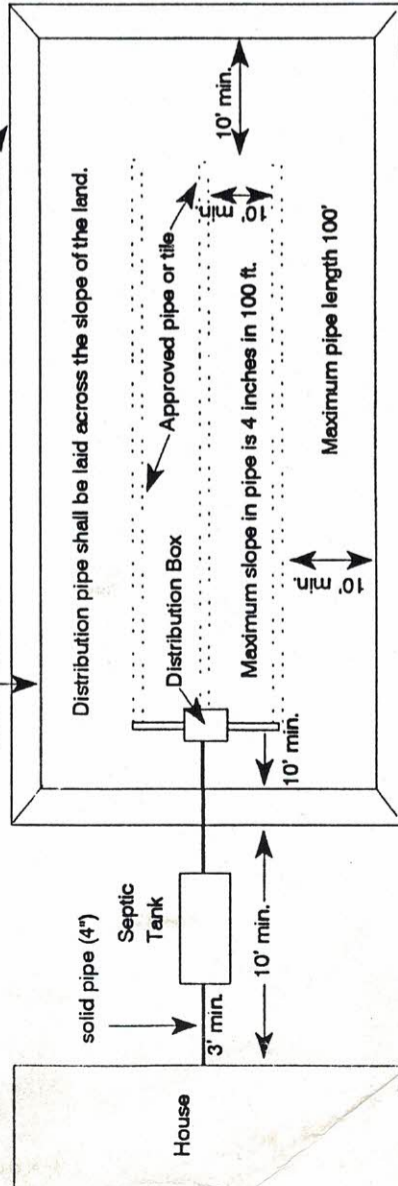


**CENTRAL FRASER VALLEY HEALTH UNIT
ALTERNATE FILL MOUND REQUIREMENTS**

Number of Bedrooms	Estimated Daily Sewage Flow in Gallons	Septic Tank Volume in Gallons (min. req.)	Percolation Rate in Natural Soil	
			Minimum Amount of Distribution Pipe Required/Foot	16 - 30 minutes/inch
1-2	250	500	250	16 - 30 minutes/inch
3	300	600	300	
4	375	750	350	Additional distribution pipe will be determined by the Environmental Health Officer
5	450	900	400	
6	550	1100	450	

TYPICAL FILL AREA DIMENSIONS (FEET)			
Number of Bedrooms	Minimum Pipe Length	Fill Area (Base)	Fill Area (Top)
1-2	250 feet	7200 sq ft (80 x 90)	4200 sq ft (60 x 70)
3	300 feet	8000 sq ft (80 x 100)	4800 sq ft (60 x 80)
4	350 feet	9000 sq ft (90 x 100)	5600 sq ft (70 x 80)

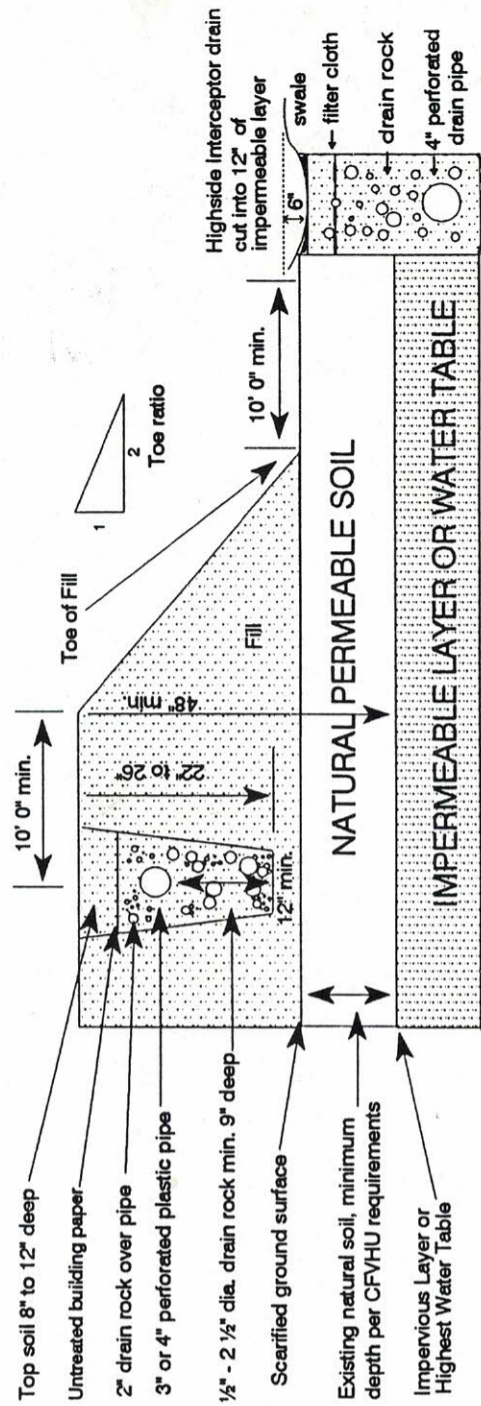


TYPICAL FILL MOUND LAYOUT

INSTALLATION NOTES

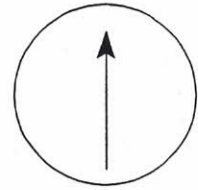
- A fill mound shall not be located less than:
 - 10 feet from a building
 - 10 feet from a parcel boundary
 - 50 feet from a curtain drain
 - 10 feet from an interceptor drain
 - 100 feet from a source of domestic water
 - 100 feet from a natural boundary of a lake or other body of non-tidal water
 - 10 feet from a domestic water pipeline

