CITY OF RANCHO CUCAMONGA
BUILDING AND SAFETY SERVICES DEPARTMENT

10500 Civic Center Dr., Rancho Cucamonga, CA 91730 909/477-2710

PLAN REVIEW GUIDELINE FOR PRIVATE DISPOSAL SYSTEMS

Rancho Cucamonga is located within the SANTA ANA REGION OF THE CALIFORNIA WATER QUALITY CONTROL BOARD. This board controls the installation of private sewage disposal systems in our area and regulates the minimum lot size requirements of these systems.
Board Resolution 93-40 states that a minimum lot size of one-half acre per dwelling unit is required for new developments.
A NEW DEVELOPMENT IS DEFINED AS ANY NEW TRACT OF HOUSES OR ANY NEW FREESTADING STRUCTURES ADJACENT TO AN EXISTING RESIDENCE THAT WILL ADD A LOAD TO THE WASTE DISCHARGE OF THAT LOT

For more information, contact the Board at: (951)782-4130

For this reason, the following are requirements necessary for the design plan check and inspection of private sewage disposal systems:

Date: _____ **PMT No.**_____

Project Address_____

Owner/Contractor_____

Plans Examiner_____ **Telephone No.** **(909) 477-2710, ext 420**

1st Check_____ **2nd Check**_____**3rd Check** _____

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PLAN CHECK LIST FOR THE REVIEW OF PRIVATE SEWAGE DISPOSAL SYSTEMS

- Plans require correction as indicated by circled items below before a permit can be issued.
- Return this correction sheet with corrected plans.
- TO FACILITATE RECHECKING PLEASE IDENTIFY, NEXT TO EACH CIRCLED ITEM BELOW, THE SHEET OF THE PLANS UPON WHICH CORRECTION HAS BEEN MADE. RETURN TWO (2) SETS OF CORRECTED PLANS AND ONE SET OF ORIGINAL PLAN USED FOR PLAN CHECK.

__1 Show site plan to scale showing the property lines, structures, trees, pools, and paved areas such as driveways and walkways. Plat may be drawn on letter, legal or ledger size paper. A computerized drawing is preferred. Minimum letter height is 1/8 inch. All plats must be drawn to scale.
__2 Identify location and size of the existing private sewage disposal system on plans.
__3 Show number of bedrooms in the house.
__4. Show the depth below grade of the outlet of the septic tank and inlet of the seepage pit or leach lines.
__5. Show sizes of all seepage pits and leach lines, and the new construction shall be in accordance with City of Rancho Cucamonga requirements.
__6. For new septic systems, tanks shall be sized as follows per Table below from the current adopted California Plumbing Code.

Single Family Dwelling # of bedroom	Size of Tank (gallons)
1 or 2	750
3	1,000
4	1,200
5 or 6	1,500

Note: Dens, studies and offices are considered as bedrooms

__7. Attach a copy of the City of Rancho Cucamonga Private Sewage Disposal System General Notes to the plans set. (See attachment no.2)
__8. Attach inspection procedure #24 to the plan set. (See attachment no.3)

In order to provide an accurate review of private sewage disposal systems, the following information is to be provided on or with the plans when submitted.

Septic Tank:

__1. Show manufacturer, model number, capacity and IAPMO listing number. Tanks which are not IAPMO listed must have structural calculations and construction details submitted.

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__2. Show manufacturers approved installation requirements, the approved burial depths for the tank with or without grade boards, and any special devices necessary in order to attain greater burial depths.
__3. Indicate number and size of compartments in the tank.
__4. Show tanks drawn to scale and properly dimensioned from all buildings, property lines, water wells, trees, seepage pits, disposal fields, and water lines (see table K-1) on Attachment 1.
__5. Show anticipated burial depth to the top of the tank. If extra burial depth is proposed, the number of risers and the actual and effective burial depths are to be identified on the plans.
__6. Describe manner in which the manholes will be brought to grade when installed under concrete or asphalt paving. Model numbers and sizes of extension rings, caps or access covers.
__7. Provide a note requiring the tank to be filled with water, without leakage, at the time of the first inspection.

Disposal Field or Seepage Pit:

__1. Show location drawn to scale including length, width, depth, and dimensions from all buildings, property lines, wells, trees (for seepage pits), adjoining seepage pits or disposal fields, water lines and distribution box.
__2. Provide cross sectional details: For disposal fields, show the depth of filter material both above and below the leach pipe the size of the leach pipe and the paper or straw cover. For seepage pits, provide an IAPMO listing number with the manufacturer's installation requirements, or, for field fabricated pits, a complete structural section and structural calculations.
__3. Show location of 100% expansion area or replacement pits, drawn to scale.
__4. Provide a clear indication that disposal fields will not be installed under concrete or asphalt paving.
__5. Provide notes regarding leach line scope (3"/100' Max.), filler material size, and preparation of the trench prior to line placement.

