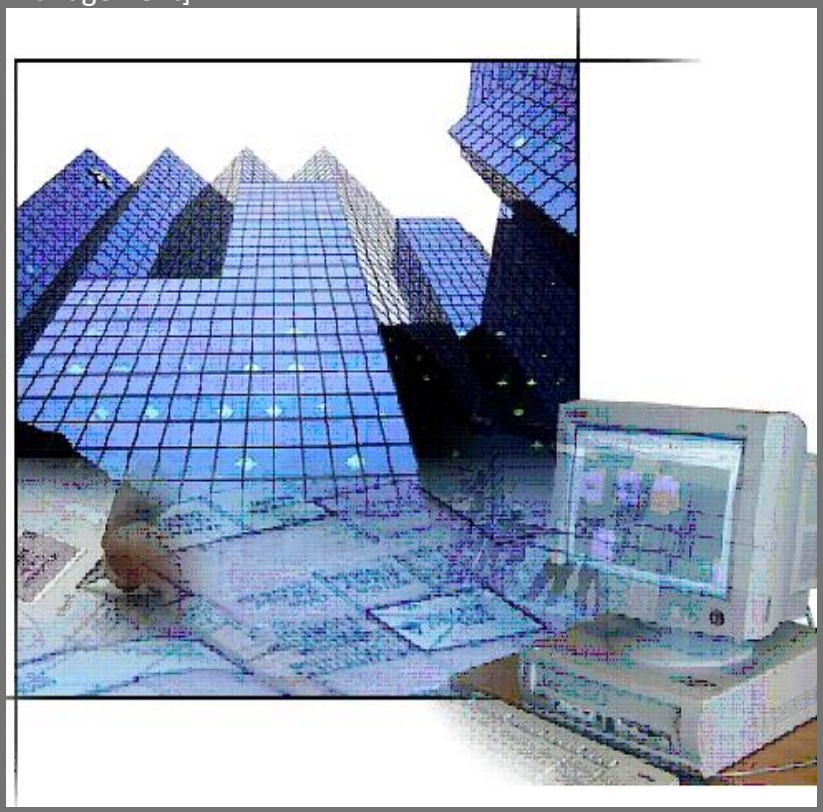
Maharashtra

PreDCR Help Manual

[An Automatic solution for Approval of Building Proposal and Work Flow Management]



PreDCR
Softtech engineers .pvt. ltd

PreDCR Manual - Maharashtra

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Document outline

About the drawing protocol document

Maharashtra has planned to automate the building plan approval process by introducing AutoDCR system. AutoDCR software reads the CAD drawings submitted by architects and automatically produce the deviation report based on the control regulations prescribed by Maharashtra.
The purpose of this document is to establish a set of guidelines to Architects for preparation of drawings to be submitted for taking Building Permission from Maharashtra , Uniformity in the

process of drafting of the drawings to be submitted for approval is required for automation of building approval system by introducing AutoDCR system.

The consultants/Architects should prepare the drawings keeping specific objects in specific layers with specific colors and text. The layers required to be generated with explanation of what is required to be drawn on which layer is described in this document. This document serves as a source of information on obtaining level of consistency in drafting and approval process focuses on both the theoretical and practical description of process flow and protocol to be used while preparing drawings for submission at Maharashtra for Building Permission. The document explains use of PreDCR utility.

How to read this drawing protocol document?

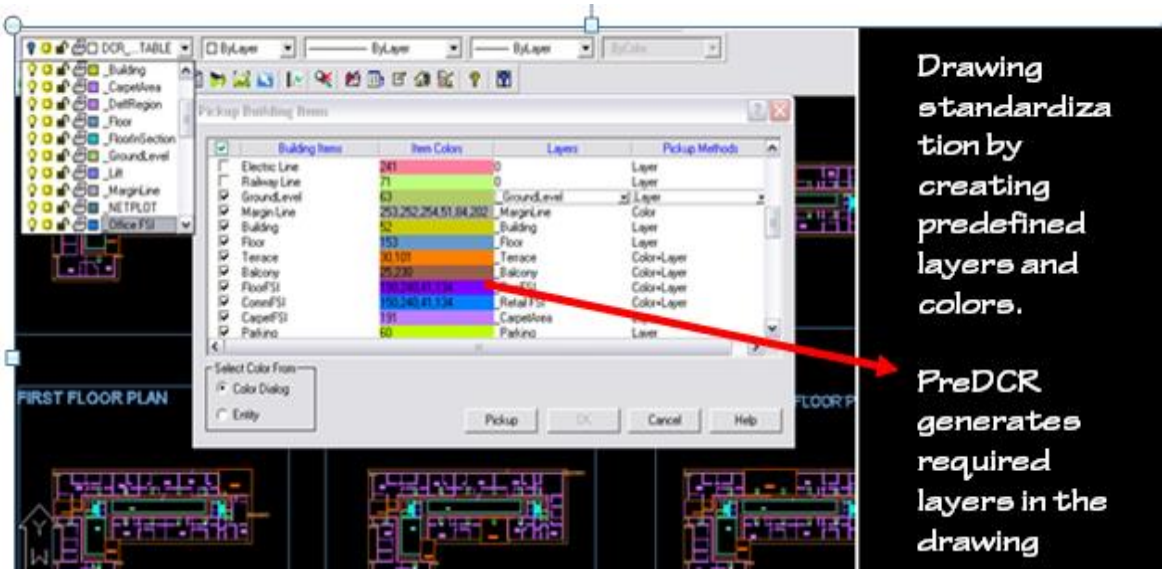
This document should be read in conjunction with the building bye-laws which will be applicable for approval of a proposal. The reader of this document should have understood the applicable bye laws for scrutiny of a proposal. The reader should also be familiar with AutoCAD terminology and environment for better understanding of the system. It is more exploratory in nature than the specifications and contains sections to explain particular aspect of planning and designing.

Drawing pre-formatting utility (PreDCR)

Overview

AutoDCR is a unique and innovative approach to automate scrutiny of building proposals by reading CAD drawings. AutoDCR software needs preformatted drawings with some specifications. PreDCR is a software application used to create the architectural plan as per AutoDCR software requirements. It helps in standardization of drawings and helps in reducing time required for preparing submission drawings. It works under AutoCAD environment with additional menu &

toolbar.



Using PreDCR commands user can create all the required layers in one click. Once all the layers are created in the drawing user can use AutoCAD commands to draw entities on the corresponding layers with the help of PreDCR software. Short commands are provided to activate any layer in PreDCR. PreDCR also helps in correcting drafting errors in the drawing. At any time user can verify if the drawn entities are properly closed or not, if proper name text has been written inside all closed poly or not etc. PreDCR will highlight all the failed entities if any.

Aims & objectives

To bring uniformity and standardization in submission drawing format.

To create error free drawing by auto-correction of drafting errors.

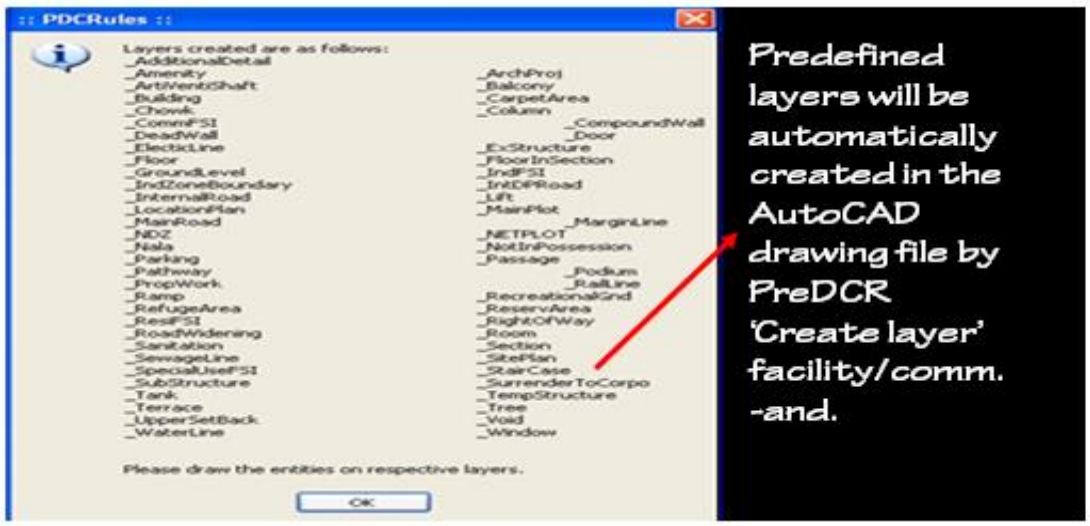
To Increase drafting speed and efficiency

To reduce drawing data redundancy.

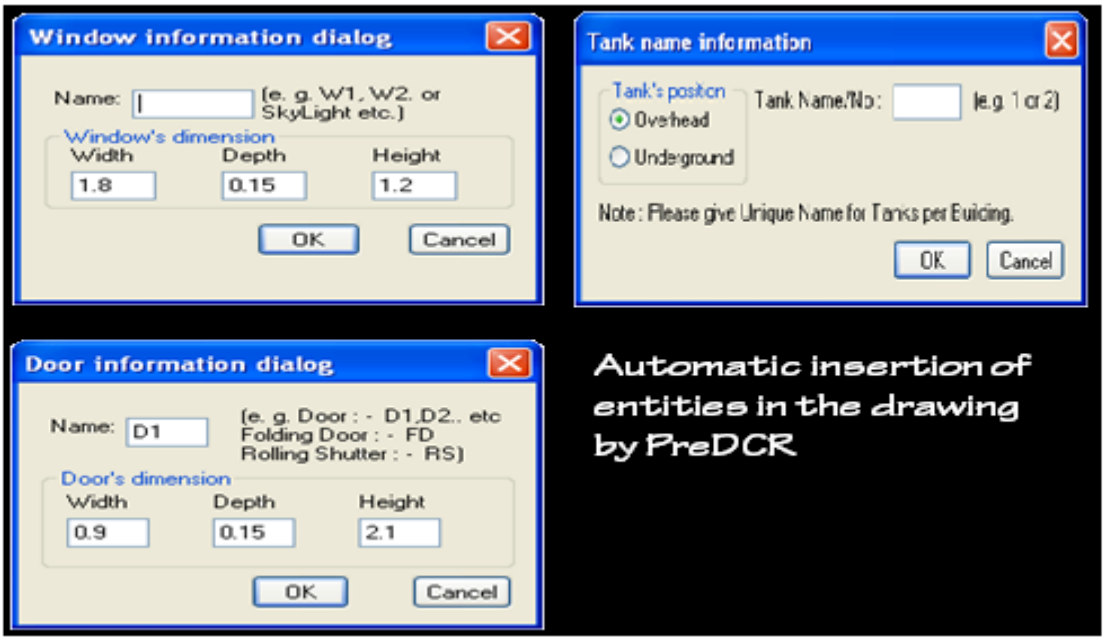
To remove dimensioning and area calculation requirements from submission drawing format and auto-calculating areas in AutoDCR automatically.

Salient features

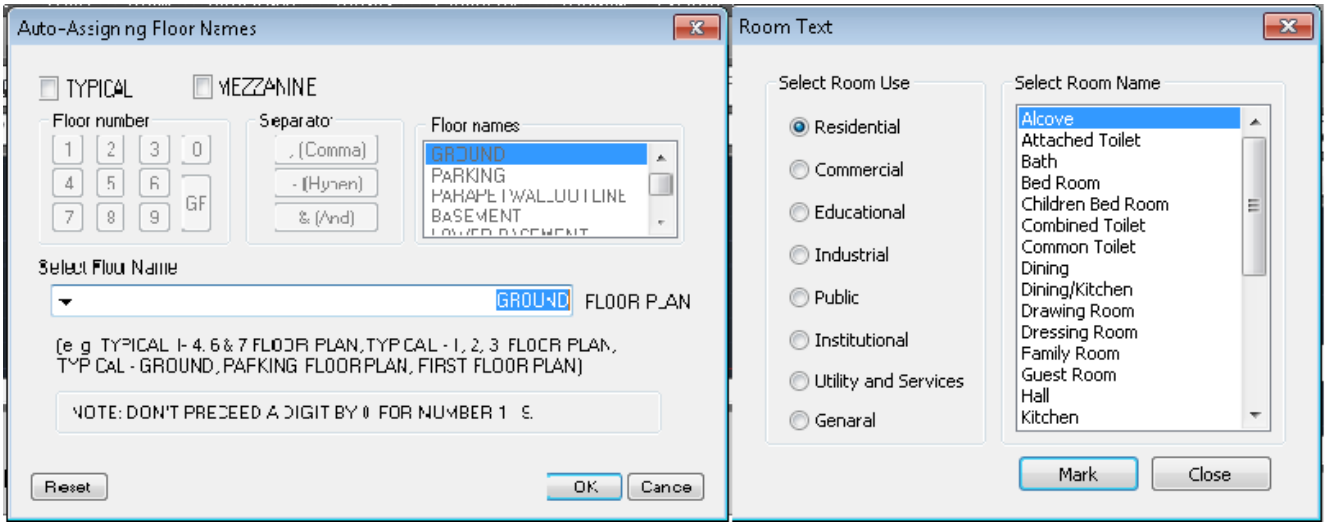
Automatically creating required layers in the drawing.



Automatically creating and inserting entites of required size in the drawing: User can define size of entity and insertion point in the the drawing.PreDCR will create and insert entity in the drawing at specified location.

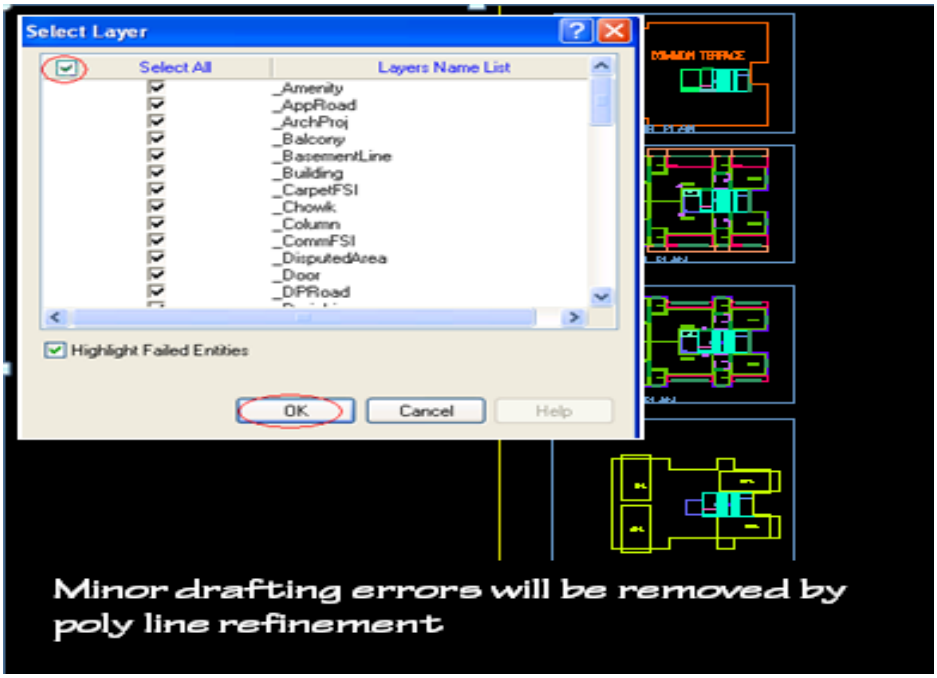


Automatic insertion of required text in the drawing.

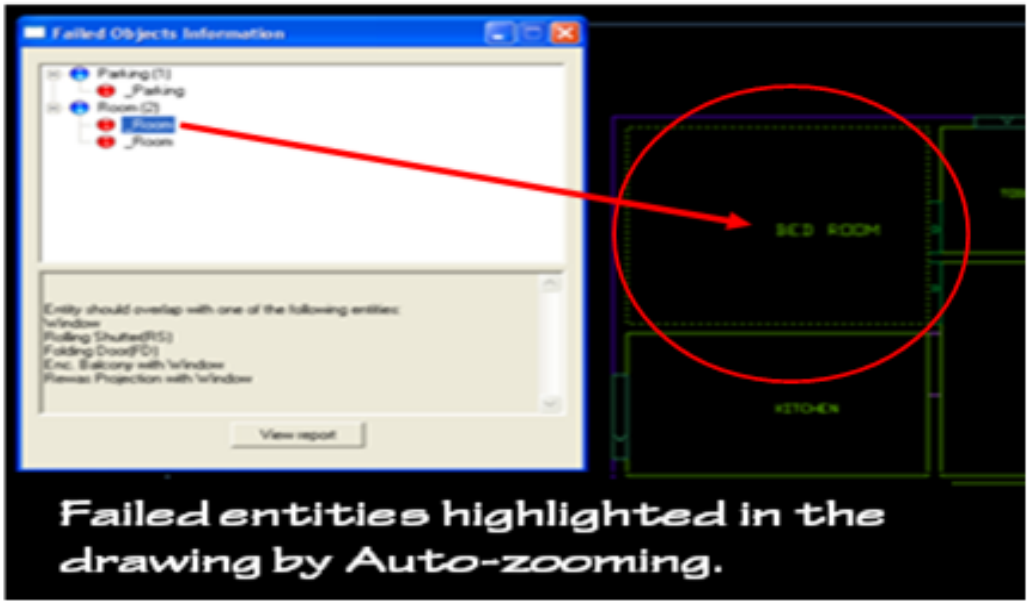


PreDCR can automatically insert text like room name, floor name etc. at specified location in the drawing.

Drawing cleaning, refinements of poly lines, text and closed entity verification will be done by PreDCR to eliminate drafting errors.



PreDCR verify and will highlight failed entities in verifications with detailed explanation and Auto-Zooming.



Benefits of PreDCR

1) Standardization of submission drawings-Brings uniformity & standardization in submission drawing format. This software will correct some minor drafting errors and also provide list of failed entities with Auto-zooming facility so that user can easily locate the failed entities in the drawing.

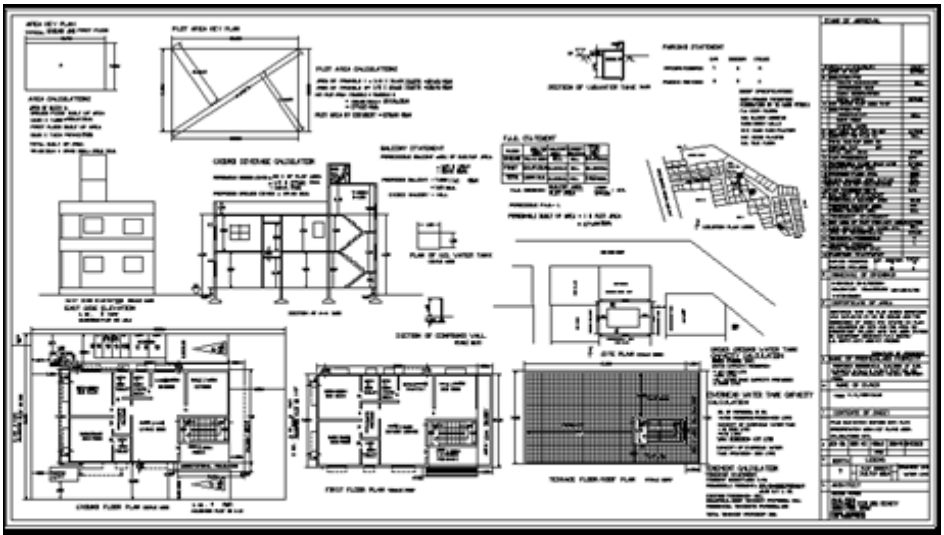
2) Operational ease and convenience-Data redundancy is eliminated from the drawing. Only minimum required entities are to be drawn in the drawing as most of the data will be auto detected by the system from existing available data.

3) Increased speed and efficiency-PreDCR facilitates Auto insertion of many drawing entities like parking, door windows etc of required size and number. Test auto-insertion facility saves text typing efforts. Auto-dimensioning and auto-calculation facility saves calculation efforts. Using this software user can create all the required layers at one click.

4) Accuracy - Accuracy in area calculations is achieved. Preparing Calculation tables, showing dimensions in the drawing is not required.

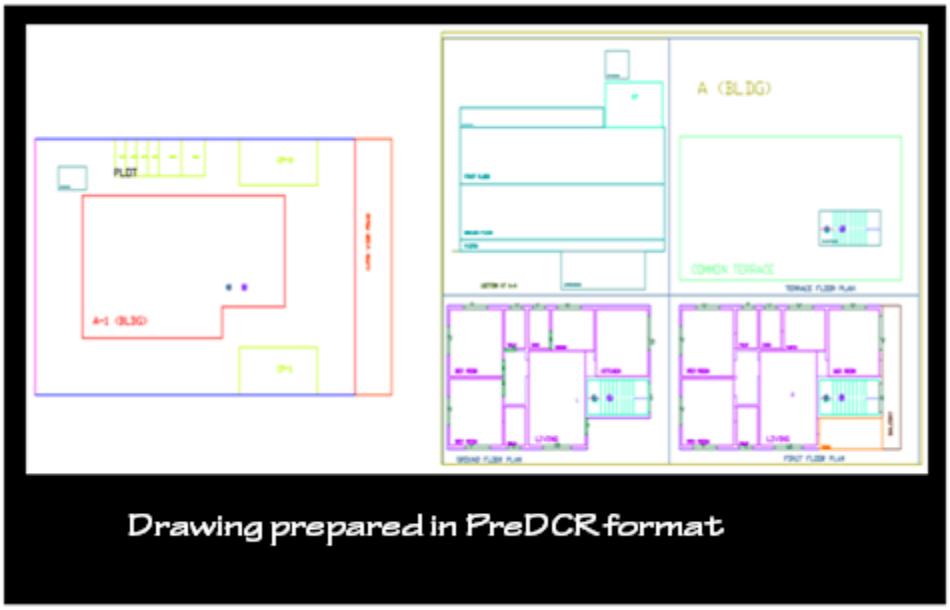
Drawing formats

1) Conventional submission drawing format

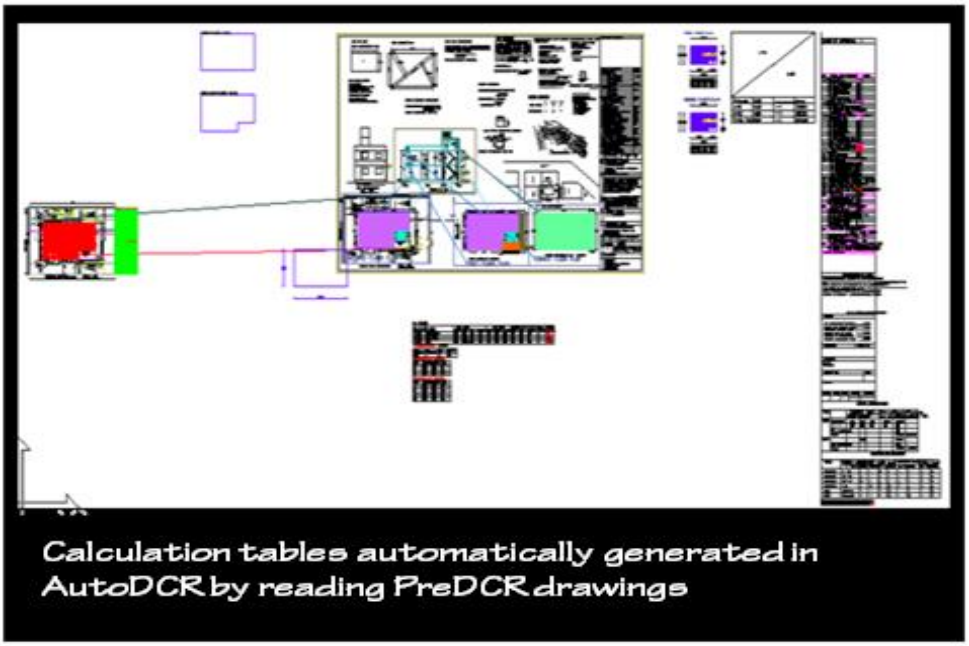


Conventional drawing submission format

2) As per PreDCR format specified by PreDCR



3) After scrutiny of drawing using AutoDCR-



Protocol details

PreDCR is a **software** application used to create the architectural plan as per **AutoDCR** software requirements. It works under AutoCAD environment with additional menu & toolbar.

Using PreDCR commands user can create all the required layers in one click. Once all the layers are created in the drawing user can use AutoCAD commands to draw layout plan.

As per AutoDCR requirement all building items like proposed plot, proposed work should be drawn on the corresponding layers. Short commands are provided to activate any layer in PreDCR

At any time user can verify if the drawn entities are properly closed or not, if proper name text has been written inside all closed poly or not etc. PreDCR will highlight all the failed entities if any.

PreDCR can be used to modify/make and verify the existing or new architectural plan as per **AutoDCR** software requirements. Users are free to use AutoCAD commands and or PreDCR commands to achieve the main purpose which is.

Drawing the architectural plan in DWG format as per AutoDCR software requirements.

For automating the process of Development Control Regulations user/draughtsman/architect have to follow some specifications. The following are the list of specifications that the user should follow.

Plot layout, detailed floor plan and building section for all the floors should be there in one AutoCAD drawing file.

All building items like proposed plot, proposed work, proposed parking etc. must **be drawn using closed polyline**.

(i.e. Every entity must be closed LWPOLYLINE except Railway Line , Drain line, Water Line, Electric Line, Dead Wall and Ground lvl.).

Building Sub-Items **must be exactly inside of outer closed polygon as per their place in architectural plan.**

This means none of the edge or vertex of inside entity should be drawn outside its container entity.

For example Parking or Open Space poly must be exactly inside the main plot poly.

Tools are provided in **PreDCR** to verify this check.

Every Building Sub-Items should be given a specific/unique name (Text or MText entity) on the same layer & inside the entity poly. If name not found then AutoDCR will generate the name

automatically. Naming Conventions should be followed properly.

e.g. Each Room should be given the concerned name Using <Assign Name> function of PreDCR Living, Kitchen, Bedroom. Etc.

Floor Name: GROUND FLOOR; TYPICAL FLOOR 1,2 & 5-8; TERRACE FLOOR

Floor Items: Room Names should be given properly without using abbreviations so the software can identify perfect entity. This can be done by Assign name facility provided by the software.

User shall use only following kind of entities for Building Items :-

LWPOLYLINE / TEXT / MTEXT

If in a plan two proposed work are mirrored in that case user should provide two separate building plan. For each proposed work.

Installation and Registration

System Requirements

- Pentium IV or better (or compatible processor)
- 1GB RAM
- USB Port
- Windows 98/2000/XP(32bit and 64bit)/Vista/Windows7(32bit and 64bit)
- CD-ROM drive
- AutoCAD 2000/2002/2004/2005/2006/2007/2008/2009/2010/2011.

Installation

To install PreDCR software on your computer please follow the given steps.

Step 1: Insert the supplied PreDCR CD in CD drive of the computer.

Step 2: Run the PreDCR installer by double clicking on file ***"PreDCR_Installer.exe"*** in the PreDCR CD.

Step 3: Follow the next steps in installer wizard to complete installation.

After successful installation, a PreDCR shortcut will be placed on your computer desktop as shown below.

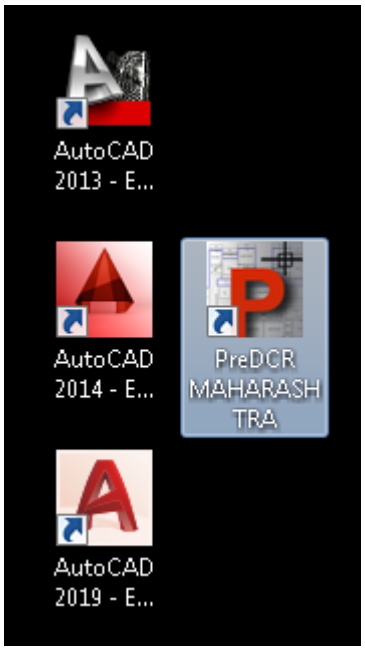
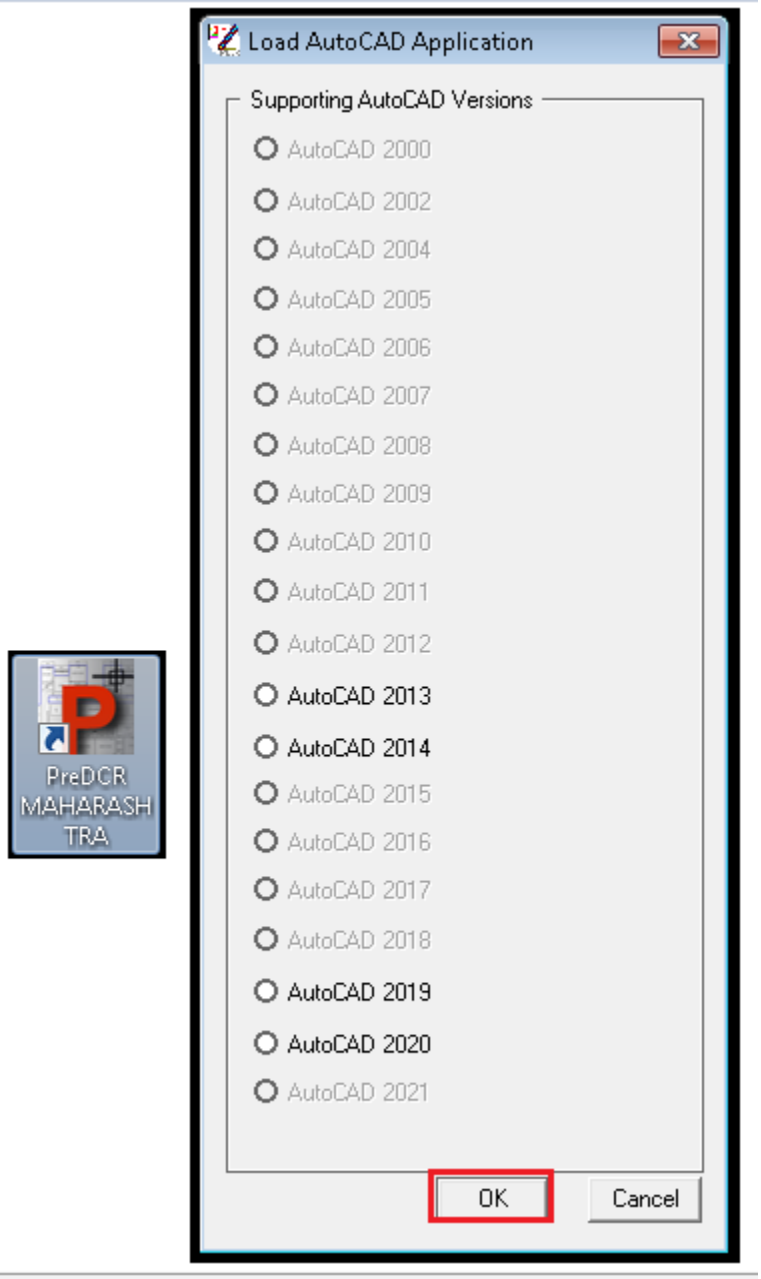


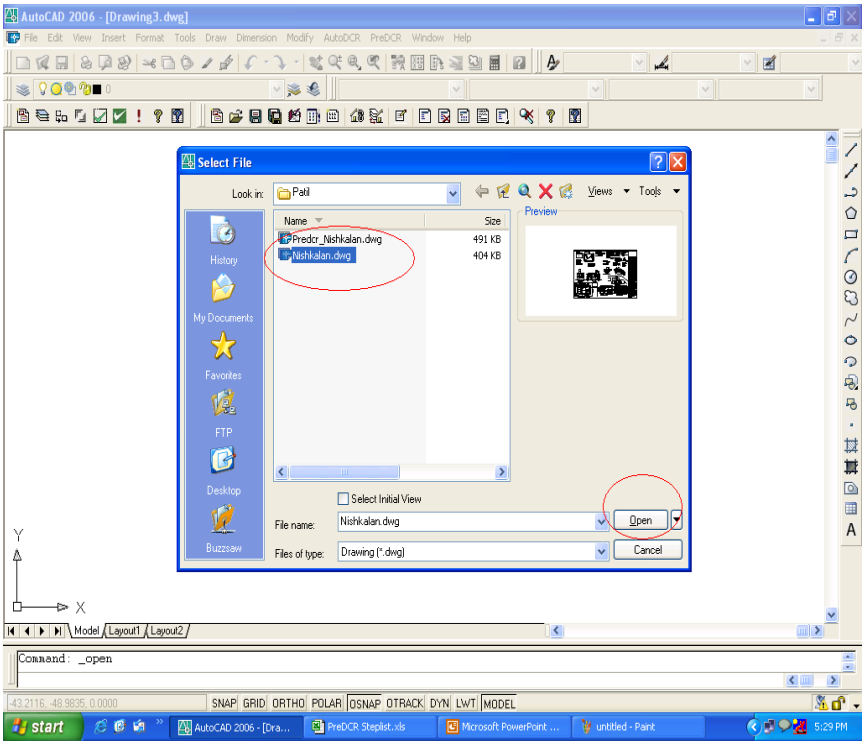
Figure 1: PreDCR shortcut on desktop

Methodology

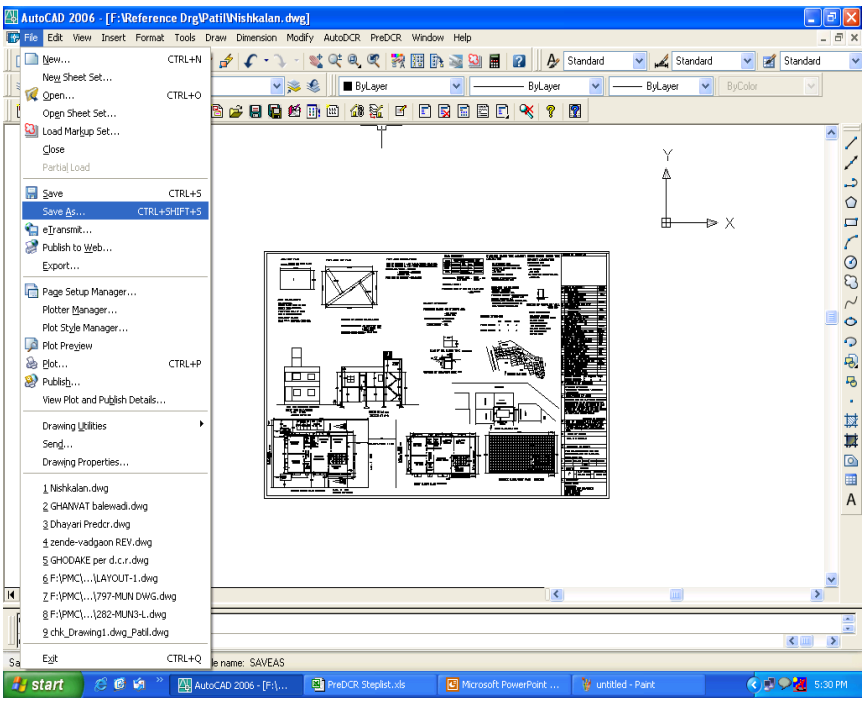
1) Open the PreDCR software for clicking on PreDCR menu on your desktop & select the Autocad version & then click on "OK" button.