• **SEPARATION DISTANCES are measured from the toe of the fill •**
- Site preparation and mound construction shall not commence until written authorization has been received from an Environmental Health Officer and only when the site is completely dry. Consult your EHO if in doubt.
- A completed Fill Information Sheet with percolation information on fill material must be submitted after fill placement.
- A receiving area of at least 50 feet may be required if there are breakout points, i.e. excavations or exposed impervious layers in a ditch, or curtain drains down slope.
- Soil may not be stripped or removed within 50 feet downslope and sideslope of a built-up absorption field.
- An interceptor drain is required on the highside of the fill mound if it is located on a slope.
- Alternate fill mound shall not be located on slope greater than 12% grade.
- The fill mound must be free from all rocks, stumps, branches, turf and debris.
- The Environmental Health Officer may require gentler toe ratio than 2:1. (2 horizontal to 1 vertical)
- The finished mound shall be crowned or sloped to provide maximum surface run-off.
- For details of Package Treatment Plant trench construction standards consult your Environmental Health Officer.**



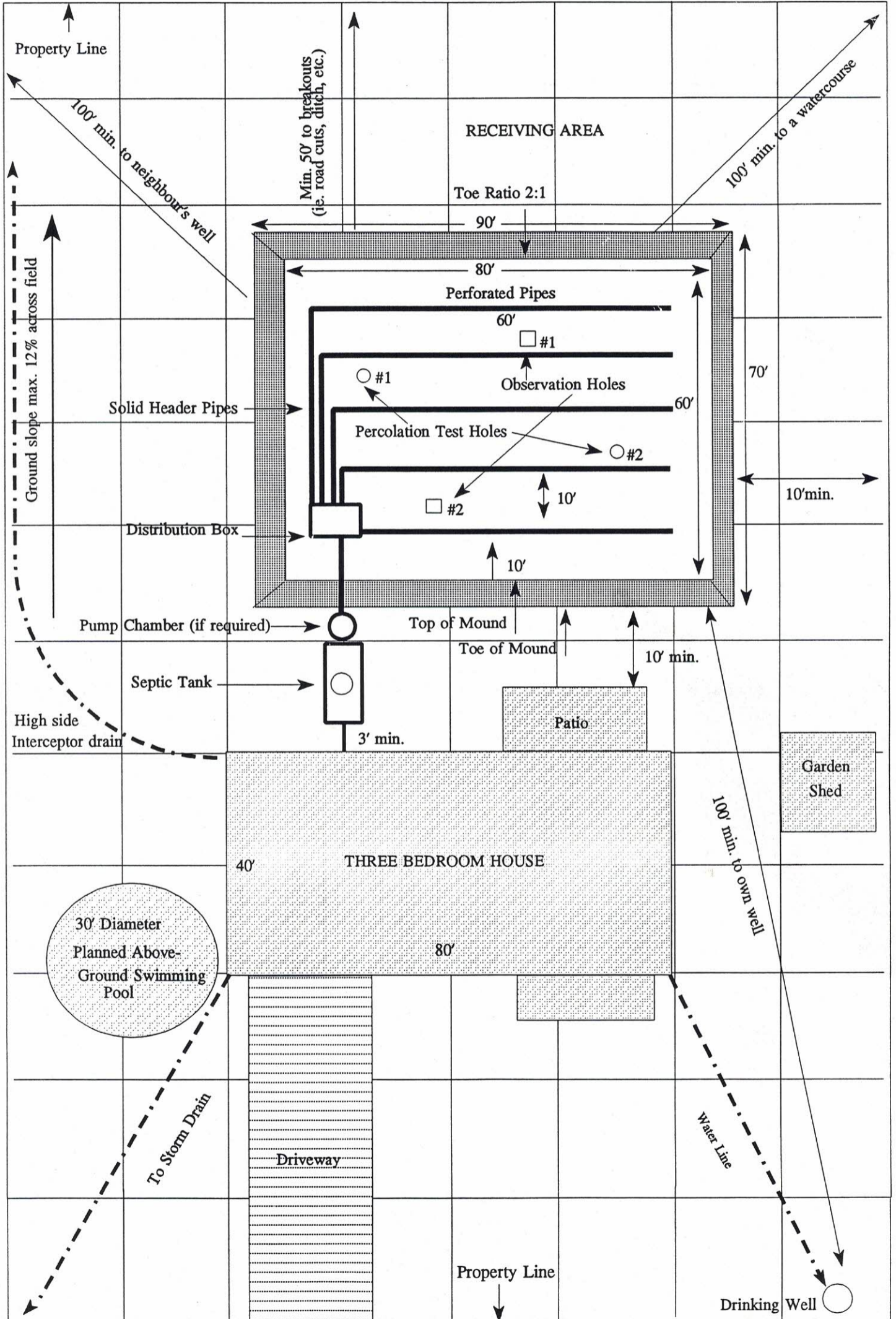
TYPICAL FILL MOUND CROSS SECTION

SAMPLE DIAGRAM FILL MOUND SYSTEM



SCALE: 1":20'

INSERT NORTH ARROW



- Don't allow roof or perimeter drains, or any surface water, to discharge into or nearby the sewage disposal system;
- Don't overload the system with water via continuously running toilets or dripping faucets;
- Don't flush away cigarette butts, filters, sanitary napkins, newspaper, disposable diapers, condoms, facial tissue, paper towels, hair, metal or metal items, coffee grounds, tea leaves, fats or grease as these can all plug a septic tank or a drain field;
- Don't install a garbage disposal without increasing the size of your tank and field;
- Use water sparingly;
- In areas where frost penetration is a problem, insulate the main pipe and disposal area with a generous layer of straw during winter months. Insulate the tank and pipe connection from the house as well;
- Don't leave the system inoperative for long periods during cold winter months;
- Use snow fences to promote maximum insulation from snow cover.
- If water pools up on a disposal area, seek advice from your Environmental Health Officer.