Distribution Box:

__1. Manufacturer, model number, IAPMO listing number and installation instructions.
__2. Cross section detail depicting installation on a level concrete slab and showing the number of outlets.
__3. Drawn to scale and properly distanced from seepage pit or disposal field (see Table K-1)

General Requirements:

__1. Provide two copies of the San Bernardino Department of Environmental Health approved percolation study and plans when required by policy #24.
__2. Notes regarding the requirement to post, in a conspicuous location within each dwelling unit, a septic system owner's guide, and individual as-built drawings prior to final inspection. Further, these drawings are to be submitted the Building and Safety Inspector prior to the time of final inspection on the septic system and are to be of a quality as to allow for computer scanning and subsequent imaging.

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__3. Provide notes on the plans that outline the work to be accomplished at each inspection of the septic system. Inspection procedure #24, see Attachment 3 may be attached to the approved plans in order to accommodate these requirements.

__4. If a new septic system: show the general topography including contour lines of the site relative to the finish floor elevation in order to establish approximate burial depths of the leach field and septic tanks. For sites that have been graded, indicate all cut and fill areas in relation to the septic system.

__5. If an existing septic system: show the depth below grade for the inlets at the depth below the inlet to the bottom of the seepage pit.

ADDITIONAL CORRECTIONS:

_____

_____

_____

_____

_____

Plans examiner is available by appointment for recheck and consultation.
RECHECK REQUIRED YES☐ NO☐

CORRECTIONS MADE AND APPROVED_____ DATE_____
(Except for clearances)

Attachment No. 1

TABLE K-1
(From 2007 California Plumbing Code)
Location of Sewage Disposal Systems

Minimum Horizontal Distance in Clear From:	Building Sewer	Septic Tank	Disposal Field	Seepage Pit
Buildings or structures[1]	2'	5'	8'	8'
Property line *	Clear[2]	5'	5'	8'
Water supply wells	50'[3]	50'	100'	150'
Streams	50'	50'	50'	100'
Trees	--	10'	--	10'
Seepage Pits/Cesspools	--	5'	5'	12'
Disposal Field	--	5'	4'[4]	5'
On site domestic water service line	1'[5]	5'	5'	5'
Distribution box	--	--	5'	5'
Pressure public water main	10'[6]	10'	10'	10'

Table K-1 Notes:

Note:

When disposal fields and/or seepage pits are installed in sloping ground, the minimum horizontal distance between any part of the leaching system and ground surface shall be 15'.

1. Including porches and steps, whether covered or uncovered, breezeways roofed porte-cocheres, roofed patios, carports, covered walks, covered driveways and similar structures or appurtenances.
2. All trenches deeper than and parallel to the footing of any structure shall be 45" therefrom.
3. All drainage piping shall clear domestic water supply wells by at least 50'. This distance may be reduced to not less than 25' when the drainage piping is constructed of materials approved for use within a building.
4. Plus 2' for each additional 1' of depth in excess of 1' below the bottom of the drain line.
5. Building sewers constructed of materials not approved for use within a building shall not be run or laid within the same trench as water pipes unless the water pipe is 12" above the top of the sewer pipe and is placed on a solid shelf excavated at one side of the common trench with a minimum of 12" horizontally from the sewer pipe.
6. For parallel construction only- For perpendicular crossings, Health Department approval is required.

*For underground placement of the septic tank, disposal field or seepage pit adjacent to the street public right-of-way line, the offset distances may be reduced upon the written authorization of the Engineering Department.

Attachment No. 2

City of Rancho Cucamonga
Private Sewage Disposal System General Notes
(TO BE ATTACHED TO PLANS)

A. GENERAL NOTES

1. The City only approves the plumbing design in scope and not in detail on these plans. The City does not verify construction quantities of these plans. Approval of the plans is for permit purposes only and shall not prevent the city from requiring corrections of errors in the plans. City acceptance of the plans does not relieve the applicant/contractor from responsibilities from the correction of errors and omissions discovered during construction.

2. All work shall be completed in accordance with the current adopted California Plumbing Code and all subsequent amendments.

3. At the time of the first inspection, the septic tank shall be filled with water.

4. Disposal fields shall not be constructed under driveways, asphalt pavement, walkways or other impervious services.

5. Leach lines shall be laid level. The maximum allowable slope for a leach line is 3"/100-feet.

6. The distribution box shall be set on a level concrete pad, minimum 4" thick.

7. The contractor shall provide to the homeowner a septic systems owner's guide.

8. Prior to final inspection, the contractor shall provide to the Building and Safety Services inspector an as-built set of plans.

