

### Framing Plans

- The framing plan shows the layout of the supporting features such as bearing walls, columns, beams and girders.
- The framing plan is meant to complement the architectural plans. These are strictly structural drawings intended for the location of all the structural members and features.
- A building frame in wood or steel is shown with isolated structural supports (columns) and individual beams, joists, girders and purlins.
- Framing plan must include all the building's structural components, horizontal and sloped slabs, stairs and ramps and the framing members themselves.
- Framing plan is usually drawn at the same scale as the floor plan. Commonly, if there is a system of columns a structural grid will be set up to mark the center lines of the columns both ways.

### Roof Plans

- This explains the overall configuration of the roof and the elements that rest on or penetrate the roof membrane.
- Adequate provision should be made to cater for positive drainage and slope in all roof systems. Ponding on a roof forces the water to seek an opening through which it can leak into the building
- The roof plan is drawn at the same scale as the floor plan. Chimneys, drains, skylight, stacks and the pattern of slopes built into the roof surface should be well enumerated

### Building Sections and Elevations

- The floor plan is a horizontally cut section that provides us with a layout of the rooms and the openings into them.
- The elevations show the floor to floor heights in their correct dimensions
- The sections generally fall into two classifications; longitudinal and traverse sections. The two-section complex, cross and longitudinal are important in any project, no matter how large or small
- Basically they are oriented vertically to reveal information not shown on other drawings. They will usually show features that appear on other large scale details and in a sense are an index of these details
- The concept of the building section is to cut the building with all details in place, to look in a particular direction as denoted by the designation and show everything in front of the cut line.
- Architectural symbols must be used as in wall sections, a material that is cut must be marked by the appropriate symbol

### Staircase

- Stair is a conventional means of access between floors in building. The staircase should be constructed to provide ready, easy, comfortable and safe access up and down with steps that are neither laborious nor difficult to climb.
- Flight
- Steps
- Treads and Risers

- Nosing
- Rise and going
- Pitch
- Headroom and clearance

#### Detailing Reinforced Concrete

- Detailing Column bases
- Foundations to support columns vary according to the nature of the ground, the disposition of the columns and the magnitude of the loading that they sustain
- Detailing Columns
- Columns are detailed in elevation with sufficient X-sections to show the arrangement of the longitudinal bars and the shape of the links.
- Detailing Beams
- Beams are usually rectangular in X-section. Their width is commonly the same as the column that support them. Beams are detailed in elevation with sufficient X-sections to illustrate the position of all the longitudinal bars and shape of the stirrup
- Detailing Floor Slabs
- Floor slabs are detailed in plan with sufficient sections to show the positioning of all reinforcement. Description of bars are given in full on the plan view and bar marks only are repeated in the sections.