Servicing A Septic Tank

Although septic tanks should be inspected every year, they typically need servicing every two to three years (depending on the number of people using the system and the volume of daily sewage flow). Here are a few things to keep in mind:

- Septic tanks need servicing when the sludge is 45 centimetres (18 inches) from the bottom of the outlet pipe, or if the scum is within 8 centimetres (3 inches) of the outlet pipe;
- Remove sludge in the spring rather than in the fall, as this prevents leaving undigested solids in the tank during the cold winter months;
- Don't scrub a septic tank clean. A small amount of sludge should be left to renew bacterial activity;
- When it's septic servicing time, check the Yellow Pages for firms equipped for this work.

If you have any further questions about how sewage systems work, or about local requirements, then contact your local Environmental Health Officer at your nearest Health Unit office.

In other cases, particularly in the colder regions of the province, assessments cannot be made during the winter.

Prospective builders should therefore plan to have all necessary tests performed at the time of year appropriate for local weather conditions. Your EHO can advise you further.

What about the "Appeal" Period?

Once your permit has been initially approved, your neighbours will then have 30 days in which to appeal the granting of the permit to the Environmental Appeal Board (see Environmental Appeal Board brochure). You must post a notice of the proposed sewage disposal system in a conspicuous place on your property, including a site map clearly showing the system's exact location and extent.

The appeal process is open to anyone who feels that they might be negatively affected by your proposed sewage disposal system — for example, if they draw their drinking water from a nearby shallow well, or are "downstream" of your sloped property.

Alternatively, anyone whose application for a sewage disposal permit is turned down also has 30 days to appeal that decision to the Environmental Appeal Board.

How does the Appeal Process work?

Appeals regarding the issuance (or non-issuance) of a sewage disposal permit are heard by an independent body known as the Environmental Appeal Board. Whenever the issuance of a permit already granted is being grieved, the property owner's or lot buyer's interests will be represented by an Environmental Health Officer from the local Health Unit. The EHO will defend his or her decision to have granted the sewage disposal permit in the first place. Anyone interested in filing an appeal -- either regarding the issuance OR the non-issuance of a permit -- should ask at their local Health Unit for a brochure that explains this appeal procedure in more detail.

What else Should I be Aware of?

Not only are sewage disposal permits only valid for one year — they are NOT transferrable. Because different owners often have different site plans for sewage disposal systems, the specifics of each proposed system have to be judged on their own merits.

Generally, land buyers are advised to give themselves plenty of time when planning to buy an undeveloped lot. Aside from the 30-day notice-of-appeal period once a permit has been issued, it can take up to 60 days more before a grievance may be heard by the Environmental Appeal Board.

IMPORTANT NOTICE:

A person who decides to proceed with the construction of a sewage system **AFTER** the permit has been issued but **BEFORE** the 30 day appeal period has passed must realize that there is a risk that the permit may be appealed, and that the Environmental Appeal Board may overrule the EHO's decision and revoke or cancel the permit.

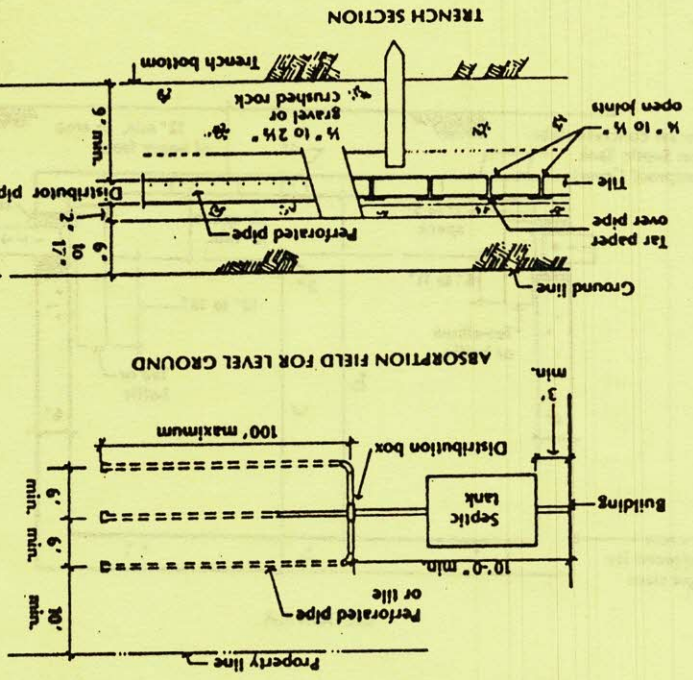
Under these circumstances, the board has the authority to have the offending system removed. For this reason, property owners are strongly advised **NOT** to proceed with **ANY** construction on-site until the 30 day appeal period has passed and no appeals have been submitted.

If you have any further questions about obtaining sewage disposal approvals, please call your public health unit or department.

