the inspectionsgroup inc.

Permits and Compliance

A reference guide for applying for Electrical, Plumbing, Gas, Private Sewage and Building Permits

INDEX

PAGE

REFERENCE SECTION – The reference section contains helpful information and diagrams that cover some of the more common permit and compliance situations.

INTRODUCTION

Service
Friendly advice. Complete inspection services. Quick turnaround time.

Mission Statement
The Inspections Group Inc. is committed to providing optimum compliance monitoring services with utmost integrity.

- Always be the inspection agency of choice
- Consistently exceed customer expectations

CORPORATE VALUES

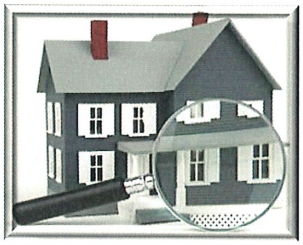
Ethical
Conduct our business with integrity in the communities we serve.

Proactive
Identify contractor and municipal expectations and deliver on commitments and communications in a timely manner

Growth & Innovation
Challenging the status quo with new ideas and continuously improve our people services and processes.

Teamwork
Share knowledge through communication that promotes continuous learning.

Service Excellence
By listening to our customers and their needs, consistently deliver extraordinary service that exceeds our customer's expectations.



We Strive To Provide Our Customers With Expertise And Guidance At An Unmatched Level Of Excellence

The Inspections Group Inc. was incorporated in 2001. The Inspections Group Inc. provides compliance monitoring services under the Alberta Safety Codes Act for five disciplines: building, electrical, plumbing (including private sewage disposal systems), gas and fire. The Inspections Group Inc. also provides permit issuance and inspection services for residential, commercial and industrial sites in all four disciplines throughout the Province of Alberta.

PROUD LEADERS IN COMPLIANCE MONITORING SINCE 2001

12010 111 Avenue, Edmonton AB T5G 0E6
Phone: 780 454 5048 Fax: 780 454 5222

4905 4 Avenue, Edson AB T7E 1V9
Phone: 780 723 4923 Fax: 780 723 3991

WHAT DO YOU NEED BEFORE APPLYING FOR A BUILDING PERMIT?

Make sure you have the following before applying for a Building Permit other than a garage, shed or accessory building:

- A copy of your approved Municipal Development Permit.
- The correct municipal address or the legal description of the property (lot, block, plan, section, township, range).
- At least two complete sets of plans for your building project including:
  - A floor plan
  - Elevation drawings
  - Cross-section drawings
  - Mechanical information
  - Electrical information
  - Professional endorsement (e.g. Engineer or Architect seal and signature when required)

All construction plans will be reviewed by a qualified professional to verify that they meet the requirements of the regulations adopted under the Safety Codes Act. Building Permits may be issued provided everything in your construction plan meet the requirements.

OTHER TYPES OF PERMITS?

The Inspections Group Inc. is accredited to issue permits and provide compliance monitoring in five disciplines under the Alberta Safety Codes Act. Our qualified Safety Codes Officer's, will also check materials and appliances for compliance with recognized standards.

When your project includes services such as electrical, plumbing and gas, additional permits will be required.

The Alberta Safety Codes Act requires that installations of electrical, gas and plumbing (including private sewage disposal systems) be covered under a permit and that they must be inspected.

Our Safety Codes Officers will verify that proper methods of assembly are used and examine for proper identification before providing acceptance of installations.

HOW DO I APPLY?

- Check with your local Municipality first to find out if they issue the required permits.
- Fill out the correct application form.
- Submit the completed form with the necessary plans and supporting documents, (as required). Check to see where the application is to be received. It may be to the Municipality or directly to The Inspections Group Inc.

  Call our office, at (866) 554 5048 (toll free) from anywhere in Alberta for free consultation, to verify the appropriate permit issuer in your Municipality and to obtain the correct application form. In the Edmonton area, please give us a call at (780) 454 5048 or visit our office located at 12010 - 111 Avenue, Edmonton, Alberta, you can also visit our Edson office at 4905 - 4th Avenue Lower Level, Edson Alberta or call (877) 723 4923.

Contractor

A permit issuer may issue a permit in:

Building:

- to an owner's agent

Electrical:

- to a master electrician

Plumbing:

- to a journeyman plumber

Gas:

- to a journeyman gasfitter

PSDS:

- to a certified installer (to locate a certified installer visit the link below)
  www.municipalaffairs.alberta.ca/cp_privatesewagecontractorlist.cfm

5. Cross Section

This drawing describes the construction details and dimensions of various components of the buildings construction (e.g. foundation, floor, basement floor, interior walls, exterior walls and roof).

For example a typical exterior wall may consist of the following: Horizontal vinyl siding, building paper, 3/8" OSB exterior sheeting, 2" X 6" SPF # 2 studs at 16 inch on center, R-20 batt insulation, 6 mil CGSB polyethylene vapor barrier, 1/2 inch gypsum board (painted).

6. Mechanical and Electrical Information

Information describing the type of heating and ventilation system which will be installed in the dwelling is to be shown.

Note: that hydronic radiant floor heating systems require engineered design systems, which must be submitted if you are installing such a system.

Electrical lighting, receptacles, service location and smoke alarms are to be included on floor plans.

7. Summary

Designs created by an applicant must be legible, drawn to scale and be of sufficient clarity and detail to enable a Safety Codes Officer to determine that the construction is in compliance with safety standards and identify any potential infractions prior to construction beginning.

It is impossible to cover all designs and site conditions using standard building practices as outlined in Part 9 of the Alberta Building Code. Any design which cannot be checked using the minimum standard of the Alberta Building Code must be designed and reviewed by Professional Engineer or a Registered Architect licensed to practice in the Province of Alberta.

A Safety Codes Officer may refuse to issue a permit if the work proposed does not meet the safety standards and regulations adopted under the Safety Codes Act. The issuer must be satisfied with the quality, accuracy, adequacy of the information provided by the applicant in support of the application.

In summary, this document is intended as general information only and may not address all situations which may arise in the process of preparing construction drawings or conditions encountered on the site during construction. It is our intention that this will act only as a guide to assist you in obtaining a Building Permit in a quick and efficient manner.

Prefabricated roof trusses and manufactured floor joists are designed and engineered to accommodate each individual site condition and cannot be checked using the building code. With each roof truss or floor system shipment, a truss or joist layout drawing showing the location of each truss or joist type and a shop drawing stamped and sealed by a Professional Engineer are included. These are to be submitted to the Safety Codes Officer prior to permit issuance.

