

SCREEN PORCHES  101 DEVELOPMENT RESOURCES, INC. 320-226.5189 www.101developmentresources.com	
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While every attempt has been made to insure the correctness of this handout, no guarantees are made to its accuracy or completeness. Responsibility for compliance with applicable codes and ordinances falls on the owner or contractor. For specific questions regarding code requirements, refer to the applicable codes or contact 101 Development Resources, Inc.

Permit Requirements

Building permits are required for construction of all screen porches and for conversion of a screen porch to a four-season porch. Porches must also meet the land use and setback requirements of the Zoning Code. Zoning questions should be directed to the Planning and/or Zoning Department of your jurisdiction.

Permit Fees

The building permit fee is based on the project's construction cost and square footage, and is designed to cover the cost of a plan review and the field inspections that will be done during construction. The building inspections department does the plan review in order to spot potential problems or pitfalls that may arise. The plan reviewer will make notes on the plan for your use. Construction inspections will be done during the project to insure code compliance and the materials you use are installed safely. The plan review and inspections are not designed to be a guarantee of the work, but are done to provide a reasonable degree of review and observation so the project will be successful, safe, and long lasting.

Information Necessary When Applying for a Building Permit

Information necessary for the Inspections Department to do a proper job of plan review and to help the project go smoothly are as follows:

1. Completed application for permit
2. Survey
3. Floor plan
4. Section
5. Elevation

Remember the purpose of the plan review is for the inspector to use his or her experience to inform you of potential problems or make suggestions, so the more information shown on the plans, the more likely your project will be successful.

Minimum Plan Details Necessary for a Proper Plan Review

The following text and sample drawings show the minimum detail expected so the permitting process can proceed smoothly. Plans do not need to be professionally drawn, but should include all of the information requested. The application for permit can be filled out at the time you drop off your plans. Permits can be handled by mail by calling the Inspection Department.

- ❖ Submit two copies of a certificate of survey. The City may have one on file.

The survey must be drawn to scale indicating the lot dimensions, the location and size of the existing structure(s), and the location and size of the proposed structure. Indicate the setbacks from property lines of the existing and proposed structure(s). Include any septic system areas or well locations, if applicable.