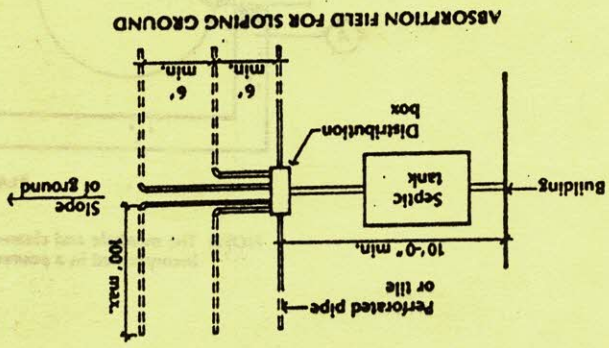
NOTE: See also Health File #21a - Operation and Maintenance of Sewage Disposal Systems.

Estimated Daily Sewage Flow (Imperial Gallons)	Percolation Rate of Absorption Field (minutes per inch)	Length of Absorption Field (feet)	Distributor Pipe (feet)
1	5	10	20
25	15	20	25
30	20	25	30
322	150	160	210
387	150	192	252
485	150	240	315
485	150	240	315
580	162	288	378
580	198	352	462
710	198	352	462

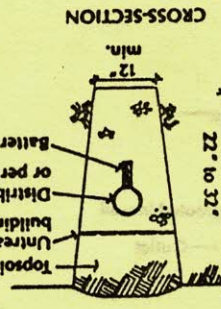
TABLE - ABSORPTION FIELD REQUIREMENTS



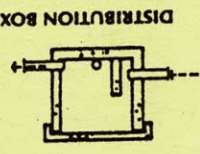
ABSORPTION FIELD FOR LEVEL GROUND



ABSORPTION FIELD FOR SLOPING GROUND



CROSS-SECTION

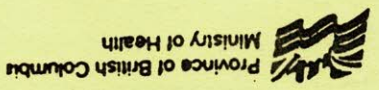


DISTRIBUTION BOX

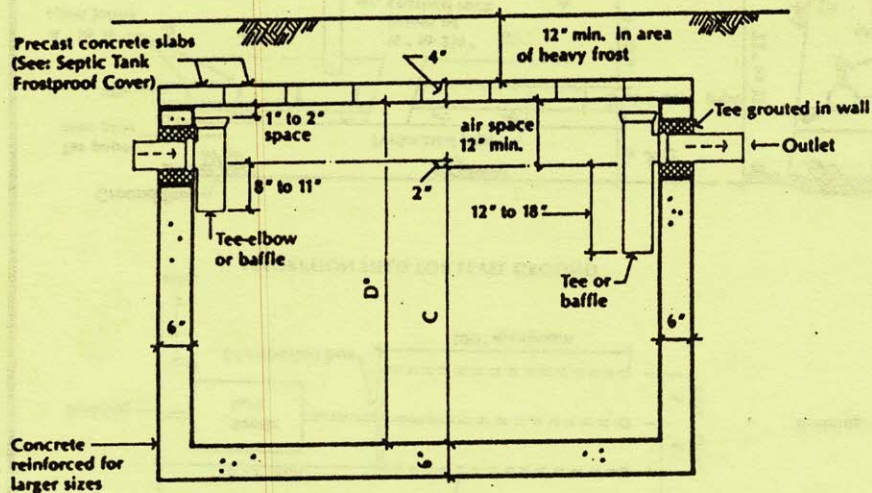
- NOTES:
1. Located the conventional absorption field where the ground water table, impervious layer, or bedrock is 4 feet or greater below the natural ground surface.
 2. Maximum percolation rate is 30 minutes per inch.
 3. An absorption field shall NOT be located less than:
 - a) 10 feet from a building
 - b) 10 feet from a parcel boundary
 - c) 10 feet from a curtain drain
 - d) 100 feet from a source of domestic water
 - e) 100 feet from a natural boundary of a lake or other body of non-tidal water
 - f) 10 feet from a domestic water pipeline
 4. An absorption field shall not be located:
 - a) under a roadway
 - b) under a paved area
 - c) under an area used or intended for parking motor vehicles
 5. Dead ends of distributor pipe shall be plugged or vented.
 6. Distributor pipe shall be laid across the slope of the land.
 7. Doung chambers are required when distributor pipe length exceeds 500 feet.
 8. A sewage disposal system must be located, constructed and the ground surface land-scaped to protect the sewage disposal system from storm water.

RECOMMENDED LAYOUT/DETAILS FOR HOUSEHOLD SEWAGE ABSORPTION FIELDS

IMPERIAL



Public Health PROTECTION

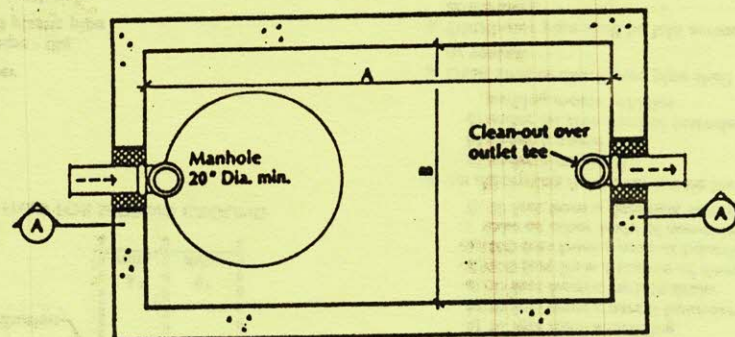


SECTION A-A

Recommended Dimensions

No. of Bedrooms	Tank Volume (l. gals.)	A	B	C	D*
2 or less	500	7'-0"	3'-0"	4'-0"	5'-0"
3	600	8'-1"	3'-0"	4'-0"	5'-0"
4	750	8'-1"	3'-9"	4'-0"	5'-0"
5	900	9'-1"	4'-0"	4'-0"	5'-0"
6	1,100	10'-0"	4'-6"	4'-0"	5'-6"

