WESTERVILLE
PLANNING & DEVELOPMENT

64 E. Walnut Street, Westerville, Ohio 43081

Guide to Deck Permits

Fees

- **Building Permit** **$75.75** (This includes a 1% State of Ohio Fee).
- **Zoning** **$40.00**
- This fee is collected once a permit has been issued and is not required at the time of the application.

Application Requirements

- Completion of an application form furnished by the building department.
- Two (2) sets of plans of sufficient clarity to indicate how the proposed deck will be constructed (see plan requirements).
- Two (2) survey based plot plans/site plans showing the location of the proposed deck, existing structures, all improved surfaces, and the distances from the property/lot lines.

Action on the Application

- The building and zoning departments will examine the application and plans of the proposed deck within two weeks or ten working days.
- If the application and plans of the proposed deck conform to the building and zoning codes, the applicant is notified and a deck permit is issued. The applicant shall pick up one set of the approved plans and pay the permit fees prior to the start of construction.
- If the application and plans of the proposed deck do not conform to the building and zoning codes, the applicant is notified and the reasons for the disapproval will be given in writing.

Time Limitations

- Work shall commence within twelve (12) months of the approval of the residential construction documents. One extension shall be granted for an additional twelve-month period if requested by the owner at least ten days in advance of the expiration of the approval and upon payment of a fee not to exceed one hundred dollars. If in the course of construction, work is delayed or suspended for a time period of six (6) months, the approval of the plans or drawings is invalid. Two extensions shall be granted for six months each if requested by the owner at least ten days in advance of the expiration of the approval and upon payment of a fee for each extension.

Have Questions or Need Help

- If you have questions regarding zoning issues such as where the deck can be located, how far from the property line, and the size of the deck, please call the Zoning Department at 614.901.6650, option 3.
- If you have questions regarding building issues such as how to construct the deck, or questions regarding the sample drawings contained in this guide, please call the Building Department at 614.901.6650, option 4, and ask to speak with a building inspector.

Plan Requirements

Post Hole Section & Layout - The deck plans shall show all post locations supported by footings. Illustration Sheet #1 shows a layout of a deck that is partially supported by the house wall. Illustration Sheet #2 is a layout of a deck that is completely self-supported. Illustration Sheet #3 is a typical post and footing detail. The post hole shall be 36 inches deep, and the diameter of the bottom six inches of the hole shall be sized according to Table 507.3.1 of the Residential Code of Ohio. **Note**: The posts shall bear on top of the concrete. The remaining portion of the post hole may be filled with dirt or gravel. If the applicant desires, they may fill the entire post hole with concrete and set the post in a post base bracket.

Framing Plan - The framing plan shall include: the overall deck dimensions, ledger board size, ledger bolting type and spacing, floor joist direction, size, span & spacing, and beam sizes and direction. See Illustration Sheets 4 through 8. The framing plan shall include dimensions between each post, between each beam, and the distance between the posts and the house foundation. The framing sections shall include connections of the beams to the posts. Illustration Sheets 5 and 8, show a typical beam connection to a post detail. If the applicant intends on supporting one end of the floor joists using the existing dwelling, then refer to Illustration Sheet 6, showing a typical ledger board section with anchorage requirements. If the applicant will be using both types of support, then the plan submittal shall include framing drawings similar to Illustration Sheets 5 through 8.

Deck Elevation - The deck elevation shall show the height of the deck floor surface from the adjacent grade. If the deck is more than 30 inches above the adjacent grade, a guardrail system shall be shown on the plans. Guardrails shall be 36 inches high and shall have balusters, a cable system, or horizontal rails that will not allow the passage of a 4 inch sphere. See Illustration Sheet 7.

Stair Details - The plans shall show a typical stair detail. Stair stringers shall be made of 2 x 12's and spaced 16 inches on center. The stair risers shall have riser heights that do not exceed 8 ¼ inches, and the stair treads shall be a minimum of 9 inches in depth. See Illustration Sheet 9, for typical stair details. Four or more stair risers will require a continuous graspable handrail mounted between 34 & 38 inches above the stair nosing, with the ends returned to the posts at the top and bottom of the stairway. Illustration Sheet 10 shows handrail types and dimensions.

