

Introduction

Automated Building Plan Scrutiny System (ABPSS)

ABPSS is the Software Application for automatic scrutiny of building plans; it is a unique application which helps in automating the cumbersome process of scrutinizing the building plans and mapping them to the development rules and regulations.

“ABPSS” reads the building entities from drawings which are being submitted by Architects in soft copies, geometrically map each & every entity by corresponding with complex & interlinked rules. It produces relevant reports embedded in drawings as well as in printed format.

Hitherto, this process is being carried out manually in almost all bodies of local self governance and development authorities. Since the process of automating the mapping of the rules and regulations with a CAD based drawing involves a very complex technology and requires in depth understanding of Structural Engineering, Architecture, related legislation and the flow of business processes behind this activity.

ABPSS helps in attaining the e-Governance by supplying all electronic versions of the documents. This system reduces the paper work, valuable time and efforts for Architects as well as Authority. It also helps in standardizing the building drawing plan process. It also makes the whole process objective and transparent replacing the human dependent existing system which is prone to intentional and unintentional human errors.

Thus ABPSS takes care of all major aspects of e-governance initiative that is speed, ease, transparency, anywhere/any time availability and in addition to it environment friendliness is also done by reducing the consumption of paper considerably. Thus besides being efficient and user friendly, this Product is a green product too.

ABPSS will prove itself to be a better way to manage the process of approval of Building Plans and subsequent process of granting the permissions to the concerned citizens because of the workflow application integrated with the basic application. This makes this system completely web accessible with search capabilities and flexible enough to be customized according to the existing processes of any body of local governance.

Following major aspects of the “e-Governance” concept are being fulfilled by ABPSS.

- IT enabling the government functions - something similar to back-office automation,
- Web-enabling the government functions so that the citizens will have a direct access, and
- Improving Government processes so that openness, accountability, effectiveness and efficiency.
- Uniformity and standardization

Main Features of ABPSS

- **Auto-Detection of Type of Use & Bldg. Structure:** It can auto detect Use & Bldg. Structure of Project Proposal such as Commercial Use or Resi-Comm Mixed Use by auto scanning of drawings and generates report stating whether it is permissible or not.
- **Auto-Triangulation & Block Diagram:** ABPSS generates Net Plot Area after deducting Road widening area. It generates Plot area Diagram by Triangulation Method & Plot Area calculation by itself. ABPSS also generates Block diagram for each Floor and provide dimensions with Area Calculation.
- **Margin Generation:** ABPSS generates required Margin from Main Road, Plot Boundary, and Open Space etc. by itself. Also it shows Proposed Failed Margins with Auto Dimensioning.
- **Verification with Actual Coverage Area:** ABPSS verifies Built-up Area (Max. Coverage area) drawn in Layout Plan with Actual Built-up Area generated by auto punching of each Floor plan.
- **Auto-Linking :** It can auto link each Bldg with corresponding Pwork (Max. coverage Area) drawn in Layout Plan, each Floor Plans with its section, Tank, Ramp, Stair with their Sections.
- **Section reading & Association:** It reads Section, associates each floor plan with floor section & gives Ht. of Bldg. & each floor by auto dimensioning.
- **Checking Double Ht. & Verification of Chowk/ Vshaft:** ABPSS checks Double Ht. of each Terrace. It verifies each Chowk & V shafts for its clear Ht. by auto punching of each floor Plan.
- **Auto-Generation of FSI & BUA Table & Ind. Plot Area Table:** ABPSS automatically inserts FSI & Built-up Area Tables with per floor detail for each Building & Plot Level. In case of Sub Plotting, ABPSS inserts Individual Plot area Table with Proposed & Permissible area (Value).
- **Auto-Generation of Area-Statement:** ABPSS automatically inserts Area Statement with all Proposed & Permissible Value in traditional Format.
- **Auto-Generation of Schedule of Opening & Parking Table:** ABPSS automatically inserts Schedule of Opening and Proposed Parking Table for each Building as well inserts Proposed Parking for whole Project.
- **Auto-Hatching to Particular Object:** ABPSS provides hatching to Particular Objects as described in DC Rule book. e.g. Green colored Hatch in Main Road, Yellow colored Hatch in Open Space, etc.
- **Auto-generation for Bldg. Line:** ABPSS provides Bldg Line with particular Road Name & checks each Bldg with respect to the Building Line.