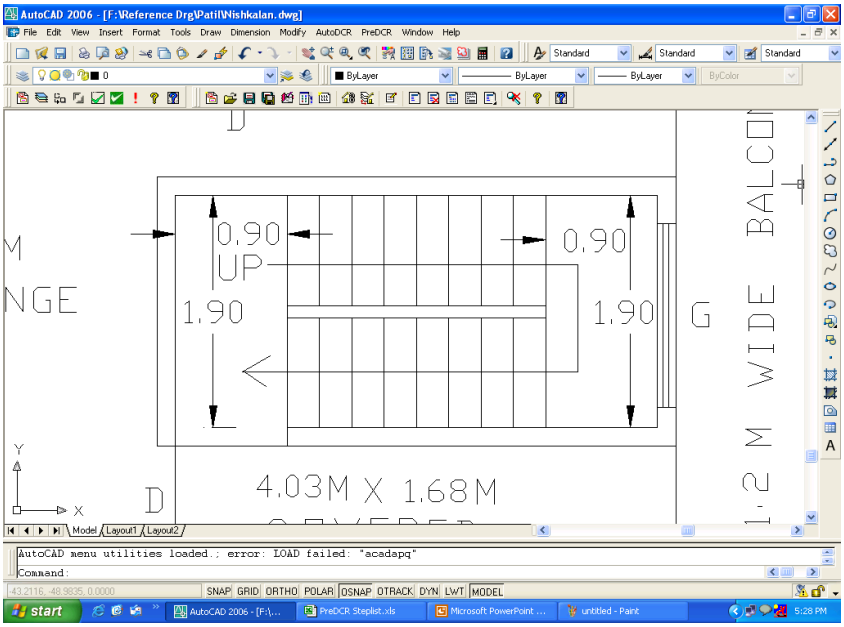
2) First open submission drawing which is now converting in PreDCR format.



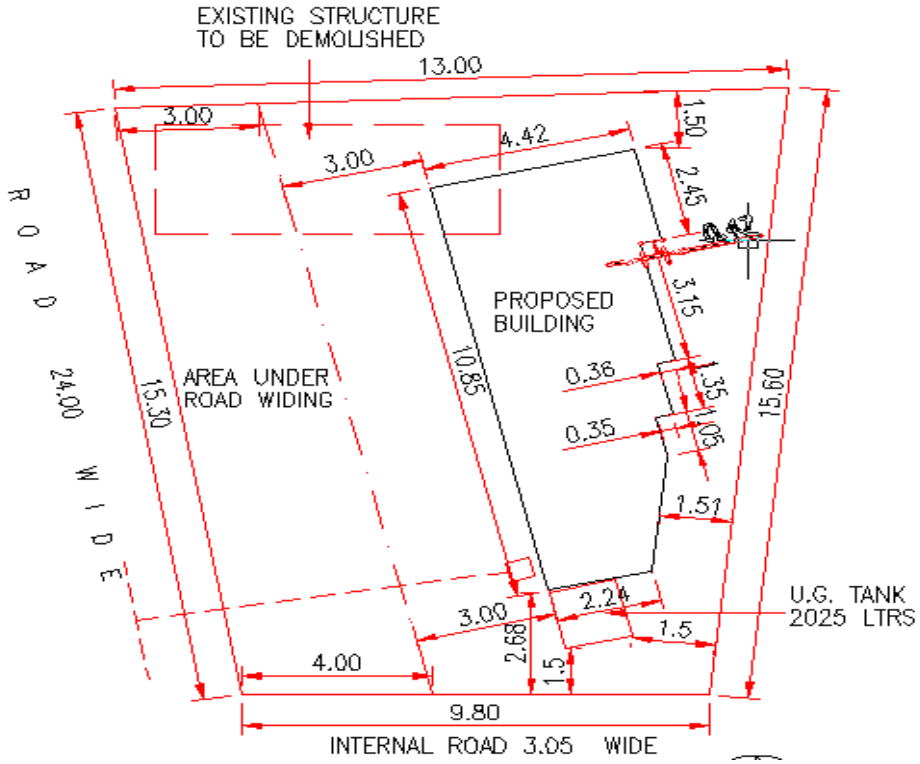
3) Save as your drawing with give some name.



4) Check the scale by using Scale command. If drawing is not in 1:100 scale then covert into the 1:100 scale. & then make that drawing in metric scale if it is in other than meter.



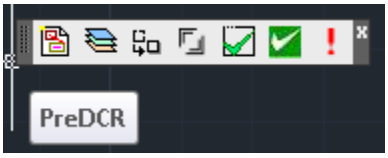
5) Also make the site plan in 1:100 scale.

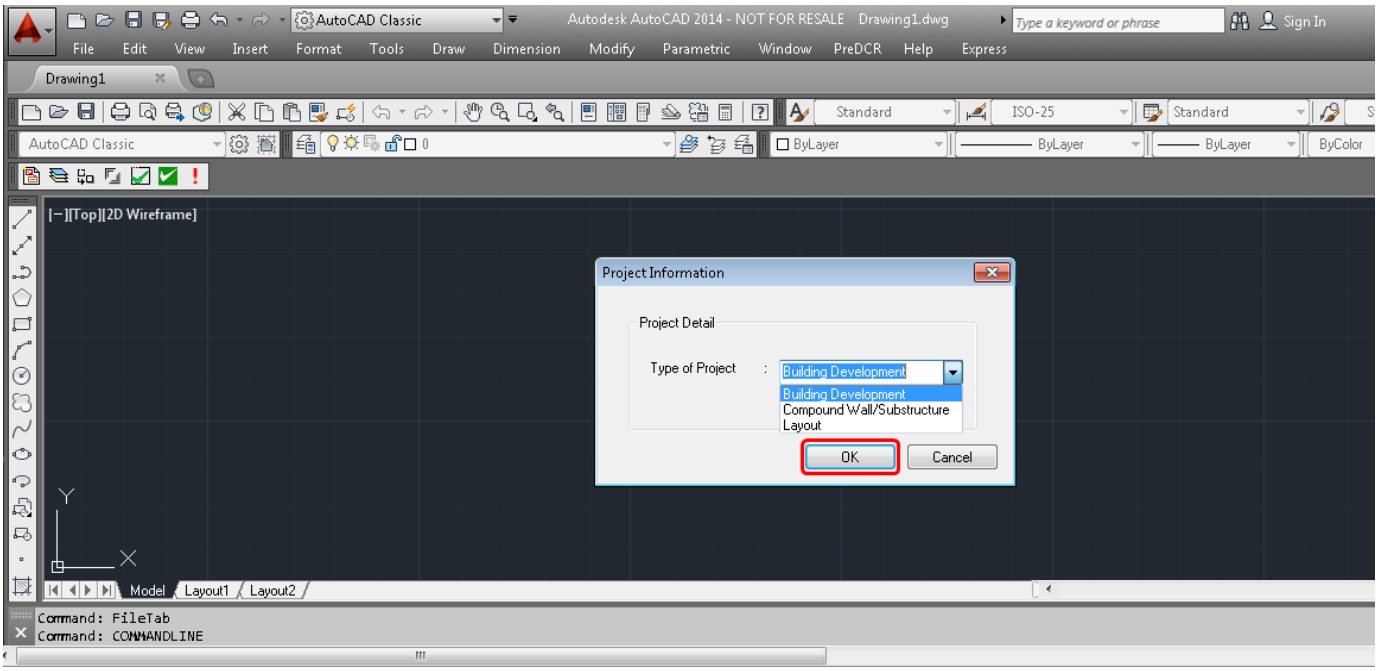


6) By using PreDCR toolbar first select the Type of Project that is " Building Development or Compound Wall/substructure " or side plan

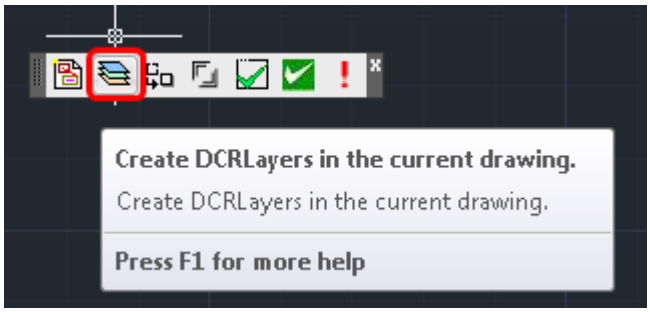
a) If Plot is Already sanctioned & user have to take permission for the buildings only then select "Proposed Development."

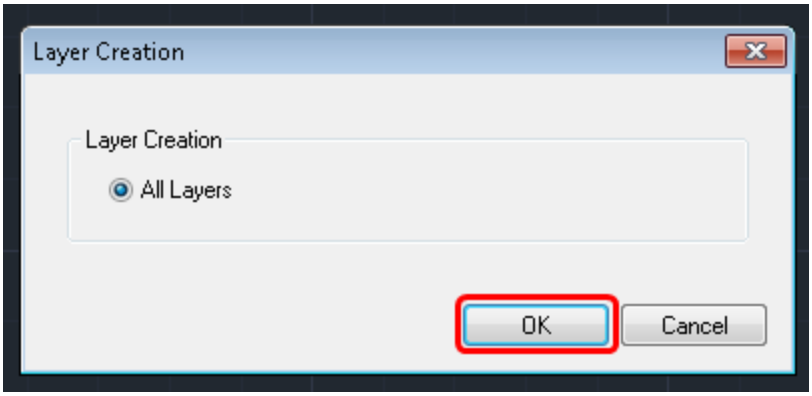
b) If Proposal having a only compound wall approval or only subsidiary structure approval without any main building then select that “Compound Wall/Substructure” option from the list.





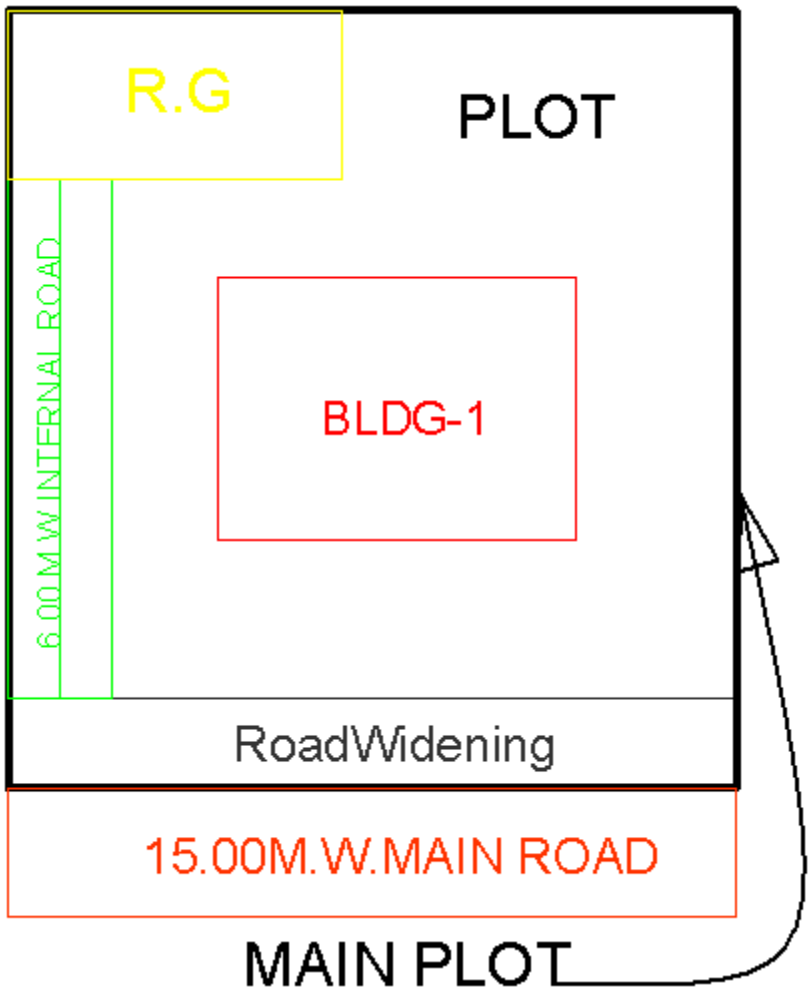
7) By using PreDCR toolbar "Create a DCR layer" that is second option in PreDCR toolbar.



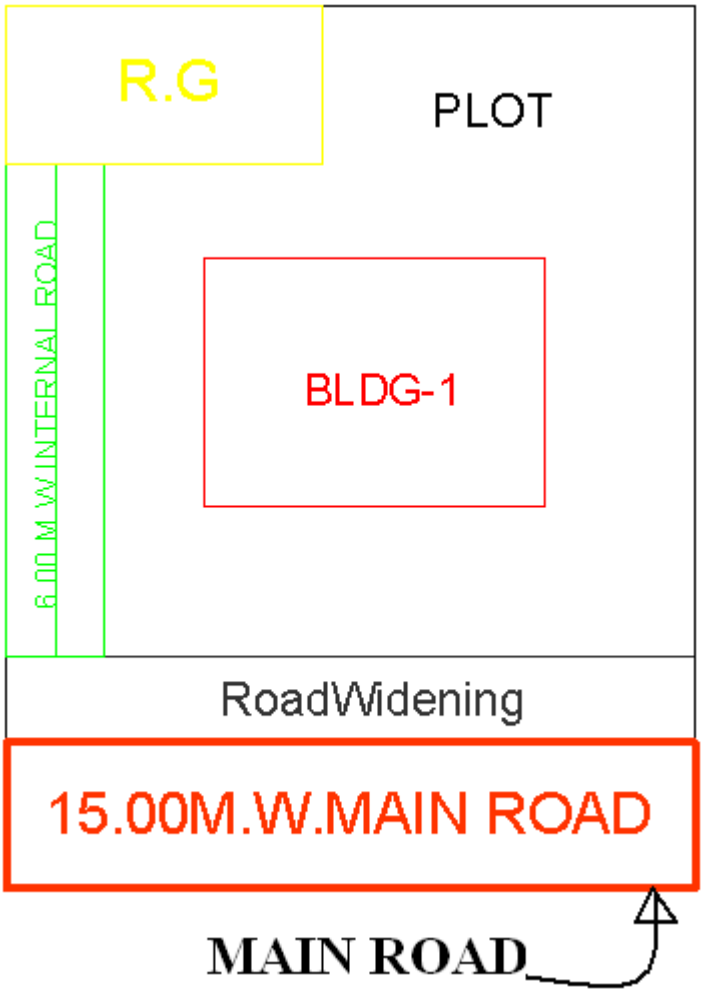


8) Then user will get the list of PreDCR toolbar, then just click on "OK" button. Now all the Layers user will get in Layer Properties managers.

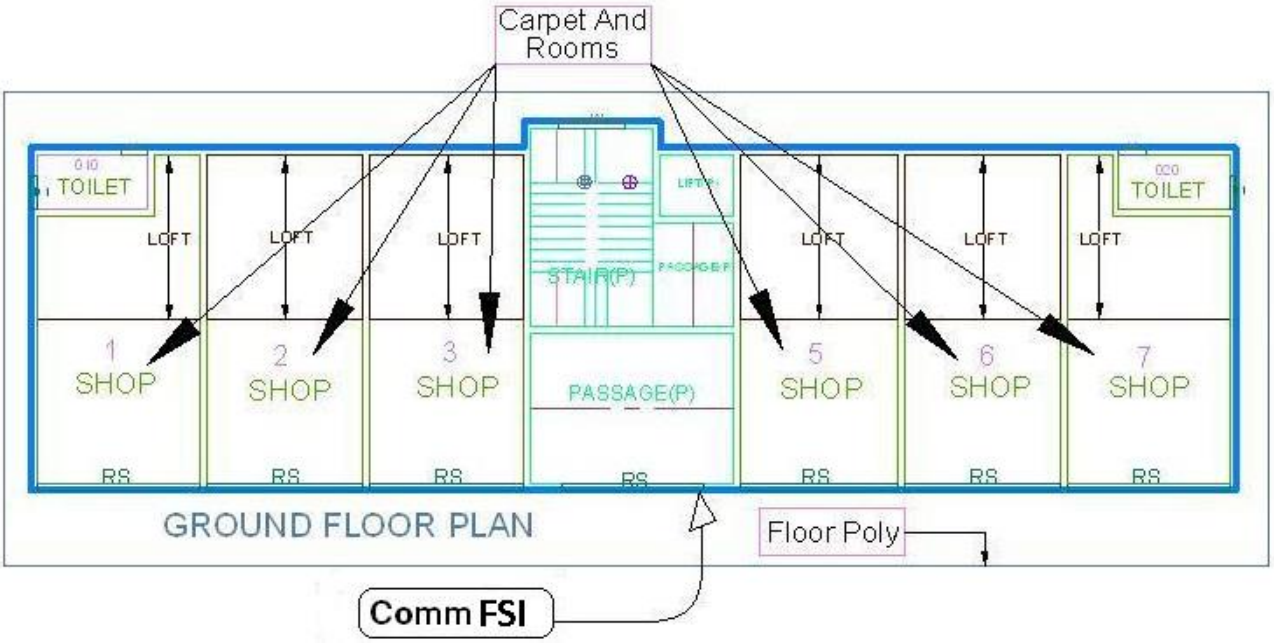
Now Select current Layer is **"_ Main plot"** & Draw a closed polyline on this layer. Also give the plot name on that layer only.



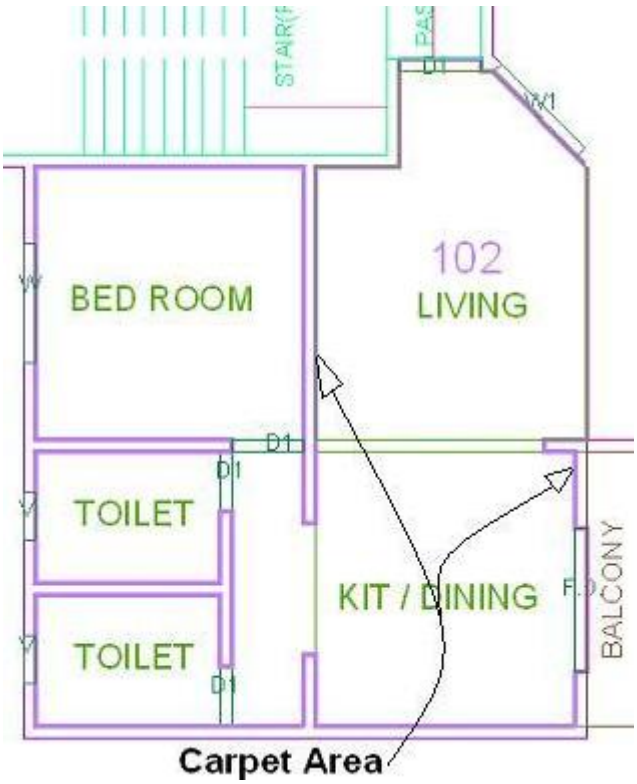
Make the current layer "**_Main Road"** & Draw a road on this layer. Give the Name of road which is starting with it's width.



Make the current Layer **" .....FSI"** as per your project having that use user can select that use of FSI. e.g. For Residential use - Select **"_ResiFSI"** poly, For Commercial use select **"CommFSI"** poly. & Draw a area key plan line on this layer. No need to give any name on this Layer.



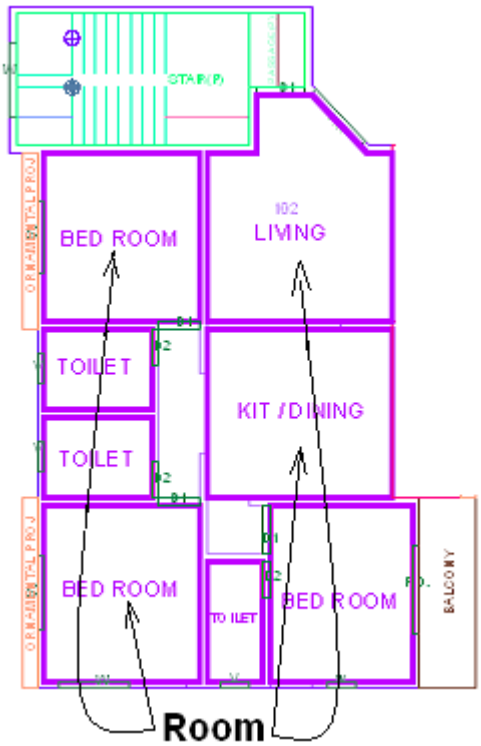
Make the current Layer **"_Carpet Area"** and draw a closed poly on this Layer which having floor area excluding wall area. Also give the name on this Layer. If carpet is splitted no of places but having only one tenement then use the Splitted tenement option from PreDCR Mark menu bar.



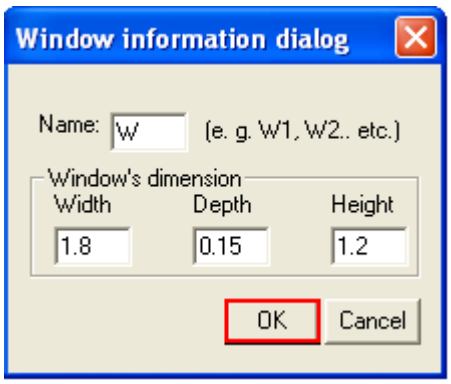
CARPET AREA

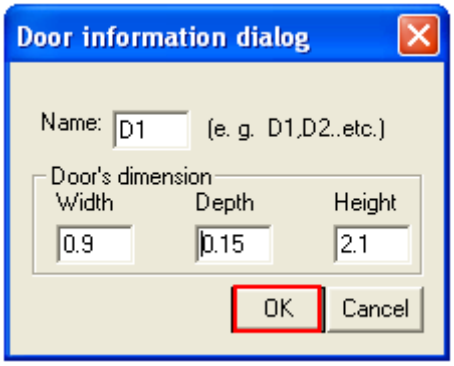
Make the current Layer **"_Room"** and draw a closed poly on this layer. If room having rectangle shape then u can use rectangle also. Assign the room name for using the assigned name option

from PreDCR menu bar.

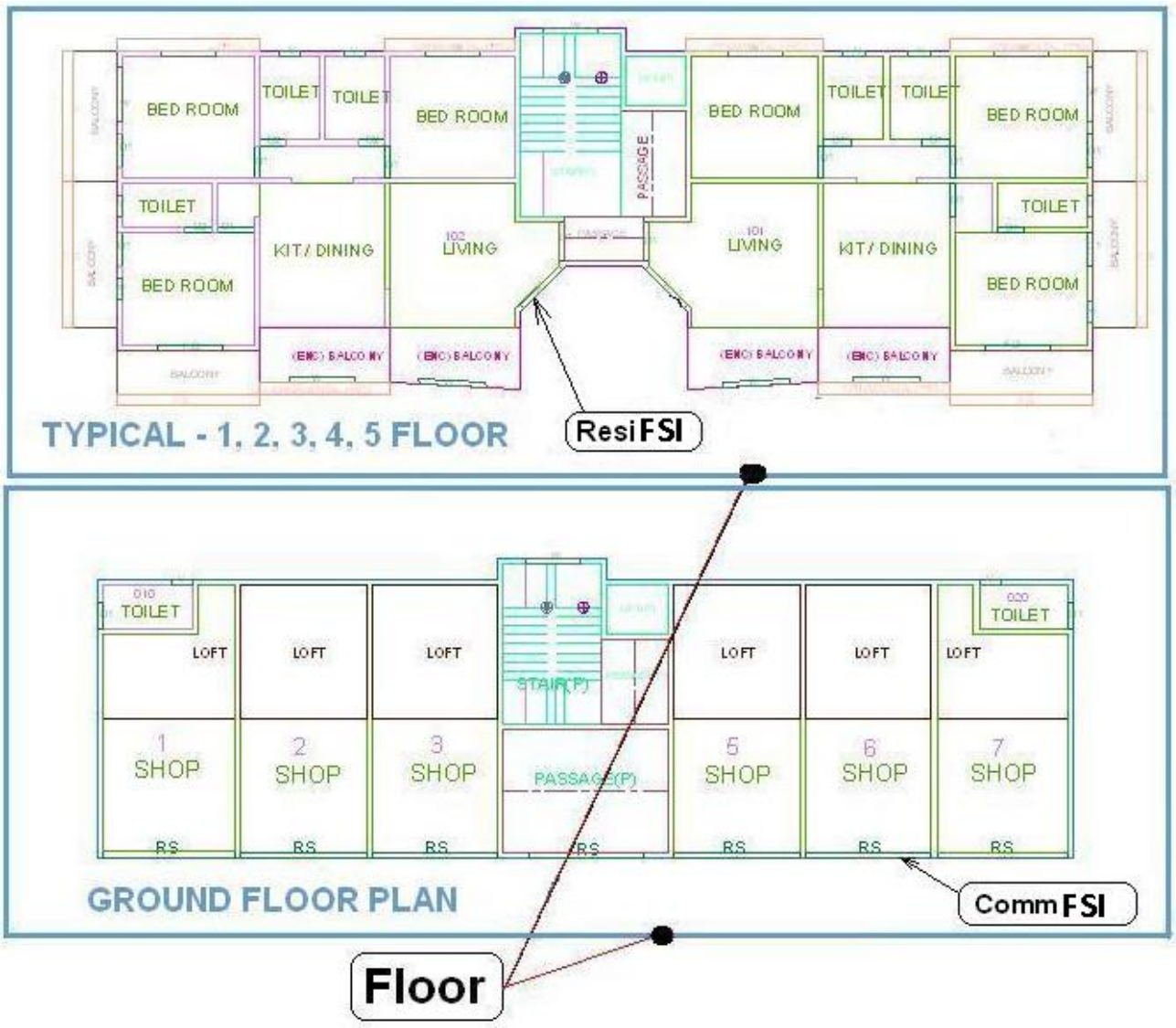


: Insert the **doors & windows** by using insert option from PreDCR menu bar.

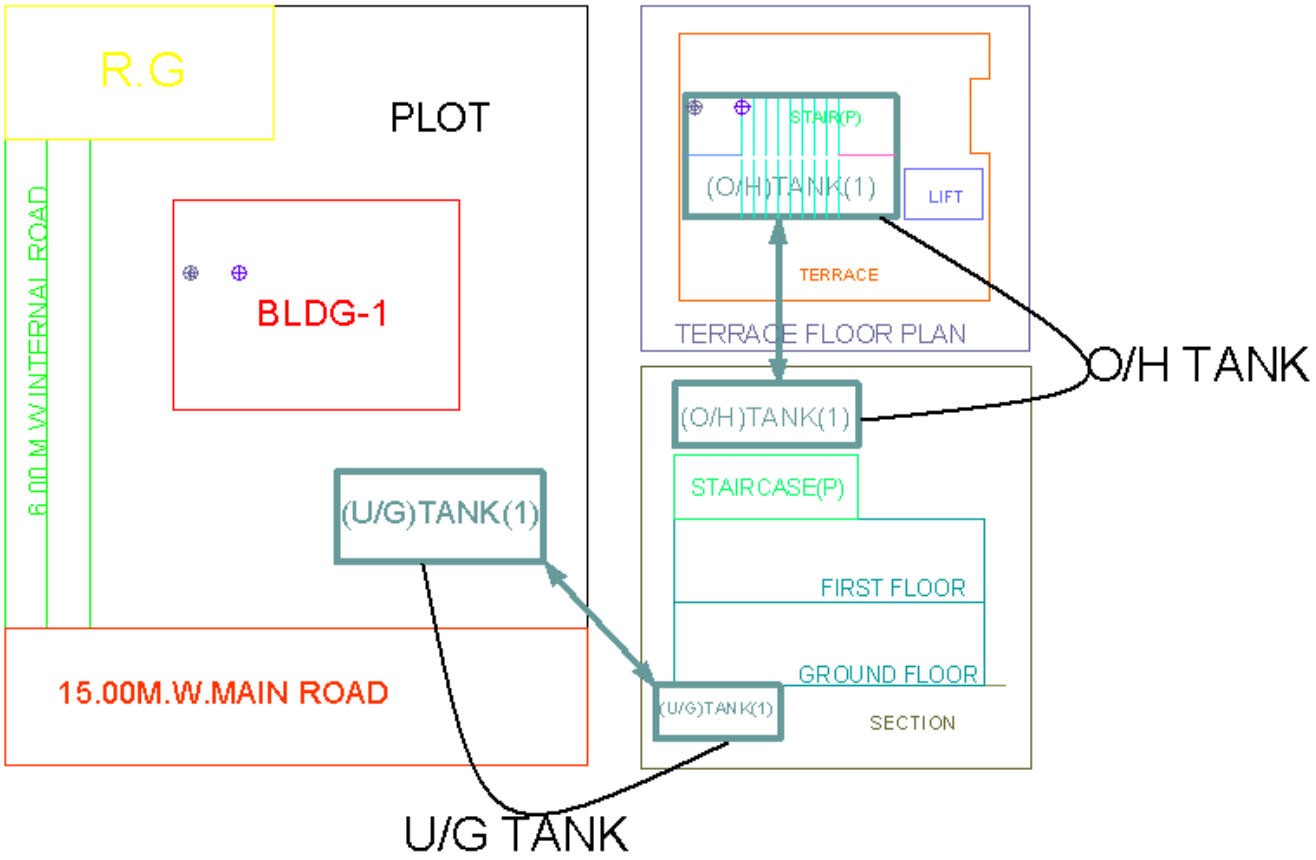




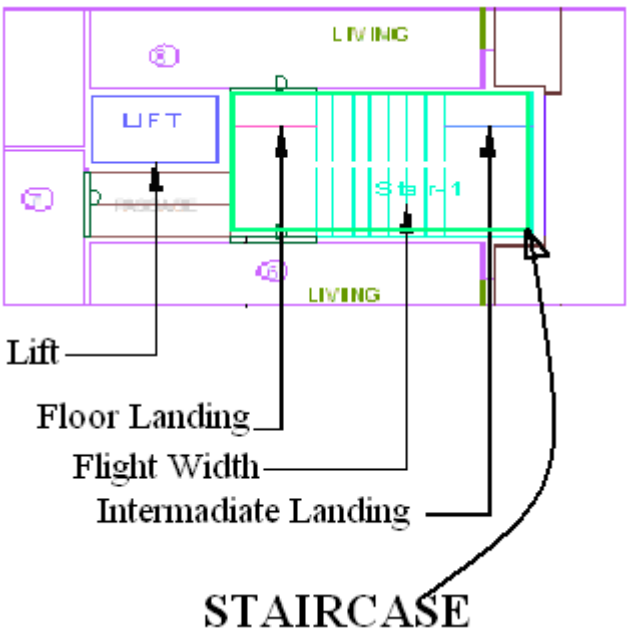
15) Make the current layer **"_Floor"** and draw a boundary outside of each & every floor.



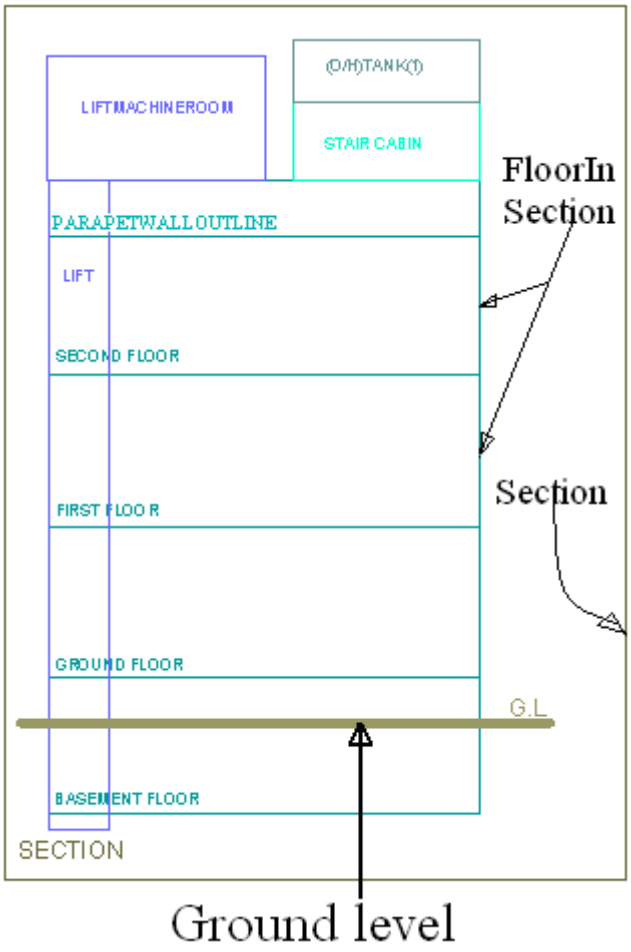
16) Make the current layer **"_Tank"** and draw U/G & O/H tank in plan as well as in section also. Assigned this tank name by using Assigned name option from PreDCR menubar.



