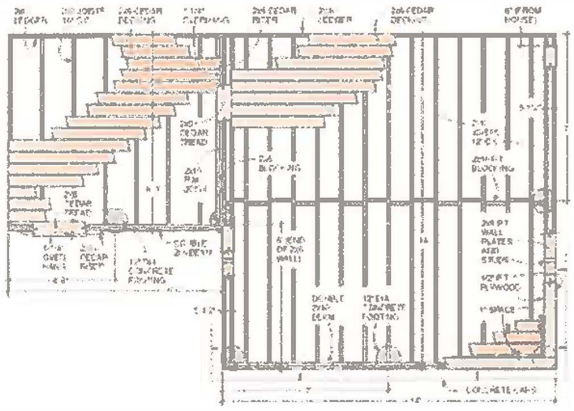
DECK PLANS

Centerville
Established 1858

BUILDING DEPARTMENT
651-429-4750



This handout is intended only as a guide and is based in part on the 2020 Minnesota Residential Code, City of Centerville ordinances, and good building practice. 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 your local Building Department.

The following are examples of information that should be included on plans submitted for building permits for residential decks. They are ***examples*** only and should not be construed as being code compliant for every application. It is the responsibility of the homeowner or person preparing the plans to show in detail how they will build their deck. Some designs may require more detail than others.

Your deck plans should replicate ***exactly*** how you will build your deck. We will review your plans before we issue the building permit to identify code violations before you start work. The more detailed your plans, the more likely you avoid corrections in the field.

When you receive your permit, you will also be given one set of plans stamped "Approved". Once your plans are approved, you should not change your design without approval by the Building Department. ***You should read through the approved plans to determine if the plan reviewer noted any corrections to your plan.*** If you have any questions regarding any of the corrections, you should contact us before proceeding.

Plans created at home centers are seldom acceptable for plan review. These computer designs do not allow homeowners to duplicate conditions at their home. Applications submitted with these types of plans will be returned to the applicant.

The City of Centerville has a detailed handout on deck construction and it is recommended that you obtain a copy of the handout for further direction.

CHECKLIST FOR DECK PLANS

Site Plan
- ☐ Street address and/or legal description shown
- ☐ North arrow shown
- ☐ Plan drawn to useable scale and scale used shown
- ☐ Size of existing buildings shown
- ☐ All lot dimensions and pin locations shown
- ☐ Location and size of proposed deck shown
- ☐ Distance to all lot lines from existing buildings and proposed deck

Construction Plans
- ☐ Plans drawn to useable scale
- ☐ Scale indicated on plan
- ☐ Plan neat and legible

Elevation (This could be illustrated on section drawings)
- ☐ Show side and front view of deck in relation to grade and dwelling
- ☐ Include railing height and design

Framing Plan
- ☐ Floor joist size and spacing including species and grade
- ☐ Orientation of floor joists
- ☐ Cantilever of joists
- ☐ Bearing points for all joists
- ☐ Size and location of all beams including species and grade
- ☐ Cantilever of beams
- ☐ Size and location of ledger board including species and grade
- ☐ Size and location of all columns including species and grade
- ☐ Track all floor loads thru beams to columns to footings
- ☐ Location of stairs
- ☐ Changes in elevation of deck floors or landings
- ☐ Unusual framing issues such as cantilevers of the dwelling floor

Ledger Details
- ☐ Framing method and orientation of existing dwelling floor framing.
- ☐ Method of meeting lateral load connection requirements
- ☐ Spacing, location, and type of bolts or lags used to attach ledger.

Footings (This information may be included on section or framing plans)
- ☐ Footing depth and design
- ☐ Footing width at base consistent with load for each footing location.

Section(s)
- ☐ Section view(s) from bottom of footing to top of guard to show railing details; floor framing orientation; joist/beam orientation and bearing; column locations; connections; footing design, size, and depth; and height of deck floor above grade.