A building Safety Codes Officer will stamp the drawings "examined" during the plan review phase. One set of these drawings must be present at the project site during construction.

THE IMPACT OF PERMITS MISSED OR IGNORED

It is important that work on buildings and properties be properly permitted. The Safety Codes Act and its pursuant codes, (e.g. Building, Electrical, Plumbing and Gas, etc.), were put in force to protect public safety by establishing a minimum standard to be met. When permits are missed or ignored serious consequences may result. Less serious is the issue of having to put permits in place for completed work, days, weeks even months later (usually because of a property sale that someone never anticipated). There is also a financial impact; permits will cost more in the future than they will today.

The Government of Alberta is currently in the process of increasing energy efficiency requirements within the Provincial Building Code. They have commissioned two research papers to investigate options for accomplishing this in both small and large buildings and have recently completed a period of public consultation regarding code changes for single family dwellings.

Natural Resources Canada reports that houses built between 2000 and 2009 have been tested in Alberta and averaged an EnerGuide level of 70. Many provinces are moving towards EnerGuide 80 or equivalent as a minimum standard. There is also a process to include energy efficiency requirements in the National Building Code by 2012, which the Government of Alberta has stated it will likely adopt by 2014. Indications are that the Alberta Government would like to reach an EnerGuide 80 level by 2014 and will use the next code update to set interim mid-range efficiency requirements in preparation for the anticipated change in 2014.

The above information was taken from a recent Alberta Government report released in March 2010. We are anticipating changes affecting many of our current construction codes to achieve improvements in energy efficiency.

Existing buildings and construction that have permits in place will not be affected by future changes.

Buildings or work that did not have permits in place, (and future new construction of course), will have to meet all new requirements when a permit is taken out at a later date.

INSPECTIONS

Booking an Inspection: Allow at least two working days (48 hrs.) notice for an inspection to take place. The receiver of an issued permit can request an inspection by phone, fax or on line at www.inspectionsgroup.com.

Inspection requests require the following information:

- Permit applicant contact name and phone number
- Permit number
- Project location / address (civic or legal)
- Directions to project location
- Stage of inspection; see pages 12 and 13 for reference

PERMIT INSPECTION REQUEST

CONTACT INFORMATION:

Permit Applicant Contact Name: _____

Phone: _____ Cell: _____

Additional Information: _____

Preferred Inspection Date: (allow at least 48 hours from submission) _____

PROJECT INFORMATION:

Permit Number: _____

County/City/Town/Village: _____

Civic Address: _____

Legal Address: Part of _____ Sec _____ Twp _____ Rge _____ West of ___

Subdivision, Lot, Block, Plan: Subdivision _____ Lot _____ Block _____ Plan _____

Directions: _____

INSPECTION INFORMATION: (number and type of inspections may vary depending on QMP requirements)

Building

Foundation prior to backfill - footing & walls with forms removed, weeping tile & damp proofing in place

OR

Framing prior to drywall - framed walls, floors & roof complete prior to insulation, foundation backfilled, exterior doors & windows installed, outside sheathing, engineered floor & truss layout

AND

Final prior to occupancy - all items from previous inspection reports complete

Electrical

Rough in prior to drywall - main service, all wire & boxes installed & visible, bonding & grounding complete

Final prior to occupancy - all items from previous inspection reports complete, panel labeled, smoke alarms installed, all load devices & switches installed & operational

Gas (also see TIGI Gas Service Completion Notification form)

Rough in - for installations over 400,000 BTU

Final prior to occupancy - All gas piping installed, pressure test complete, gas meter installed, all fixtures installed, vented & operational

Plumbing

Rough in prior to covering - All drain or sewer lines installed, all water lines installed, all vent stacks installed

Final prior to occupancy - All items from previous inspections reports complete, all fixtures installed & operational

Private Sewage Disposal Systems

Rough in prior to backfill - Majority of system installed with a portion left open for inspection

DECKS, SHEDS, HOTTUBS, POOLS

Final – before using:

- All work is complete

WOODSTOVES AND WOOD FIREPLACES

Rough-in (for built in units):

- The unit is in place, the clearances to combustibles and connection of various parts are open to view

Final – before using:

- All work is complete, finishes are in place hearth and other surface protectors are in place
- Carbon Monoxide alarm has been installed

INSPECTION STAGES IN SERVICE OR TRADE PERMITS

ELECTRICAL PERMITS

Rough in prior to drywall:

- Main service installed
- All wire and boxes installed and visible
- Bonding and grounding complete

Final prior to occupancy within 365 days of permit issuance:

- All items from previous inspection reports complete
- Panel labeled
- Smoke alarms installed
- All load devices and switches installed and operational

GAS PERMITS

Final prior to occupancy within 365 days of permit issuance:

- All gas piping installed
- Pressure test complete
- Gas meter installed
- All fixtures installed, vented and operational

PLUMBING PERMITS

Rough in prior to covering:

- All drain or sewer lines installed
- All water lines installed
- All vent stacks installed

Final prior to occupancy within 365 days of permit issuance:

- All items from previous inspection reports complete
- All fixtures installed and operational

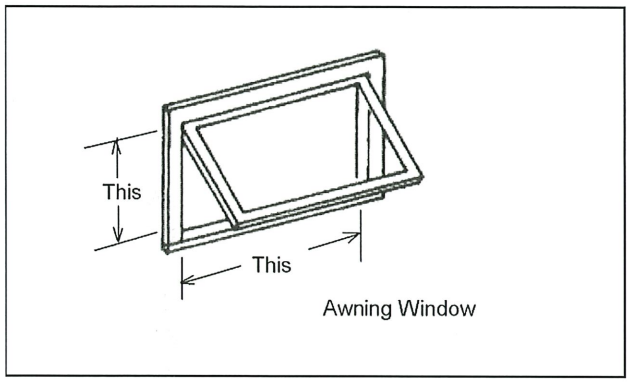
PRIVATE SEWAGE DISPOSAL SYSTEM PERMITS

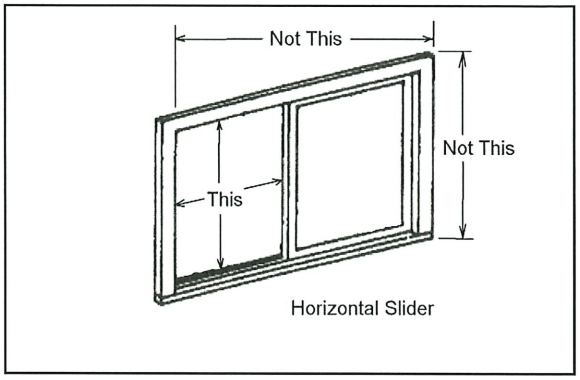
Rough in prior to being covered:

- Majority of system installed with a portion left open for inspection

BEDROOM WINDOW EGRESS

Bedroom windows must be sized so that they can be used as a direction of escape in case of fire. Each bedroom must have a window that opens from the inside without the use of tools or special knowledge and has an unobstructed area when open of at least 0.35 m^2 or 3.75 sq. ft. (minimum dimension of opening, (width or height), allowed is 380 mm or 15") (Division B Article 9.7.1.2).