B. AS-BUILT CERTIFICATE:

I hereby certify that the "record drawing" measurements as shown hereon were made under my supervision or as noted and are correct to the best of my knowledge and belief.

_____	_____
Printed name	Contractor's license number
_____	_____
Signature	Date

C. OTHER NOTES TO BE COMPLETED BY APPLICANT OR CONTRACTOR

1. Septic Tank – Existing Proposed Circle one

   Manufacturer_____

   Manufacturer Model No. _____

   Capacity_____ Gallons

   IAPMO Listing No._____

   Number of Compartments in Tank_____

   Size of each compartment_____

2. Seepage Pit Liner

   Manufacturer_____

   Manufacturer Model No._____

   IAPMO Listing No._____

3. Distribution Box

   Manufacturer _____

   Manufacturer Model No._____

   IAPMO Listing No._____

Revised: April 6, 2005
Effective: April 6, 2005
Ref. Code & Section:
2001 CA Plumbing Code , Appendix K

INSPECTION OF PRIVATE SEWAGE DISPOSAL SYSTEM

PURPOSE: To provide a consistent method of inspection of private sewage disposal systems.

PROCEDURE: The inspection of private sewage (septic) systems requires three visits to the site.

First visit: Pre-inspection, after submittal of plans and payment of plan check fee, prior to issuance of a plumbing permit and commencement of construction activity.

Second visit: When excavation is complete, the septic tank and distribution box are installed; points to be considered include the following:

Septic Tank:

1. Tank is installed on dry, level, well-compacted soil. UPC Section K-10 (a) (3)
2. Inlet invert 2" above outlet invert K-5 (g)
3. Fittings properly vented with legs extending 12" below liquid level
4. Compartment fitting in place
5. Tank is coated in accordance with material used K-5 (m)
6. Located in accordance with Table K-1 (attached) and the approved plans
7. Burial depth of tank in accordance with manufacturer's design, IAPMO listing and approved plans. Deepened tanks installed in accordance with manufacturer's recommendations ie. grade boards, tank risers, strengthened caps, etc. Interior coating (per UPC K-10) K-5 (k)
8. Manholes brought to grade where under concrete or asphalt paving K-5 (l)
9. Additional manhole shall be provided over the baffle wall when first compartment exceeds 12' in length. K-5 (e)
10. Tank filled with water to flow line. Seams and joints are left exposed (except bottom) and the tank and other components determined to be watertight. K-10 (b) 1

Distribution Box
1. Set level on a concrete slab K-6 (e)
2. Inside coated with a bituminous coating K-6 (e)
3. Invert of inlet 1" minimum above outlet inverts. All outlets at the same level K-6 (e)
4. Located 5' minimum from disposal fields, beds and seepage pits. Table K-1

Disposal Trenches, Bed or Seepage Pit:

1. For disposal trenches or beds, grade line, or other acceptable filter material depth indicators, shall be installed with elevation of leach pipe invert indicated. Slope of leach line not to exceed 3” per 100’ of run. K-6 (i) chart.
2. Excavation properly prepared with no smeared surfaces. Soil roughened to facilitate proper percolation. I-6 (b)
3. Width and location of trenches for leach lines and diameter and depth of seepage pit in accordance with Table K-1 and approved plans.
4. In a serial distribution system, upper trench to be saturated before effluent passes to the next lower trench. The connecting down line installed on natural, undisturbed soil. K-6 (j)

Third visit: Leach lines installed to previously determined gradients and ready for back filling.

Disposal Trenches, Beds or Seepage Pit:

1. Filter material (stone, gravel, or slag) to be clean and varying in size from 3/4’” to 2 ½”. Liners or brick for seepage pit back filled with rock as required. K-6 (b)
2. Leach lines minimum 4” diameter and checked for consistent grade not exceeding 3” fall in 100 of length. K-6 (i) Chart
3. Fittings watertight with no mitering of pipe. K-6 (f) and K-6 (g)
4. Lines covered with 2” minimum of filter material. K-6 (i) Table
5. Leach line or bed covered with untreated building paper, straw or other acceptable porous material. K-6 (b)
6. Minimum spacing between trenches shall be 4’ plus 2’ for each additional foot of depth in excess of 1’ below the bottom of the drain line. Distribution lines in leach beds spaced not more than 6’ on center nor more than 3’ from edge of bed. K-6 (i)
7. Multiple lines of approximately equal length. K-6 (f)
8. Distribution boxes properly shaded prior to back filling (reference Code Interpretation-08)

ANALYSIS

This procedure is intended to provide a thorough and accurate inspection of private sewage disposal systems. Any variations from that outlined above will be considered on a case-by-case basis only and must be discussed with the appropriate supervisor.