Charter Township of Highland

205 North John Street, Highland, Michigan 48357 www.highlandtwp.net



General Information and Requirements for the Building Department

ATTENTION PROPERTY OWNERS OR PLUMBING, HEATING AND ELECTRICAL CONTRACTORS

It is unlawful for a property owner to pull a homeowner's plumbing, heating, or electrical permit and then Not do the work themselves.

It is also unlawful for a plumber, heating contractor, or electrician to work for a homeowner on the homeowner's permit. If contractors are working for homeowners they must obtain a permit in their company name in order to work on the job in question.

Please be advised that if the above statements are not adhered to, then tickets will be issued to the respective parties in violation.

Cordially,
Steven Tino
Building Official
Ordinance Department Supervisor

GENERAL INFORMATION

AND

REQUIREMENTS FOR BUILDING STRUCTURES

THIS SUPPLEMENT IS NOT OFFICIALLY PART OF THE BUILDING CODE OR ZONING ORDINANCE THIS IS ONLY AN EASY REFERENCE AID

Highland Township Office Hours Are:

Monday through Thursday 8:30 a.m. to 5:00 p.m.

Friday 8:00 a.m. to 4:00 p.m.

Visit us on the web at: www.highlandtwp.net

or

call 248-887-3791, Ext. #8

HIGHLAND TOWNSHIP BUILDING DEPARTMENT

Permits are **required** for the following:

- > Sheds
- Decks (attached or detached)
- Kennels
- Accessory Structures such as tree houses, pergolas, play structures, etc.
- Pole barns or barns
- Garages (attached or detached)
- Swimming pools (in-ground & above ground)
- Spas and Hot Tubs
- Additions including 2nd story additions, add-ons, dormers, screened porches, covered porches, etc.
- Fire repairs
- Changes in all egress ways from all buildings
- Roof repairs (structural and non-structural)
- > Remodels/repairs (interior and exterior) including siding, windows, doors, etc.
- Foundation upgrades/repairs
- Mobile homes
- House
- House and attached garage
- Modular Home
- > Pre-manufactured home and commercial structure
- Commercial building projects: new and existing (remodel and repairs)
- Industrial building projects: new and existing (remodel and repairs)
- All plumbing, heating and electrical work (new and repair)
- > Signs
- > Fences
- Satellite dish permits through the Planning Department

This is a general list of structures that need permits to erect or build. You should consult with the Building Department if you have any doubt about the need for a permit for your project. Please feel free to direct any questions that you might have to the Building Department at (248) 887-3791, ext. #8.

NOTE: Demolition of any structure also requires a Demolition Permit

Requirements When Applying For A Building Permit

The following list includes the required paperwork that must be submitted at the time of application or the application will Not be accepted. If the Zoning Board of Appeals granted a variance the approved minutes must accompany the application or it will Not be accepted. All of this paperwork is part of the construction documents to be kept on file.

- 1. Planning review and approval of placement: The Planning Department will be able to tell you the setbacks and Zoning requirements for your property. This information is required in order to draw your scaled plot plan for the Planning & Zoning Department's review. If you cannot meet all zoning requirements you cannot be issued a building permit. You may apply for a variance request through the Planning Department. They will supply you with additional information and the meeting schedules of the Zoning Board of Appeals. If your variance is granted then you can apply for your building permit at the Building Department once the approved minutes are available.
- 2. Scaled Plot Plan: You are responsible for the accuracy of your plot plan as well as any other plans submitted. If you are building within 5ft of your lot line, you are required to use a Certified Line Survey for your plot plan. This provision may be waived if you can locate your Capped Survey Markers. The scaled plot plan must be stamped approved by the Planning Department before the building permit packet can be submitted to the Building Department.

INCLUDE:

- Building Envelope
- > Streets and driveways with labels
- Lot number, subdivision, and parcel ID number
- Any proposed and existing buildings marked as such. Show distance of all new buildings/ additions or accessory structures to the property lines and to each other.
- Indicate location of the well and the septic field and tank and the distance from any new construction and existing structures.
- Indicate any existing easements and utilities (overhead & underground).
- Indicate any lakes, streams, ponds, and/or wetlands.