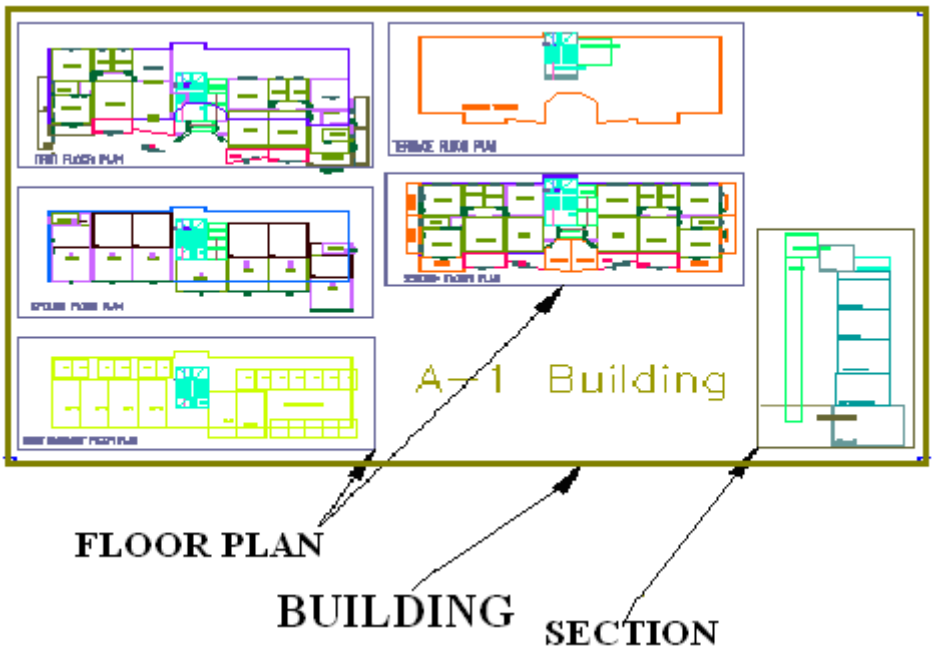
17) Make the current layer **"_Staircase"** and draw all the riser on this layer which is a open polyline. Also draw two extra line on this layer which is showing a floor landing and intermediate landing. Then mark this landing for using staircase landing option from PreDCR menu. Also mark the staircase which having type. For spiral and fabricated staircase no need to draw riser & landing marking.



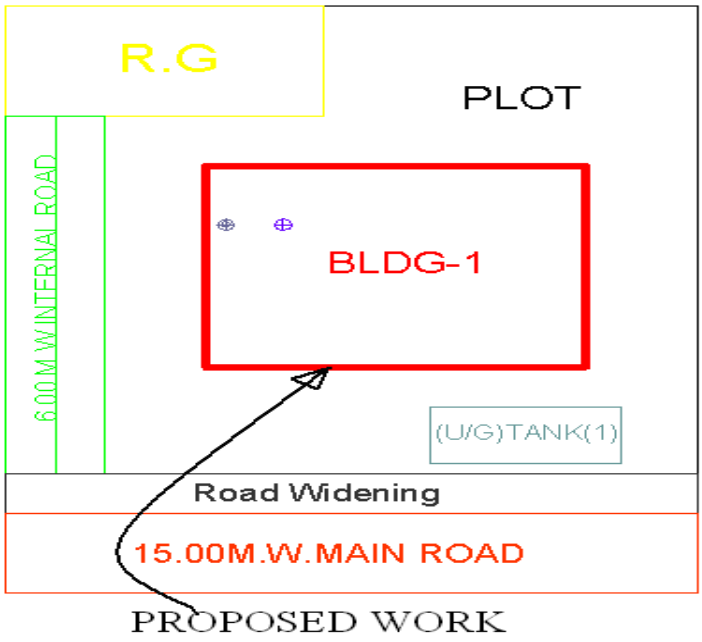
18) Make the current layer is **"_Ground Level"** and draw an open polyline on this layer which is place below the plinth level.



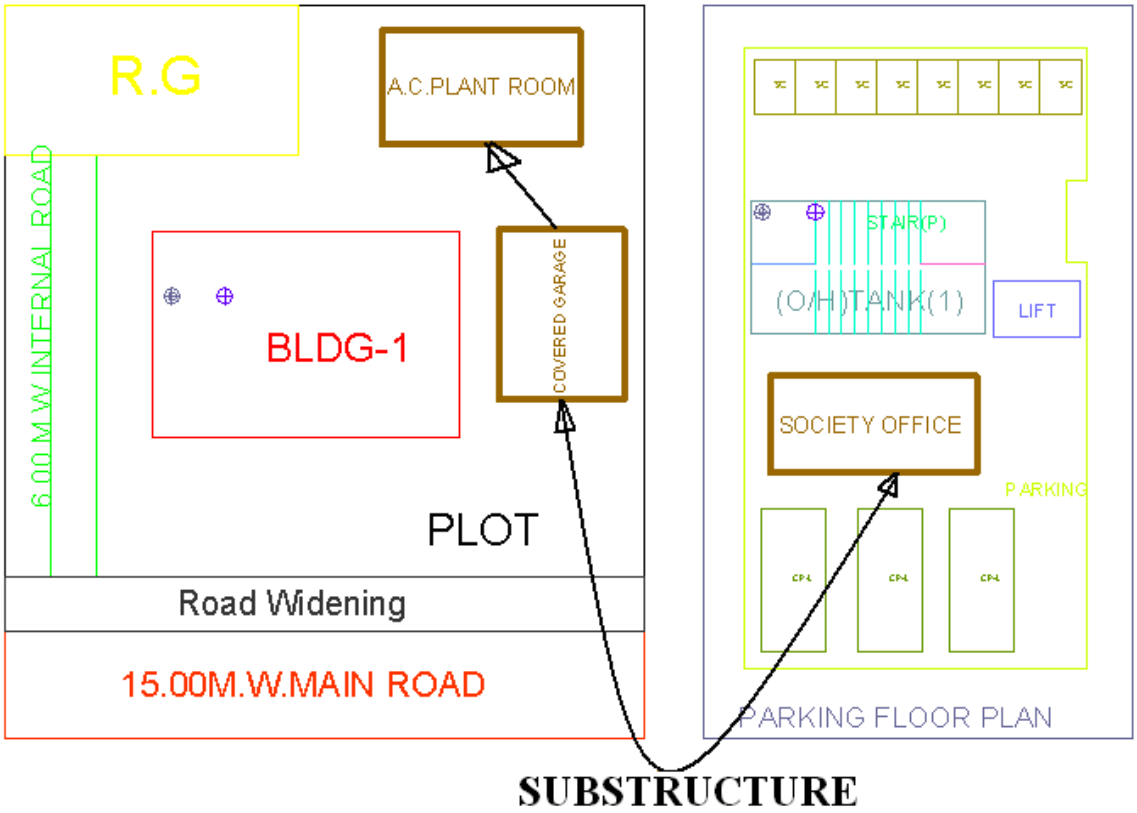
Make the current layer is **"_Building"** and draw a boundary on this layer which is having a group of all the floors with section



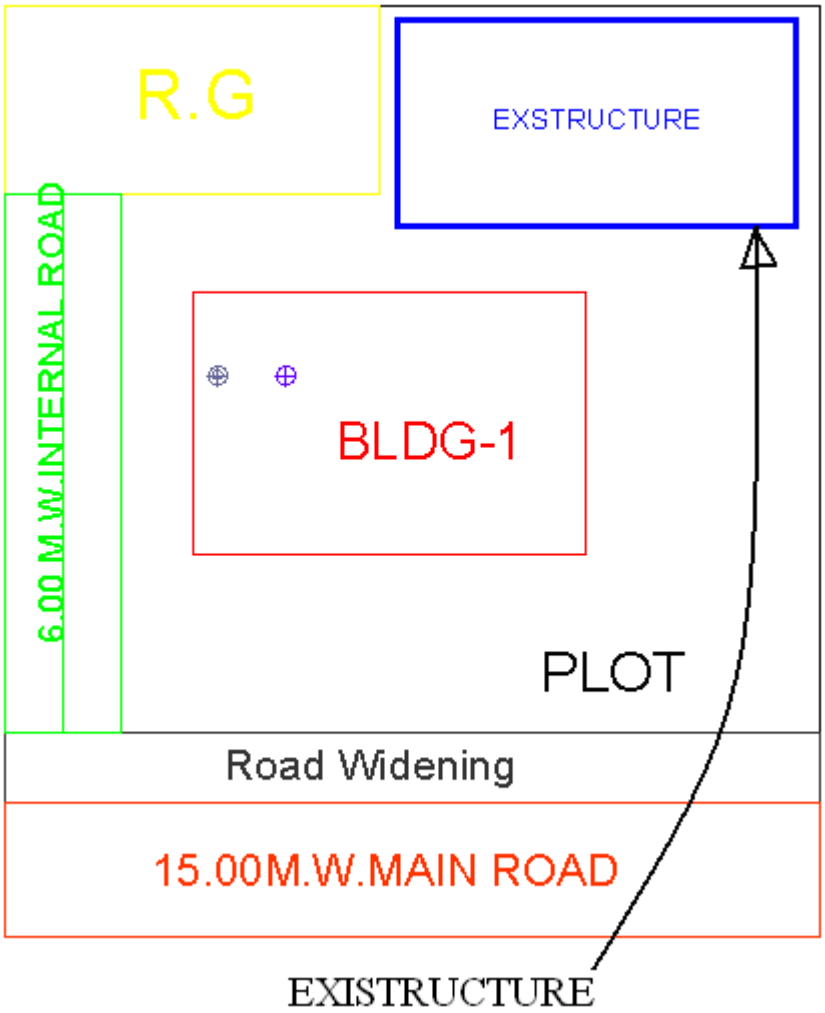
Make the current layer is **"_Proposed Work" and draw** a total coverage on this layer. Assigned this proposed work by using "PreDCR->Assigned name -> Building & proposed Work from PreDCR menu.



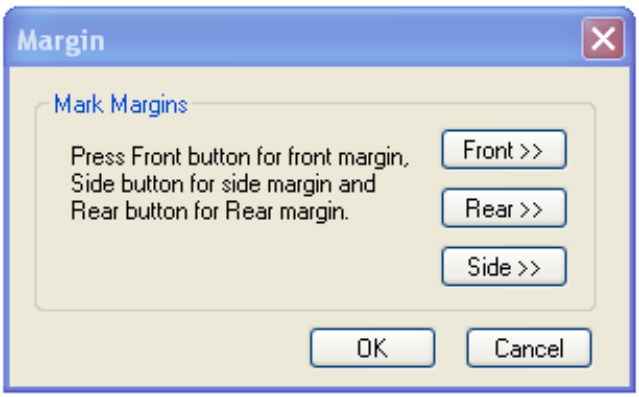
If project having any Substructure then draw a closed polyline on **"_Substructure"** layer. Also mark this substructure by using " PreDCR-> Mark-> Substructure from PreDCR menu bar.



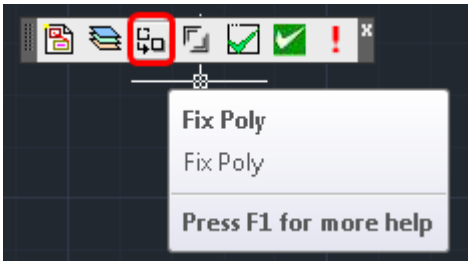
If project having any Existing structure then draw a closed polyline on **"_Restructure"** layer. Also mark this Restructure by using " PreDCR-> Mark-> Restructure from PreDCR menubar.

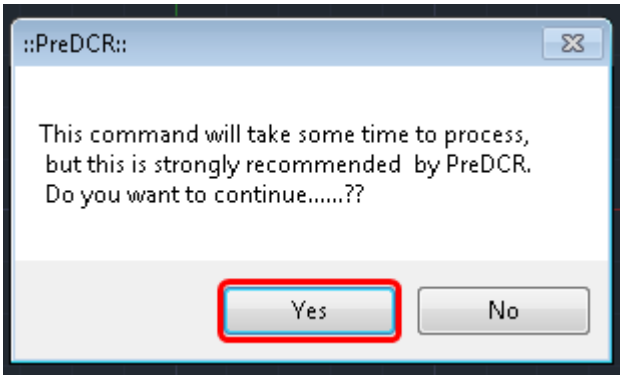


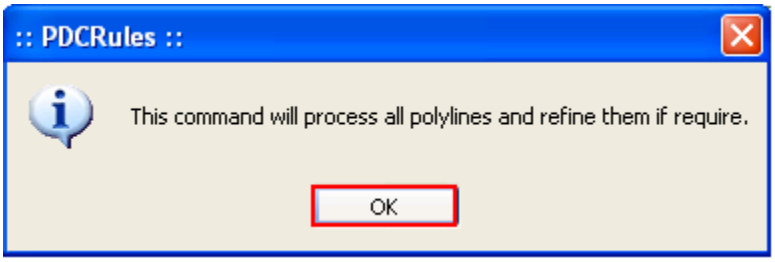
Mark the margins by using Mark-> margin from PreDCR menu bar



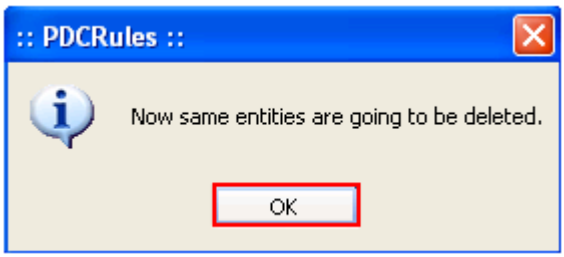
After converting all the Layers use the **"Fix poly"** option from PreDCR menu bar.



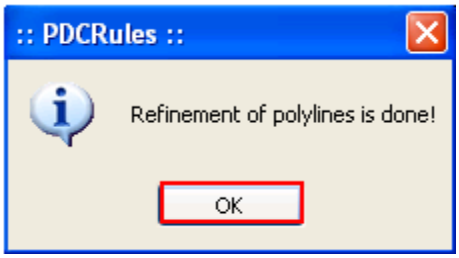




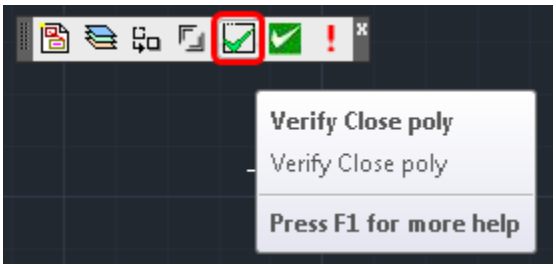
Just click on "OK"

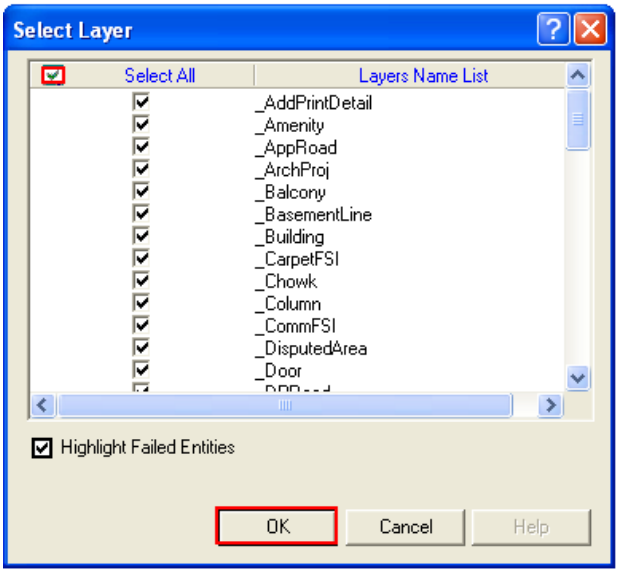


Just click on "OK"

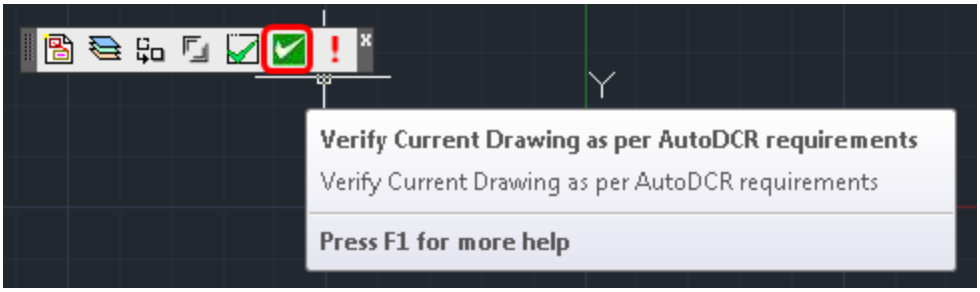


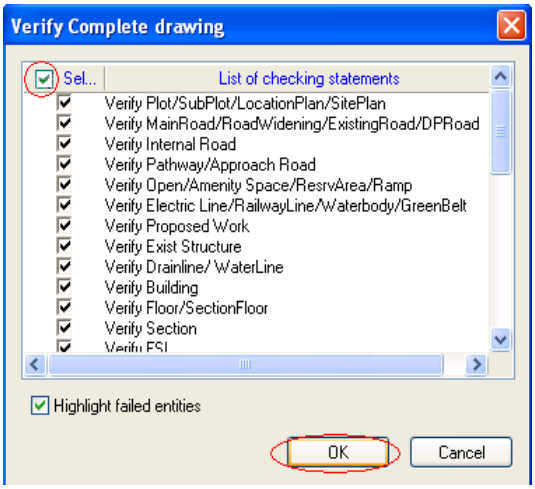
When u will get these message "Refinement of Polyline is done" then select the **"Verify Closed poly"** option from PreDCR menu.

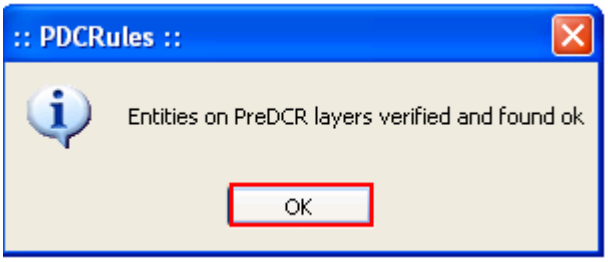




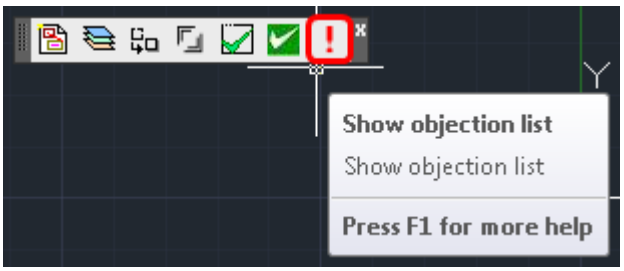
: When user will get these message "Entities on PreDCR Layers are verified and found o.k." then only user can submit a softcopy of your drawing to the Corporation.







27) Also check the **"Objection list"** which user are missing to convert in PreDCR layer.



PreDCR Layer Information:

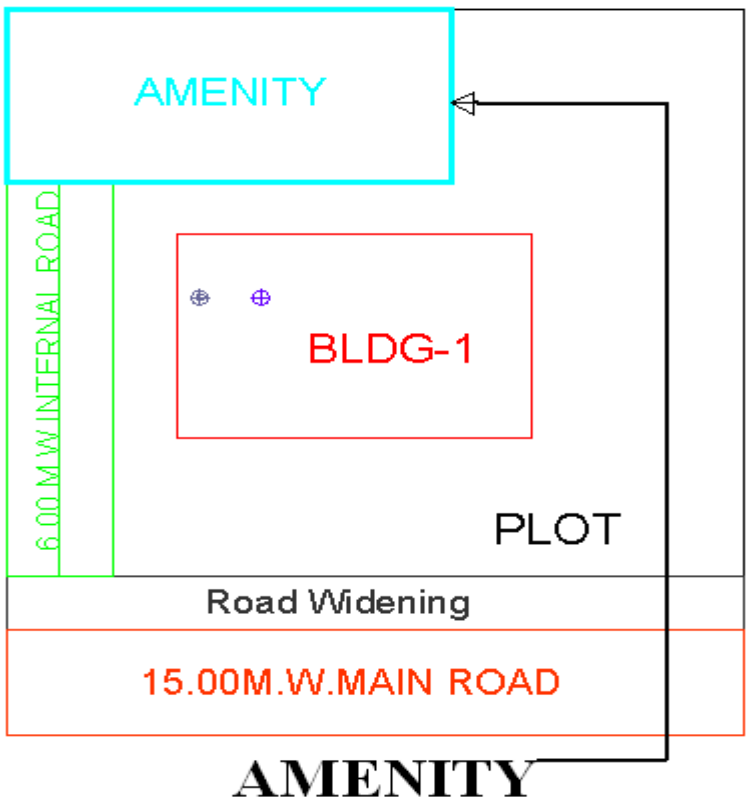
_Amenity:

Description :

Draw Amenity space as a closed polyline which is reserve for utilities, services and conveniences.

Shortcut Command :-AMN

How to draw :



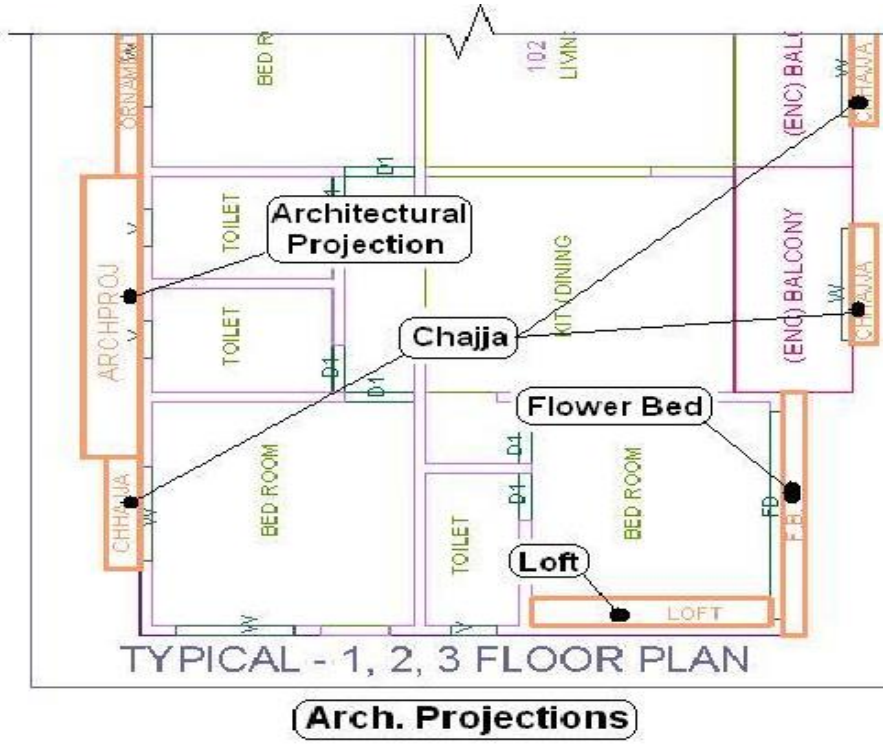
_ArchProj:

Description :

- This layer is used to represent various Architectural Projections in your Plan. Draw a closed Polyline for Architectural Projections. And mark it using **Mark->Projection** from PreDCR menu, according to requirements. Canopy/porch will come in plot & other projections will come with floor plans.

Shortcut Command :AP

How to draw : -



Arch. Projections

_Balcony

Description :

- Draw a balcony as a closed polyline which is a horizontal projection including parapet to serve as a sitting out place. Name of balcony must be inside and on _Balcony layer.

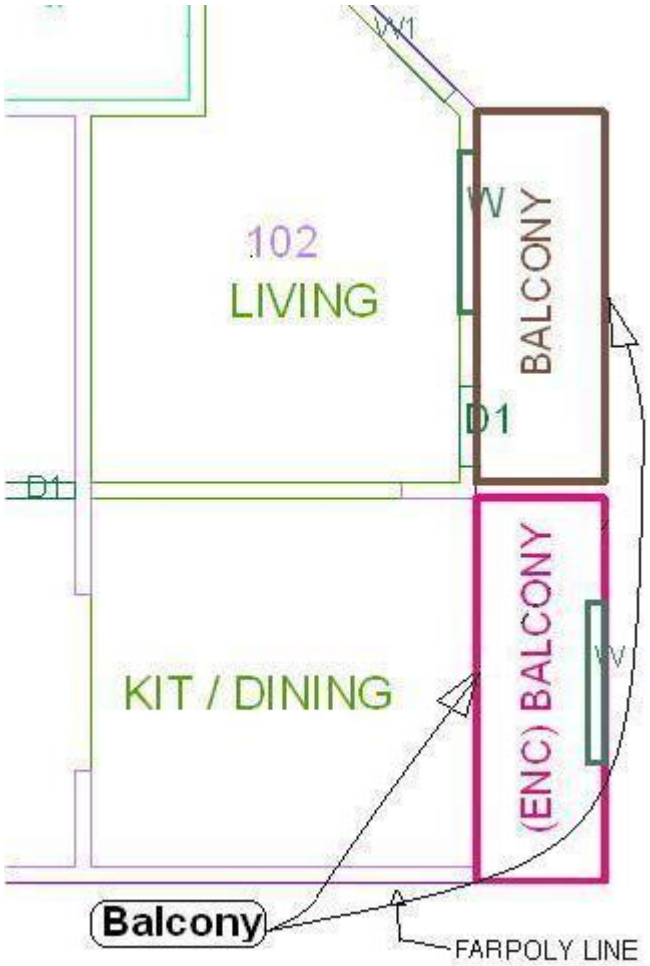
Balcony can be present in:

Plot: It must overlap with PWork (if not enclosed)

Floor: It must overlap ResiFSI

Shortcut Command : BL

How to draw : -



_Building

Description :-

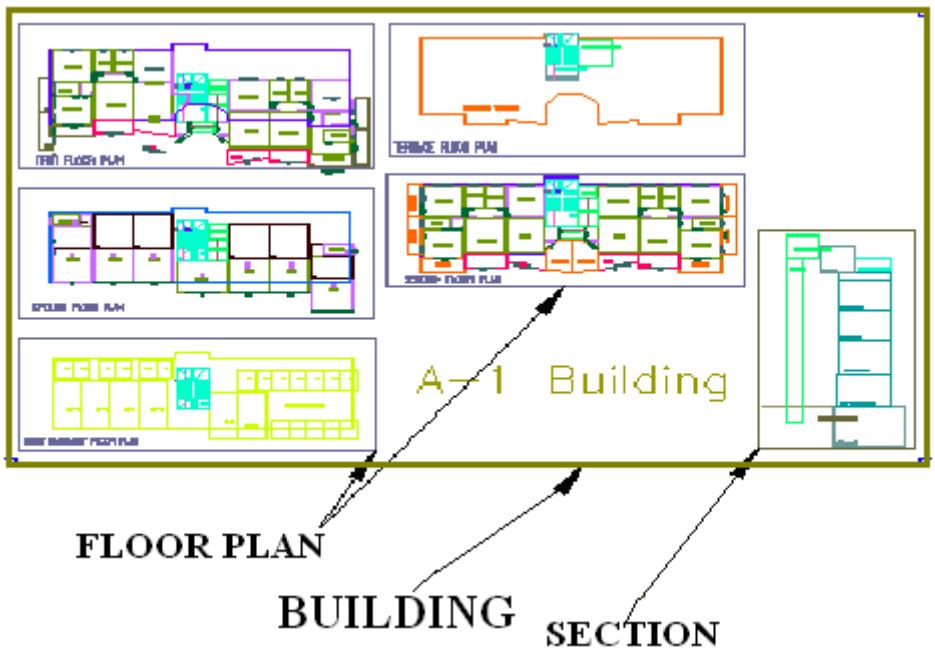
- Building is used to group all floor plans of the same building. Draw a closed poly enclosing all the floor plans and section of the same building on _Building layer. Note: As written above, dimension or area of this building poly has no meaning in AutoDCR. This is just an logical group of all floors of the same building. If the building plan of multiple Prop Works or wings are same then building name shall be as given in table below.

Building names can be.

1	"A(Monarch)"	Prop Work "A" has building plan "Monarch".
2	"A,B(Monarch)" or "A&B(Monarch)"	Wings A, B have same building plan "Monarch".
3	"A-C(Monarch)"	Wings A,B,C have same building plan "Monarch".
4	"A1-A3(Monarch)"	Wings A1,A2,A3 have same building plan "Monarch".

Shortcut Command : BLD

How to draw :



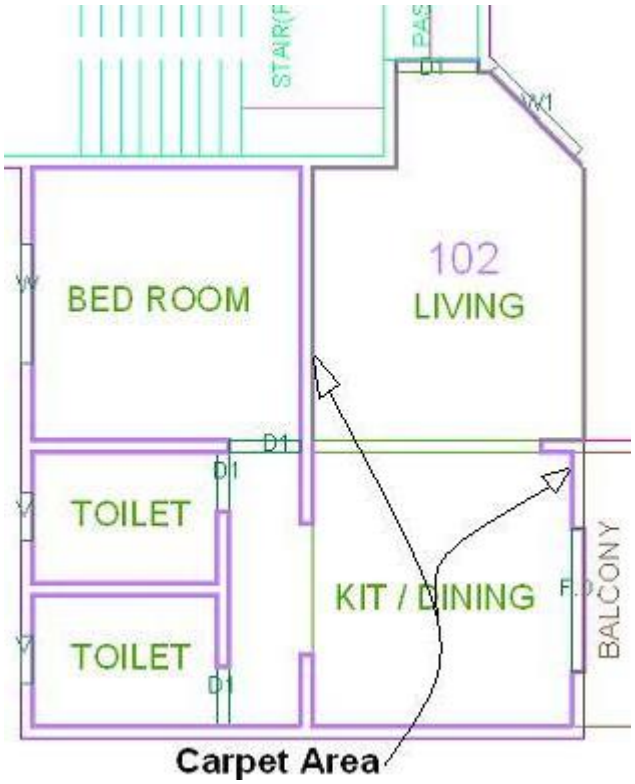
_Carpet area

Description :

Draw carpet area as a closed polyline which is a net usable floor area within a building excluding that covered by the walls or any other areas specifically exempted from floor space index computation in these regulations.

Shortcut command : CPT

How to draw : -



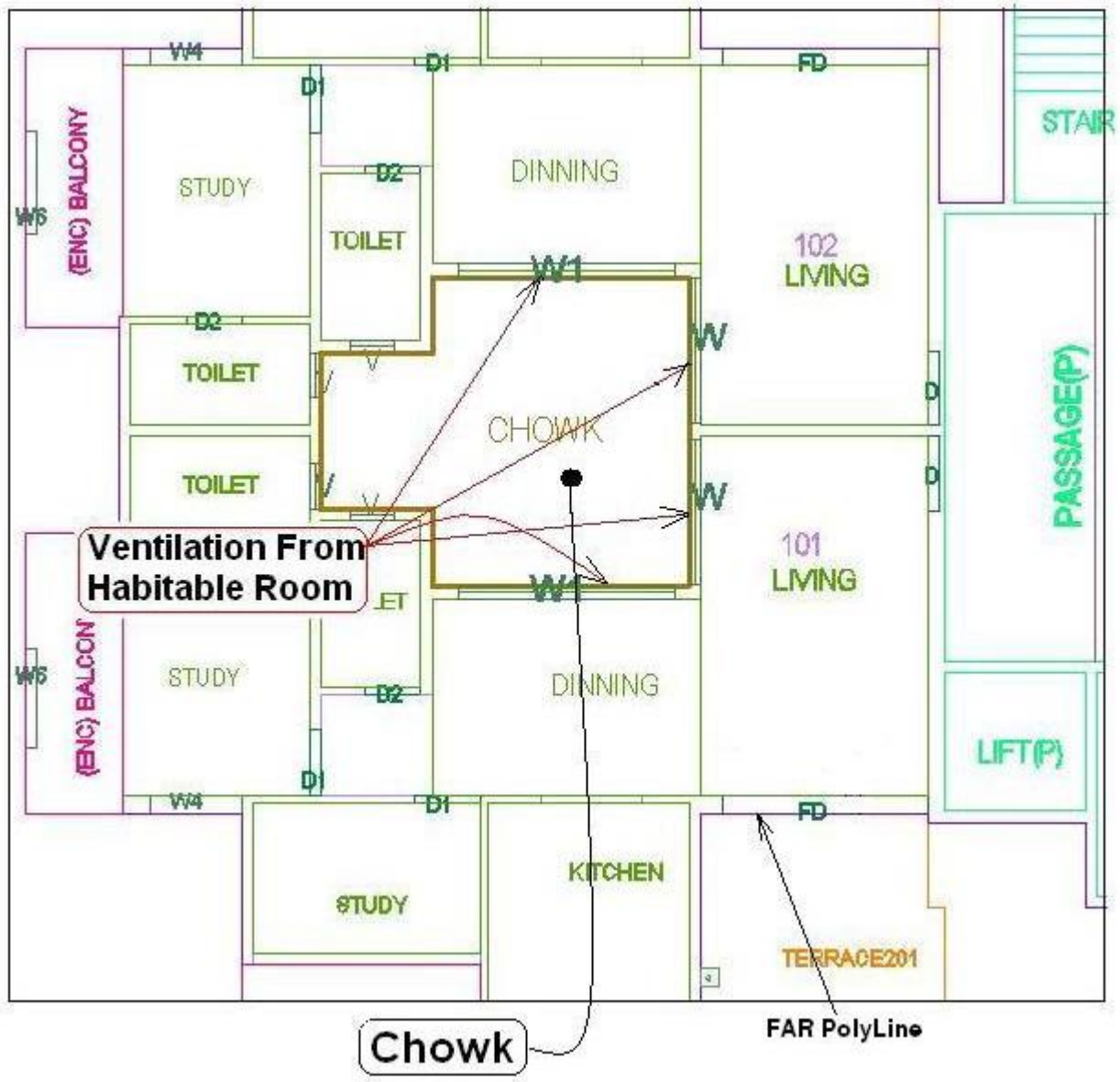
_Chowk

Description :

Draw a chowk as a closed polyline which is an enclosed space permanently open to the sky within a building at any level. From chowk we take ventilation for habitable rooms.

