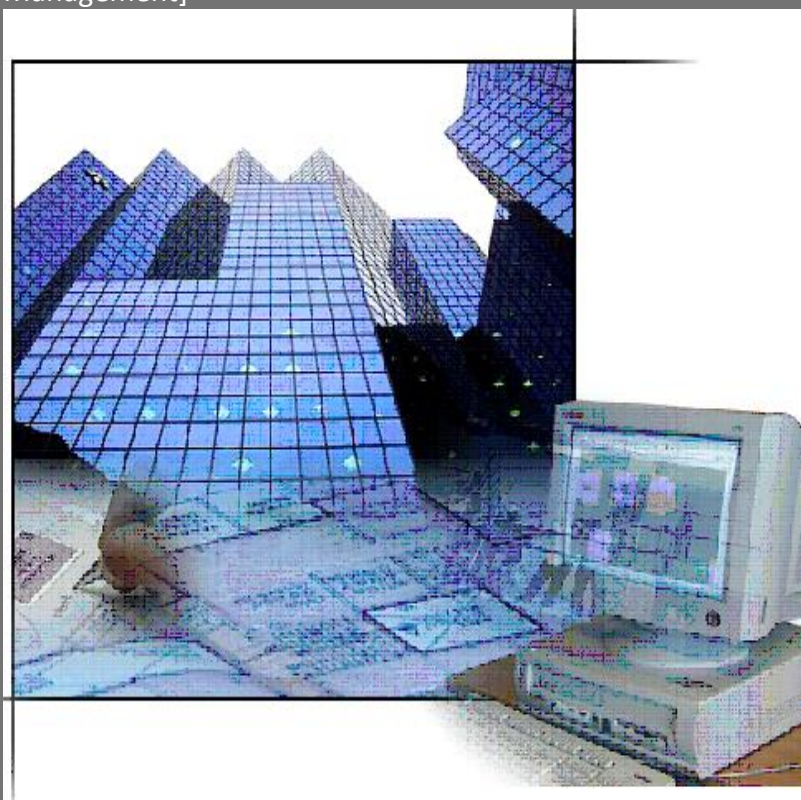


# Chennai Metropolitan Development Authority

## PreDCR Help Manual

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



PreDCR  
Softtech engineers .pvt. ltd



# PreDCR Manual: Chennai Metropolitan Development Authority

## Contents:

<i>Chennai Metropolitan Development Authority</i> .....	<b>Error! Bookmark not defined.</b>
<i>PreDCR Manual: Chennai Metropolitan Development Authority</i> .....	2
<b>DOCUMENT OUTLINE</b> .....	<b>9</b>
ABOUT THE DRAWING PROTOCOL DOCUMENT.....	9
HOW TO READ THIS DRAWING PROTOCOL DOCUMENT? .....	9
<b>DRAWING PRE-FORMATting UTILITY (PREDCR)</b> .....	<b>10</b>
OVERVIEW .....	10
AIMS & OBJECTIVES .....	11
SALIENT FEATURES .....	11
BENEFITS OF PREDCR .....	14
DRAWING FORMATS .....	15
1) <i>Conventional submission drawing format</i> .....	15
2) <i>As per PreDCR format specified by PreDCR</i> .....	15
3) <i>After scrutiny of drawing using AutoDCR-</i> .....	15
PROTOCOL DETAILS.....	16
<b>INSTALLATION AND REGISTRATION</b> .....	<b>17</b>
SYSTEM REQUIREMENTS .....	17
INSTALLATION .....	18
<b>METHODOLOGY</b> .....	<b>18</b>
<b>PREDCR LAYER INFORMATION</b> .....	<b>34</b>
_ARCHPROJ.....	34
Description : .....	34
Shortcut Command:- AP.....	34
How to draw : -.....	34
_BALCONY .....	35
Description : .....	35
Shortcut Command : BL .....	35

*How to draw* : ..... 35

**\_BUILDING** ..... 36

*Description* : ..... 36

*Shortcut Command* : *BLD* ..... 37

*How to draw* : ..... 37

**\_CARPET AREA** ..... 38

*Description* : ..... 38

*Shortcut command* : *CPT*..... 38

*How to draw* : - ..... 38

*\_CarpetArea*:- ..... 38

**\_CHOWK** ..... 39

*Description* : ..... 39

*Shortcut Command* : *CWK* ..... 39

*How to draw* : ..... 39

**\_COLUMN** ..... 40

*Description* : ..... 40

*Shortcut Command* : *COL* ..... 40

**\_COMMFSI** ..... 40

*Description: Commercial FSI* : ..... 40

*Shortcut Command* : *CMFS* ..... 40

**\_COMPOUNDWALL** ..... 41

*Description* : ..... 41

*Shortcut Command* : *CW*..... 41

*How to draw* : - ..... 41

**\_DEADWALL** ..... 41

*Description* : ..... 42

*Shortcut Command* : *DW*..... 42

*How to draw* : - ..... 42

**\_DOOR** ..... 43

*Description* : ..... 43

*Shortcut Command* : *DR*..... 43

*How to draw* : - ..... 43

**LAYER: \_DRIVEWAY**..... 44

*Description* : ..... 44

**\_DWELLINGBUAOUTLINE**..... 43

*Description* : ..... 43

**\_ELECLINE** ..... 45

*Description* : - ..... 45

*Shortcut Command* : *LI* ..... 45

*How to draw* : - ..... 45

ELEVATION..... 46  
*Description* : ..... 46

EWS..... 46  
*Description* : ..... 46

EXSTRUCTURE..... 46  
*Shortcut Command* : *EX* ..... 46  
*How to draw* :- ..... 46

FLOOR..... 47  
*Discription*: ..... 47  
*Shortcut Command* : *FLR*..... 47  
*How to draw* :- ..... 48

FloorInSection : ..... 49  
*Description* : ..... 49  
*Shortcut Command* : *SEC*..... 49  
*How to draw* : - ..... 49

GROUNDLEVEL..... 50  
*Description* : ..... 50  
*Shortcut Command* : *GL*..... 50  
*How to draw* : - ..... 50

INDFSI..... 51  
*Description* : ..... 51  
*Shortcut Command* : *IFSL*..... 51  
*How to draw* : - ..... 51

INTDPROAD..... 52  
*Description* : ..... 52  
*Shortcut Command* : *R3*..... 52  
*How to draw* : - ..... 52

INTERNALROAD..... 53  
*Description* : ..... 53  
*Shortcut Command* : *R2*..... 53  
*How to draw* : - ..... 53

LIFTWELL..... 54  
*Description* : ..... 54  
*Shortcut Command* : *LFT*..... 54  
*How to draw* : ..... 54

LAYER: LIG..... 55  
*Description* : ..... 55

LOCATION PLAN..... 55  
*Description* : ..... 55  
*Shortcut Command* : *LCP*..... 55

\_MAINROAD ..... 56  
*Description :* ..... 56  
*Shortcut Command : RI*..... 56  
*How to draw : -*..... 56

\_MARGINLINE ..... 57  
*Description :* ..... 57

\_NALA ..... 57  
*Description :* ..... 57  
*Shortcut Command : R4*..... 57  
*How to draw : -*..... 57

[NDZ.....60](#)

[DESCRIPTION.....60](#)

\_NETPLOT ..... 58  
*Description :* ..... 58  
*Description : -*..... 58  
*Shortcut Command : NDZ*..... 58  
*How to draw : -*..... 58

\_NOTINPOSSESSION :- ..... 59  
*Description :* ..... 59  
*Shortcut Command: NIP*..... 59  
*How to draw : -*..... 59

\_OPENSPECRESERVATION..... 60  
*Description :* ..... 60  
*Shortcut Command : OSR*..... 60  
*How to draw : -*..... 60

\_PARKING ..... 61  
*Description :* ..... 61  
*Shortcut Command : PK*..... 61  
*Parking Name :*..... 61  
*How to draw : -*..... 62

\_PASSAGE ..... 63  
*Description :* ..... 63  
*Shortcut Command : PAS*..... 63

\_PLOT ..... 64  
*Description:* ..... 64  
*Shortcut Command: PLT* ..... 64  
*How to draw :-*..... 64

\_PODIUM..... 65  
*Description :* ..... 65  
*Shortcut Command : POD*..... 65

*How to draw* :-..... 65

\_PRINTADDITIONALDETAIL..... 66

*Description*:..... 66

*Shortcut Command: ADET* ..... 66

*How to draw*: ..... 66

\_PROPWORK..... 67

*Description* : ..... 67

*Shortcut Command:- PW*..... 67

*How to draw* :-..... 67

\_RAILLINE ..... 68

*Description* : ..... 68

*Shortcut Command : L2*..... 68

*How to draw* : -..... 68

\_RAMP ..... 69

*Description* : ..... 69

*Shortcut Command :- RP*..... 69

*How to draw* : -..... 69

\_REFUGEAAREA:- ..... 70

*Description* : ..... 70

*Shortcut Command* : ..... 70

*How to draw* : ..... 70

\_RESERVAREA..... 71

*Description* : ..... 71

*Shortcut Command : RSA*..... 71

*How to draw* :-..... 71

\_RESIFSI..... 72

*Description* : -..... 72

*Shortcut Command : MFS* ..... 72

*How to draw* : -..... 72

\_RIGHT-OF-WAY..... 75

*Description* : -..... 75

*Shortcut Command : ROW* ..... 75

*How to draw* : -..... 76

\_ROADWIDENING ..... 73

*Description* : ..... 73

*Shortcut Command : R5*..... 74

*How to draw* : -..... 74

\_ROOM..... 74

*Description* : ..... 74

*Shortcut Command : RU*..... 74

<i>How to draw</i> : -.....	75
_SANITATION .....	76
<i>Description</i> : .....	76
<i>Shortcut Command</i> : <i>SND</i> .....	76
_SECTION .....	76
<i>Description</i> : .....	76
<i>Shortcut Command</i> : <i>SEC</i> .....	77
<i>How to draw</i> : -.....	77
_SEWAGLLINE .....	78
<i>Description</i> : -.....	78
<i>Shortcut Command</i> : <i>L5</i> .....	78
<i>How to draw</i> : -.....	78
_SITEPLAN .....	79
<i>Description</i> : -.....	79
_SPECIALUSEFSI .....	79
<i>Description</i> :-.....	79
<i>Shortcut Command</i> : <i>SUF</i> .....	79
<i>How to draw</i> : -.....	79
_STAIRCASE.....	80
<i>Description</i> : .....	80
<i>Shortcut Command</i> : <i>STR</i> .....	80
<i>How to draw</i> : -.....	80
_SUBSTRUCTURE .....	81
<i>Description</i> : .....	81
<i>Shortcut Command</i> : <i>SSTR</i> .....	81
<i>How to draw</i> : -.....	81
_TANK .....	82
<i>Description</i> : .....	82
<i>Shortcut Command</i> : <i>TNK</i> .....	83
<i>How to draw</i> : -.....	83
_TEMPSTRUCTURE.....	84
<i>Description</i> : .....	84
<i>Shortcut Command</i> : <i>TMPS</i> .....	84
<i>How to draw</i> : -.....	84
_TERRACE.....	85
<i>Description</i> : .....	85
<i>Shortcut Command</i> : <i>TER</i> .....	85
<i>How to draw</i> : -.....	85
_VENTILATIONSHAFT.....	86
<i>Description</i> : .....	86

*Shortcut Command:- AVS*..... 86

*How to draw : -*..... 86

**\_VOID** ..... 87

*Description :* ..... 87

*Shortcut Command : VD*..... 87

*How to draw : -*..... 87

**\_WATERLINE** ..... 88

*Description :* ..... 88

*Shortcut Command : WL* ..... 88

*How to draw : -*..... 88

**\_WINDOW** ..... 88

*Description :* ..... 89

*Shortcut Command : WND* ..... 89

*How to draw : -*..... 89

**TOOL** ..... **90**

ALL/REMOVER TOOL TIP (PDCRTOOLTIP):..... 90

SHOW ONLY DCR LAYERS:..... 90

BUILDING LEVEL LAYER (PDCRSBL):..... 90

LAYOUT LEVEL LAYER (PDCRSLL):..... 90

SHOW ONLY DCR LAYERS (PDCRSDL): ..... 90

SHOW OTHER LAYERS (PDCRSOL): ..... 90

SHOW ALL LAYERS (PDCRSAL);..... 90

CALCULATE TOTAL AREA (PDCRCTA): ..... 90

CALCULATE DEDUCTED AREA (PDCRCDA): ..... 91

GET ALL INSIDE POLY (PDCRFIP):..... 91

GET ALL OVERLAPPING POLY (PDCRGOP):..... 91

GET ALL INTERSECTING POLY (PDCRGIP):..... 91

FIND OPEN ENTITIES (PDCRFNDO):..... 91

FIND CLOSED ENTITIES (PDCRFNDC):..... 91

CONVENT ARC IN PLOTLINE..... 91

SHORTEST DISTANCE (PDCRFSD): ..... 92

SPELLING CHECK (\_SPELL): ..... 92

FIND OBJECT (PDCRFOBJ):..... 92

**COMMANDS** ..... **93**

CREATE NEW PROJECT (PDCRNWP):..... 93

CREATE AUTODCR LAYERS (PDCRCL):..... 93

VERIFY DRAWING: ..... 93

**MARKINGS** ..... **95**



**INSERT ENTITIES ..... 98**

**ASSIGN NAME..... 100**

**TOOLS..... 102**

**PREDCR SHORT-CUT COMMANDS ..... 104**

**SAMPLE CASES ..... 119**

    RESIDENTIAL BLDG (ROW HOUSE) ..... 119

    RESIDENTIAL BLDG. (SINGLE DETACHED WITH TWO BUILDINGS)..... 119

    COMMERCIAL BUILDING..... 120

    INDUSTRIAL BUILDING..... 121

    SPECIAL BUILDING (SCHOOL BLDG) ..... 121

**MEANING OF VARIOUS PREDCR MESSAGES ..... 122**

**F.A.Q (FREQUENTLY ASK QUESTIONS)..... 124**

Document outline

***About the drawing protocol document***

Chennai Metropolitan Development Authority 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 CMDA.

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 CMDA, 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 CMDA for Building Permission. The document explains use of PreDCR utility.

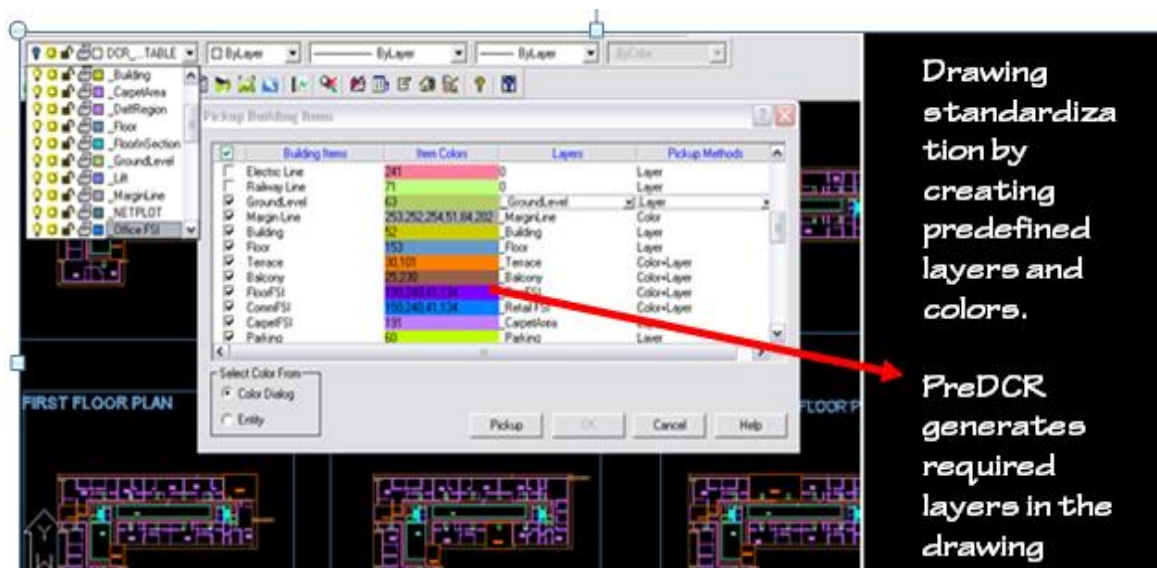
***How to read this drawing protocol document?***

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.

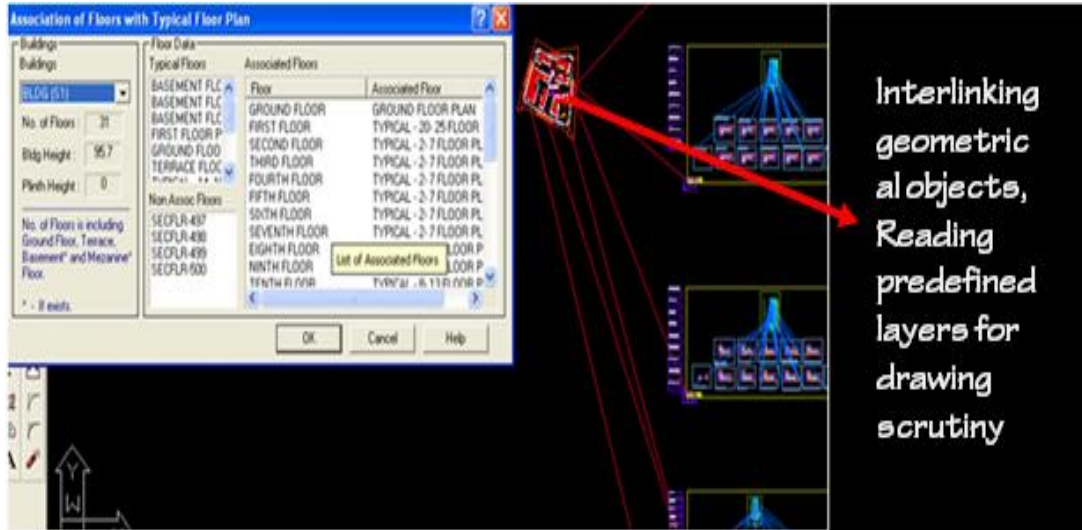
## Drawing pre-formatting utility (PreDCR)

### 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.

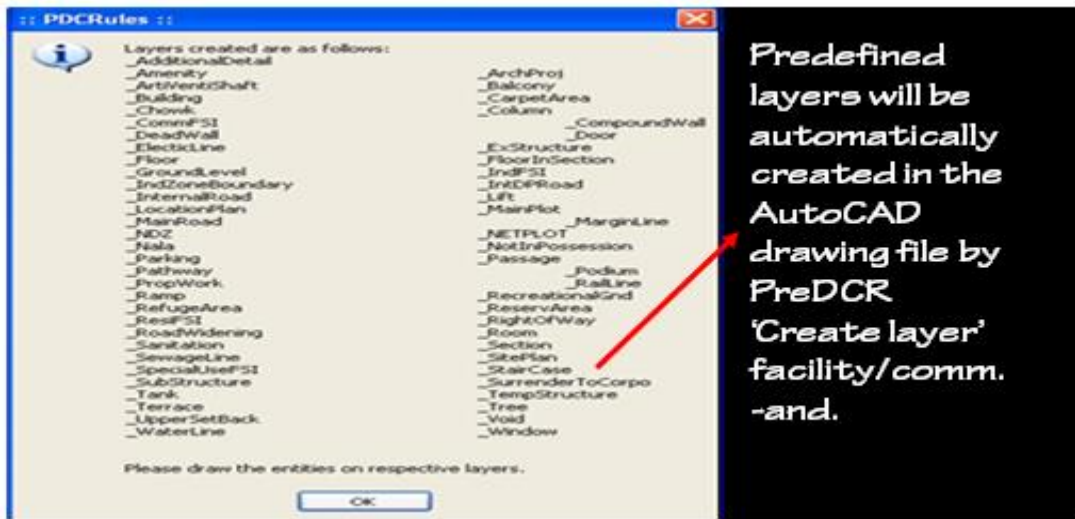
To Increase drafting speed and efficiency

To reduce drawing data redundancy.

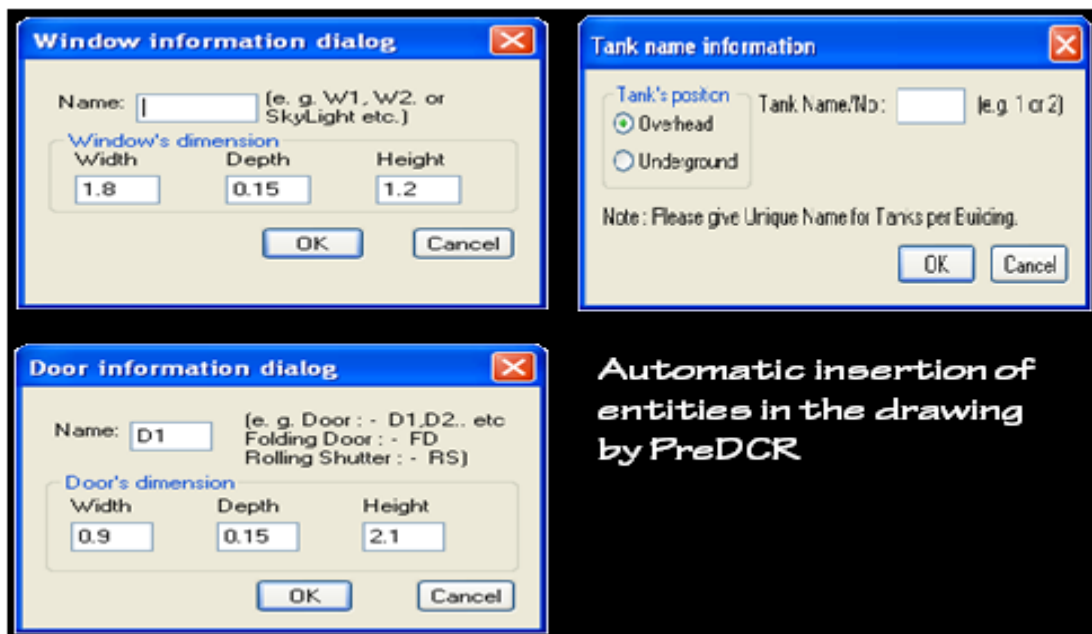
To remove dimensioning and area calculation requirements from submission drawing format and auto-calculating areas in AutoDCR automatically.