If you have any questions regarding your plot plan, please feel free to contact the **Planning & Zoning Department at 248-887-3791 ext. #2.**

- 3. <u>Grading Plan:</u> A scaled drawing of the building site showing all buildings existing and proposed and the direction of surface water runoff of the site. This applies to all new construction. This may be included on your scaled plot plan.
- 4. <u>Subdivision Association Review:</u> Please include a copy of your Association Review if you plan construction within a subdivision that has an active association. They may have restrictions other than the ones enforced by the Township.
- Perk Test and Well Permits: Contact Oakland County Health Division Location: the North Office Health Center Building at 1200 N. Telegraph Phone: General Information 248-858-1312

Proposed new house construction requires an approved perk test. Proposed additional bedrooms require existing septic system review by the Health Department. The approved perk test must be included with your building permit application; check to make sure the number of the permit is clearly marked on the perk test.

6. <u>Municipal Water Systems:</u> Contact the Oakland County Water Resources Commission Phone: 248-858-1110

Location: 2636 Dixie Hwy, Waterford, MI 48328

Some subdivisions have municipal water systems; water connection permits are required.

7. Driveway Approach Permit: Contact Oakland County Road Commission.

Citizen Service Department Phone: 248-858-4804

Permits Phone: 248-858-4835

Location: 2420 Pontiac Lake Road, Waterford, MI 48328

If your new house will be built on property adjoining an Oakland County Road, you will need a

Driveway Approach Permit when you apply for your building permit.

8. Soil Erosion Permit: Contact Oakland County Water Resources Commission.

Phone: 248-858-5389

Location: 1 Public Works Dr Bldg 95 West, Waterford, MI 48328

When building a new house, addition, or accessory structure on property within 500' of a lake, stream or sub aqueous area, it is required to have the Drain Commission review the location. We require a copy of the Soil Erosion Permit when applying for a building permit.

9. <u>Blueprints – Residential</u>: See page 8 for requirements

<u>Two (2) complete sets</u> of blueprints or drawings must be submitted when applying for a residential building permit. Plan on <u>approximately Two (2) Weeks for review</u>. One set of prints will be kept on file in the office and the other will be returned to you to be kept on site when you pay for your permit. The Building Official may note comments or corrections on your prints. Please review them at once. Houses 5,000-sq. ft. and over require an Architectural Stamp on the prints.

<u>PLEASE NOTE:</u> For home remodel/renovations submit a <u>floor plan of existing structure and a separate floor plan of the intended structure after renovations.</u>

- **10.** <u>Michigan Uniform Energy Code:</u> We accept REScheck and Energy Star software program work sheets for compliance to the Michigan Energy Code 2015. Just google Rescheck or EnergyStar
- 11. <u>Commercial</u> projects require <u>two (2) sets of prints</u> stamped by an Architect or Engineer and take <u>approximately Three (3) to Four (4) Weeks for review</u>. Licensed Contractors must pull all Mechanical, Plumbing, and Electrical Permits.

<u>PLEASE NOTE:</u> COMMERCIAL OR MULTI-LIVING: Exterior Lighting will Require a Planning Review through the Planning Department

12. Proof of Ownership:

<u>If you've owned</u> your property <u>for less than a year</u> please supply a copy of your Deed, Land Contract, or Memorandum of Land Contract when making application. A Purchase Agreement, Property Transfer Affidavit, or tax bill are Not acceptable as proof of ownership.

13. Written Authorization from Property Owner

Contractors must supply a written authorization from the property owner stating that the contractor may pull permits on their property for this project. A copy of the signed contract will suffice.

- 14. Legible Copies of Contractors Licence, Driver's License, and proof of Insurance.
- **15.Notarized letter** for agent/representatives to pull permits on behalf of the licensee.

Additional Information Regarding Building Permits

1. Mailbox Placement: Before placing a mailbox on your property call the Highland Township Postmaster at 248-887-4722.

2. Building Permit Fee:

The building permit fee is based on the value of the proposed construction as determined by the Building Official during review. This fee must be paid when picking up your approved permit. You may pay for your building permit with cash, check, or credit card. However, the Township does not accept two party checks. The building permit does not cover Electrical, Plumbing or Heating work that may be part of the same project.

Note: When remodeling existing structures and you discover rotted materials, stop and call the Building Official before proceeding. If you continue without permission from the Building Official your permit will be rescinded and all fees will be forfeit.

If alterations exceed 50% of the structure it will be considered a new build and must be brought to current codes.

3. Posting a Cash Permit Deposit (Bond):

You will be required by Highland Township Ordinance that you submit a cash deposit when obtaining your building permit. Under the section called **Permit Deposit Information** (page 11) is an explanation of how the cash deposit may affect you. **Keep this information with your records.** When the job is completed and you have received your Certificate of Occupancy, your deposit will automatically be returned to you, minus refuse collection fee for new construction or any additional inspection fees or outstanding bills. Your refund check will be sent to you by mail approx. thirty (30) days after your Certificate of Occupancy is issued.