1. The septic tank should be watertight.
2. The septic tank shall be located to provide a minimum fall of 1/8 inch per foot in the building drain and building sewer.
3. A septic tank shall be located not less than:
 - a) 50 feet from a source of domestic water;
 - b) 3 feet from a parcel boundary;
 - c) 3 feet from a building;
 - d) 10 feet from a domestic water pipeline.



PLAN

NOTE: The manhole and clean-out must be incorporated in a poured in place lid.

Public Health
PROTECTION

Province of British Columbia
Ministry of Health

IMPERIAL RECOMMENDED DESIGN FOR HOUSEHOLD SEPTIC TANKS

*Know
the*

Health files

Ministry of Health and
Ministry Responsible for Seniors

Number 21b
February 1995

On-Site Sewage Disposal System Permits For Undeveloped Lots

Is it Necessary to get a Sewage Disposal Permit for an Undeveloped Lot?

You are legally required to get approval from your local Health Unit or Department BEFORE installing any kind of sewage disposal system (such as a septic field). These sewage disposal system permits are NOT a right of ownership. They are only granted after the site has been inspected by an Environmental Health Officer (EHO) and certain conditions have been met. The lot must have the appropriate soil and drainage characteristics that will safely support an on-site sewage disposal system, and adequate "set back" distances from property lines and water courses.

What does this Mean for Someone Buying an Empty Lot?

You can never assume that ANY undeveloped lot will automatically qualify for installation of a sewage disposal system. Anyone buying an undeveloped lot as a prospective home site is responsible for determining whether that lot will qualify for a sewage disposal permit. Always remember the rule of "buyer beware." If you make an offer to purchase a bare lot with the intention of building a house on it, you should consider including a "subject to" clause which makes successfully acquiring an on-site sewage disposal permit for the bare lot a condition of the sale. Discuss this with your realtor and/or lawyer.

Keep in mind that just because neighbouring lots may have existing sewage systems, that fact does NOT guarantee that a new permit will be granted for YOUR lot. Standards are much stricter now than they used to be. The only way to guarantee that you can get a proper permit for your planned sewage system is to go through your local Health Unit or Department.

How do I Apply for a Permit?

Technically, only the owner of a property can apply for a permit for that property. That permit — if given — is only valid for one year, and is not transferable.

However, if you are far enough along in the purchase process to have an "agreement for sale" and enclose a copy of that agreement with your application and payment of a \$250 processing fee, then the local Health Unit will accept and act upon your application.

It is the responsibility of the applicant to provide all the necessary information, and undertake all the work needed to support the application (i.e. site plan, "perc" tests, etc.). It is NOT the responsibility of the local Environmental Health Officer to design your system for you.

Once you have filled out the application — providing all the information requested on the form — an Environmental Health Officer will inspect your lot to confirm that the information you have provided is accurate, and the property meets the requirements of the Sewage Disposal Regulation and is suitable for a sewage disposal system. If in the opinion of the Environmental Health Officer the property meets the proper specifications (i.e. appropriate soil depth, drainage, slope, water table, etc.) you will then be issued a permit to construct your sewage disposal system.

Possible Delays

In some cases, the EHO may postpone the required inspection/testing procedures until the wintertime so that the drainage/absorption characteristics of the lot may be determined during the wetter winter months.



*Know
the*

Health files

Number 21a

September 1994

Ministry of Health and
Ministry Responsible for Seniors

Maintenance and Operation of Sewage Disposal Systems

When Are Septic Tanks Used?

Any domestic or commercial building that is not serviced by a municipal or city sewage system needs a method for disposal of human wastes. Although some rustic-minded homesteaders are content to use an outhouse, indoor plumbing requires a sewage disposal system, which usually includes a septic tank, distribution box and an approved method of ground disposal.

How Does A Septic Tank Work?

Typically, a septic tank is a watertight container or box that acts as a settling chamber where bacteria assist in the breakdown of human wastes. The solids settle to the bottom of the tank and become sludge, while oils and other light material float to the surface. The effluent liquid between the two layers flows from the tank into the septic field, where biodegradable action continues until the effluent is rendered harmless and inert. The sludge and surface oils remaining in the septic tank should be removed by a septic system pump-out contractor, typically every two or three years. Failure to properly maintain your system can result in the premature failure of your ground disposal system and the need for costly repairs or replacement of your field.

Can A Septic Tank Be Installed Anywhere?

Everyone who intends to install an on site sewage disposal system must apply for a permit and pay an administrative fee of \$250.00 which includes the cost of one final inspection. (And if a re-inspection is necessary, the fee is an extra \$100.)

Remember that all sewage systems must conform to certain specifications and must be approved by an Environmental Health Officer.

See Health File #21b regarding the issue of sewage disposal system permits for undeveloped lots, and the rights of appeal against decisions to issue or not issue such permits.

