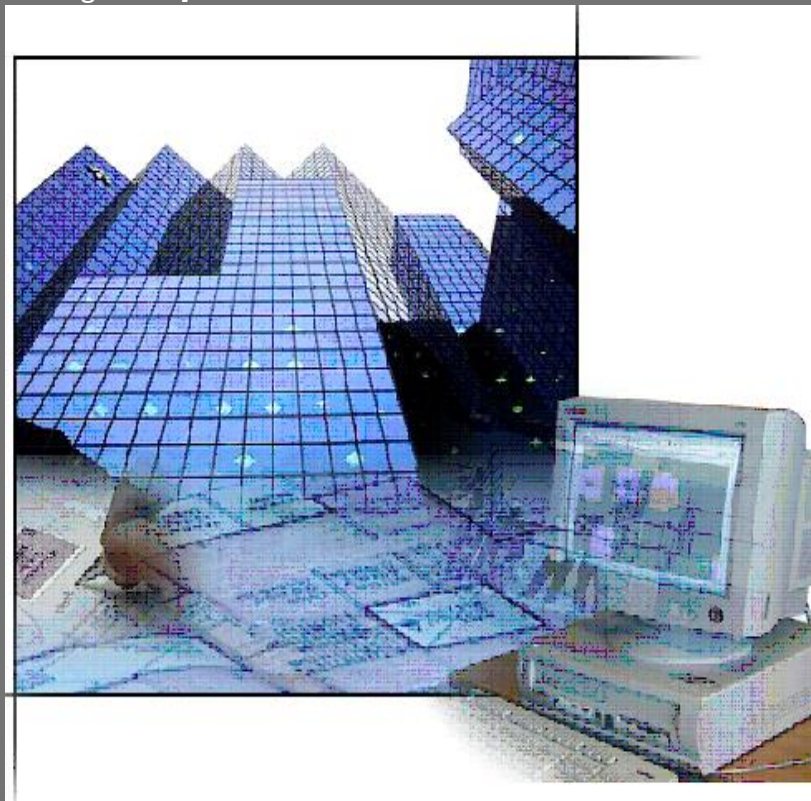


Maharashtra

PreDCR Help Manual

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



PreDCR Manual - Maharashtra

Contents:

DOCUMENT OUTLINE.....	11
ABOUT THE DRAWING PROTOCOL DOCUMENT.....	11
HOW TO READ THIS DRAWING PROTOCOL DOCUMENT?	12
DRAWING PRE-FORMATTING UTILITY (PREDCR)	12
OVERVIEW	12
AIMS & OBJECTIVES.....	13
SALIENT FEATURES.....	14
BENEFITS OF PREDCR	16
DRAWING FORMATS.....	17
1) <i>Conventional submission drawing format.....</i>	<i>17</i>
2) <i>As per PreDCR format specified by PreDCR.....</i>	<i>17</i>
3) <i>After scrutiny of drawing using AutoDCR-.....</i>	<i>18</i>
PROTOCOL DETAILS.....	18
INSTALLATION AND REGISTRATION.....	20
SYSTEM REQUIREMENTS	20
INSTALLATION.....	20
METHODOLOGY.....	28
PREDCR LAYER INFORMATION:.....	48
_AMALGAMATION:	48
<i>Description :</i>	<i>48</i>
<i>How to draw :</i>	<i>48</i>
_AMENITY:	48
<i>Description :</i>	<i>48</i>
<i>Shortcut Command :-AMN</i>	<i>48</i>

<i>How to draw :</i>	48
_ARCHPROJ:	49
<i>Description :</i>	49
<i>Shortcut Command :AP</i>	49
<i>How to draw : -</i>	49
_BALCONY	50
<i>Description :</i>	50
<i>Shortcut Command : BL</i>	50
<i>How to draw : -</i>	50
_BUILDING	51
<i>Description :-</i>	51
<i>Shortcut Command : BLD</i>	51
<i>How to draw :</i>	51
_CARPET AREA	52
<i>Description :</i>	52
<i>Shortcut command : CPT</i>	52
<i>How to draw : -</i>	52
_CHOWK	53
<i>Description :</i>	53
<i>Shortcut Command : CWK</i>	53
<i>How to draw :</i>	53
_COLUMN	54
<i>Description :</i>	54
<i>Shortcut Command : CPL</i>	54
<i>How to Draw:-</i>	54
_COMMFSI	55
<i>Description:</i>	55
<i>Shortcut Command : CMFS</i>	55
_COMPOUND WALL	56
<i>Description :</i>	56
<i>Shortcut Command : CW</i>	56
<i>How to draw : -</i>	56
_DEADWALL	56
<i>Description :</i>	56
<i>How to draw : -</i>	57
_DISPUTEDAREA	57

<i>Description :</i>	57
_DOOR	57
<i>Description :</i>	57
<i>Shortcut Command : DR</i>	57
<i>How to draw : -</i>	57
_DPROAD	58
<i>Description :</i>	58
<i>How to draw : -</i>	58
_DRIVEWAY	59
<i>Description :</i>	59
_ELECTRIC LINE	59
<i>Description : -</i>	59
<i>Shortcut Command : LI</i>	59
<i>How to draw : -</i>	59
_ELEVATION	59
<i>Description : -</i>	60
<i>Shoutcut :-</i>	60
<i>How to draw :-</i>	60
_EWS	60
<i>Description: -</i>	60
<i>How to draw :-</i>	60
_ExSTRUCTURE:-	60
<i>Shortcut Command : EX</i>	60
<i>How to draw :-</i>	60
_FIREESCAPECHUTE	61
<i>Description: -</i>	61
<i>How to draw :-</i>	61
_FIRETOWER	61
<i>Description: -</i>	61
<i>How to draw :-</i>	61
_FLOOR	61
<i>Discription:</i>	61
<i>Shortcut Command : FLR</i>	62
<i>How to draw :-</i>	62
<i>_FloorInSection :</i>	63
<i>Description :</i>	63

<i>Shortcut Command : SEC</i>	63
<i>How to draw : -</i>	63
_FSISURRENDERTOORPO	64
<i>Description: -</i>	64
<i>How to draw :-</i>	64
_GROUND LEVEL	64
<i>Description :-</i>	64
<i>Shortcut Command : GL</i>	64
<i>How to draw : -</i>	65
_INDFSI	65
<i>Description :-</i>	65
<i>Shortcut Command :IFSI</i>	65
<i>How to draw : -</i>	65
_INTERNAL ROAD	66
<i>Description :</i>	66
<i>Shortcut Command : R2</i>	66
<i>How to draw : -</i>	66
_LIFTWELL	67
<i>Description :</i>	67
<i>Shortcut Command : LFT</i>	67
<i>How to draw :</i>	67
LAYER: _LIG.....	68
<i>Description :</i>	68
<i>How to draw :</i>	68
_LOCATION PLAN	68
<i>Description :</i>	68
<i>Shortcut Command : LCP</i>	68
_MAIN PLOT.....	69
<i>Description:</i>	69
<i>Shortcut Command: PLT</i>	69
<i>How to draw :</i>	69
_ MAIN ROAD	70
<i>Description :</i>	70
<i>Shortcut Command : R1</i>	70
<i>How to draw : -</i>	70
_MARGIN LINE.....	70

<i>Description :</i>	71
_NETPLOT.....	71
<i>Description :</i>	71
<i>NotInDevelopment :</i>	71
<i>Description :</i>	71
<i>Shortcut Command: NID</i>	71
<i>How to draw : -</i>	71
<i>NotInPossession :</i>	72
<i>Description :</i>	72
<i>Shortcut Command: NIP</i>	72
<i>How to draw : -</i>	72
_PARKING.....	72
<i>Description :</i>	72
<i>Shortcut Command : PK</i>	72
<i>Parking Name :</i>	73
<i>How to draw : -</i>	73
_PASSAGE.....	73
<i>Description :</i>	73
<i>Shortcut Command :PAS</i>	74
<i>How to draw:-</i>	74
_PLOTSURROUNDINGDETAILS:.....	75
<i>Description :</i>	75
_PODIUM.....	75
<i>Description :</i>	75
<i>Shortcut Command: -POD</i>	75
<i>How to draw :-</i>	75
_PRINTADDITIONALDETAIL:-.....	76
DESCRIPTION:-.....	76
SHORTCUT COMMAND:-.....	76
HOW TO DRAW:-.....	76
_PROPACCESSROAD.....	76
<i>Description :</i>	76
_PROPWORK.....	76
<i>Description :</i>	76
<i>Shortcut Command:- PW</i>	77
<i>How to draw :-</i>	77

_RAMP	78
<i>Description :</i>	78
<i>Shortcut Command :-RP</i>	78
<i>How to draw : -</i>	78
_RECREATIONAL GROUND	78
<i>Description :</i>	78
<i>Shortcut Command: -OPS</i>	78
<i>How to draw :-</i>	78
_REFUGE AREA.	79
<i>Description :</i>	79
<i>Shortcut Command : RFG</i>	79
<i>How to draw :</i>	79
_RESIFSI	80
<i>Description : -</i>	80
<i>Shortcut Command : MFS</i>	80
<i>How to draw :-</i>	80
<i>ReserveArea :</i>	81
<i>Description :</i>	81
<i>Shortcut Command:</i>	81
<i>How to draw :</i>	81
_RIGHT-OF-WAY	82
<i>Description :</i>	82
<i>Shortcut Command : ROW</i>	82
<i>How to draw : -</i>	82
_ROAD WIDENING	82
<i>Description :</i>	82
<i>Shortcut Command : R5</i>	82
<i>How to draw : -</i>	82
_ROOM	83
<i>Description :</i>	83
<i>Shortcut Command : RU</i>	83
<i>How to draw : -</i>	83
_SECTION.....	84
<i>Description :</i>	84
<i>Shortcut Command : SEC</i>	84
<i>How to draw :</i>	84

_SECTION LINE.....	85
<i>Description: -</i>	85
_SERVICE DUCT.....	85
<i>Description: -</i>	85
<i>How to draw : -</i>	85
_SERVICE ROAD.....	85
<i>Description: -</i>	85
<i>How to draw : -</i>	85
_SEWAGE LINE.....	86
<i>Description: -</i>	86
<i>Shortcut Command : L5</i>	86
<i>How to draw : -</i>	86
_SPECIAL USEFSI	86
<i>Description :-</i>	86
<i>Shortcut Command : SUF</i>	86
<i>How to draw : -</i>	87
_SPLAY	87
<i>Description: -</i>	87
<i>How to draw : -</i>	87
_STAIRCASE	88
<i>Description :</i>	88
<i>Shortcut Command : STR</i>	88
<i>How to draw : -</i>	88
_SUBDIVISION.....	88
<i>Description: -</i>	88
<i>How to draw : -</i>	88
_SUBSTRUCTURE	89
<i>Description :</i>	89
<i>Shortcut Command : SSTR</i>	89
<i>How to draw :</i>	89
_TANK	90
<i>Description :</i>	90
<i>Shortcut Command : TNK</i>	90
<i>How to draw : -</i>	90
_TERRACE.....	91

<i>Description:-</i>	91
<i>Shortcut Command : TER</i>	91
<i>How to draw : -</i>	91
_TREE	92
<i>Description :</i>	92
<i>Shortcut Command : TRE</i>	92
<i>How to draw :</i>	92
_TREEPLANTATIONSTRIP	93
<i>Description :</i>	93
<i>Shortcut Command :</i>	93
<i>How to draw :</i>	93
_VENTILATION SHAFT	93
<i>Description :</i>	93
<i>Shortcut Command:-AVS</i>	93
<i>How to draw : -</i>	93
_VOID	94
<i>Description :</i>	94
<i>Shortcut Command : VD</i>	94
<i>How to draw :</i>	94
_WATERCOURSE	95
<i>Description :</i>	95
_WATERLINE	95
<i>Description :</i>	95
<i>Shortcut Command : WL</i>	95
<i>How to draw : -</i>	95
_WINDOW	96
<i>Description :</i>	96
<i>Shortcut Command : WND</i>	96
<i>How to draw : -</i>	96
_ZONE	96
<i>Description :</i>	96
TOOLS	97
ALL/REMOVER TOOL TIP (PDCRTOOLTIP):	97
SHOW ONLY DCR LAYERS:	97
ALL PREDCR LAYERS (PDCRSPL): THIS COMMAND WILL TURN OFF ALL THE LAYERS IN THE DRAWING EXCEPT PREDCR LAYERS. 97	

BUILDING LEVEL LAYER (PDCRSBL):	97
LAYOUT LEVEL LAYER (PDCRSLL):	97
SHOW ALL LAYERS (PDCRSAL):	97
CALCULATE TOTAL AREA (PDCRCTA):	97
CALCULATE DEDUCTED AREA (PDCRCDA):	98
GET ALL INSIDE POLY (PDCRFIP):	98
GET ALL OVERLAPPING POLY (PDCRGOP):	98
GET ALL INTERSECTING POLY (PDCRGIP):	98
FIND OPEN ENTITIES (PDCRFNDO):	98
FIND CLOSED ENTITIES (PDCRFNDC):	98
SHORTEST DISTANCE (PDCRFSD):	99
SPELLING CHECK (_SPELL) :	99
FIND OBJECT (PDCRFOBJ) :	99
COMMANDS	100
CREATE NEW PROJECT (PDCRNWP)	100
CREATE AutoDCR LAYERS (PDCRCL) :	100
FIX POLY (PDCRPE) :	101
VERIFY DRAWING:	101
MARKINGS	105
INSERT ENTITIES	109
BUILDING TEMPLATE	110
ASSIGN NAME	111
TOOLS	113
SAMPLE CASES	116
RESIDENTIAL BLDG (ROW HOUSE)	116
RESIDENTIAL BLDG. (SINGLE DETACHED WITH TWO BUILDINGS)	117
COMMERCIAL BUILDING	117
INDUSTRIAL BUILDING	118
SPECIAL BUILDING (SCHOOL BLDG)	118
MEANING OF VARIOUS PREDCR MESSAGES	119
PATH FOR GIVING FULL RIGHTS TO SYSTEM IN REGISTRY:	122
PATH OF PREDCR INSTALLER IN REGISTRY:	122

Document outline

About the drawing protocol document

Maharashtra has planned to automate the building plan approval process by introducing AutoDCR system. AutoDCR software reads the CAD drawings submitted by architects and automatically produce the deviation report based on the control regulations prescribed by Maharashtra.

The purpose of this document is to establish a set of guidelines to Architects for preparation of drawings to be submitted for taking Building Permission from Maharashtra , Uniformity in the process of drafting of the drawings to be submitted for approval is required for automation of building approval system by introducing AutoDCR system.