4. Issuance of Street Number:

This is done at the time of the review of the building permit application. When you obtain your building permit your street number will be issued and printed on your building permit.

5. Obtaining Electrical, Plumbing, and Mechanical Permits:

These are **separate permits** from the building permit. The building permit only covers the structural work and does not permit you to do electrical, plumbing, or mechanical work. To obtain any of these additional permits fill out the applications describing exactly what you will be installing in each of these categories. A permit fee will be charged for each permit separately.

Homeowners doing their own work can pull a Homeowners Permit. If a contractor is doing the work they must obtain the permit in their company name in order to work on the job in question.

6. All Contractors: Please note the following procedures and policies.

- > Work done Prior to Pulling a Permit is subject to Double Fees.
- > Building permits must be applied for In Person.
- Mechanical, Electrical, and Plumbing permits may be applied for by mail.
- ➤ When Pulling a Permit **Please** observe the following for **Each Application**:
 - 1. Include Building Permit # if applicable, address, and job description/items.
 - 2. Enclose a copy of contractor's license every time.
 - 3. Enclose a copy of <u>contractor's driver license **every time**</u>.
 - 4. Contractor must sign and date application
 - 5. Agents/Representatives must submit a currently dated notarized letter on company letterhead granting permission to the agent to pull permits for the licensee.

Additional Requirements for Modular Homes:

- Minimum square footage is 1,000 square feet
- ➤ An approval sticker from the State of Michigan must be affixed to the home □ Building System Approval Report from the Department of Labor of Michigan □ HUD approved homes are required to go to the Zoning Administrator for review.

Demolition requirements:

- Proof of property ownership
- > Two plot plans to scale
- Proof of Electrical Service disconnect from Utility Company
- Proof of Gas Service disconnect from Utility Company
- Proof of septic cleanout from the septic company
- Proof of well abandonment from Oakland County Health Division
- ➤ Soil Erosion Permit from Water Resource Commission (within 500' of water, see page 6)

PLEASE NOTE: A set of Approved prints Must be on site for All inspections.

NO building permits accepted by Mail / Fax / Electronic Mail

Fees for permits are Doubled if work has started Prior to Obtaining said Permit

BLUEPRINT REQUIREMENTS:

- Reverse plans will Not be accepted.
- > Structures 5,000 sq ft or larger must have an Architectural Stamp on the prints.
- ➤ Blueprints or drawings Must be drawn **To Scale** no less than one quarter inch equals one foot (1/4"=1")
- A. Plot Plan: To Scale

Please see the description on page 5 and the example in Appendix A.

B. **Elevations: To Scale** Example in Appendix A

Elevations are drawings that show the outside of the structure with dimensions listed. These drawings must be scaled so that all elements will appear in true relationship to each other. Generally the various elevations are connected to the site by listing them according to the compass directions they face. When plans are not designed for a given location, the names FRONT, REAR, LEFT SIDE and RIGHT SIDE are used.

- 1. Complete roof design on each view given
- 2. Include all doors and windows showing dimensions to openings from corners.
- C. Foundation Plan/Basement or Crawl Area: To Scale: Example in Appendix A Foundation plans are similar to floor plans and are often combined with basement plans. The footings, if shown, are represented by a dotted line since it is assumed that the basement floor is in place and that the grade covers the footings on the outside. Indicate the following:
 - 1. Foundation width and dimensions
 - 2. Supporting pads with dimensions

D. Floor Plan: To Scale Example in Appendix A

Floor Plans would indicate the exact room dimensions used for each room and must include the following:

- 1. Exterior dimensions
- 2. Room sizes
- 3. Location and sizes of interior partitions, doors, windows, and stairs 4. Plumbing fixtures and various appliances and utility installations

E. Sectional View: To Scale Example in Appendix A

Sectional view should indicate foundation, footings, wall and roof composition, showing dimensions.