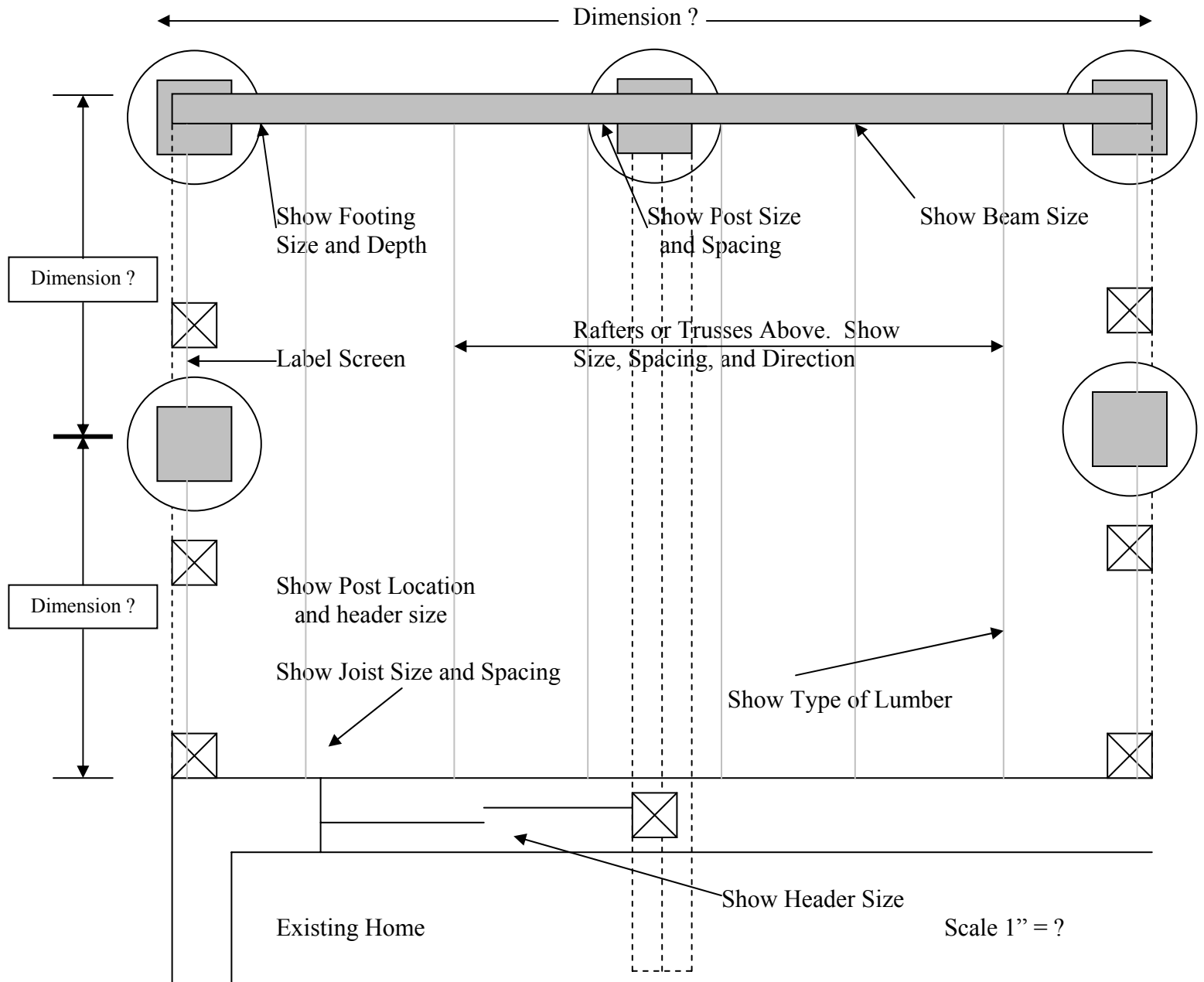
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- ❖ Submit two copies of the floor plan showing proposed design and materials. See **sample** below.

All drawings need to be drawn to scale and the scale should be shown on the drawing. Floor plans should include the following:

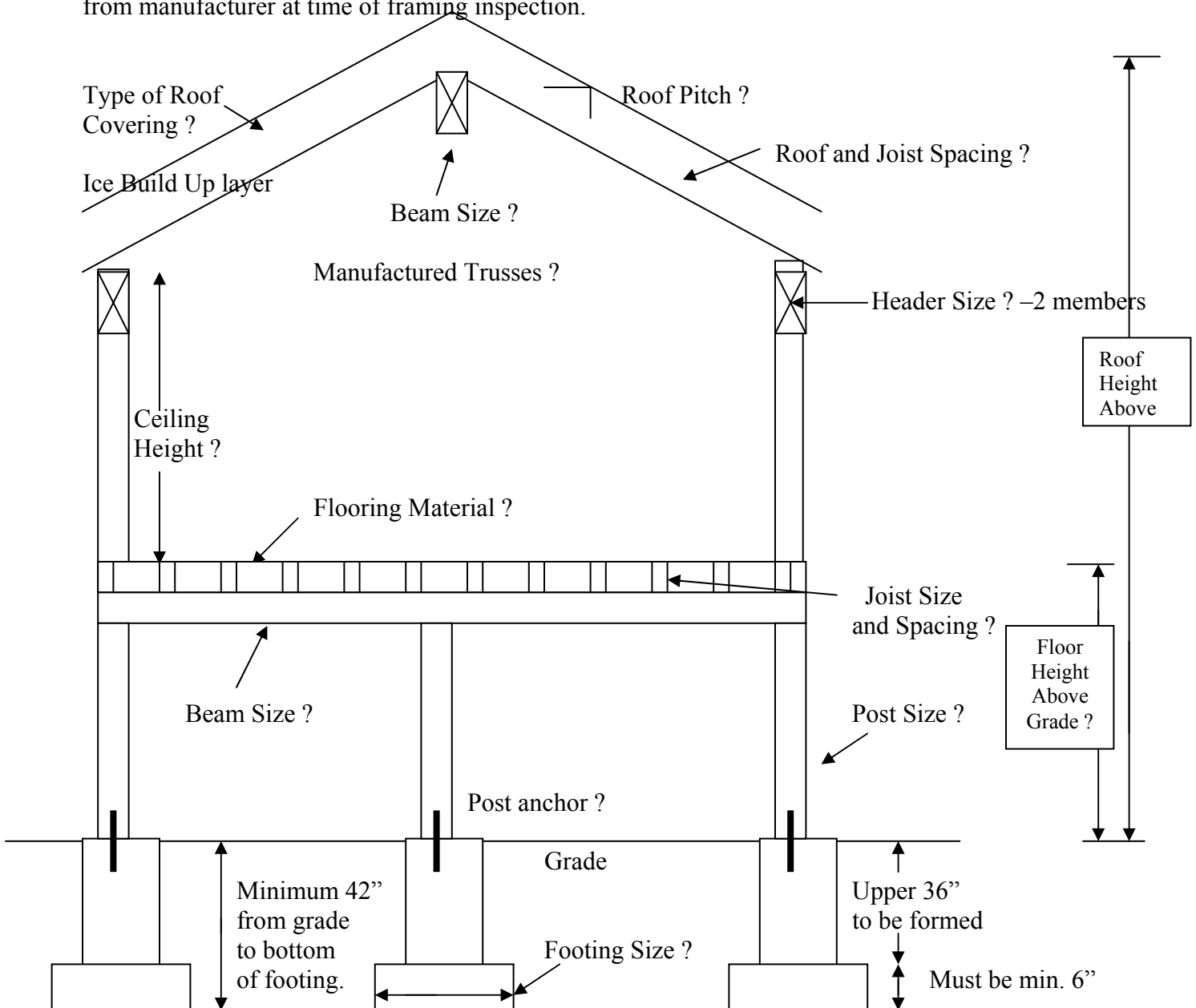
1. Proposed size of porch
2. Location and size of window and door openings
3. Size of headers over all doors and window openings
4. Size, spacing, and direction of rafter (roof) materials
5. Size and spacing of floor joists
6. Size, location, and spacing of posts and footings
7. Type (grade and specie) of lumber to be used



- ❖ Submit two copies of section showing the proposed design. See **sample** below. All sections must include the following:

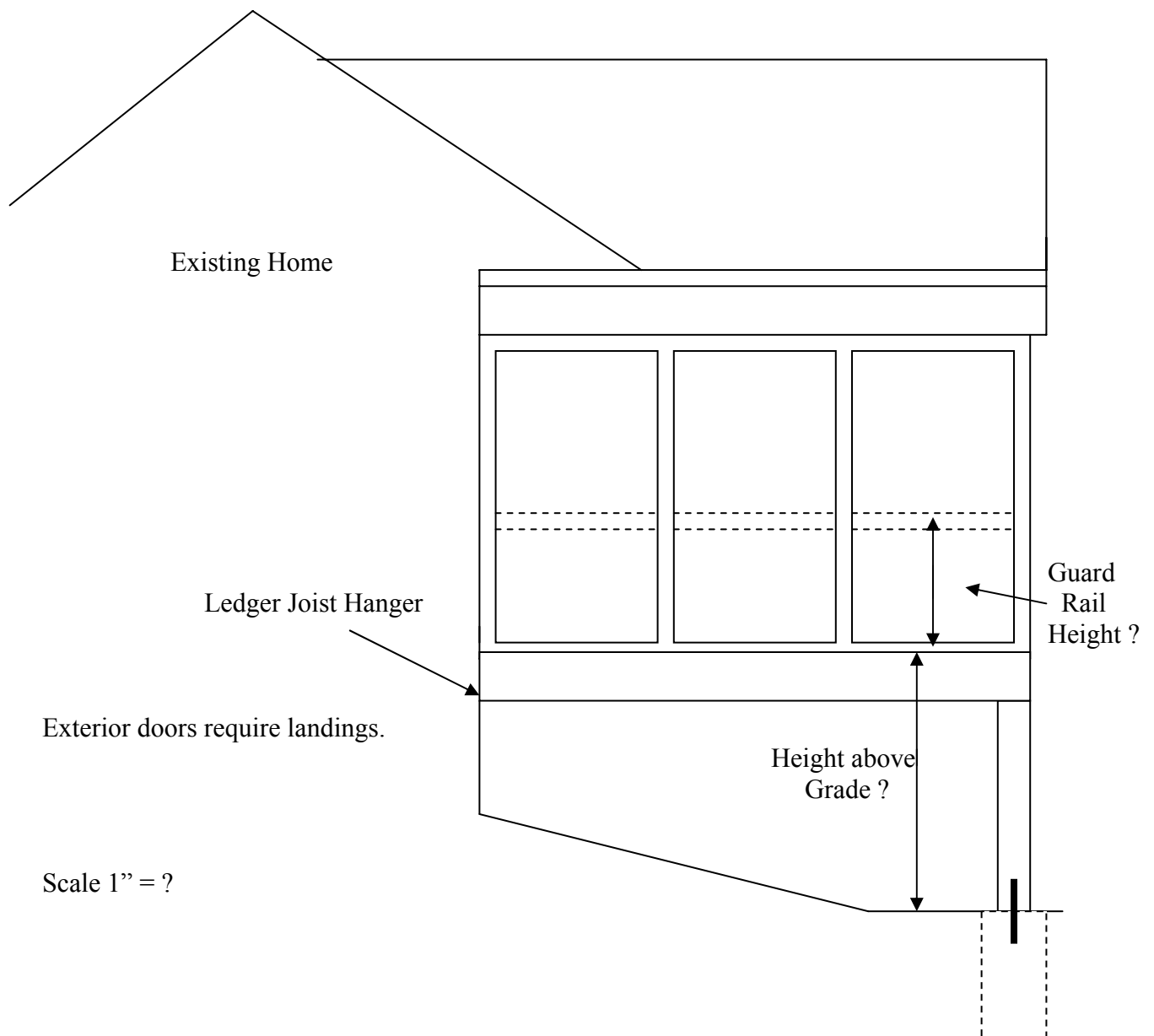
1. Height of structure from grade
2. Size and depth of footings
3. Beam sizes supporting floor and roof joists
4. Floor joist size and spacing
5. Flooring material
6. Ceiling height
7. Header size over windows, doors, and screened openings
8. Size and spacing of rafters
9. Type(s) of roofing underlayment and roof covering
10. Pitch of roof

Note: If truss roof system is to be used, submit one copy of stamped, pre-engineered truss designs from manufacturer at time of framing inspection.