The consultants/Architects should prepare the drawings keeping specific objects in specific layers with specific colors and text. The layers required to be generated with explanation of what is

required to be drawn on which layer is described in this document. This document serves as a source of information on obtaining level of consistency in drafting and approval process focuses on both the theoretical and practical description of process flow and protocol to be used while preparing drawings for submission at Maharashtra for Building Permission. The document explains use of PreDCR utility.

How to read this drawing protocol document?

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

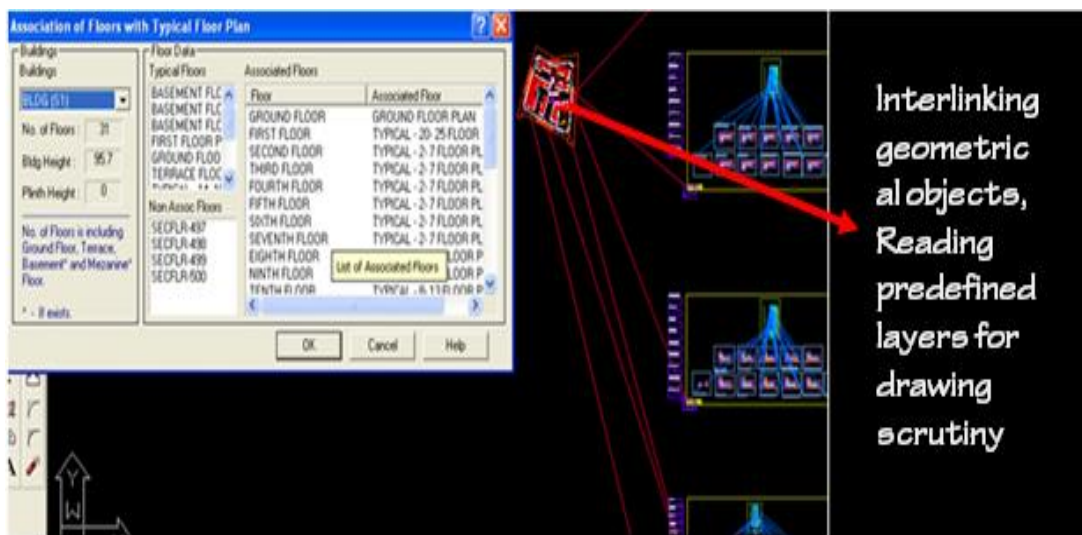
Drawing pre-formatting utility (PreDCR)

Overview

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



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



Aims & objectives

To bring uniformity and standardization in submission drawing format.

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

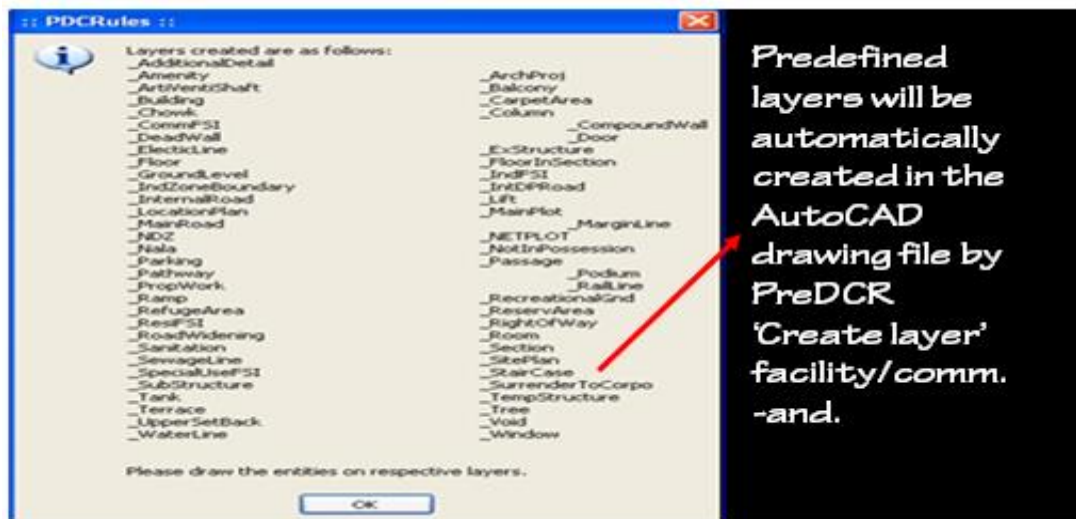
To Increase drafting speed and efficiency

To reduce drawing data redundancy.

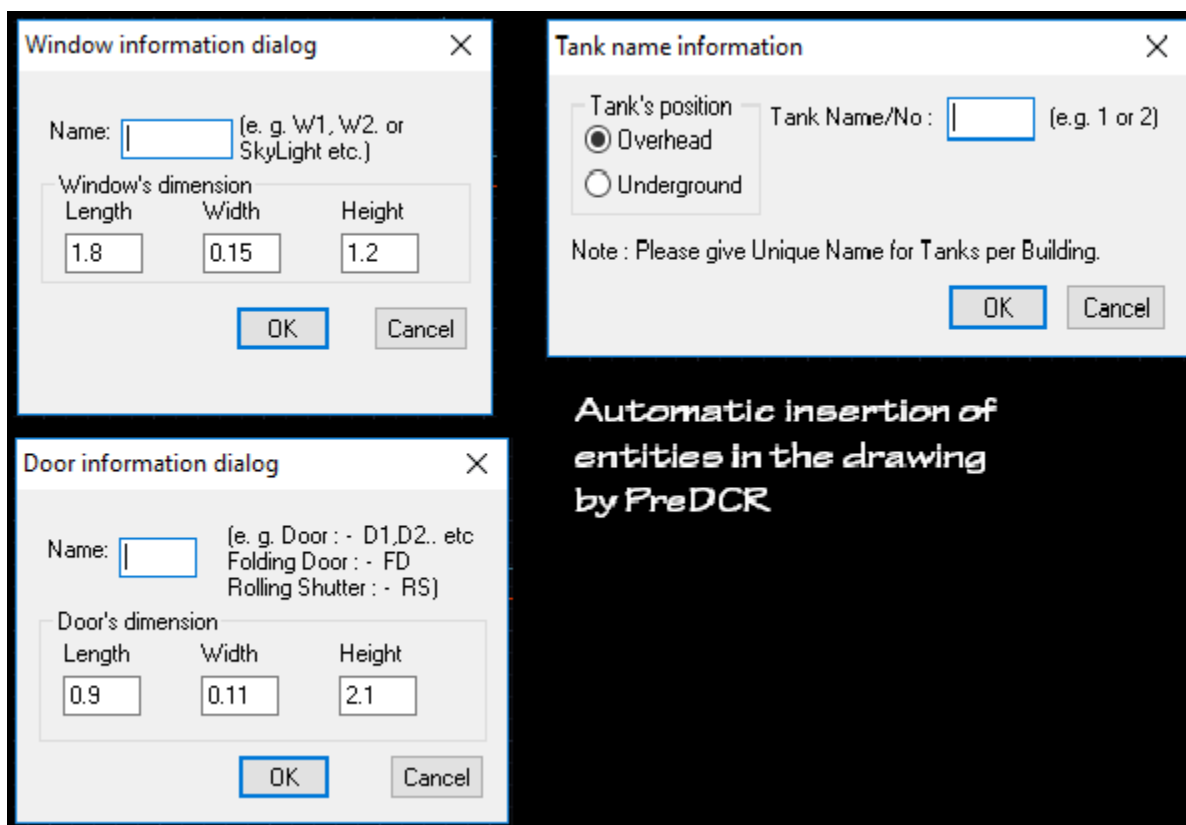
To remove dimensioning and area calculation requirements from submission drawing format and auto-calculating areas in AutoDCR automatically.

Salient features

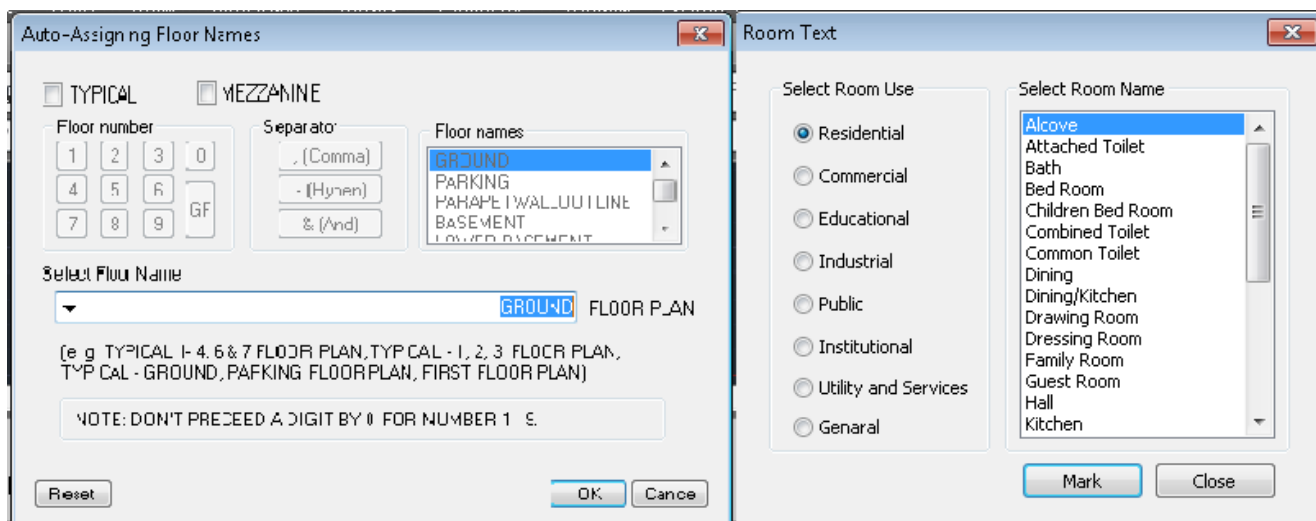
Automatically creating required layers in the drawing.



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

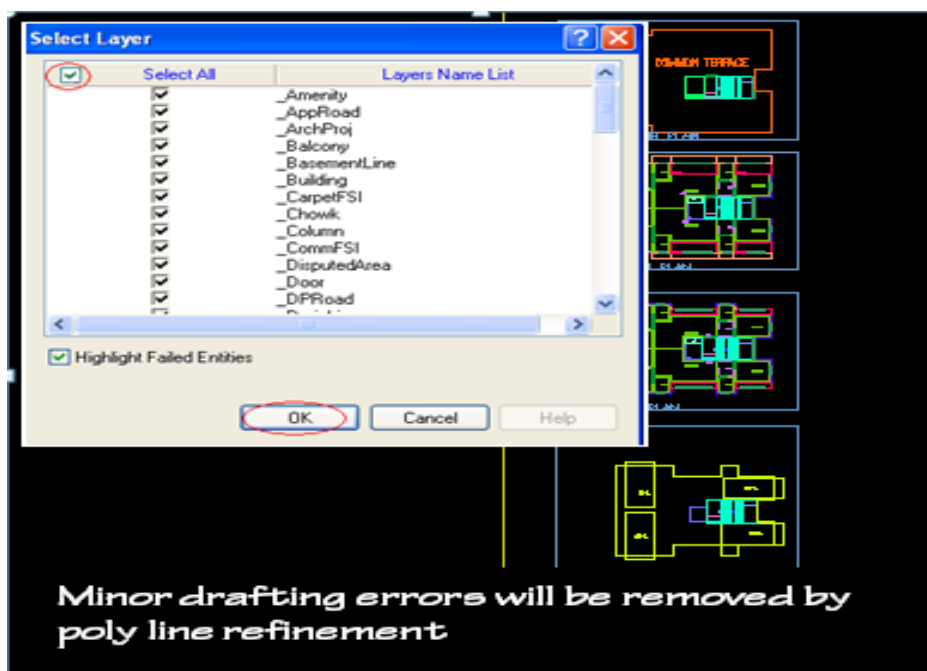


Automatic insertion of required text in the drawing.

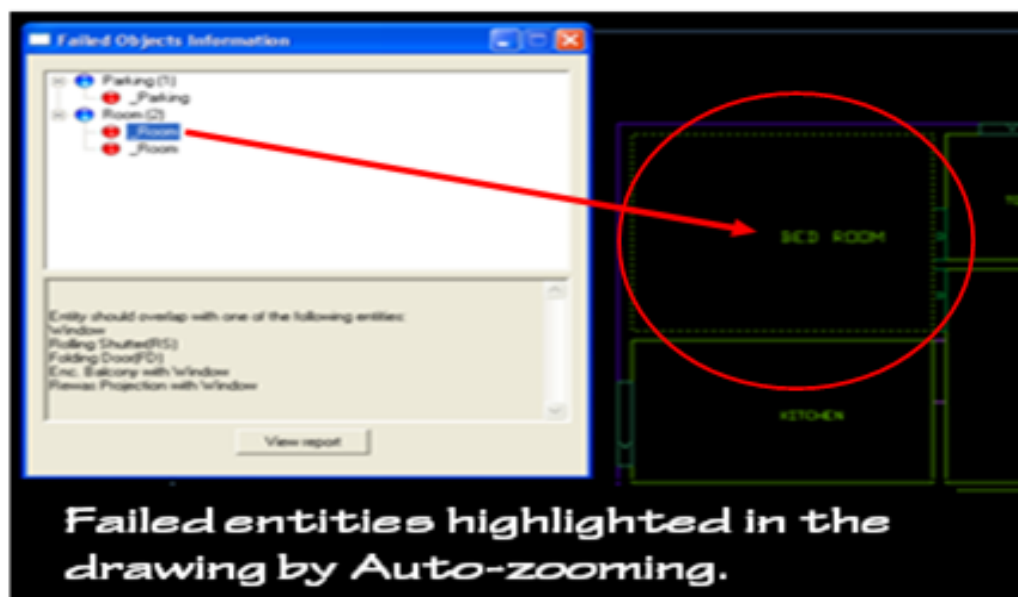


PreDCR can automatically insert text like room name, floor name etc. at specified location in the drawing.

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



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



Benefits of PreDCR

- 1) Standardization of submission drawings-Brings uniformity & standardization in submission

drawing format. This software will correct some minor drafting errors and also provide list of failed entities with Auto-zooming facility so that user can easily locate the failed entities in the drawing.