Maintaining Your Sewage Disposal System

It is important to keep an accurate sketch that shows the location of your septic tank, distribution box and disposal field; make sure that the sketch shows the system relative to a fixed point, such as your house or an outbuilding.

Provide appropriate indicators for access hatches which should be protected from runoff water. Burying or raising accesses above the grade is usually recommended.

Preventing Possible Problems

Sewage systems are vulnerable to a number of largely preventable problems (and sewage systems are not pleasant to fix). Keep the following in mind:

- Don't permit any vehicles (including snowmobiles) to drive or park on any part of the disposal system;
- Don't flush paints, solvents or any kind of toxic chemicals down the toilet;
- Avoid planting large trees or shrubs nearby because the roots may affect the disposal field;



OWNER INFORMATION	FOLIO NUMBER	DATE OF APPLICATION (YYYY/MM/DD)	<input type="checkbox"/> New Construction	<input checked="" type="checkbox"/> Repair	<input type="checkbox"/> Alteration
Correspondence to be sent to <input type="checkbox"/> owner	NAME OF OWNER				
	MAILING ADDRESS	City			Postal Code
APPLICANT INFORMATION	NAME OF APPLICANT	TELEPHONE NUMBER			
Correspondence to be sent to <input type="checkbox"/> applicant	MAILING ADDRESS	City			Postal Code
LOT INFORMATION	LEGAL DESCRIPTION OF WHERE DISPOSAL SYSTEM IS TO BE CONSTRUCTED	TELEPHONE NUMBER			
	STREET ADDRESS / GENERAL LOCATION				

PREMISE INFORMATION	SEWAGE DISPOSAL SYSTEM WILL SERVE:	NUMBER OF BEDROOMS:	FINISHED BASEMENT	DO YOU INTEND TO ADD A BASEMENT SUITE OR MORE BEDROOMS IN THE FUTURE?
	<input type="checkbox"/> SINGLE FAMILY DWELLING <input type="checkbox"/> DUPLEX	3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	OTHER (specify):	TOTAL LIVING AREA:		
	ESTIMATED DAILY SEWAGE FLOW:	1600 SQ FT	LOT SIZE:	1.11 ACRES
SYSTEM INFORMATION	TYPE OF SEWAGE DISPOSAL SYSTEM:	SEPTIC TANK MANUFACTURER	MATERIAL OF SEPTIC TANK	LIQUID VOLUME OF TANK
	<input checked="" type="checkbox"/> CONVENTIONAL		CONCRETE	600L
	ALTERNATE (E.G. <input type="checkbox"/> PRIVY <input type="checkbox"/> LAGOON, <input type="checkbox"/> RAISED MOUNDS, <input type="checkbox"/> SEEPAGE BED)			
	<input type="checkbox"/> DEEP TRENCH <input type="checkbox"/> OTHER (specify):			
	TOTAL LENGTH OF DRAINAGE PIPE	TYPE OF DRAINAGE PIPE:		INSIDE DIAMETER OF PIPE
	420'	<input type="checkbox"/> PVC <input type="checkbox"/> OTHER (specify):		3"
	IF PACKAGE TREATMENT PLANT IS PROPOSED GIVE:	TREATMENT CAPACITY		
	MAKE			
	MODEL			

ALTERNATE INFORMATION	PRESSURE DISTRIBUTION PROPOSED	LAGOON SIZE	DEPTH OF CLAY SOIL	GARBURATOR	FIELD DOSE VOLUME PUMPED PER CYCLE:
	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		220	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
SITE INFORMATION	SOIL DESCRIPTION	DEPTH OF SOIL:	under 1.2 m (4 ft.)	due to <input type="checkbox"/> rock or <input checked="" type="checkbox"/> clay at 220" ft. from surface.	
	DEPTH TO WATER TABLE:	over 1.2 m (4 ft.)	<input type="checkbox"/> under 1.2 m (4 ft.)	the depth is	
	PERC TESTS				
	SLOWEST RATE FROM	test hole #1	85	min./2.5 cm (1 inch)	test hole #2
	AVERAGE OF SLOWEST RATE FROM EACH TEST HOLE		17.5	min./2.5 cm (1 inch)	

WATER INFORMATION	SOURCES OF DOMESTIC WATER:			
	DISTANCES OF PROPOSED DISPOSAL FIELD FROM:			
	own well	neighbouring wells	stream or lake	breakout point
			410'	410'
				water lines

ARE THERE ANY RESTRICTIVE COVENANTS / EASEMENTS WHICH WILL AFFECT THE DESIGN OR LOCATION OF THE SEWAGE DISPOSAL SYSTEM? Yes No
If Yes, explain

The information on this application is accurate and true to the best of my knowledge:

Owner or Agent

Signature: _____ Date (yyyy/mm/dd): _____

PAID: 100.00 OFFICE USE ONLY

DATE: 01/11/08

INITIALS: Jm

PERMIT TO CONSTRUCT, INSTALL, ALTER OR REPAIR

FOLIO / LOT NUMBER

Pursuant to this application and the Sewage Disposal Regulations, permission is hereby granted to construct, install, alter, or repair the sewage disposal system on this property. This permit may be cancelled if variations are made to these plans and specifications.

Conditions of Permit:

PERMIT ISSUED FOR REPAIR

EFFLUENT FILTER TO BE INSTALLED

WITH FORM 136 TO BE SUBMITTED AS FINAL NOTICE

ALL WORK TO BE DONE IN DRY WEATHER.