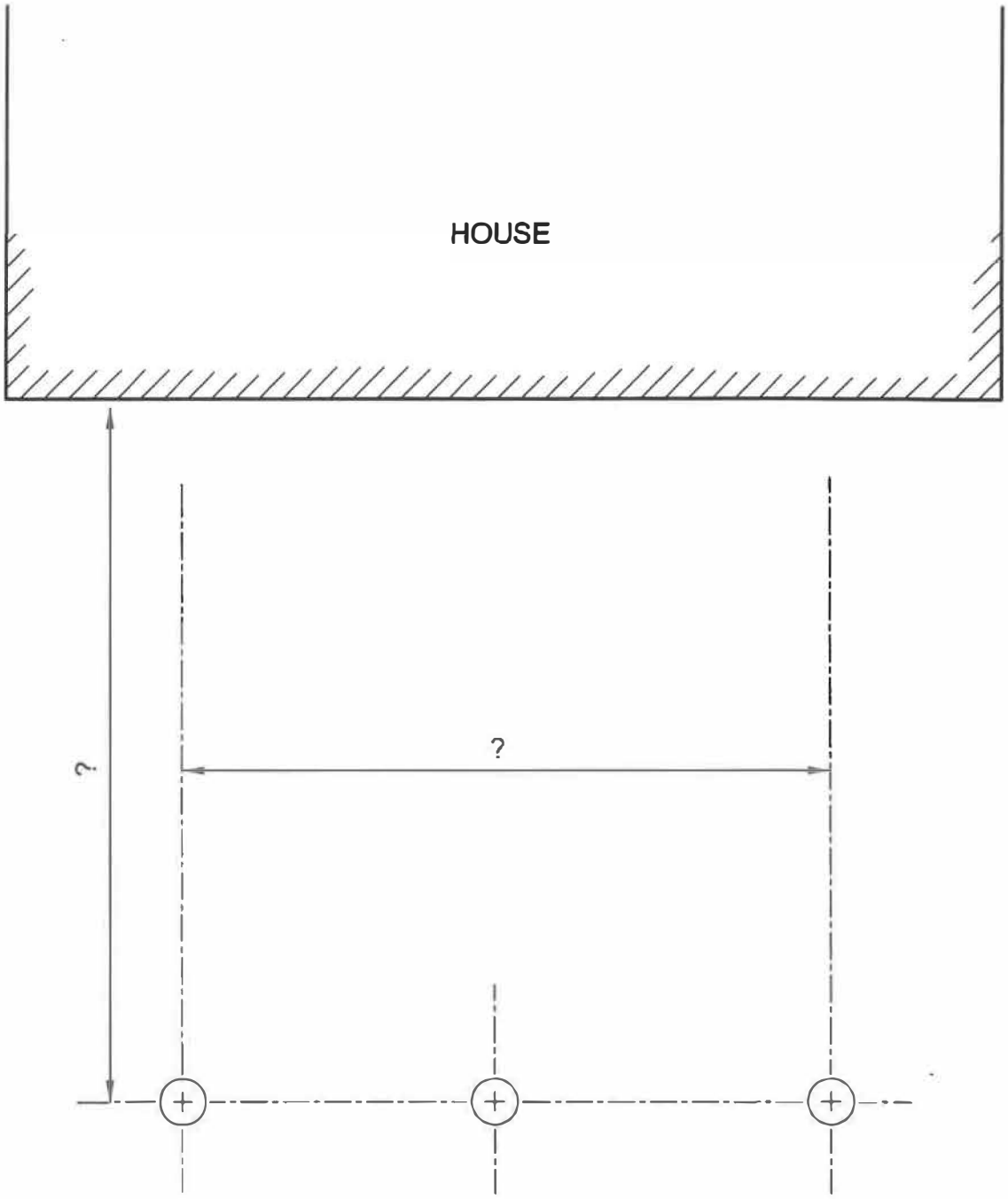
Inspections

Footing – After the excavation of the post holes and prior to placement of the concrete.

Framing – After the installation of all structural framing members (ledger, floor joists, beams, & posts), but before the installation of the deck floor boards.

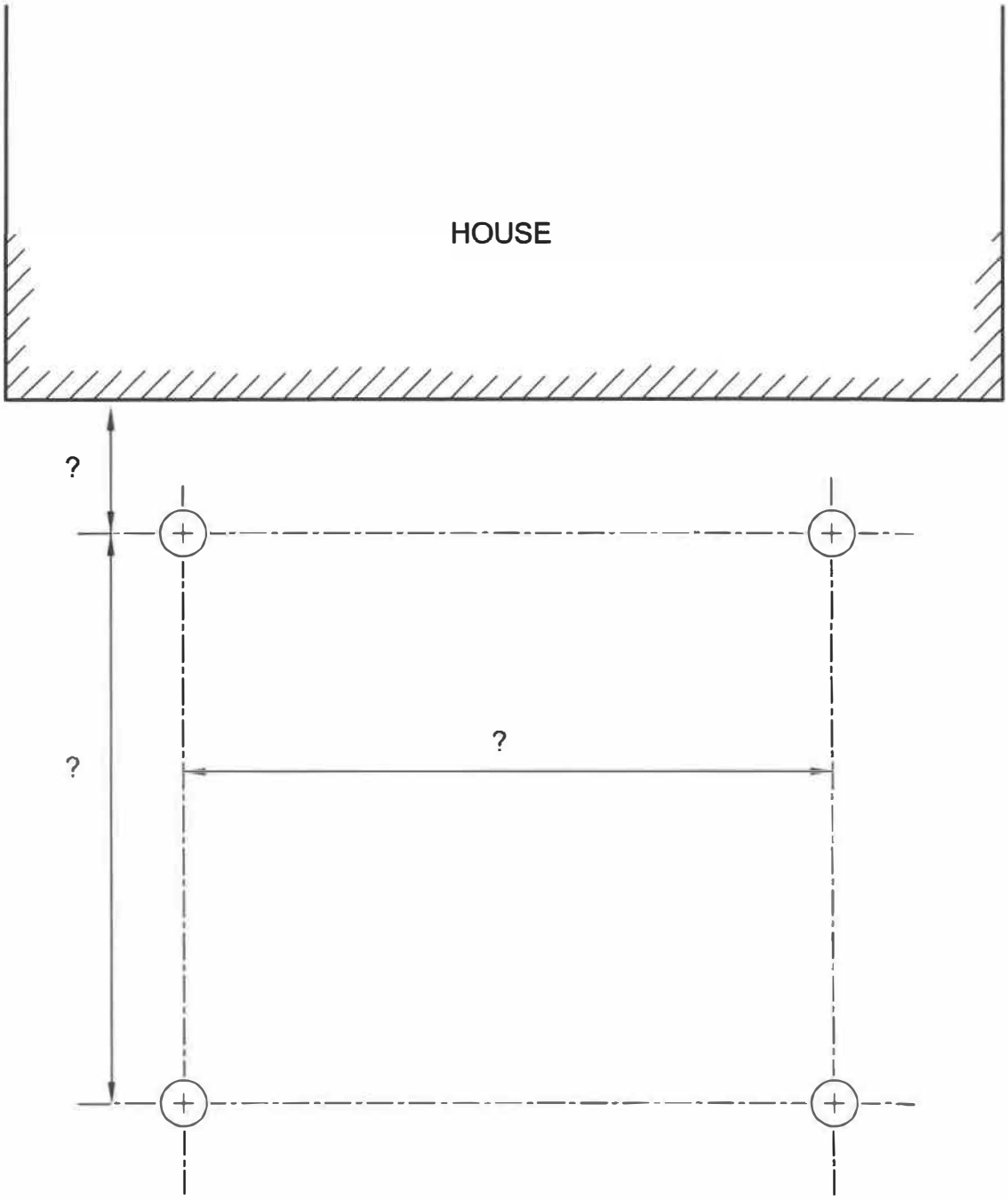
Final Inspection – After the completion of the deck. All stairs, handrails, and guardrails shall be complete.

