

GENERAL STAIR NOTES:

1. TYPICAL STAIR CONSTRUCTION MATERIALS:

10-1/4 INCH TREADS
1X8 RISERS
2X12 STRINGERS

2. STAIR DIMENSIONS PER 2009 MICHIGAN RESIDENTIAL CODE.

MAXIMUM RISER HEIGHT SHALL BE $8\frac{1}{4}$ " INCHES. THE RISER VARIANCE SHALL NOT EXCEED $\frac{3}{8}$ " INCH WITHIN ANY FLIGHT OF STAIRS.

MINIMUM TREAD DEPTH SHALL BE 9" INCHES PLUS NOSING. THE GREATEST TREAD DEPTH VARIANCE SHALL NOT EXCEED THE SMALLEST BY MORE THAN $\frac{3}{8}$ ". WINDERS SHALL NOT BE LESS THAN 6 INCHES AT THE NARROWEST POINT AND NOT LESS THAN 10" INCHES AT A POINT 12" INCHES FROM THE NARROWEST SIDE OF THE TREAD. A CONTINUOUS HANDRAIL SHALL BE LOCATED ON THE SIDE WHERE THE TREAD IS NARROWER.

A NOSING OF NOT LESS THAN $\frac{3}{4}$ " INCHES AND NOT MORE THAN 1- $\frac{1}{4}$ " SHALL BE PROVIDED ON STAIRWAYS WITH SOLID RISERS. NOSING IS NOT REQUIRED WITH TREADS GREATER THAN 1" INCHES.

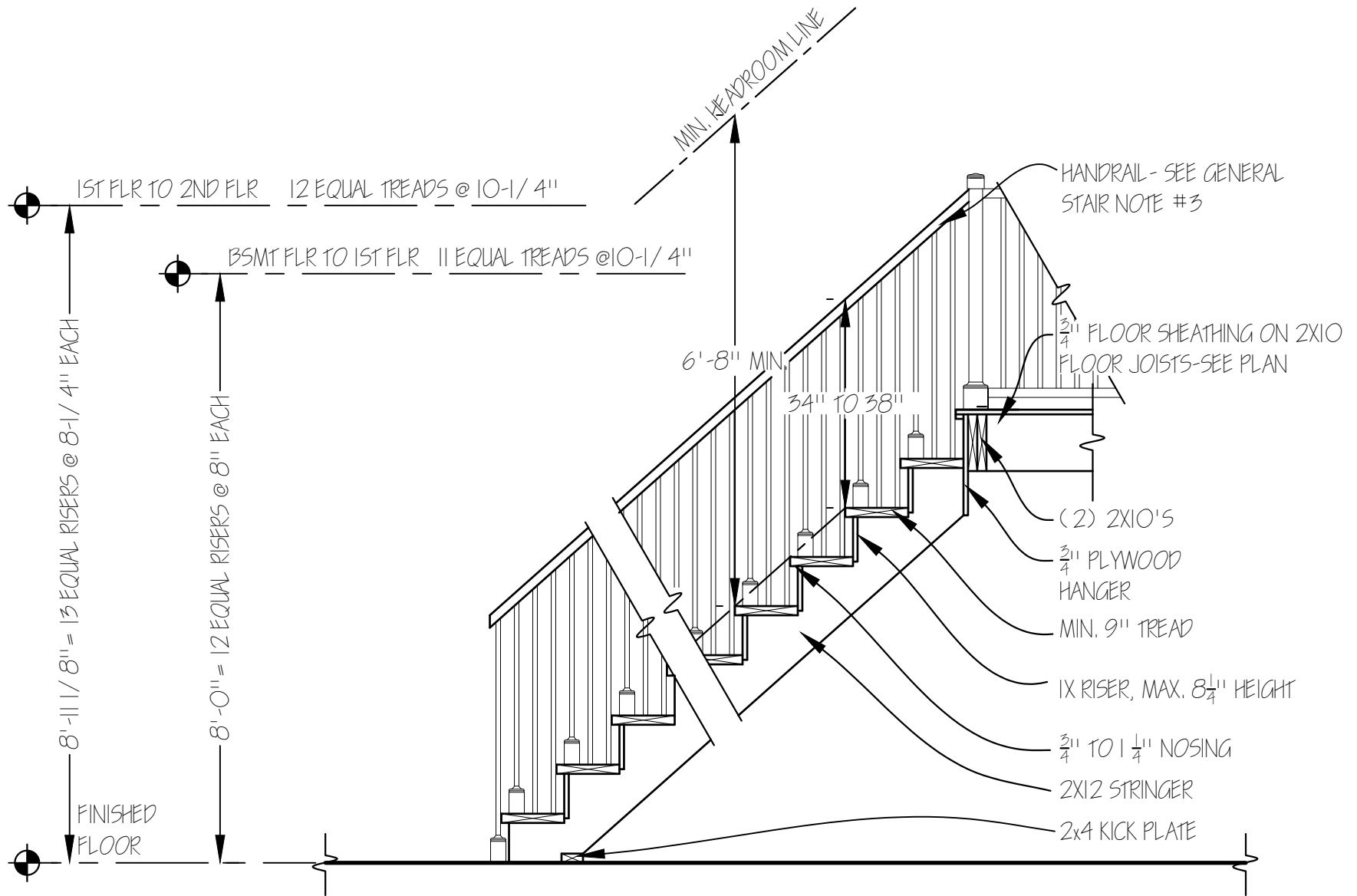
3. HANDRAILS SHALL BE PROVIDED ON ONE SIDE OF EACH CONTINUOUS RUN OF TREADS OR FLIGHT WITH FOUR OR MORE RISERS. A HANDRAIL SHALL BE MOUNTED BETWEEN 34" INCHES AND 38" INCHES ABOVE THE LINE OF NOSING AND SHALL HAVE A MINIMUM OF $1\frac{1}{2}$ " INCHES SPACE BETWEEN WALL AND RAIL AND THE MAXIMUM PROJECTION INTO STAIRWAY SHALL BE $4\frac{1}{2}$ ". HANDRAILS MUST EXTEND FOR THE FULL LENGTH OF THE STAIR RUN AND SHALL BE RETURNED TO THE WALL OR TERMINATE IN A NEWEL, POST OR SAFETY TERMINAL. HANDRAIL GRIP SIZE SHALL BE $1\frac{1}{4}$ " INCHES TO 2" INCHES IN DIAMETER CIRCLE. IF THE HANDRAIL IS NOT CIRCULAR IT SHALL HAVE A PERIMETER DIMENSION OF AT LEAST 4" INCHES AND NOT MORE THAN $6\frac{1}{4}$ " INCHES WITH THE LARGEST CROSS SECTIONAL DIMENSION NOT GREATER THAN $2\frac{1}{4}$ " INCHES. ALL HANDRAIL EDGES SHALL HAVE A MINIMUM OF .01 INCH RADIUS.