ORDER OF REQUIRED INSPECTIONS: Must have Approved Prints on site for All Inspections

- Water Service for Community Wells only
- Footings (rail) prior to pouring
- Backfill prior to basement being backfilled
- Trench footings prior to pouring concrete
- Underground Plumbing prior to covering
- Underground Heating prior to covering
- Underground Electrical prior to covering
- Open Deck on all crawl spaces in additions and new homes
- Rough Plumbing prior to insulation
- Rough Heating prior to insulation (fireplace roughs must incl photos of insulation before drywall)
- ➤ Rough Electrical prior to insulation
- Insulation prior to pouring cement slab (walkout basements only)
- Compaction prior to pouring cement slab
- ➤ Rough Framing Prior to insulation, Must have Truss Drawings on site
- Masonry Wall Flashing prior to laying brick
- Insulation before drywall
- Drywall Screw Pattern before mud and tape
- Final Plumbing (after water meter/transponder is installed if applicable)
- Final Heating
- Final Electrical
- Final inspection by Fire Marshal (for commercial work only)
- ➤ Final Building / Residential for a Certificate of Occupancy (C of O) and Bond Release (gutters and downspouts required, blown-in insulation in attic inspected at final, everything required except carpeting)
- Final Building / Commercial Must have site work by engineer completed and memo from Planning & Zoning before either Temporary Certificate of Occupancy (TCO) or C of O can be issued

Importanat Notices Regarding Inspections:

• It is <u>mandatory</u> that <u>proof of final septic system and water well approval</u> from Oakland County Health Division is provided to the Building Department prior to the final building inspection.

- It is **mandatory** that the Insulation Certificate issued by the Insulation Installer be provided to the Building Department prior to the final building inspection.
- If the above information is not submitted prior to the request for the final building inspection the final building inspection will Not be done.
- Call before 2:30pm to schedule inspections. If possible the inspection will be scheduled the next day. You must have your permit number and address when you call for an inspection. All final plumbing, heating, and electrical inspections must be approved prior to the final building inspection.

BUILDERS AND HOMEOWNERS:

Please! Give the subcontractors working for you the building permit number and site address.

An approved set of prints must be on the building site at the time of Every inspection.

LIST OF ITEMS THAT MUST BE COMPLETED FOR THE ISSUANCE OF A TEMPORARY CERTIFICATE OF OCCUPANCY FOR RESIDENTIAL USE

- The outside of home completely finished.
- All decks and porches to be completed.
- If there are no decks on prints then the exterior doors must have guard rails across their openings.
- The electrical must be completely done.
- > The heating (mechanical) must be completely done.
- For the plumbing there must be water (well or public supply), hot water, kitchen sink, one completed bathroom with a tub or shower and a locking door for privacy.
- > Doors on all the bedrooms including trim and hardware.
- > All handrail and guardrails must be installed.
- Water well approval from Oakland county Health Department.
- > Septic system approval from Oakland County Health Department.
- For blown-in or sprayed insulation certification from the installer.
- Address numbers on the House.

This list is an attempt to make sure that all safety issues are addressed before occupancy of a residential unit. However, completion of this list does not insure that all safety issues will necessarily be addressed for a specific site. The code states: "...that such portion or portions (of a building) shall be occupied safely prior to full completion of the structure without endangering life or public welfare." This is entirely up to the inspector at the time of inspection.

Direct all questions you might have regarding TCOs to the Building Official.

Note: All commercial and industrial projects must be inspected for a TCO by the building inspector, for safety items and safe access to the building or to certain areas of the building by the public. There is no set standard list of inspection items for these types of projects.

Building Permit Deposit (Bond) Information

REASON FOR POSTING A PERMIT DEPOSIT:

This deposit is required by the Township to assure completion of your project (including site plan) within a reasonable period of time in accordance with Township and State Codes (the BOCA Building Code with State amendments). Any interest earned on the deposit shall be the property of the Township. This Permit Deposit covers the cost of extra inspections that may be incurred and the collection of the Township refuse fee. (Note: No refuse will be collected until you receive your TCO or C of O.)

REFUND OF PERMIT DEPOSIT:

As the applicant for the Building Permit **you are responsible to call** the Building Department **for required inspections** and oversee the project through completion. When all inspections are approved you will receive a Certificate of Occupancy (C of O). At this time your permit deposit will automatically be returned to you less extra inspection fees, if unpaid, and less Township refuse fee if applicable. A refund will only be made when the project, including site plan, is completed. The refund check will be mailed approx. thirty (30) days after your final building inspection. (If you have not received your check within this time period please call the Building Department and inquire.)

FORFEITURE OF PERMIT DEPOSIT:

Your permit must Not be allowed to expire until completion of the project and a Certificate of Occupancy is issued or your permit deposit will be forfeited. **NOTE: According to the Building Code your site plan is part of the construction documents and therefore is part of your permit.** It is necessary to obtain a Certificate of Occupancy prior to occupying or using your new construction, as noted in Township Ordinance Chapter 7, Buildings and Building Regulations. Not doing so would result in **forfeiture** of your permit deposit.