6/19/23



NOTE:
THESE DRAWINGS ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT TO BE COPIED AND USED FOR PLAN SUBMITTALS.

Z:\Westerville Logo-COLOR.jpg	CITY OF WESTERVILLE DEPARTMENT OF PLANNING AND DEVELOPMENT BUILDING DIVISION	POST HOLE LAYOUT FOR DECK PARTIALLY SUPPORTED OFF HOUSE WALL
	CHIEF BUILDING OFFICIAL _____ DATE _____	SHEET 1



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	CHIEF BUILDING OFFICIAL _____ DATE _____	SHEET 2

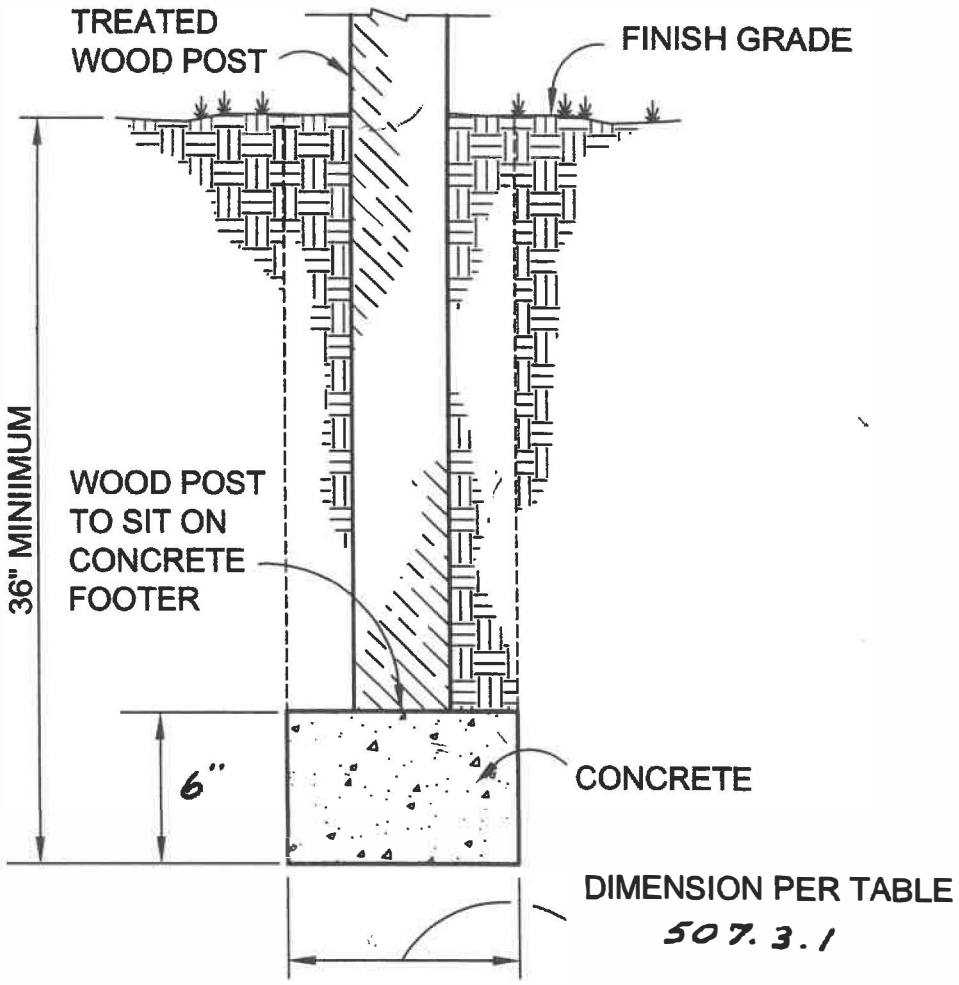

TABLE 507.3.1
MINIMUM FOOTING SIZE FOR DECKS

LIVE OR GROUND SNOW LOAD [b] (psf)	TRIBUTARY AREA (sq. ft.)	LOAD BEARING VALUE OF SOILS [a, c, d] (psf)								
		1500 [a]			2000 [a]			2500 [a]		
		Side of a square footing (inches)	Diameter of a round footing (inches)	Thickness (inches)	Side of a square footing (inches)	Diameter of a round footing (inches)	Thickness (inches)	Side of a square footing (inches)	Diameter of a round footing (inches)	Thickness (inches)
40	20	12	14	6	12	14	6	12	14	6
	40	14	16	6	12	14	6	12	14	6
	60	17	19	6	15	17	6	13	15	6
	80	20	22	7	17	19	6	15	17	6
	100	22	25	8	19	21	6	17	19	6
	120	24	27	9	21	23	7	19	21	6
	140	26	29	10	22	25	8	20	23	7
	160	28	31	11	24	27	9	21	24	8