❖ Submit two copies of elevations that will show appearance of finished structure. See **sample** below. All elevations should include the following:

1. Guardrail type and height, if any
2. Type of openings (screened openings, windows, sliding doors, etc.)
3. Method of attachment to existing structure
4. Other information not shown on the section that may be needed to clearly show the construction being proposed



Building Code Requirements

- A. Footings must extend below frost depth, at least 42 inches.
- B. Wood joists 18 inches or closer to grade or wood beams 12 inches or closer to grade and their supports must be of an approved treated wood (.40 treated) or wood with natural resistance to decay (heartwood of cedar or redwood).
- C. Columns and posts supporting porches and stairways exposed to the weather or to water splash must be supported and connected to concrete piers or metal pedestals projecting above grade. Columns and posts in contact with the ground or embedded in concrete or masonry must be of special pressure treated wood approved for ground contact (.60 treated).
- D. All porches, balconies or decks, open sides of landings, and stairs which are more than 30 inches above grade or a floor below must be protected by a guardrail not less than 36 inches in height. Open guardrails and stair railings require intermediate rails or an ornamental pattern such that a ball 4 inches in diameter cannot pass through.
- E. If a stairway is to be provided, it must be not less than 36 inches in width (stairways may be constructed having a $7\frac{3}{4}$ inch maximum rise and a 10 inch minimum run). The largest tread rise and tread run may not exceed the smallest corresponding tread rise or run by more than $\frac{3}{8}$ inch. Exterior stairways must be constructed of 2x material.
- F. Handrails are required on all stairways having 4 or more risers. Handrails may not be less than $1\frac{1}{4}$ inches, nor more than $2\frac{5}{8}$ inches in cross sectional diameter. Handrails must be installed not less than 34 inches nor more than 38 inches above the nosing (front edge) of treads and they must be returned to a wall or post.
- G. If an exterior stairway is to be provided, the construction members which form the structural support, shall be of approved wood of natural resistance to decay such as cedar, redwood, or treated wood (.40 treated) when such members are exposed to the weather.
- H. Top Plate: Bearing and exterior wall studs need to be capped with double top plates installed to provide overlapping at corners and at intersections with other partitions. End joints in double top plates must be offset at least 48 inches.
- I. Sheathing, Roofing, and Siding: Approved wall sheathing, siding, roof sheathing, and roof coverings must be installed according to the manufacturers specifications.

- J. Ice and Water Barrier: Two layers of 15 # roofing felt solidly mopped together or one of the approved ice and water shield underlayment materials must be installed on all roofs over heated porches. For roofs less than 4:12 pitch, it is required from the eave to 24 inches inside the inside wall line.
- K. Roof Framing: Size and spacing of conventional lumber used for roof framing depends upon the roof pitch, span, the type of material being used, and the loading characteristics being imposed. Porches must be designed for the snow load required locally. Contact Building Inspections for details. Rafters need to be framed directly opposite each other at the ridge. A ridge board at least one inch (nominal) thickness and not less in depth than the cut end of the rafter is required for hand framed roofs. At all valleys and hips, there also need to be a single valley or hip rafter no less than two inches (nominal) thickness and not less in depth than the cut of the rafter. Rafters must be nailed to the adjacent ceiling joist to form a continuous tie between exterior walls when the joists are parallel to the rafters. Where not parallel, rafters must be tied to a minimum one inch by 4 inch (nominal) cross tie spaced a minimum four foot on center. If manufactured trusses are to be used, submit one copy of truss plans signed by a registered engineer.
- L. Outside Meters, Wells and Septic Systems: When planning a porch, care must be given to the location of existing gas and electric meters, wells, and septic systems. These may need to be relocated to allow for construction of the porch. Septic systems and wells may be difficult to relocate, requiring an alternate location for the porch. Prior to placement of any porch that will interfere with these devices, contact the Building Inspections Department.
- M. Outside Water Meter Readers: If you have a remote water meter reading device it may need to be relocated for construction of a porch. These devices must be relocated properly and may require special tools. Prior to placement of any porch that will interfere with the operation or accessibility of the reader, contact the Water Department to obtain information on relocating this device.

Note: The above outlines only general code requirements with regard to porch construction. For more specific requirements, contact the Building Department.

Required Inspections

- A. Footings: After the holes are dug and any reinforcement is in place, BUT PRIOR TO THE POURING OF CONCRETE.
- B. Final: To be made upon completion of the structure and after the electrical final passes (if applicable).