Shortcut Command : CWK

How to draw :



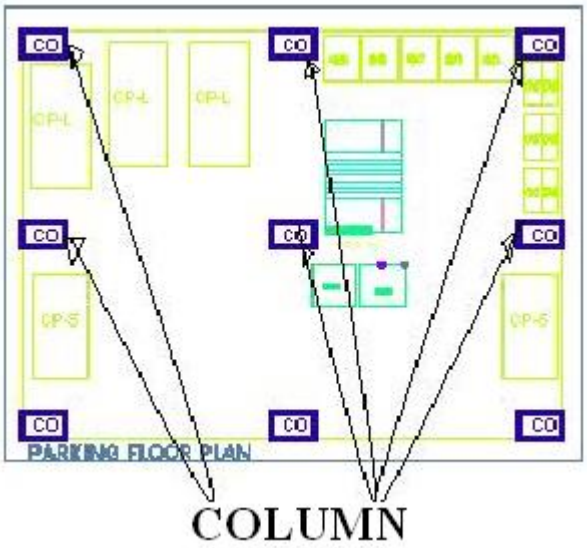
_Column

Description :

-Column shall be drawn as closed polyline on this layer.

Shortcut Command : CPL

How to Draw:-



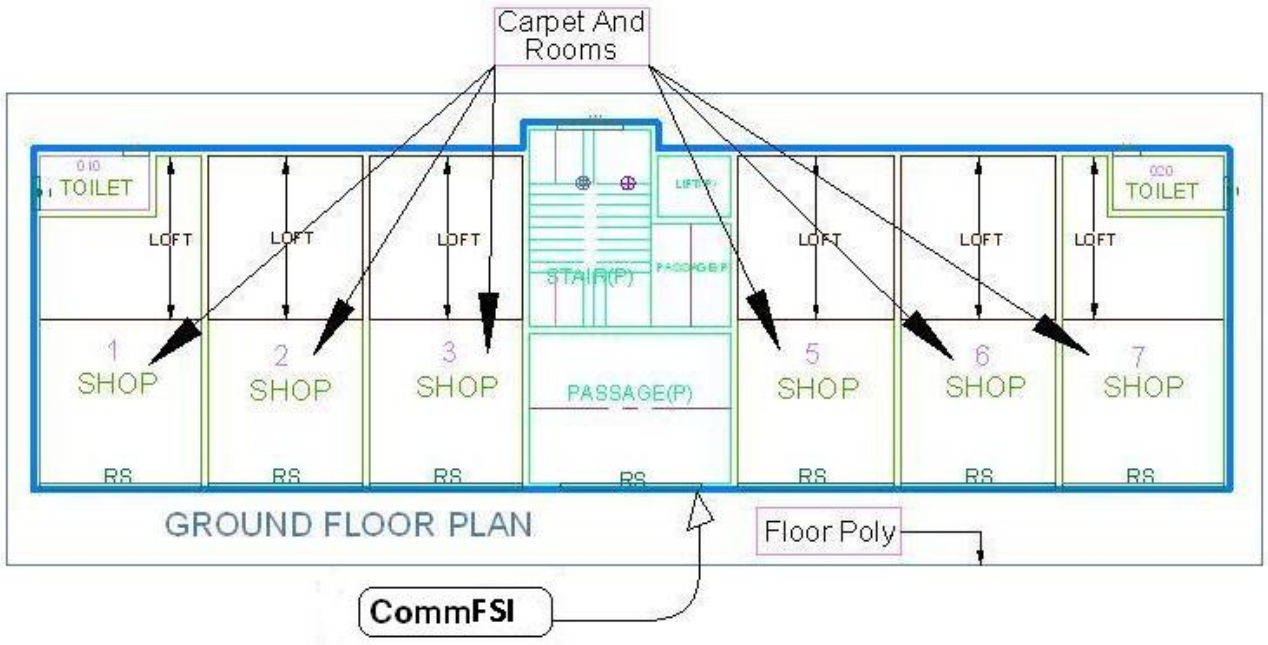
_CommFSI

Description:

Draw a CommFSI as a closed polyline which is the area covered by a building on all the floors. This FSI polyline mainly used for commercial use bldg.

Shortcut Command : CMFS

How to draw:



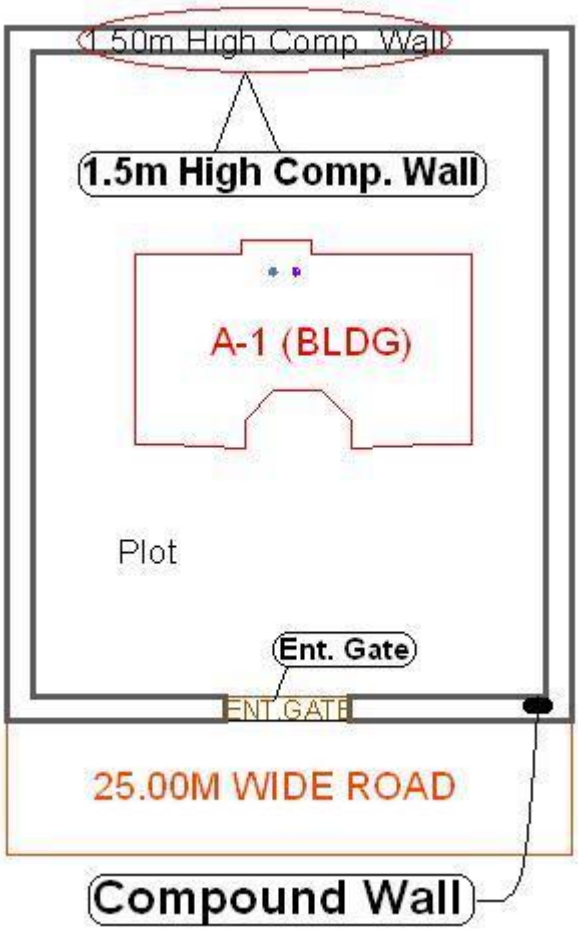
_Compound Wall

Description :

Open polyline of compound wall to be drawn on proposed compound wall with text started with compound wall height. E.g. 1.50m. High Compound Wall

Shortcut Command : CW

How to draw : -



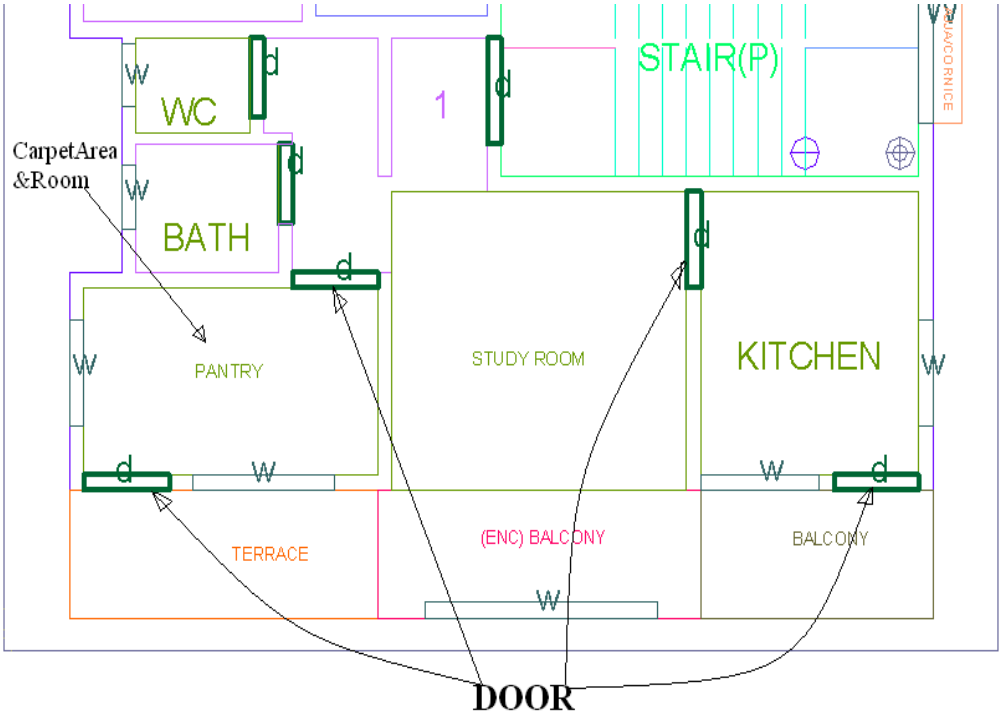
_Door

Description :

Door is a closed Polyline which is drawn on "_Door" layer. Also you can insert a particular size poly for Door using **Insert->Door** from PreDCR menu.

Shortcut Command : DR

How to draw : -



_Electric Line

Description : -

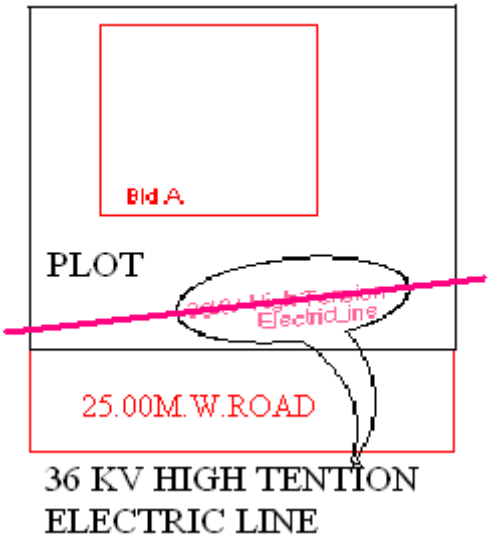
Electric line will be present in the layout plan and shall pass through plot entity as a non closed polyline.

Name electric line shall start with its voltage capacity and text insertion point shall lie on its polyline.

For e.g. 33 KV High Tension Line

Shortcut Command : LI

How to draw : -



_Elevation

Description : -

Elevation to be drawn in _Elevation layer only for printing purpose. No regulations will bye checked by reading this layer. The drawing on this layer need not be drawn using polylines

Shoutcut :-

How to draw :-

_EWS

Description: -

Draw a EWS area on "_EWS" as a closed poly line, which area is left for economically weaker section.

How to draw :-

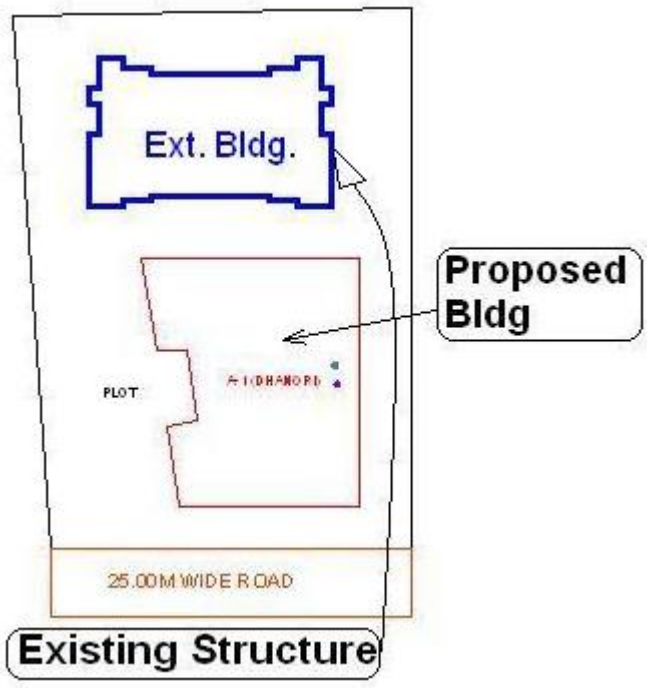
Draw a closed poly line on _EWS layer in floor plan.

_ExStructure:-

Description: - Draw an Exstructure as a closed polyline which is a building or structure existing authorized before the commencement of these regulation. And mark it using **Mark -> Existing structure** as 'To be demolished' or 'to be retained'.

Shortcut Command : EX

How to draw :-



_Floor

Discription:

Draw a Floor as a closed polyline to the boundary of the lower surface in a story on which one normally walk in a building and including mezzanine floor also. The floor at ground level with a direct access to a street or open space shall be called the ground floor, the floor above it shall be termed as Floor 1 with the next higher floor being termed as Floor 2 and so on upward. For giving the name of each floor use the assign named option from the PreDCR menu. Also draw each floor separately. While giving name to the typical floor then use a Typical option from **Assigned name -> Floor name** option from PreDCR menu bar.

Shortcut Command : FLR

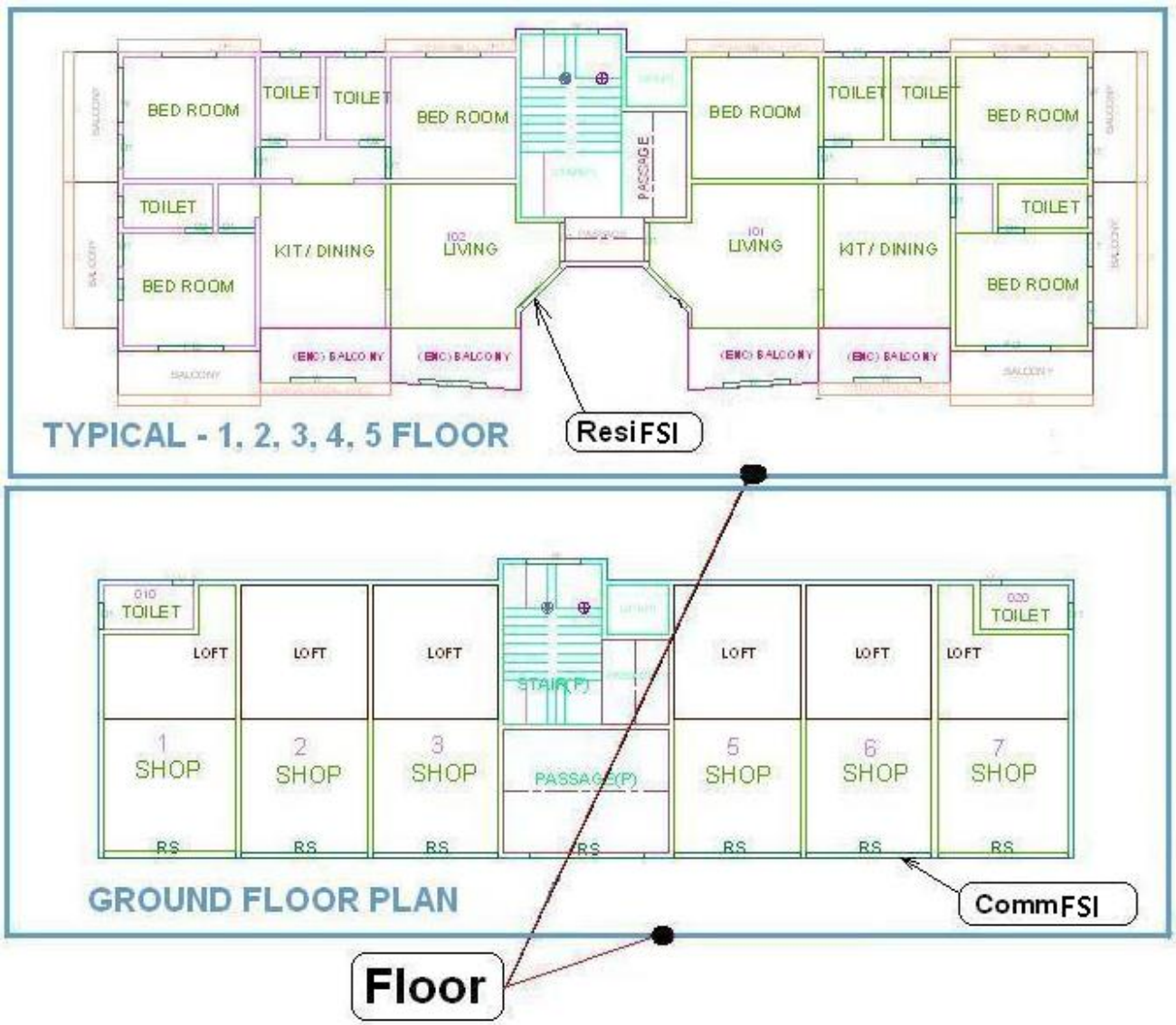
Reference Circle: - All Floor poly must contain a circle with its center on common point for whole building on layer "_ResiFSI". Usually it can be placed inside either Common Liftwell or stair/Inner Chowk as their locations are common for all floors.

Floor Name: - Floor name will be taken from text inside floor poly and on same layer.

A floor plan is automatically associated/linked by AutoDCR software with one or more floor section poly in Section plan. This is done by matching name of Floor Plan and FloorInSection so both must be same.

Typical Floor	Non-Typical
"TYPICAL" X "FLOOR PLAN"X: Floor numbers in specific format (, or & or -)	X "FLOOR PLAN" X: Direct Floor's Name
e.g.: TYPICAL 1,2 FLOOR PLAN TYPICAL 1-4 FLOOR PLAN TYPICAL 2&3 FLOOR PLAN	e.g. GROUND FLOOR PLAN FIRST FLOOR PLAN SECOND FLOOR PLAN

How to draw :-



_FloorInSection :

Description :

Draw a FloorInSection polyline as a closed poly of section boundary which contain all floors with stair cabin, Liftwell machine room, water tanks etc. as shown in the figure. Also write the name as "Section" in this section poly.

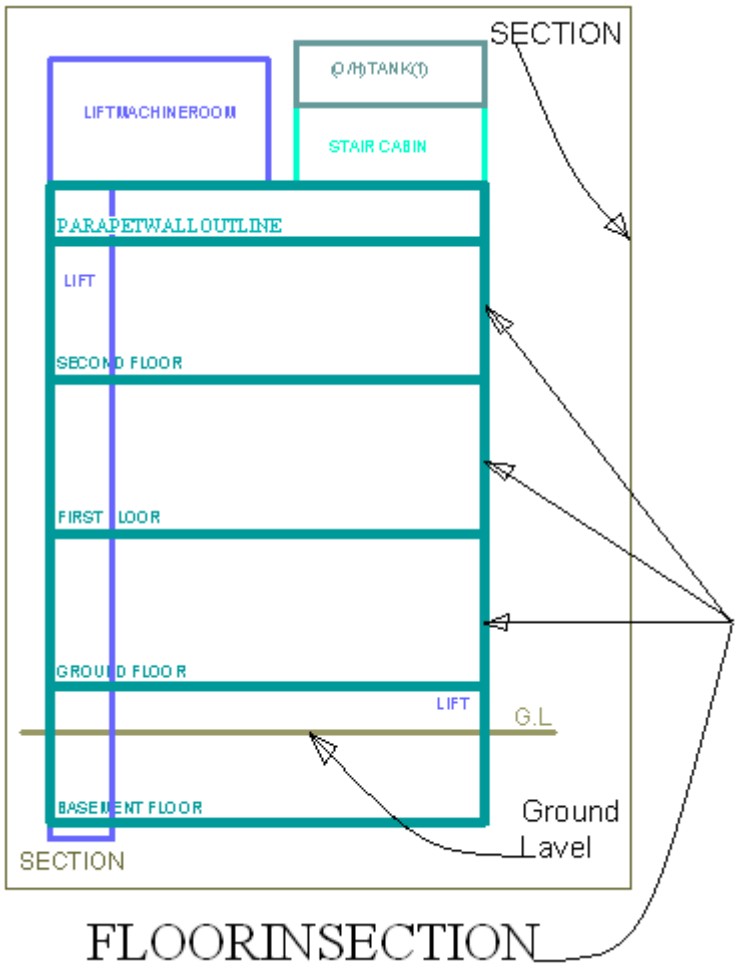
In this closed poly of section draw sections of all floors with stair cabin, inner Chowk, Liftwell machine room, Ventilation shaft, water tanks etc. as shown in the figure.

Also write the name as "Section" in this section poly.

This section poly will present inside the building poly.

Shortcut Command : SEC

How to draw : -



FLOORINSECTION

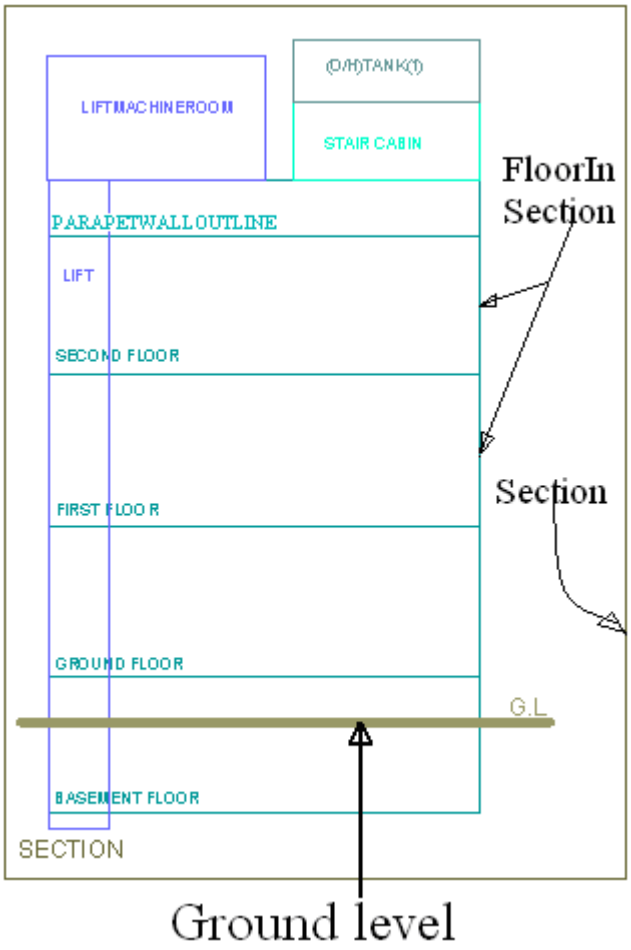
_Ground Level

Description :-

Draw the Ground level line as open polyline in section .It is used for checking a total building height from this line.

Shortcut Command : GL

How to draw : -



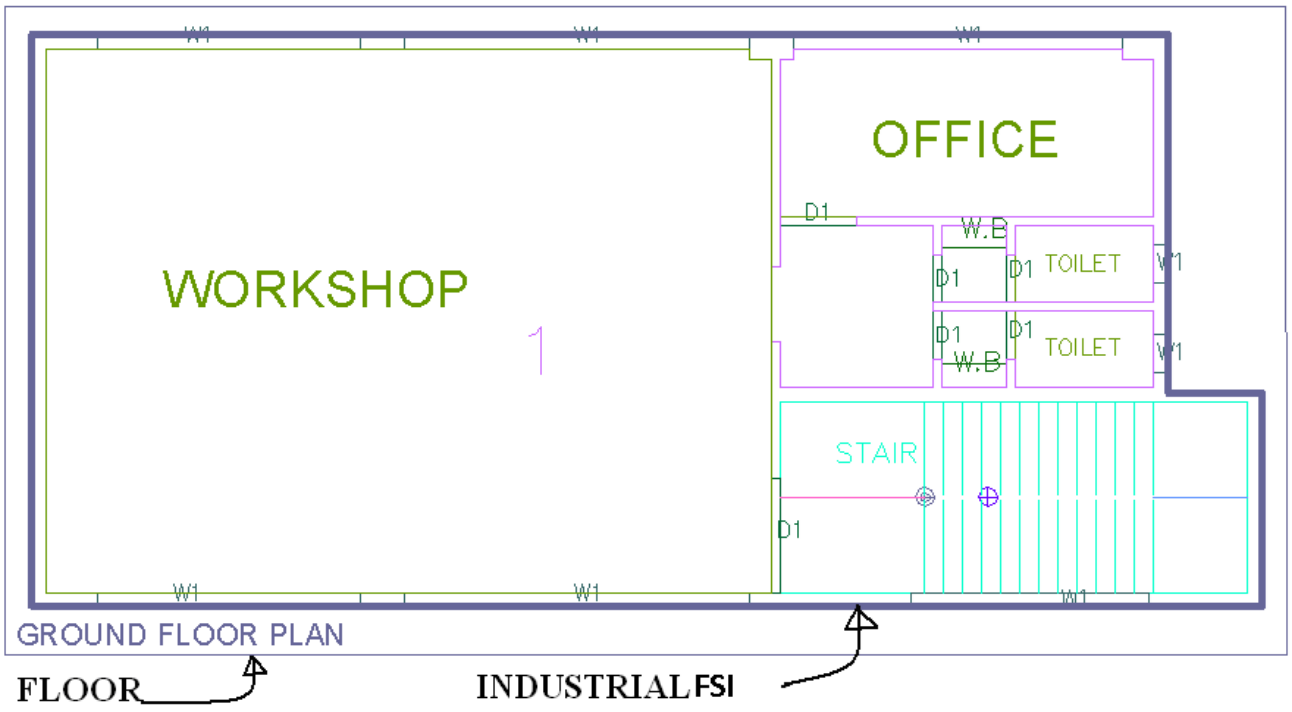
_IndFSI

Description :-

Draw a IndFSI as a closed polyline (area key plan line in the submission drawing) which is the area covered by all the floors. Industrial building means building or part thereof wherein products or material are fabricated, assembled or processed such as assembly plants, laboratories, power plans, refineries, gas plants, mills, dairies and factories. This polyline should be excluding balcony & terraces area.

Shortcut Command :IFSI

How to draw : -



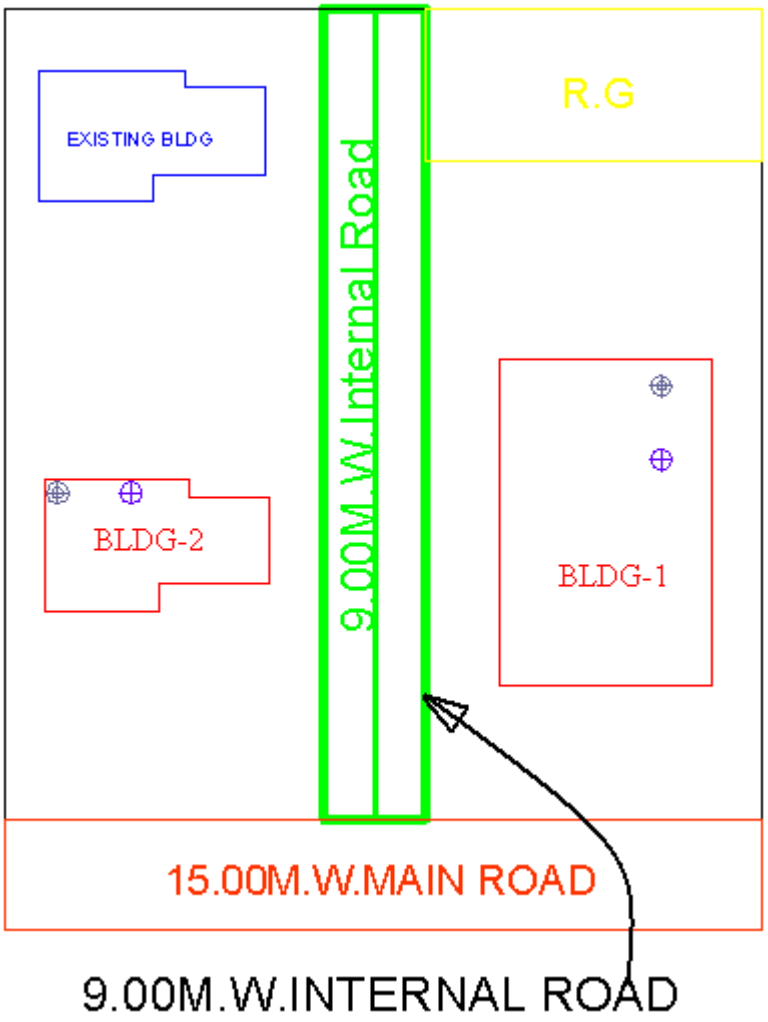
_Internal Road

Description :

Draw internal road with text specifying its width as shown in figure. And draw a center line. And type of layer of the center line must be center line (Type of the Layer).

Shortcut Command : R2

How to draw : -



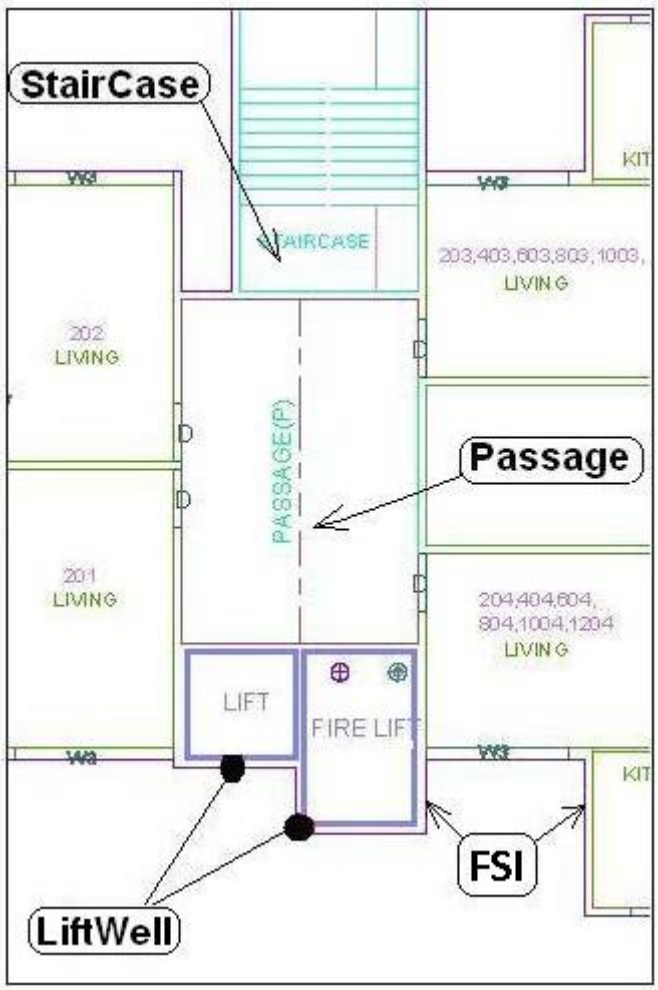
_Lift well

Description :

Draw a Liftwell as a closed polyline which is a mechanically guided car, platform or transport for persons and materials between two or more levels in a vertical or substantially vertical direction. If fire Liftwell is provided then use the marking of “Fire Liftwell" option from **Mark -> Liftwell -> Fire Liftwell.** Fire Liftwell means a special Liftwell designed for the use of fire service personnel in the event of fire or other emergency.

Shortcut Command : LFT

How to draw :



Layer: _LIG

Description :

Draw LIG area in _LIG layer as close poly line which is left for Lower Income Group.

How to draw :

Draw closed ply line,It should be Inside of Floor or Plot.

_Location Plan

Description :

Locations plan if any to be drawn on this layer. This is only for reference. No verifications are done by AutoDCR for this layer so not compulsory.

Shortcut Command : LCP

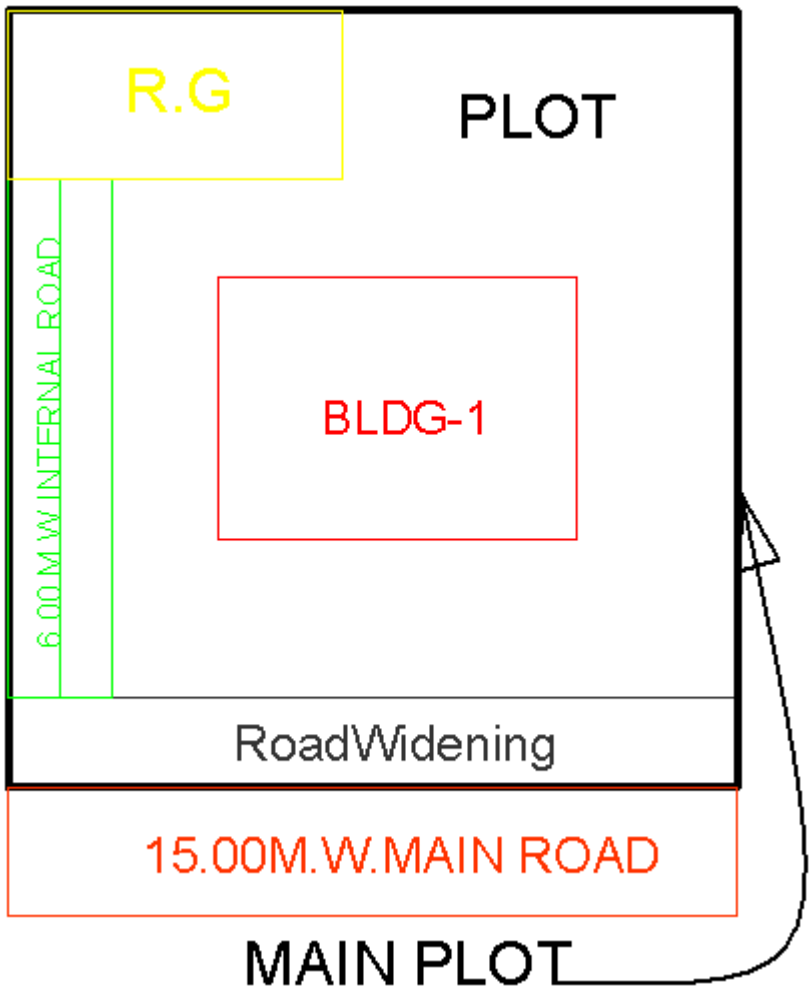
_Main Plot

Description:

Draw a Plot poly as a closed polyline which is a parcel or piece of land enclosed by definite boundaries. A Plot will contain all Proposed Works (buildings, wings), open space, Internal Roads, Parking etc. The overall Plot Entity represent a Plan, AutoDCR refers it as 'Layout Plan'. The overall Plot Entity represent a Plan, AutoDCR refer it as "**Layout Plan**".