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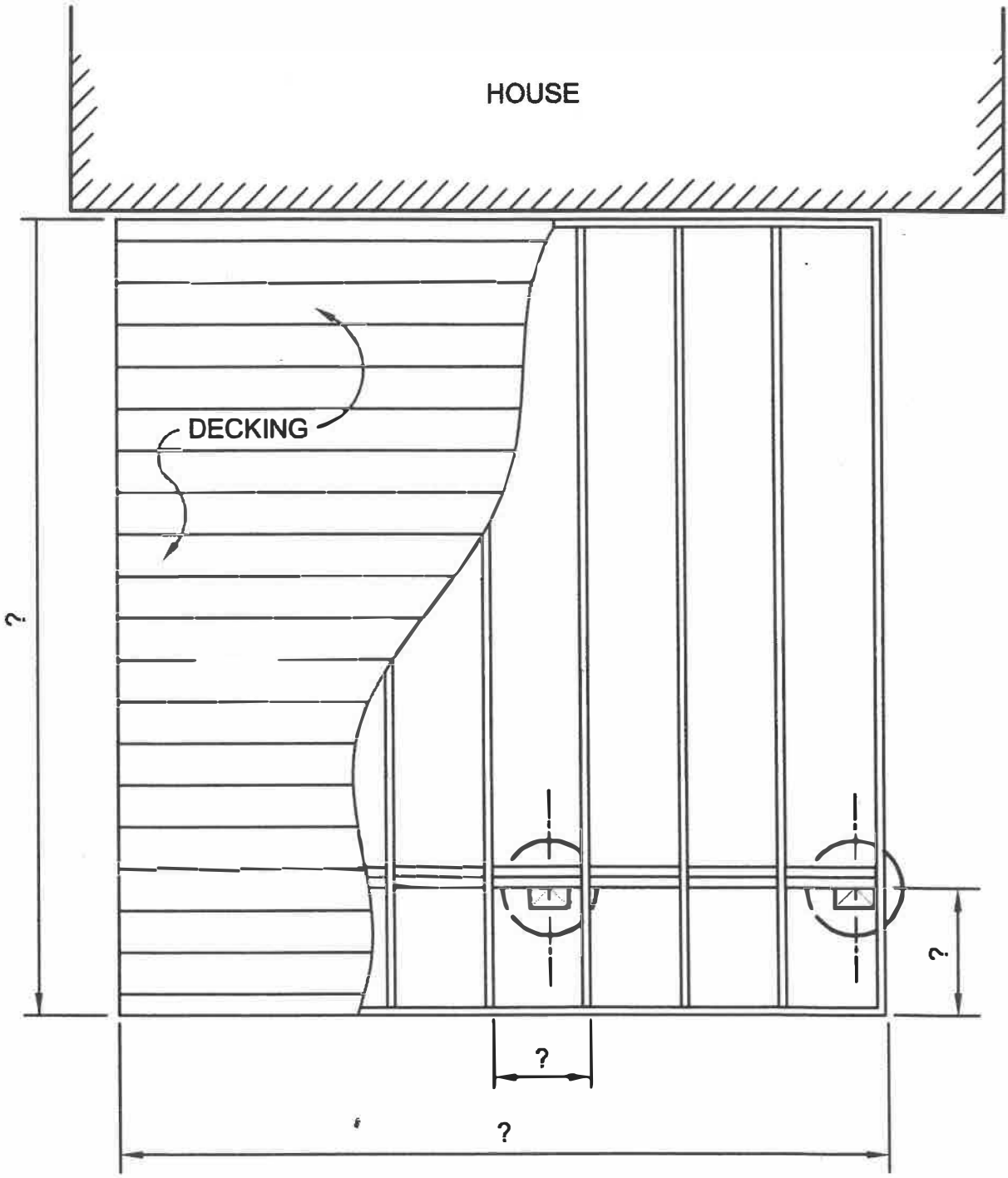
BUILDING DIVISION

CHIEF BUILDING OFFICIAL _____ DATE _____

POST AND FOOTING DETAIL

SHEET 3



FLOOR JOIST SIZE?
BEAM SIZE?