### *Salient features*

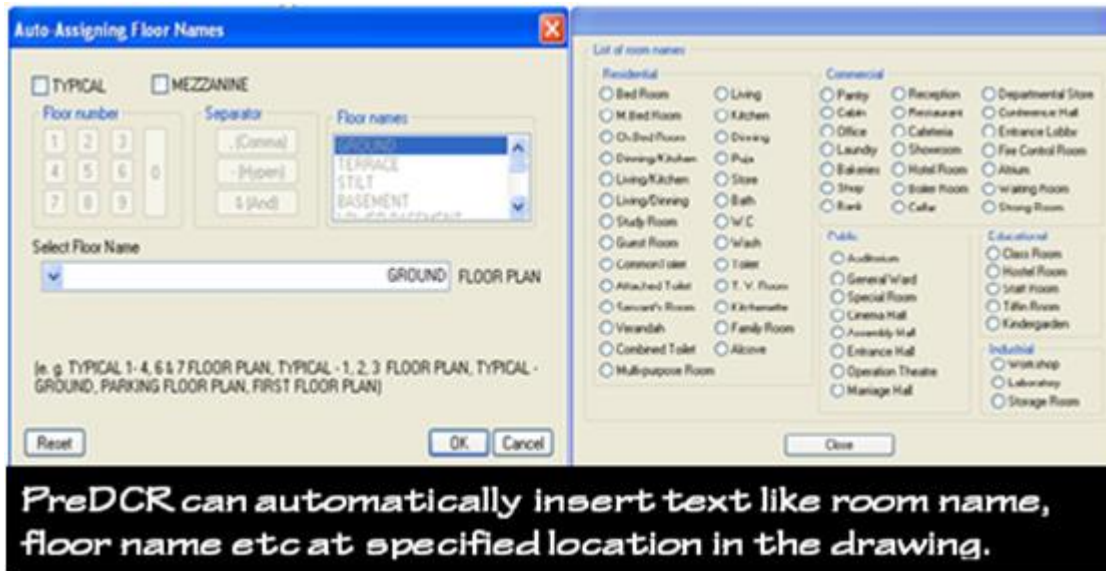
Automatically creating required layers in the drawing



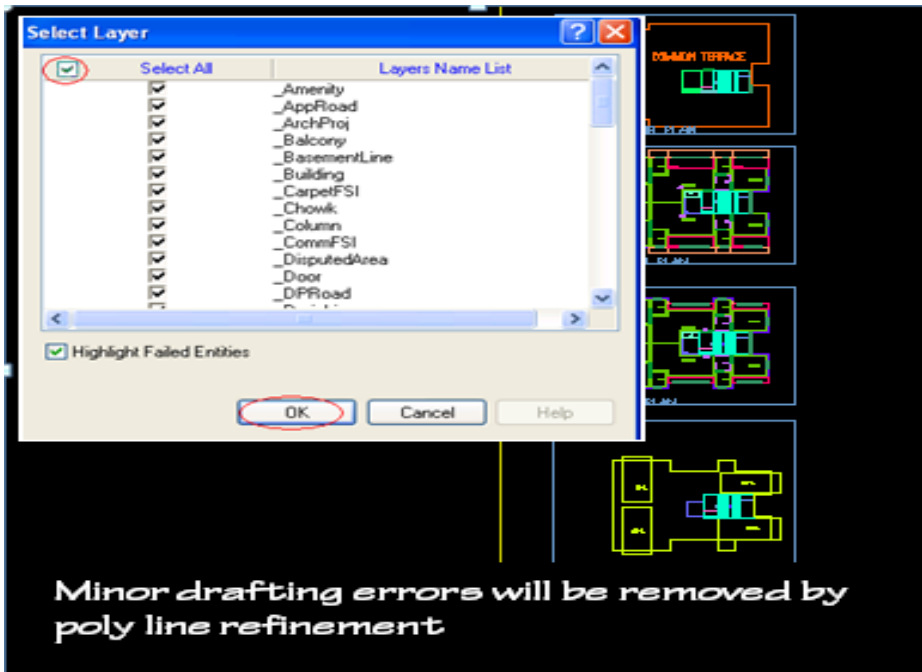
Automatically creating and inserting entities of required size in the drawing: User can define size of entity and insertion point in the drawing. PreDCR will create and insert entity in the drawing at specified location.



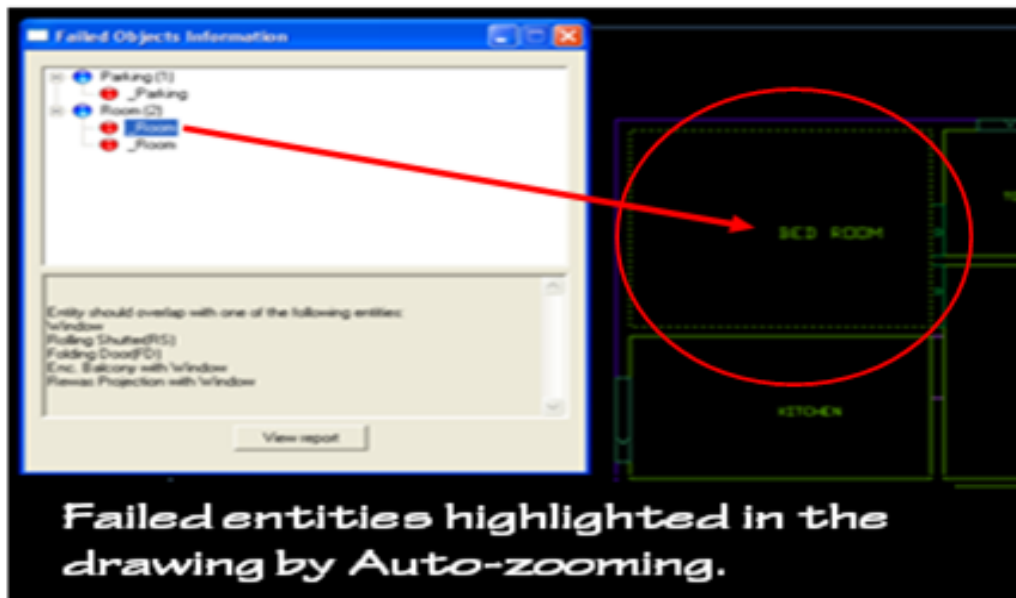
Automatic insertion of required text in the drawing.



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.

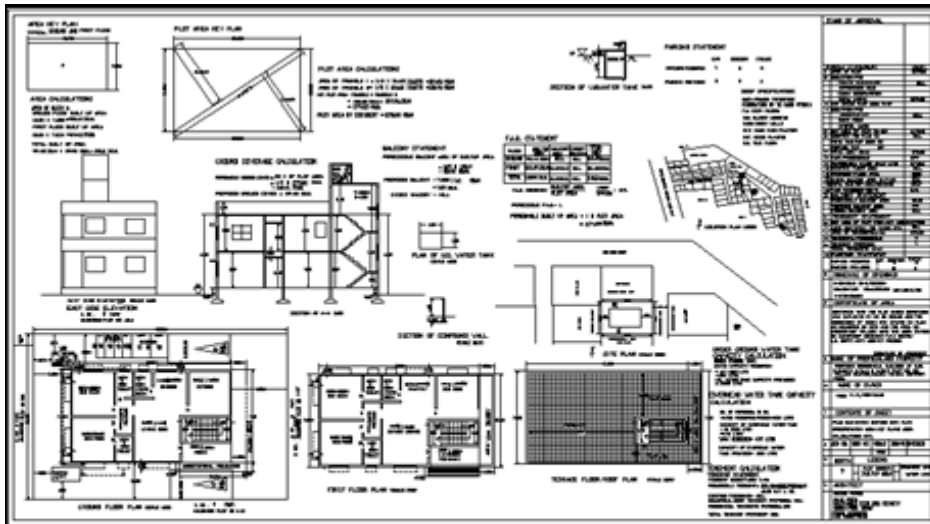


### *Benefits of PreDCR*

- 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



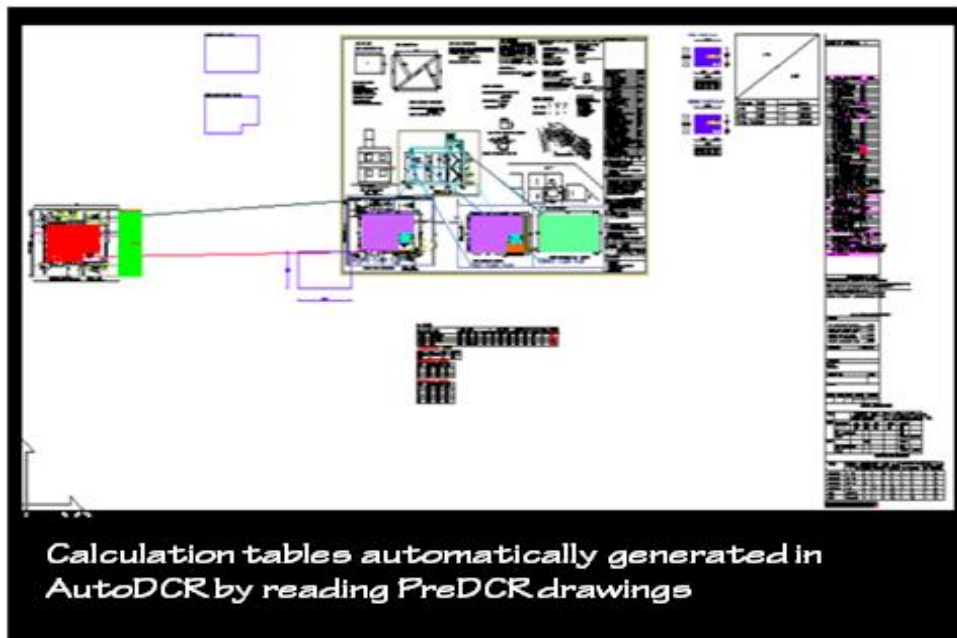
Conventional drawing submission format

### 2) As per PreDCR format specified by PreDCR



Drawing prepared in PreDCR format

### 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 Boundary, 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 Boundary 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 Boundary , 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, DeadWall 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)
- 1 GB RAM minimum
- Windows 98/XP/2000/ 2007/2008
- AutoCAD 2000 and onwards

### *Installation*

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

Step 1: Run the PreDCR installer by double clicking on file "*PreDCR\_Installer.exe*"

Step 2: 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.

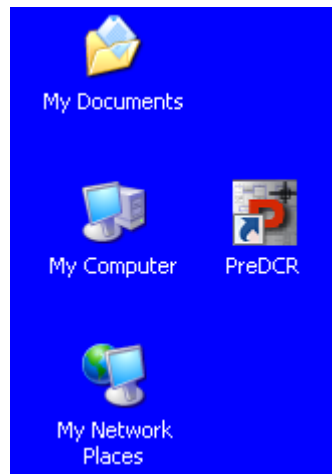
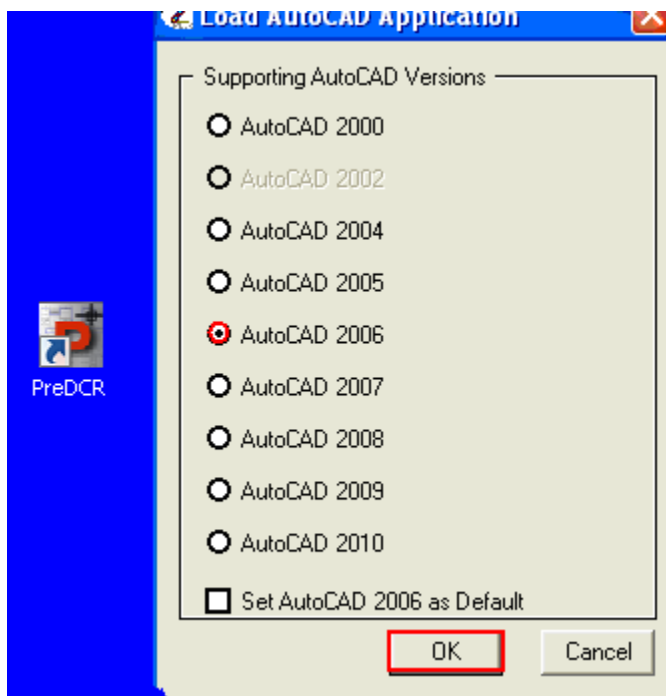


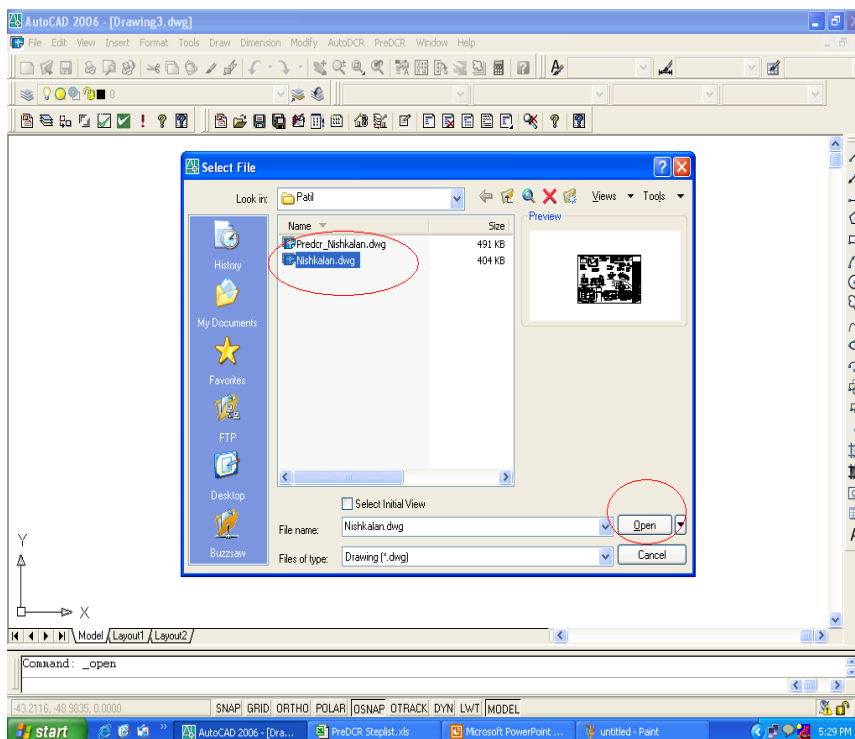
Figure 1: PreDCR shortcut on desktop

## Methodology

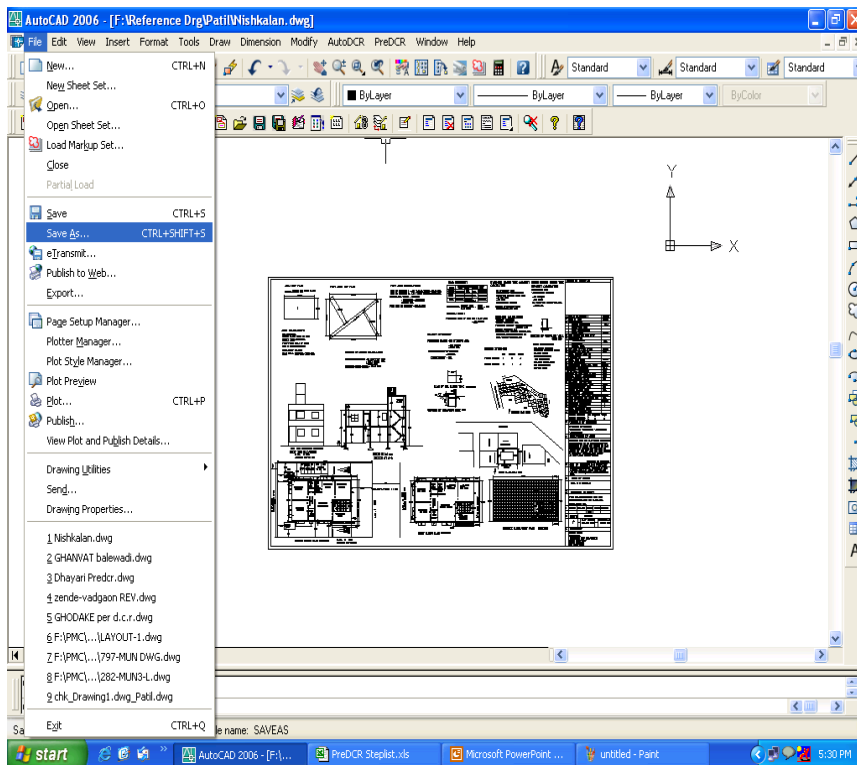
1) Open the PreDCR software for clicking on PreDCR menu on your desktop & select the Autocad version & then click on "OK" button.



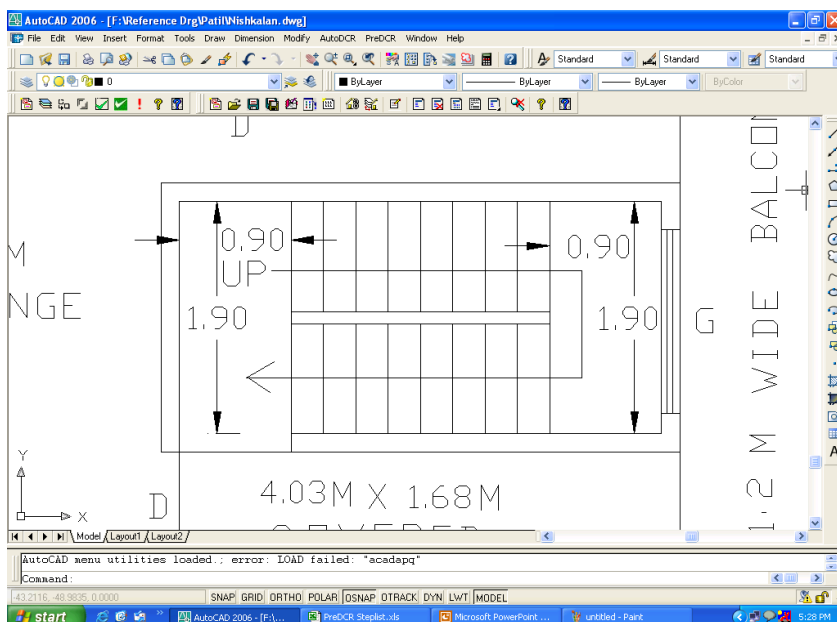
2) First open submission drg which is now converting in PreDCR format.



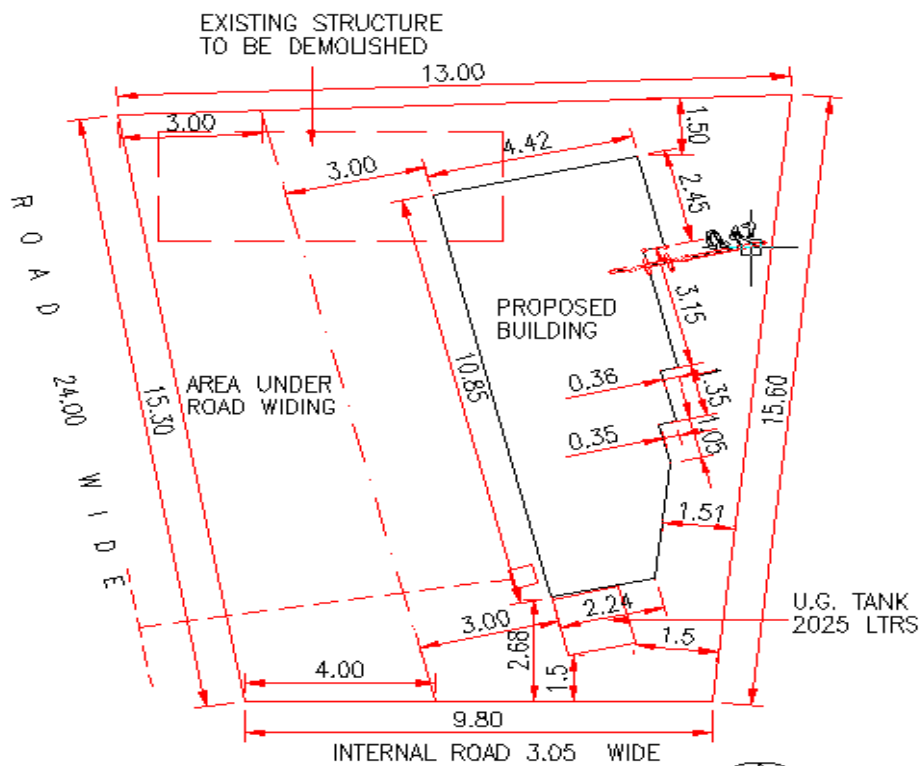
3) Save as your dwg with give some name.



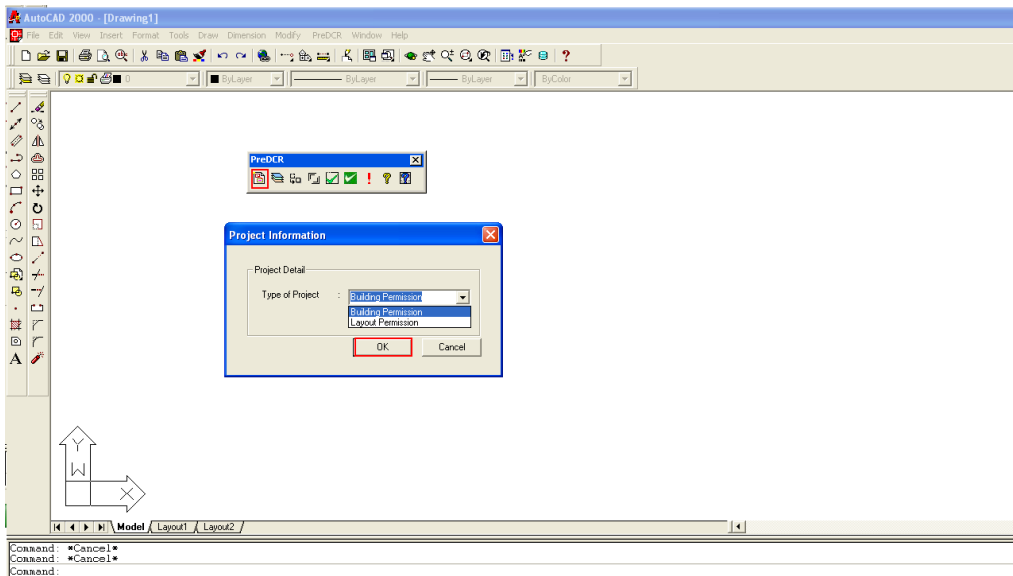
4) Check the scale by using Scale command. If drg is not in 1: 100 scale then convert into the 1:100 scale. & then make that drg in metric scale if it is in other than meter.



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

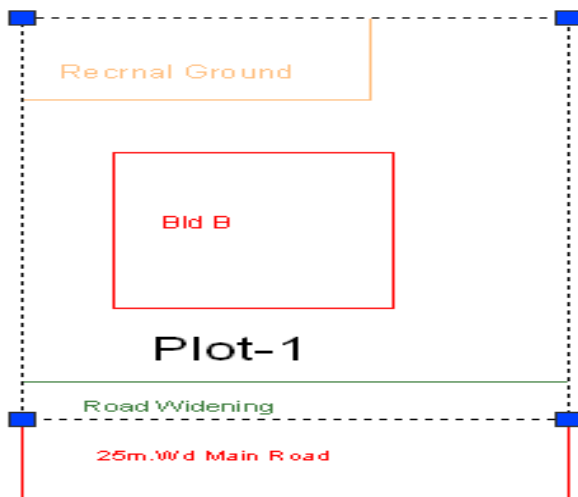


- 6) By using Predcr toolbar first select the Type of Project that is " Proposed Development" , "Land Division" or "Plot Boundary Layout"
- If Plot Boundary is Already sanctioned & user have to take permission for the buildings only then select "Proposed Development."
  - If User having Proposal is Amalgamation or Subdivision then select "Land Division" option from the list.
  - If Proposal having a Plot Boundary ting Layout then select that "Plot Boundary ting Layout" option from the list.

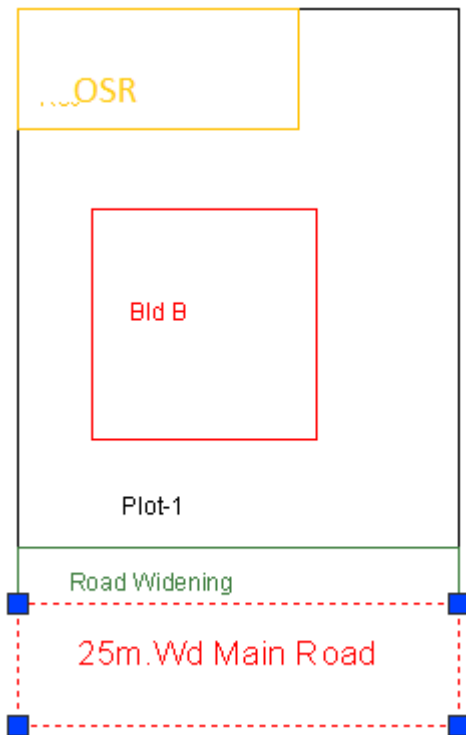


7) By using Predcr toolbar "Create a DCR layer".

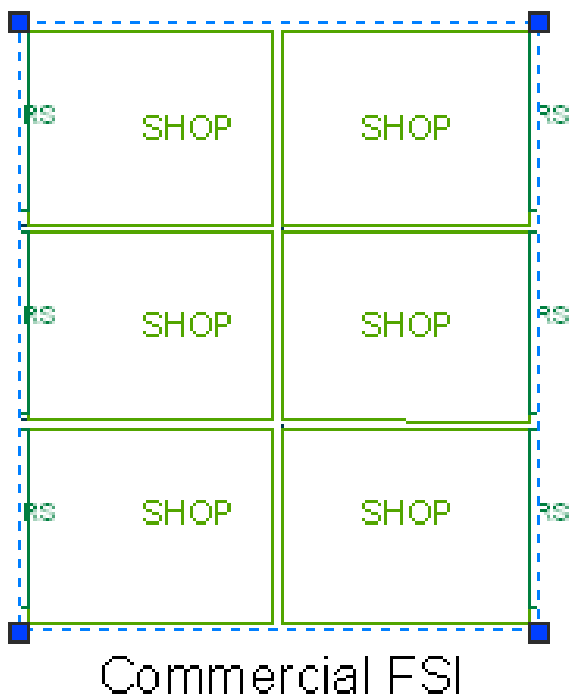
Now Select current Layer is "**\_ Plot Boundary**" & Draw a closed polyline on this layer. Also give the Plot Boundary name on that layer only.