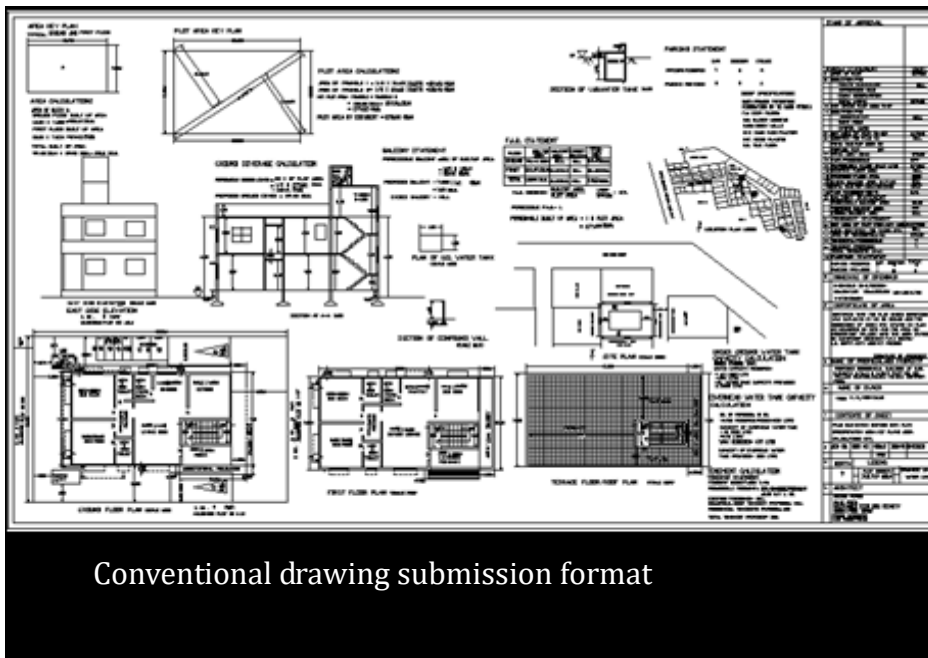
2) Operational ease and convenience-Data redundancy is eliminated from the drawing. Only minimum required entities are to be drawn in the drawing as most of the data will be auto detected by the system from existing available data.

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

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

Drawing formats

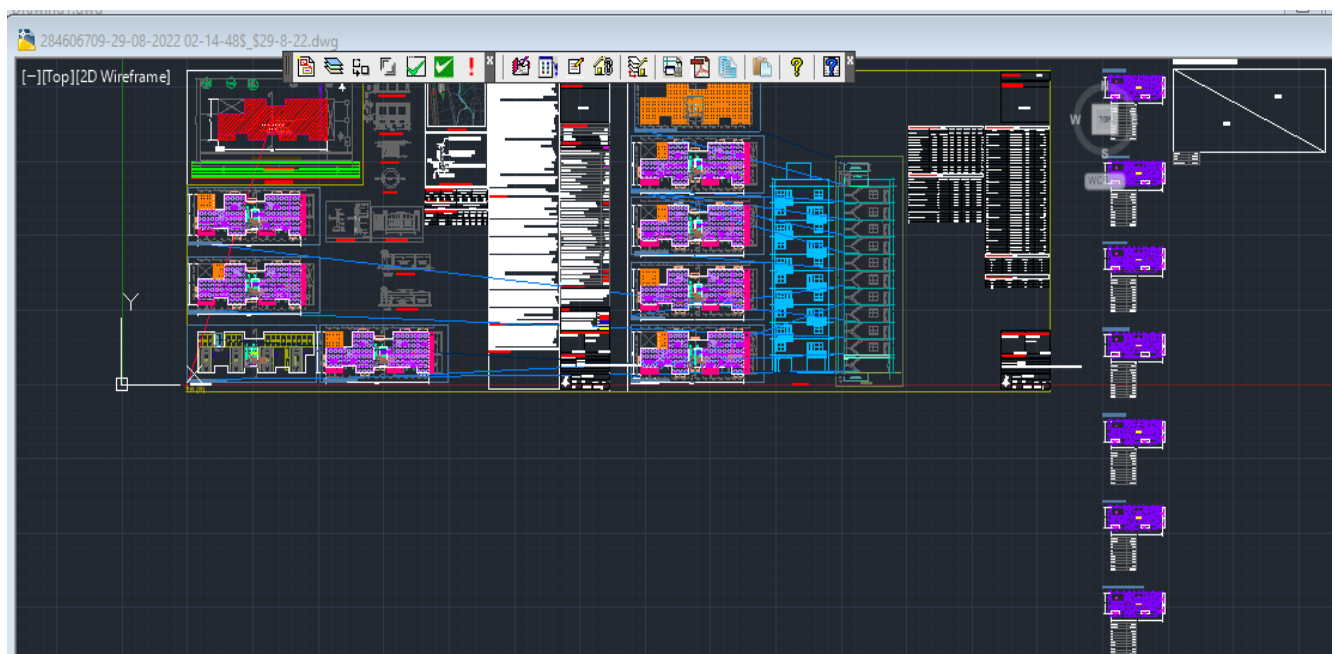
1) Conventional submission drawing format



2) As per PreDCR format specified by PreDCR



3) After scrutiny of drawing using AutoDCR-



Protocol details

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

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

As per AutoDCR requirement all building items like proposed plot, proposed work should be

drawn on the corresponding layers. Short commands are provided to activate any layer in PreDCR. At any time user can verify if the drawn entities are properly closed or not, if proper name text has been written inside all closed poly or not etc. PreDCR will highlight all the failed entities if any.

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

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

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

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

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

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

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

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

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

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

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

automatically. Naming Conventions should be followed properly.

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

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

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

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

LWPOLYLINE / TEXT / MTEXT

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

Installation and Registration


System Requirements

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

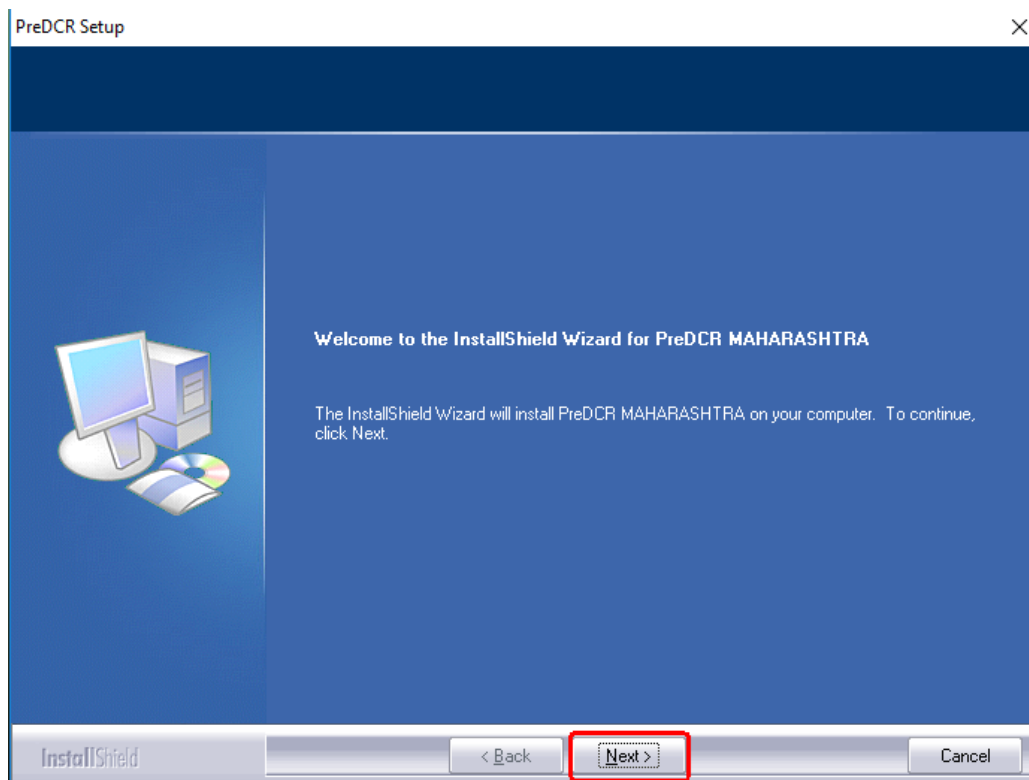
Installation

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

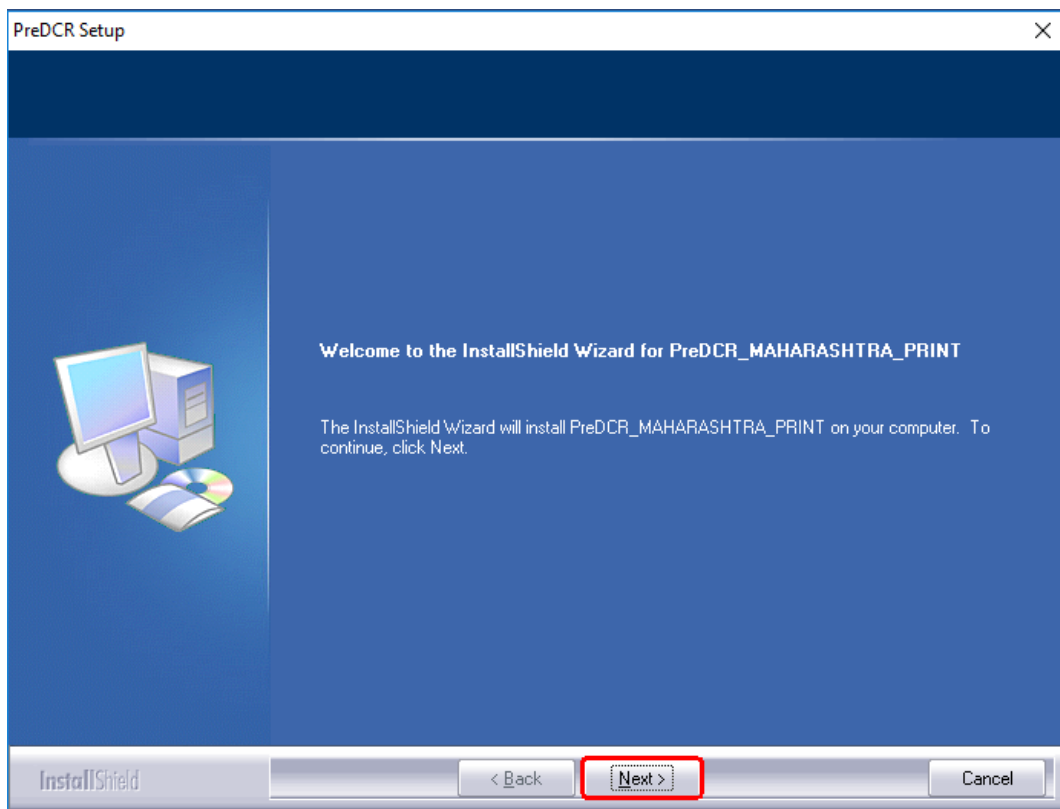
Step 1: Run the PreDCR installer by double clicking on file "***PreDCR_MAHARASHTRA_Print.exe***"

Name	Date modified	Type	Size
 PreDCR_MAHARASHTRA_Print_...	7/25/2022 5:11 PM	Application	73,550 KB

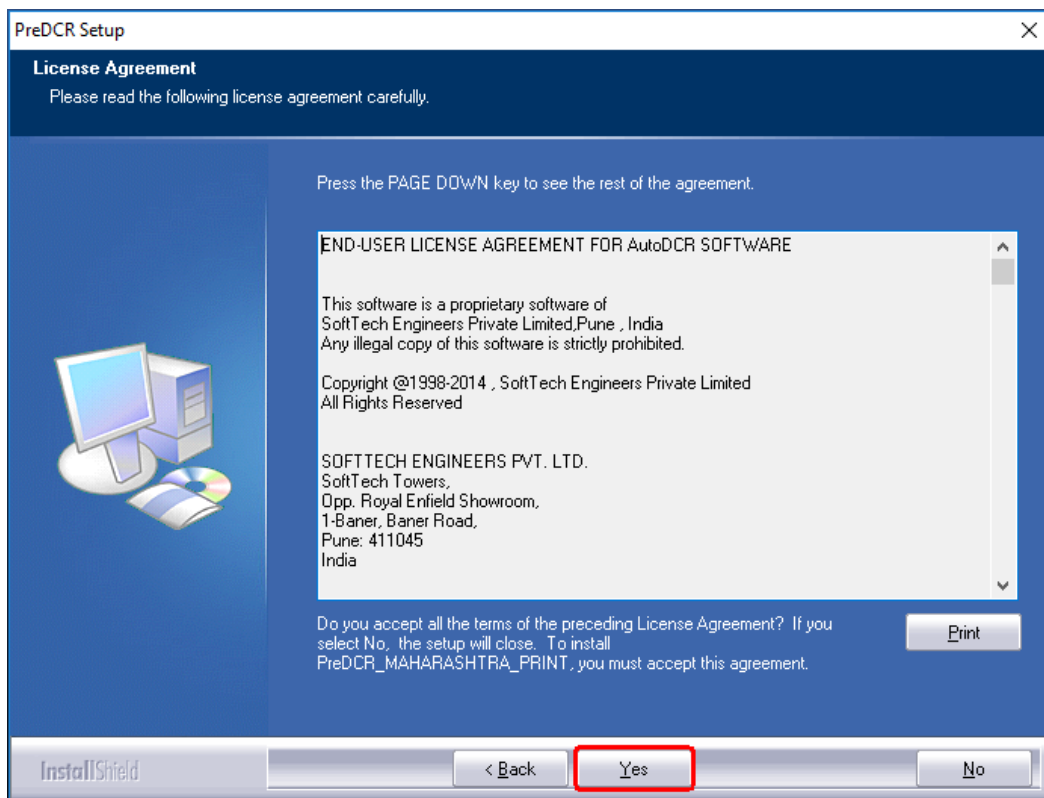
Step 2: Click on next tab:



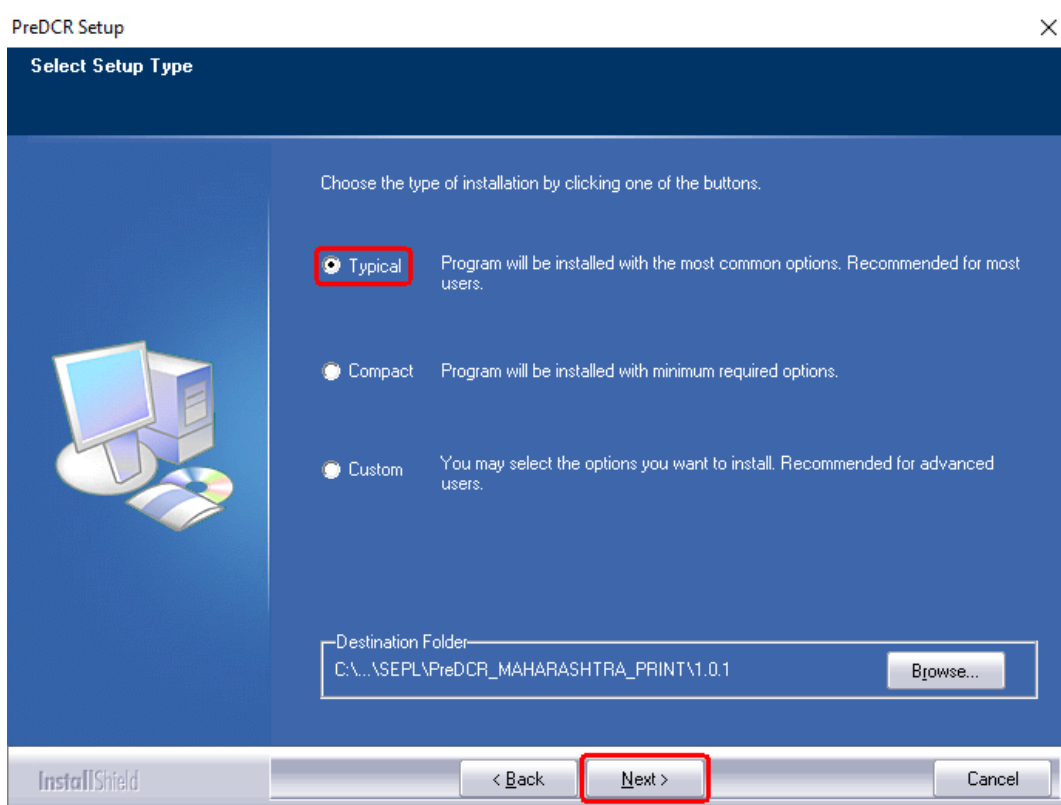
Step 3: Click on next tab:



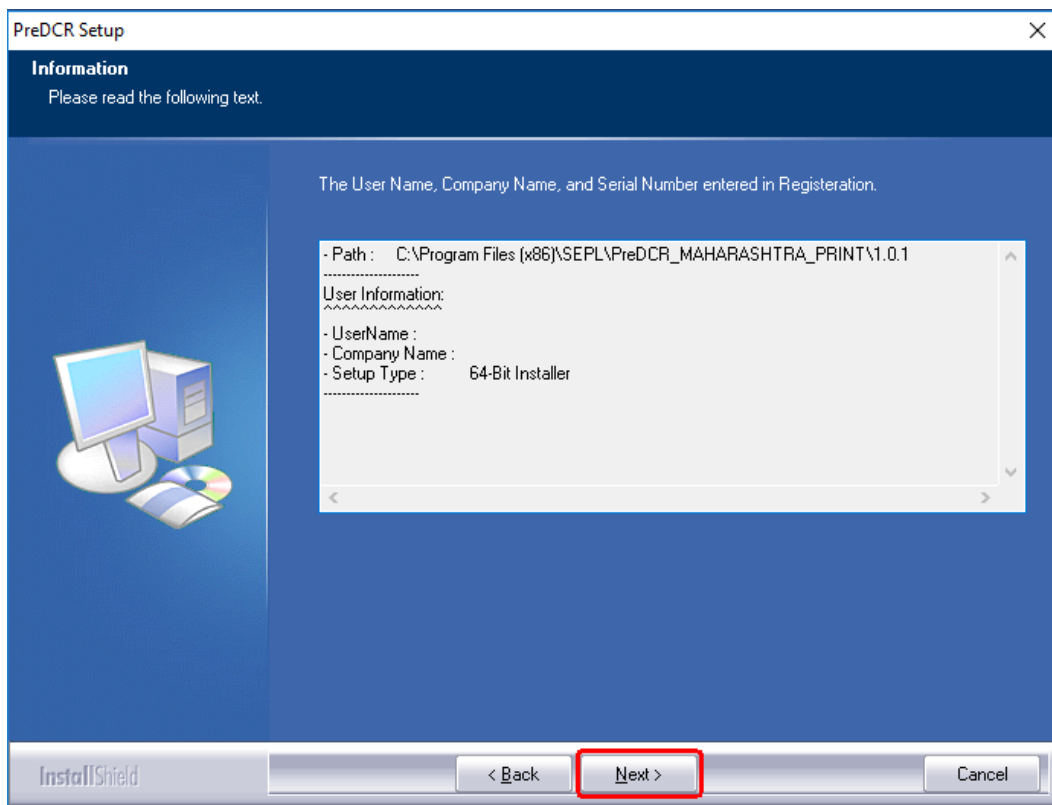
Step 4: Click on next tab:



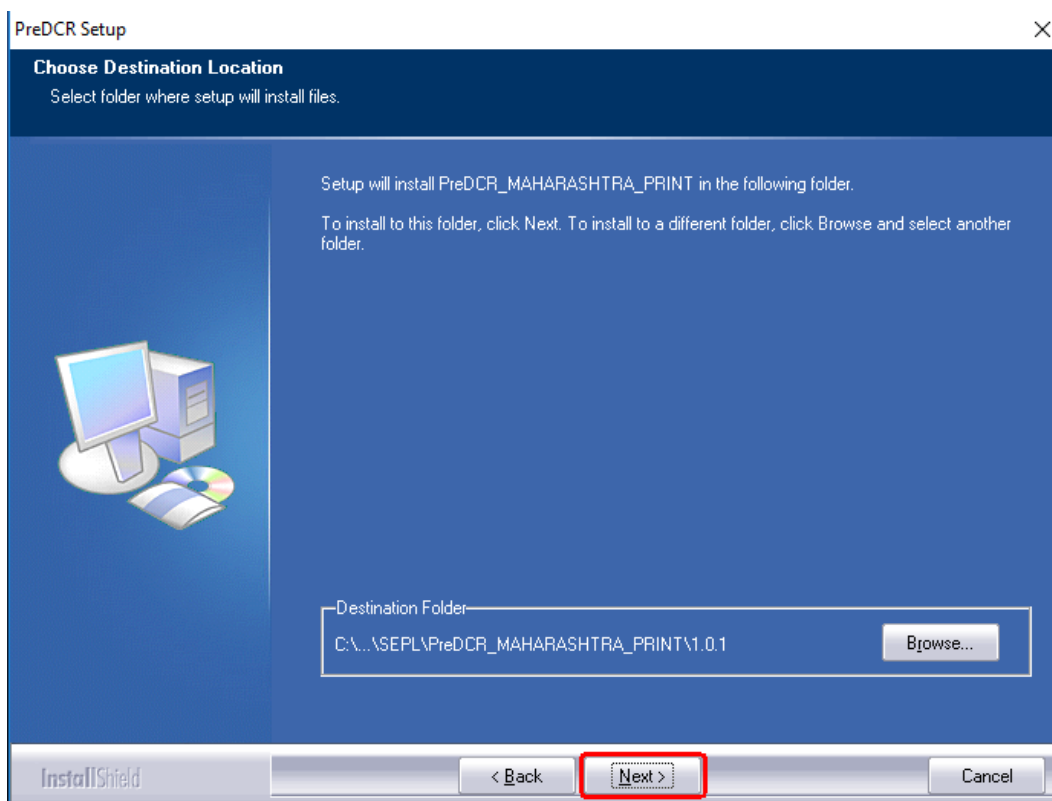
Step 5: Select Typical and click on Next tab.



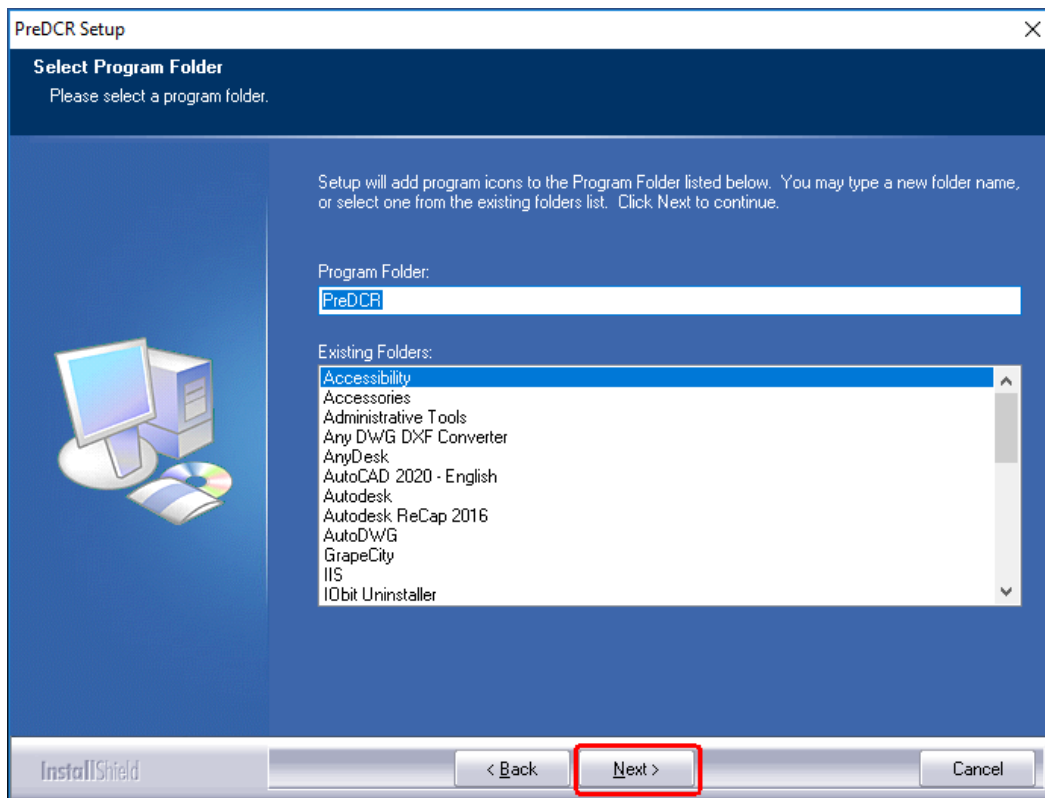
Step 6: Click on next tab:



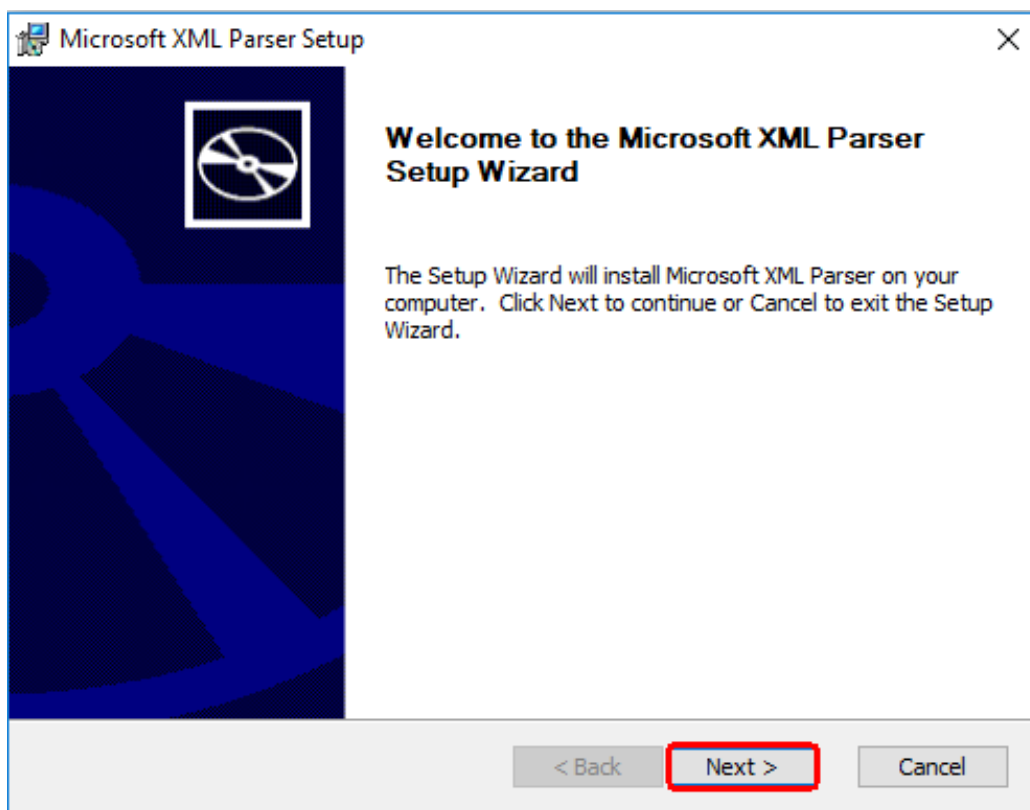
Step 7: Click on next tab:



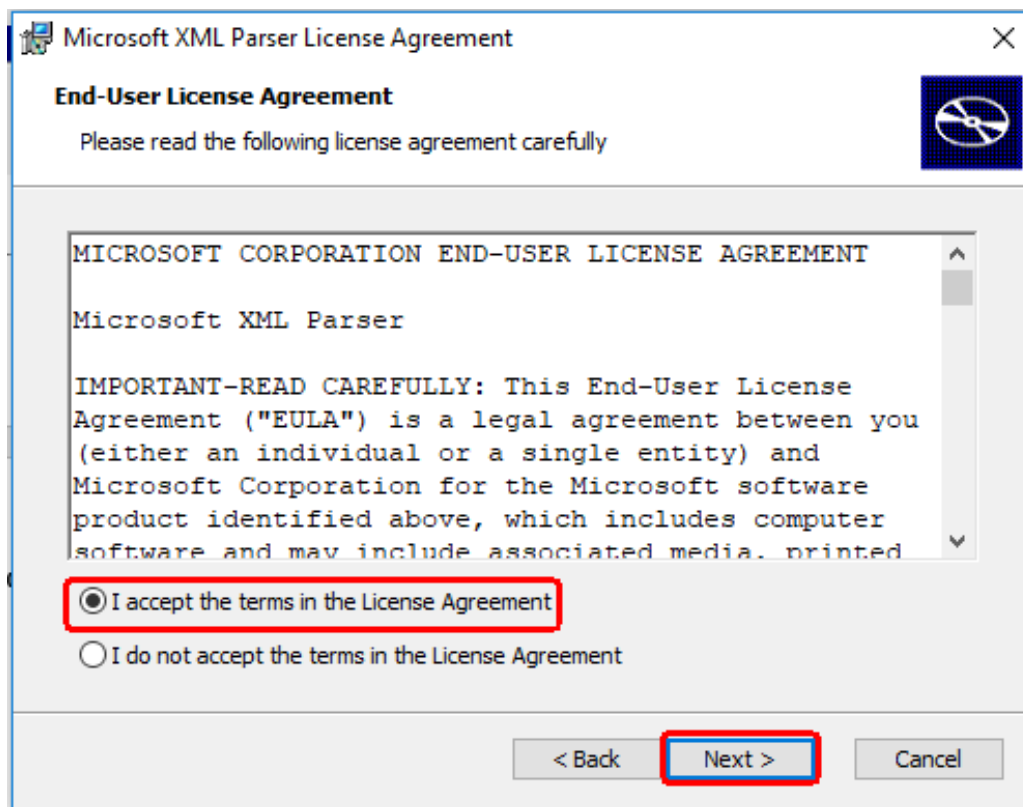
Step 8: Click on next tab:



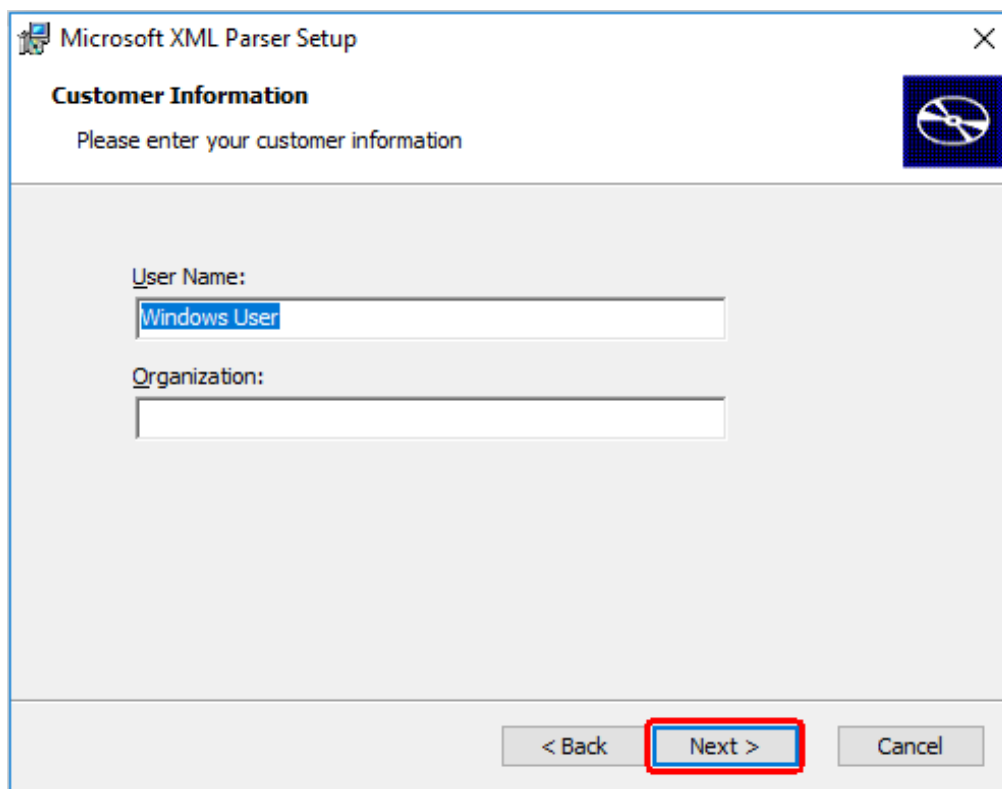
Step 9: Click on next tab:



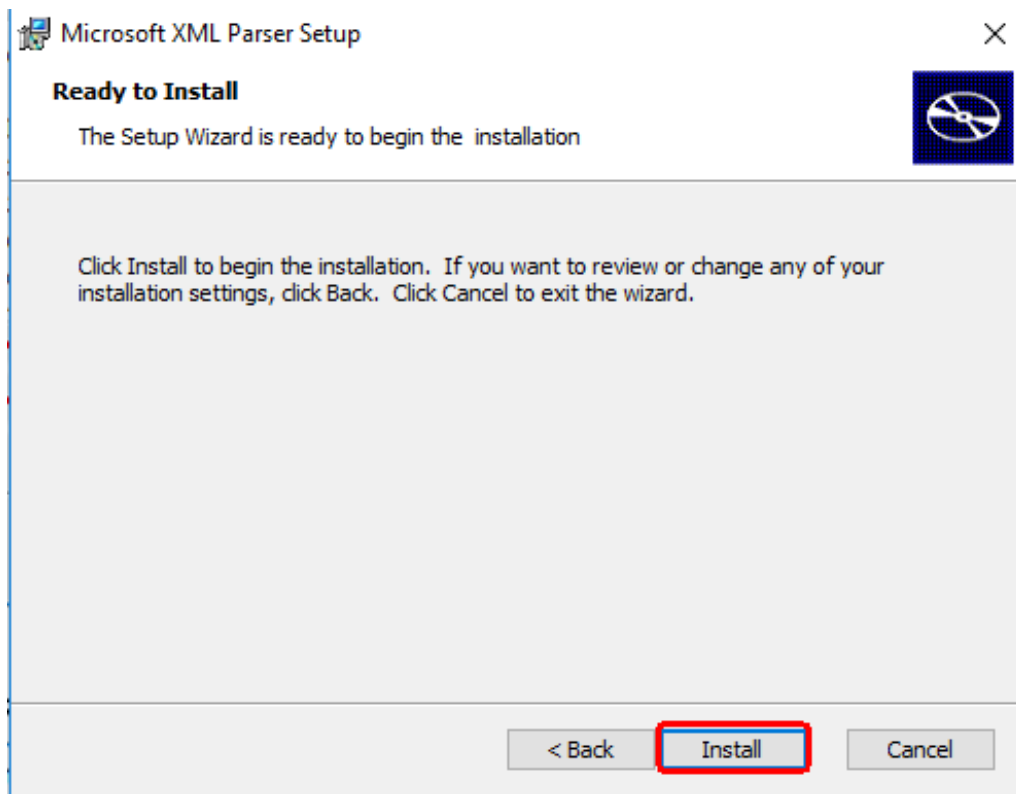
Step 10: Tick on "I accept the terms in the License Agreement" and click on Next tab.



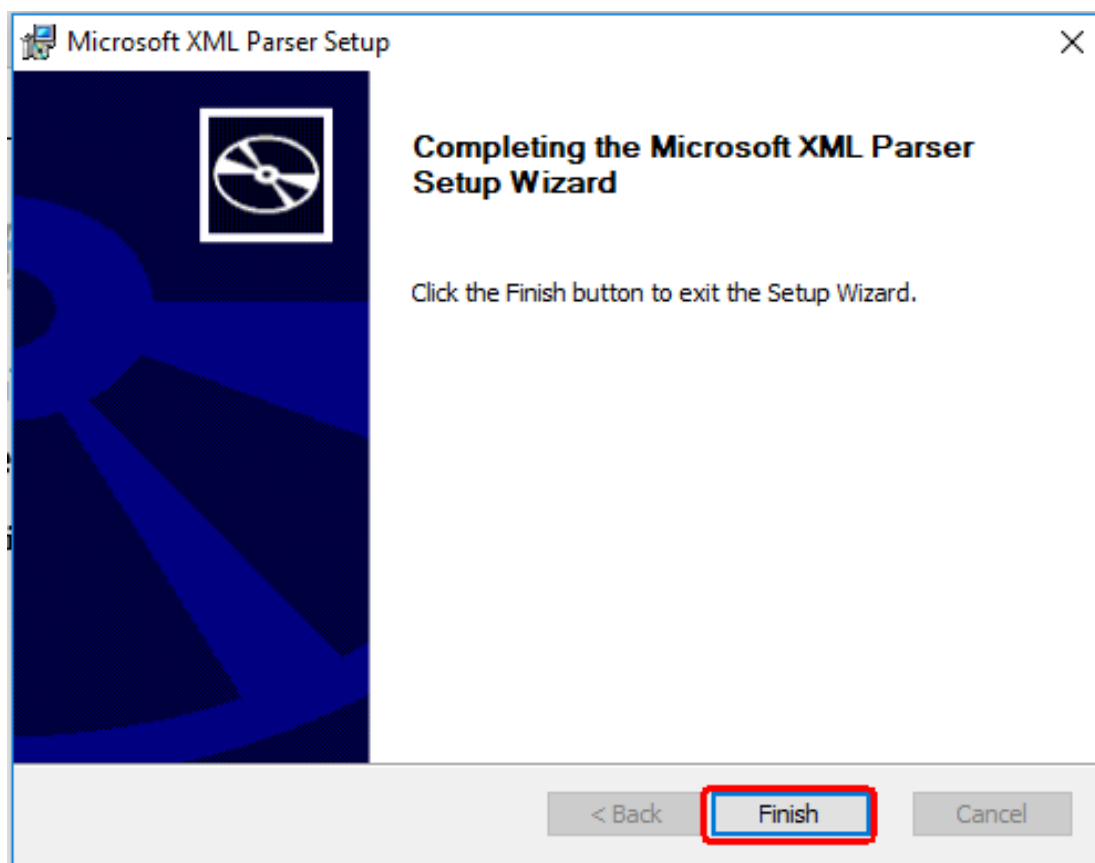
Step 11: Click on Next tab



Step 12: Click on Install tab



Step 13: Click on Finish tab



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

shown below.

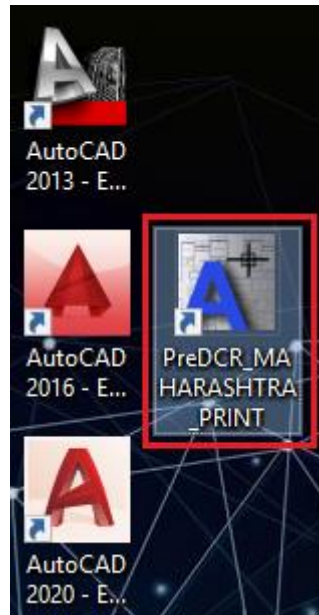
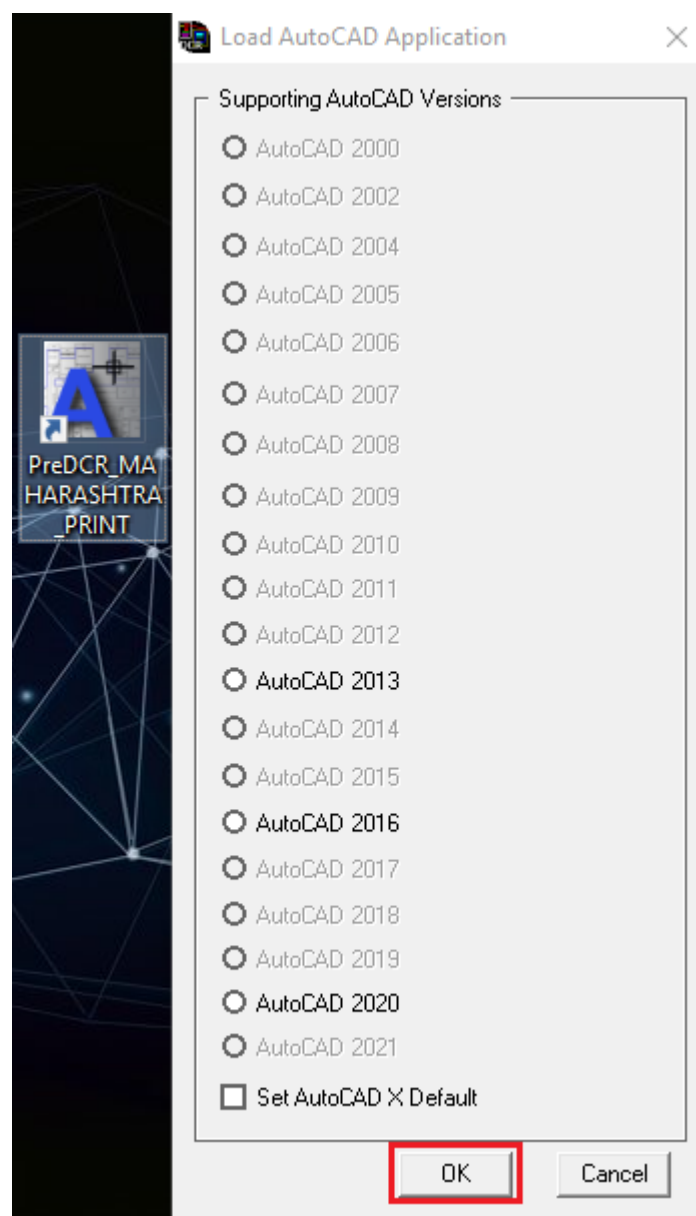


