Red line drawings: Significance, Implementation and Use

Significance- Essential mechanism to retain a projects life cycle after the project has finished. This would aid the forthcoming party to identify the location, level, and route of completed work which can be otherwise a tedious effort to locate. This is usually helpful during modification and demolition works.

With hundreds and thousands of steps involved in completion of a project, often the requirements of red-line/ asbuilt drawings were ignored. These were pushed to the end of the project to capture the completed work, compile, and record. This would potentially prevent the drafting team or surveyor to revisit the area to understand the asbuilt condition (especially for concealed services or service lines or any structure) or deny a chance to re-confirm the detail captured incase of a doubt.

A red-line/ as-built drawing could save expenses during future expansion by preventing damages that could be expensive to repair or paying hefty authority fines.

Implementation-Traditionally red line drawings were made by capturing as- built data from the work site by marking the same using red colour on a drawing, hence the name. Data includes details from original scope and modifications not limited to the following,

- 1. Dimensions
- 2. Materials used
- 3. Location
- 4. Level
- 5. Route
- 6. Quantity

Developments in software-based solutions has paved new ways of recording the data using Autodesk Build, BIM



models (as shown here), Laser scanning etc. These developments are proving one thing- the importance of such a record.



Use- Listed below are few advantages from having a red line/ as- built drawing.

- 1. During future expansion or renovation process
- 2. Where new parties are involved in subsequent work stages

- 3. To streamline issuance of permits in hotels, government offices and other public facilities
- 4. To obtain permits from authorities