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

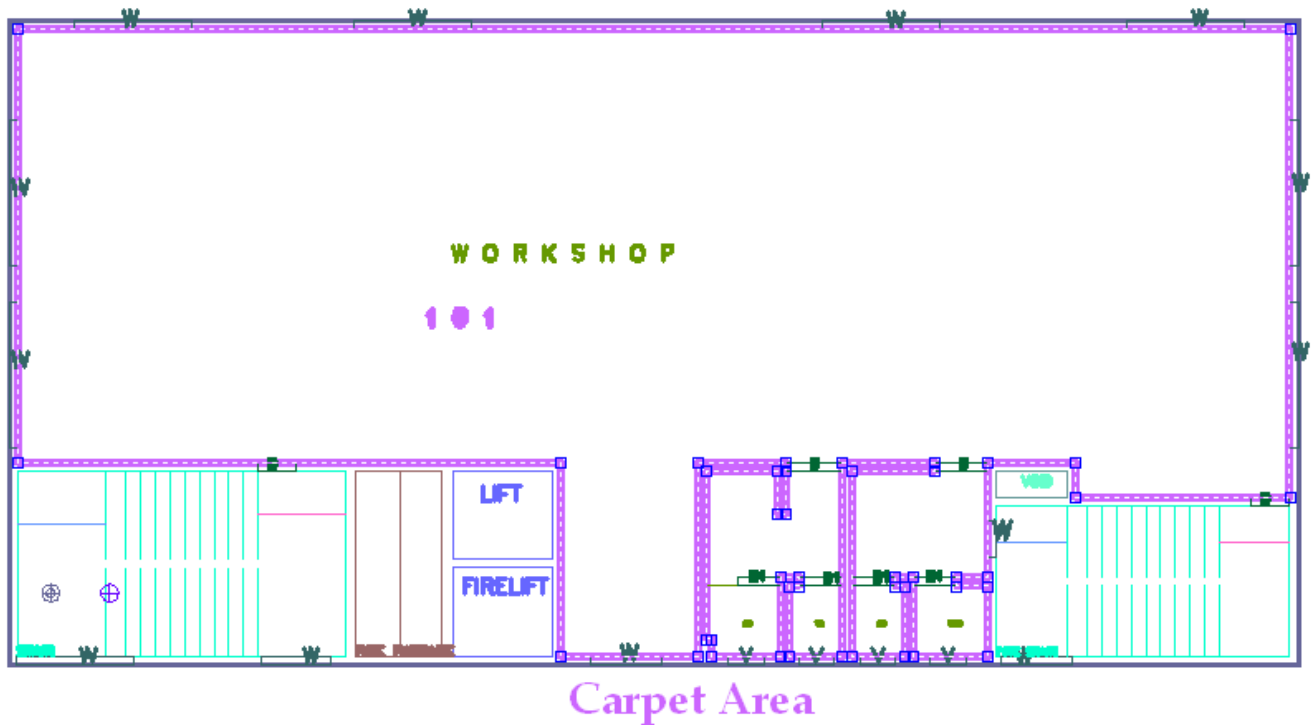


Make the current Layer " .....FSI" as per your project having that use you can select that use of FSI. e.g. For Residential use - Select "**\_ResiFSI**" poly, For Commercial use select "**CommFSI**" poly. & Draw a area key plan line on this layer. No need to give any name on this Layer



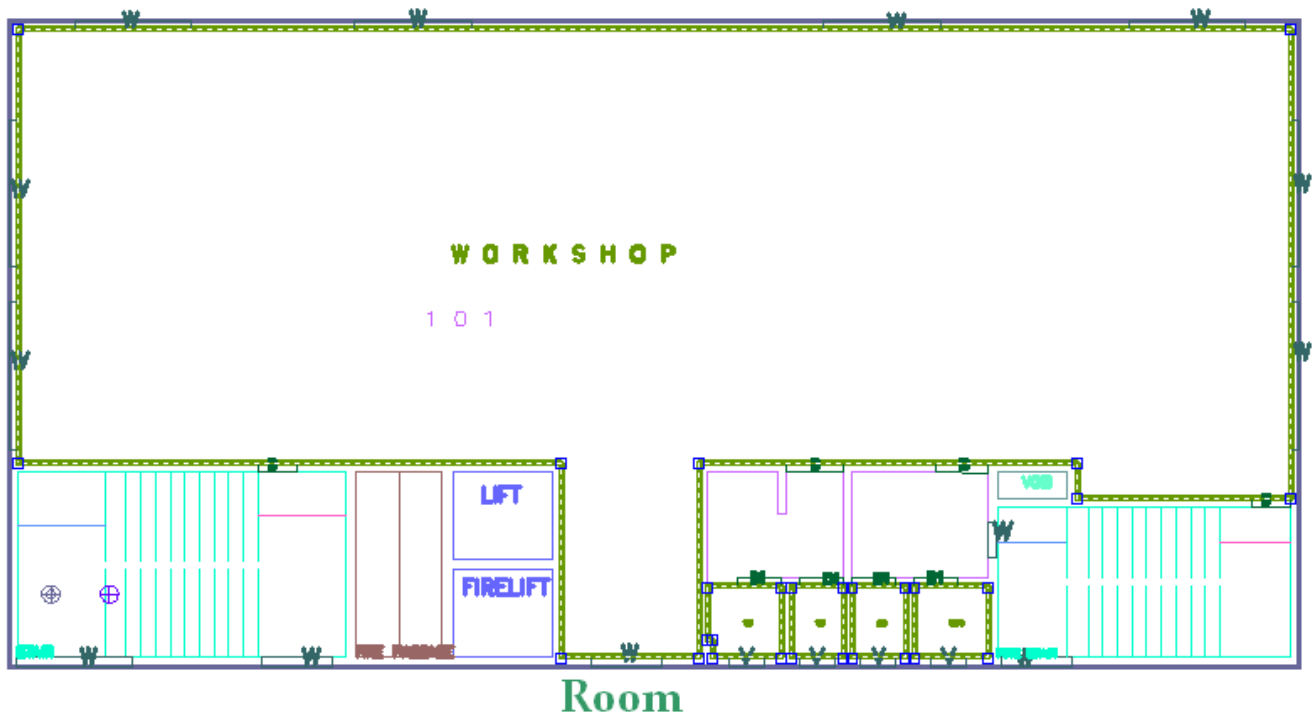
Make the current Layer "**\_Carpet Area**" and draw a closed poly on this Layer which having floor

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.

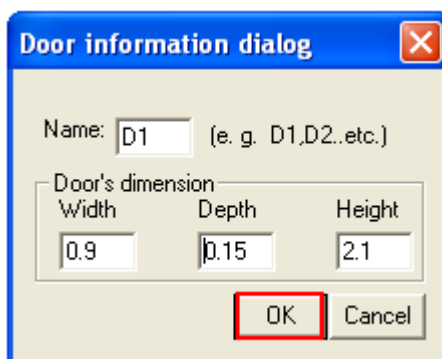
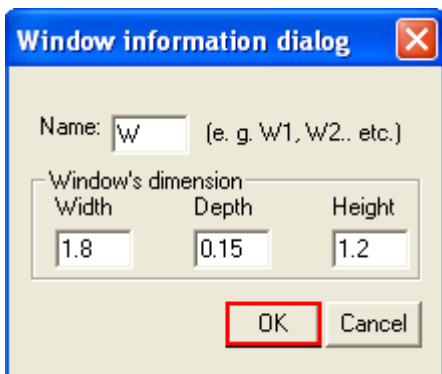


Make the current Layer "**\_Room**" and draw a closed poly on this layer. If room having rectangle shape then u can use rectangle also. Assign the room name for using the assigned name option from Predcr menu bar:





: Insert the **doors & windows** by using insert option from Predcr menubar.



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.

**Tank name information** ✖

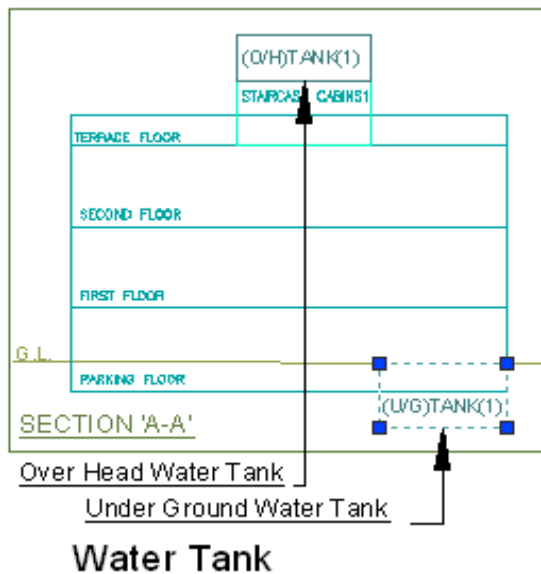
Tank's position

Overhead

Underground

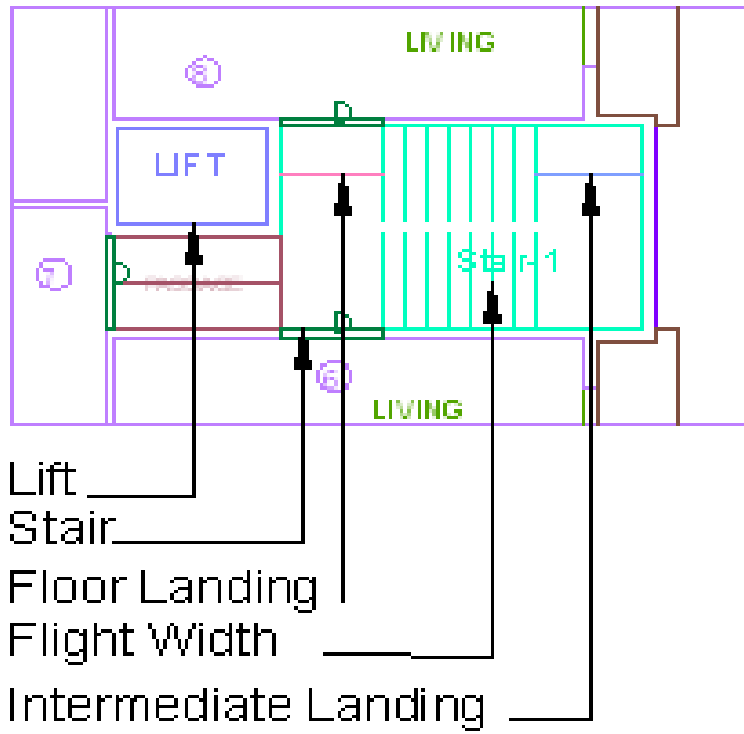
Tank Name/No :  (e.g. 1 or 2)

Note : Please give Unique Name for Tanks per Building.

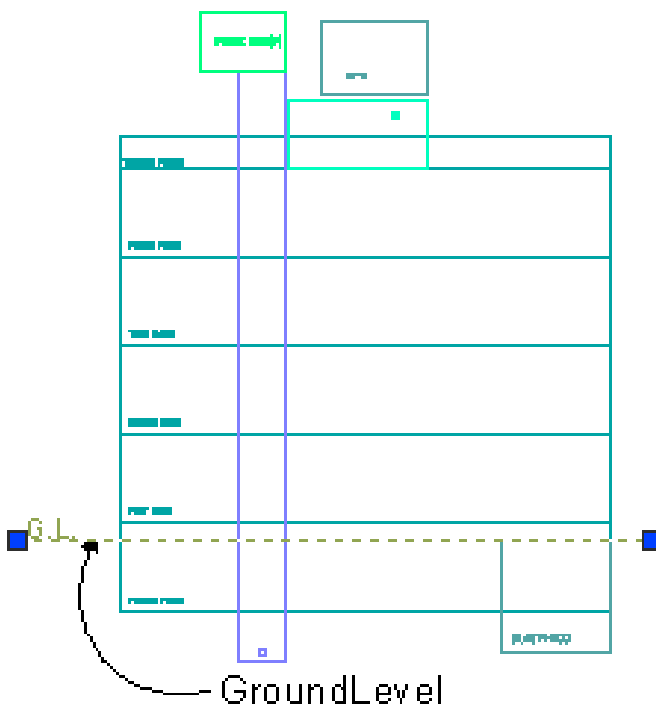


17) Make the current layer "**\_Staircase**" and draw all the riser on this layer which is a open polyline. Also draw two extra line on this layer which is showing a floor landing and intermediate landing. Then mark this landing for using staircase landing option from Predcr menu. Also mark the staircase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

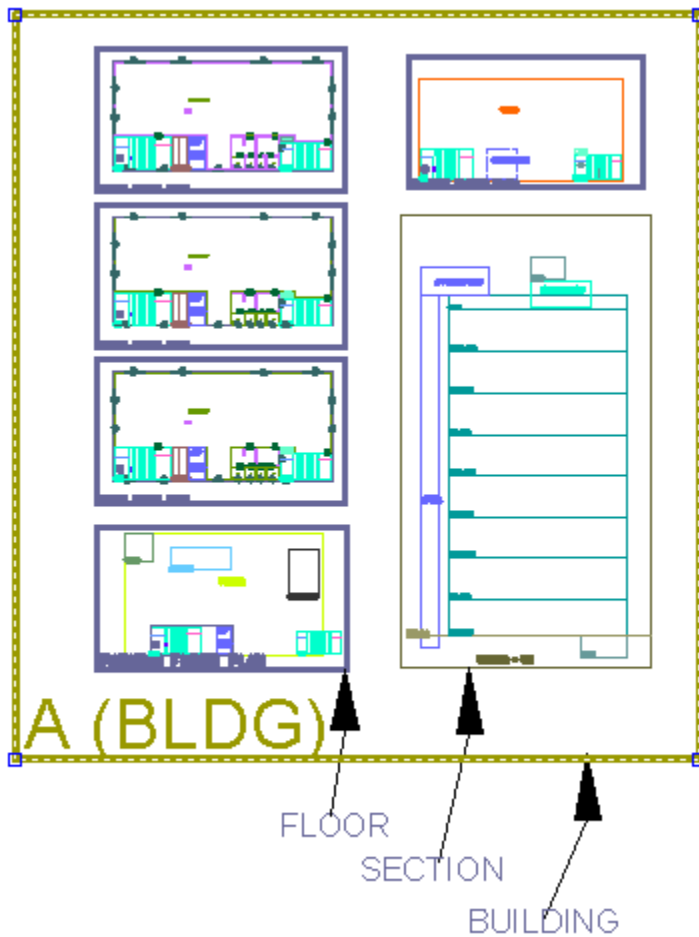
### Stair Case



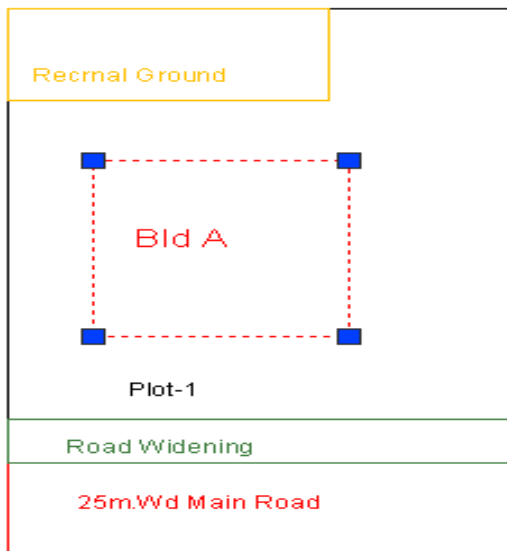
18) Make the current layer is "**\_Ground Level**" and draw a open polyline on this layer which is place below the plinth level.



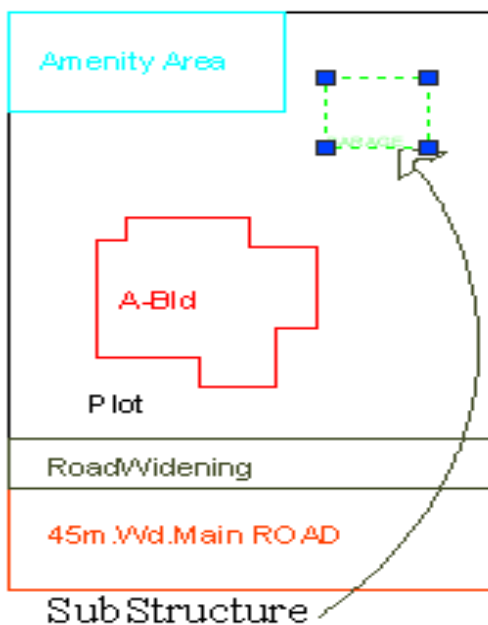
Make the current layer is "**\_Building**" and draw a boundary on this layer which is having a group of all the floors with section



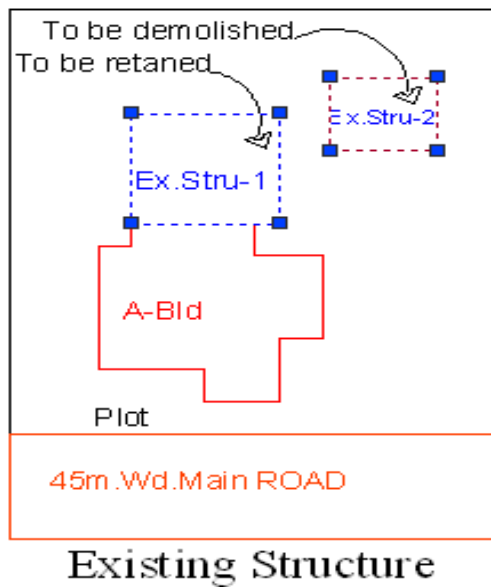
Make the current layer is "**\_ProposedWork**" and draw a total coverage on this layer. Assigned this proposed work by using "Predcr->Assigned name -> Building & proposed work from Predcr menu.



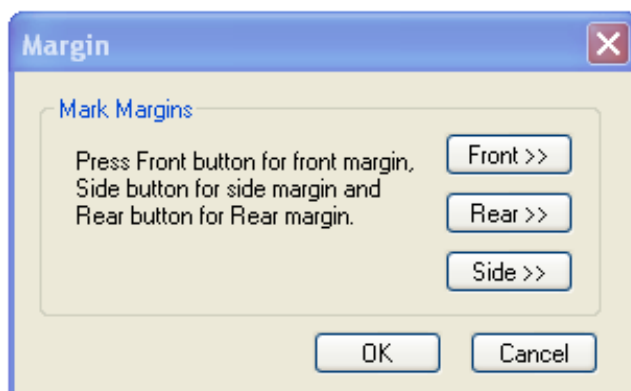
If project having any Substructure then draw a closed polyline on "**\_Substructure**" layer. Also mark this substructure by using " Predcr-> Mark-> Substructure from Predcr menubar.



If project having any Existing structure then draw a closed polyline on "**\_Exstructure**" layer. Also mark this Exstructure by using " Predcr-> Mark-> Exstructure from Predcr menubar.



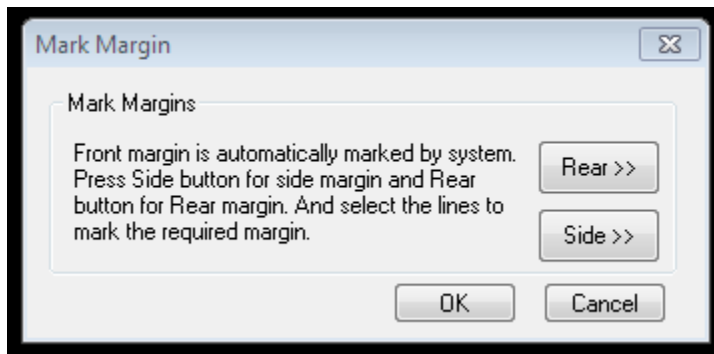
Mark the margins by using Mark-> margin from Predcr menu bar



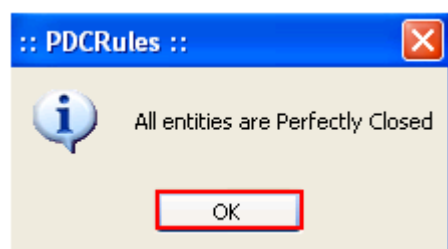
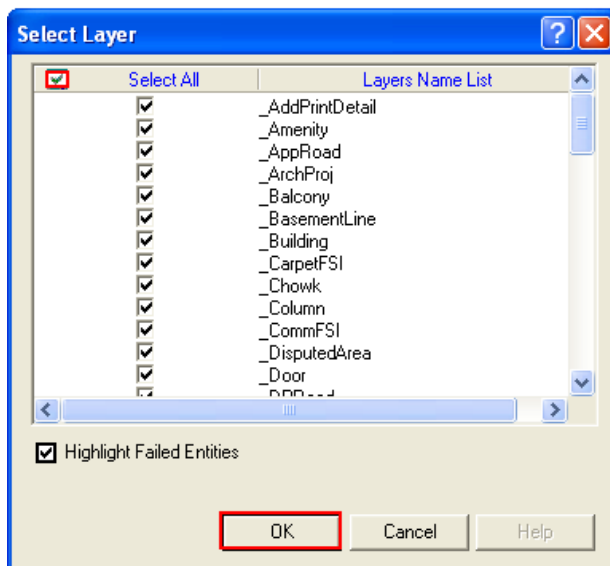
Mark the margins by using Mark margin tab from from PreDCR tool bar.



Front margin is automatically marked by system according to main access road. User need to mark side and rear margin only.

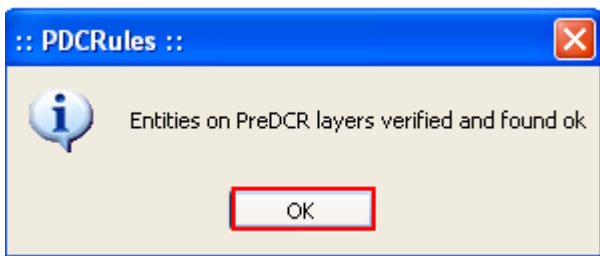
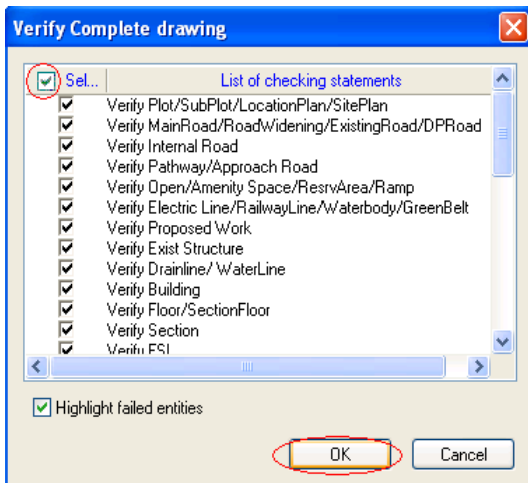


When Mark margin is done, Click on **"Verify Closed poly"** option from Predcr tool.



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

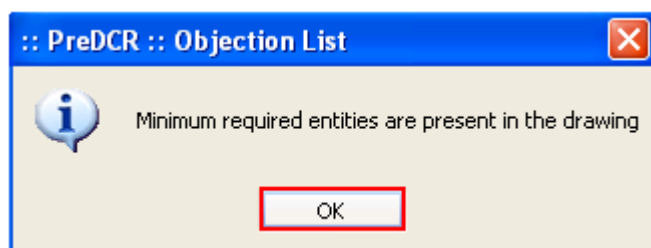




Also check the "**Objection list**" which user are missing to convert in Predcr layer.



You can check minimum entities are present on not in drawing according to selected type of project by using "**Objection list**" tab.