TEMPORARY CERTIFICATE OF OCCUPANCY:

In some cases, when a building is near completion, the Building Official, at your request, may issue a Temporary Certificate of Occupancy (TCO). The Building Official would then set a time limit for you to complete the unfinished items and call for the final inspection.

EXPIRATION OF A BUILDING PERMIT:

A Building Permit expires 6 months (180 days) from the date of issuance. However, if you can show any progress on your project within that time, by calling for an inspection and getting approval from the Building Inspector, your Building Permit will remain active for one full year from the issuance date. You are responsible for contacting the Building Department within the six months to report your construction status. If progress has not been made within the six months (180 days) allowed, your permit will be terminated and your permit deposit forfeited.

RENEWAL OF A BUILDING PERMIT:

At the end of 6 months (180 days) or a full year when your permit is about to expire but your project is not yet completed, you must apply for a permit renewal in writing. There is a fee of at least one half (1/2) the original permit fee. A renewed permit will expire 6 months from the date of issuance. The original permit deposit may be carried over to the new permit if it hasn't already been forfeited.

The following are the names of the Highland Township Inspectors. You may contact them through the Highland Township Building Department at:

1-248-887-3791, EXT. #8

BUSINESS HOURS

Monday through Thursday 8:30a.m. to 5:00p.m.

Friday 8:00a.m. to 4:00p.m.

STEVEN TINO

Building Official

GREG CALME

Electrical Inspector

ROBERT LUTTMAN

Heating Inspector

JEFFREY DUNCAN

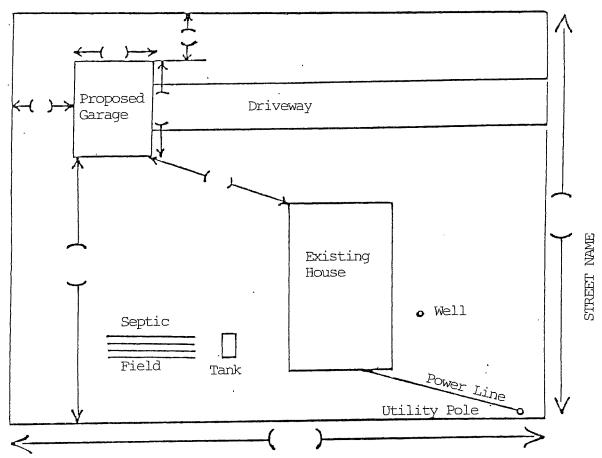
Plumbing Inspector

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APPENDIX A

THE FOLLOWING ITEMS ARE IN THE APPENDIX

- 1. DECK FLOOR PLAN
- 2. SECTIONAL OF A DECK
- 3. PLOT PLAN OF PROPERTY
- 4. TYPICAL SECTIONAL VIEW OF A HOUSE
- 5. FLOOR PLAN OF A HOUSE
- 6. BASEMENT PLAN OF A HOUSE
- 7. FOUR ELEVATION VIEWS OF A HOUSE