Details
- ☐ Flashing at the ledger
- ☐ Joist bearing/hangers
- ☐ Ledger connection (Caution for dwelling floor cantilevers)
- ☐ Fasteners/connectors consistent with lumber and decking used
- ☐ Column/beam connection
- ☐ Column/footing connection
- ☐ Type of decking and orientation (Caution for 5/4 or composite decking for spans more than 16" o.c. or installed diagonally
- ☐ Research report required for decking other than wood
- ☐ Stair stringer connection
- ☐ Lateral bracing

Stairs
- ☐ Width of stairs
- ☐ Rise/run w/tolerance shown
- ☐ Number and size of stringers
- ☐ Open riser design
- ☐ Type and size of tread consistent with stringer spacing (Caution for decking use)
- ☐ Connection method for treads to stringers
- ☐ Handrails shown for stairs with 4 or more risers
- ☐ Handrail height shown on plan
- ☐ Handrail profile detailed
- ☐ Landing at bottom of stair
- ☐ Show any doors or windows adjacent stairs and landings.

Guards
- ☐ Guard height and opening dimensions
- ☐ Guard design/materials
- ☐ Guard attachment

Date: _____

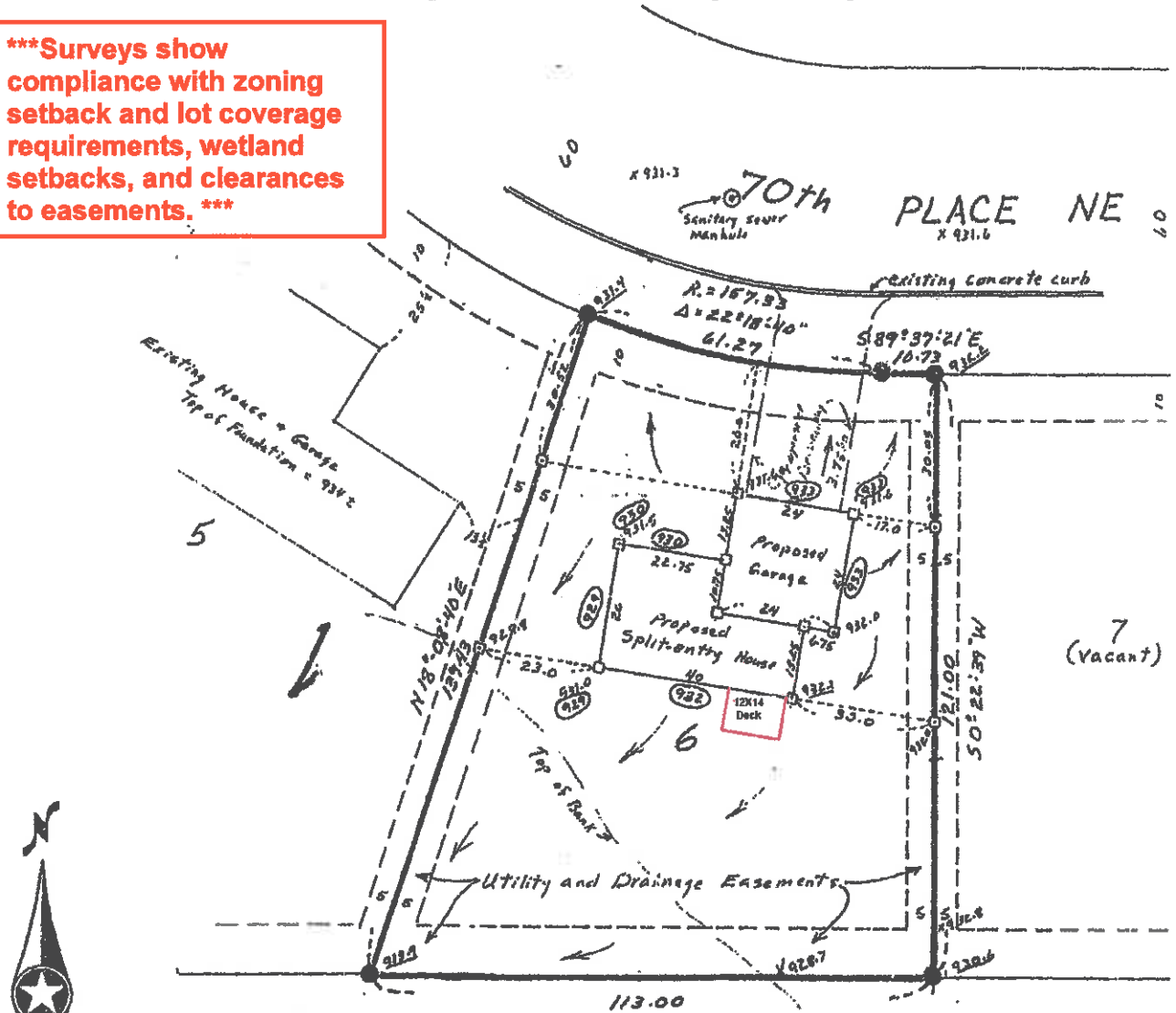
Job Address: _____

ASSOCIATES
SURVEYORS, INC.

CERTIFICATE OF SURVEY FOR: K Builders

DESCRIBED AS: Lot 6, Block 1, WIND 4th ADDITION, according to the recorded plat thereof, Hennepin County, Minnesota.

*****Surveys show compliance with zoning setback and lot coverage requirements, wetland setbacks, and clearances to easements. *****



Benchmark: Top of first hydrant on East side of Fish Lake Road NW. of I. 494 Bridge. Elevation = 936.97.

SCALE: 1 INCH = 30 FEET.

○ DENOTES 1/2 INCH IRON PIPE SET.

● DENOTES FOUND IRON MONUMENT.

BEARINGS SHOWN ARE ASSUMED.

⊡ Denotes wood hub and Tac set.

□ Denotes wood hub set.

Proposed lowest floor elev. = 929.5

Proposed Garage floor elev. = 933.0

Proposed Top of foundation elev. = 933.5

x 930 Denotes existing elevation.

x 930 Denotes existing + proposed elev.

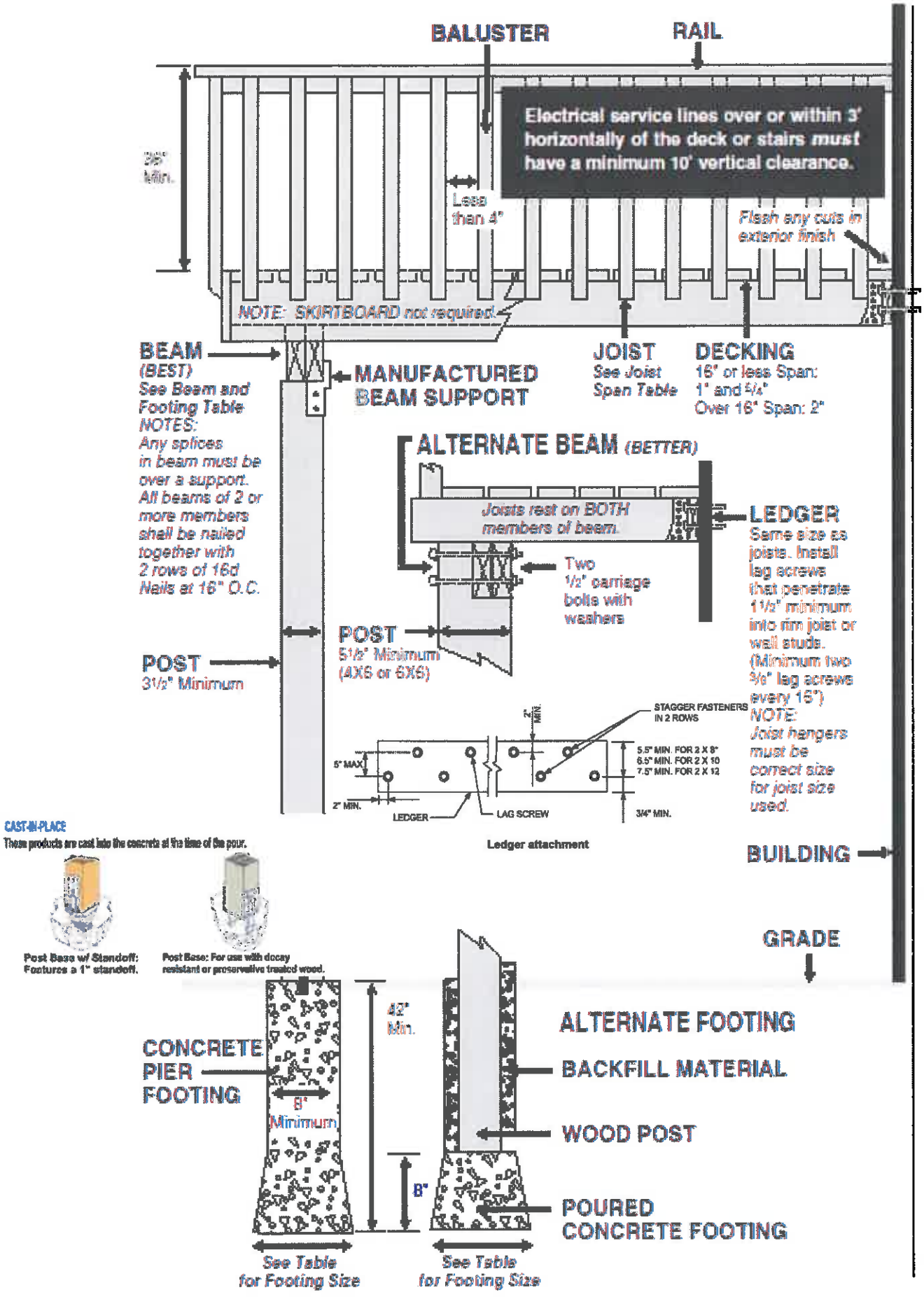
(930) Denotes proposed elevation.