## PreDCR Layer Information

### 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.

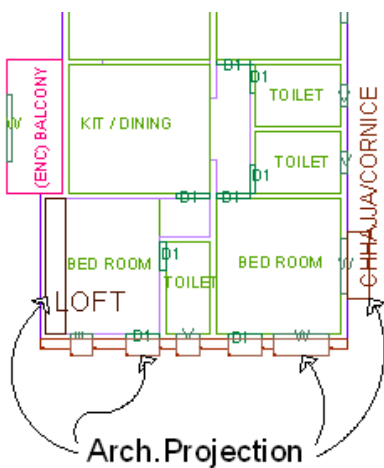
#### Shortcut Command:- AP

#### How to draw : -

### ArchProj:-

- Following rules will be applied on the objects of ArchProj layer
- Pergola
- Planter box
- F.Bed
- C.B.( Wardrobe)
- SunShade
- Loft
- Canopy ( 100% in FSI )
- Garbage Chute
- Ornamental Projection
- Portico (100% in FSI)
- Service verandah
- Verandah

- Otta
- Steps
- **Precautions to be taken -**
- Draw polyline correctly.
- Give name to this object from “Mark → Projection” option (From PreDCR Menu)
- If this object has not been marked properly then it won't be checked.



## .\_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 Boundary :** It must overlap with PWork (if not enclosed)

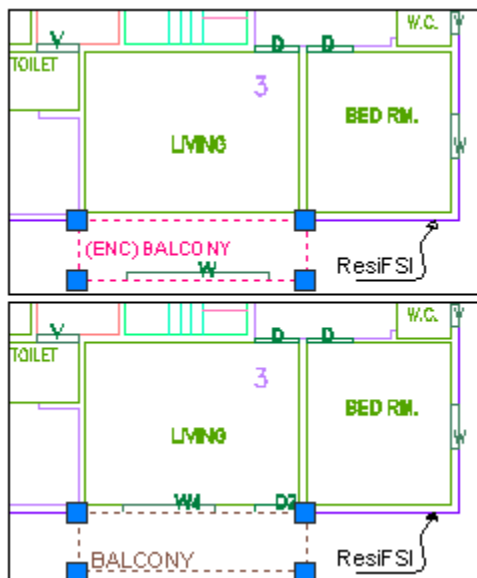
**Floor:** It must overlap ResiFSI.

### Shortcut Command : BL

### How to draw : -

## \_Balcony:-

- Following rules will be applied on the Objects of Lift layer
- Balcony area
- Balcony width
- Precautions to be taken –
- Draw polyline correctly.
- Give name to this object from “Mark → Projection” option (From PreDCR Menu).
- If this object has not been marked properly then it won't be checked.



## \_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 PWorks or wings are same then building name shall be as given in table below.

Building names can be.

1	"A(Monarch)"	PWork "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".

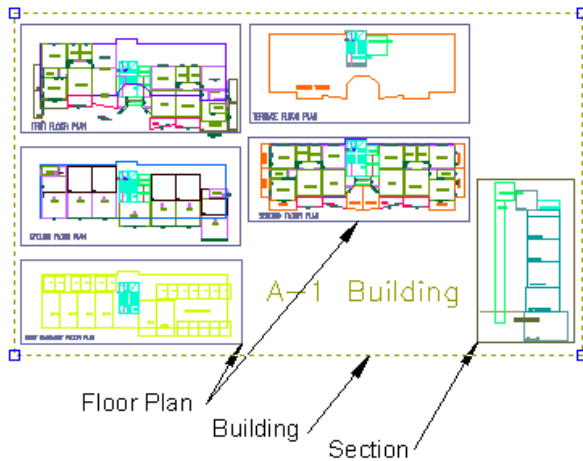
### Shortcut Command : BLD

### How to draw :

### Building:-

- Following rules will be applied on the objects of Building layer
- Building & propwork At Mark on depend below rules will be check
- Building height
- Margin
- Built up area
- Total floor calculation
- Consume fsi factor
- Parking
- Tenement density
- Lift height
- Staircase check
- Per floor area
- Floor Number Check
- Subsidiary Structure Check
- Precautions to be taken –
- Draw poly line properly and give name to this object from “Assign Name → Building & PropWork” Option?
- If this polyline has not been draw and marking correctly then all above rules will not get checked

What Building poly will have? Building poly will enclose all the floor plans in that building along.



## \_Carpet area

### Description :

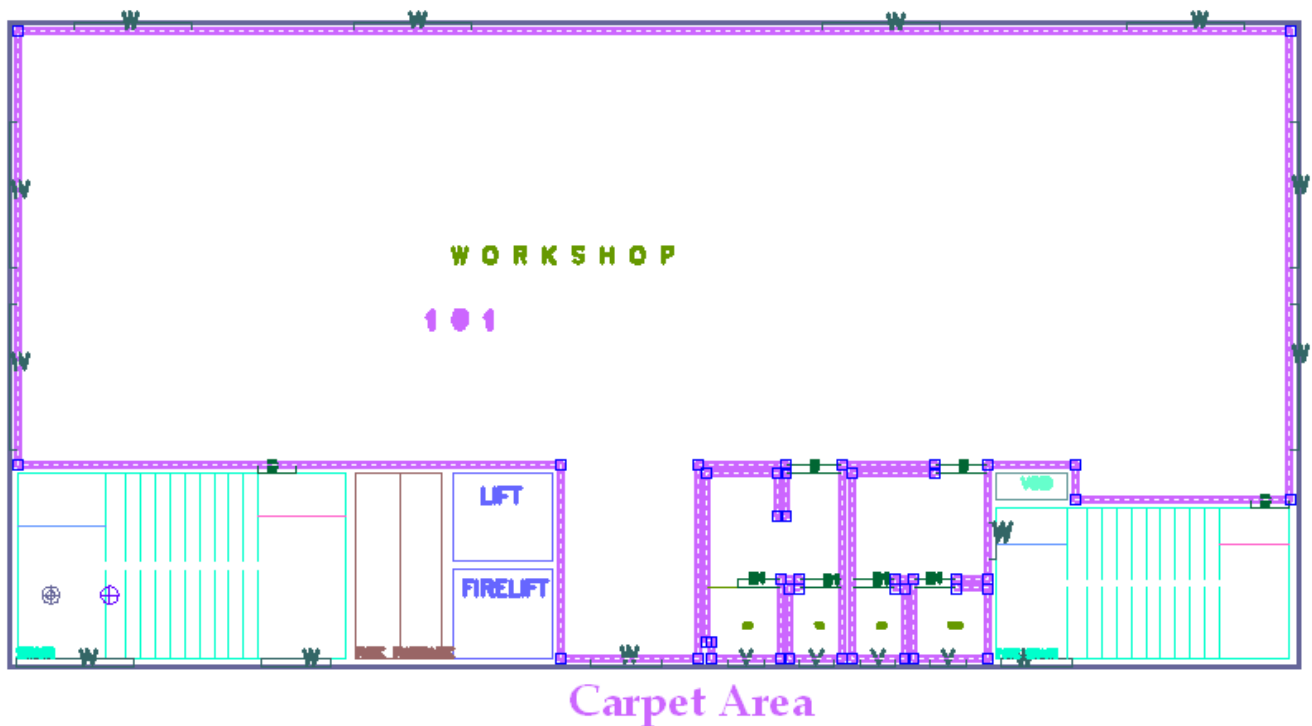
Draw carpet area as a closed polyline which is a net usable floor area within a building excluding that covered by the walls or any other areas specifically exempted from floor space index computation in these regulation.

### Shortcut command : CPT

### How to draw : -

### \_CarpetArea:-

- Following rules will be applied on the objects of carpet area layer
- Per Carpet Tenement number check required
- Parking car, scooter, cycle
- Tenement density
- Water tank
- Sanitation
- Precautions to be taken –
- Draw polyline correctly Give name to this object in same layer as that of object
- If this polyline has not been drawn and named correctly then all Above rules will not get checked.



## \_Chowk

### Description :

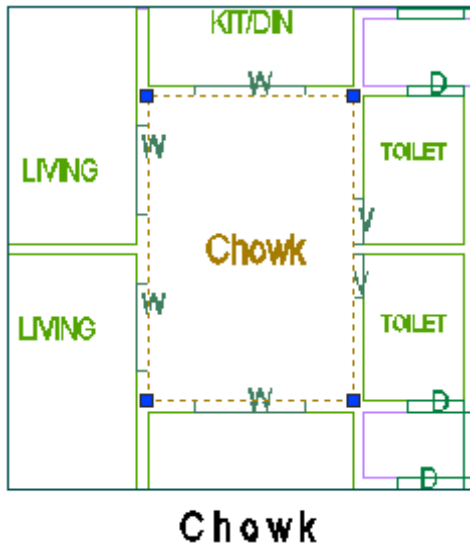
Draw a chowk as a closed polyline which is an enclosed space permanently open to the sky within a building at any level. From chowk we take ventilation for habitual rooms.

### Shortcut Command : CWK

### How to draw :

### \_Chowk :-

- Following rules will be applied on the objects of Chowk layer
- Area
- Width
- Precautions to be taken –
- Draw polyline correctly Give name to this object in same layer as that of object
- If this polyline has not been drawn and named correctly then all Above rules will not get checked.



### ***\_Column***

#### **Description :**

Column shall be drawn as closed polyline on this layer.

#### **Shortcut Command : COL**

### ***\_CommFSI***

#### **Description: Commercial FSI :**

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**

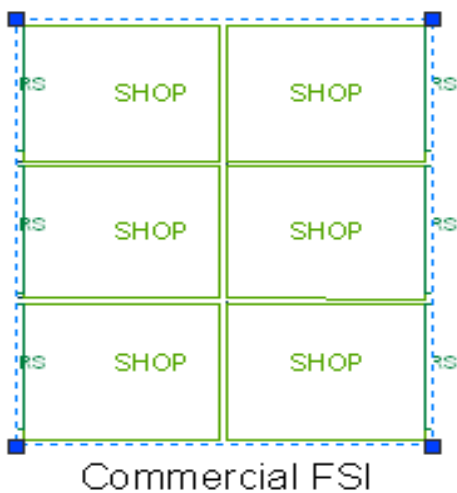
How to draw: -

### ***\_CommFSI:-***

- Following rules will be applied on the objects of ResiFSI layer
- Permissible Balcony area
- Built up area
- Permissible FSI
- Carpet area
- Staircase
- Room area
- Arch projection



- Chock
- Ventilation shaft
- Passage
- Lift
- Terrace
- Converge check
- Precautions to be taken -
- Draw polyline correctly
- Give name to this object in same layer as that of object.
- If this polyline has not been drawn and named correctly then all above rules will not get checked.



### ***\_CompoundWall***

#### **Description :**

Open polyline of compound wall to be drawn on proposed compound wall with text started with compound wall height. E.g. 1.5m. high Compound Wall

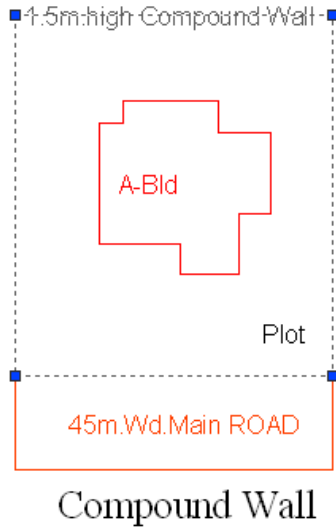
#### **Shortcut Command : CW**

#### **How to draw : -**

#### **\_CompoundWall:-**

- Following rules will be applied on the objects of Chowk layer
- Height
- Precautions to be taken -

- Draw polyline correctly
- Give name to this object in same layer as that of object.
- If this polyline has not been drawn and named correctly then all above rules will not get checked.



### Description :

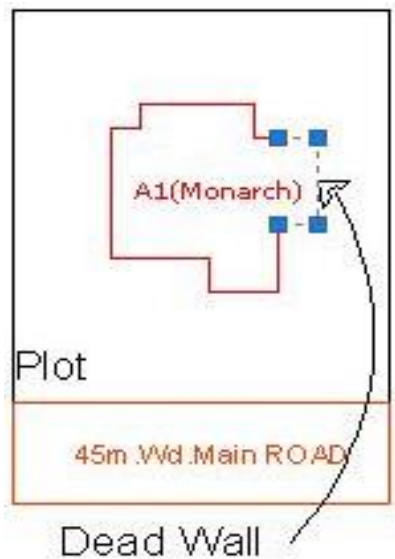
Draw open polyline overlapping with pwork on a side from where ventilation is not taken and should be draw inside the Plot Boundary

### Shortcut Command : DW

### How to draw : -

### Deadwall:-

- Following rules will be applied on the objects of Deadwall layer
- Ventilation
- Margin
- Precautions to be taken -
- Draw polyline correctly
- Give name to this object in same layer as that of object
- If this polyline has not been drawn and named correctly then all above rules will not get checked



### Door

#### Description :

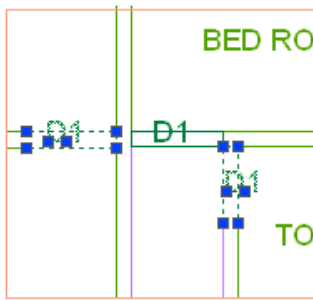
Door is a closed Polyline Which is drawn on “\_Door” layer. Also you can insert a particular size poly for Door using **Insert->Door** from PreDCR menu.

#### Shortcut Command : DR

#### How to draw : -

#### Door:-

- Following rules will be applied on the objects of Door layer
- Width
- Depth
- Height
- Precautions to be taken -
- Draw polyline correctly
- Give name to this object in same layer from “insert “option as that of object
- If this polyline has not been drawn and named correctly then all above rules will not get checked



## Door

### *\_DriveWay*

#### **Description : -**

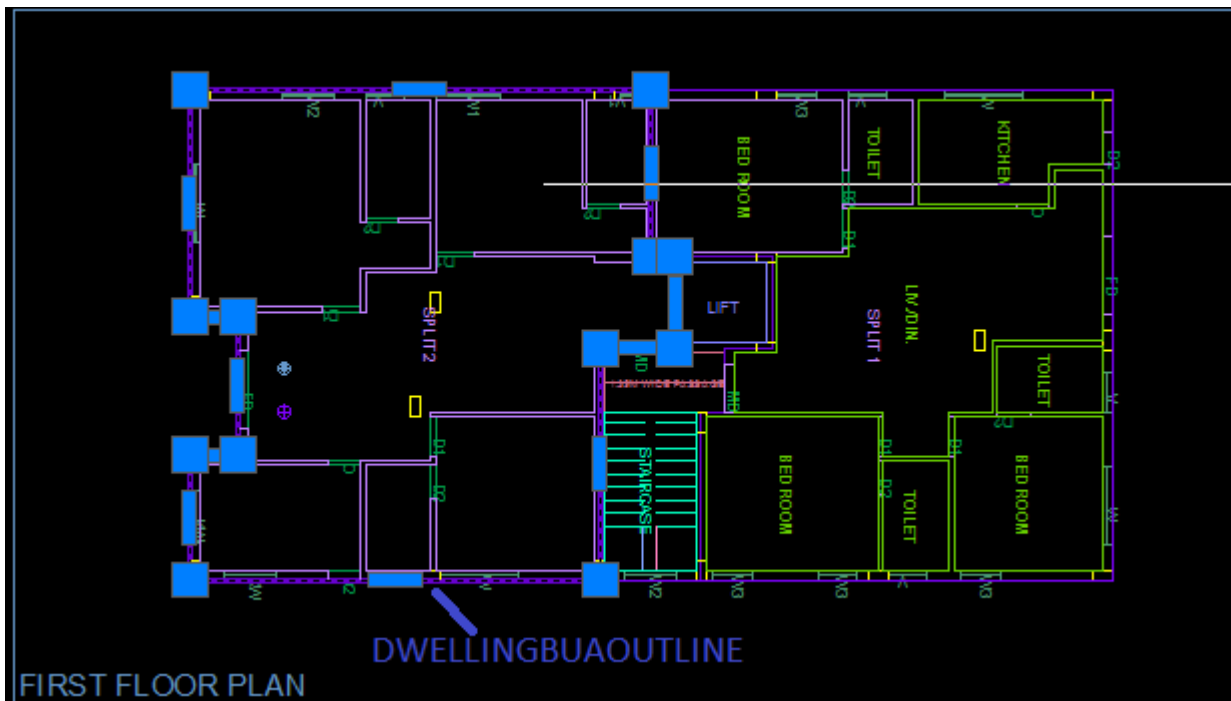
Draw a closed polyline of drive way inside floor plan/layout plan and provide text with mentioning its width, also need to draw a center line on the same layer as open polyline.

Mark drive way from PreDCR mark menu whether it is for cars, two wheeler or transport vehicle.

### *\_DwellingBUAOutline*

#### **Description : -**

Draw DwellingBUAOutline as a closed polyline which is a individual one tenement area including all wall thickness.



## \_ElecLine

### Description :-

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

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

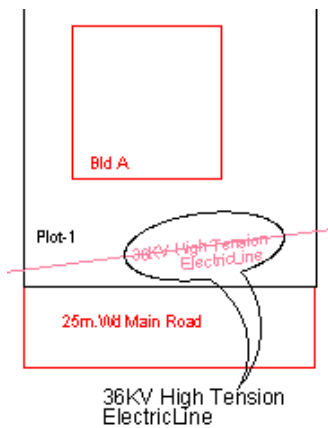
For e.g. 33 KV High Tension Line

### Shortcut Command : LI

### How to draw :-

### \_Electricline:-

- Following rules will be applied on the objects of electricline layer
- Building distance check depend on 33kv high voltage & low voltage
- Precautions to be taken -
- Draw polyline correctly
- Give name to this object in same layer as that of object
- If this polyline has not been drawn and named correctly then all above rules will not get checked



### ***\_Elevation***

#### **Description :**

Draw a elevation as a closed polyline which is a only outer line elevation for printing

### ***\_EWS***

#### **Description :**

Draw “\_EWS” layer as poly line to define area of individual EWS units.

### ***\_ExStructure***

#### **Description: -**

Draw a 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'.

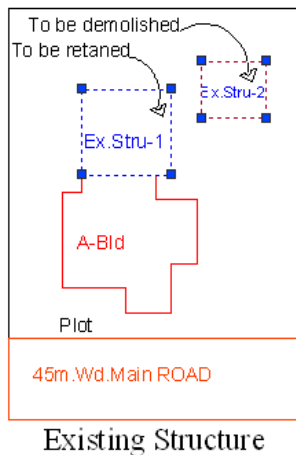
#### **Shortcut Command : EX**

#### **How to draw :-**

#### ***\_ExStructure:-***

- Following rules will be applied on the objects of Exstructure layer
- To be retain
- To be demolish

- **Precautions to be taken –**
- Draw poly line properly and give name to this object from “Mark → Exstructure” Option?
- If this polyline has not been drawn and named correctly then all above rules will not get checked



## ***\_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 Lift 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.:	e.g.
TYPICAL 1,2 FLOOR PLAN	GROUND FLOOR PLAN
TYPICAL 1-4 FLOOR PLAN	FIRST FLOOR PLAN
TYPICAL 2&3 FLOOR PLAN	SECOND FLOOR PLAN

**How to draw :-**

**\_Floor:-**

- Following rules will be applied on the objects of Floor layer
- Built up area
- Inside all floor plan
- Inside parking
- Corresponding check
- Total floor plan calculation
- Per floor fsi calculation
- Precautions to be taken -
- Draw poly line properly and give name to this object from "Assign Name → FloorName" Option?
- If this polyline has not been drawn and named correctly then all above rules will not get checked





### FloorInSection :

#### Description :

Draw a FloorInSection polyline as a closed poly of section boundary which contain all floors with stair cabin, Lift 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, Lift 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.

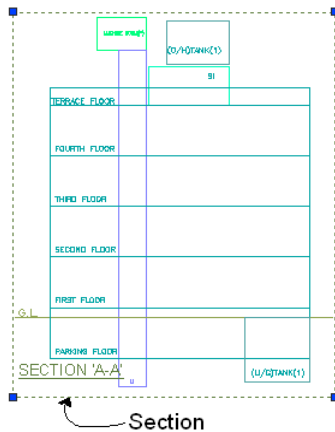
### Shortcut Command : SEC

#### How to draw : -

#### \_FloorInsection:-

- Following rules will be applied on the objects of FloorInsection layer
- Floor height
- Terrace height
- Plinth height
- All Corresponding check
- Precautions to be taken –
- Draw poly line properly and give name to this object from “Assign Name → FloorName” Option?

- If this polyline has not been drawn and named correctly then all above rules will not get checked



### \_GroundLevel

#### Description :

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

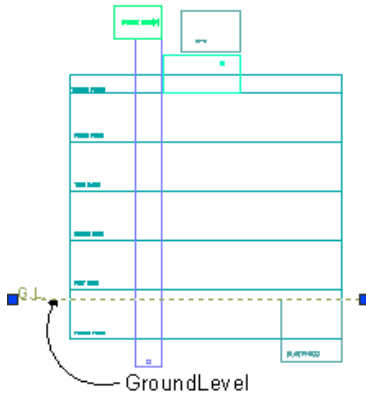
#### Shortcut Command : GL

#### How to draw : -

### \_Ground Level:-

- Following rules will be applied on the objects of Ground level layer
- Building Height
- Per floor height
- Basement height
- Plinth height
- Average height check
- Precautions to be taken -
  - Draw polyline correctly
  - Give name to this object in same layer as that of object

- If this polyline has not been drawn and named correctly then all above rules will not get checked



### ***\_IndFSI***

#### **Description :**

Draw a IndFSI as a closed polyline (area key plan line in the submission drg) 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 :IFSL**

#### **How to draw : -**

#### **IndFSI :-**

- **Following rules will be applied on the objects of ResiFSI layer**
- Permissible Balcony area
- Built up area
- Permissible FSI
- Carpet area
- Staircase
- Room area
- Arch projection
- Chock
- Ventilation shaft

- Passage
- Lift
- Terrace
- Converge check
- **Precautions to be taken -**
- Draw polyline correctly
- Give name to this object in same layer as that of object.
- If this polyline has not been drawn and named correctly then all above rules will not get checked.



### ***\_DPRoad***

#### **Description :**

Draw existing or proposed D. P. (Development Plan) road or T. P. (Town Planning) Road when inside/intersected with Plot Boundary . While giving name start text with road -width.E.g. 15m wide D.P. Road.

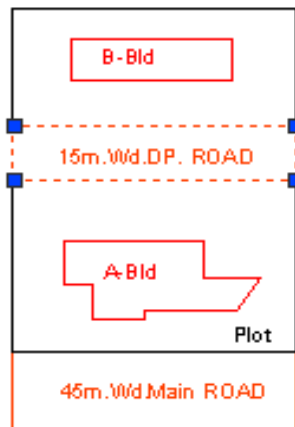
#### **Shortcut Command : R3**

#### **How to draw : -**

#### ***\_DPRoad:-***

- **Following rules will be applied on the objects of intDProad layer**
- Width
- Plot Boundary area
- Margin

- Deduction area
- Precautions to be taken –
- Draw polyline correctly
- Give name to this object in same layer as that of object
- If this polyline has not been drawn and named correctly then all above rules will not get checked



Internal D.P. Road

### InternalRoad

#### 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

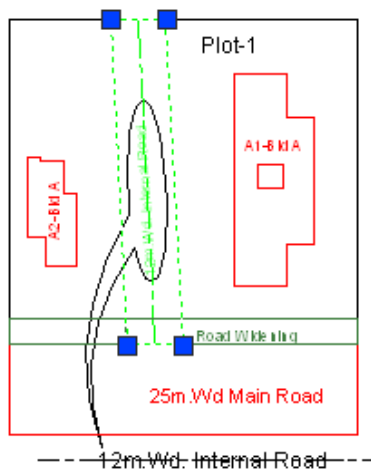
#### How to draw : -

#### Internal road:-

- Following rules will be applied on the objects of internal road layer

Width

- Precautions to be taken –
- Give name to this object in same layer as that of object
- If this polyline has not been drawn and named correctly then all above rules will not get checked



## Lift

### Description :

Draw a Lift 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 lift are provided then use the marking of “Fire lift” option from **Mark -> Lift -> Fire Lift**. Fire Lift means a special lift designed for the use of fire service personnel in the event of fire or other emergency.

