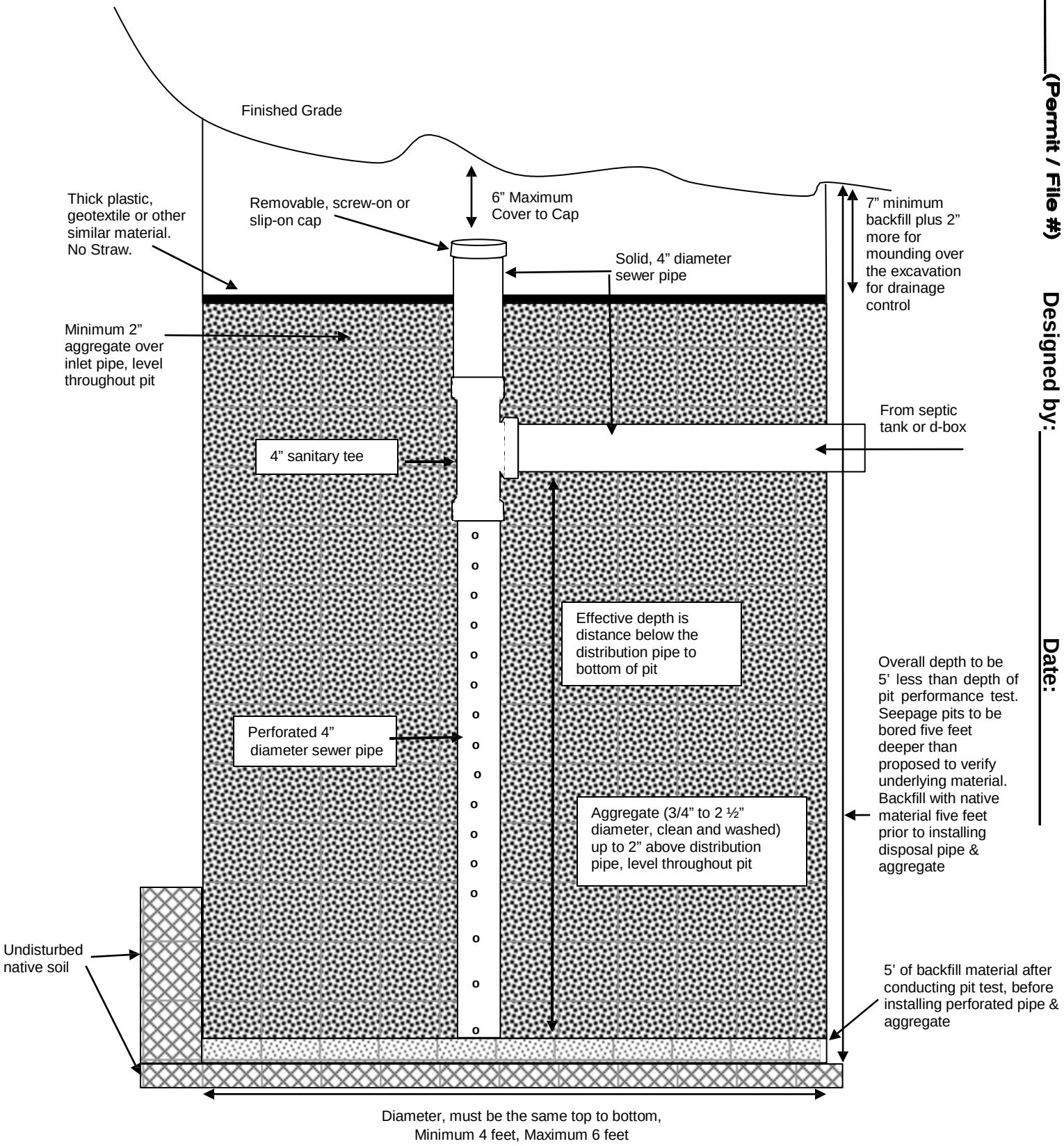
Designed by:_____

Date:_____

These diagrams are for example purposes only; they are not to TRUE scale.

Cross Section for Seepage Pit
(Excluding Backhoe Pits)

(to be submitted with NOID Application Packet)



(Permit / File #) _____ Designed by: _____ Date: _____

These diagrams are for example purposes only; they are not to TRUE scale.

4/20/06