I HEREBY CERTIFY THAT THIS SURVEY, PLAN, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MINNESOTA.

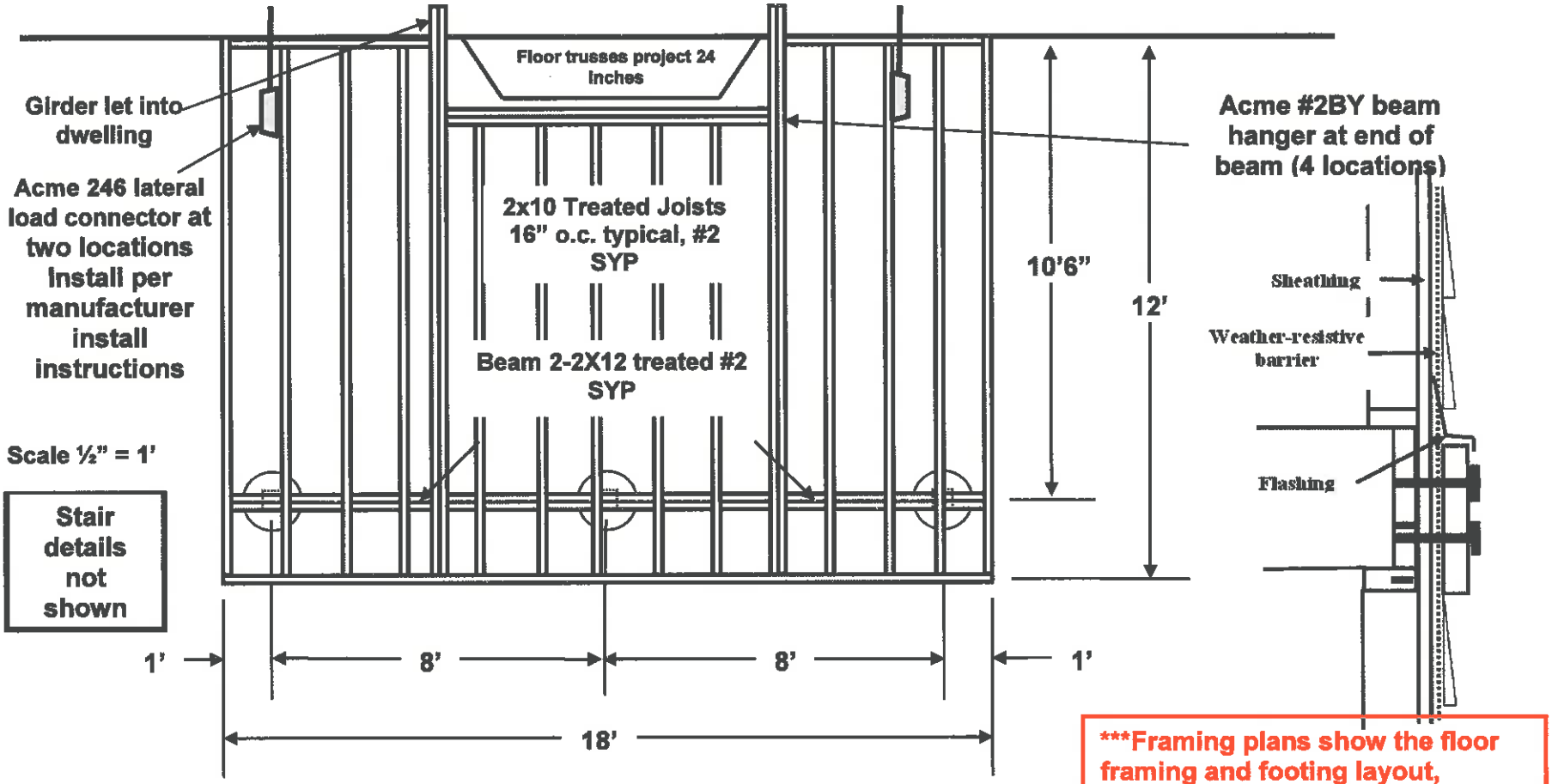
Jeff S. Cox

DATE April 19, 1984 REG. NO. 25128

WARNING: THIS IS AN ILLUSTRATION ONLY. IT IS INTENDED TO SHOW SOME OF THE INFORMATION THAT SHOULD BE INCLUDED ON YOUR DECK PLANS. IT IS NOT INTENDED TO SHOW COMPLIANCE WITH ANY CODES THAT MAY APPLY. CHANGES IN THE HEIGHT AND SIZE OF A DECK WILL CAUSE VARIATIONS IN CODE REQUIREMENTS.


BALUSTER
RAIL
Electrical service lines over or within 3' horizontally of the deck or stairs must have a minimum 10' vertical clearance.
Less than 4"
Flash any cuts in exterior finish
NOTE: SKIRTBOARD not required
BEAM
(BEST)
See Beam and Footing Table
NOTES:
Any splices in beam must be over a support.
All beams of 2 or more members shall be nailed together with 2 rows of 16d Nails at 16" O.C.
MANUFACTURED BEAM SUPPORT
JOIST
See Joist Span Table
DECKING
16" or less Span: 1" and 5/4"
Over 16" Span: 2"
ALTERNATE BEAM (BETTER)
Joists rest on BOTH members of beam.
Two 1/2" carriage bolts with washers
LEDGER