DATE PERMIT VALID

NOV 8/01

SIGNATURE OF PUBLIC HEALTH INSPECTOR / EHO

[Signature]

NOTICE

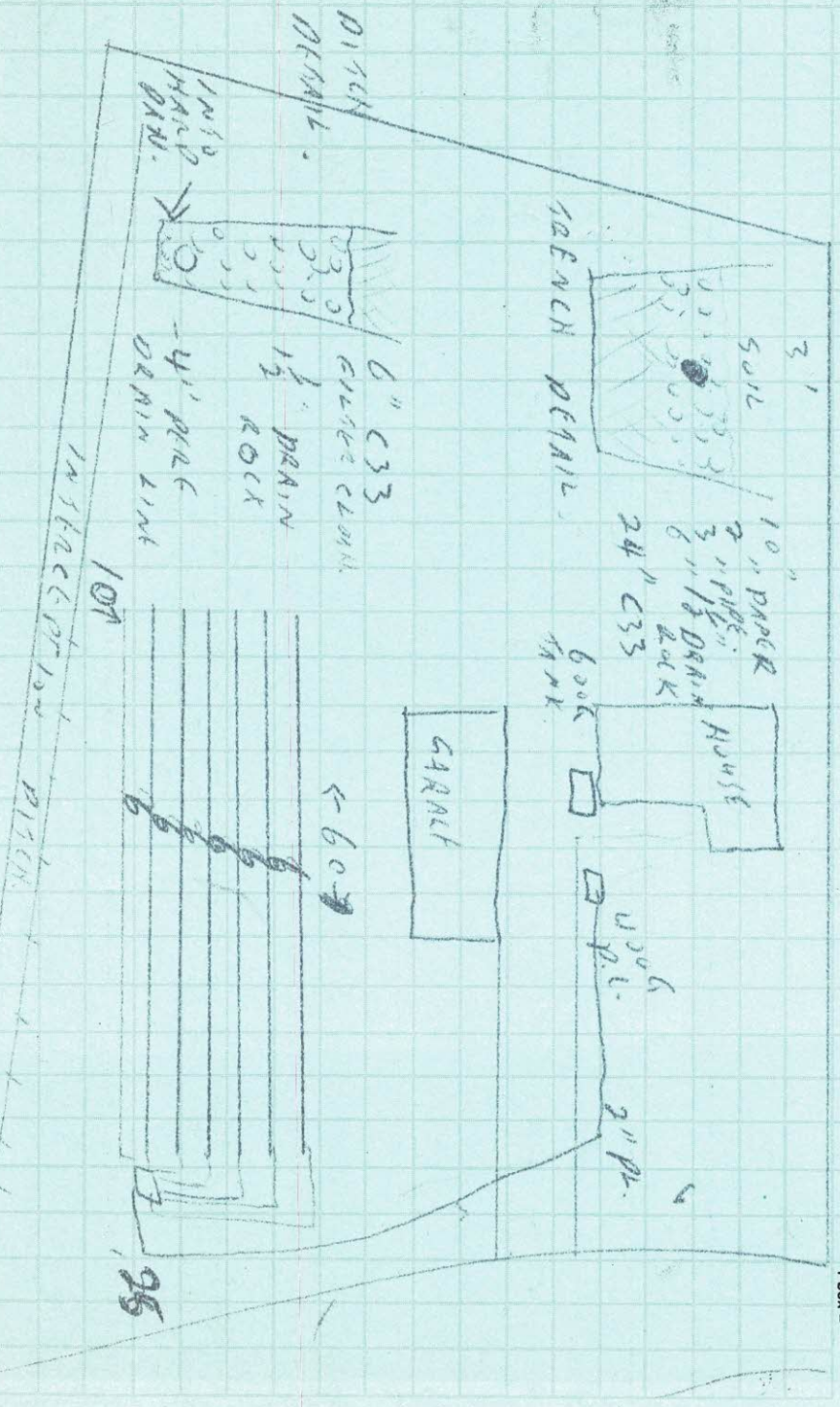
This notice must be posted in a conspicuous place on the parcel for which the permit is issued not more than 3 days after the date the permit is issued and must remain posted for 30 consecutive days from the date the permit is issued.

Persons who consider themselves aggrieved by a decision made under the Sewage Disposal Regulation are eligible to file an appeal under section 5 (3) (a) of the Health Act.

A Notice of Appeal must be delivered by hand, facsimile or registered mail to the Chair of the Environmental Appeal Board, Parliament Buildings, Victoria, B.C. V8V 1X4 within 30 days of the issuance of the permit. Please contact your local Health Unit for information on appeal procedures.

SITE MAP

Scale
1 box =





FOLIO NUMBER

DATE OF APPLICATION (Y/M/D)

NAME OF OWNER

NAME OF CONTRACTOR

LEGAL DESCRIPTION OF LOT

0008/04/29

VANOCER2ALM.