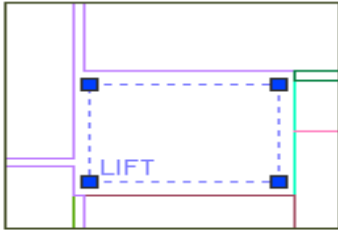
### Shortcut Command : LFT

### How to draw :

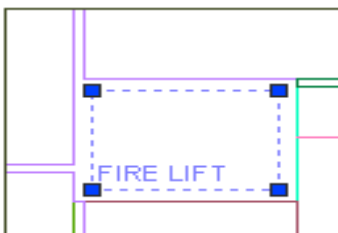
### Lift :-

- Following rules will be applied on the objects of Lift layer
- Lift area
- No of lift
- width
- height
- Capacity
- Free from FSI(paid & unpaid)
- Taken in FSI
- Hydraulic lift
- Fire lift
- Precautions to be taken –
- Draw poly line properly and give name to this object from “Mark → LIFT ” Option?

- If this polyline has not been drawn and named correctly then all above rules will not get checked



Lift



Fire Lift

### ***\_LIG***

#### **Description :**

Draw a “\_LIG” layer as poly line to show area of LIG units.

### ***\_Location Plan***

#### **Description :**

Location 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**

## \_MainRoad

### Description :

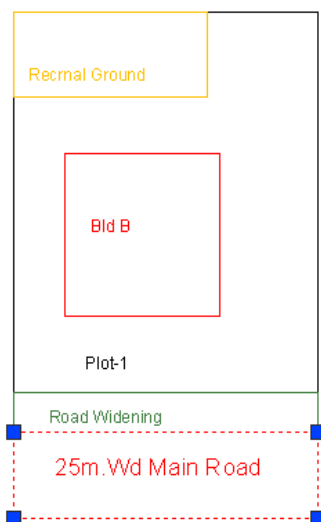
Draw a MainRoad as a closed polyline which is abutting the Plot Boundary . On the site that road is any type of road,such as any highway, street , lane, etc. over which the public have a right of passage or access or have passed and had access uninterruptedly for a specified period, whether existing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

### Shortcut Command : R1

### How to draw : -

### \_Mainroad:-

- Following rules will be applied on the objects of mainroad layer
- Mainroad Width
- Margin
- Building height
- Zone
- Rewas projection
- Precautions to be taken –
- Draw polyline correctly
- Give name to this object in same layer as that of object
- If this polyline has not been drawn and named correctly then all above rules will not get checked





### ***\_MarginLine***

#### **Description :**

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

### ***\_Nala***

#### **Description :**

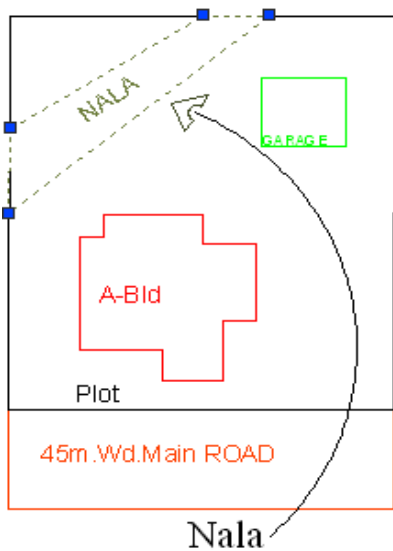
Draw Nala polygon on this layer.

#### **Shortcut Command : R4**

#### **How to draw : -**

### **\_Nala:-**

- **Following rules will be applied on the objects of Nala layer**
- Deduction
- between nala to building Distance check
- **Precautions to be taken -**
- Draw polyline correctly
- Give name to this object in same layer as that of object
- If this polyline has not been drawn and named correctly then all above rules will not get checked



### ***\_NETPLOT***

#### **Description :**

No need to draw NETPLOT. This layer is not provided for users. AutoDCR uses '\_NETPLOT' layer for its own internal use.0

### ***\_NDZ:-***

#### **Description : -**

No Development zone area if any inside Plot Boundary to be drawn on this layer. And it should be drawn inside the Plot Boundary with text on \_NDZ layer.

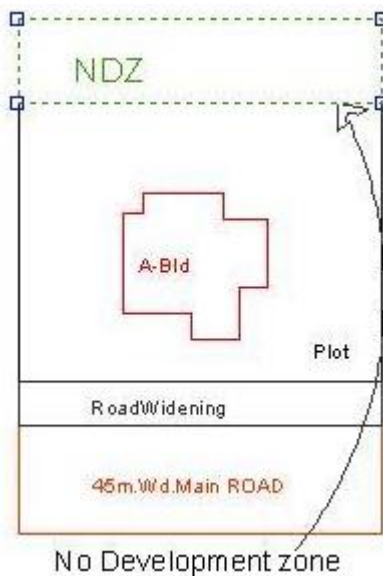
#### **Shortcut Command : NDZ**

#### **How to draw : -**

### ***\_NDZ:-***

- **Following rules will be applied on the objects of NDZ layer**
- Reserve area
- Deduction and additional in net Plot Boundary area
- **Precautions to be taken –**
- Draw polyline correctly
- Give name to this object in same layer as that of object

- If this polyline has not been drawn and named correctly then all above rules will not get checked



### **\_NotInPossession :-**

#### **Description :**

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

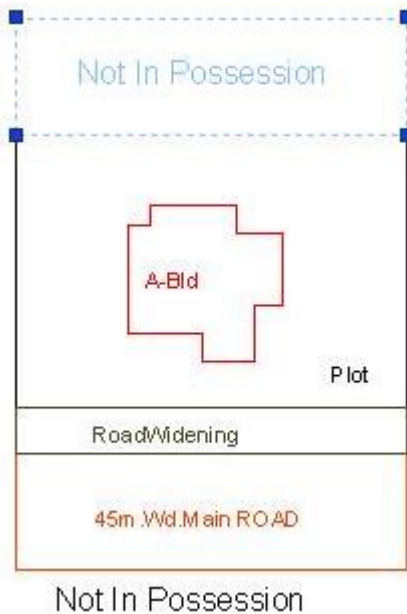
#### **Shortcut Command: NIP**

#### **How to draw : -**

### **\_NotInPossession:-**

- **Following rules will be applied on the objects of NotinPossesstion layer**
- **Deduction**
- **Precautions to be taken -**

- Draw polyline correctly
- Give name to this object in same layer as that of object
- If this polyline has not been drawn and named correctly then all above rules will not get checked



### ***\_OSReservation***

#### **Description :**

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

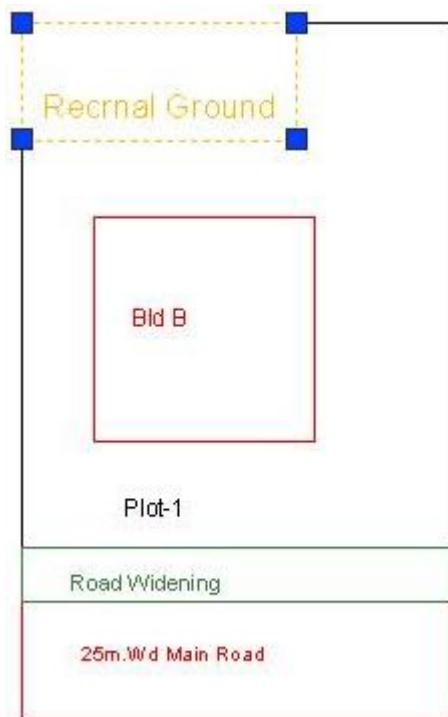
#### **Shortcut Command : OSR**

#### **How to draw : -**

#### ***\_OSReservation :-***

- **Following rules will be applied on the objects of OSReservation layer**
- Balance Plot
- Deduction in area calculation
- Minimum OSReservation area
- Plot area in side OSReservation
- **Precautions to be taken –**

- Draw polyline correctly
- Give name to this object in same layer as that of object
- If this polyline has not been drawn and named correctly then all above rules will not get checked



## \_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.

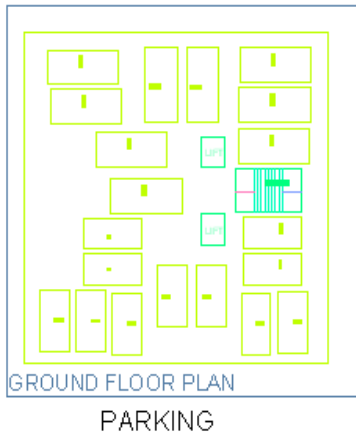
On this layer, you can group and insert any number of parking

Parking	Name
Car Large	CP-L
Car Small	CP-S
Car	CP
Scooter	SC
Cycle	CY
Transportation vehicle	TV
Visitor's Parking ( Car )	VP

**How to draw : -**

Parking:-

- **Following rules will be applied on the objects of Parking layer**
- Parking area
- Staircase
- Lift
- Height
- Size
- Car, scooter, cycle, transport vehicle, visitor parking, ambulance
- **Precautions to be taken -**
- Draw polyline correctly
- Give name to this object in same layer as that of object
- If this polyline has not been drawn and “Insert → parking” correctly then all above rules will not get checked



## *\_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'.

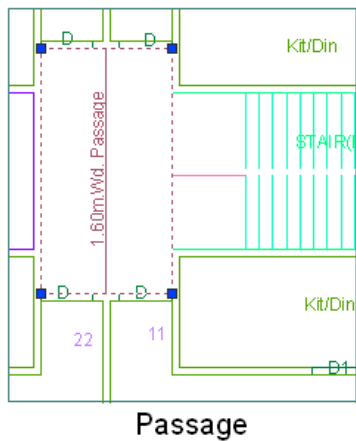
### **Shortcut Command : PAS**

How to draw: -

### *\_Passage*:-

- Following rules will be applied on the objects of Passage layer
- Passage Width
- Deduction
- Taken in FSI
- Center line
- Precautions to be taken -
- Draw polyline correctly.
- Give name to this object from "Mark → Passage" option (From PreDCR Menu).

- If this object has not been marked properly then it won't be checked.



## 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

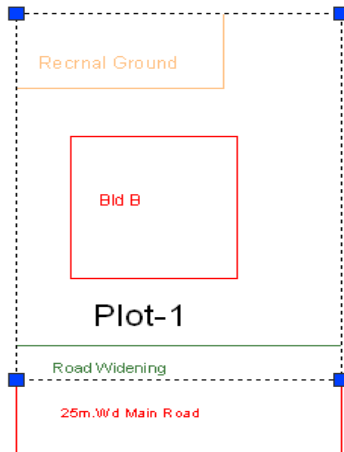
### How to draw :-

### Plot:-

- Following rules will be applied on the objects of Plot layer
- Minimum & maximum Plot area
- FSI
- Amenity
- Recreational ground
- Internal road
- Reserve area
- Surrender to corporation
- Access road
- Road wideing
- Encroached area



- Pathway
- D.P road
- **Precautions to be taken –**
- Draw polyline correctly
- Give name to this object in same layer as that of object
- If this polyline has not been drawn and named correctly then all above rules will not get checked



## ***\_Podium***

### **Description :**

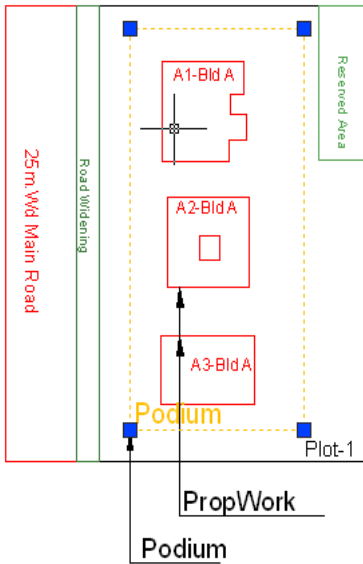
Podium shall be drawn on '\_Podium' layer as a closed polyline. Podium should be inside Plot Boundary covering proposed works if any.

### **Shortcut Command : POD**

### **How to draw :-**

### ***\_Podium:-***

- **Following rules will be applied on the objects of Podium layer**
- Parking
- between podium to Plot Boundary boundary Distance check
- **Precautions to be taken –**



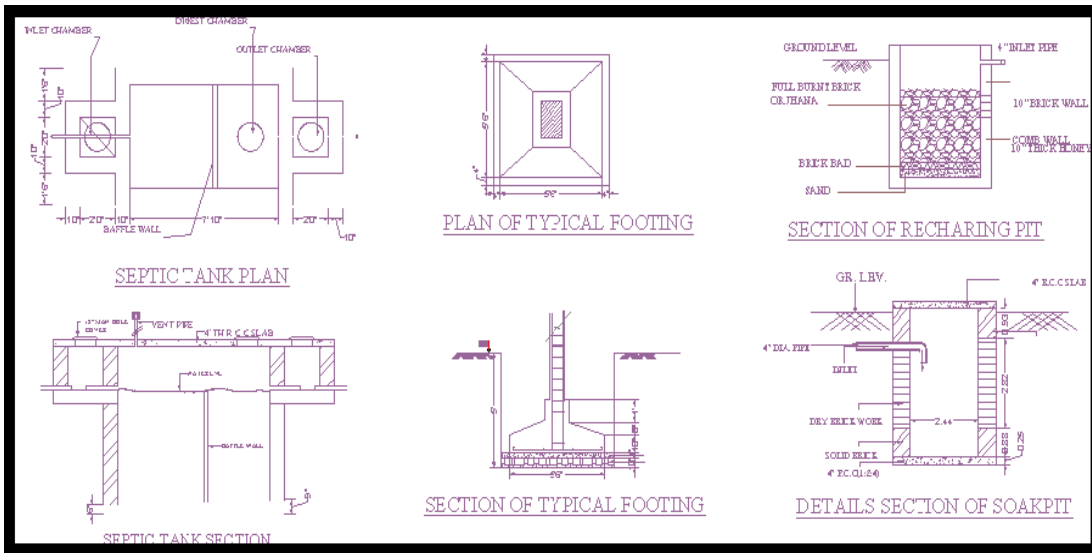
\_PrintAdditionalDetail

**Description:**

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: ADET**

**How to draw:**



## PropWork

### Description :

Proposed Work is a building profile/outline and shall be drawn inside Plot Boundary. all detail Building plans (inside building polyline ) of all PWork( inside Plot Boundary 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 Boundary. Usually they can be placed inside either Common Lift 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.

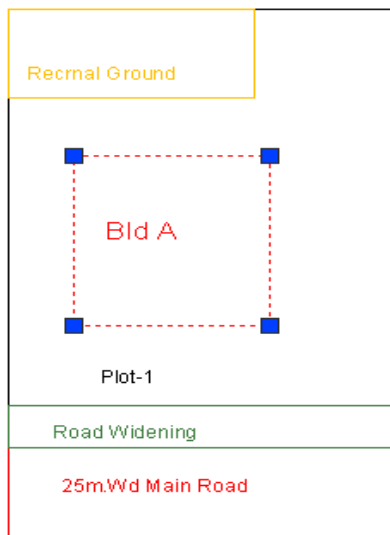
### Shortcut Command:- PW

### How to draw :-

## PropWork:-

- **Following rules will be applied on the objects of PropWork layer**
- Margin
- Coverage area
- Propwork to Propwork distance
- Propwork to parking distance

- Electrical line distance
- electric sub-station distance
- Septic tank
- covered garage distance
- Railline
- **Precautions to be taken –**
- Draw poly line properly and give name to this object from “Assign Name → Building & PropWork” Option?
- If this polyline has not been drawn and named correctly then all above rules will not get checked



### *\_RailLine*

#### **Description :**

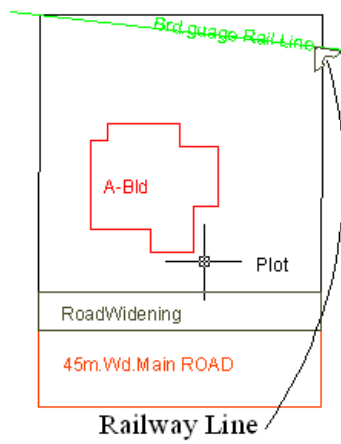
Railway line shall be drawn as a non closed polyline with some text indicating gauge of rail line over it.

#### **Shortcut Command : L2**

#### **How to draw : -**

#### *\_RailLine:-*

- Following rules will be applied on the objects of Railline layer
- Gauge
- Precautions to be taken –
- Draw polyline correctly
- Give name to this object in same layer as that of object
- If this polyline has not been drawn and named correctly then all above rules will not get checked



## ***\_Ramp***

### **Description :**

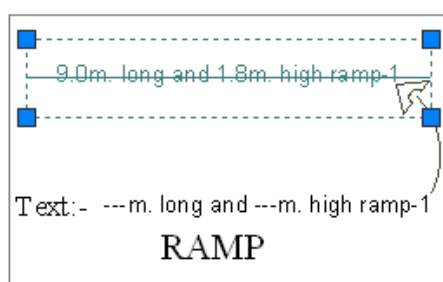
Draw a Ramp poly as a closed polyline in floor plans and/or Plot Boundary and section. Naming convention for ramp is "---m. long and ---m. high ramp-1". give unique name to each ramp.

### **Shortcut Command :- RP**

### **How to draw : -**

### ***\_Ramp:-***

- Following rules will be applied on the objects of Ramp layer
- Width
- Slope
- Precautions to be taken –
- Draw polyline correctly
- Give name to this object in same layer as that of object
- If this polyline has not been drawn and named correctly then all above rules will not get checked



### ***\_RefugeArea:-***

#### **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.

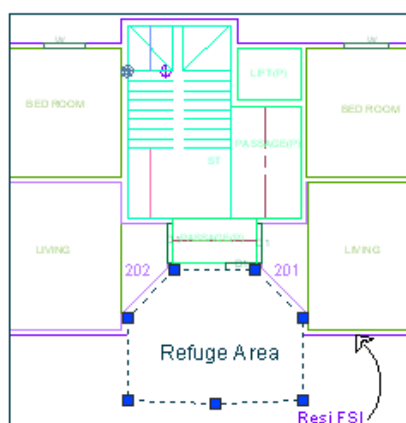
#### **Shortcut Command :**

#### **How to draw :**

### ***\_RefugeArea:-***

- Following rules will be applied on the objects of RefugeArea layer
- Area
- Width

- Height
- Precautions to be taken –
- Draw polyline correctly
- Give name to this object in same layer as that of object
- If this polyline has not been drawn and named correctly then all above rules will not get checked



Refuge Area

### *\_ReservArea*

#### Description :

Reserved area (Reservation area in Development plan) shall be drawn on this layer if present in proposal. This can be any area reserved for/by Authority for future.

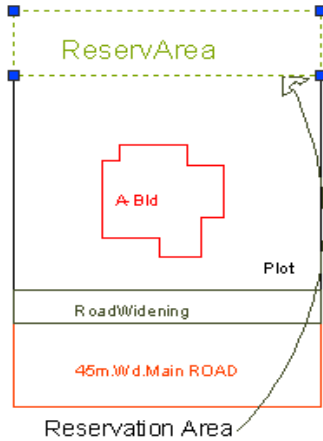
#### Shortcut Command : RSA

#### How to draw :-

#### *\_ReservArea*:-

- Following rules will be applied on the objects of ReservArea layer
- Reserve area
- Deduction
- Precautions to be taken –
- Draw polyline correctly

- Give name to this object in same layer as that of object
- If this polyline has not been drawn and named correctly then all above rules will not get checked



## *\_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**

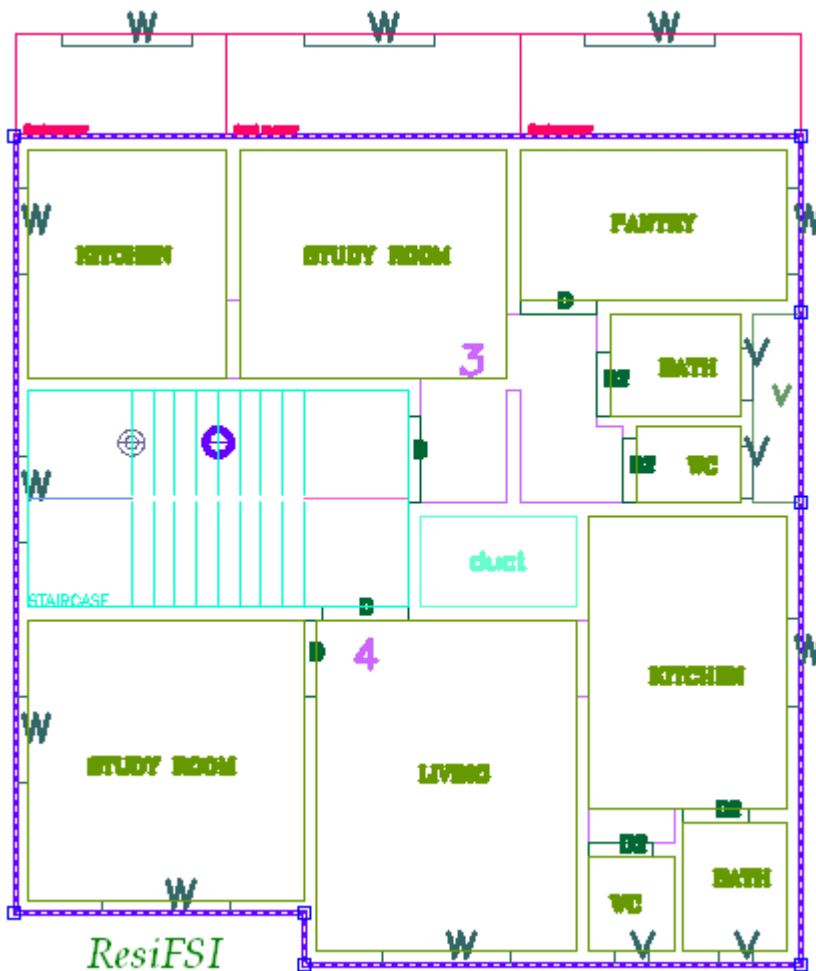
### **How to draw : -**

### *\_ResiFSI:-*

- **Following rules will be applied on the objects of ResiFSI layer**
- Permissible Balcony area
- Built up area
- Permissible FSI
- Carpet area
- Staircase
- Room area
- Arch projection
- Chowk



- Ventilation shaft
- Passage
- Lift
- Terrace
- Converge check
- Precautions to be taken –
- Draw polyline correctly
- Give name to this object in same layer as that of object.
- If this polyline has not been drawn and named correctly then all above rules will not get check.



### \_RoadWidening

#### **Description :**

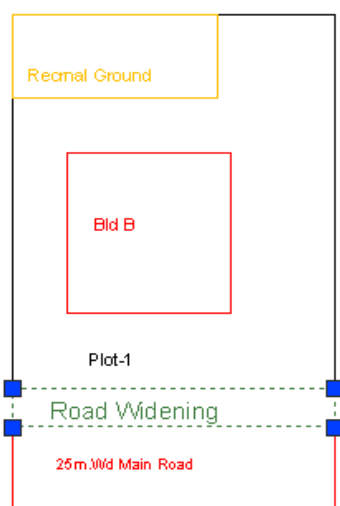
Draw a road widening polyline as a closed polyline which the Plot Boundary area is going to the road, that area should be drawn on this layer. It should be inside the Plot Boundary polyline.

## Shortcut Command : R5

How to draw : -

### RoadWidening:-

- Following rules will be applied on the objects of RoadWidening layer
- In Area calculation
- Deduction
- Addishnal
- Margin
- Precautions to be taken -
- Draw polyline correctly
- Give name to this object in same layer as that of object.
- If this polyline has not been drawn and named correctly then all above rules will not get check.