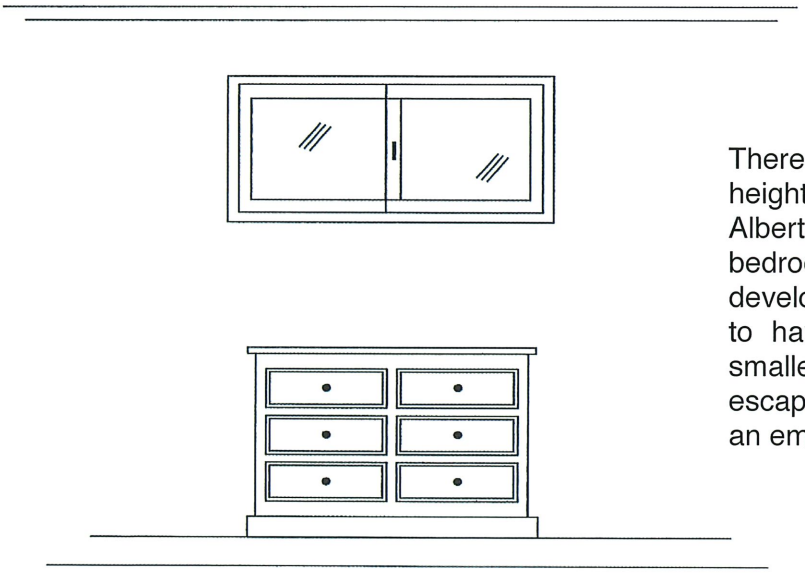




The critical area of a bedroom window is the open area that is free and clear of obstruction when open fully.

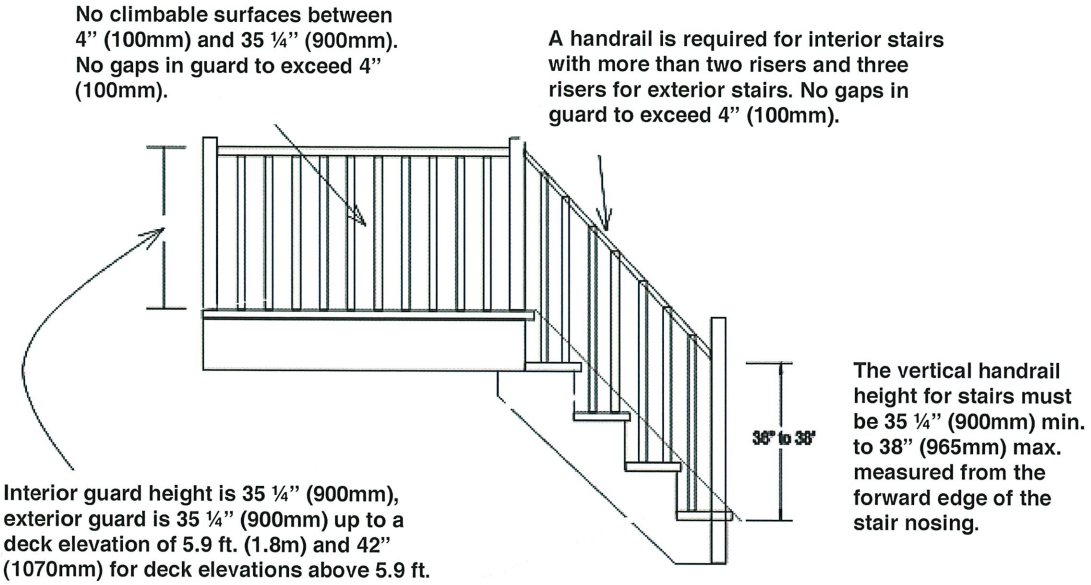
If a bedroom window is fitted with security bars, the bars must be openable from the inside without the use of any tool or special knowledge. (Division B Article 9.7.1.2).

Where a bedroom window opens into a window well, a clearance of not less than 550 mm must be provided in front of the window. (Division B Article 9.7.1.3.).