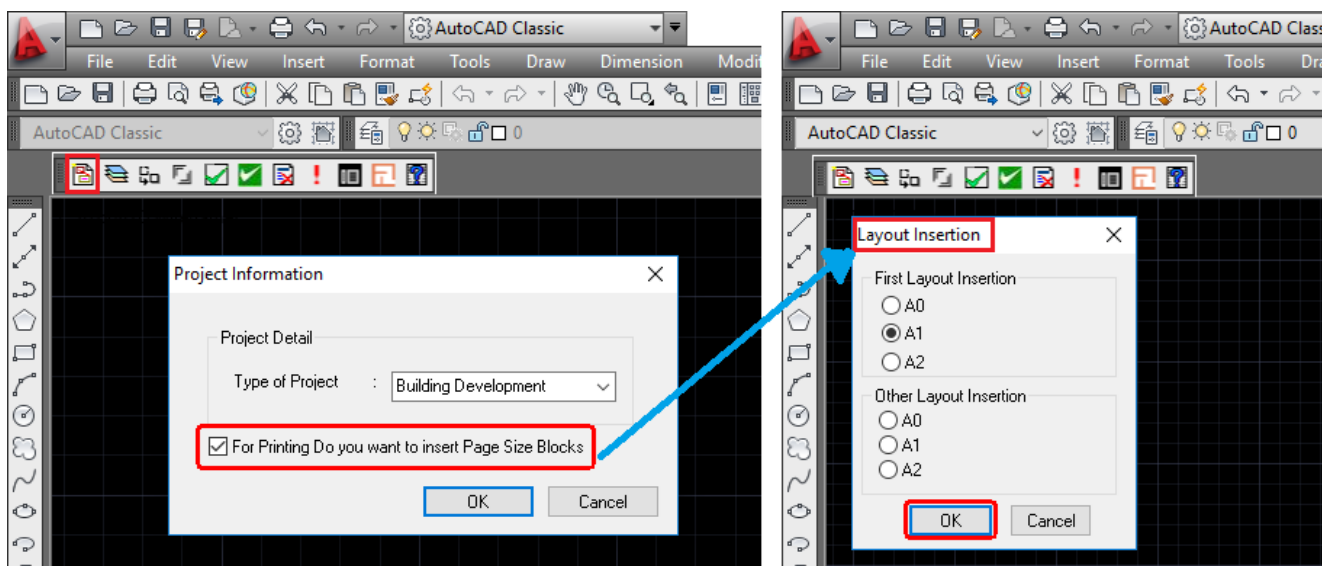
Figure 1: PreDCR shortcut on desktop

Methodology

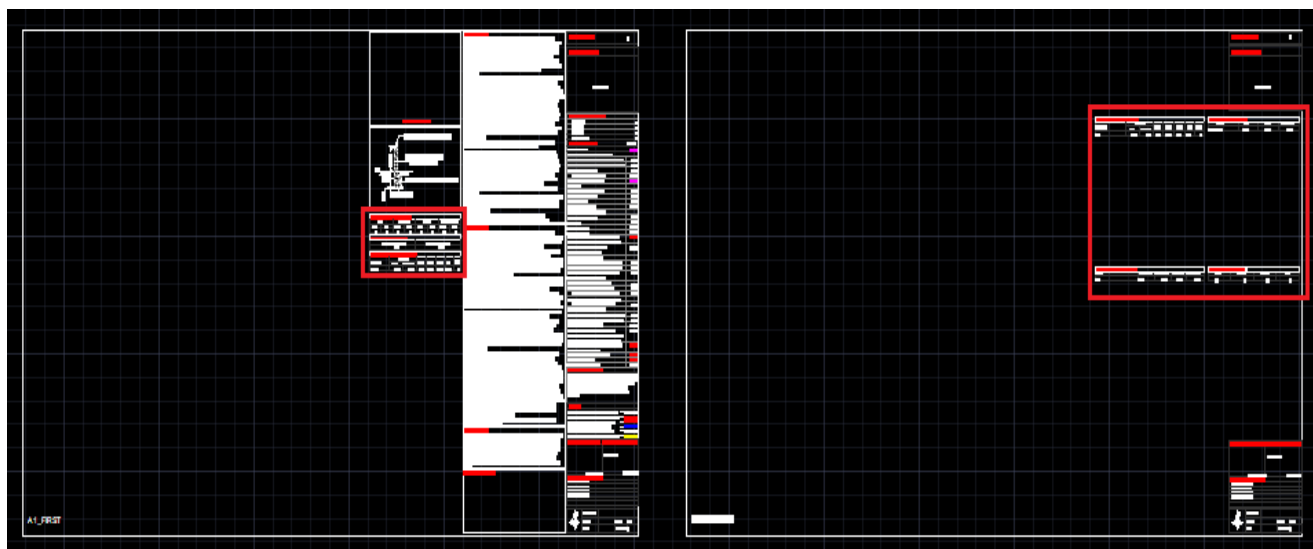
- 1) Open the PreDCR Maharashtra Print software by clicking on PreDCR shortcut on your desktop & select the AutoCAD version & then click on "OK" button.



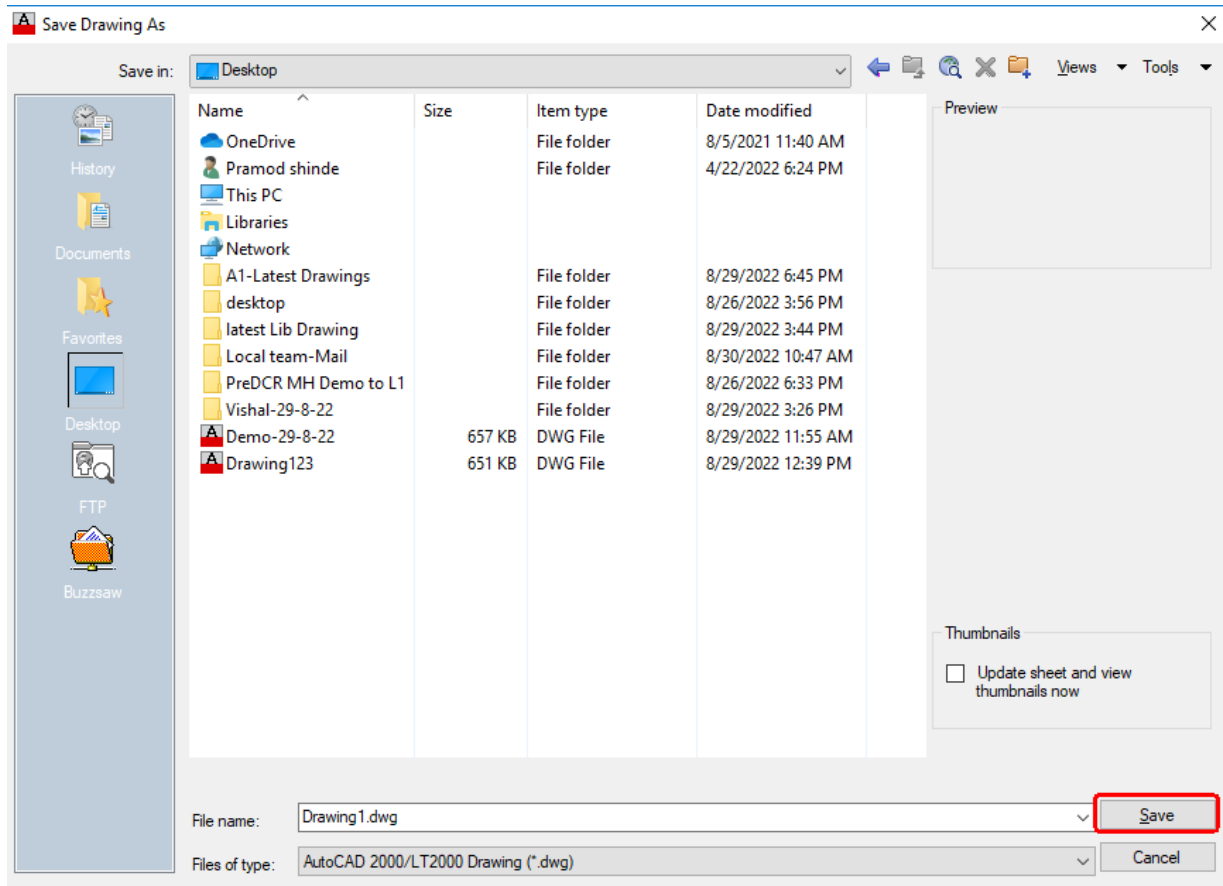
- 2) Insert Printing Layout Templates as per drawing requirement. (A0, A1, A2).
 - a. Insert First layout from selection given. (Only 1 layout insertion is allowed)
 - b. Insert Other Layout from selection given. (User can insert more than 1 layout as per requirement)



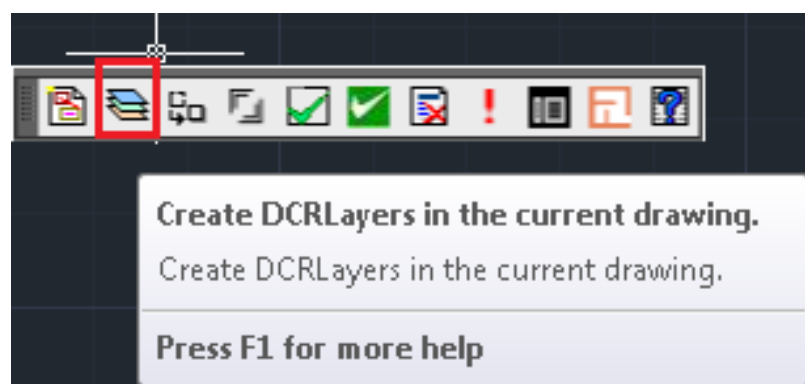
Blank Layout templates will be inserted with Blank Area Tables without values as highlighted.

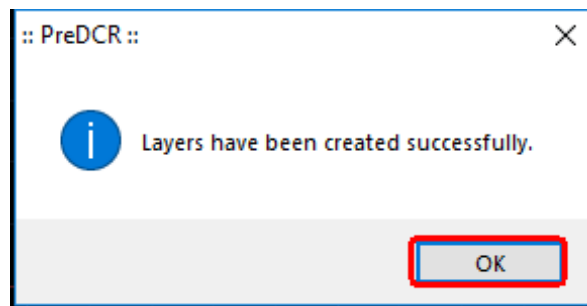
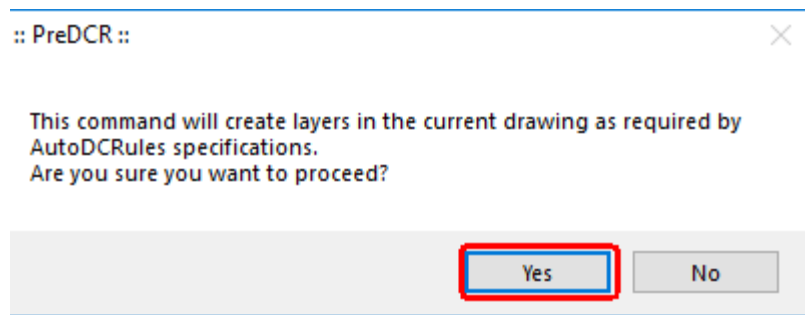


3) Save the drawing to any folder

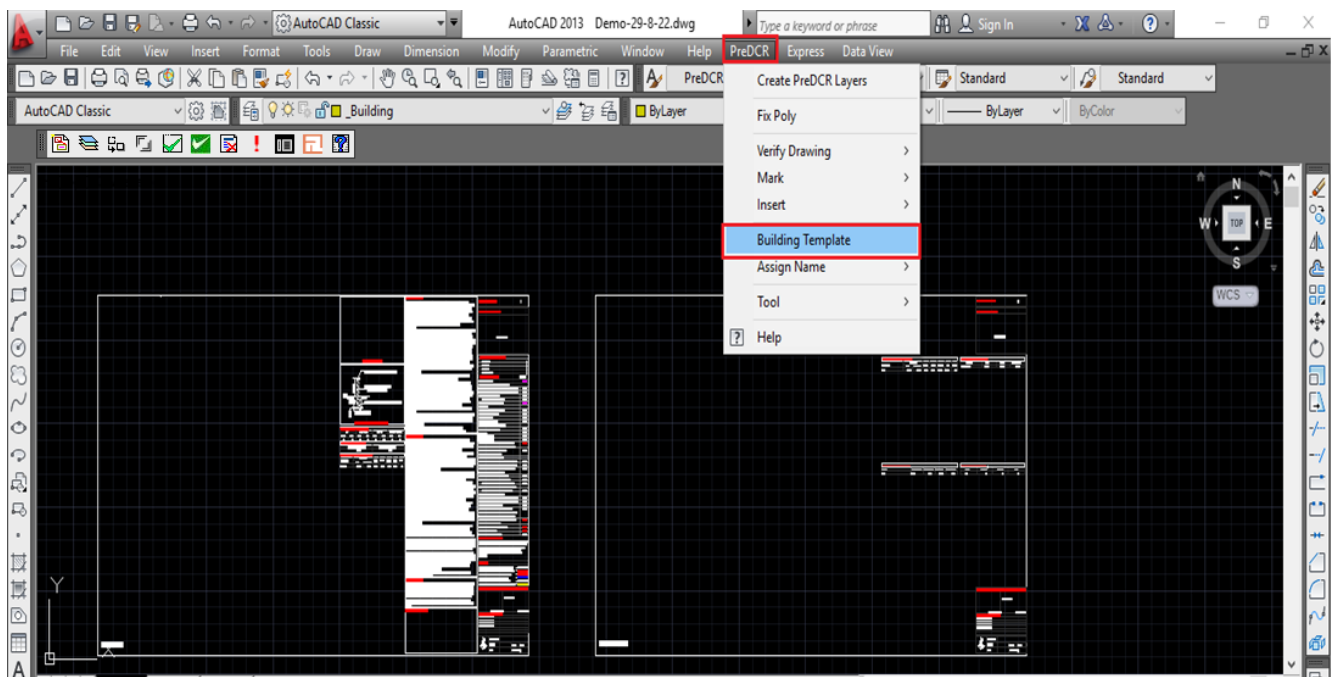


- 4) By using PreDCR toolbar "Create a DCR layer" that is second option in PreDCR toolbar, select yes and then Ok

