I. Building Section:

You have to remove typical section drawing from your mind. Get out of that mindset now! Do NOT draw sketch lines, except on the second floor so that you know where the interior partition walls are.

a. Write down each element required from the program AND vignette information screens. Also check tip screen for information. (grade line, slab, footings, bearing walls, int. partitions, fire-rated partitions, ceilings, joists/decking, ducts, parapets, etc.)

b. Verify the size of the foundation slab and the floor/roof decking that will be drawn.

c. Check for duct/joist combination ON BOTH FLOORS and the two story space. Add the lights and decking thickness at this time.

d. Write down (from left to right) the joist and duct sizes AT THE SECTION.

e. Turn off all layers except 1st floor architectural.

f. Draw the grade line. {Note: I always use the section cut line as the grade line, drawing from circle to circle (unless it extends too much) but some people find that confusing.}

g. Draw sketch rectangles for frost depth (below the grade line) and slab thickness (above the grade line). {Note: Make sure you are zoomed in to draw it accurately in relation to the grade line. Remember, you don’t have to draw everything in one pass. Make a small portion in zoom, then use move/adjust tool to extend at larger view.}

h. Zoom in and draw in this order, from left to right (stay zoomed): western exterior footing (start at top of slab rectangle taking bottom of footing to bottom of frost depth rectangle), stub of western bearing wall (see note above about not drawing all at once), western half of slab, interior footing (start of top of slab, taking top of footing to bottom of slab), stub of interior bearing wall, eastern half of slab, eastern exterior footing, and stub of eastern bearing wall.

i. In Zoom, draw sketch rectangles for 1st floor elements one on top of the other aligned with the CENTER of the western bearing wall stub: Ceiling height, 1st floor interstitial space (make sure this includes the lights and the decking), then draw the 2nd floor sketch elements: ceiling height, 2nd floor interstitial space, parapet. {Note: sketch rectangles only need to be the right height, they don’t need to be a certain width. You already have your bearing walls located.}

j. Using move/adjust, pull western exterior and interior bearing walls to top of parapet sketch rectangle.

k. Zoom in and draw the interior ceiling for the first floor (top of sketch rectangle) and the structural element (top of interstitial sketch rectangle - see the notes you took regarding the joist size and spacing at the section). Repeat for 2nd floor. {Note: using move/adjust extend elements to center of interior bearing wall.}

l. Draw 1st floor partitions: interior to the ceiling, fire-rated to the underside of decking.

m. Turn on 1st floor mechanical plan and draw the ducts being sure to use the locations at the section cut. (See your notes for the sizes at the section)
Turn off mechanical and turn on 1st floor structural. Adjust joists to line up with centerlines shown.

Turn off 1st floor elements and turn on 2nd floor architectural plan only. Repeat sequence with 2nd floor.

Draw 2-story space sketch elements (align with CENTER of interior bearing wall): ceiling height, interstitial (including lights and decking), parapet.

Extend interior and eastern exterior walls to top of parapet sketch rectangles.

Zoom in and draw the interior ceiling for the 2-story space and the structural element. \(\text{Note: extend elements to center of eastern bearing wall.}\)

Turn on 2nd floor mechanical and draw ducts.

Go through your checklist to be sure you drew everything. Use ID tool to verify sizes. Check over each element with one layer on at a time.