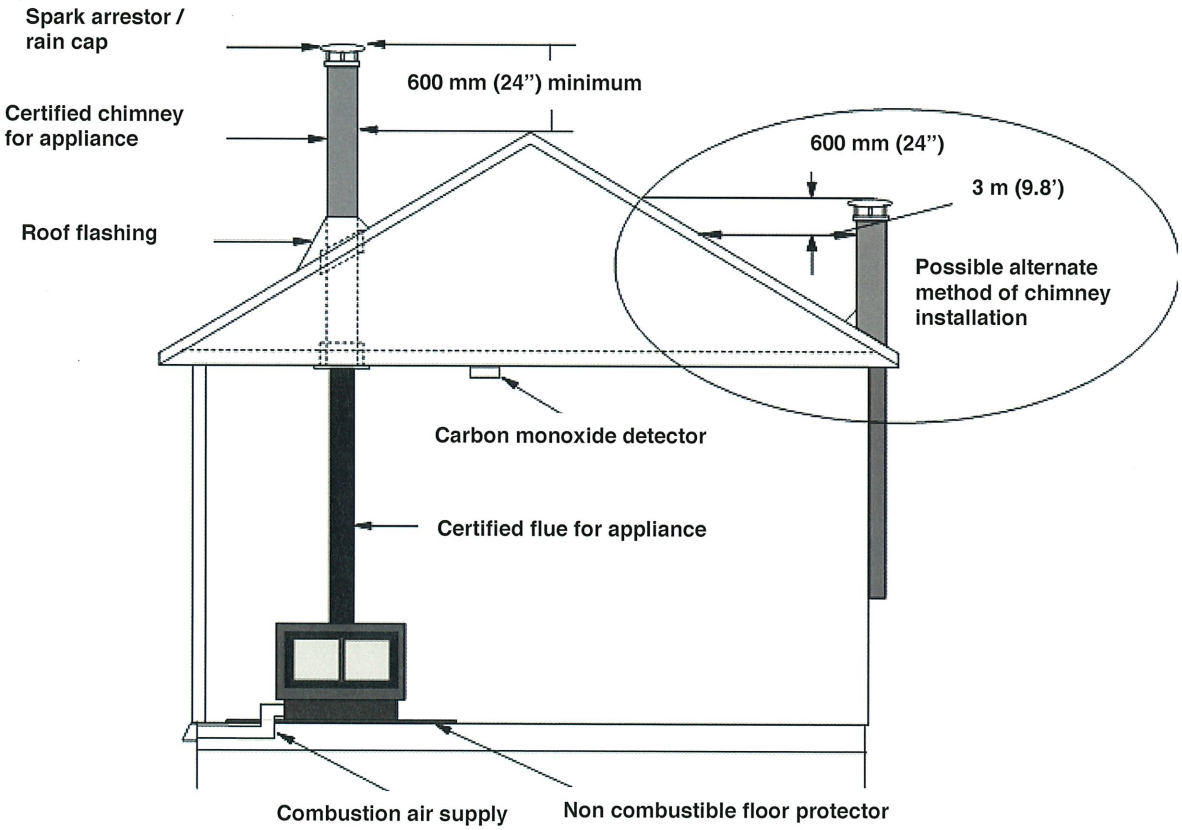


There is no minimum or maximum height requirement stated in the Alberta Building Code for bedroom windows in a basement development. It is recommended to have furniture built in to aid smaller children to access an escape route through a window in an emergency.

TYPICAL GUARD CONSTRUCTION



TYPICAL ARRANGEMENT FOR A WOODSTOVE INSTALLATION



PRIVATE GARAGE INFORMATION

(Both pages to be completed fully and attached to the Building Permit Application)

Owner Name: _____

Address: _____ Postal Code: _____

Phone:_____ Fax: _____

BUILDING SIZE: Length _____ X Width _____ X Wall Height _____

BUILDING FOUNDATION (select one)

- ☐ Concrete slab on grade. 55 sq. M. (592 sq. ft.) or less.
- ☐ Concrete slab on grade. Greater than 55 sq. m. (592 sq. ft.) (Engineering design and stamped drawing is required).
- ☐ Concrete frostwall on concrete strip footing with minimum 4' depth.
- ☐ Concrete pile and grade beam (Engineered design and stamped drawing is required).
- ☐ Other _____

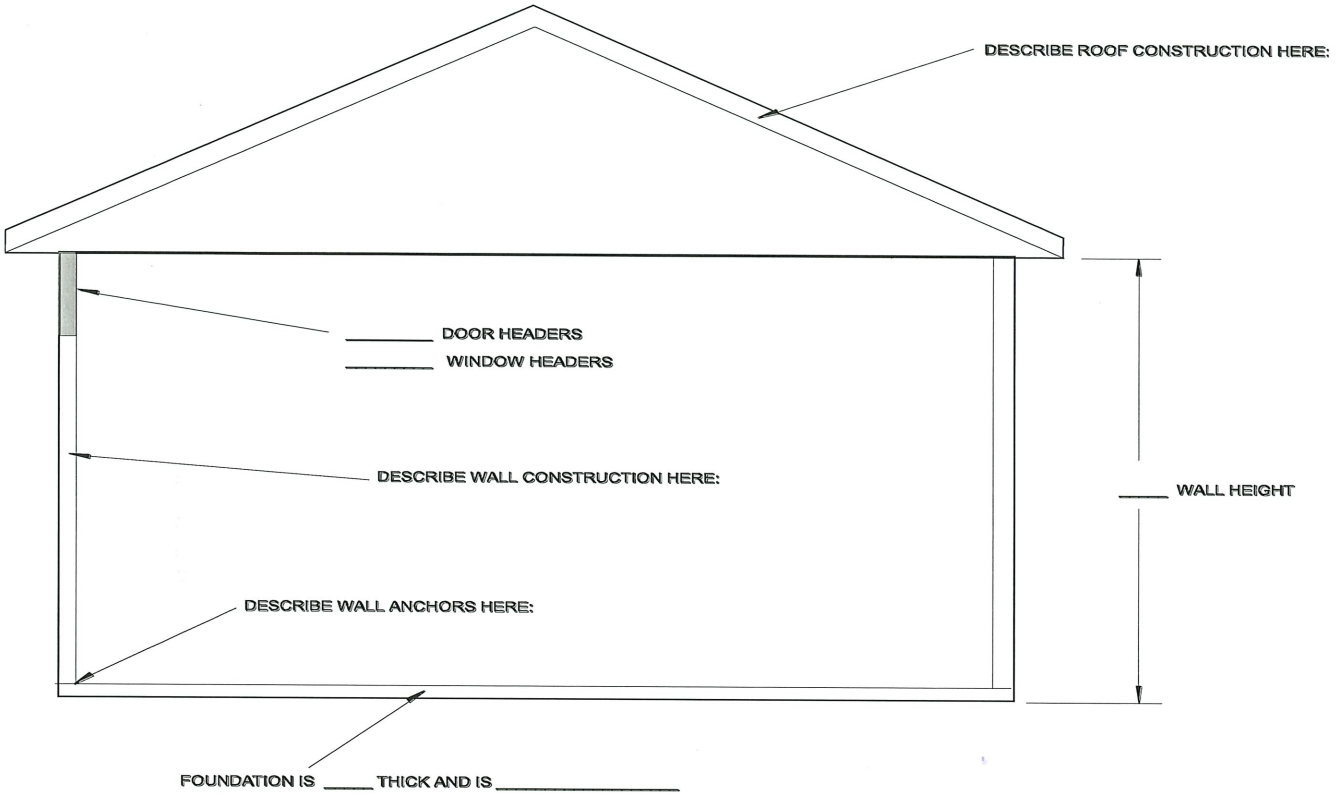
WALL CONSTRUCTION (fill in information or and select as required)

- ☐ 2 x __ wall studs _____" on center.
- ☐ 2 x __ double top plates.
- ☐ 2 x __ treated bottom plate.
- ☐ ½" anchor bolts maximum 8' apart.
- ☐ ___ windows.
- ☐ ___ man door(s) (minimum one required).
- ☐ 2 2 x ___ headers over windows and man door(s).
- ☐ Overhead door header. type ____ size _____.
- ☐ Wall sheathing ☐ 3/8" ☐ 7 /16" ☐ ½" ☐ O.S.B. ☐ Plywood ☐ Other: _____.
- ☐ I.C.F. wall construction ____ thickness _____ height.
- ☐ Siding: ☐ Vinyl ☐ Stucco ☐ Metal ☐ Other: _____.
- ☐ Electrical lighting: ☐ Interior ☐ Exterior.