Shortcut Command: PLT

How to draw :



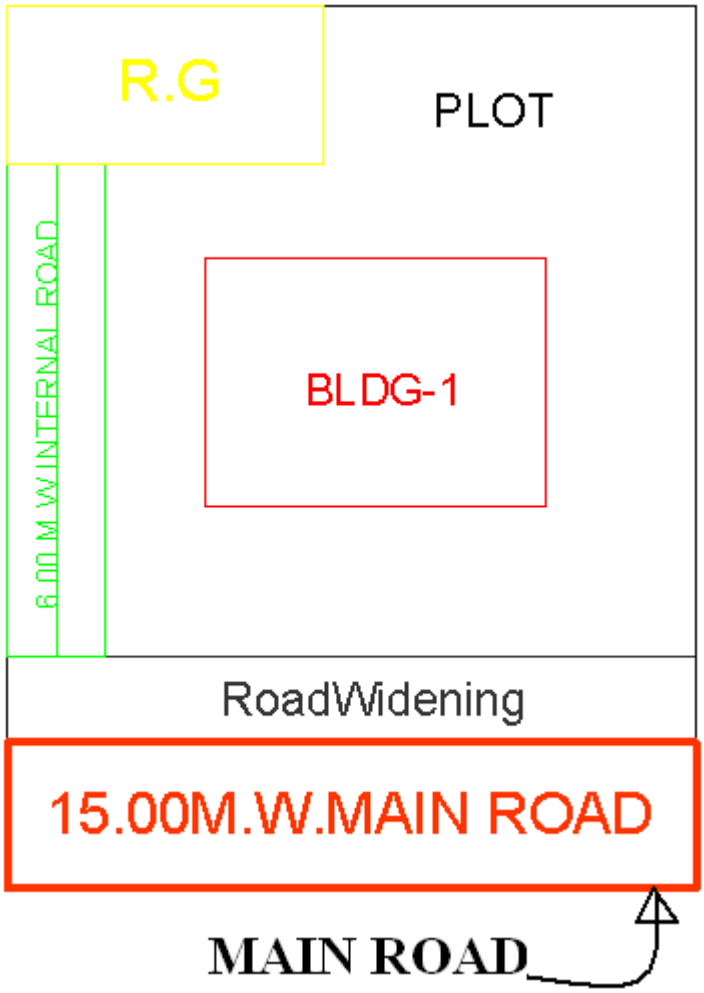
_ *Main Road*

Description :

Draw a Main Road as a closed polyline which is abutting the plot. On the site that road is any type of road. Such as any highway, street, lane, etc. over which the public have a right of passage or access or have passed and had access uninterruptedly for a specified period, whether existing or proposed in any scheme. Road name start with its width only.

Shortcut Command : R1

How to draw : -



_Margin Line

Description :

No need to draw Margin Line, Just use **Mark Margin** tool for it. This layer is not provided for users. AutoDCR uses '_Margin Line' layer for it's own internal use.

_NETPLOT

Description :

No need to draw NETPLOT. This layer is not provided for users. AutoDCR uses '_NETPLOT ' layer for its own internal use.

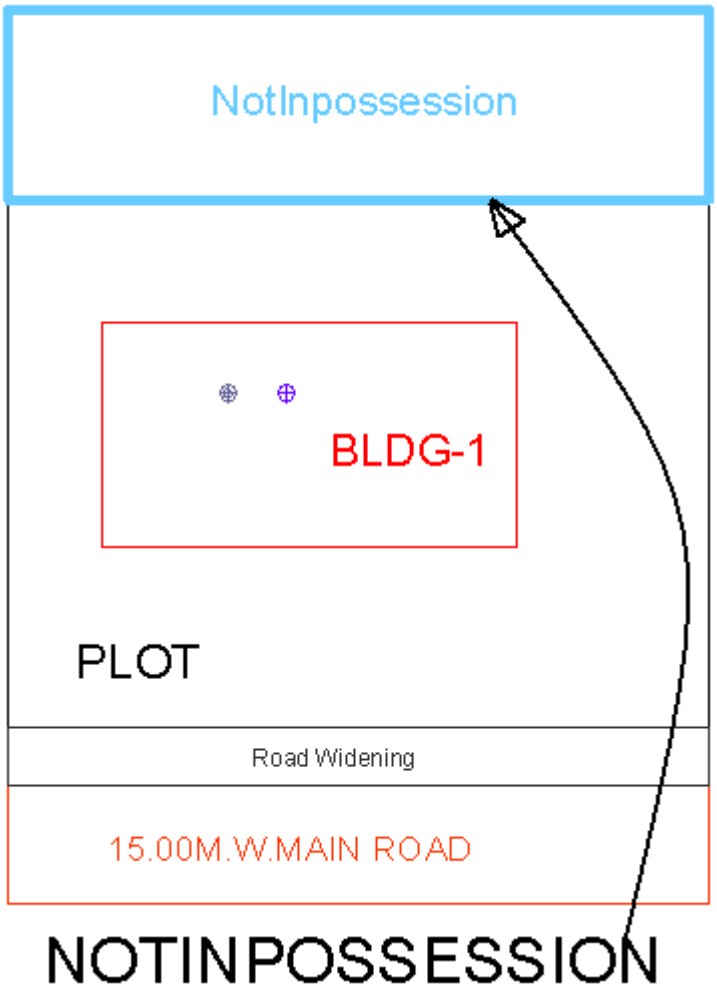
NotInPossission :

Description :

Plot area which is not in possession or which is not in proposal to be drawn as a closed polyline on this layer.

Shortcut Command: NIP

How to draw : -



_Parking

Description :

Draw a parking poly as a closed polyline which is an enclosed covered or open area sufficient in size to park vehicles. This closed polyline shall contain a text on same _Parking layer. This text is treated as name of parking. Insert the parking by using a **Insert-> Parking** option.

Shortcut Command : PK

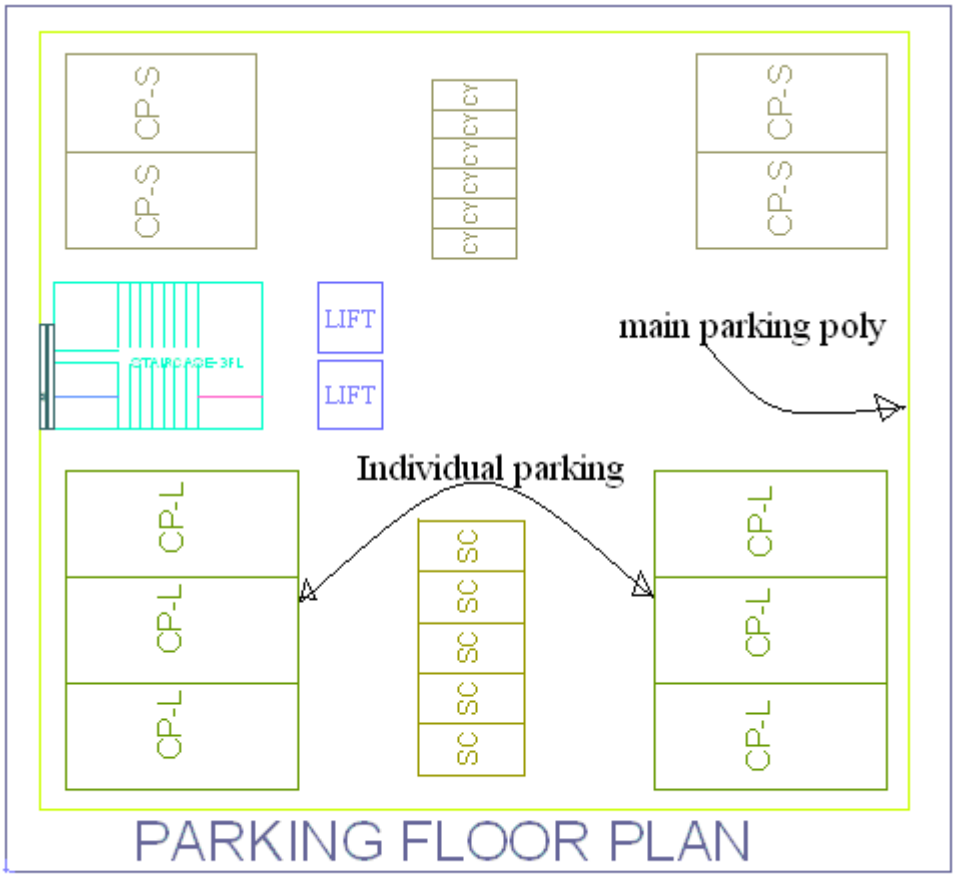
Parking Name :

This closed polyline shall contain a text on same _Parking layer. This text is treated as name of parking.

On this layer, you can group and insert any number of parking

Parking		Name
Car	(2.75 X 5.0)	CP
Scooter	(1.50 X 0.84)	SC
Cycle	(1.50 X 0.70)	CY

How to draw : -



Parking

_Passage

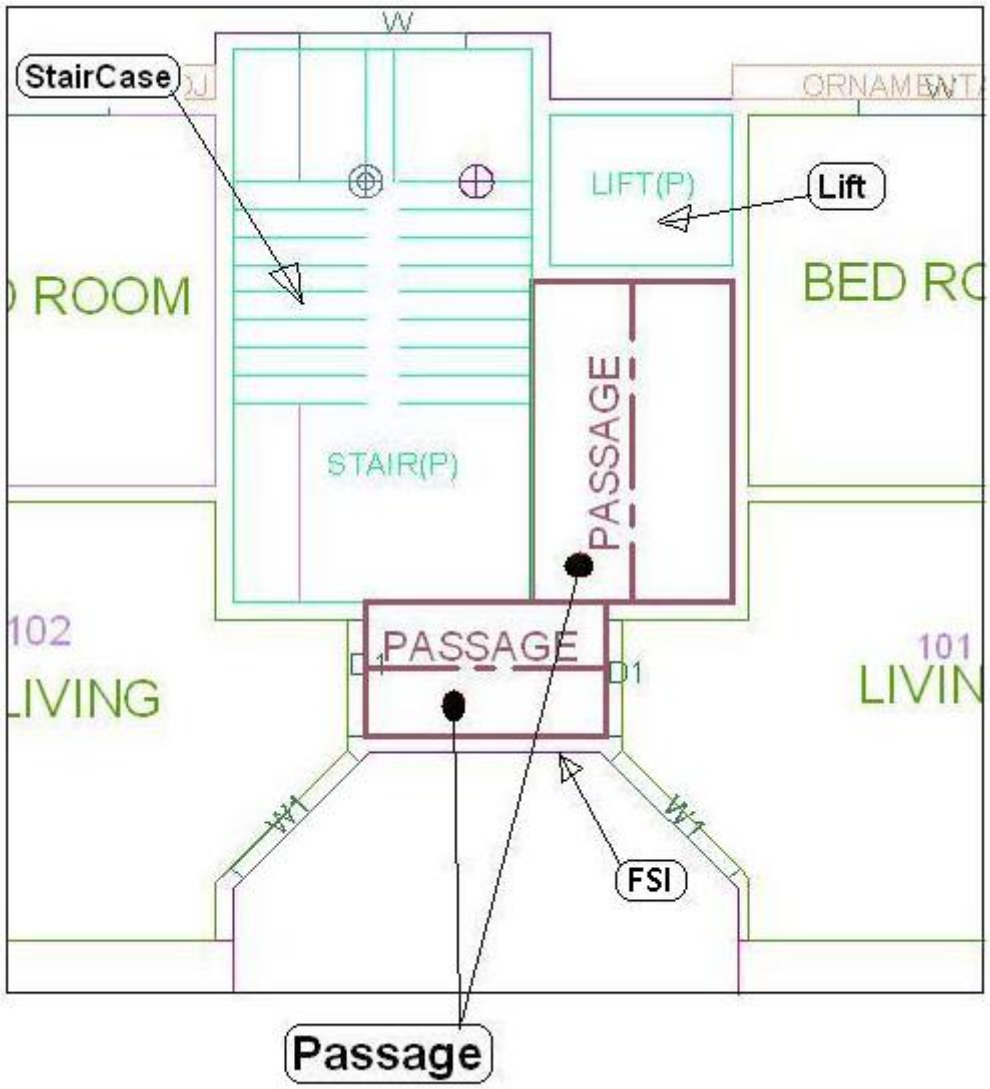
Description :

A closed polyline on _Passage represents a passage. It is a common passage or circulation space including a common entrance hall. This closed polyline contain a text. This text must be on "_Passage" layer. This text is treated as name of closed polyline.

Centre Line: - All Passage poly must contain an Open Polyline inside that closed poly representing centre line on "***_Passage***" Layer. But line type of center line must be 'Center line'.

Shortcut Command :PAS

How to draw:-



_PlotSurroundingDetails:

Description :

A closed polyline on "_PlotSurroundingDetails" layer represents surrounding details of plot.

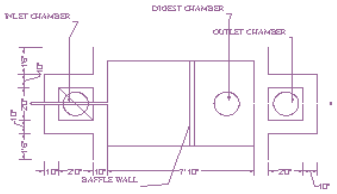
_ PrintAdditionalDetail:-

Description:-

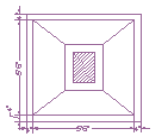
PrintAdditionalDetail layer----Apart from the layers specified by PreDCR, any other information which user wants to display in final approval print shall be drawn on _PrintAdditionalDetail layer.

Shortcut Command:-

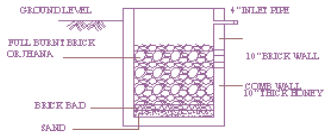
How to draw:-



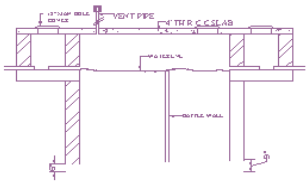
SEPTIC TANK PLAN



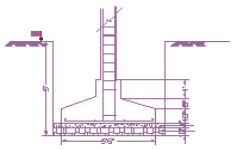
PLAN OF TYPICAL FOOTING



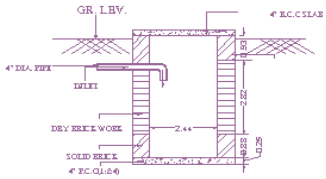
SECTION OF RECHARING PIT



SEPTIC TANK SECTION



SECTION OF TYPICAL FOOTING



DETAILS SECTION OF SOAKPIT

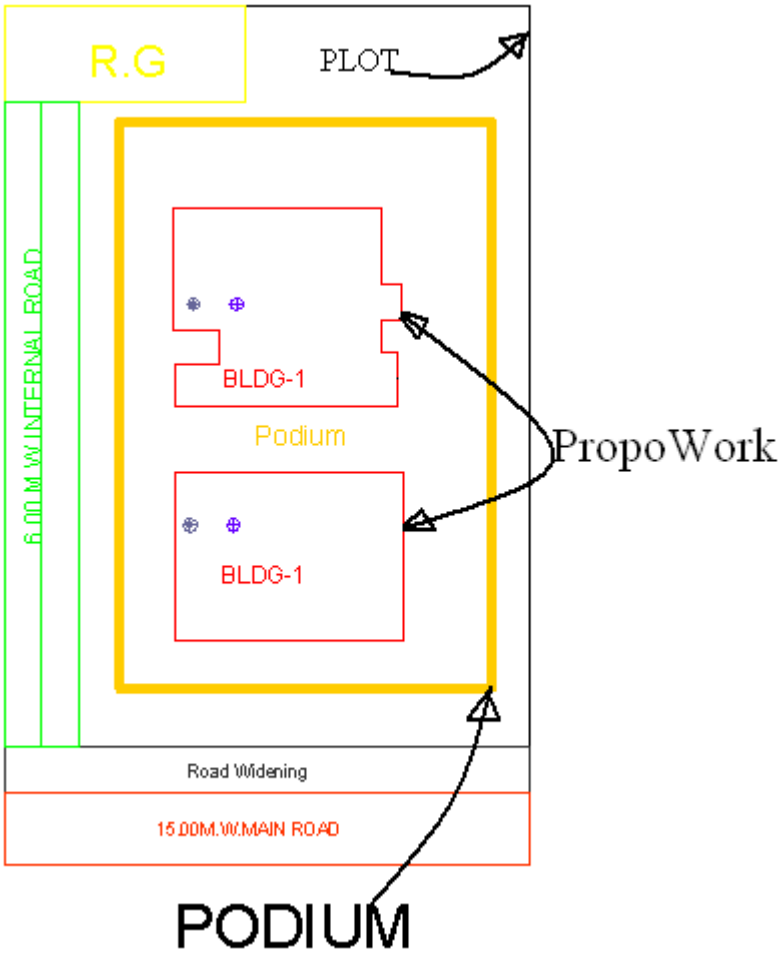
_Podium

Description :

Podium shall be drawn on '_Podium' layer as a closed polyline. Podium should be inside plot covering proposed works if any.

Shortcut Command: -POD

How to draw :-



_PropWork

Description :

Proposed Work is a building profile/outline and shall be drawn inside plot. All detail Building plans (inside building polyline) of all PWork (inside plot polyline) is associated/linked automatically by Auto-DCR by matching its name.

So for proper association it is required to follow specific standard as given.

XY (Z)

X is Wing name.

Y is wing number.

Z is Building name.

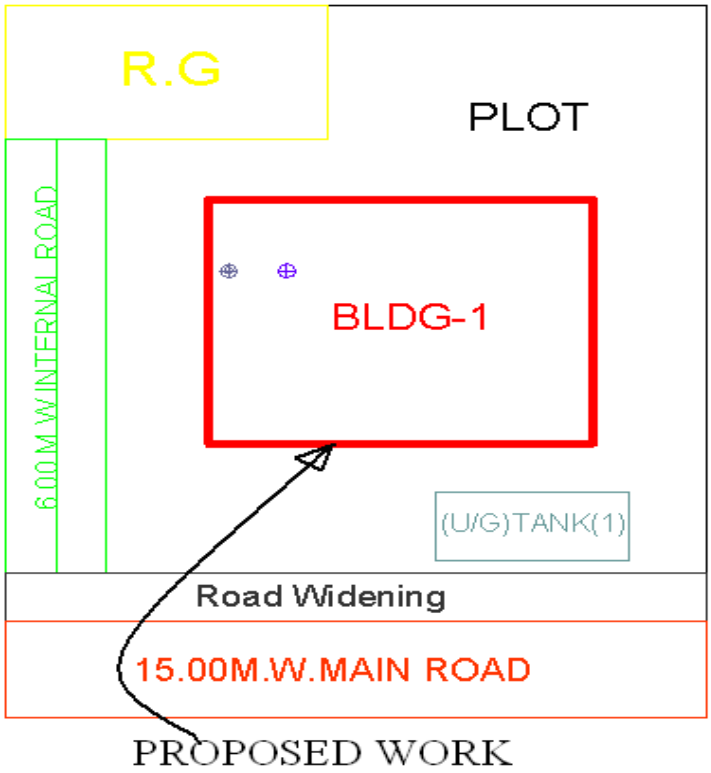
For example if there are four wings A1,A2 & B1,B2 in building named "Monarch" then proposed work names shall be -

A1 (Monarch), A2 (Monarch)
B1 (Monarch), B2 (Monarch)

Reference Circle*:* All PWork poly must contain two circles (of any size) with its center on common point for whole building. First on layer of any FSI and second on Layer "_Floor". These reference circles to be inserted from **PreDCR -> insert-->Direction ref circles** at the same location in all the floors as well as pwork in plot. Usually they can be placed inside either Common Liftwell or Stair/Inner Chowk (because generally their location is same on all floors). Reference circles are used by the software for overlapping all floor plans.

Shortcut Command:- PW

How to draw :-



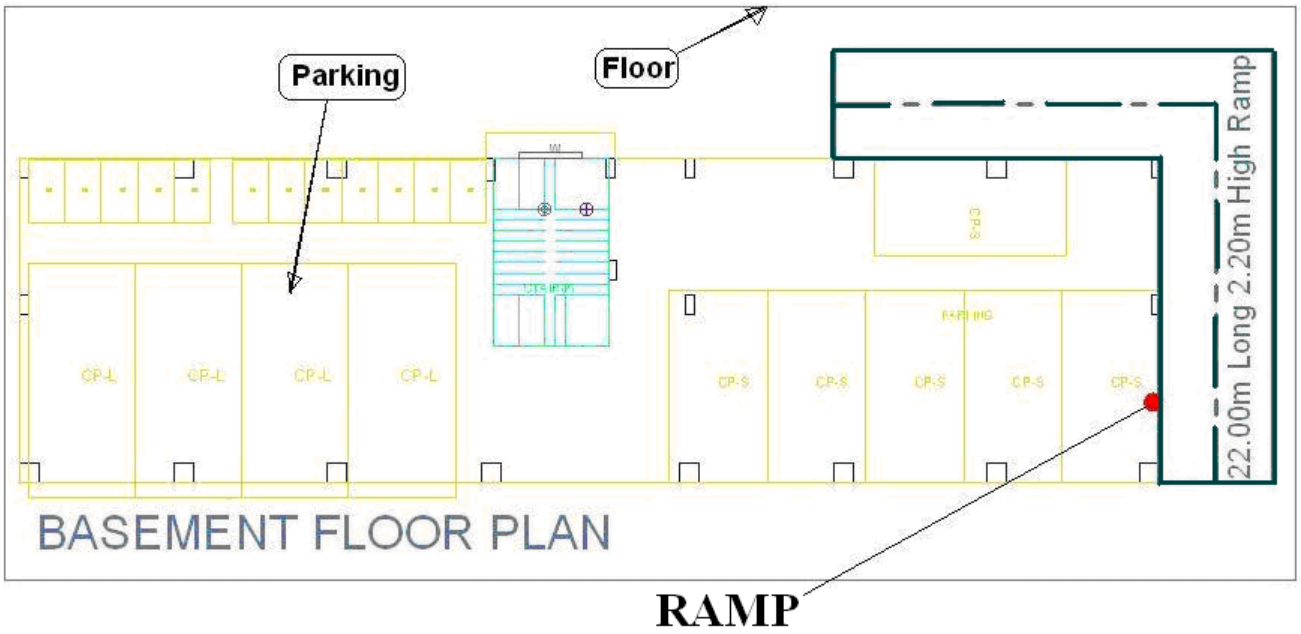
_Ramp

Description :

Draw a Ramp poly as a closed polyline in floor plans and/or plot and section. Naming convention for ramp is "---m. long and ---m. high ramp-1". Give unique name to each ramp.

Shortcut Command :-RP

How to draw : -



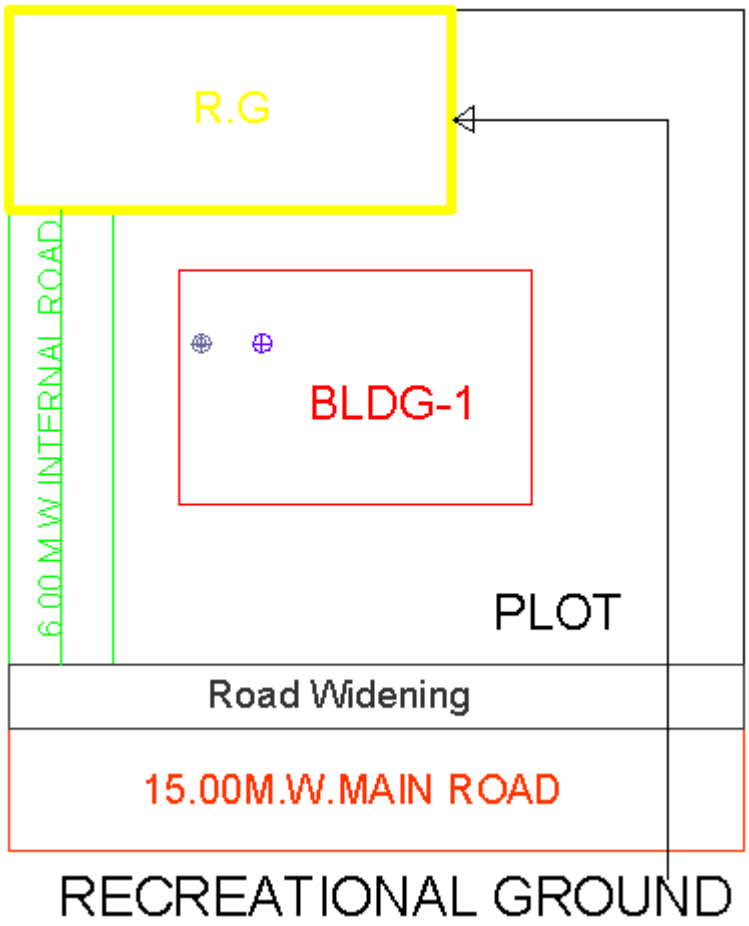
_Recreational Ground

Description :

Draw Recreational Ground as closed polyline reserved as recreational space on this layer. With text on same layer.

Shortcut Command: -OPS

How to draw :-



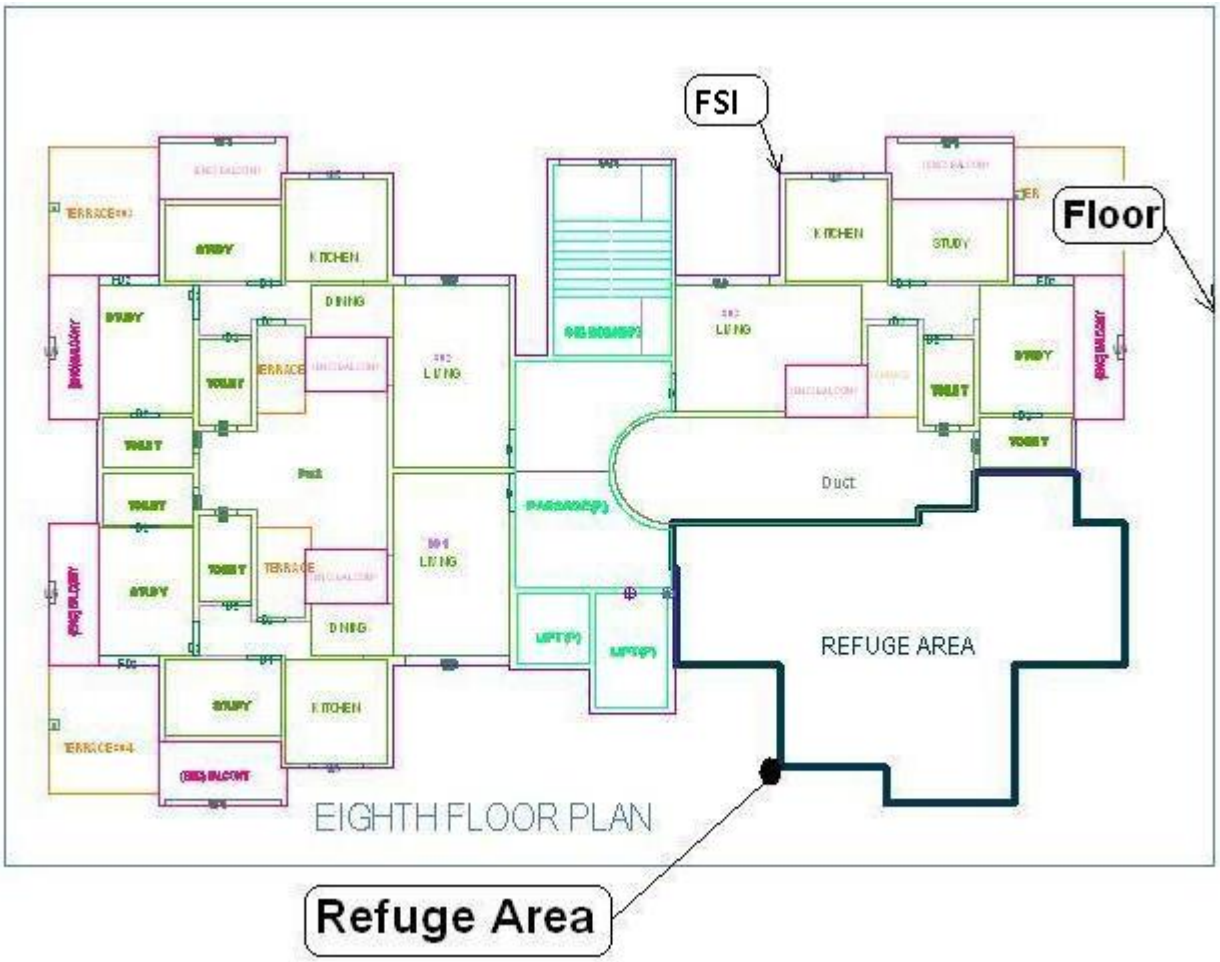
_Refuge Area

Description :

Refuse area to be drawn in plan as a closed polyline with text on this layer. Overlapped with FSI layer but outside the FSI poly.

Shortcut Command : RFG

How to draw :



_Refuge Chute

Description :

Shortcut Command : RFG

How to draw :

Draw closed poly line.

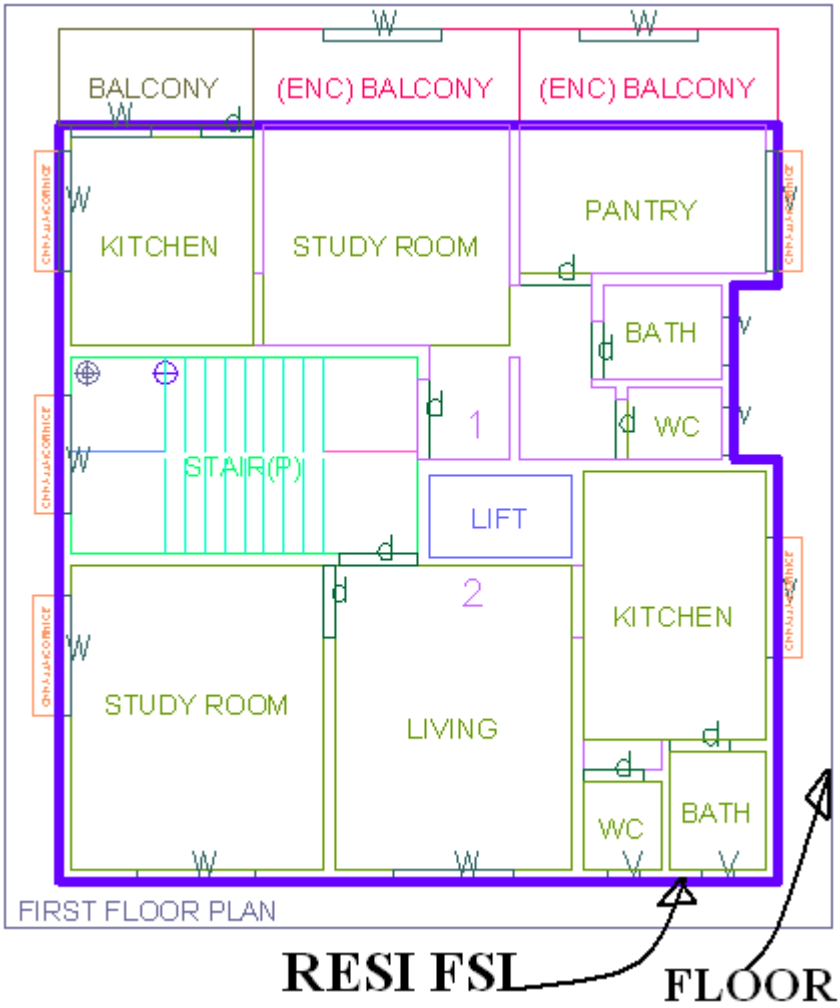
_ResiFSI

Description : -

Draw a ResiFSI as a closed polyline which is the area covered by a building on all the floors. This FSI polyline only used for residential use building or floor. ResiFSI poly must be inside Floor poly.

Shortcut Command : MFS

How to draw :-



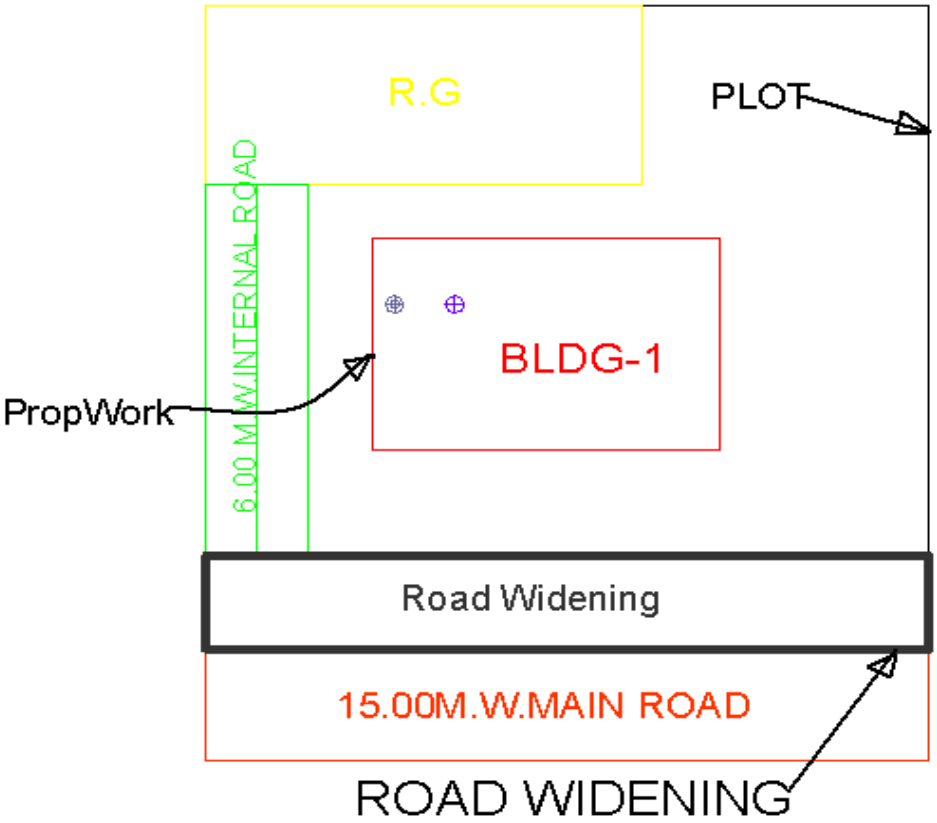
_Road Widening

Description :

Draw a road widening polyline as a closed polyline which the plot area is going to the road, that area should be drawn on this layer. It should be inside the plot polyline.