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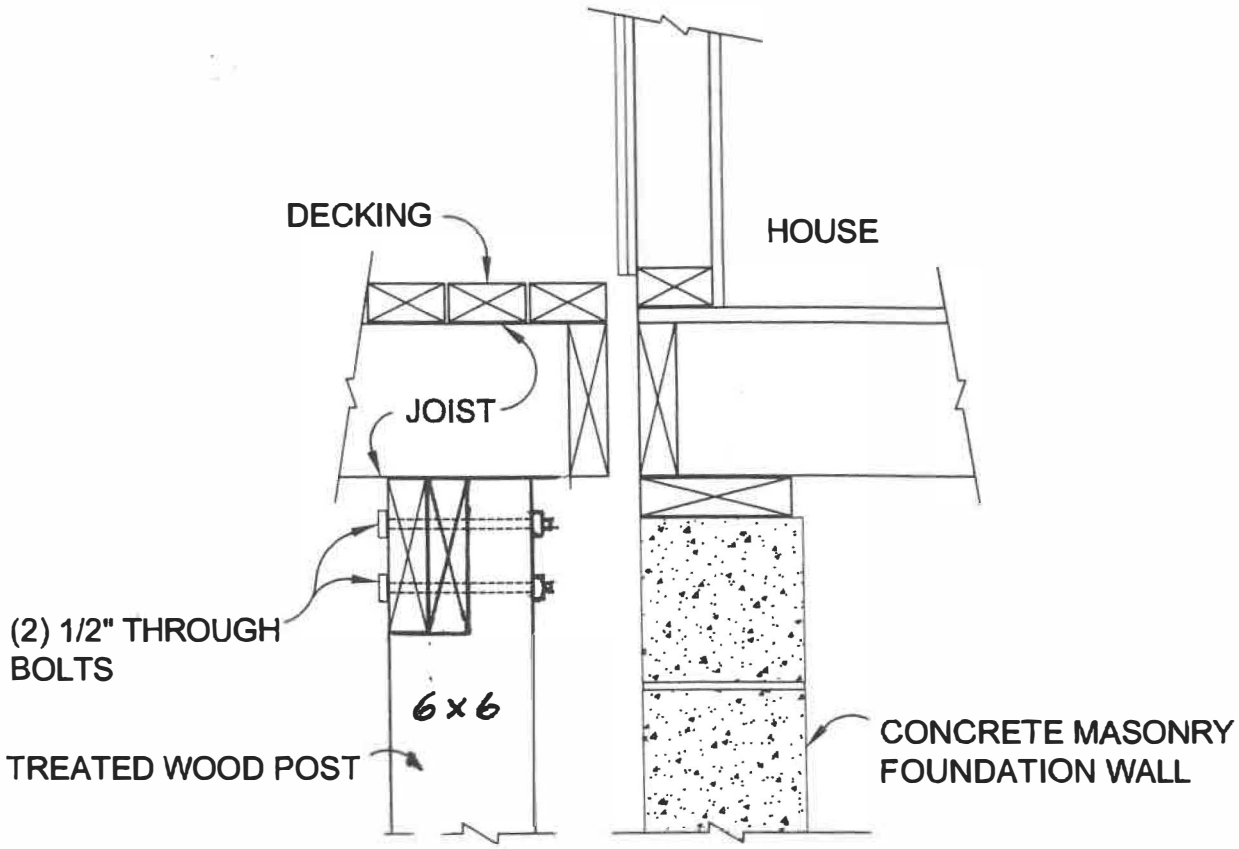
FRAMING PLAN

Sheet 4 6/19/23



Beam to 4 x 4 post connections shall use a Post Cap bracket

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Z:\Westerville Logo-COLOR.jpg	CITY OF WESTERVILLE DEPARTMENT OF PLANNING AND DEVELOPMENT BUILDING DIVISION	FRAMING PLAN SELF SUPPORTED
	CHIEF BUILDING OFFICIAL DATE	SHEET 5

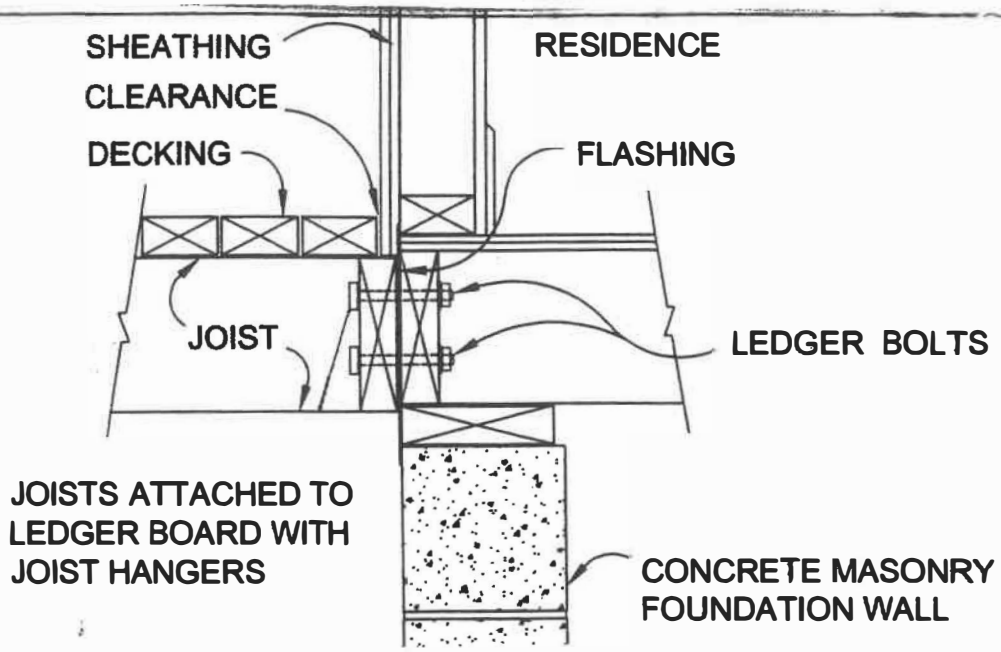


TABLE 507.9.1.3(1)
DECK LEDGER CONNECTION TO BAND JOIST[a, b]
(Deck live load = 40 psf, deck dead load = 10 psf, snow load ≤ 40 psf)

CONNECTION DETAILS	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′
	On-center spacing of fasteners						
$^1/_2$-inch diameter lag screw with $^1/_2$-inch maximum sheathing[c, d]	30	23	18	15	13	11	10
$^1/_2$-inch diameter bolt with $^1/_2$-inch maximum sheathing[d]	36	36	34	29	24	21	19
$^1/_2$-inch diameter bolt with 1-inch maximum sheathing[e]	36	36	29	24	21	18	16