Same size as joists. Install lag screws that penetrate 1 1/2" minimum into rim joist or wall studs. (Minimum two 3/8" lag screws every 16")
NOTE:
Joist hangers must be correct size for joist size used.
POST
5 1/2" Minimum
(4X6 or 6X6)
POST
3 1/2" Minimum
STAGGER FASTENERS IN 2 ROWS
2" MIN.
5" MAX.
2" MIN.
LEDGER
LAG SCREW
5.5" MIN. FOR 2 X 8"
6.5" MIN. FOR 2 X 10
7.5" MIN. FOR 2 X 12
3/4" MIN.
Ledger attachment
BUILDING
CAST-IN-PLACE
These products are cast into the concrete at the time of the pour.
Post Base w/ Standoff: Features a 1" standoff.
Post Base: For use with decay resistant or preservative treated wood.
GRADE
CONCRETE PIER FOOTING
8" Minimum
42" Min.
8"
ALTERNATE FOOTING
BACKFILL MATERIAL
WOOD POST
POURED CONCRETE FOOTING
See Table for Footing Size
See Table for Footing Size

TYPICAL DECK FLOOR FRAMING PLAN, BEAM LOCATION, AND FOOTING LAYOUT



Note about House cantilevers: Occasionally home designs include a cantilever of the floor system at the patio door. Decks may not be attached to the cantilevered joists unless the house floor framing is engineered for the deck loads.