Shortcut Command : R5

How to draw : -



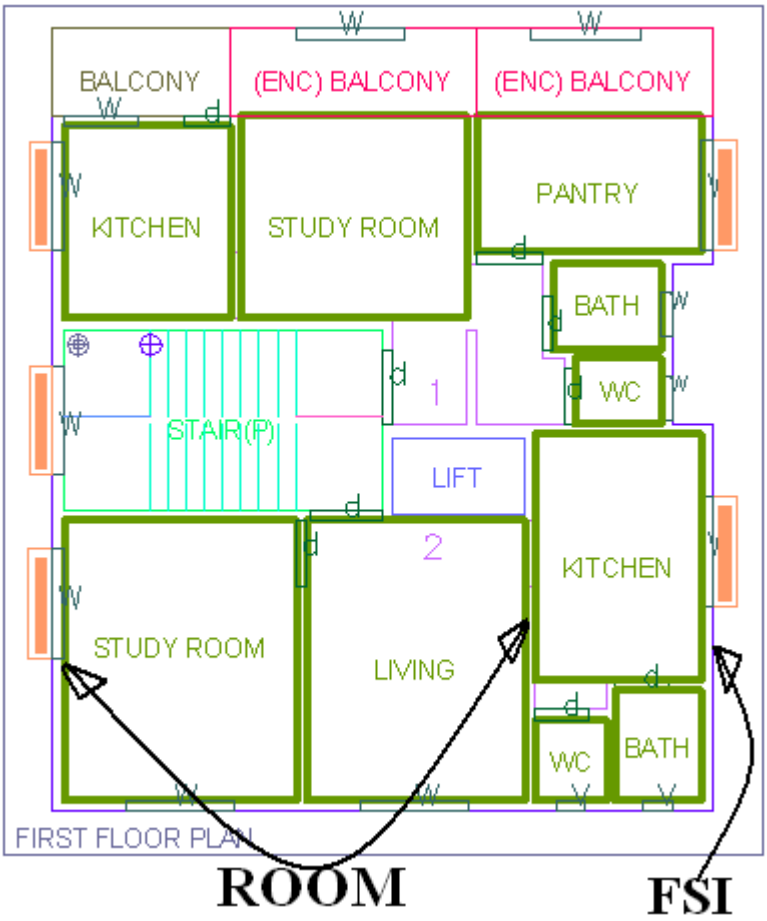
_Room

Description :

A closed polyline on _Room layer represents a room. This closed polyline contain a text. This text must be on _Room layer. Room to be marked by assigning them names using **Assign Name-> room** option from PreDCR menu.

Shortcut Command : RU

How to draw : -



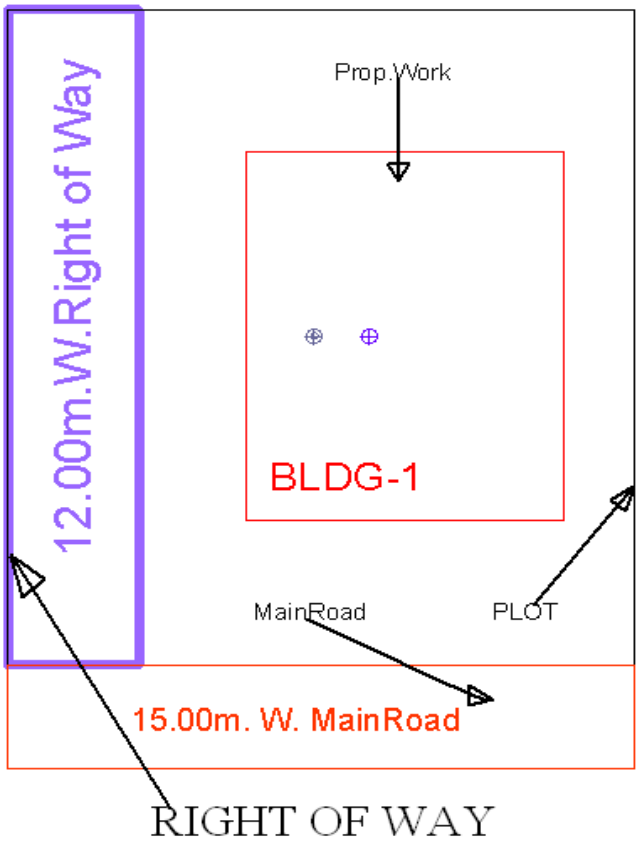
_Right-of-Way

Description :

Draw a closed polyline on "_RightOfWay" to represent a Right Of way and text inside it representing its width. Layer should be inside or intersecting with Plot poly

Shortcut Command : ROW

How to draw : -



_Section

Description :

Draw a Section polyline as a closed poly of section boundary which contain all floors with stair cabin, Liftwell machine room, water tanks etc. as shown in the figure. Also write the name as "Section" in this section poly.

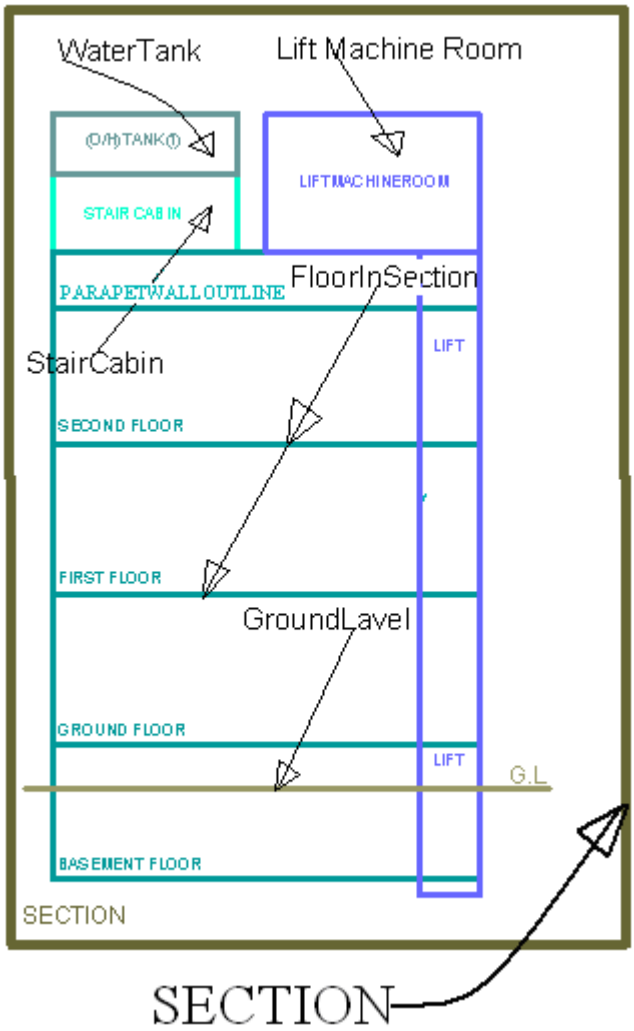
In this closed poly of section draw sections of all floors with stair cabin, inner Chowk, Liftwell machine room, Ventilation shaft, water tanks etc. as shown in the figure.

Also write the name as "Section" in this section poly.

This section poly will present inside the building poly.

Shortcut Command : SEC

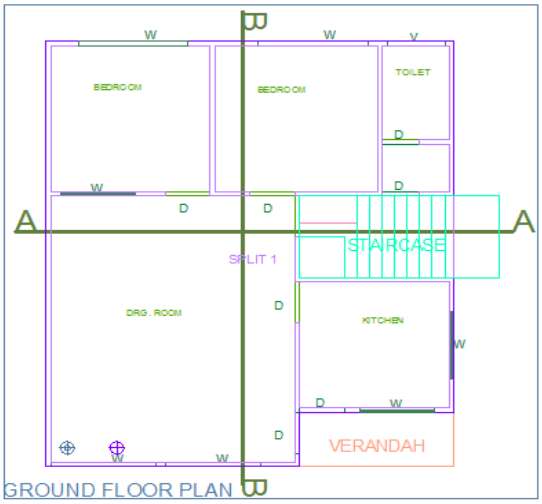
How to draw :



_Section Line

Description: -

Draw a section line on "_SectionLine" layer to represent building section.



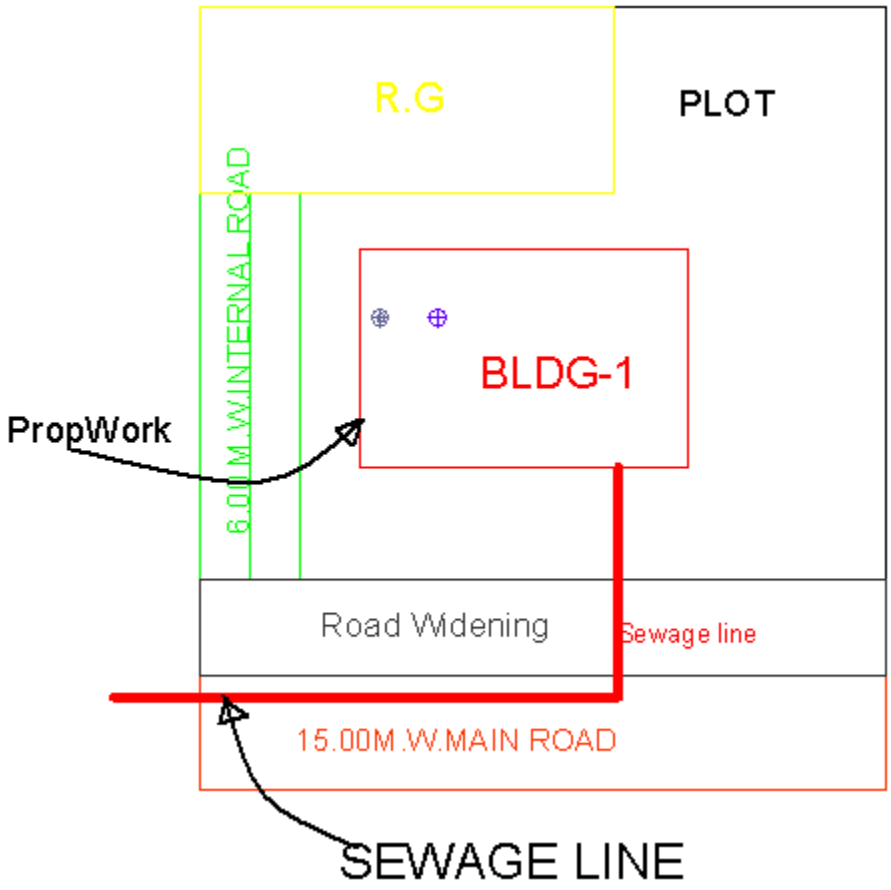
_Sewage Line

Description: -

Drain Line shall be drawn as a open polyline on this layer.

Shortcut Command : L5

How to draw : -



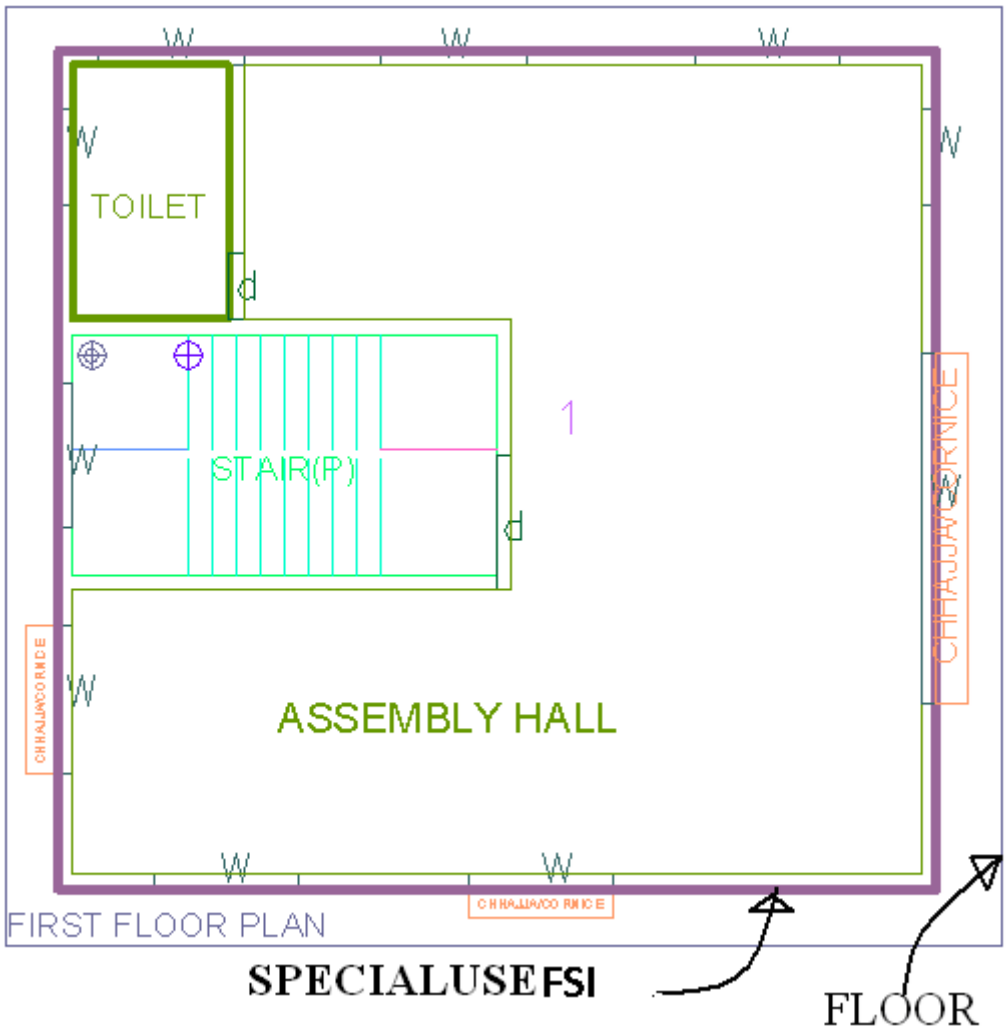
_SpecialUseFSI

Description :-

FSI ploy for all other building uses like educational, institutional etc. except ResiFSI, CommFSI & IndFSI use should be drawn on this layer.

Shortcut Command : SUF

How to draw : -



_Staircase

Description :

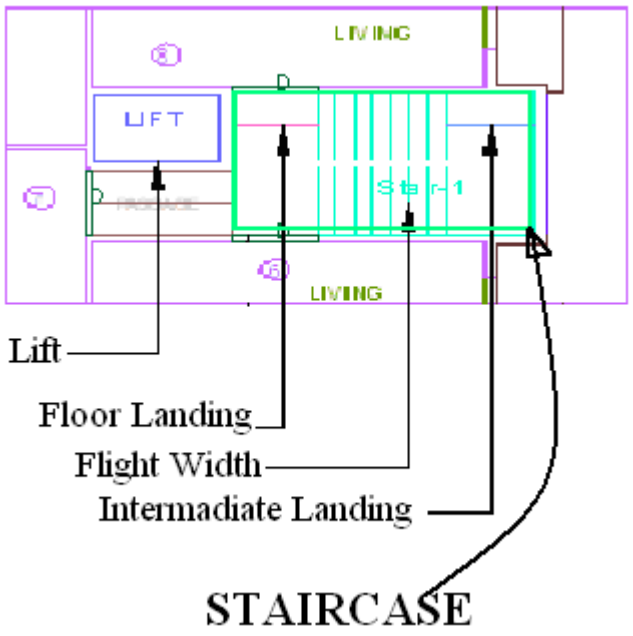
Staircase: On this layer, Each Staircase poly shall have three lines for Flight Width, Intermediate Landing and Floor Landing on same layer. Mark these open polyline by using **Mark-> Staircase** option from PreDCR menu. Also draw in plan all the treads on this layer which is a open polyline.

This closed polyline contains a text. This text must be on _Stair layer. This text is treated as name of closed polyline. On this layer, Each Staircase poly shall have three lines for Flight Width, Intermediate

Landing and Floor Landing on same layer This can be mark by tool **Mark > Staircase > intermediate landing** etc.

Shortcut Command : STR

How to draw : -



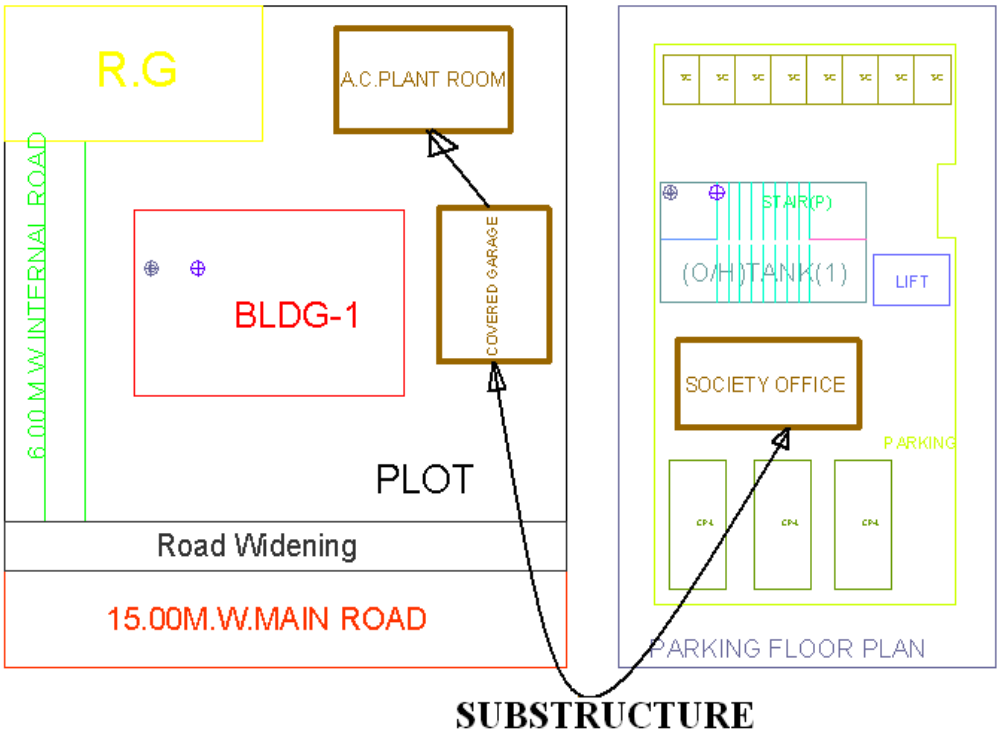
_Substructure

Description :

Draw various substructures on "_Substructure" layer as a closed polyline. And mark it according to the requirement as **Mark -> Substructure -> Society Office**, from PreDCR menu. Sub-structures can be drawn inside plot or in floor plans.

Shortcut Command : SSTR

How to draw :



SUBSTRUCTURE

_Tank

Description :

A closed polyline on _Tank layer represents a water tank. Under Ground tank can be drawn in Floor or Layout plan. If it is drawn in Floor plan then it should be at bottom of GROUND FLOOR. Overhead tank can be drawn in TERRACE FLOOR. Tank should be drawn as per internal size or dimensions. Both the tank also draw in section also.

Tank Name: - This closed polyline contain a text and must be in given format. This can also be done by tool Assign Name>Tank

Tank Name+ Type +Capacity

Tank Type	Text
Overhead water tank	(O/H)
Underground water tank	(U/G)

For e.g.

TANK-1 (O/H)

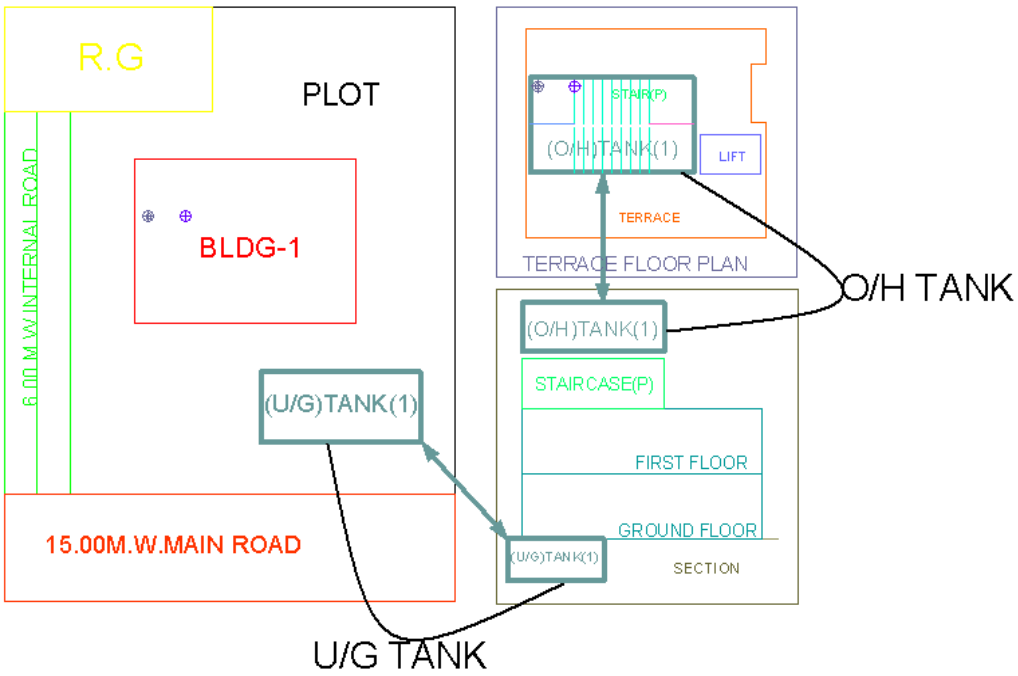
TANK-2 (U/G)

Under Ground tank can be drawn in Floor or Layout plan. If it is drawn in Floor plan then it should be at bottom of GROUND FLOOR.

Overhead tank can be drawn in TERRACE FLOOR. Usually it is drawn on Staircase poly in TERRACE FLOOR.

Shortcut Command : TNK

How to draw : -



_Terrace

Description:-

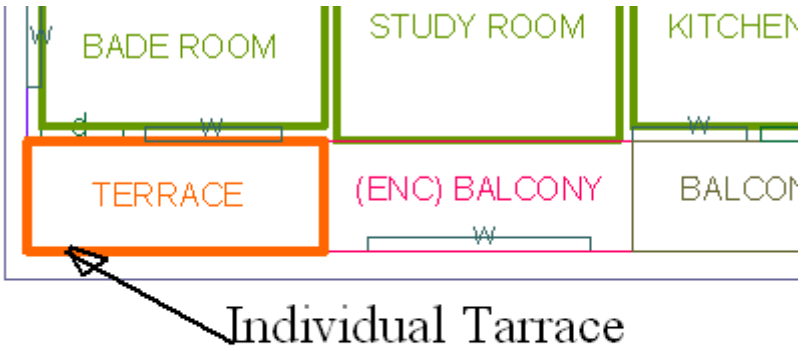
Draw a Terrace as a closed polyline on _Terrace layer which is including parapet wall.

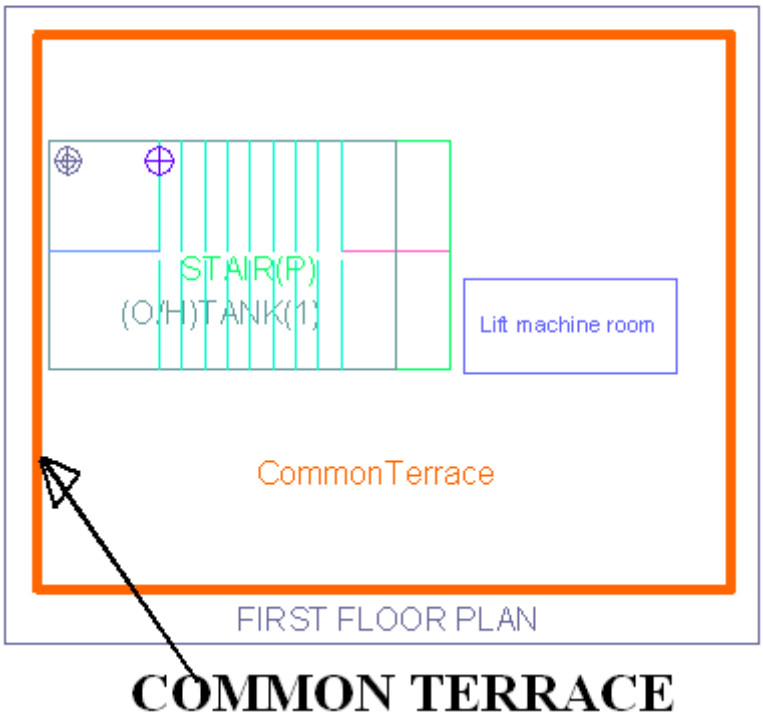
Terrace can be present in:

Plot: It must overlap with PWork
Floor: It must be outside the ResiFSI.

Shortcut Command : TER

How to draw : -





_Tree

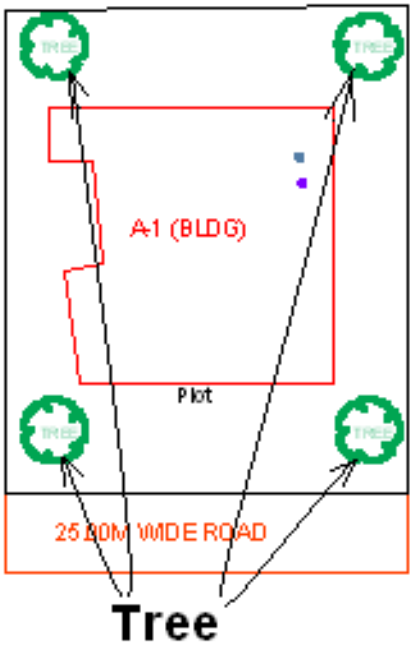
Description :

Trees can be shown on _Tree layer if required to be shown for plantation requirement in plot.

Shortcut Command : TRE

How to draw :

Insert Tree from PreDCR options.



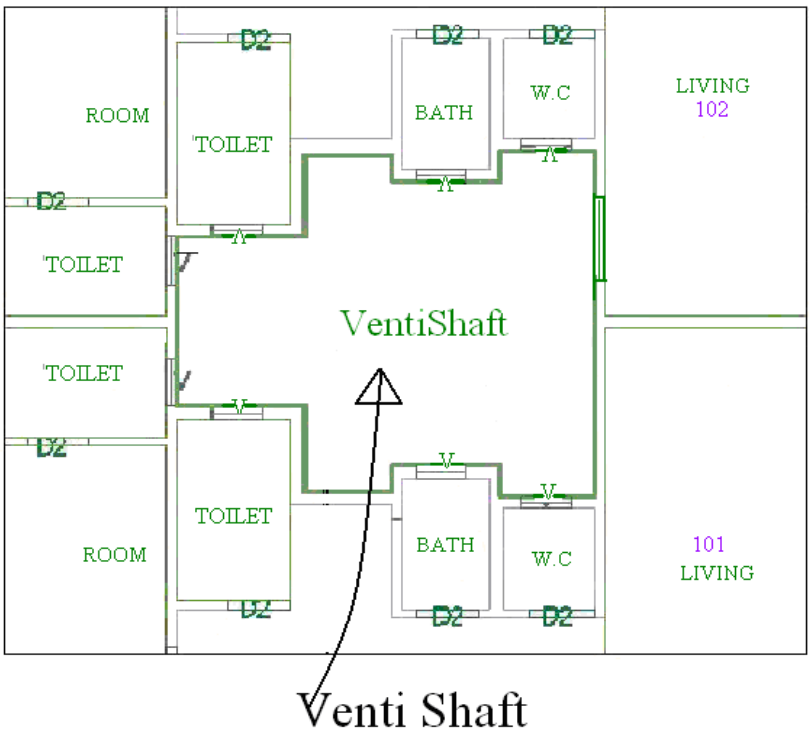
_Ventilation Shaft

Description :

Draw Ventilation shaft/duct area as a closed Polyline with Text. Inside FSI Area on _VentiShaft Layer. Only those shafts from which ventilation for habitable room is not taken should be drawn on this layer.

Shortcut Command:-AVS

How to draw : -



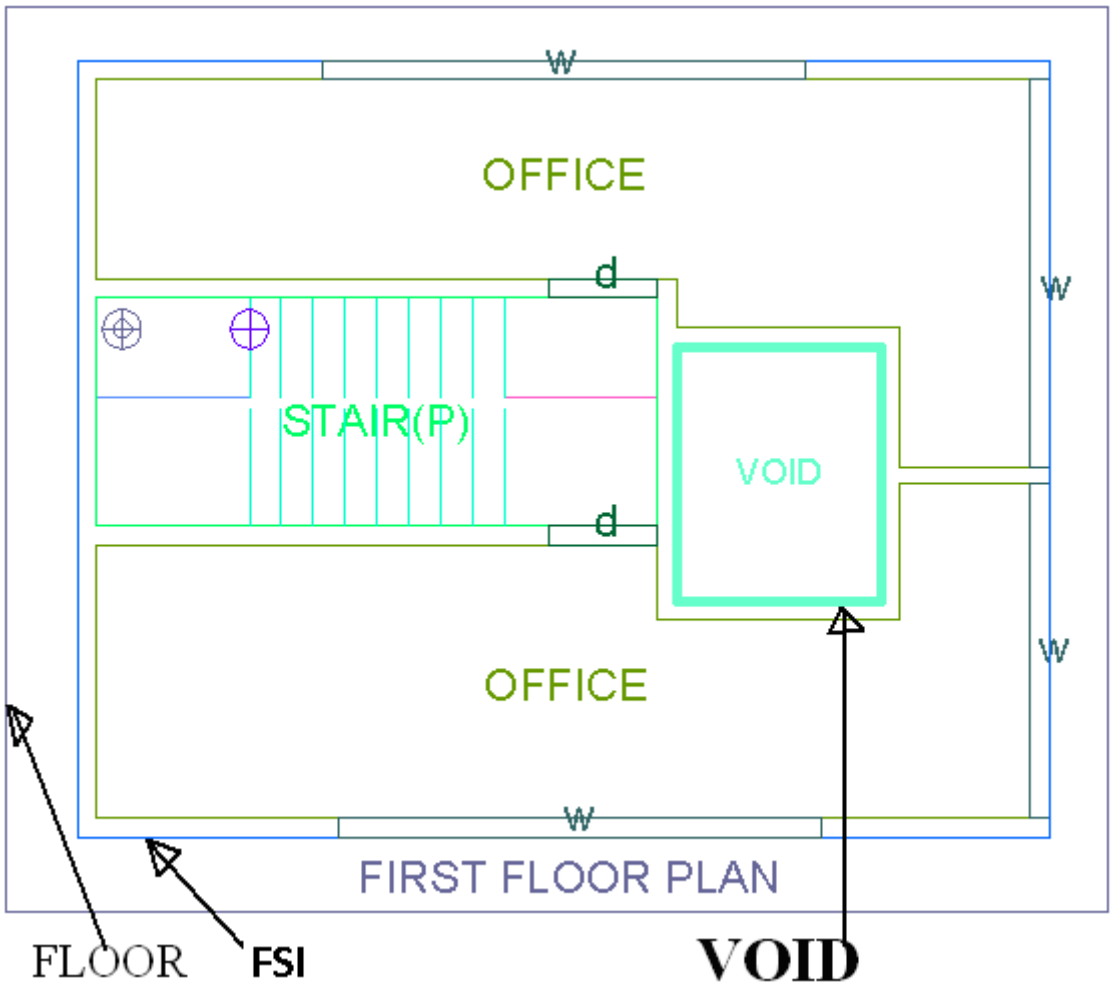
_Void

Description :

If the space is not Chowk then it can be void. All ducts (where ventilation is not taken) and double height rooms can be drawn in void layer.