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

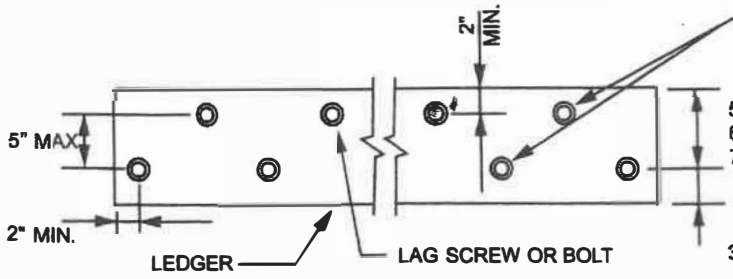
a. Ledgers shall be flashed in accordance with Section 703.4 to prevent water from contacting the house band joist.

b. Snow load shall not be assumed to act concurrently with live load.

c. The tip of the lag screw shall fully extend beyond the inside face of the band joist.

d. Sheathing shall be wood structural panel or solid sawn lumber.

e. Sheathing shall be permitted to be wood structural panel, gypsum board, fiberboard, lumber or foam sheathing. Up to $^1/_2$-inch thickness of stacked washers shall be permitted to substitute for up to $^1/_2$ inch of allowable sheathing thickness where combined with wood structural panel or lumber sheathing.



*DISTANCE SHALL BE PERMITTED TO BE REDUCED TO 4.5" IF LAG SCREWS ARE USED OR BOLT SPACING IS REDUCED TO THAT OF LAG SCREWS TO ATTACH 2 X 8 LEDGERS TO 2 X 8 BAND JOISTS.

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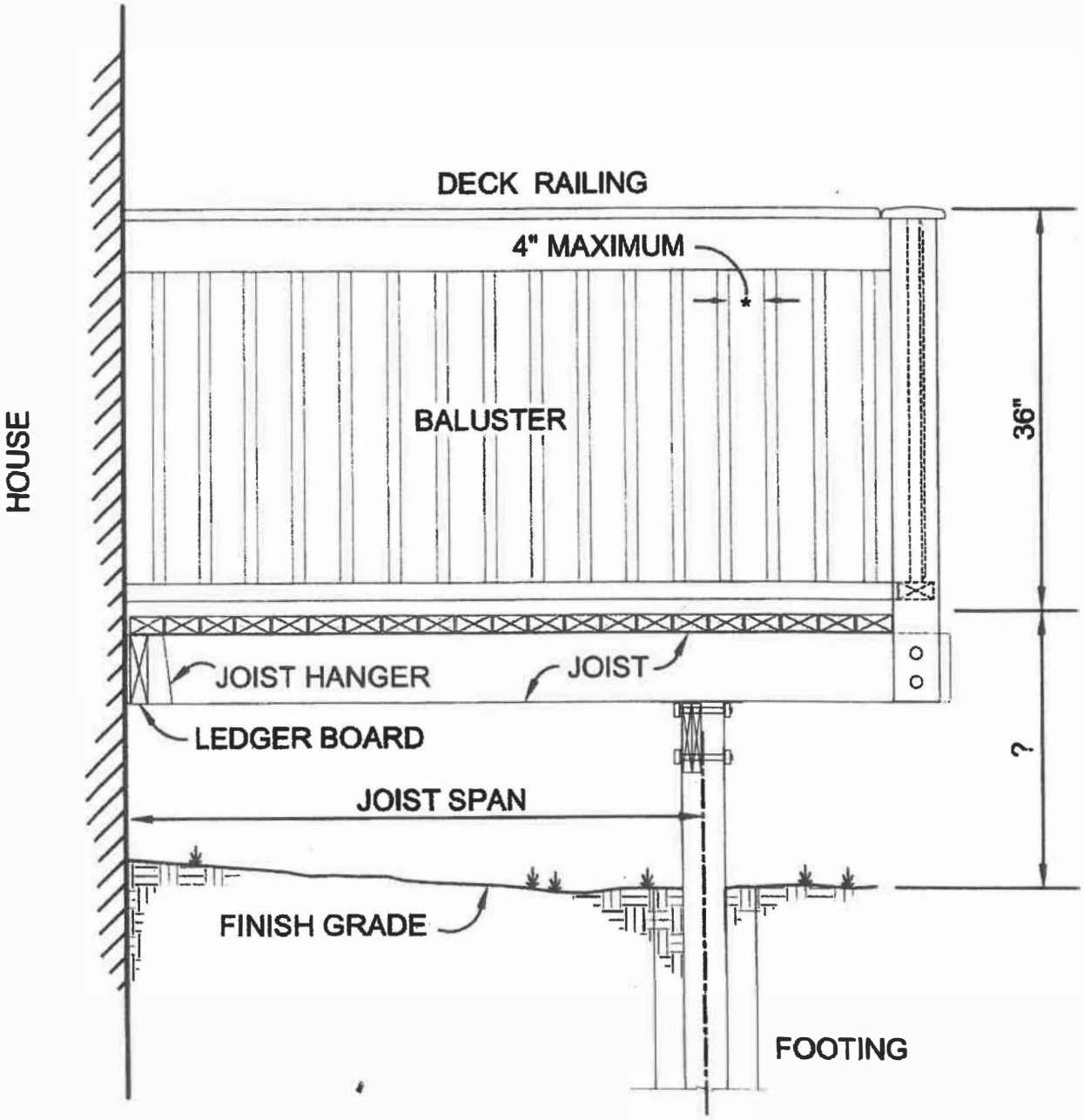
	CHIEF BUILDING OFFICIAL DATE	SHEET 6