***Framing plans show the floor framing and footing layout, enable checks on spans and sizing of beams and joists, validation of footing sizes, and the ledger design. ***

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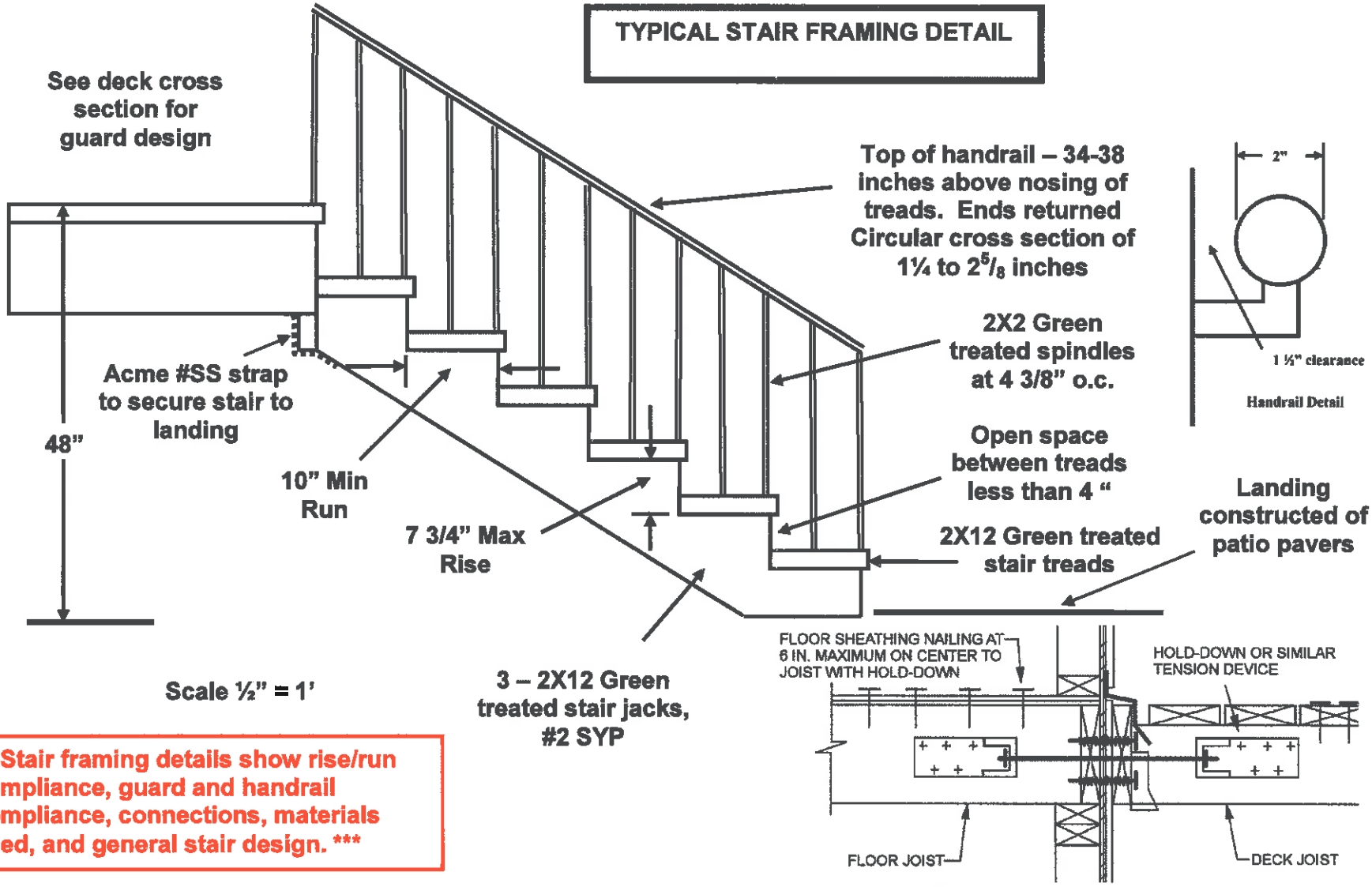
TYPICAL STAIR FRAMING DETAIL



***Stair framing details show rise/run compliance, guard and handrail compliance, connections, materials used, and general stair design. ***

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