ROOF CONSTRUCTION

- ☐ Engineered trusses _" on center.
- ☐ Site framed roof _____.
- ☐ Roof Covering: ☐ Asphalt shingles ☐ Metal ☐ Other __.
- ☐ Roof Sheathing ☐ 3/8" ☐ 7 /16" ☐ ½" ☐ O.S.B. ☐ Plywood ☐ Other _____.

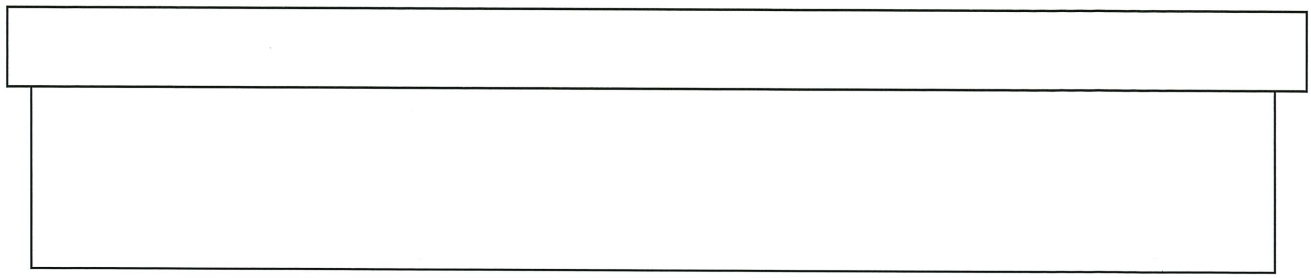
GARAGE, SHED AND ACCESSORY BUILDING SECTION VIEW



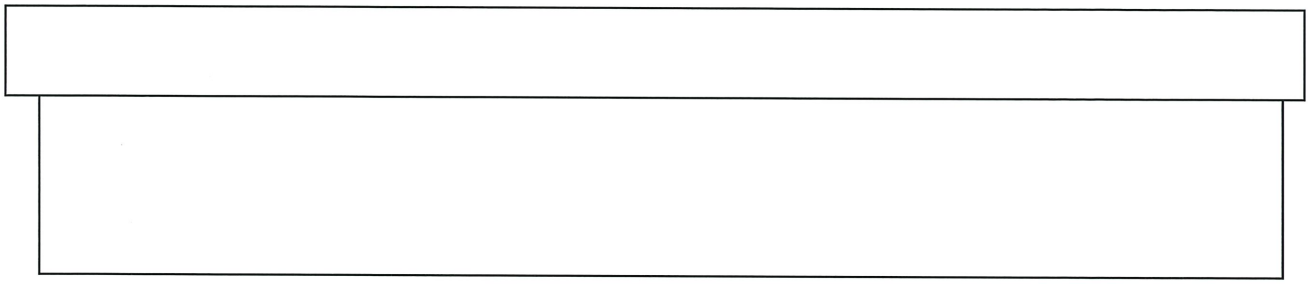
COMPLETE THIS DIAGRAM AS IT APPLIES TO YOUR CONSTRUCTION

1. DIMENSION THE WALL HEIGHT
2. INDICATE THE TYPE AND THICKNESS OF THE FOUNDATION
3. DESCRIBE THE BUILDING ANCHORS
4. IDENTIFY THE TYPE AND THE DIMENSIONS OF THE WINDOW AND DOOR HEADERS
5. COMPLETE THE ROOF SECTION SHOWING THE TRUSS WEBBING WITH ANY BRACING OR RAFTER CONSTRUCTION
6. INDICATE AND DESCRIBE PROVISION FOR ROOF VENTILATION, ANY INSULATION AND WALL FINISHES.

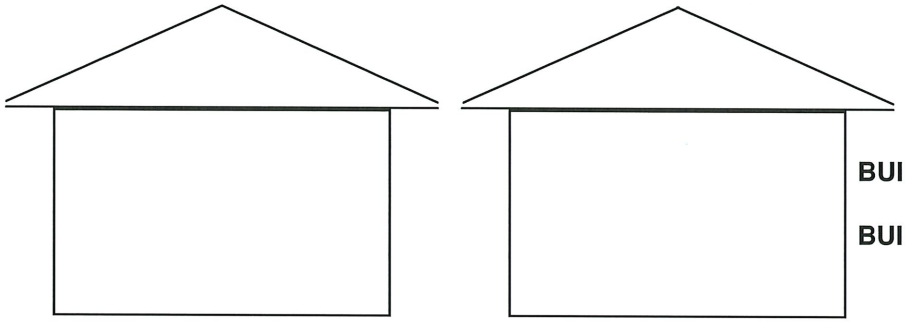
RELOCATED MANUFACTURED HOME



REAR VIEW



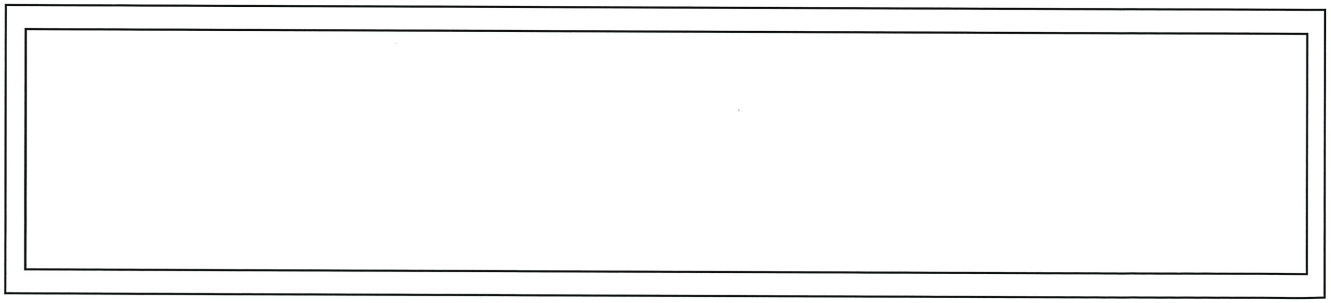
FRONT VIEW



BUILDING L. _____

BUILDING W. _____

LEFT VIEW RIGHT VIEW



PLAN VIEW

PLEASE COMPLETE THE VIEWS ON THIS PAGE AS ACCURATELY AS POSSIBLE. PLEASE INDICATE THE FOLLOWING:

1) THE APPROXIMATE SIZES AND LOCATIONS OF ALL ROOMS
2) THE APPROXIMATE SIZES AND LOCATION OF ALL WINDOWS AND DOORS
3) THE LOCATION OF ALL CARBON MONOXIDE ALARMS AND SMOKE ALARM

BULDING APPLICATION REQUIREMENTS CHECKLIST

Single Family Dwellings and Additions

- ☐ Site plan
- ☐ Floor plan(s)
- ☐ Foundation Requirements:
  - a full basement or frost wall foundation is acceptable
  - pile and grade beam or any other foundation will/may require a structural engineered stamped plan
- ☐ Elevation views
- ☐ Roof truss layouts
- ☐ Manufactured floor joist layouts
- ☐ Engineered stamped drawing for attached garage foundation if it is pile and grade beam

One Room Additions and Sunrooms

- ☐ Site plan
- ☐ Floor plan
- ☐ Foundation plan
- ☐ Elevation views
- ☐ Cross section view
- ☐ If it is a manufactured sunroom; supplier's full product information is required

Garages/Sheds/Storage Buildings

- ☐ Site plan
- ☐ Plan view
- ☐ 4 Elevation views
- ☐ Building cross section
- ☐ Roof truss information (optional could be submitted later)
- ☐ Foundation Requirements:
  - frost wall foundation or 55 sq. m. (596 sq. ft.) concrete slab are acceptable
  - any other foundation will require a structural engineered stamped plan
- ☐ Wall Requirements:
  - walls up to 12 feet in height are acceptable
  - walls over 12 feet will require an engineered stamped plan

BASIC BUILDING FOUNDATIONS

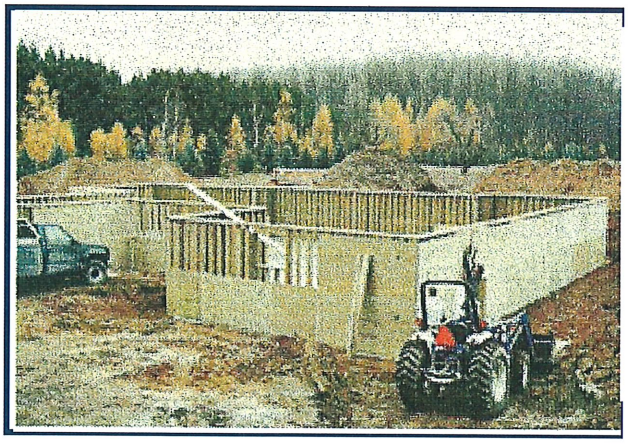
The examples illustrated on the following pages are not intended to be a complete list. They are however examples of the most common foundations currently being used for residential construction and is for information only.

Poured Concrete Wall on a Strip Footing

This is by far the most common foundation for new home construction. Minimum widths and thicknesses can vary so be sure to consult your local Building Safety Codes Officer if you are unsure about dimensions. In this example there will be a full basement on the opposite side of the wall. You can see in this picture a foundation that has been damproofed. The perimeter weeping tile is in place awaiting coverage by six inches (150 mm) of clean stone. This foundation does not require professional engineering.

Frost Wall Foundation

This foundation is generally used when either a crawl space will be used under a building or both sides of the wall will be backfilled. Most often it is constructed from poured concrete. It is called a frost wall because it is meant to extend a minimum depth into the ground to be below expected frost penetration. This foundation does not require professional engineering.



Preserved Wood Foundation (PWF)

This foundation has its walls constructed from below grade certified treated wood. It can have either PWF footings and floor or poured concrete footings and floor. Most of these foundations are built from engineered drawings. Care must be taken to ensure that the wood used in this construction is not confused with treated wood meant for above grade work like decks.

