1ST FLOOR FRAMING: (SEE SKS-1 FOR DETAILS)
TYPICAL FRAMING OBSERVED INCLUDED:
- VARIOUS SIZED SINGLE SPAN WOOD JOISTS AT 16”oc IN THREE BAYS SPANNING EAST-WEST WITH THE EAST AND WEST BAY JOISTS SPANNING BETWEEN A FOUNDATION WALL AT ONE END AND A DROPPED BEAM AT THE OTHER END AND THE CENTER BAY JOISTS SPANNING BETWEEN A DROPPED BEAM AT BOTH END.
- TWO CONTINUOUS 4-SPAN 7-1/2”x 12” DROPPED BEAMS WITH EACH BEAM END SUPPORTED AT THE NORTH AND SOUTH FOUNDATION WALL AND (3) 4” DIAMETER STEEL POSTS APPROXIMATELY SPACED EQUALLY WITHIN THE LENGTH OF THE BEAM.

OBSERVATIONS & ANALYSIS: (SEE SKS-1, SKS-2 & AKS-1 FOR DETAILS)
- 1ST FLOOR FRAMING IN GENERAL GOOD CONDITION.
- ANALYSIS OF JOISTS WAS BASED ON A 1-3/4”x 7-1/2” MEMBER SIZE AS A CONSERVATIVE ESTIMATION DUE TO THE VARYING JOIST SIZES.
- OBSERVED SEVERAL JOISTS WITH HORIZONTAL CRACKS. REPAIRS RECOMMENDED.
- INADEQUATE BEARING CONDITION AT 2x JOIST ON 7-1/2”x 12” DROPPED BEAM. SEE SKS-1 FOR RECOMMENDED REPAIR.
- RECOMMEND ADDING FRAMING CLIPS AT FLUSH FRAMING ABOVE BASEMENT WINDOWS.
- 1ST FLOOR FRAMING MEETS THE CODE REQUIRED LOADING FOR THE CURRENT BUILDING’S USE AS A RESIDENCE WITH RECOMMENDED REPAIRS.
Photo P1:
Various size joists in east joist bay looking southwest. Joist with observed notch in this photo determined structurally acceptable by analysis.

Photo P2:
Various size joists in center joist bay looking north.

Photo P3:
Various size joists in west joist bay looking southeast.
Photo P4:
Horizontal crack at 9th joist from south end of building - west joist bay.

Photo P5:
Inadequate bearing condition at 4th joist from south end of building - west joist bay.

Photo P6:
Horizontal crack at 1st joist from south end of building – center joist bay.
Photo P7:
Horizontal crack at 3rd joist from south end of building - east joist bay.

Photo P8:
Horizontal crack at 6th joist from south end of building - east joist bay.

Photo P9:
Inadequate bearing condition at 5th joist from south end of building - east joist bay.
127 Cross St.
Middletown, CT

Photo P10:
Typical flush framing at basement windows.
HORIZONTAL CRACK AT 6TH JOIST FROM SOUTH END OF BUILDING

5TH JOIST FROM SOUTH END OF BUILDING NOT BEARING AT 7-1/2"x12" BEAM. JOIST EQUIVALENT TO 2X8.

HORIZONTAL CRACK AT 3RD JOIST FROM SOUTH END OF BUILDING

HORIZONTAL CRACK AT 1ST JOIST FROM SOUTH END OF BUILDING

HORIZONTAL CRACK AT 9TH JOIST FROM SOUTH END OF BUILDING

PROVIDE HARD WOOD SHIMS AT 4TH JOIST FROM SOUTH END OF BUILDING AT 7-1/2"x12" BEAM AS REQUIRED FOR PROPER END BEARING.

PROVIDE FRAMING CLIPS AT JOISTS & HEADERS ABOVE BASEMENT WINDOWS TYP

1/4" = 1'-0"
FRAMING NOTES

1. FASTENERS SHOWN ARE SIMPSON STRONG-TIE FASTENERS AND ARE SELECTED FOR LOAD REQUIREMENTS. SUBSTITUTION IS PERMITTED IF LOAD CAPACITIES OF ALTERNATE FASTENERS ARE OF EQUAL OR GREATER CAPACITY THAN COMPARABLE SIMPSON FASTENERS.

2. CONSTRUCTION ADHESIVE SHOWN IN DETAILS SHALL BE PL-400 CONSTRUCTION ADHESIVE OR EQUIVALENT. ADHESIVE SHALL CONFORM TO APA PERFORMANCE SPECIFICATION AFG-01.

3. PLYWOOD & OSB SHEATHING SHOWN IN DETAILS SHALL BE APA RATED SHEATHING.

4. METAL CONNECTOR HARDWARE SHOWN IN DETAILS ARE SIMPSON STRONG-TIE CONNECTORS AND ARE SELECTED FOR LOAD REQUIREMENTS. SUBSTITUTION IS PERMITTED IF LOAD CAPACITIES OF ALTERNATE ARE OF EQUAL OR GREATER CAPACITY THAN COMPARABLE SIMPSON CONNECTOR. FASTENING SHALL BE PER MANUFACTURER'S REQUIREMENTS USING SD SCREWS.

NOTE:
ALTERNATE REPAIR DETAIL PROVIDED ONLY WHEN CRACK IS LOCATED BELOW JOIST CENTERLINE.
SCREW LENGTH SHALL BE MINIMUM 0.6D.

TYPICAL CRACKED JOIST REPAIR DETAIL

TYPICAL ALTERNATE CRACKED JOIST REPAIR