JIM WILSON

2012, PLAN 75333 0155233

STREET ADDRESS / GENERAL LOCATION

8909 ARMSTRONG LANGFORD

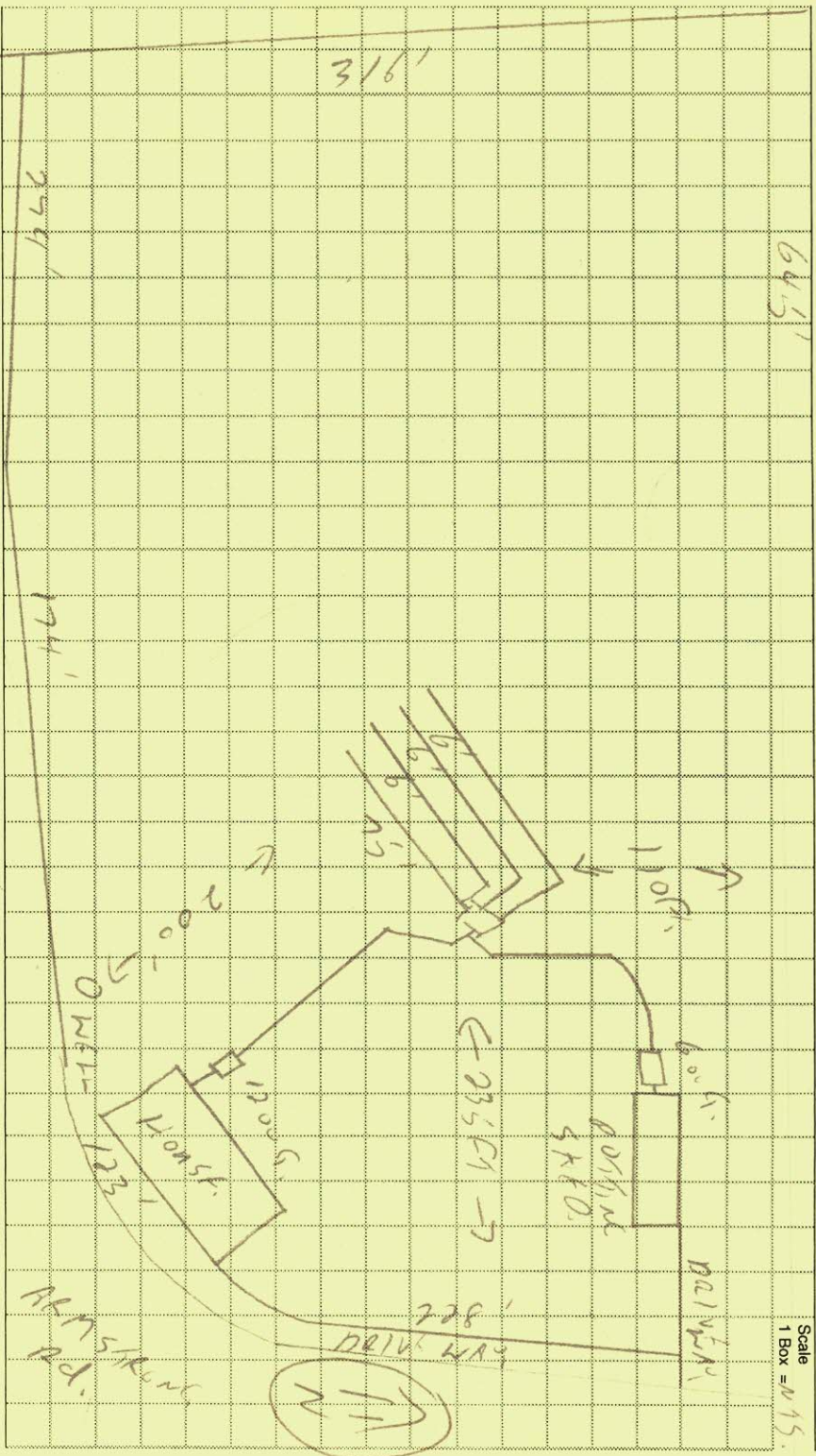
AS BUILT DIAGRAM : to be completed by the contractor or applicant

INSTALLED AS PER REGULATIONS
 Yes No

SIGNATURE OF OWNER/APPLICANT

[Signature]

Scale
1 Box = 1:15



The Ministry of Health does not guarantee the useable life of the sewage disposal system. The life of the system is affected by the use and maintenance it receives. Pump out the septic tank every 2-3 years. For servicing of package treatment plants, consult your local service agent. For service guarantees, consult your local sewage disposal contractor. If the system needs repair or modification, a new permit is required.

If the system is not authorized for backfilling and if corrections are required, a re-inspection fee of \$100 must be paid for each time the Public Health Inspector checks to see that the faults have been corrected.

SUBJECT TO THE FOLLOWING CONDITIONS:

DATE BACKFILL / USE AUTHORIZED JAN 7/03

OK TO BACKFILL & OPERATE

SIGNATURE PUBLIC HEALTH INSPECTOR / EHO:

[Signature]

FOR PUBLIC HEALTH INSPECTOR / EHO USE ONLY

APPROVED REJECTED NOT APPLICABLE

septic tank

APPROVED REJECTED NOT APPLICABLE

package treatment plant

APPROVED REJECTED NOT APPLICABLE

other (e.g.lagoon,holding tank) field laterals

APPROVED REJECTED NOT APPLICABLE

distribution box

APPROVED REJECTED NOT APPLICABLE

siphon

APPROVED REJECTED NOT APPLICABLE

APPROVED REJECTED NOT APPLICABLE

curtain drain

APPROVED REJECTED NOT APPLICABLE

interceptor drains

APPROVED REJECTED NOT APPLICABLE

pump

APPROVED REJECTED NOT APPLICABLE

drain rock

APPROVED REJECTED NOT APPLICABLE

set back distances

APPROVED REJECTED NOT APPLICABLE

fill

APPROVED REJECTED NOT APPLICABLE