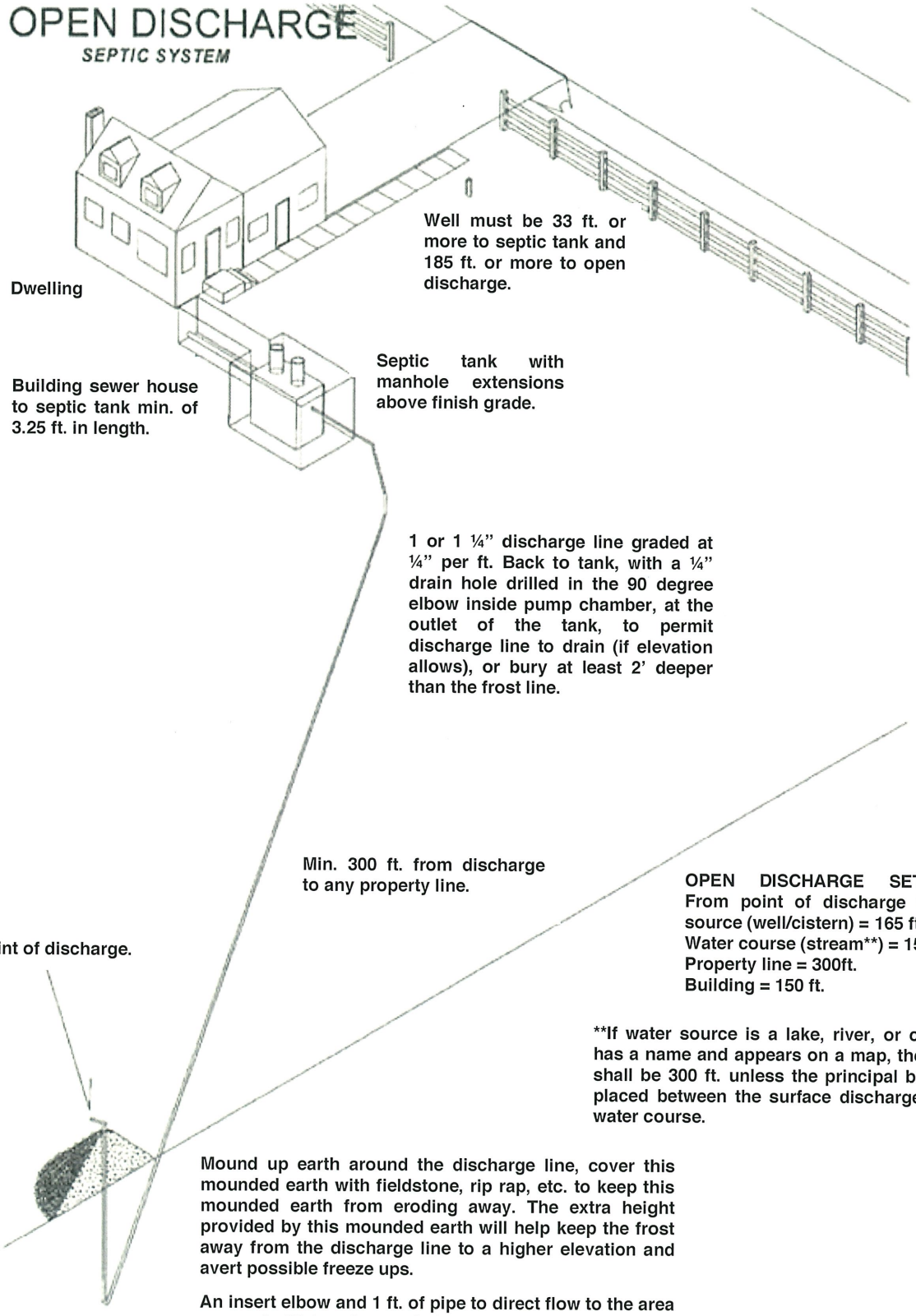
BASIC BUILDING FOUNDATIONS (cont'd)

Poured Concrete Slab Foundation

This foundation is made from poured concrete resting on the surface of the ground. The Alberta Building Code limits its size to 55 sq. m. or 592 sq. ft. This foundation type is permitted for single storey detached garages with no masonry veneer. It is not intended for houses, cabins or tall wall construction. Slabs that exceed the maximum size allowed or are used for buildings other than vehicle parking will require the slab plans to be designed and stamped by a professional engineer.

OPEN DISCHARGE

SEPTIC SYSTEM



Dwelling

Well must be 33 ft. or more to septic tank and 185 ft. or more to open discharge.

Septic tank with manhole extensions above finish grade.

Building sewer house to septic tank min. of 3.25 ft. in length.

1 or 1 ¼" discharge line graded at ¼" per ft. Back to tank, with a ¼" drain hole drilled in the 90 degree elbow inside pump chamber, at the outlet of the tank, to permit discharge line to drain (if elevation allows), or bury at least 2' deeper than the frost line.

Min. 300 ft. from discharge to any property line.

Point of discharge.

OPEN DISCHARGE SETBACKS:
From point of discharge to water source (well/cistern) = 165 ft.
Water course (stream**) = 150 ft.
Property line = 300ft.
Building = 150 ft.

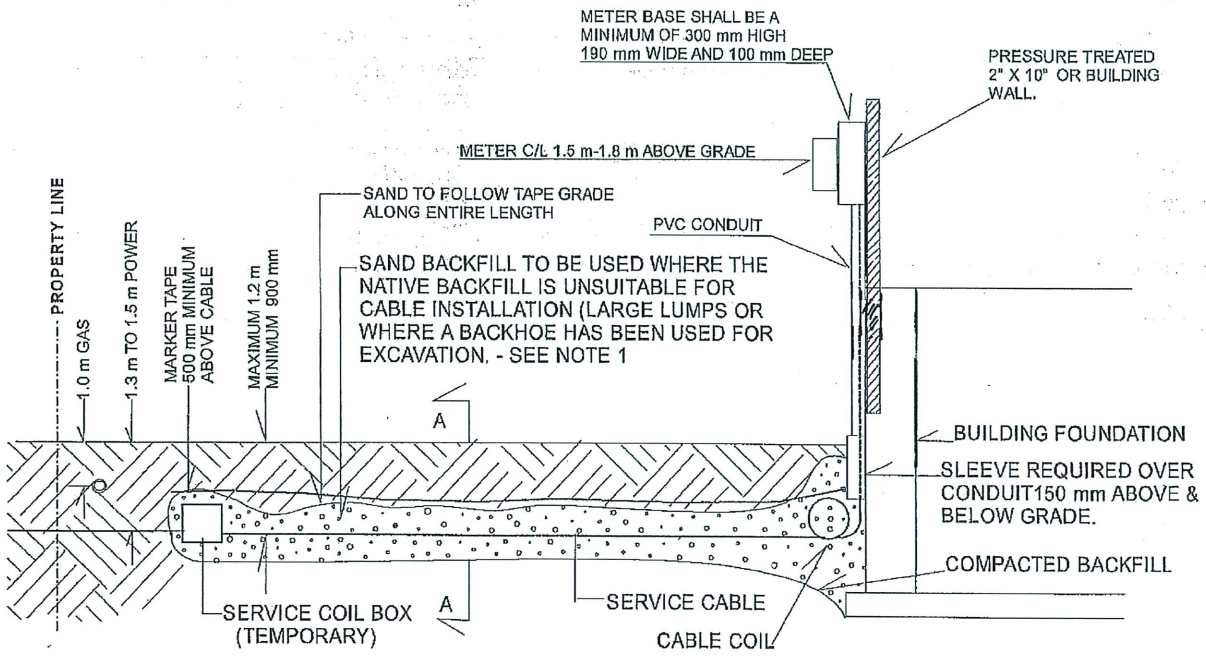
**If water source is a lake, river, or creek that has a name and appears on a map, the setback shall be 300 ft. unless the principal building is placed between the surface discharge and the water course.

Mound up earth around the discharge line, cover this mounded earth with fieldstone, rip rap, etc. to keep this mounded earth from eroding away. The extra height provided by this mounded earth will help keep the frost away from the discharge line to a higher elevation and avert possible freeze ups.