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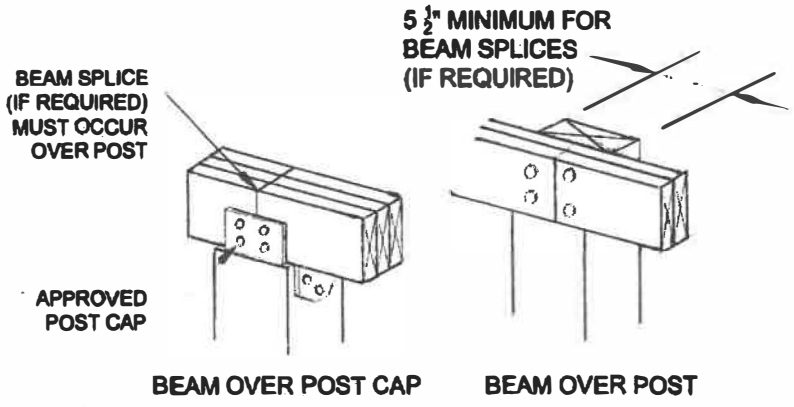
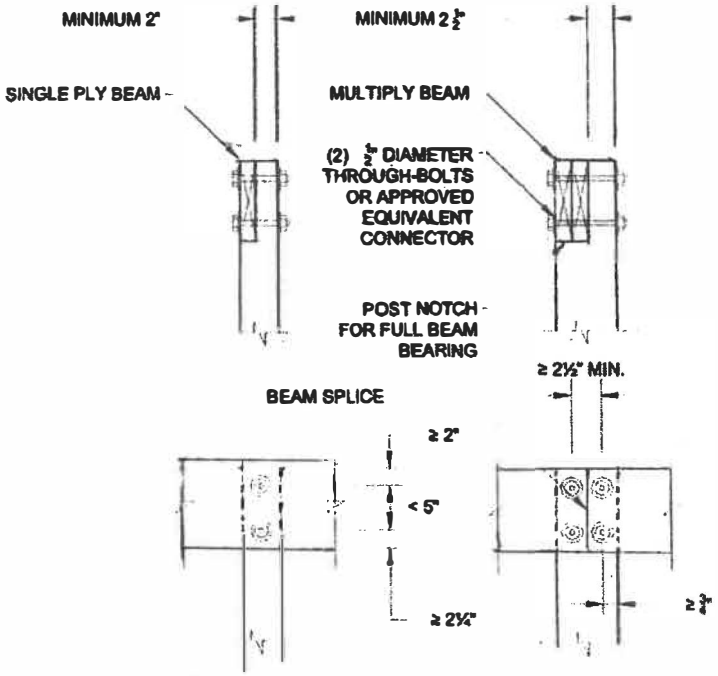
DECK ELEVATION

Sheet 7 6/19/23



For SI: 1 inch = 25.4 mm.

FIGURE 507.5.1(1)
DECK BEAM TO DECK POST



For SI: 1 inch = 25.4 mm.

FIGURE 507.5.1(2)
NOTCHED POST-TO-BEAM CONNECTION

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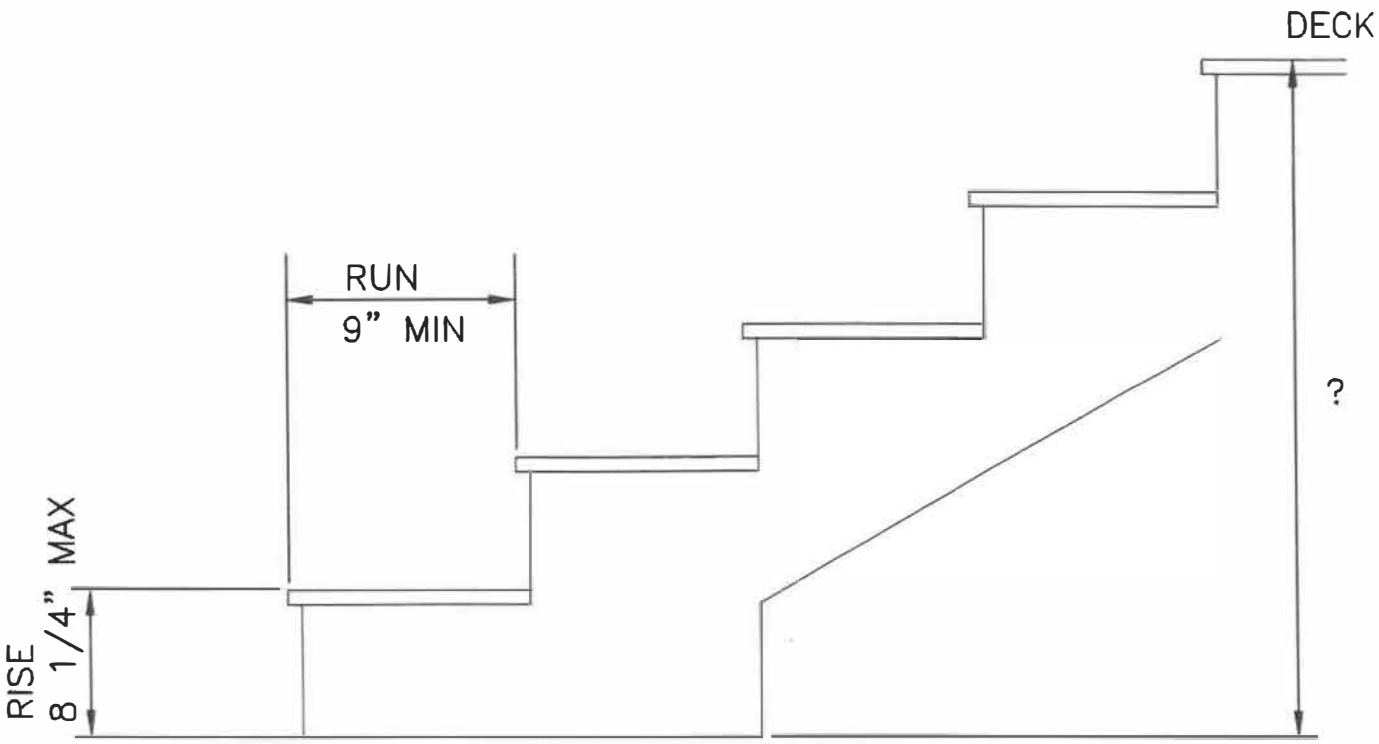