Indicate all dimensions between parentheses in drawing MUST BE DRAWN TO SCALE

SEE ZONING & PLANNING DEPARTMENT

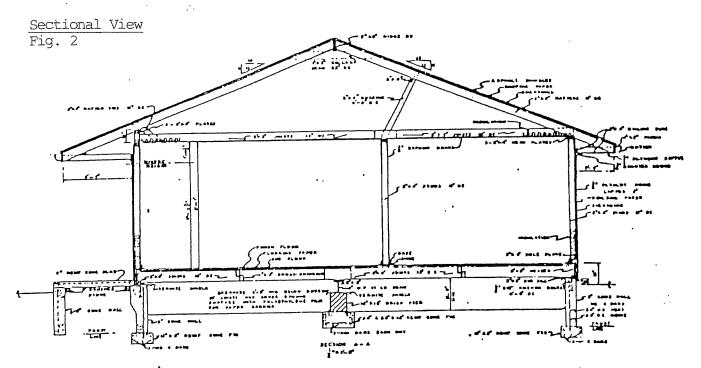
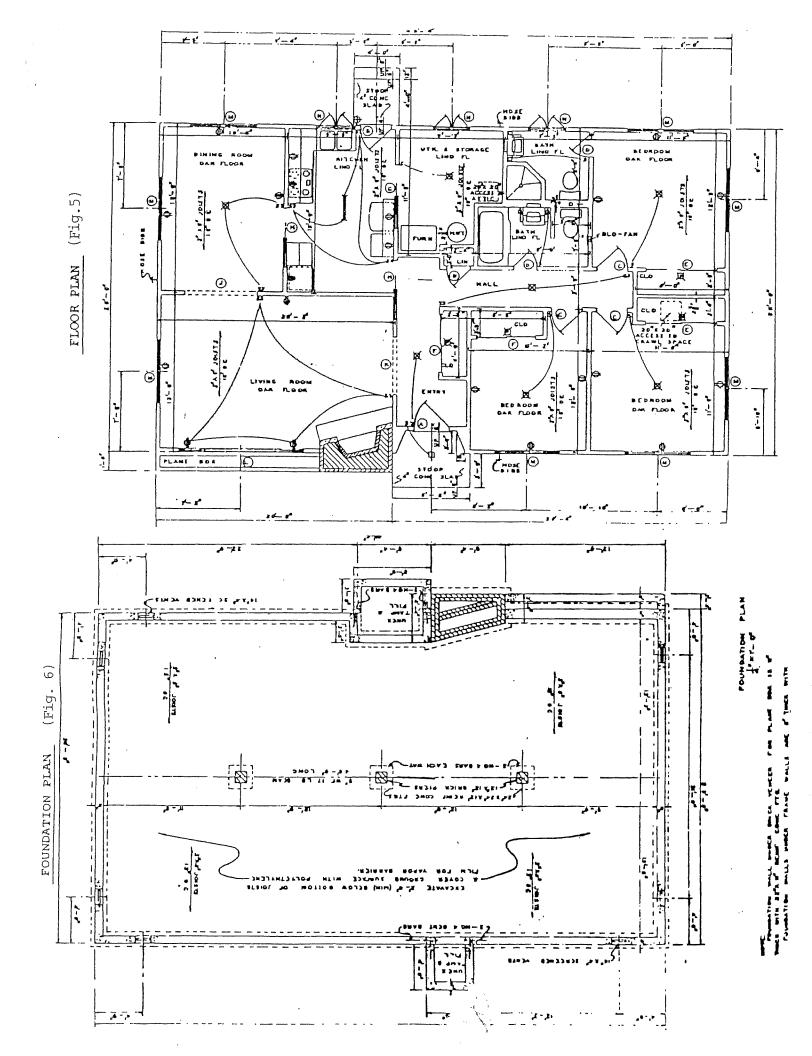
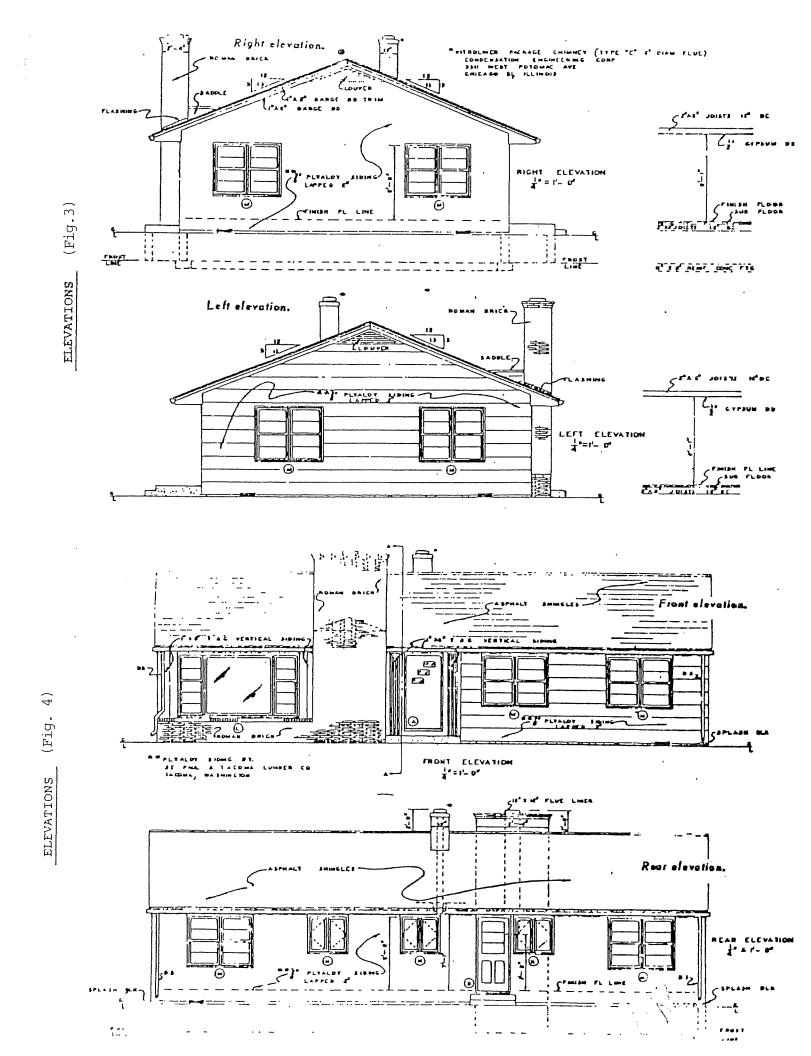
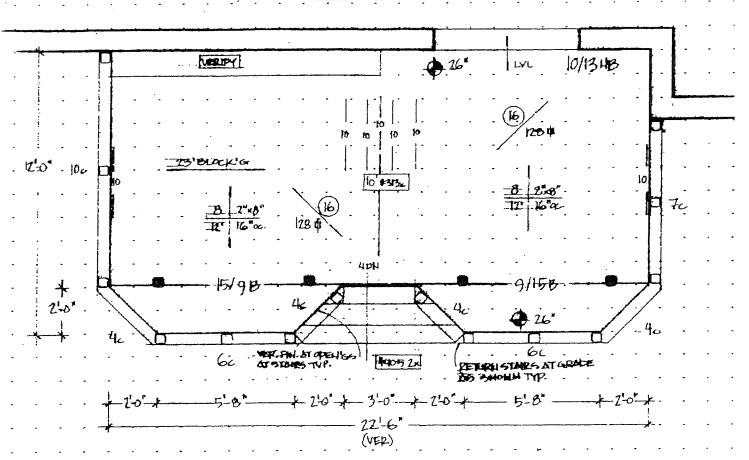