4. GUARDRAILS A MINIMUM 36 INCHES IN HEIGHT SHALL BE PROVIDED ON OPEN SIDES OF PORCHES, BALCONIES, AND OTHER RAISED FLOOR AREAS LOCATED MORE THAN 30 INCHES ABOVE ADJACENT FLOOR AREA OR GRADE BELOW.

GUARDRAILS SHALL BE PROVIDED ON OPEN SIDES OF STAIRWAYS WHERE THE TOTAL RISE IS MORE THAN 30 INCHES ABOVE THE ADJACENT FLOOR AREA OR GRADE BELOW. GUARDRAILS SHALL BE A MINIMUM OF 34" INCHES HIGH WITH SPINDLES SPACED SUCH THAT A SPHERE OF 4 INCH DIAMETER CANNOT PASS BETWEEN RAILS.

5. THE TRIANGULAR OPENINGS FORMED BY THE RISER, TREAD AND BOTTOM RAIL OF A GUARD AT THE OPEN SIDE OF A STAIRWAY ARE PERMITTED TO BE SUCH AS SIZE THAT A SPHERE 6" INCHES CANNOT PASS THROUGH.

6. UNDER STAIR PROTECTION FOR ENCLOSED ACCESSIBLE SPACES UNDER STAIRS SHALL BE PROVIDED BY HAVING WALLS, UNDER-STAIR SURFACE, AND ALL SOFFITS PROTECTED ON THE ENCLOSED SIDE WITH MINIMUM $\frac{1}{2}$ " INCH GYPSUM BOARD.



OO STAIR SECTION
 A-OO SCALE 1/2" = 1'-0"