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STAIR DETAIL

STAIR HANDRAIL REQUIREMENTS

All stairs with 4 or more risers shall have a handrail on at least one side (see Figure 32A) [R311.7.8]. The handrail height measured vertically from the sloped plane adjoining the tread nosing shall be not less than 34 inches and not more than 38 inches (see Figure 30) [R311.7.8.1]. Handrails shall be graspable and shall be composed of decay-resistant and/or corrosion resistant material. Handrails shall be Type I, Type II, or provide equivalent graspability (see Figure 32B). Type I shall have a perimeter dimension of at least 4" and not greater than 6-¼". Type II rails with a perimeter greater than 6-¼" shall provide a graspable finger recess area on both sides of the profile [R311.7.8.3]. All shapes shall have a smooth surface with no sharp corners. Handrails shall run continuously from a point directly over the lowest riser to a point directly over the highest riser and shall return to the guard at each end (see Figure 33). Handrails may be interrupted by guard posts at a turn in the stair [R311.7.8.2].

STAIR FOOTING REQUIREMENTS [R403]

Where the stairway meets grade, attach the stringers to the stair guard posts as shown in Figure 34. Posts shall bear on footings. All footings shall bear on solid ground and shall be placed at least 12 inches below the undisturbed ground surface or below the frost line, whichever is deeper (see Figure 34). Stringers shall bear on a 2x4 bearing block attached to the post as shown. Stringers shall not bear on new or existing concrete pads or patios that are not founded below this depth. When guards are not required (see GUARD REQUIREMENTS), posts may terminate below the bottom tread elevation. Bolts are only required if a guard post is required.

STAIR LIGHTING REQUIREMENTS [R303.7]

Stairways shall have a light source located at the top landing such that all stairs and landings are illuminated. The light switch shall be operated from inside the house. However, motion detected or timed switches are acceptable.

Figure 32A. Handrail Mounting Examples.

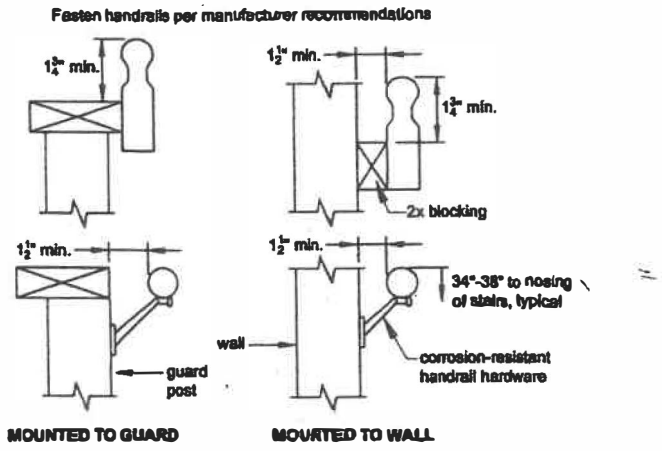

Figure 32B. Handrail Grip Size.

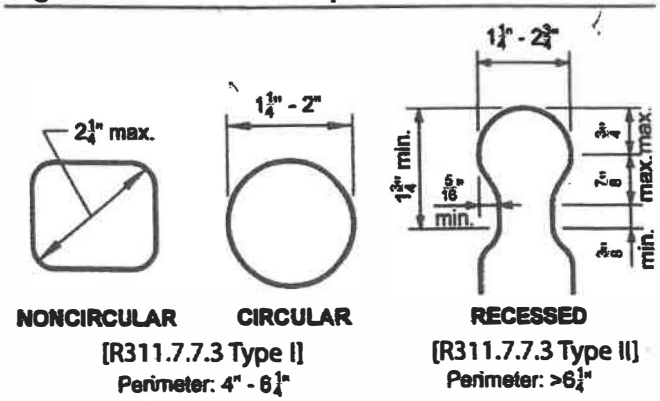

Figure 33. Miscellaneous Stair Requirements.

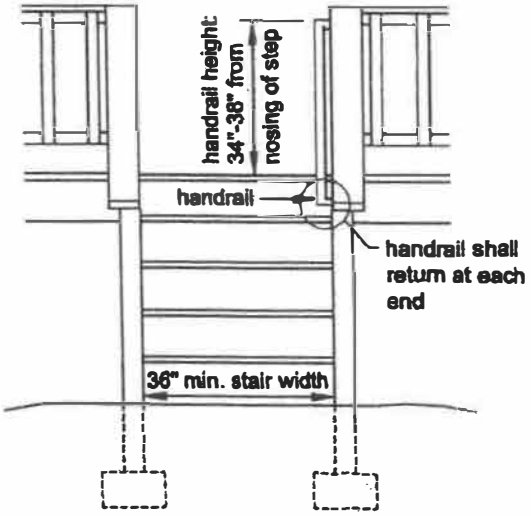

Figure 34. Stair Footing Detail.