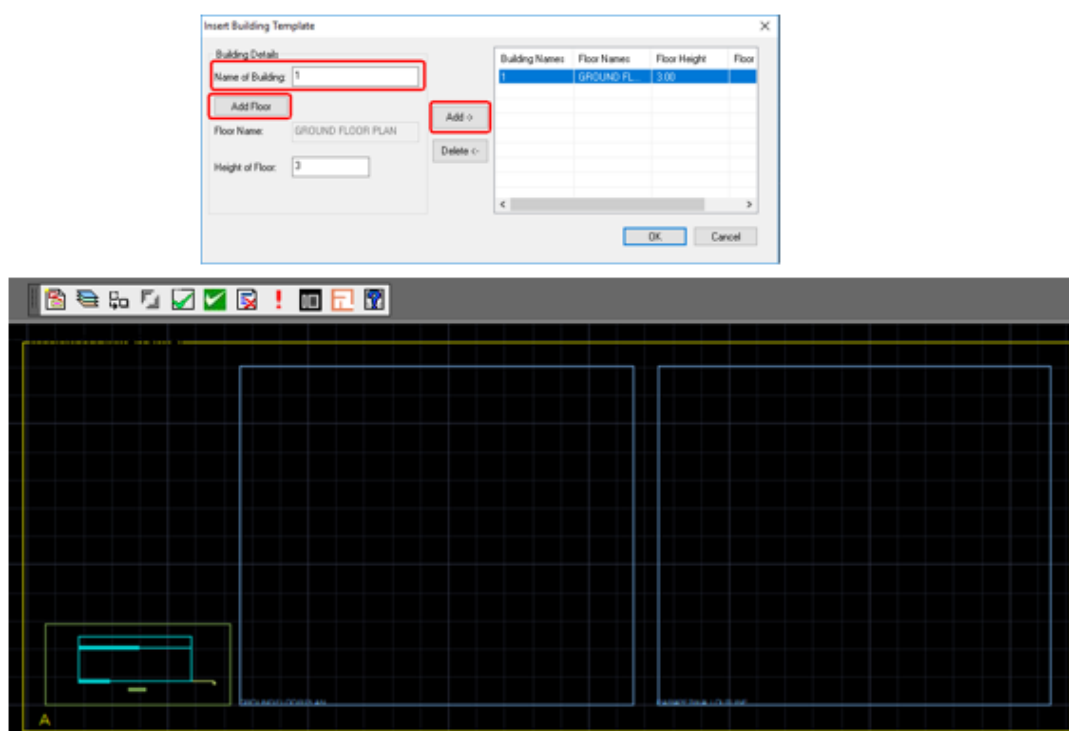




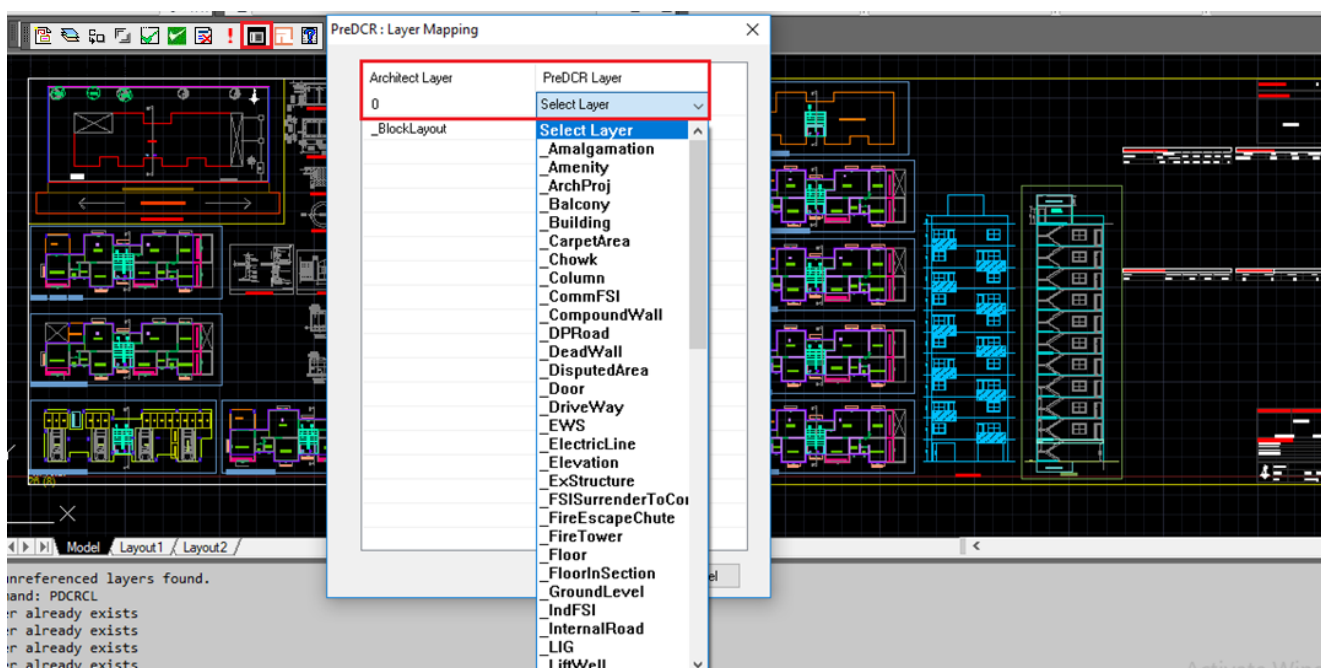
5) Insert Building templates from PreDCR option - Building template.



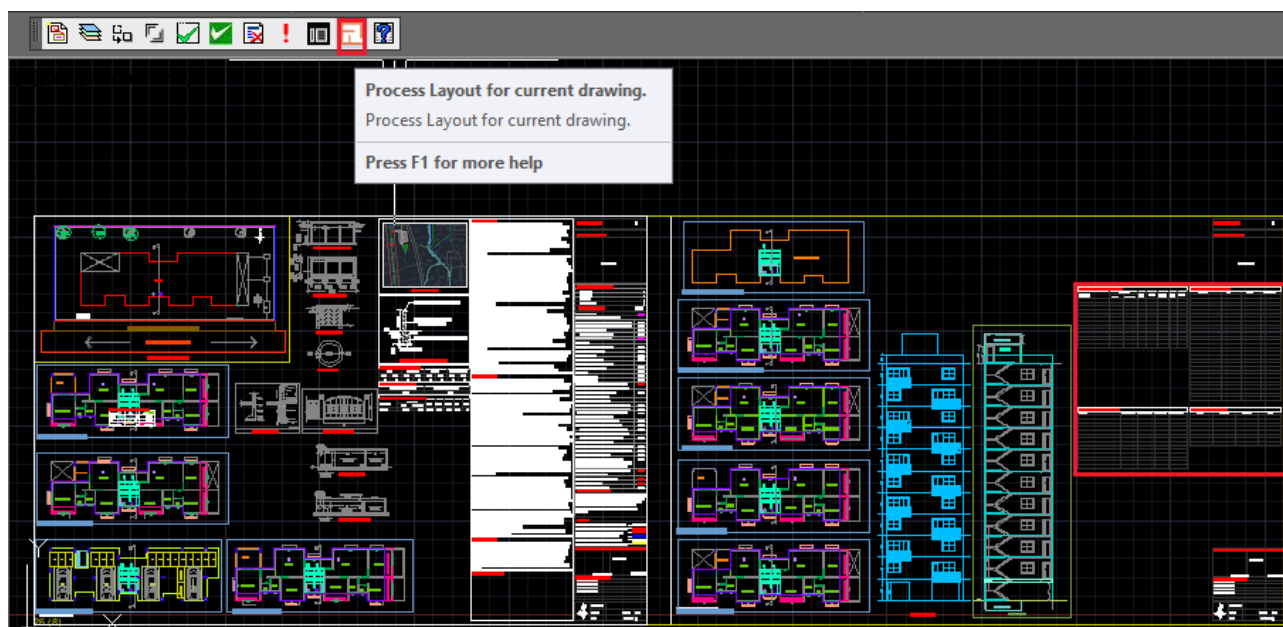
- 6) Give inputs as name of building, Add floors and its floor height, click Add and then click OK, blank template will get inserted in drawing.



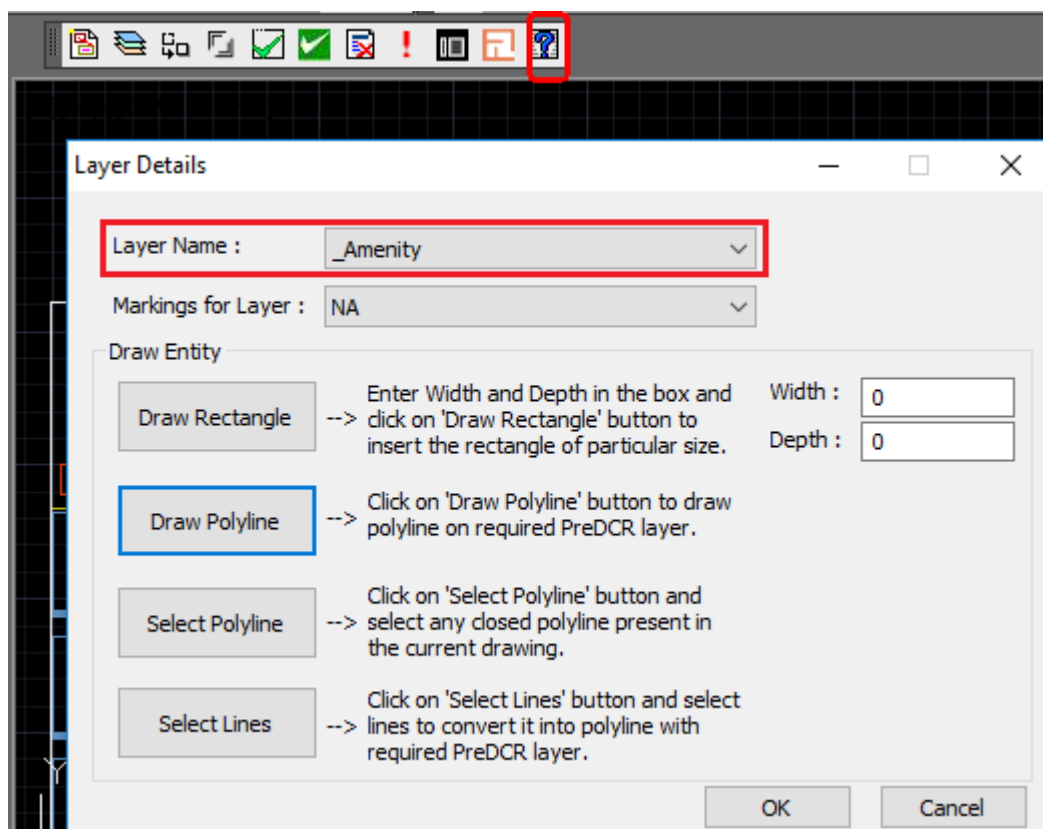
- 7) Layer mapping feature – User can easily convert any Architect layer to PreDCR layer from drop down option.



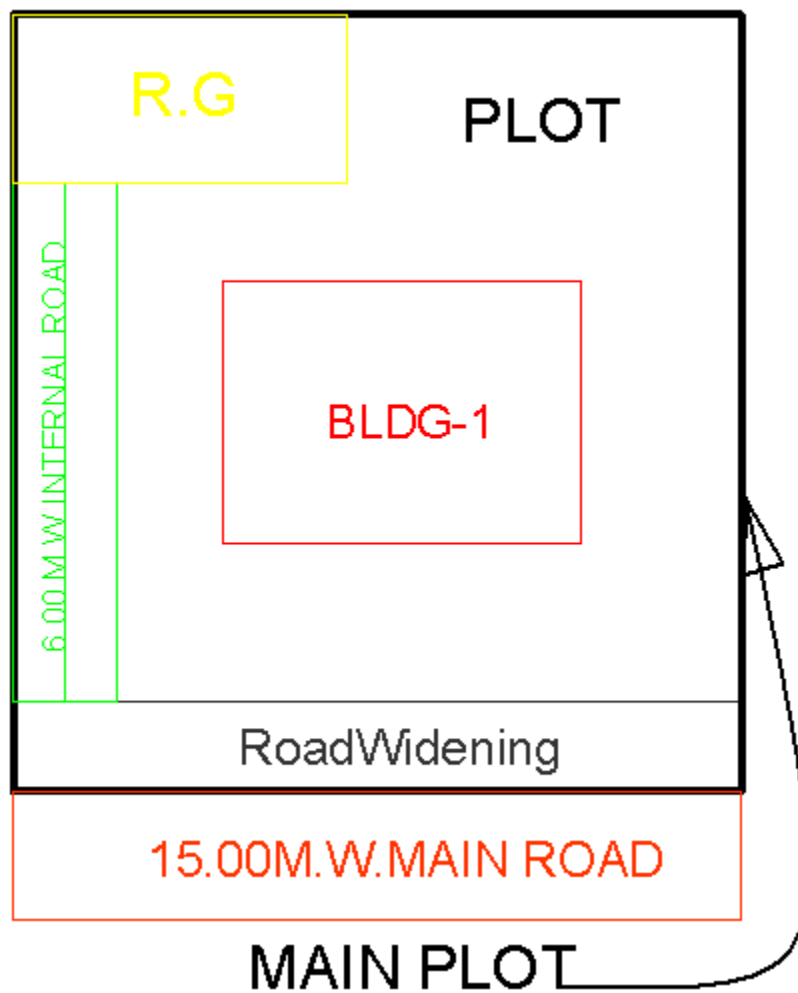
8) Process Layout – Blank rows will get inserted as per drawing



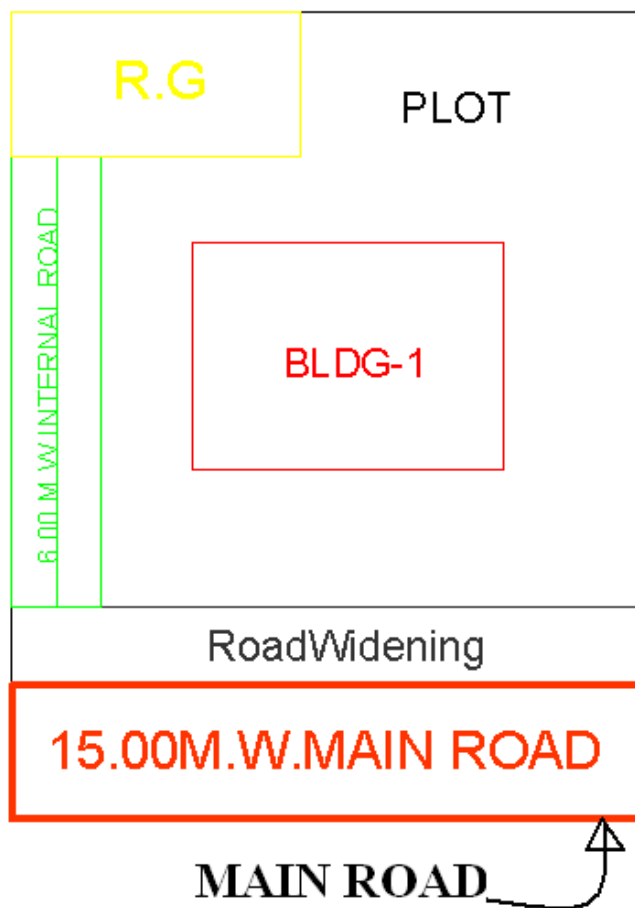
9) Active help – User can Draw, join, shift any Rectangle, Polyline to any PreDCR layer from Layer Name Drop down.



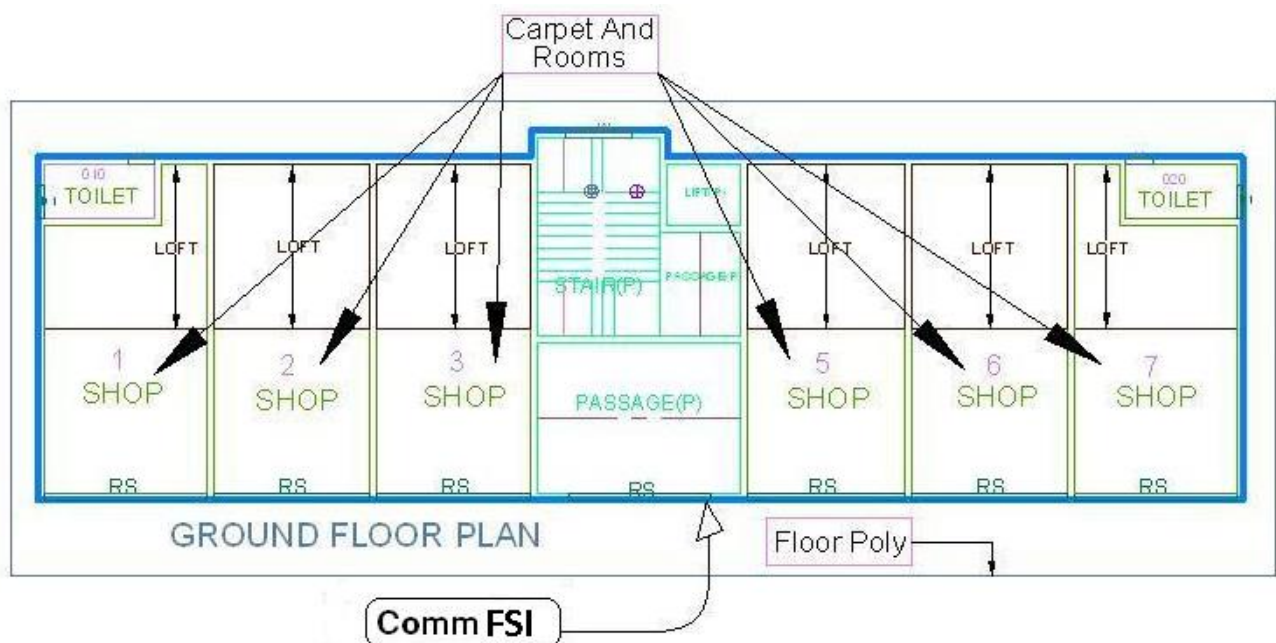
Now Select current Layer is "**_Main plot**" & Draw a closed polyline on this layer. Also give the plot name on that layer only.