### Room

#### Description :

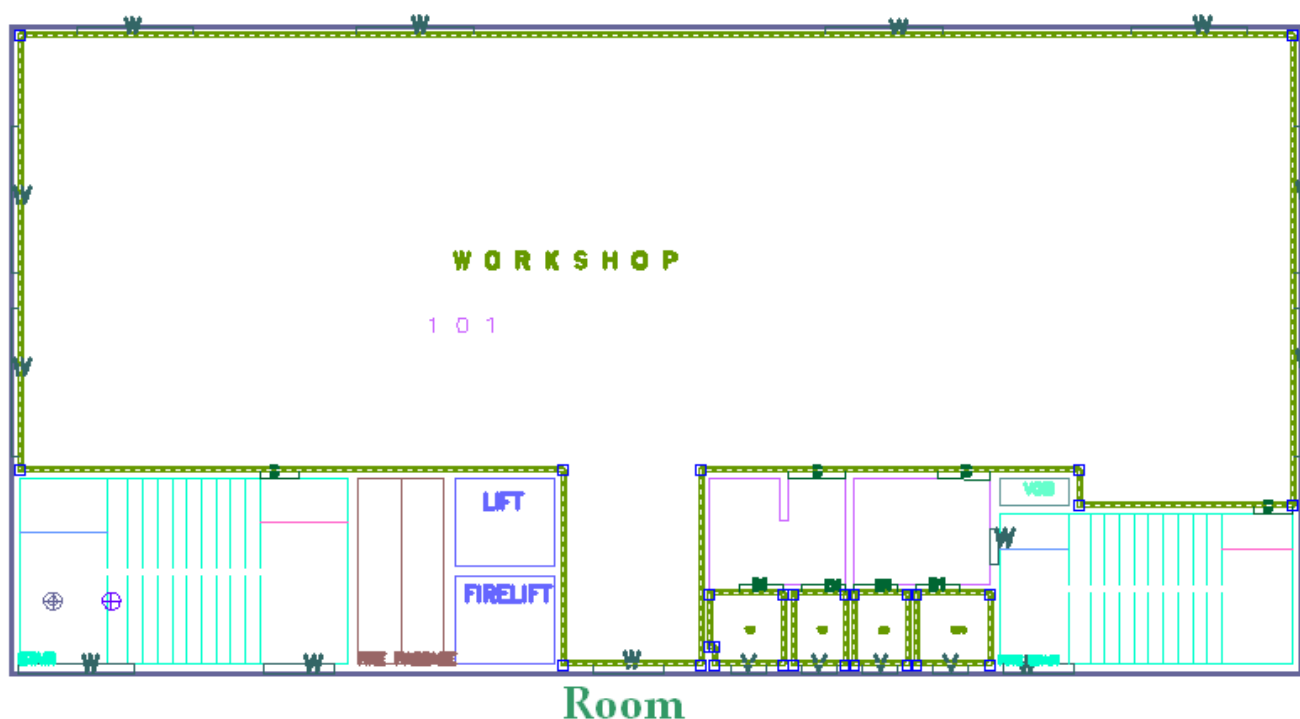
A closed polyline on Room layer represents a room. This closed polyline contain a text. This text must be on Room layer. Room to be marked by assigning them names using **Assign Name-> room** option from PreDCR menu.

#### Shortcut Command : RU

How to draw : -

## Room:-

- Following rules will be applied on the objects of room layer
- Room size
- Width
- Depth
- Door
- ventilation
- Balcony
- Projection
- Precautions to be taken –
- Draw poly line properly and give name to this object from “Assign Name → “ROOM” Option?
- If this polyline has not been drawn and named correctly then all above rules will not get check.



## Right-of-Way

Description : -

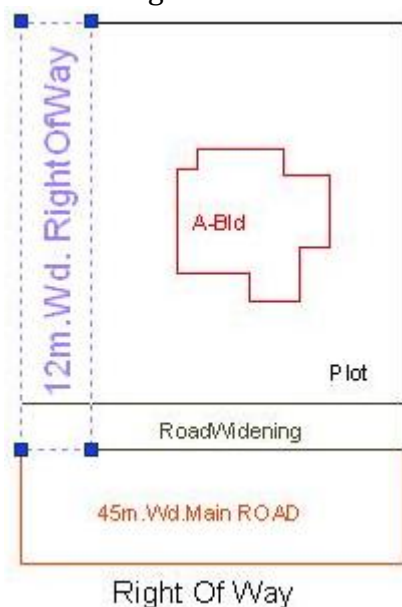
Draw a closed polyline on “\_RightOfWay” to represent a Right Of way and text inside it representing its width. Layer should be inside or intersecting with Plot Boundary poly

**Shortcut Command : ROW**

How to draw :-

### RightOfWay:-

- Following rules will be applied on the objects of RightofWay layer
- Width
- Plot Boundary
- Precautions to be taken -
  - Draw polyline correctly
  - Give name to this object in same layer as that of object.
  - If this polyline has not been drawn and named correctly then all above rules will not get check.



### Sanitation

#### Description :

Draw any sanitation entities on this layer. (E.g. , Kitchen sink etc..) Mark those entities by using **PreDCR -> Insert -> Sanitation.**

**Shortcut Command : SND**

### Section

#### Description :

Draw a Section polyline as a closed poly of section boundary which contain all floors with stair cabin, Lift 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, Lift machine room, Ventilation shaft, water tanks etc. as shown in the figure.

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

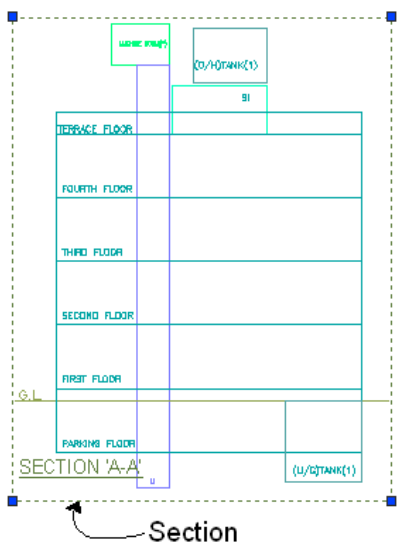
This section poly will present inside the building poly.

### Shortcut Command : SEC

#### How to draw : -

#### Section:-

- Following rules will be applied on the objects of Section layer
- Name
- All Floorinsection
- Ground level
- Lift height
- Staircase cabin
- Margin
- Tenement number
- Parking
- Per floor area
- Building height
- Water tank
- Precautions to be taken -
- Draw polyline correctly
- Give name to this object in same layer as that of object.
- If this polyline has not been drawn and named correctly then all above rules will not get check.



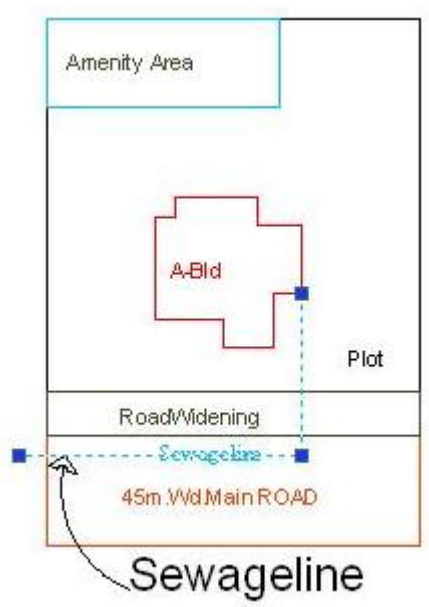
### SewagLine

**Description: -**

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

**Shortcut Command : L5**

**How to draw : -**



## *\_SitePlan*

### **Description :-**

Site 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: - STP**

## *\_SpecialUseFSI*

### **Description :-**

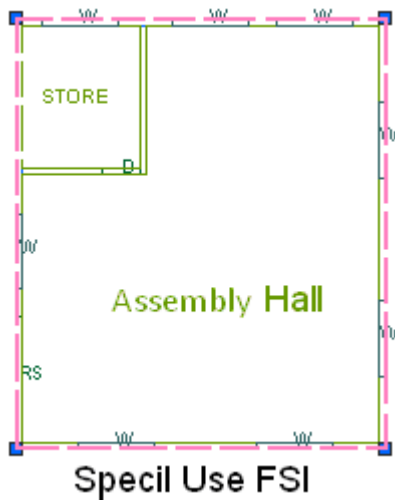
FSI ploy for all other building uses like educational, institutional etc. except ResiFSI, CommFSI & IndFSI use should be drawn on this layer.

**Shortcut Command : SUF**

### **How to draw :-**

### **SpecialFSI:-**

- **Following rules will be applied on the objects of ResiFSI layer**
- Permissible Balcony area
- Built up area
- Permissible FSI
- Carpet area
- Staircase
- Room area
- Arch projection
- Chock
- Ventilation shaft
- Passage
- Lift
- Terrace
- Converge check
- **Precautions to be taken -**
- Draw polyline correctly
- Give name to this object in same layer as that of object.
- If this polyline has not been drawn and named correctly then all above rules will not get checked.



### *\_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**

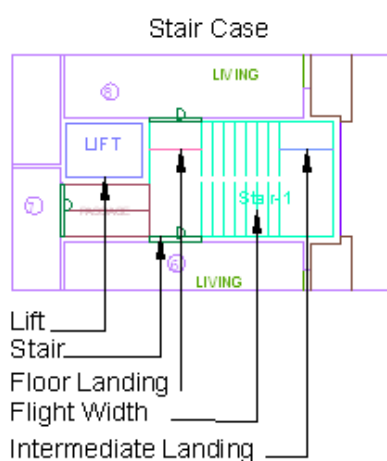
#### **How to draw : -**

#### **\_Staircase:-**

- **Following rules will be applied on the objects of staircase layer**
- At Mark on depend below rules check
- Staircase area
- Tread
- No. On Flight
- Rise height



- Floor landing
  - Midlanding
  - Flight width
  - No of rise
  - Ventilation
  - Free from FSI (paid & unpaid)
  - Taken in FSI
  - Fire staircase
  - **Precautions to be taken –**
- Draw polyline correctly.
  - Give name to this object from “Mark → STAIRCASE” option (From PreDCR Menu).
- If this polyline has not been drawn and marked correctly then all above rules will not get checked.



## **\_SubStructure**

### **Description :**

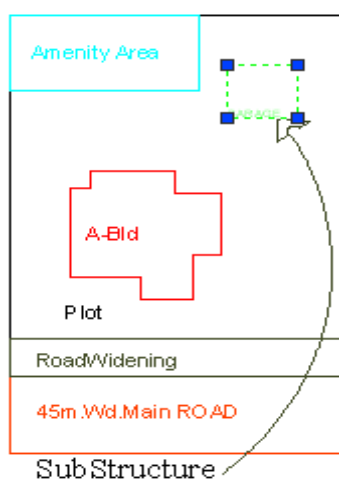
Draw various substructures on "\_SubStructure" layer as a closed polyline. And mark it according to the requirement as **Mark -> Substructure -> Society Office**, from PreDCR menu. Sub-structures can be drawn inside Plot Boundary or in floor plans.

### **Shortcut Command : SSTR**

### **How to draw : -**

### **\_Substructure:-**

- Following rules will be applied on the objects of Substructure layer
- Depend on mark
- Proposwork distant
- Deduction
- Addition
- Substructure area
- Width
- Depth
- Allowed in margin Front, Rear, Side
- Distains from main road
- Distains from PlotBoundary boundary
- Distains from Building
- Precautions to be taken –
- Draw polyline correctly.
- Give name to this object from “Mark → Projection” option (From PreDCR Menu).
- If this object has not been marked properly then it won't be checked.



## \_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.

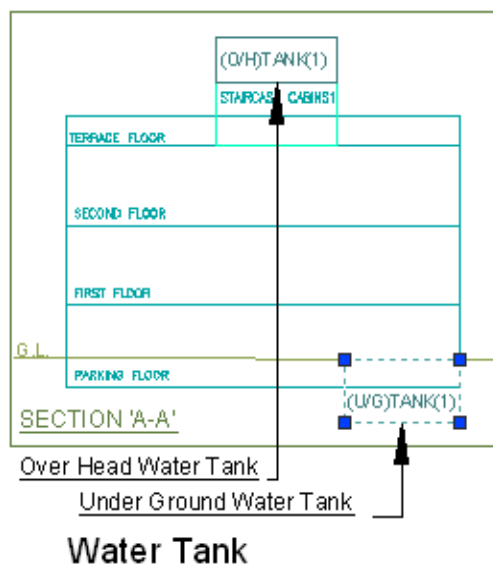
Overhead tank can be drawn in TERRACE FLOOR. Usually it is drawn on StairCase poly in TERRACE FLOOR.

### Shortcut Command : TNK

#### How to draw : -

#### \_Tank:-

- Following rules will be applied on the objects of Tank layer
- Tank area
- Width
- Depth
- Capacity
- Precautions to be taken -
- Draw poly line properly and give name to this object from “Assign Name → “TANK” Option?
- If this polyline has not been drawn and named correctly then all above rules will not get check.



### *\_TempStructure*

#### **Description:**

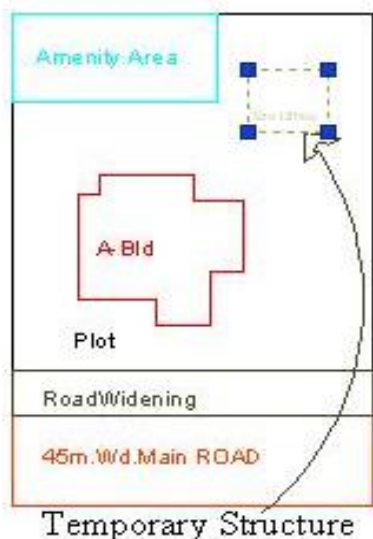
Area for temporary structures to be drawn as closed polyline with text on this layer

#### **Shortcut Command : TMPS**

#### **How to draw : -**

#### **\_TempStructure:-**

- Following rules will be applied on the objects of TempStructure layer
- Area check
- Sent to bpams
- Precautions to be taken -
- Draw polyline correctly
- Give name to this object in same layer as that of object.
- If this polyline has not been drawn and named correctly then all above rules will not get checked.



**\_Terrace**

**Description:**

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

Terrace can be present in:

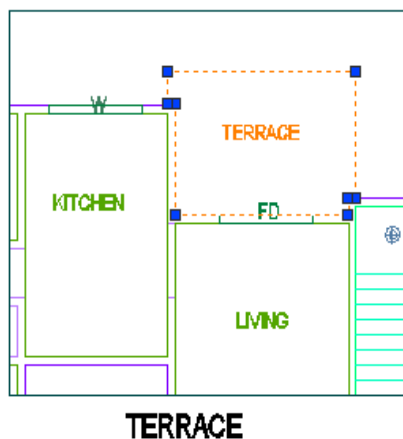
<b>Plot Boundary</b> : It must overlap with PWork
<b>Floor</b> : It must be outside the ResiFSI.

**Shortcut Command : TER**

**How to draw : -**

**\_Terrace:-**

- Following rules will be applied on the objects of Terrace layer
- Deduction
- Addition
- AlterNet terrace
- Covered terrace
- Precautions to be taken –
- Draw polyline correctly
- Give name to this object in same layer as that of object.
- If this polyline has not been drawn and named correctly then all above rules will not get checked.



### *\_Tree*

#### **Description:**

Draw or insert Tree in plot on *\_Tree* layer if it is present in plot.

User can be insert tree block directly by using predcr menu bar insert option.

#### **Shortcut Command: TREE**

### *\_VentilationShaft*

#### **Description :**

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

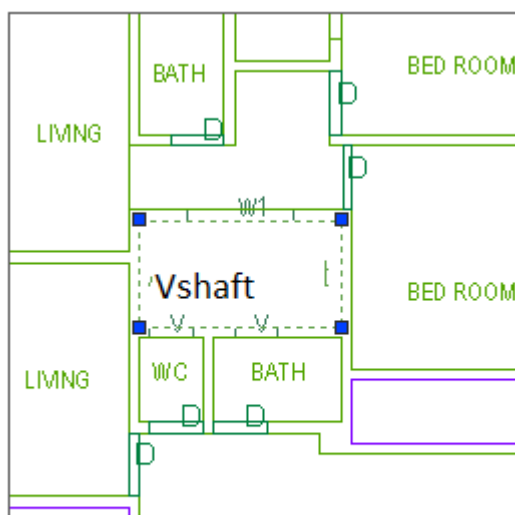
#### **Shortcut Command:- VS**

#### **How to draw : -**

#### ***\_VentilationShaft:-***

- Following rules will be applied on the objects of VentilationShaft layer
- Area
- Width
- Ventilation
- Precautions to be taken –
- Draw polyline correctly
- Give name to this object in same layer as that of object

- If this polyline has not been drawn and named correctly then all Above rules will not get checked.  
Give name to this object in same layer as that of object



Ventilation shaft

### ***\_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.

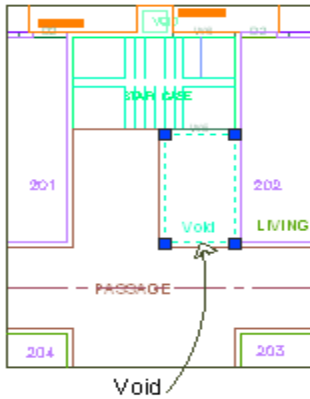
#### **Shortcut Command : VD**

#### **How to draw : -**

#### ***\_Void:-***

- **Following rules will be applied on the objects of Void layer**
- Only Deduction

- **Precautions to be taken -**
- Draw polyline correctly
- Give name to this object in same layer as that of object.
- If this polyline has not been drawn and named correctly then all above rules will not get checked.



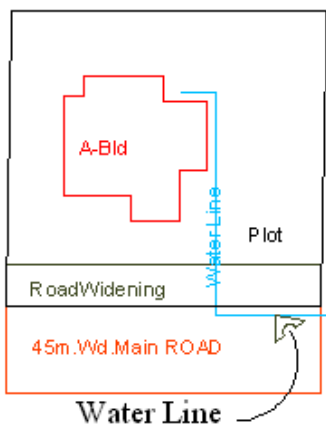
### **\_WaterLine**

#### **Description :**

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

#### **Shortcut Command : WL**

#### **How to draw : -**



### **\_Window**





## Tool

### *All/Remove Tool Tip (PDCRTOOLTIP):*

This command will activate the tool tips for PreDCR layers.

### *Show Only DCR Layers:*

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):*

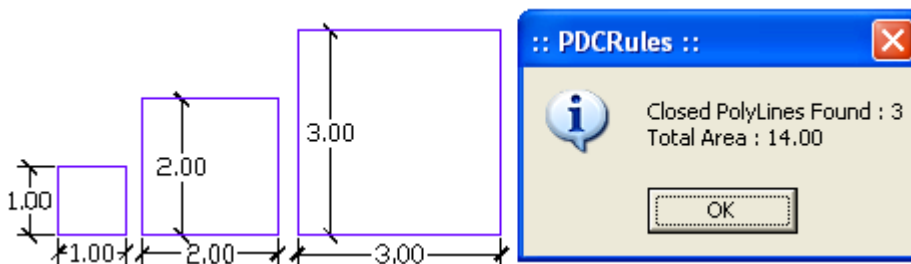
This command will turn off all the DCR and PreDCR layers in the drawing.

### *Show All layers (PDCRSAL):*

This command will turn on all layers in the drawing.

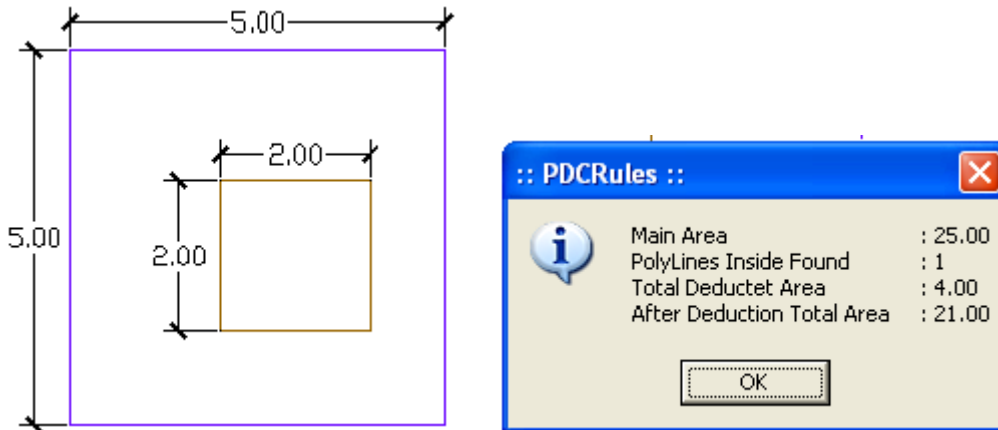
### *Calculate Total Area (PDCRCTA):*

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.

*Convent Arc in Plotline*

*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 (PDCRFOB):*

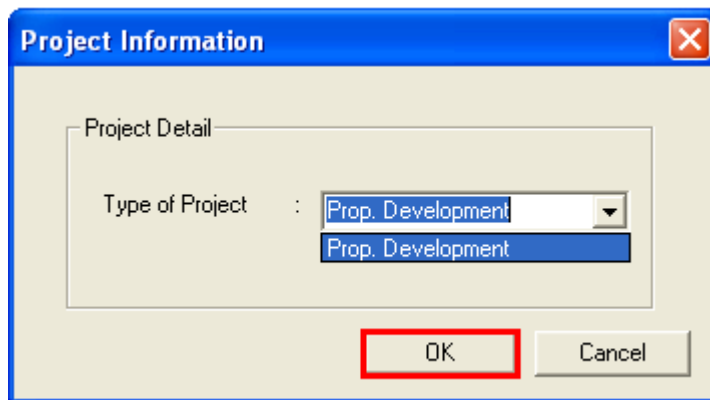
This command zoom & highlight object of a given handle.

## Commands

### *Create New Project (PDCRNWP):*

This command will Create New project for current drawing.  
Here you have to select Type of Project as  
Proposed Development.

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



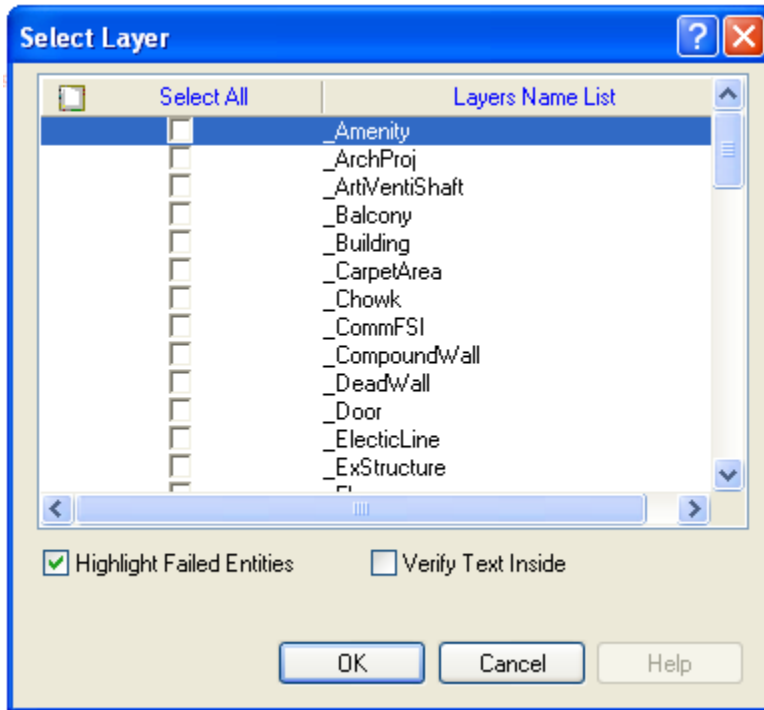
### *Create AutoDCR Layers (PDCRCL):*

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

### *Verify Drawing:*

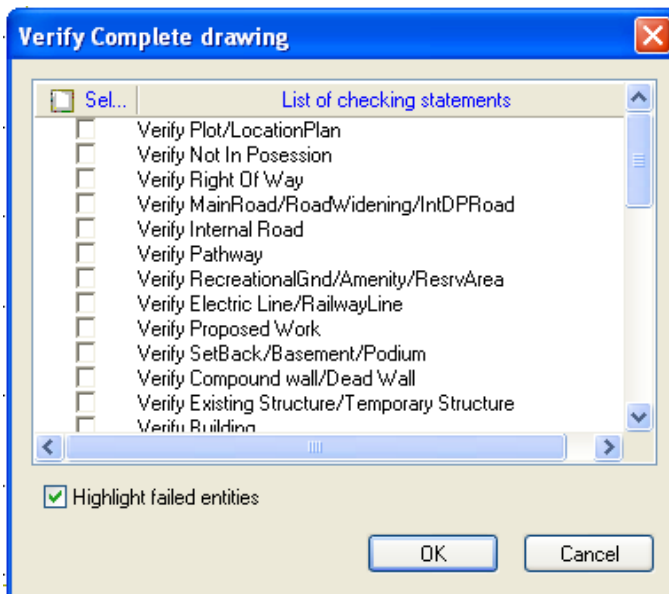
This command will verify the current drawing as required by DCR specifications.