Fig. 3-7. Section vir.— A.A. See front advantage, Fig. 3-5, for A.A location, Note that this part of the original plan drawing was done to a scale of \$/2" = 1" = 8".





EXIGTIG RESIDENCE



DECK FLOOR PLAN

Example (Can't use for your drawings)

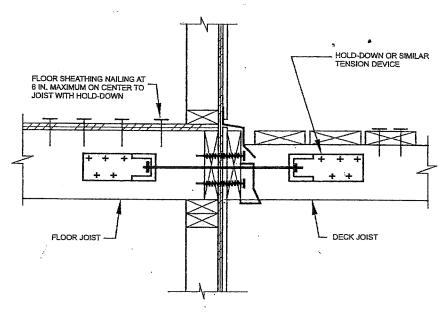
2-xizeded under 30 Et 1-every 15 Kt

TABLE R502.2.2.1 FASTENER SPACING FOR A SOUTHERN PINE OR HEM-FIR DECK LEDGER AND A 2-INCH NOMINAL SOLID-SAWN SPRUCE-PINE-FIR BAND JOIST^{-1,9} (Deck live load = 40 psf, deck dead load = 10 psf)

JOIST SPAN	6' and less	6'1" to 8'	8'1" to 10'	10'1" to 12'	12'1" to 14'	14'1" to 16'	16'1" to 18'
Connection details	On-center spacing of fasteners ^{d, e}						
1/2 inch diameter lag screw with 15/32 inch maximum sheathing ²	30	23	18	15	13	11	10
$^{1}\!/_{2}$ inch diameter bolt with $^{15}\!/_{32}$ inch maximum sheathing	36	36	34	29	24	21	19
1 / ₂ inch diameter bolt with 15 / ₃₂ inch maximum sheathing and 1 / ₂ inch stacked washers ^{b, h}	36	36	29	24	21	18	16

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm. 1 pound per square foot = 0.0479kPa.