Shortcut Command : VD

How to draw :



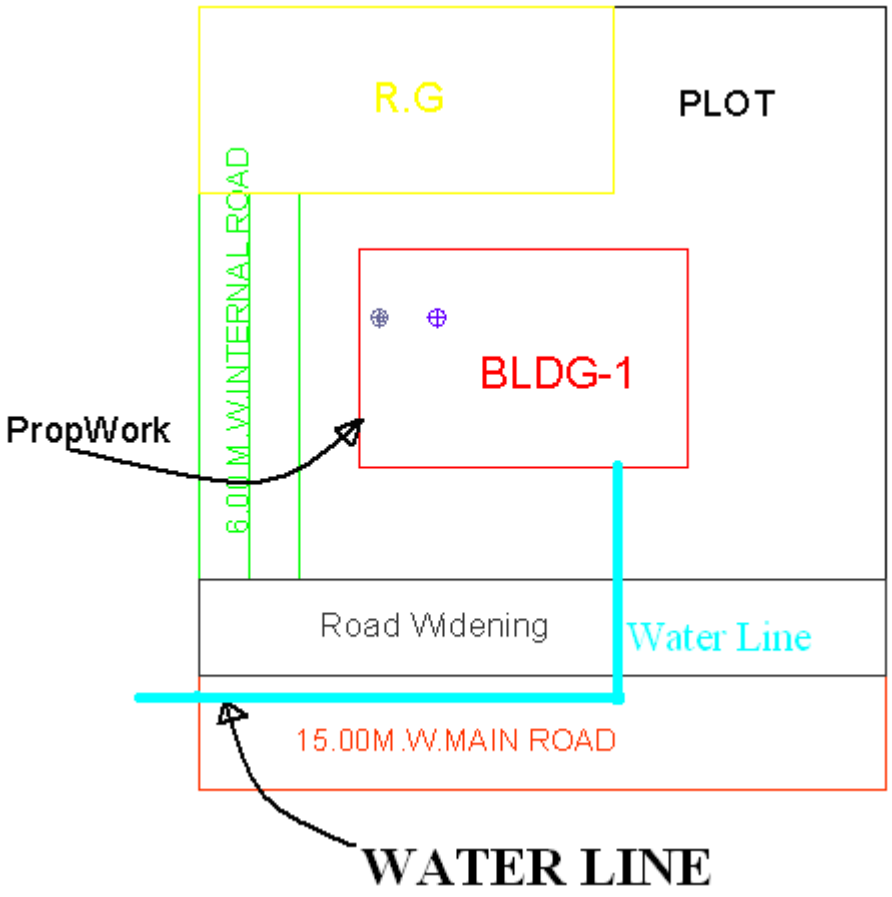
_WaterLine

Description :

Draw a Water line as a open polyline to show Water supply.

Shortcut Command : WL

How to draw : -



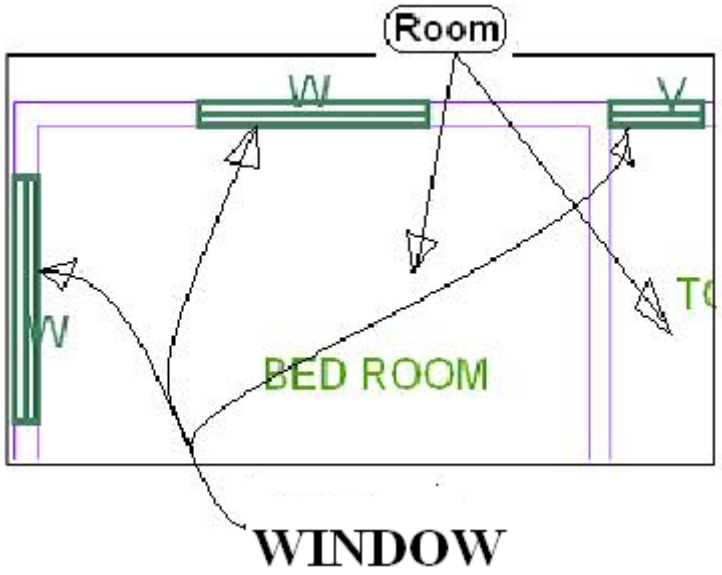
_Window

Description :

Window is a closed Polyline which is drawn on "_Window" layer. Also you can insert a particular size poly for Window using **Insert->Window** from PreDCR menu.

Shortcut Command : WND

How to draw : -



Tools

All/Remover Tool Tip (PDCRTOOLTIP):

This command will activate the tool tips for PreDCR layers.

Show Only DCR Layers:

All PreDCR layers (PDCRSPL):

This command will turn off all the layers in the drawing except PreDCR layers.

Building level layer (PDCRSBL):

This command will turn on all the building plan level layers in the drawing.

Layout level layer (PDCRSLL):

This command will turn on all the Layout plan level layers in the drawing.

Show Only DCR Layers (PDCRSDL):

This command will turn off all the layers in the drawing except DCR layers.

Show Other Layers (PDCRSOL):

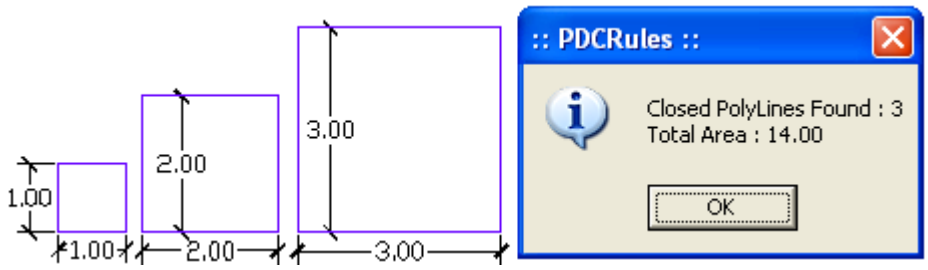
This command will turn off all the DCR and PreDCR layers in the drawing.

Show All layers (PDCRSAL);

This command will turn on all layers in the drawing.

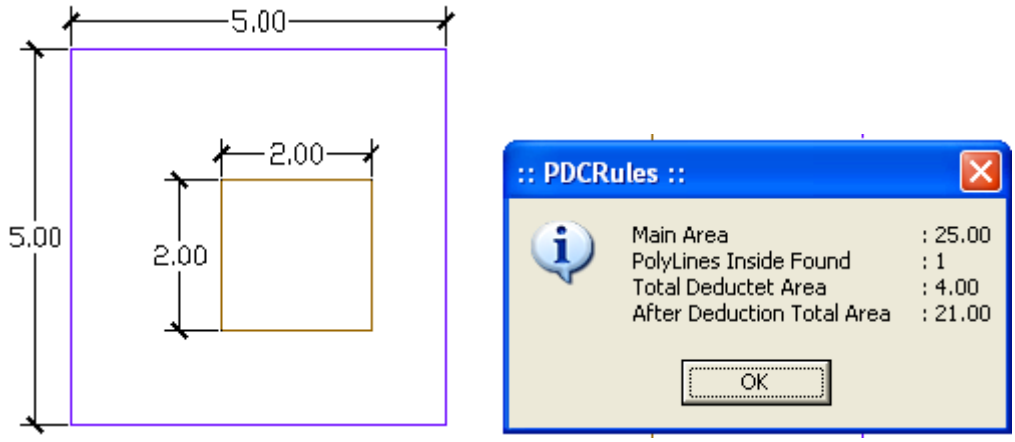
Calculate Total Area (PDCRCTA):

This command will compute the total area of all selected closed polygons.



Calculate Deducted Area (PDCRCDA):

This command will compute the area of closed polygon after deducting closed polygons found inside.



Get All Inside Poly (PDCRFIP):

This command will highlight all polygons, which found exactly inside selected polygon under test.

Get All Overlapping Poly (PDCRGOP):

This command will highlight all polygons, which are overlapping with selected polygon under test.

Get All Intersecting Poly (PDCRGIP):

This command will highlight all polygons, which are intersecting with selected polygon under test.

Find Open Entities (PDCRFNDO):

Highlight open entities on PreDCR layers.

Find Closed Entities (PDCRFNDC):

Highlight closed entities on PreDCR layer.

Shortest distance (PDCRFSD):

This command will find the shortest distance between two entities.

Spelling check (_spell):

This tool is used for spelling checking.

Find Object (PDCRFOBJ):

This command zoom & highlight object of a given handle.

Set Default ACAD Version (PDCRSDA

Commands

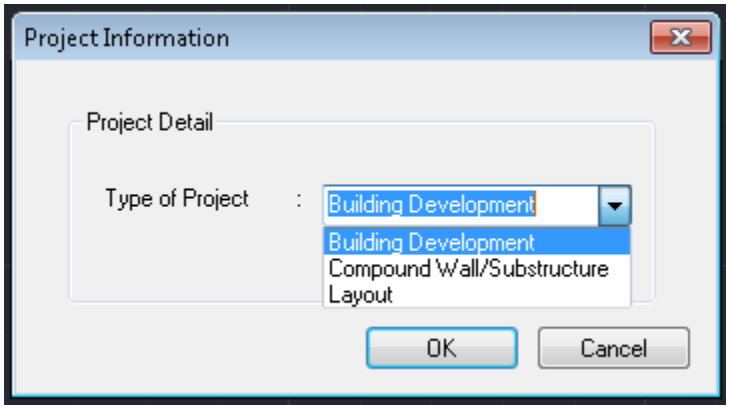
Create New Project (PDCRNWP)

This command will Create New project for current drawing.

Here you have to select Type of Project as

Proposed Building Development.

Note: It is always compulsory to add your drawing to new Project.



Create AutoDCR Layers (PDCRCL):

This command will create layers required for AutoDCR and as per the Project Type you have selected.

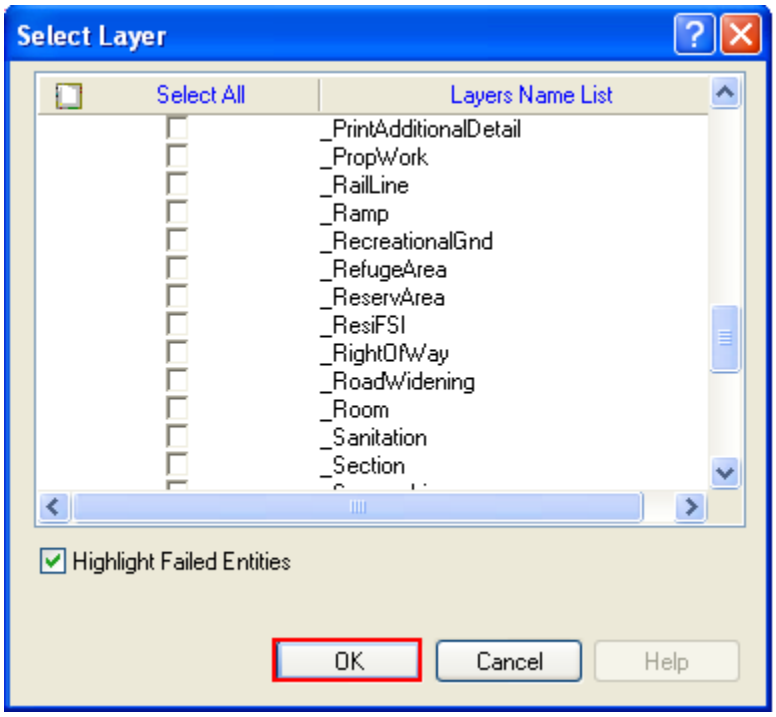
Fix Poly (PDCRPE):

Use this command once on the final drawing which will process all the polyline on the PreDCR layer and remove extra vertices found on polyline. This command can be used before verifying the drawing using Verify commands.

Verify Drawing:

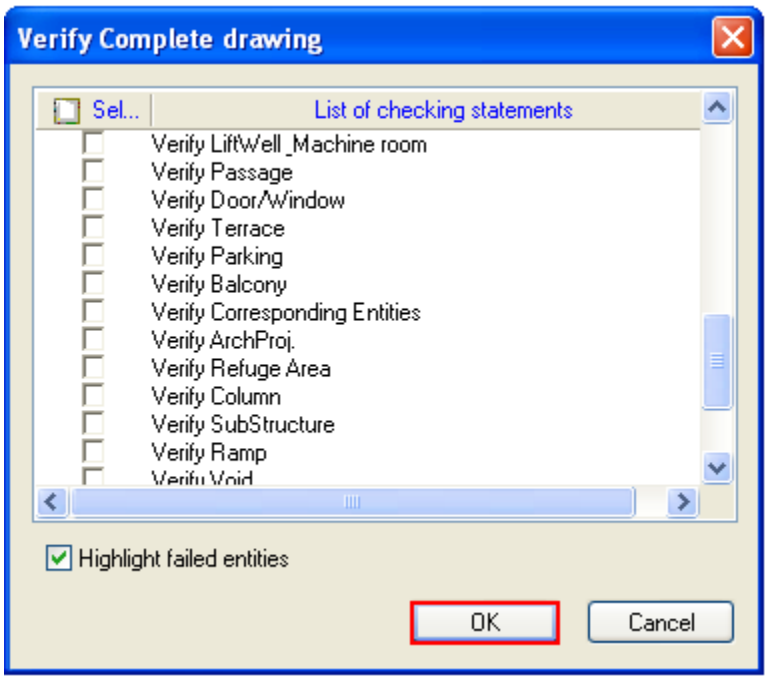
This command will verify the current drawing as required by DCR specifications.

a) Verify Close Entities (PDCRVD): Verify that LWPOLYLINE entities on the selected layers are closed and contain one text.



B) Verify all drawing (PDCRVT): Use this command to verify the layout and building level objects in the current drawing plan.

Major checks are as follows:



In the "Verify All Drawing Dialog" you can select the layout or building objects to be checked. Then to view the result press OK button. PreDCR will start checking all corresponding objects in the currently open drawing and then display the status as OK or list of failed objects in the dialog as shown in Figure. Failed Object Information.

Check if these entities are drawn as closed LWPOLYLINE.

Name text is given to all objects.

Entities are placed exactly inside their parent objects (container).

Naming conventions are followed properly.

c) Objection List (PDCROLST): This command gives the list of all minimum required entities which are not there in your drawing. If all required entities found then it gives a message that "minimum required entities are present in drawing".

Markings

Marking adds some extra meaning in entity. Following commands are provided to mark different entities as per requirement.

Mark-> Proposed work-> Centrally Air conditioned : Mark proposed work as centrally air conditioned if it is.

Mark-> Proposed work -> Normal(Default):Mark proposed work as normal.

Mark-> Floor in section-> Beam: In beam is present in floor so user can mark beam eith the help of this marking option.

Mark-> Floor in section->Normal (Default): Mark floor as a floor in section.

Mark-> Stair Case-> **No of flight -> 3flight or 4flight** (PDCRSCFAB): Mark line inside staircase as a no of flight 3flight 4flight

Mark-> Stair Case->**Staircase {Default} (**PDCRSCFAB): Mark line inside staircase as a Staircase {Default}

Mark-> Stair Case->**Open Staircase (**PDCRSCFAB): Mark line inside staircase as a open staircase

Mark-> Stair Case->**Fire Escape Staircase (**PDCRSCFAB): Mark line inside staircase as a fire escape staircase.

Mark-> Stair Case-> **Fab /Spiral Staircase** (PDCRSCFAB): Mark line inside staircase as a Fabricated or spiral staircase.

Mark->Escalators (PDCRMFL): Mark ->Escalators as a provided

Mark->Staircase Landing **->Intermediate Landing (**PDCRMIL): Mark line inside staircase as intermediate Landing.

Mark->Stair Case Landing->**Flight Width** (PDCRMFW): Mark line inside staircase as Flight Width.

Mark->Stair Case Landing->**Floor Landing** (PDCRMFL): Mark line inside staircase as Floor Landing.

2) **Mark-> Lift- -> Lift {Default} (PDCRSCES):-** mark-> Lift-> as a lift {Default}

Mark-> Lift- -> Hydraulic (PDCRSCES):- mark-> Lift-> as a Hydraulic

Mark-> Lift-> Fire Lift -> (PDCRSCES): mark->Lift -> as a Fire Lift

Mark->Ramp->Ramp for Handicapped: mark ramp as a ramp for handicapped if that ramp for handicapped people.

Mark->Ramp-> **Unmark (default):** Mark ramp as a normal ramp.

Mark->FSI-> Existing FSI (PDCRCONES): Mark Residential or Commercial FSI as Existing FSI.

Mark->FSI->Normal (Default) (PDCRUMFSI): Mark Residential or Commercial FSI as Normal FSI.

Mark->Carpet Area->Splitted Tenement (PDCRMSPLTT): Mark Carpet Area as Splitted

tenement.

Mark->Carpet Area-> SlumDevopment->sale or rehab (PDCRUMFSI): Mark Carpet Area as a slumdevlopment sale or rehab Normal

Mark->Carpet Area->Normal (default) (PDCRMSPLTT): Mark Carpet Area as Normal (default)

Mark -> Parking-> Two Stacked: Mark parking poly as a two stacked.

Mark -> Parking-> Three Stacked: Mark parking poly as a three stacked.

Mark -> Parking-> Four Stacked: Mark parking poly as a four stacked.

Mark->Projection-- >

Mark->Projection->Chhajja (PDCRMCJPROJ): Mark Projection as Chajja.

Mark->Projection->Loft (PDCRMLPROJ): Mark Projection as Loft in floor plan as well as in section.

Mark->Projection->Canopy (PDCRMCBPROJ): Mark Projection as Canopy.

Mark->Projection->Porch (PDCRMCPROJ): Mark Projection as Porch.

Mark->Projection->Verandah (PDCRMVPROJ): Mark Projection as a Verandah.

Mark->Projection-> Otta (PDCRUMPROJ): Mark Projection as a Otta as a provided.

Mark->Projection-> Steps (PDCRUMPROJ): Mark Projection as a Steps as a provided.

Mark->Existing Structure ->To Be Retained ->Building or Substructure (PDCRMREXWD): Mark Existing structure as to be Retained Building or Substructure.

Mark->Existing Structure-> to be demolish (Default) (PDCRMRMREXWC): Mark Existing structure as to be Demolish.

Mark->Substructure-> Electric Meter Room (PDCRMER): Mark Substructure as an Electric meter room.

Mark->Substructure->Electric Sub-Station (PDCRMTRAN): Mark Sub Structure as an electric Sum-Station.

Mark->Substructure->Watchman Cabin (PDCRMTRAN): Mark Sub Structure as an watchman cabin

Mark->Substructure->Society Office (PDCRMOR): Mark Sub Structure as a Society office.

Mark->Substructure->Servant Quarter (PDCRMSQ): Mark Sub Structure as a servant quarter.

Mark->Substructure->Sanitary Block (PDCRMSB): Mark Sub Structure as a sanitary block.

Mark->Substructure -> Covered Garage (PDCRMGRJ): Mark Sub Structure as a covered garage when garage is covered.

Mark->Substructure -> Rain Water harvesting (PDCRMGRJ): Mark Sub Structure as a Rain Water harvesting**.**

Mark->Substructure -> A.C Plant Room (PDCRMGRJ): Mark Sub Structure as a A.C Plant Room

Mark->Substructure -> AHU (PDCRMGRJ): Mark Sub Structure as a AHU

Mark->Substructure -> Swimming Pool (PDCRMGRJ): Mark Sub Structure as a Swimming Pool

Mark->Substructure -> Septic Tank/Soak pit (PDCRMGRJ): Mark Sub Structure as a Septic Tank/Soak pit

Mark->Substructure ->Pump House (PDCRMPR): Mark Sub Structure as a Pump House.

Mark->Substructure ->Effluent Treatment Plant/ STP (PDCRMETP): Mark Sub Structure as a Effluent Treatment Plant /STP

Mark->Substructure ->Dish Antenna room (PDCRMSPT): Mark Sub Structure as a Dish Antenna room

Mark->Substructure -> Well (PDCRMSPT): Mark Sub Structure as a Will

Mark->Substructure ->Telephone Installation room (PDCRMSPT): Mark Sub Structure as a Telephone Installation room

Mark->Substructure -> Entrance gate (PDCRMSPT): Mark Sub Structure as a Entrance gate

Mark->Substructure -> Fitness center (PDCRMSPT): Mark Sub Structure as a Fitness center

Mark->Substructure -> Suction Tank (PDCRMSPT): Mark Sub Structure as a Suction tank

Mark->Substructure -> Pavilion (PDCRMSPT): Mark Sub Structure as a Pavilion

Mark->Substructure -> Gymnasium (PDCRMSPT): Mark Sub Structure as a Gymnasium

Mark->Substructure -> Club-House (PDCRMSPT): Mark Sub Structure as a Club-House

Mark->Substructure -> Dust bin (PDCRMSPT): Mark Sub Structure as a Dust bin

Mark->Substructure -> Milk/ Telephone booth-> (PDCRMSPT): Mark Sub Structure as a Milk/ Telephone booth.

Mark->Substructure -> Letter Box (PDCRMSPT): Mark Sub Structure as a Letter Box.

Mark->Substructure -> Chimney (PDCRMSPT): Mark Sub Structure as a Letter Box.

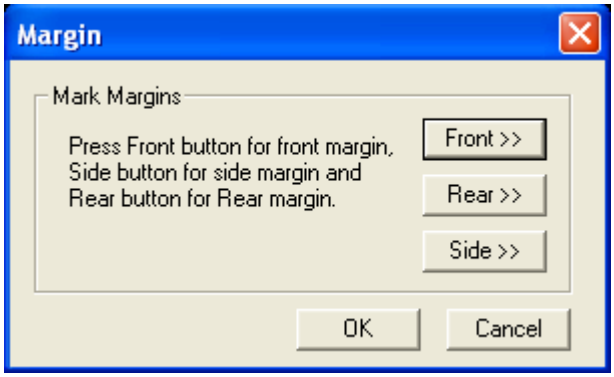
Mark->Substructure -> Storage : Mark Sub Structure as a storage.

Mark->Substructure -> Godown : Mark Sub Structure as a godown.

Mark->Special use FSI ->

- Education.
- Institutional
- Assembly
- Public/Semi-Public
- Recreational
- Transport

Mark->Margin (PDCRMRGN): Use this command to define or mark the front, sides and rear margins of the plot. .



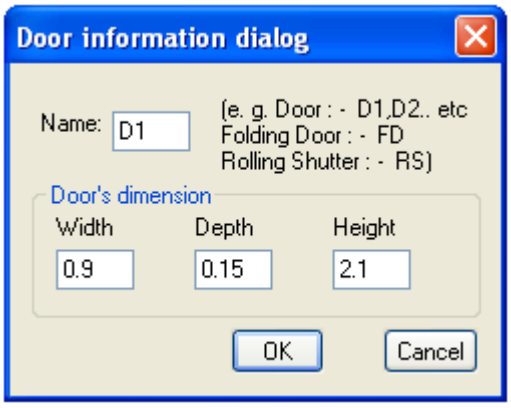
Insert entities

Insert->Parking-> Car/ Motor Vehicle (2.5m. X 5.0m.) ((PDCRICP) -> Use this command to insert car-parking poly of. at selected point.

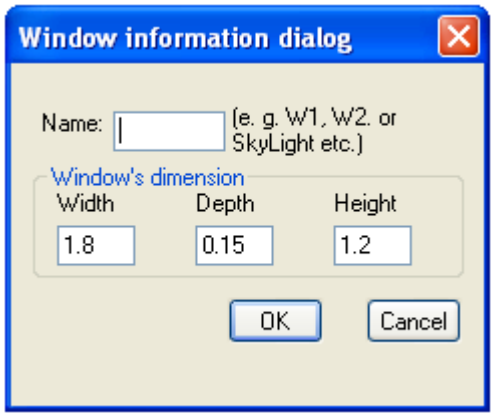
Insert-> Parking-> Scooter/ Motor Cycle (1.0m. X 2.0m.) (PDCRISP) ->Use this command to insert Scooter parking poly at selected point.

Insert-> Parking-> Transport Vehicle/ Ambulance / Mini Bus (3.75m. X 7.5m.) (PDCRICY) ->Use this command to insert Cycle parking poly at selected point.

Insert->Door (PDCRIDRNAM): Use this command to insert door poly at selected point and with specified size given by user. As soon as you use this command the following Dialog appears.



8. Insert->Window (PDCRIWNDNAM): Use this command to insert window poly at selected point and with specified size given by user.



9. **Insert->Common Reference Circle (PDCRIWC):** Use this command to insert direction reference circle. Insert these circles in all the floor plans as well as in proposed work at the same & common place (e.g. Liftwell or Stair) of all the floors.

10. **Insert->Direction Reference Circle (PDCRIWC):** Use this command to insert direction reference circle. Insert these circles in all the floor plans as well as in proposed work at the same & common place (e.g. Liftwell or Stair) of all the floors.

11.**Insert → Tree** (PDCRINTR): Use this command to insert Tree. Insert Trees showing location of Trees in your plot.

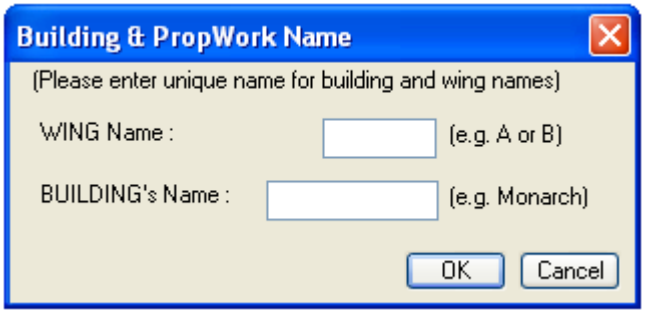
12. Insert->North Direction (PDCRINND): Use this command to insert North Direction. Insert North Direction indicating the sides of your plot. You have to rotate this as per North Side.

13.Insert-> Stair UP/DN Direction : Use this command to insert Staircase UP and Staircase DOWN direction. UP and DN direction indicating the flight direction of your staircase.

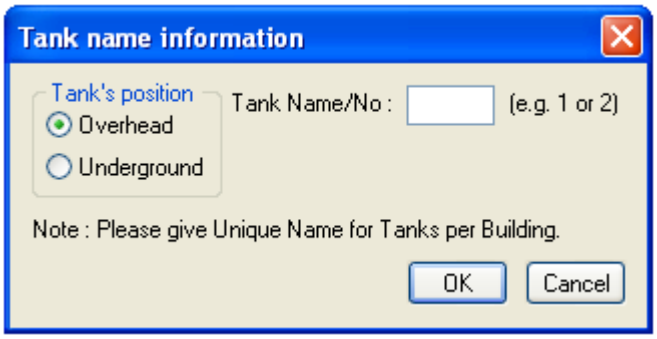
Assign Name

- There are few naming conventions required by AutoDCR, for which PreDCR provides the following tools:

Assign Name->Building and proposed works (PDCRBLDPWNL): Use this command to give name for building poly and its associated proposed works.

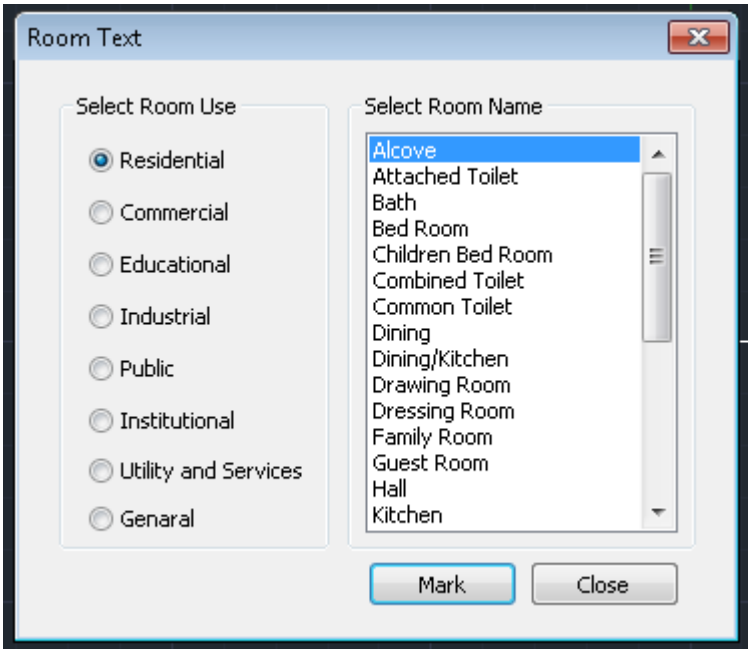


Assign Name->Tank (PDCRTNKNAM): Use this command to give name for Tank poly and its corresponding tanks.

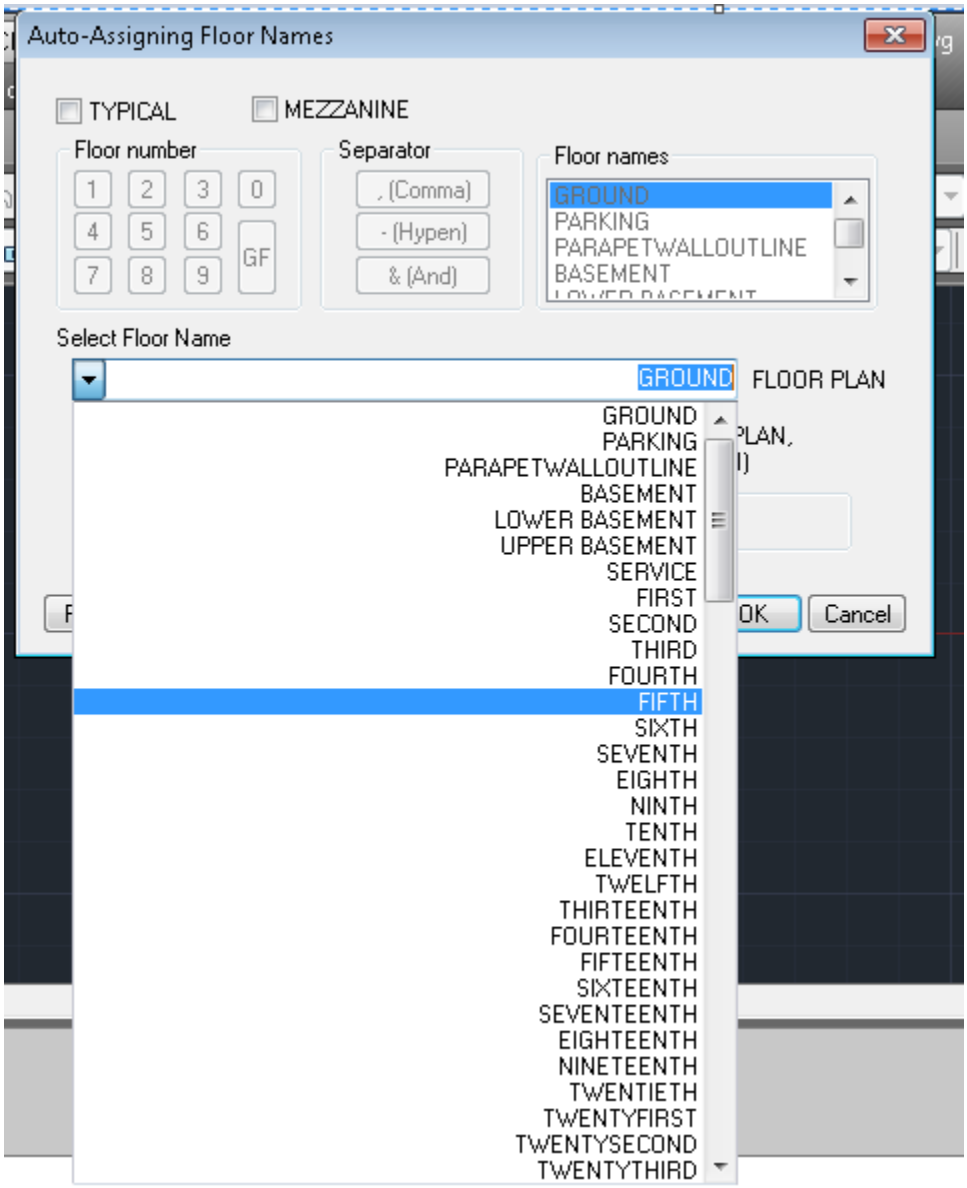


Fill in the dialog and select the tank poly drawn in plan and the same drawn in section

Assign Name->Room (PDCRASRUN): Use this command to give different names for Room poly.



Assign Name->Floor Name (PDCRASFLRNAM): Use this command for assigning name to a floor poly and it's corresponding floor in section poly in section.



Tools

Show Only DCR Layers:

All PreDCR layers (PDCRSPL):

This command will turn off all the layers in the drawing except PreDCR layers.

Building level layer (PDCRSBL):

This command will turn on all the building plan level layers in the drawing.

Layout level layer (PDCRSLL): This command will turn on all the Layout plan level layers in the

drawing.

Show Only DCR Layers (PDCRSDL):

This command will turn off all the layers in the drawing except DCR layers.

Show Other Layers (PDCRSOL):

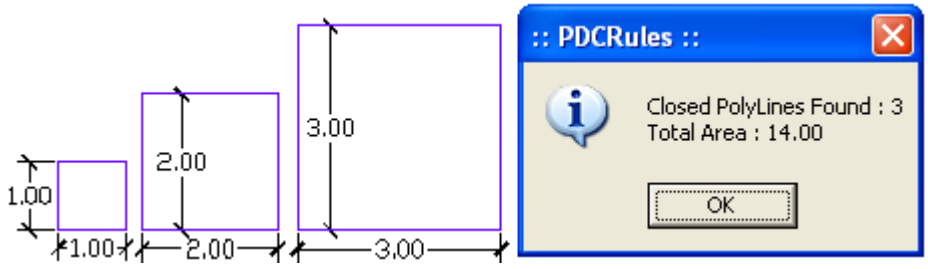
This command will turn off all the DCR and PreDCR layers in the drawing.

Show all layers (PDCRSAL);

this command will turn on all layers in the drawing.

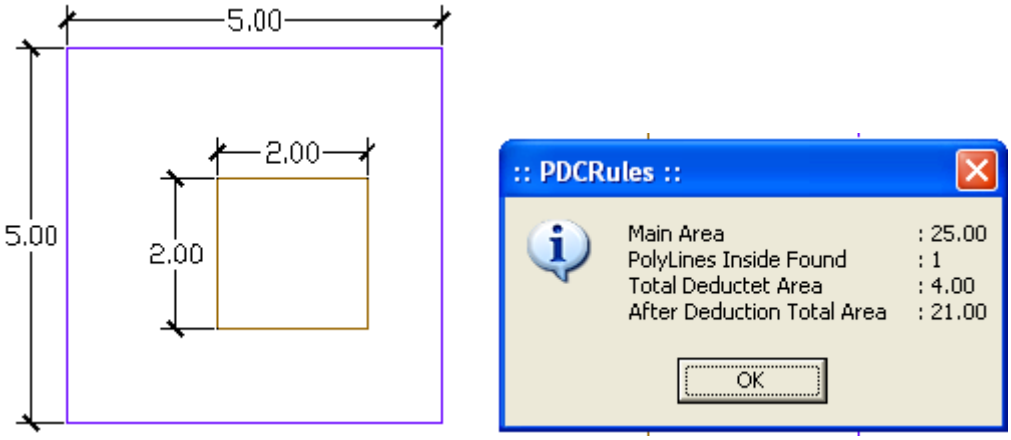
Calculate Total Area (PDCRCTA):

This command will compute the total area of all selected closed polygons.