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

**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->Stair Case-> Common Stair (PDCRSCES):** Mark> Common Stair

**Mark 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--> Fire Lift (PDCRFL):** Mark Lift as fire if fire lift is provided.

**Mark->Lift--> Hydraulic (PDCRLHTP)> Free from FSI OR Taken in FSI >** Mark Lift as

Hydraulic & it is free from FSI or taken in FSI.

Mark->Lift--> **Unmark (Default)** (Default) (PDCRLTP) > Mark->Lift--> Unmark (Default)

**Mark->Passage->Open Covered** (PDCRPOCP): Mark passage > as a Open Corridor

- 3 Mark->passage-> **Fire Escape Passage** or **Unmark (default)** (PDCRPSUP): mark passage as a fire escape passage or Unmark (default)
- 4 Mark->passage-> **Unmark (Default)** (PDCRPSUP): mark passage as a Unmark (Default)

**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->Spitted Tenement** (PDCRMSPLTT): Mark Carpet Area as Spitted tenement.

**Mark->Balcony->Enclosed Balcony** (PDCRMENCBL): Mark Balcony as enclosed balcony.

Mark->Balcony->**Unmark (Default)** (PDCRUMENCBL): Unmark the marked balcony.

Mark->**Parking->One stacked, tow stacked three stacked four stacked** (PDCRUMENCBL): mark parking as a one stacked, tow stacked three stacked four stacked

**Mark->Projection-- >**

Mark->Projection->**F.Bed** (PDCRMBPROJ): Mark Projection as Flower Bed

Mark->Projection->**Chhajja/Cornice/Whether shade** (PDCRMCJPROJ): Mark Projection as Chhajja/Cornice/Whether shade

Mark->Projection->**C .B ->** (PDCRMLPROJ): Mark Projection as C.B in floor plan as well as in section .

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

Mark->Projection->**Canopy/ Porch** (PDCRMCBPROJ): Mark Projection as Canopy/ Porch

Mark->Projection->**Verandah** (PDCRMCBPROJ): Mark Projection as a Verandah

Mark->Projection-> **Normal (Default)** (PDCRUMPROJ): Mark Projection as a Normal (default) Architectural projection.

**Mark->Road widening Taken in fsi or Unmark (default)** (PDCRMRVIFSI): Mark-> Road



## Markings

widening as a Taken in fsi or Unmark (default)

**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/ Electric Sub-Station (PDCRMER ):** Mark Substructure as an Electric meter room/ 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 -> **Garage (PDCRMGRJ):** Mark Sub Structure as a 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 -> **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-> (Above Ground) (PDCRMPR):** Mark Sub Structure as a Pump House (Above Ground)

Mark->Substructure ->**Pump House-> (Below Ground) (PDCRMPR):** Mark Sub Structure as a Pump House (Below Ground)

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

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

Mark->Substructure -> **Video Room (PDCRMSPT):** Mark Sub Structure as a Video Room

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

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

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

Mark->Substructure -> **Cycle/Scooter Shelters** (PDCRMSPT): Mark Sub Structure as a Cycle/Scooter Shelters

Mark->Substructure -> **Weigh Bridge** (PDCRMSPT): Mark Sub Structure as a Weigh Bridge

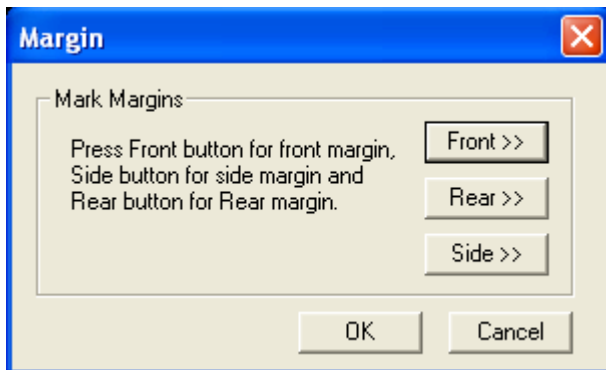
Mark->Substructure -> **Open Chemical Plant** (PDCRMSPT): Mark Sub Structure as a Open Chemical Plant

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

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

Mark->Substructure -> **Explosive Storage** (PDCRMSPT): Mark Sub Structure as a Explosive Storage

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



## Insert entities

**Insert->Parking-> Car L (2.5 X 5.5)** (PDCRICP) -> Use this command to insert car-parking poly of. at selected point.

**Insert->Parking-> Car S (2.3 X 4.5)** (PDCRICP) -> Use this command to insert car-parking poly of. at selected point

**Insert->Parking-> Car S (3.5 X 7.5)** (PDCRICP) -> Use this command to insert car-parking poly of. At selected point

**Insert-> Parking-> Scooter (PDCRISP)** ->Use this command to insert Scooter parking poly at selected point.

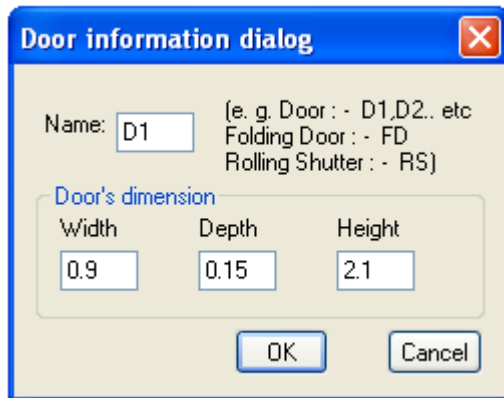
**Insert-> Parking-> Cycle (PDCRICY)** ->Use this command to insert Cycle parking poly at selected point.

4. **Insert->Parking-> Transport Vehicle (PDCRITV)** ->Use this command to insert parking Transport Vehicle poly at selected point.

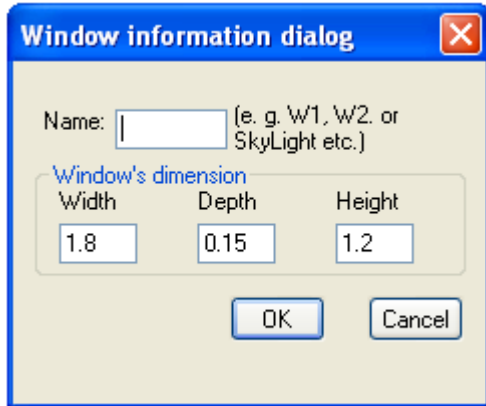
5. **Insert->Parking->Visitors Parking->Car (PDCRIVP)** -> Use this command to insert visitor car parking poly at selected point

6. **Insert->Parking-> Loading/Unloading (PDCRIVP)** -> Use this parking -> Loading/Unloading

7. **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.



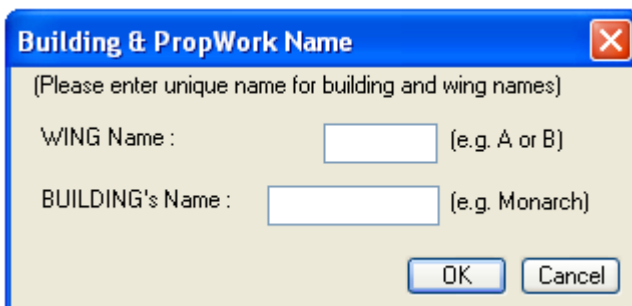
**9. Insert-> Text (PDCRIWC):** Use this command to insert sanitation text at selected point. Ex. Urinal, Wash basin Drinking water, washing tap, etc..... which is mark on then insert text by using sanitation text marking from insert menu.

**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. Lift or Stair) of all the floors.

## 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.

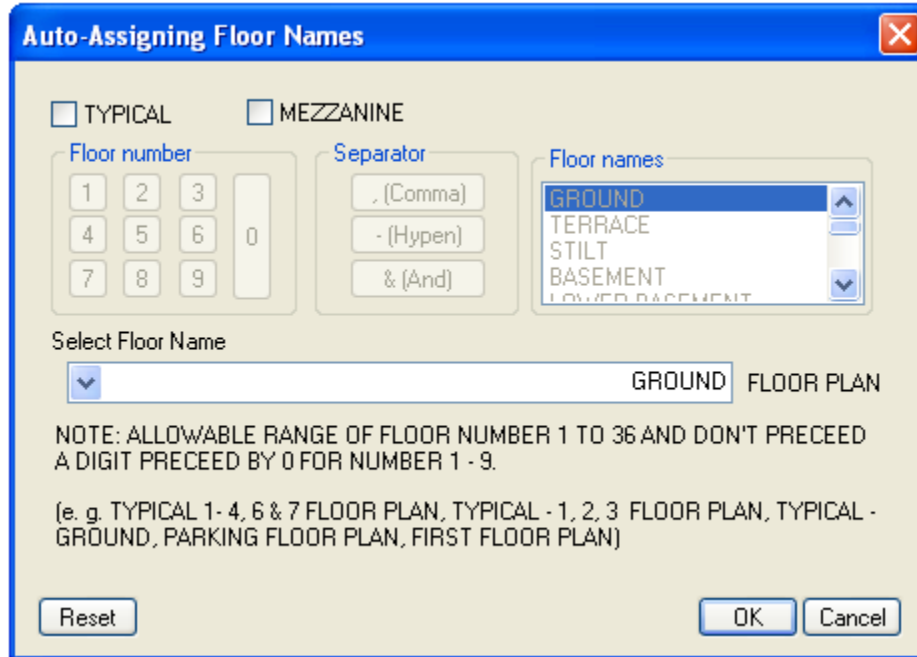


**Assign Name->Tank (PDCRTNKNAM):** Use this command to give name for Tank poly and its corresponding tanks.

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

### 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):

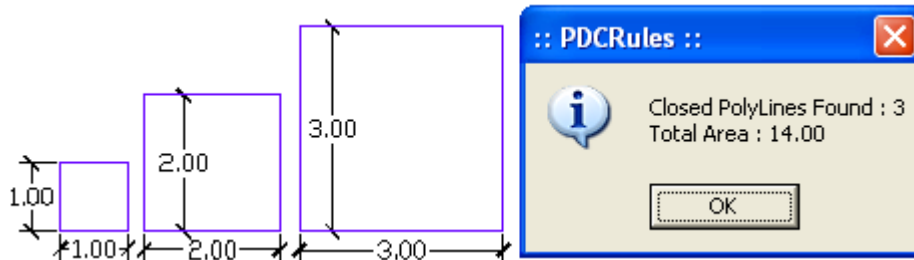
This command will turn off all the DCR and PreDCR layers in the drawing.

### Show All layers (PDCRSAL):

This command will turn on all layers in the drawing.

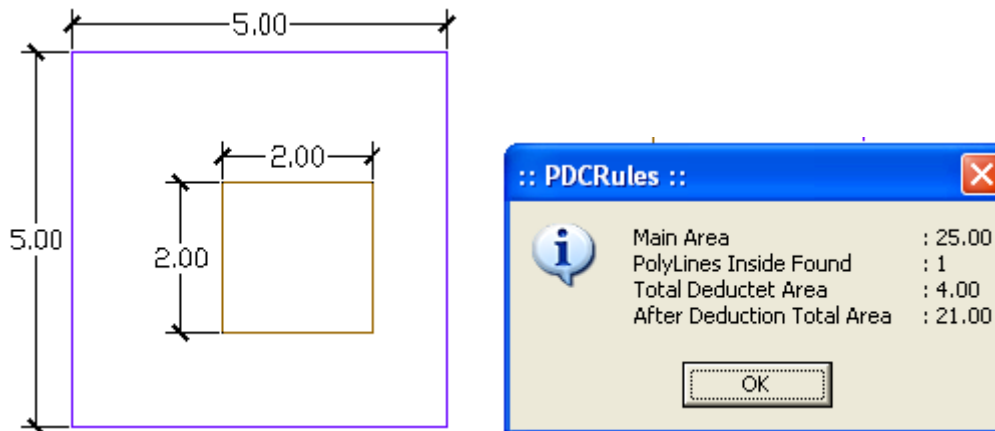
#### Calculate Total Area (PDCRCTA):

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):

## PREDCR SHORT-CUT COMMANDS

Layer name	Description	Naming Convention	short command
_PrintAdditionalDetail	Description: - Any additional details apart from details provided on all other PreDCR layers can be drawn on this layer. These details may not be necessary for actual scrutiny process but can be used as additional supporting information.		ADET



_Amenity	Draw Amenity space as a closed polyline which is reserve for utilities, services and conveniences.		AMN
_ArtiVentiShaft	Description: - Draw ArtiVentilation shaft/duct area as a closed Polyline with Text. Inside FSIArea on _ArtiVentiShaft Layer. Only those shafts from which ventilation for habitable room is not taken should be drawn on this layer.		AVS
_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 Boundary & other projections will come with floor plans.	Mark -> Projections -> Chajja	AP
_AutoFireAlarm	Fire installation detail is should be shown on this layer		AFA
_Auto Sprinkler	Fire installation detail is should be shown on this layer		

<p>_Balcony</p>	<p>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.</p>	<p>If Balcony is Enclosed Than Mark -&gt; Balcony -&gt; Enclosed Balcony</p>	<p>BL</p>
<p>_Building</p>	<p>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.</p>	<p>Naming Convention will be provided by Tool&gt;Assign Name A (Bldg.Name) inside Bldg.Poly &amp; A-1 (Bldg.Name) inside Pwork Poly</p>	<p>BLD</p>
<p>_Carpetarea</p>	<p>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.</p>	<p>If Carpetarea is Splitted – Tenement. Mark-&gt; Carpetarea-&gt; normal (default)</p>	<p>CPT</p>

_ChemStorageBoundary	Fire installation detail is should be shown on this layer		
_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 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.	CMFS
_CompoundWall	Closed polyline of compound wall to be drawn on this layer overlapping Plot Boundary .	1.5m high compound wall	CW
_Down Comer	Fire installation detail is should be shown on this layer		
_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
_DryRiser	Fire installation detail is should be shown on this layer		
_Elect line	Electric line will be present in the layout plan and shall pass through Plot Boundary entity as a non closed polyline.	33 KV High Tension Line	L1

	Name electric line shall start with its voltage capacity and text insertion point shall lie on its polyline.		
_ExStructure	Draw a 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
_FireExtinguisher	Fire installation detail is should be shown on this layer		
_FloorInSection	<p>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 <b>Assigned name</b> option for PreDCR tool menu.</p> <ol style="list-style-type: none"> <li>1. Name of each floor section will be same as of floor in plan.</li> <li>2. For one typical floor plan multiple floor section will be there.</li> </ol> <p><b>For e.g.</b> 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</p>		SECF

	"Third Floor Plan" respectively.		
_Floor	<p>Floor poly should be drawn as a closed Polyline with Text on same Layer. This is just a logical Group of all floor Entities.</p> <p>Floor Name: Floor Plan will be automatically link with Section by matching the Floor Name. Hence all names to be given using &lt;Assign Name&gt; function</p>	<p>Naming Convention will be provided by Tool&gt;Assign Name&gt;Floor name</p> <p>Name of floor should be in given format:                      TYPICAL-1,4                      FLOOR PLAN                      TYPICAL-1-5                      FLOOR PLAN                      TYPICAL-2&amp;3                      FLOOR PLAN                      Ground Floor Plan</p>	FLR
_Ground Level	<p>The Ground level line should be drawn as an open polyline in the section poly.</p> <p>Prop.Ht. will be considered from GroundLvl Polyline</p>	No need to give name on this layer.	GL
_HoseReel	Fire installation detail is should be shown on this layer		
_IndFSI	Draw a closed FSI Polyline, which is used as a Industrial Purpose.	No need to give name on this layer.	IFSI

_IntDPRoad	Description: - Draw a DP Road as a closed poly line with Text. (eg : any DProad passing from inside of the Plot Boundary )(Note: Road width must be written at the starting of Text).		R3
_InternalRoad	Draw each Internal Road as a closed Polyline with Centre Line (Ltype-CentreLine) & single text inside it.	7.50 m wd. Internal Road	R2
_Lift	Draw a Lift 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 Lift means a special lift 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 fire lift are provided then use the marking of " Fire >Hydraulic or Unmark (default )	LFT
_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		L3

	this layer.)		
_Main Road	Draw Main Road as a closed Poly with Text, which should be abutting with the Plot Boundary closed Poly. (Note: Road width must be written at the starting of Text)	24.00 m wd. Main Road	R1
_ManulFireAlarm	Fire installation detail is should be shown on this layer		
_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 Boundary area which is not in possession or which is not in proposal to be drawn as a closed polyline on this layer.		NIP
_OtherFireinst	Fire installation detail is should be shown on this layer		
_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/Transport Vehicle/Visitor Parking (Car) OR	PK

		Loading/unloading	
_Passage	<p>Draw a closed polyline on “_Passage” Layer to represent passage with Centre Line (Ltype-CentreLine) &amp; single text inside it.</p> <p>(Note: If Premium for Passage is going to be Paid, Passage should be marked by using Tool "Mark "</p>	<p>Mark &gt; Passage &gt; covered Passage.&gt;</p> <p>Free from FSI or Taken in FSI.</p> <p>Mark &gt; Passage &gt; Open Corridor</p> <p>Mark &gt; Passage &gt; Fire Escape</p> <p>Passage</p>	PAS
_Pathway	<p>Draw pathway as a closed polyline with text specifying its width.eg.1.5 m. wide pathway.</p>		R6
_Plot Boundary	<p>Description: - Draw a Plot Boundary poly as a closed polyline which is a parcel or piece of land enclosed by definite boundaries. A Plot Boundary will contain all Proposed Works (buildings, wings), open space, Internal Roads, Parking etc. The overall Plot Boundary Entity represent a Plan, AutoDCR refers it as 'Layout Plan'. The overall Plot Boundary Entity represent a Plan, AutoDCR refer it as "<b>Layout Plan</b>".</p>		PLT
_Podium	<p>Draw a closed polyline on</p>		POD



	<p>“_Podium“to represent Podium. It should be shown in the layout and not in floor plans</p>		
_PropWork	<p>PWork is a building profile and shall be drawn inside Plot Boundary . Draw a closed polyline for Proposed Work on “_PropWork” Layer.</p>	<p>Tools &gt; Assign Name &gt; Building and PropWork.</p>	PW
_RailLine	<p>Railway line shall be drawn in the layout plan as a Open Poly &amp; Text which insertion point lies on the Polyline. (Note: Railway Gauge must be written at a starting of Text)</p>	<p>_ Meter Gauge Railway Line</p>	L2
_Ramp	<p>Draw a Ramp as a closed polyline with Centreline (L-type-Centre) &amp; Text inside it in Plan.</p>	<p>10.0m long 1.5m high Ramp</p>	RP
_RecreationalGround	<p>Description: - Draw Open space as closed polyline reserved as recreational space on this layer. With text on same layer.</p>		OPS
_RefugeArea	<p>A closed polyline with Text around the refuge area should be drawn on same Layer. Refuge area should be outside overlapped with FSI (ResiFSI, CommFSI) poly.</p>		RFG

_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
_RightOfWay	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 Boundary poly.		ROW
_ReservArea	If there in any Reservation Area in Plot Boundary , it should be drawn as a closed Polyline with Text inside same Layer.		RSA
_RoadWidening	Road Acquisition/Road Widening area shall be drawn as a closed Polyline with Text on same layer inside Plot Boundary Entity. Margin will be generated & checked from Roadwidening 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

_Sewageline	Description: - Drain/Sewage Line: - Sewage line shall be drawn as a 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 closet , Kitchen sink etc..) Mark that entities by using <b>PreDCR -&gt; Insert -&gt; Sanitation</b>		SND
_Separation Wall	Fire installation detail is should be shown on this layer		
_Site Plan	The encapsulating poly around the Site/Key Plan with the Text & Scale inside it.		STP

<p>_StairCase</p>	<p>Total Staircase area should be drawn as a closed polyline with text inside it.                  This Main Stair Poly should contain Intermediate Landing, Floor Landing &amp; Each Tread as an open polyline.                  Intermediate &amp; Floor Landing Poly can be Marked by PreDCR Tool "Mark&gt;Staircase&gt;Int. or Floor Landing"                  (Note: If Premium for Staircase is going to be Paid, Staircase should be marked by using Tool "Mark&gt;Staircase&gt;Free from FSI"</p>	<p>Mark-&gt; Stair Case-&gt; No. of flight &gt;3 Flight or 4 Flight                  Fire Escape Staircase OR                  Fab/Spiral Stair Staircase and                  Common Stair                  Mark-&gt; Staircase Landing-&gt; Flight Width ,                  Intermediate &amp; Floor Landing</p>	<p>STR</p>
<p>_SpecialUseFSI</p>	<p>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.</p>		<p>SUF</p>
<p>_SubStructure</p>	<p>SubStructures which are allowed in Margins or Layout &amp; Free from FSI should be drawn as a closed polyline with text inside it.</p>	<p>Name of the SubStructure can be assigned from                  Mark&gt;SubStructure</p>	<p>SSTR</p>
<p>_Tank</p>	<p>Tank clear size should be drawn as a closed Polyline with Text on this Layer in Floor Plan or Plot Boundary as well as Section with same Text.</p>	<p>Assign Name&gt;Tank</p>	<p>TNK</p>

	(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
_TempStructure	Description: - Area for temporary structures to be drawn as closed polyline with text on this layer.		TMPS
_Upper Setback	Description : - Draw a closed polyline in plan as well as in proposed work which having setbacks	Mark-> Upper Set Back-> First OR Second	USB
_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
_Wet Riser	Fire installation detail is should be shown on this layer		

_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
_Yard Hydrant	Fire installation detail is should be shown on this layer		

Specifications to be followed-

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

Plot Boundary 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 Boundary, 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 Boundary 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.