- a. The tip of the lag screw shall fully extend beyond the inside face of the band joist.
- b. The maximum gap between the face of the ledger board and face of the wall sheathing shall be 1/2".
- c. Ledgers shall be flashed to prevent water from contacting the house band joist.
- d. Lag screws and bolts shall be staggered in accordance with Section R502.2.2.1.1.
- e. Deck ledger shall be minimum 2 × 8 pressure-preservative-treated No.2 grade lumber, or other approved materials as established by standard engineering practice.
- f. When solid-sawn pressure-preservative-treated deck ledgers are attached to a minimum 1 inch thick engineered wood product (structural composite lumber, laminated veneer lumber or wood structural panel band joist), the ledger attachment shall be designed in accordance with accepted engineering practice.
- g. A minimum 1 × 91/2 Douglas Fir laminated veneer lumber rimboard shall be permitted in lieu of the 2-inch nominal band joist.
- h. Wood structural panel sheathing, gypsum board sheathing or foam sheathing not exceeding 1 inch in thickness shall be permitted. The maximum distance between the face of the ledger board and the face of the band joist shall be 1 inch.



For SI: 1 inch = 25.4 mm.

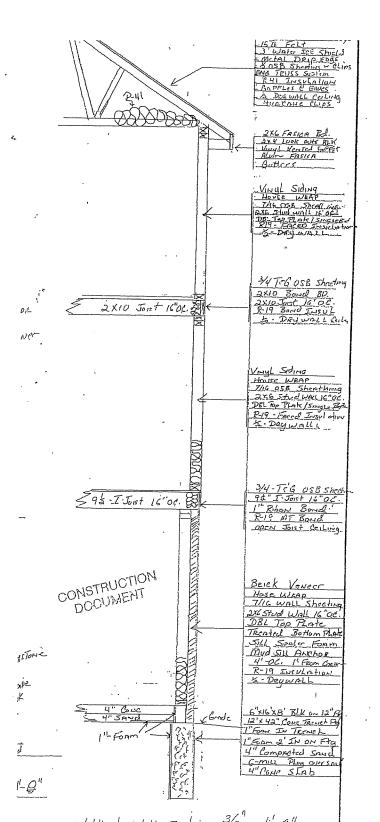
FIGURE R502.2.2.3
DECK ATTACHMENT FOR LATERAL LOADS

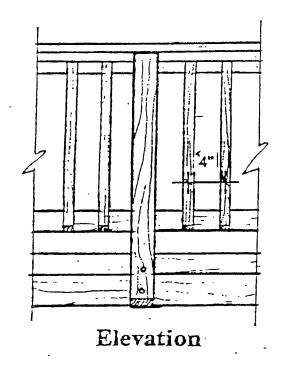
R502.3 Allowable joist spans. Spans for floor joists shall be in accordance with Tables R502.3.1(1) and R502.3.1(2). For other grades and species and for other loading conditions, refer to the AF&PA Span Tables for Joists and Rafters.

R502.3.1 Sleeping areas and attic joists. Table R502.3.1(1) shall be used to determine the maximum allowable span of floor joists that support sleeping areas and

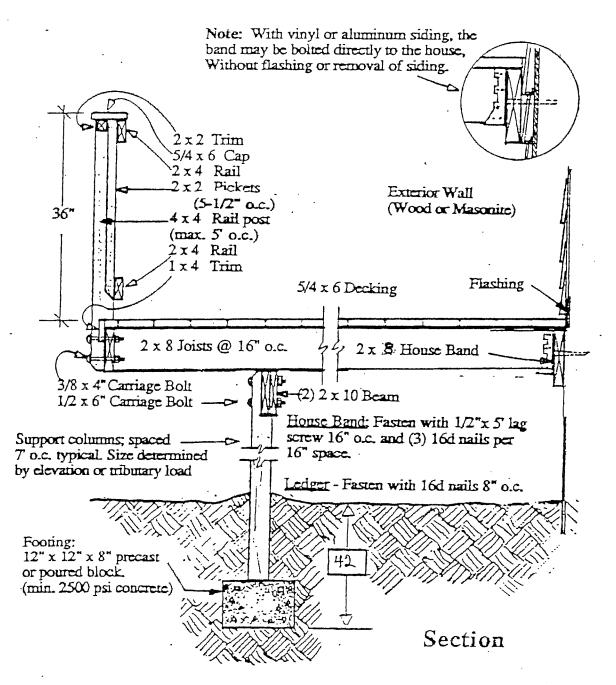
attics that are accessed by means of a fixed stairway in accordance with Section R311.7 provided that the design live load does not exceed 30 pounds per square foot (1.44 kPa) and the design dead load does not exceed 20 pounds per square foot (0.96 kPa). The allowable span of ceiling joists that support attics used for limited storage or no storage shall be determined in accordance with Section R802.4.

Example of Wall & Ruif Section





Note: See plan for specific details or special loading conditions.



TYPICAL DECK AND RAIL DETAILS