Calculate Deducted Area (PDCRCDA):

This command will compute the area of closed polygon after deducting closed polygons found inside.



Get All Inside Poly (PDCRFIP):

This command will highlight all polygons, which found exactly inside selected polygon under

test.

Get All Overlapping Poly (PDCRGOP):
This command will highlight all polygons, which are overlapping with selected polygon under test.

Get All Intersecting Poly (PDCRGIP):
This command will highlight all polygons, which are intersecting with selected polygon under test.

Find Open Entities (PDCRFNDO): Highlight open entities on PreDCR layers.

Find Closed Entities (PDCRFNDC): Highlight closed entities on PreDCR layer.

Shortest distance (PDCRFSD): This command will find the shortest distance between two entities.

Convert ARC into Polyline (PDCRFSD): This command will convert ARC into Polyline.

Spelling check (_spell): This tool is used for spelling checking.

Find Object (PDCRFOBJ): This command zoom & highlight object of a given handle.

Set Default ACAD Version (PDCRSDA):

PREDCR SHORT-CUT COMMANDS

Layer name	Description	Naming Convention	short command

_Amenity	Draw Amenity space as a closed polyline which is reserve for utilities, services and conveniences.		AMN
_ArchProj	This layer is used to represent various Architectural Projections in your Plan. Draw a closed Polyline for Architectural Projections. And mark it using Mark->Projection from PreDCR menu, according to requirements. Canopy/porch will come in plot & other projections will come with floor plans.	Mark -> Projections -> Chajja	AP
_Balcony	Draw a balcony as a closed polyline which is a horizontal projection including parapet to serve as a sitting out place. Name of balcony must be inside and on _Balcony layer.	If Balcony is Enclosed Than Mark -> Balcony -> Enclosed Balcony	BL

_Building	Building is used to group all floor plans of the same building. Draw a closed poly enclosing all the floor plans and section of the same building on _Building layer. Note: As written above, dimension or area of this building poly has no meaning in AutoDCR. This is just an logical group of all floors of the same building. If the building plans of multiple PWorks or wings are same then building name shall be as given aside.	Naming Convention will be provided by Tool>Assign Name A (Bldg.Name) inside Bldg.Poly & A-1 (Bldg.Name) inside Pwork Poly	BLD
_Carpet area	Draw carpet area as a closed polyline which is a net usable floor area within a building excluding that covered by the walls or any other areas specifically exempted from floor space index computation in these regulations.	If Carpet area is Splitted – Tenement. Mark-> Carpet area-> normal (default)	CPT
_Chowk	Draw a chowk as a closed polyline which is an enclosed space permanently open to the sky within a building at any level. From chowk we take ventilation for habitual rooms		CWK
_CommFSI	Draw a CommFSI as a closed		CMFS

	polyline which is the area covered by a building on all the floors. This FSI polyline mainly used for commercial use bldg.	No need to give name on this layer.	
_Compound Wall	Closed polyline of compound wall to be drawn on this layer overlapping plot.	1.5m high compound wall	CW
_Door	Door is a closed Polyline Which is drawn on "_Door" layer. Also you can insert a particular size poly for Door using Insert->Door from PreDCR menu.	Insert-> Door	DR
_Elect line	Electric line will be present in the layout plan and shall pass through plot entity as a non closed polyline. Name electric line shall start with its voltage capacity and text insertion point shall lie on its polyline.	33 KV High Tension Line	L1
_Elevation	Description:- Elevation to be drawn in _Elevation layer only for printing purpose. No regulations will be checked by reading this layer. The drawing on this layer need not be drawn using		EL

	polylines.		
_EWS	**Description: -** Draw a EWS area on "_EWS" as a closed poly line, which area is left for economically weaker section.		
_ExStructure	Draw an Exstructure as a closed polyline which is a building or structure existing authorized before the commencement of these regulation. And mark it using Mark -> Existing structure as 'To be demolished' or 'To be retained'.	Mark-> Existing Structure-> To be Demolished OR To be Retained	ES
_FloorInSection	Description: - Draw a Floor Inspection as a closed polyline which is the height of that floor (slab top to slab top) This poly only used for checking floor height. For assigning the name of FloorInSection then used **Assigned name** option for PreDCR tool menu. Name of each floor section will be same as of floor in plan. For one typical floor plan multiple floor section will be there.		SECF

	For e.g. for one typical floor plan for 1-3 floors there will three sections shall be drawn with name "First Floor Plan", "Second Floor Plan" and "Third Floor Plan" respectively.		
_Floor	Floor poly should be drawn as a closed Polyline with Text on same Layer. This is just a logical Group of all floor Entities. Floor Name: Floor Plan will be automatically link with Section by matching the Floor Name. Hence all names to be given using <Assign Name> function	Naming Convention will be provided by Tool>Assign Name>Floor name Name of floor should be in given format: TYPICAL-1,4 FLOOR PLAN TYPICAL-1-5 FLOOR PLAN TYPICAL-2&3 FLOOR PLAN Ground Floor Plan	FLR
_Ground Level	The Ground level line should be drawn as an open polyline in the section poly. Prop.Ht. will be considered from GroundLevel Polyline	No need to give name on this layer.	GL

_IndFSI	Draw a closed FSI Polyline, which is used as a Industrial Purpose.	No need to give Name on this layer.	IFSI
_Internal Road	Draw each Internal Road as a closed Polyline with Centre Line (Ltype-CentreLine) & single text inside it.	7.50 m wd. Internal Road	R2
_Liftwell	Draw a Liftwell as a closed polyline which is a mechanically guided car, platform or transport for persons and materials between two or more levels in a vertical or substantially vertical direction Fire Liftwell means a special Liftwell designed for the use of fire service personnel in the event of fire or other emergency.	Naming Convention will be provided by Tool<Mark>Lift If Hydraulic Lift option from Mark ->Hydraulic Lift" option from Mark -> Lift -> Fire Lift.	LFT
_LIG	**Description :** Draw LIG area in _LIG layer as close poly line which is left for Lower Income Group.		

_Location plan	Location plans if any to be drawn on this layer. This is only for reference. No verifications are done by AutoDCR for this layer so not compulsory.		LCP
_Margin line	Margin Polylines will be created by PreDCR by using Tool "Mark>Margins" (User need not do anything on this layer.)		L3
_Main Plot	Description: - Draw a MainPlot poly as a closed polyline which is a parcel or piece of land enclosed by definite boundaries. A MainPlot will contain all Proposed Works (buildings, wings), open space, Internal Roads, Parking etc. The overall MainPlot Entity represent a Plan, AutoDCR refers it as 'Layout Plan'. The overall MainPlot Entity represent a Plan, AutoDCR refer it as "**Layout Plan**".		PLT
_Main Road	Draw Main Road as a closed Poly with Text, which should be abutting with the Plot closed Poly. (Note: Road width must be written at the starting of Text)	24.00 m wd. Main Road	R1

_Nala	Draw centre Line of Nala as an open Polyline on this layer. Name of the poly should contain width of the Nala		R4
_Net Plot	No need to draw NETPLOT. This layer is not provided for PreDCR users...	No need to give name on this layer.	NPLT
_NotInPossession	Plot area which is not in possession or which is not in proposal to be drawn as a closed polyline on this layer.		NIP
_Parking	Draw a closed Polyline for Parking on "_Parking" Layer. You can also use Insert function to insert desired Parking Poly in your drawing.	Insert-> Parking->Car-/ Scooter/ Cycle	PK
_Passage	Draw a closed polyline on "_Passage" Layer to represent passage with Centre Line (Ltype-Centerline) & single text inside it.	Mark > Passage > Open Corridor Mark > Unmark(Default)	PAS
_PrintAdditionalDetail	_PrintAdditionalDetail layer---- apart from the layers specified by PreDCR, any other information		

	which user wants to display in final approval print shall be drawn on _...this layer		
_Podium	Draw a closed polyline on "_Podium" to represent Podium. It should be shown in the layout and not in floor plans		POD
_PropWork	PWork is a building profile and shall be drawn inside plot. Draw a closed polyline for Proposed Work on "_PropWork" Layer.	Tools > Assign Name > Building and PropWork.	PW
_Ramp	Draw a Ramp as a closed polyline with Centerline (L-type-Centre) & Text inside it in Plan.	10.0m long 1.5m high Ramp	RP
_RecrationalGround	Description: - Draw Open space as closed polyline reserved as recreational space on this layer. With text on same layer.		OPS
_Refuge Area	A closed polyline with Text around the refuge area should be		RFG

	drawn on same Layer. Refuge area should be outside overlapped with FSI (ResiFSI, CommFSI) poly.		
_RefugeChute	Draw closed polyline.		
_ResiFSI	Draw a ResiFSI as a closed polyline which is the area covered by a building on all the floors. This FSI polyline only used for residential use bldg or floor.	No need to give name on this layer.	MFS
_Right-Of-Way	Description: - Draw a closed polyline on "_Right-Of-Way" to represent a Right Of way and text inside it representing its width. Layer should be inside or intersecting with Plot poly.		ROW
_Road Widening	Road Acquisition/Road Widening area shall be drawn as a closed Polyline with Text on same layer inside Plot Entity. Margin will be generated & checked from Road widening Poly by AutoDCR software.		R5
_Room	A closed polyline for each room with its text inside should be drawn on this layer. Text should be given using <Assign Name> function	Assign Name > Room	RU

_Sewage line	Description: - Drain/Sewage Line: **-** Sewage line shall be drawn as an open polyline on this layer.		L5
_Section	Section poly should be drawn as a closed Polyline with Text on same Layer. It is used to group all Sectional detail like FloorInSection, Plinth, Stair cabin, Tank etc. (This is just a logical Group of Sectional Entity). (Note: Area or size of Floor doesn't have any meaning in AutoDCR)		SEC
_Sanitation	**Description: -** Draw any sanitation entities on this layer. (E.g. Water closets, Kitchen sink etc...) Mark that entities by using **PreDCR -> Insert -> Sanitation**		SND
_Site Plan	The encapsulating poly around the Site/Key Plan with the Text & Scale inside it.		STP

_Staircase	Total Staircase area should be drawn as a closed polyline with text inside it. This Main Stair Poly should contain Intermediate Landing, Floor Landing & Each Tread as an open polyline. Intermediate & Floor Landing Poly can be Marked by PreDCR Tool "Mark>Staircase>Int. or Floor Landing"	Mark->No of flight->3flight or 4 flight Mark-> Stair Case-> Fire Escape Staircase OR Fab/Spiral Stair Mark-> Staircase Landing-> Flight Width , Intermediate & Floor Landing	STR
_SpecialUseFSI	A closed poly represents a other than Residential, commercial or Industrial use FSI or Floor FSI. It will cover whole area which is considered in FSI Area per Floor.		SUF
_Substructure	Substructures which are allowed in Margins or Layout & Free from FSI should be drawn as a closed polyline with text inside it.	Name of the Substructure can be assigned from Mark>Substructure tool.	SSTR
_Tank	Tank clear size should be drawn as a closed Polyline with Text on	Assign Name>Tank	TNK

	this Layer in Floor Plan or Plot as well as Section with same Text. (Note: It should be in proper Naming convention which is Provide by PreDCR by using Tool.		
_Terrace	Closed polylines around the terraces to be drawn on this layer. If the terrace is used commonly by all tenements mark it as Common Terrace else it will be treated as Individual by default.		TER
_Tree	**Description :** Trees can be shown on _Tree layer if required to be shown for plantation requirement in plot.	Insert - Tree	
_Ventilation Shaft	Description: - Draw Ventilation shaft/duct area as a closed Polyline with Text. Inside FSI Area on _VentiShaft Layer. Only those shafts from which ventilation for habitable room is not taken should be drawn on this layer.		AVS
_Void	If the space is not Chowk then it can be void. All ducts (where ventilation is not taken) and double height rooms can be drawn in void layer.		VD

_WaterLine	Draw a open polyline on "_WaterLine" to represent water lines.		L4
_Window	Draw a closed polyline on _Window" Layer to represent window. You can also use Insert tool to insert window poly for particular size.	Insert > window	WND

Specifications to be followed-

The drawing entities should be drawn on Automatic layers created by using PreDCR.

Plot layout, detailed floor plan and building section for all the floors should be there in one AutoCAD drawing file.

All building items like proposed plot, proposed work, proposed parking etc must be drawn using closed polyline.

(i.e. Every entity must be closed LWPOLYLINE except Railway Line , Drain line, Water Line, Electric Line, Dead Wall and Ground level.)

Building Sub-Items must be exactly inside of outer closed polyline as per their place in architectural plan.

This means none of the edge or vertex of inside entity should be drawn outside its container entity. For example Parking or Open Space poly must be exactly inside the main plot poly. Tools are provided in PreDCR to verify this check.

Every Building Sub-Items should be given a specific/unique name (Text or MText entity) on the same layer & inside the entity poly. As far as possible, this name should be unique. If name not found then AutoDCR will generate the name automatically. Naming Conventions should be followed properly.

e.g. Each Room should be given the concerned name Using <Assign Name> function of PreDCR Living, Kitchen, Bedroom. Etc. Floor Name: GROUND FLOOR; TYPICAL FLOOR 1,2 & 5-8;

TERRACE FLOOR. Floor Items: Room Names should be given properly without using abbreviations so the software can identify perfect entity. This can be done by Assign name facility provided by the software.

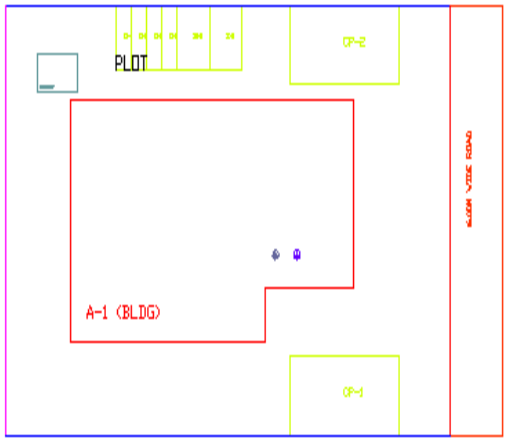
User shall use only following kind of entities for Building Items: -

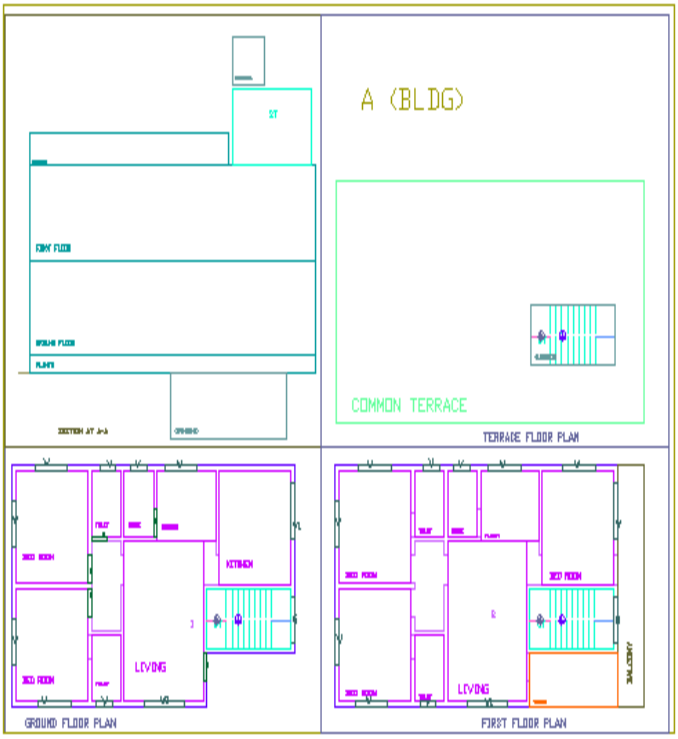
LWPOLYLINE / TEXT / MTEXT

If in a plan two proposed work are mirrored in that case user should provide two separate building plan for each proposed work.

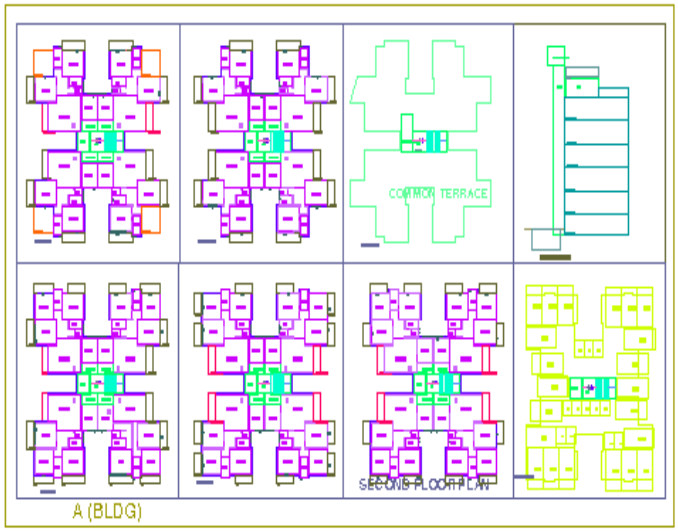
Sample cases

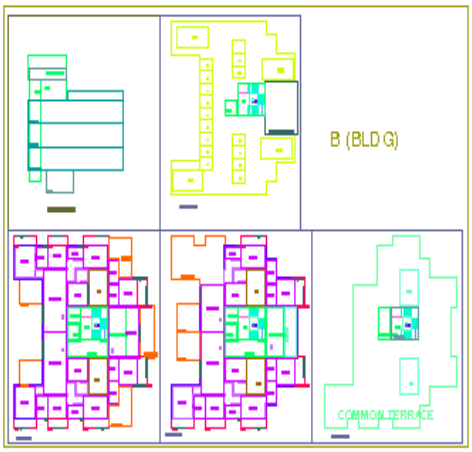
Residential Bldg (Row house)

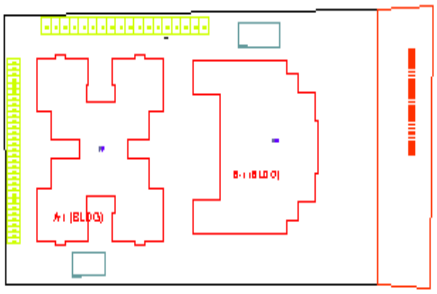




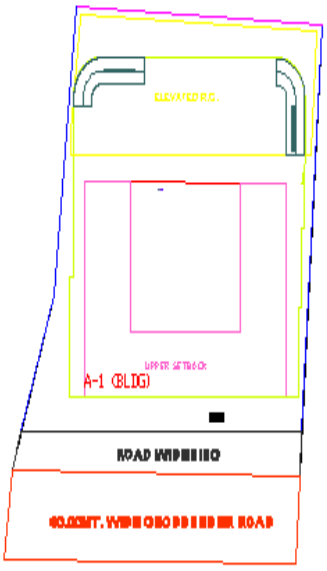
Residential bldg. (Single Detached with two buildings)

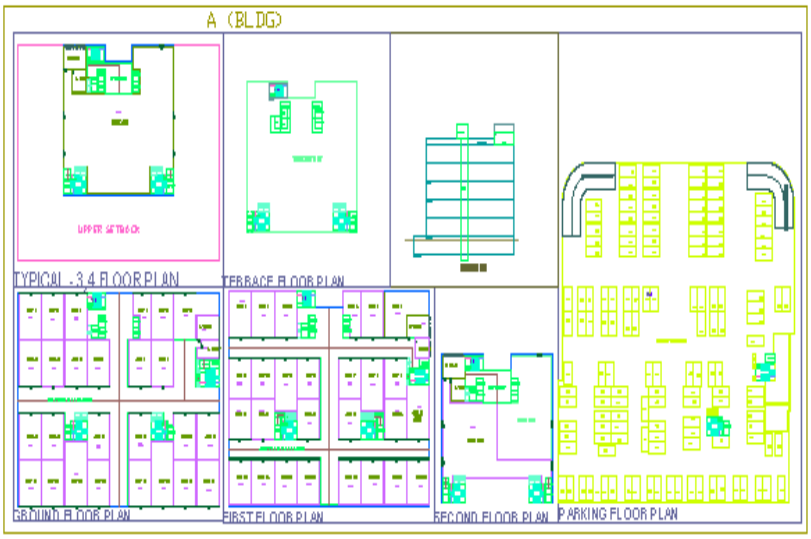




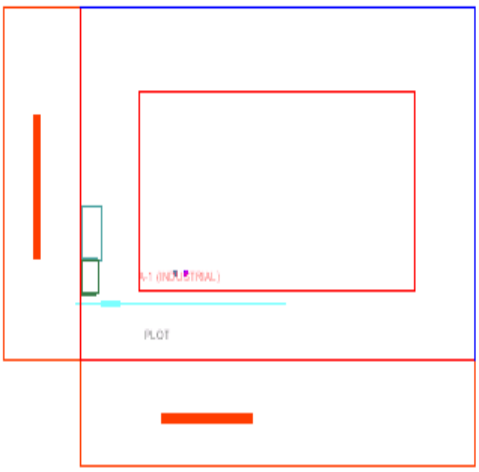


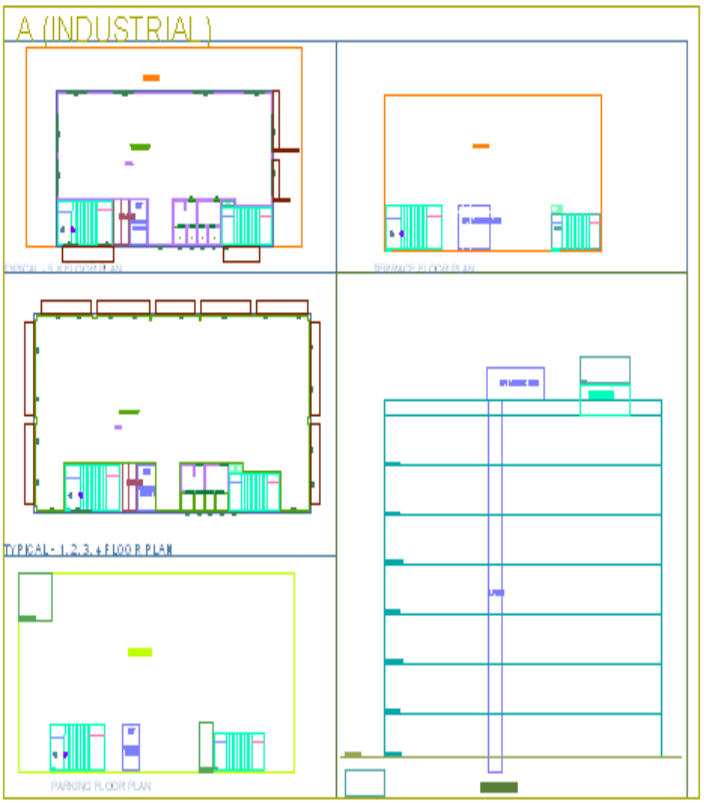
Commercial building



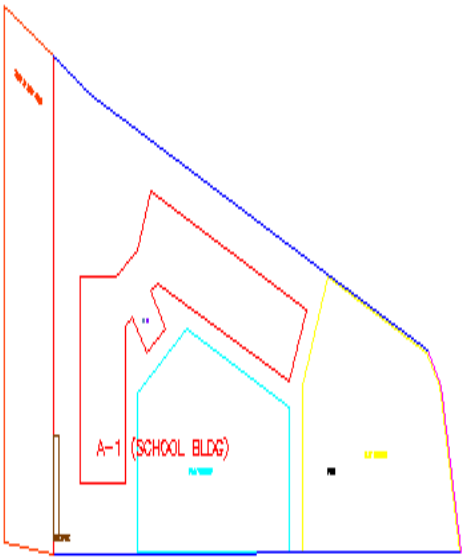


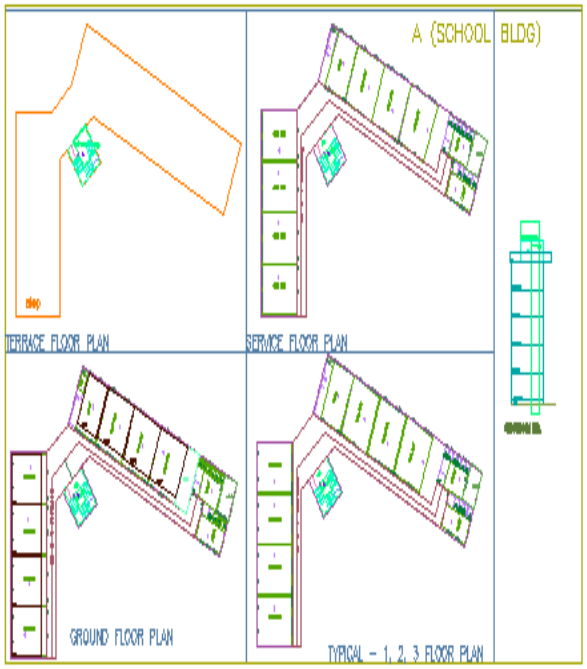
Industrial Building





Special building (School bldg)





Meaning of various PreDCR Messages

"Entity contain more than one text"

It means Entity on this layer contain more than one text. So remove the extra text. PreDCR need only one text for one entity.

"Entity not contain any text"

It means this entity not having any name/text, so give the name to this entity on this layer

"Polyline is not in a proper format"

It means Highlighted polyline not drawn properly. So redraw that polyline & check the properties of that polyline.

"Entity is not closed"

It means the highlighted entities not a closed polyline so close it by using 'pedit' command.

"Entity is supposed to inside one of the following entities"

It means this highlighted entity should be present inside the one of the entities present in the given list"

"Entity is supposed to touching one of the following entities"

It means this highlighted entity is supposed to be touched one of the entities in given list

"Entity should be outside overlapped with following entities"

It means the highlighted entity should be outside overlapped with one of the th entities in the given list.

"Entity must contain one of following entities"

It means any one layer should be present inside in this entity which is listed.

Following subentities are not found inside:

Direction Ref Point on layer _Floor,

Type: BLOCK, Color: ByLayer Status:

Common Point on layer _ResiFSI,

Type: BLOCK, Color: ByLayer Status:

It means insert the direction reference circles in side of that entities.

"The corresponding Building not found with same name"

It means that proposed work not having building with same name. So assigned that building with having same name of proposed work.

"Mark Substructures using PreDCR mark Substructure tool"

It means mark the substructure by using mark -> Substructure menu. Do not type substructure name manually.

"The Lift machine room not found in building"

It means Lift machine room having name not same in Plan & in section.

"The Lift poly is not suppose to be touch Lift machine room"

It means Lift machine room should be touch to lift poly in the section.

'Invalid objects, Please Try again"

It means if user marking balcony as a enclosed but selecting layer of terrace then this message are getting. If selected entity is incorrect then invalid objects message are showing. So select correct layer for particular of that layer marking only

"Section not found"

It means If all the floor plans are drawn but one of them in section floor are missing to converting floor in section layer then this message are getting. So draw all the floor plans with floor in sections.

"The corresponding entities not found in section"

It means that listed entities not present in the section so show that entities in the section.

"The corresponding entities not found in floor"

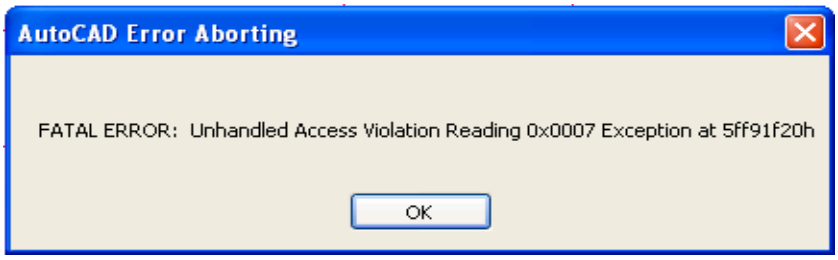
It means that listed entities not present in the floor so show that entities in the floor plan.

"Two Tanks should not have same Name"

It means that two tanks not having a same name. So assigned two tanks by using Assigned name PreDCR menu.

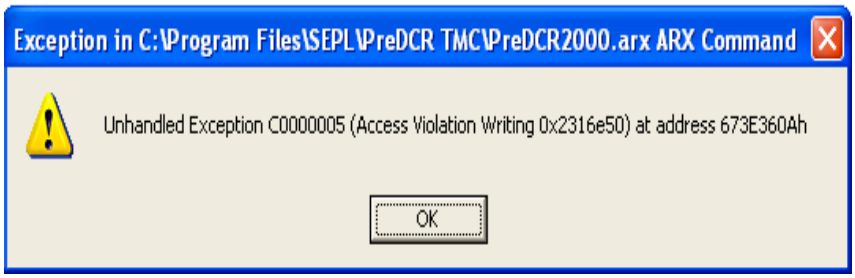
Internal error or Fatal error while verify the drawing

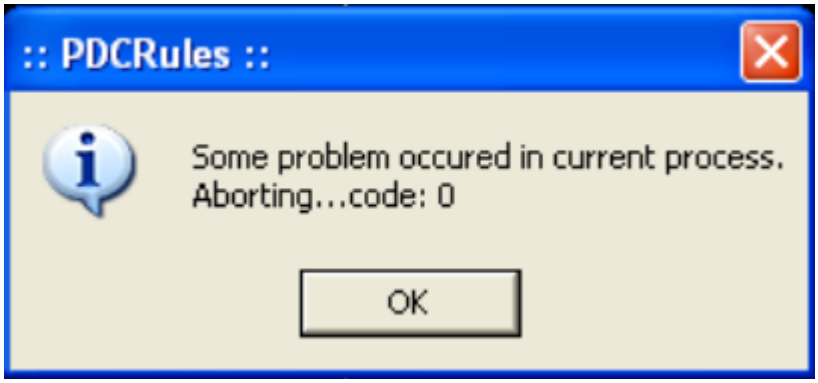
Copy that file and paste it into the new drawing file & then verify.



If Drawing is automatically closed / crashed while marking any entity or verify complete drawing.

Copy that file and paste it into the new drawing file & then verify.





While performing verification if following massage comes, then follow the steps

Check each layer separately until you found problematic layer. After that those layers redraw.

13: System Requirement

Pentium IV or better (or compatible processor)

1 GB RAM (1 GB minimum)

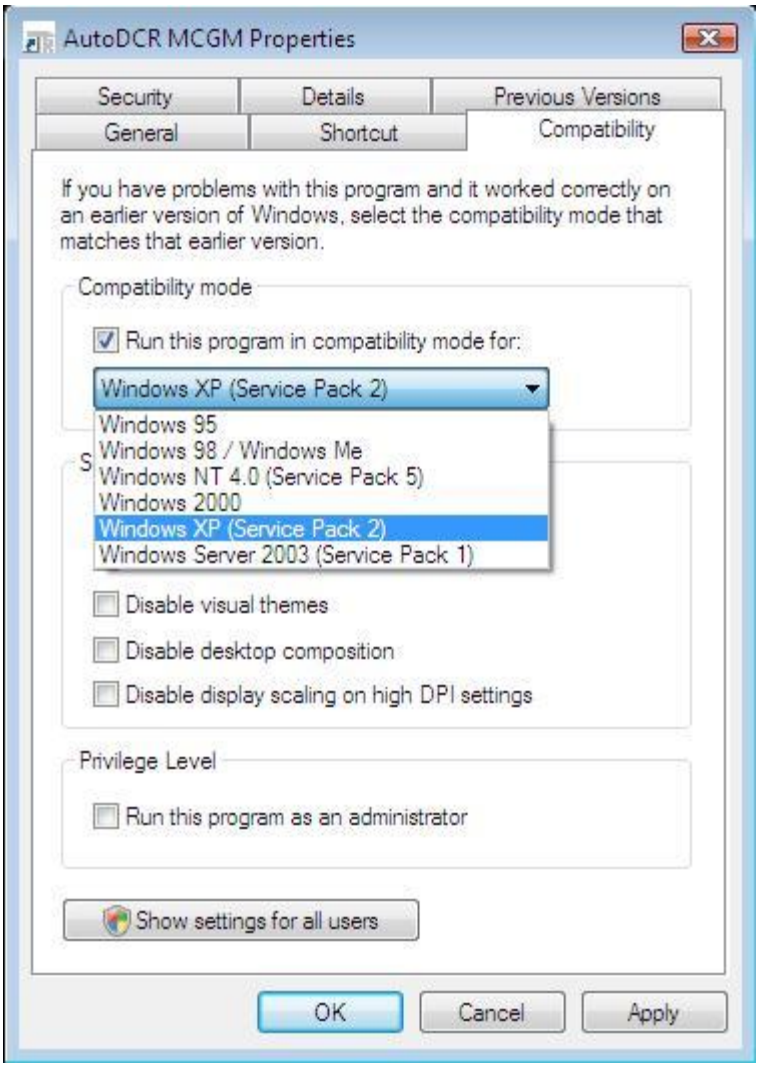
Windows 98/2000/2007/XP {32 bit & 64 bit}

CD-ROM drive

AutoCAD 2000 and onwards

PreDCR & AutoDCR Settings for Windows Vista Operating System

- ✓ Install PreDCR & AutoDCR
- ✓ After Installation, "Right Click" on Desktop Shortcut of Predcr OR AutoDCR I con & click on "Properties"
- ✓ Select "Compatibility" option from "PreDCR" OR "AutoDCR Properties" dialog.
- ✓ In that, Select "Run this program in compatibility mode for:" (from Compatibility mode option) & select Windows XP/Windows XP (Service Pack 2) option from List.



✓ Click on “Apply” button & then click “OK”

This is only one time changes.
Now PreDCR OR AutoDCR will run fine in Windows Vista

This is the last page of the document