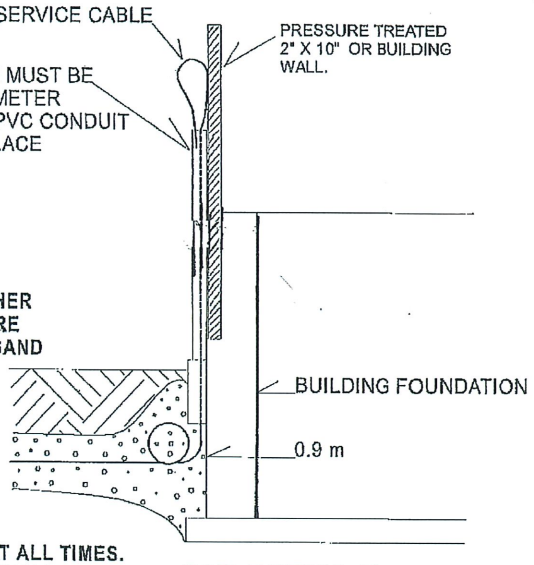
An insert elbow and 1 ft. of pipe to direct flow to the area covered with heaviest rock that has been laid down.

CUSTOMER CONNECTION GUIDE

TYPICAL UNDERGROUND RESIDENTIAL SERVICE INSTALATION



SECTION A - A

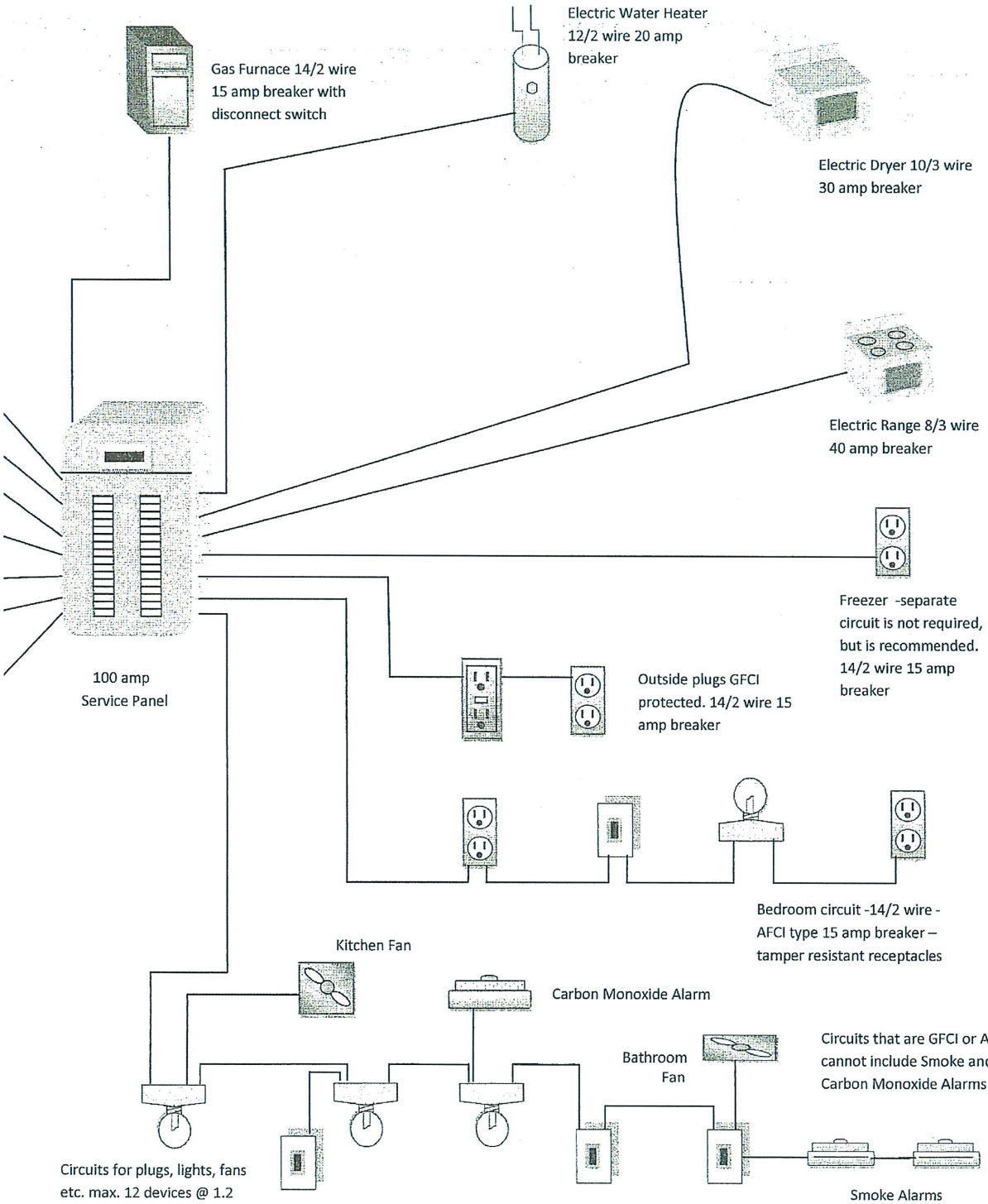


CABLE DETAIL IF NO METER SOCKET.

NOTES:

1. **DEPENDING ON CONDITIONS, WHERE A CHAIN TYPE TRENCHER IS UTILIZED, SAND MAY NOT BE REQUIRED. HOWEVER, WHERE EXCAVATION IS COMPLETED BY A HOE OR SIMILAR MEANS, SAND MUSTBE PROVIDED 150 mm ABOVE AND BELOW CABLE.**
2. **SERVICE CABLE TO BE MINIMUM 900 mm. MAXIMUM 1.2 m IN DEPTH.**
3. **INSTALATION MUST BE INSPECTED PRIOR TO COMPLETING BACKFILL (INSTALL CABLE, SAND AND FILL UP TO MARKER TAPE, THEN CALL FOR INSPECTION). IF MULTIPLE INSPECTIONS ARE REQUIRED, THERE WILL BE ADDITIONAL CHARGES.**
4. **CABLE MUST BE PROTECTED FROM MECHANICAL DAMAGE AT ALL TIMES.**
5. **INSTALLATIONS THAT ARE NOT IN COMPLIANCE WILL BE REJECTED.**

COMMON BRANCH CIRCUITS



Note! Smoke and Carbon Monoxide Alarms cannot be wired on a stand alone circuit and should be included in a circuit serving lights to ensure that the circuit is active.