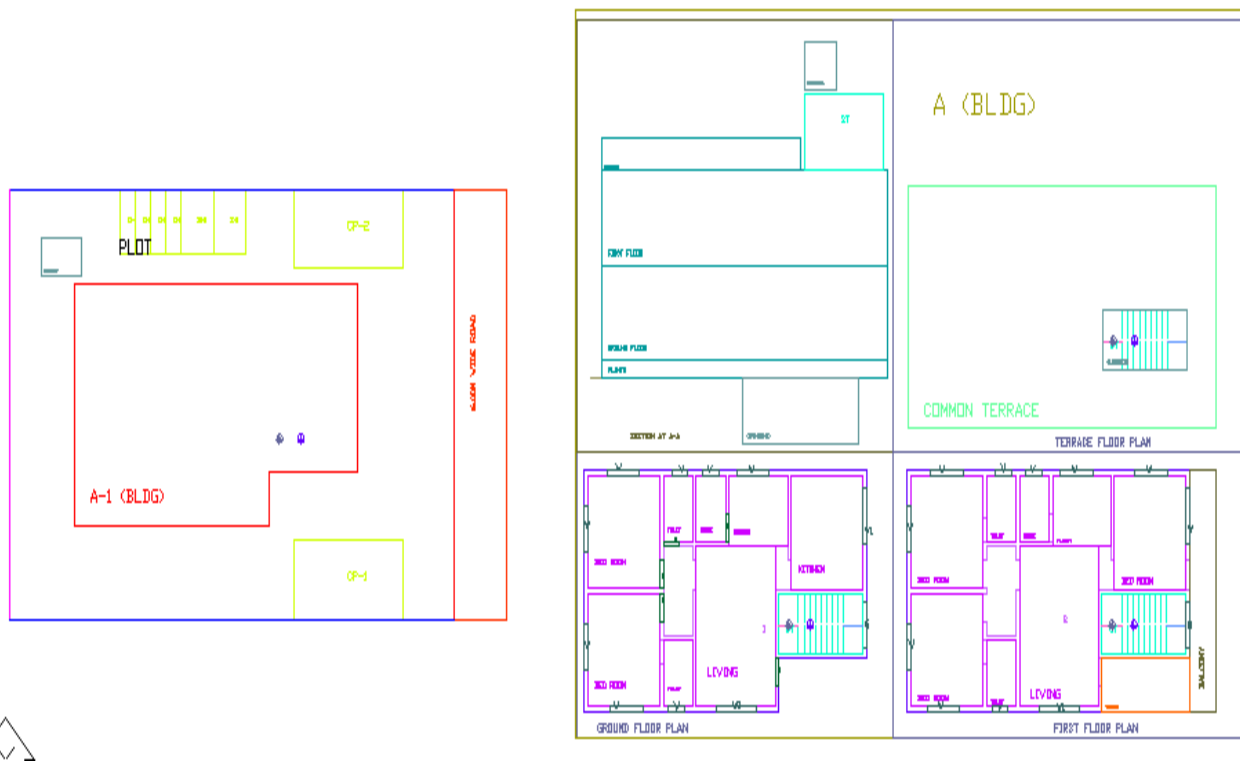
User shall use only following kind of entities for Building Items: -

LWPOLYLINE / TEXT / MTEXT

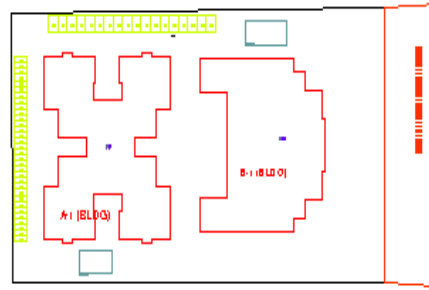
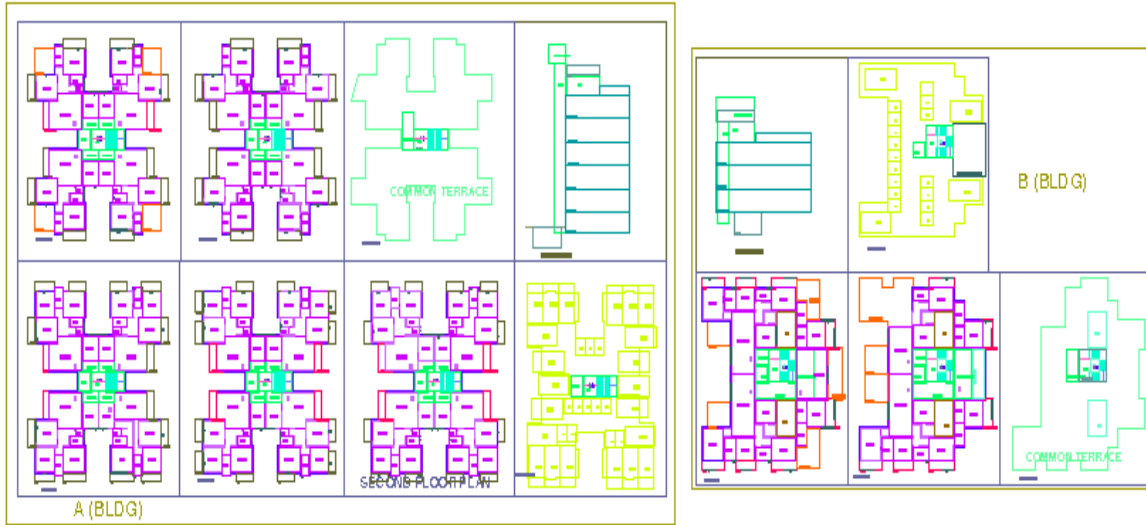
If in a plan two proposed work are mirrored in that case user should provide two separate building plan for each proposed work.

## Sample cases

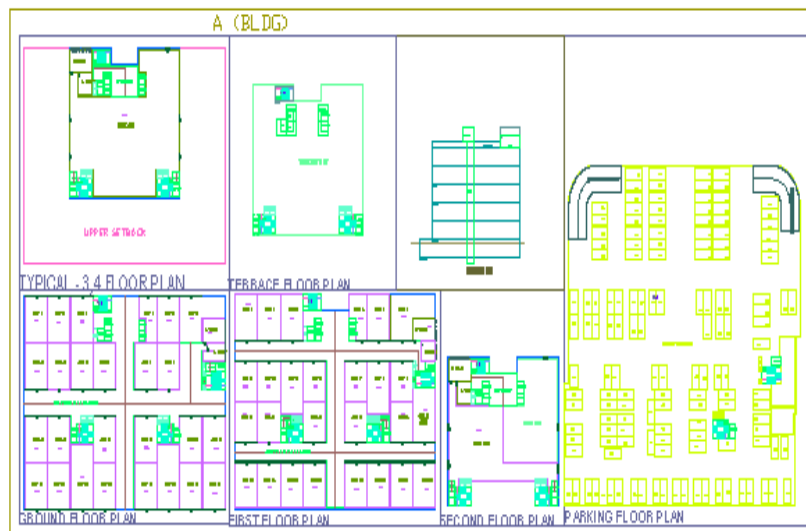
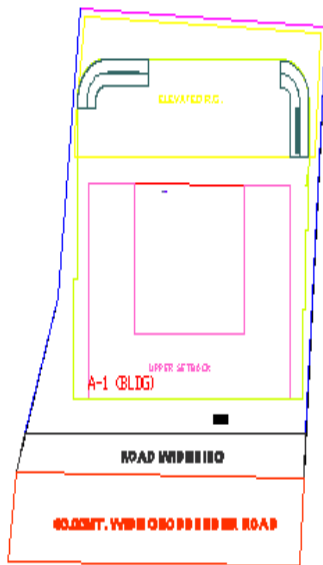
### *Residential Bldg (Row house)*



### *Residential bldg. (Single Detached with two buildings)*

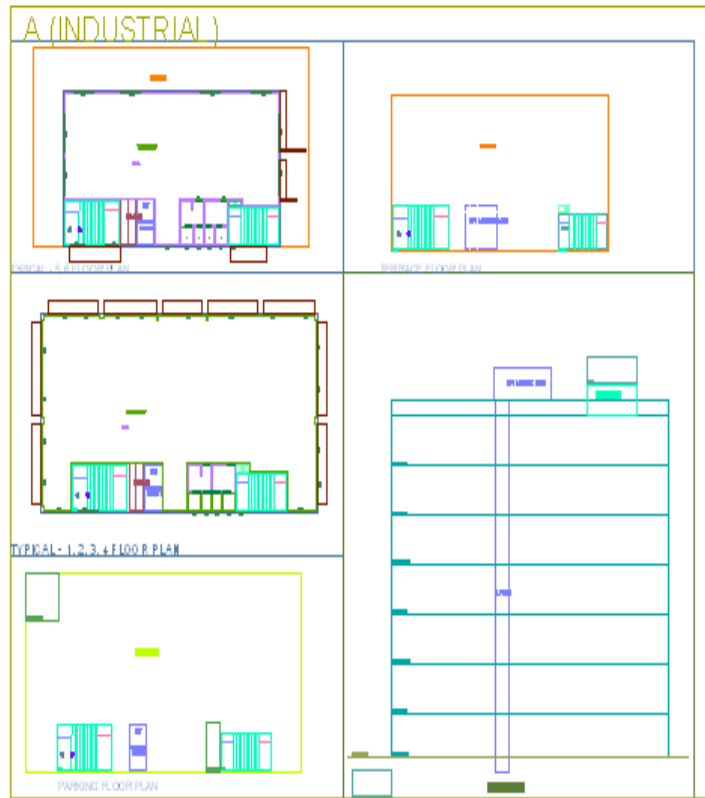
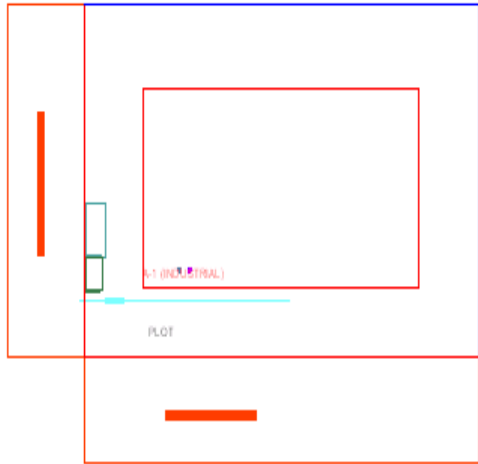


*Commercial building*

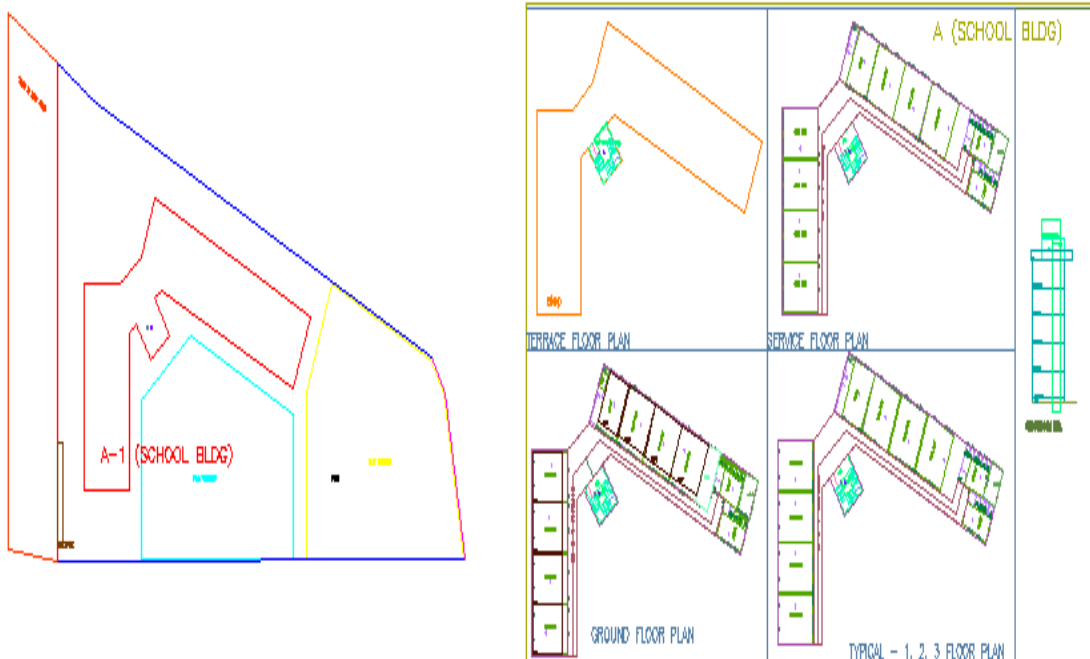




*Industrial Building*



*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.

## F.A.Q (Frequently Ask questions)

Hardware lock not found.

1) If user having Parallel port lock then they have to follow following steps.

Open My Computer -> C: Program files -> SEPL -> PreDCR -> Hlock

1.1. Open this Hlock folder & drvininstall -> click on install button & then click on Exit button.

1.2. Now open Checklock & click on check lock window. Check the return code & Description.

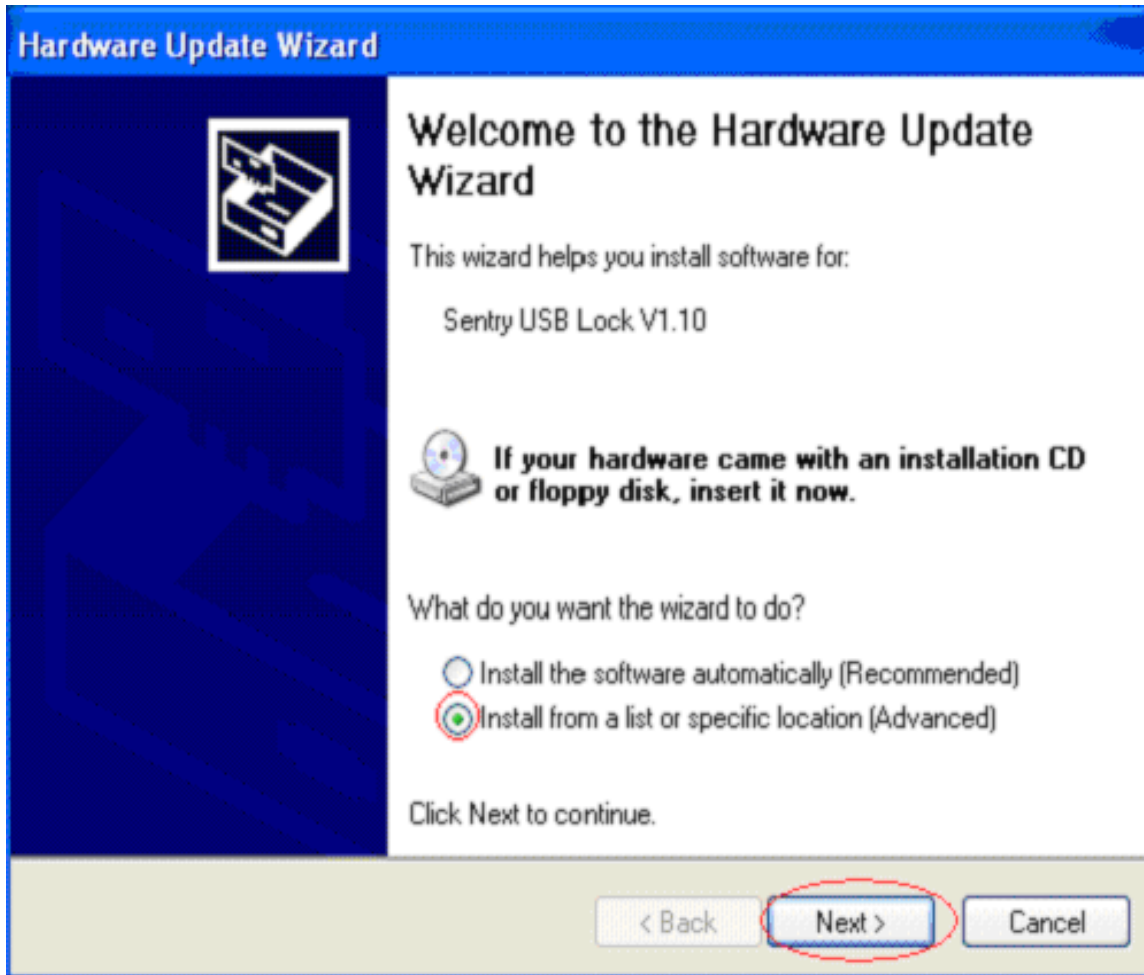
If return code is 0 then u will get the Description is " lock found" otherwise fixed the lock

properly.& do the step 1.1again & check the lock.

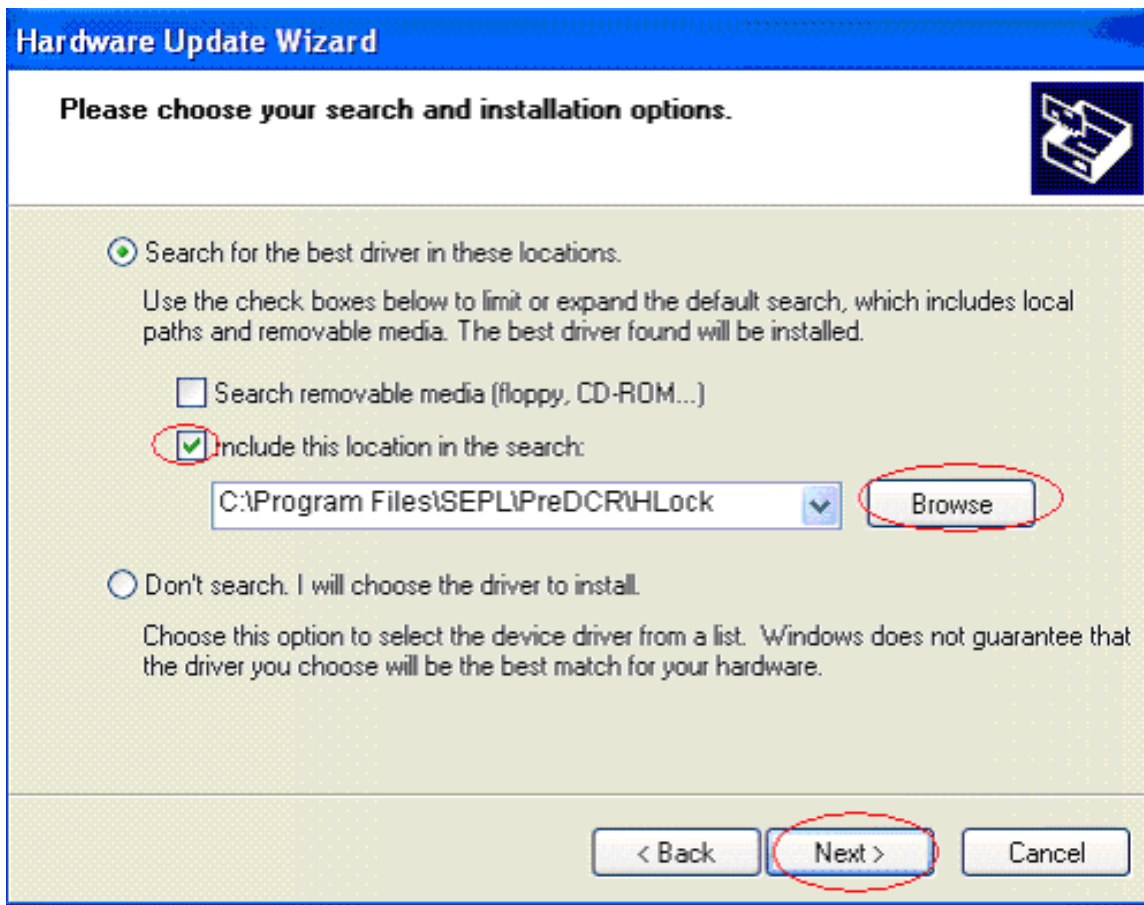
If user having serial port lock (it's look like pen drive)

2.1 Plug the Sentry USB Lock to any of the available USB Port on the PC.

2.2 The Found NEW HARDWARE WIZARD will be displayed. Click NEXT to continue.

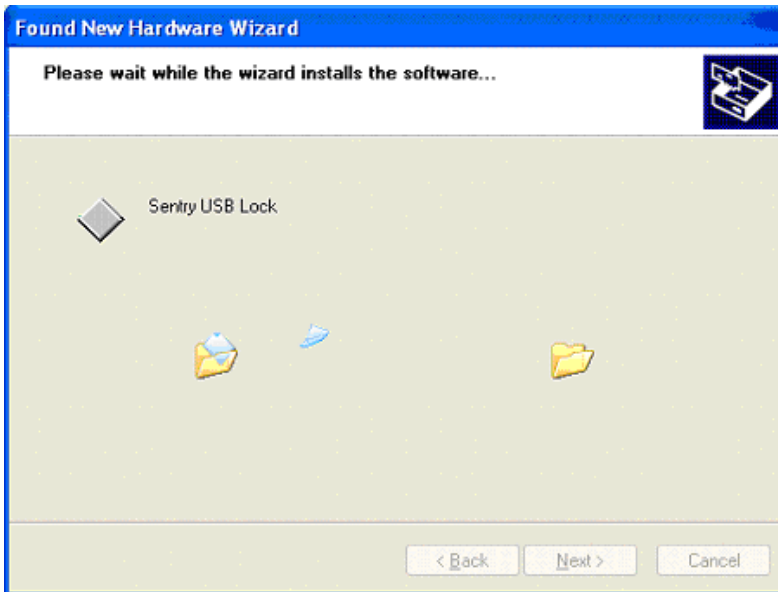


2.3. Next window coming on screen will be of Choose your search and installation options in this window select the option **Include this location in the Search.**

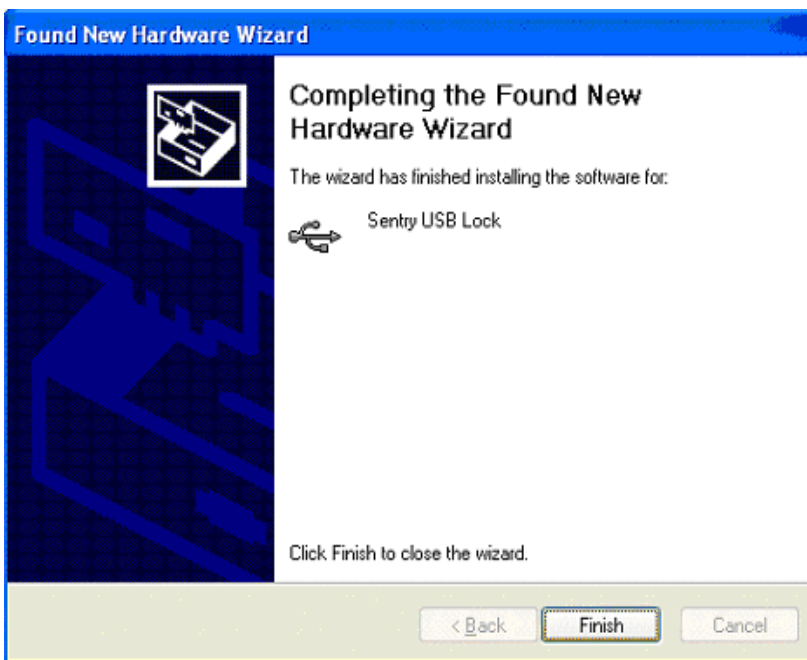


**2.4) Browse the correct path for the sentry USB driver (SentryUsb.sys) as e.g. C:\Program files\SEPL\PreDCR \ HLock and click Next option.**

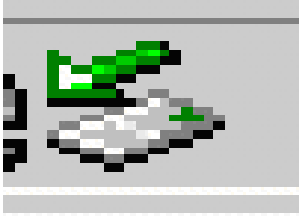
**2.5) The next window you will get regarding waiting still installation after the installation is over the Next button will be highlighted click it.**



2.6) Sentry USB device Drivers will be installed at this point Click Finish to complete the installation.

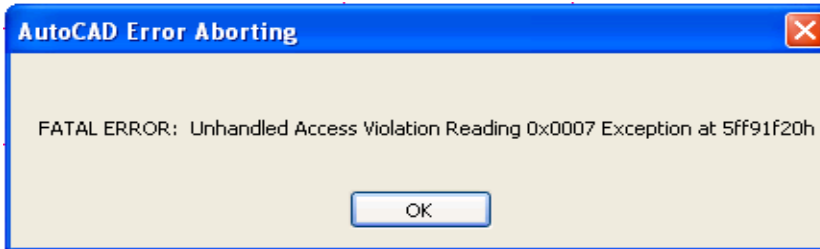


2.7) Sentry USB Lock is now installed and ready to use. Sentry USB will be displayed in the Device Manager as below.



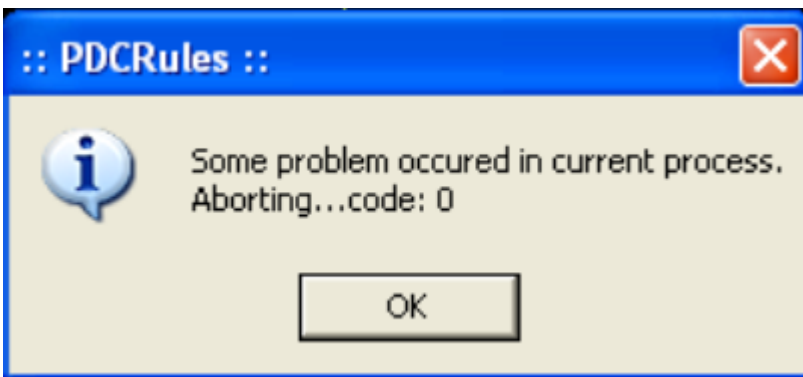
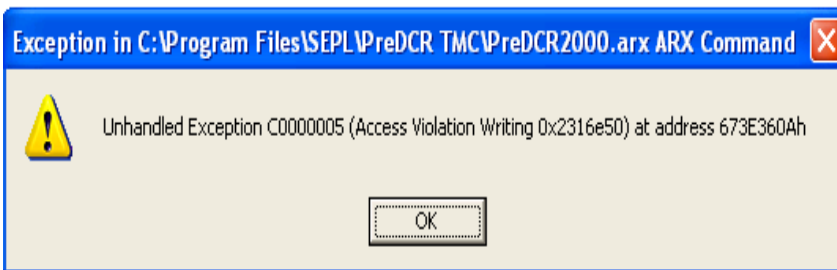
Internal error or Fatal error while verify the drawing

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



If Drawing is Automatically closed / crashed while marking any entity or verify complete drg.

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



While performing verification if following message comes, then follow the steps  
Check each layer separately until you found problematic layer



*This is the last page of the document*