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



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

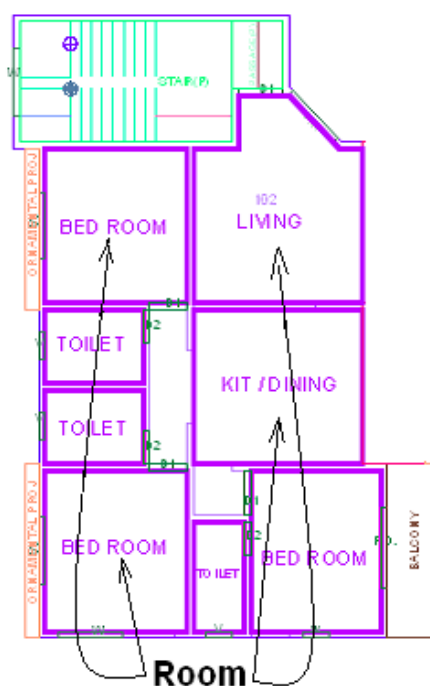


Make the current Layer "**_Carpet Area**" and draw a closed poly on this Layer which having floor area excluding wall area. Also give the name on this Layer. If carpet is splitted no of places but having only one tenement then use the Splitted tenement option from PreDCR Mark menu bar.

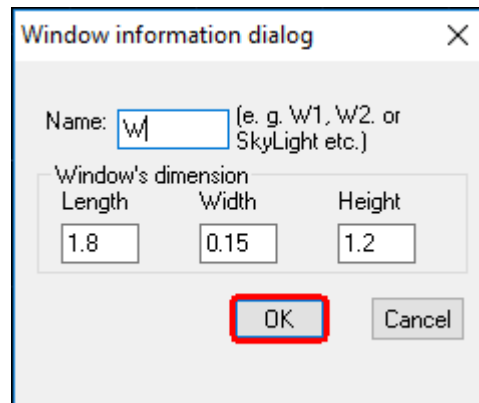


CARPET AREA

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



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

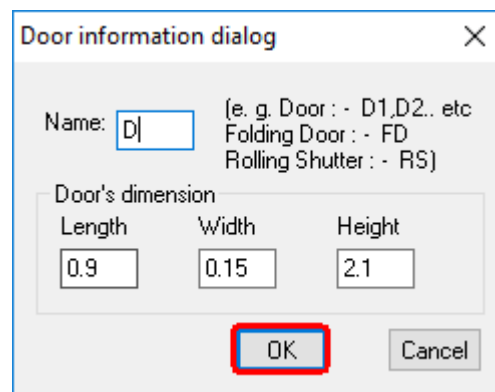


Window information dialog

Name: (e. g. W1, W2, or SkyLight etc.)

Window's dimension

Length	Width	Height
<input type="text" value="1.8"/>	<input type="text" value="0.15"/>	<input type="text" value="1.2"/>



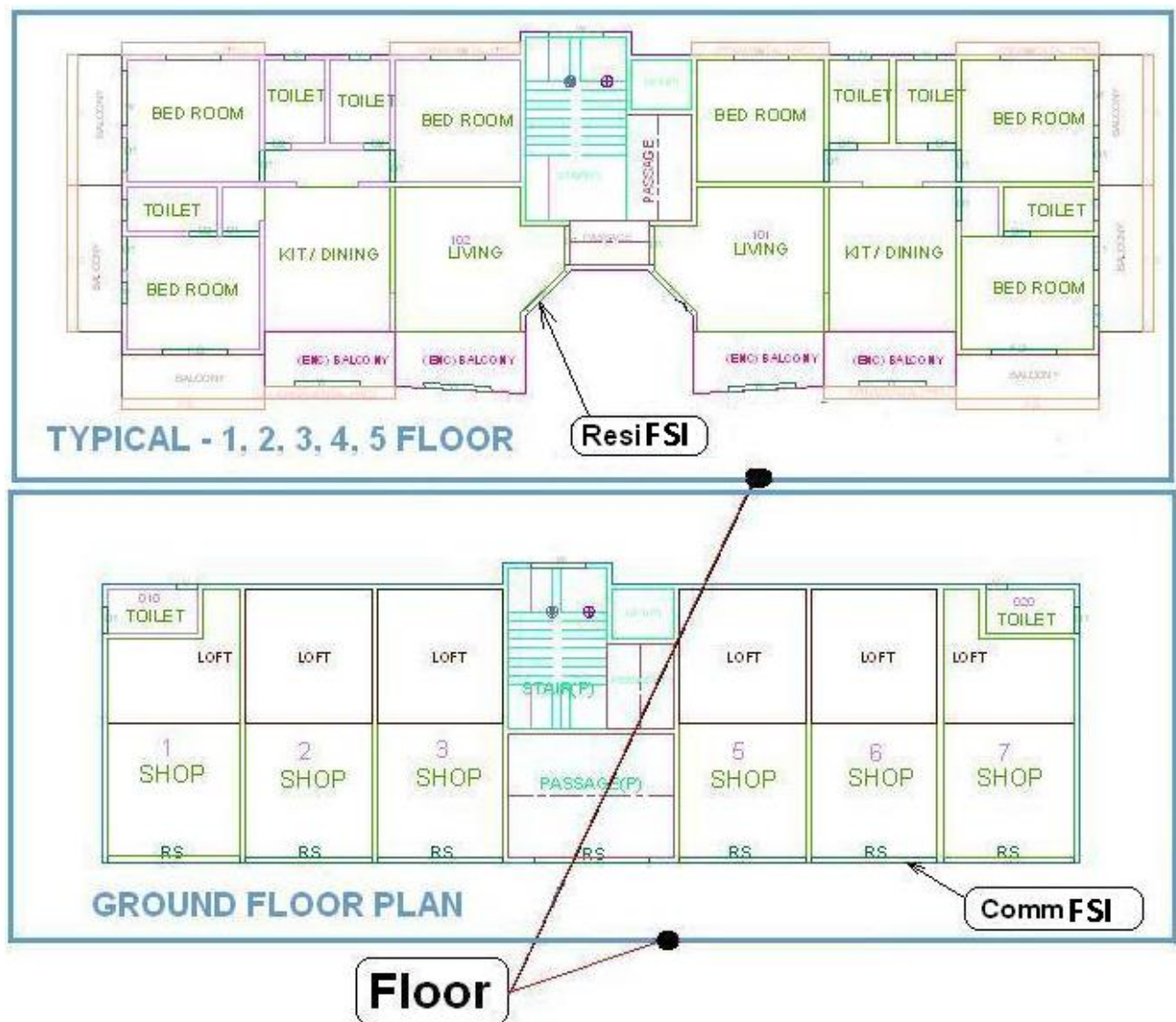
Door information dialog

Name: (e. g. Door : - D1,D2.. etc
Folding Door : - FD
Rolling Shutter : - RS)

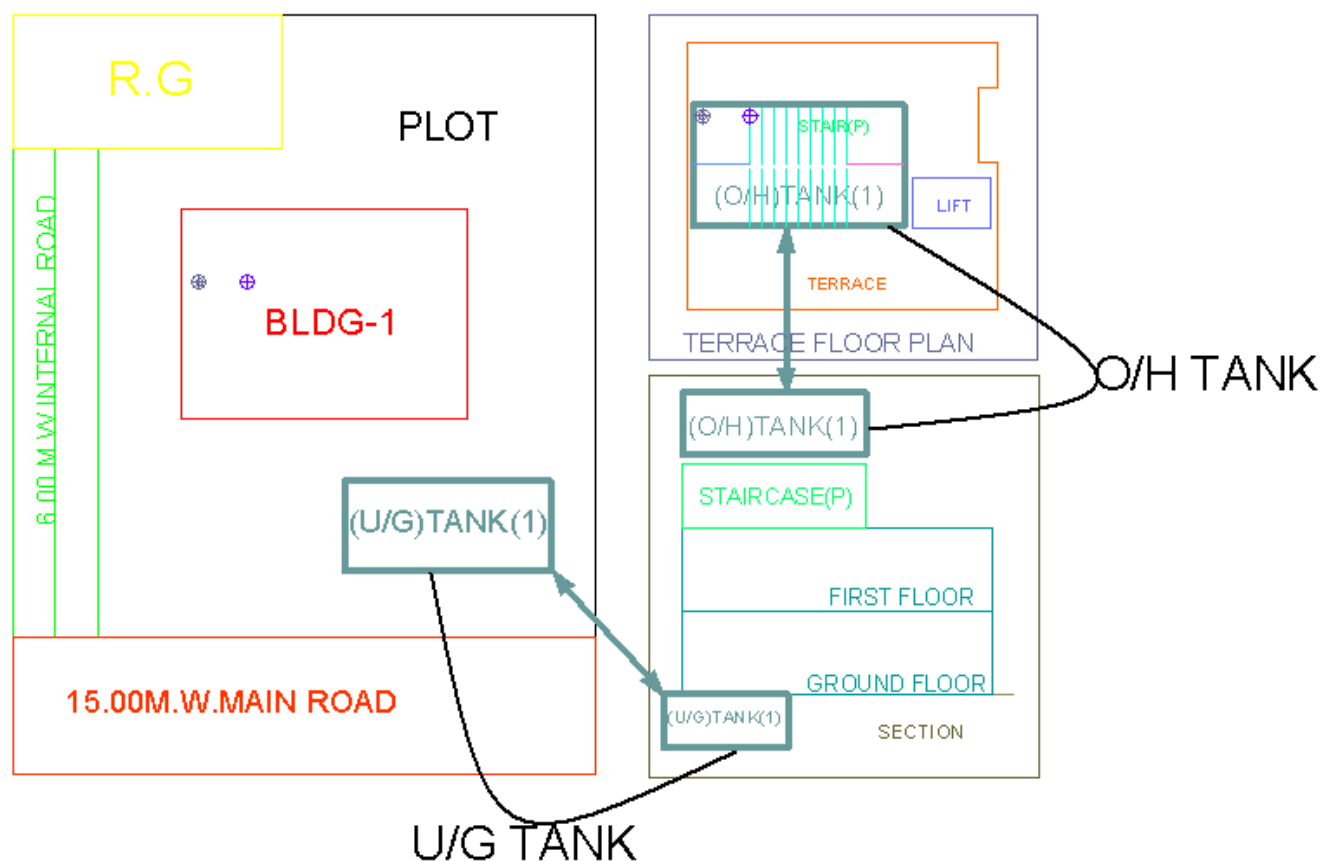
Door's dimension

Length	Width	Height
<input type="text" value="0.9"/>	<input type="text" value="0.15"/>	<input type="text" value="2.1"/>

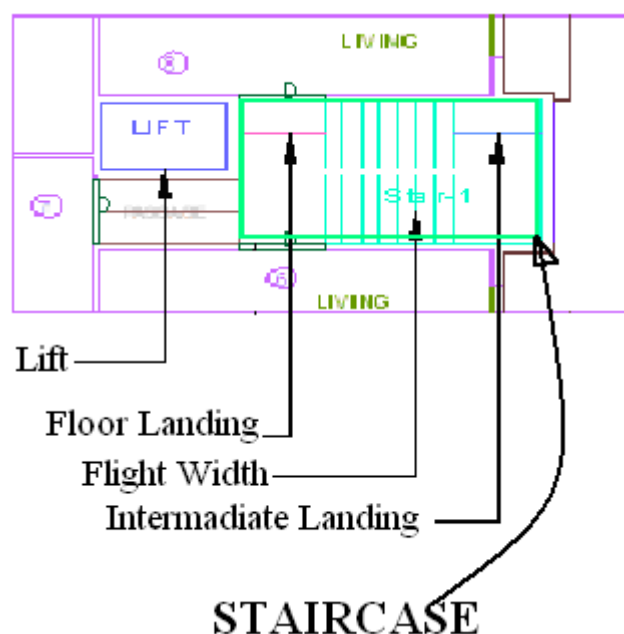
15) Make the current layer "**_Floor**" and draw a boundary outside of each & every floor.



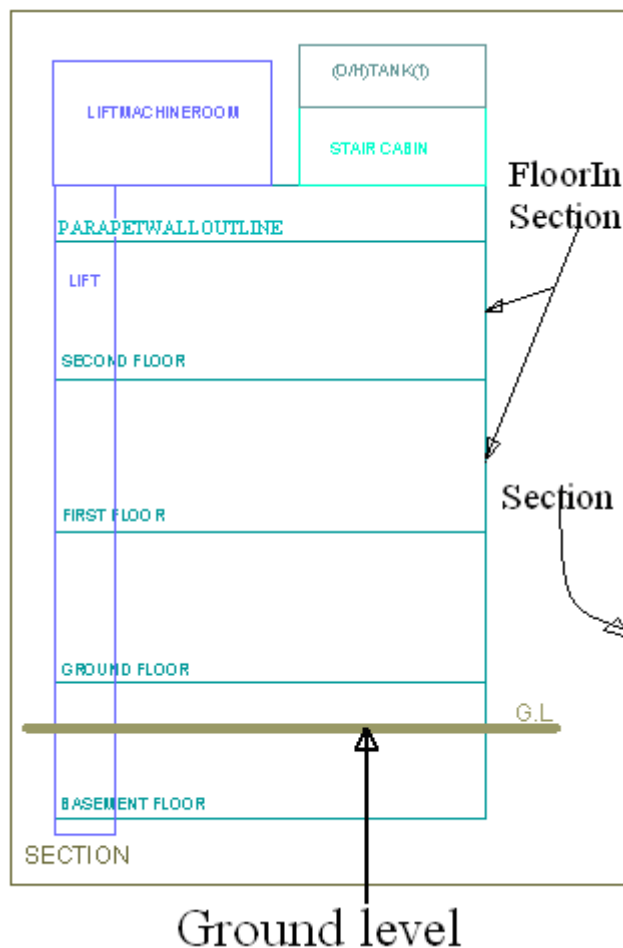
16) Make the current layer "**_Tank**" and draw U/G & O/H tank in plan as well as in section also. Assigned this tank name by using Assigned name option from PreDCR menubar.



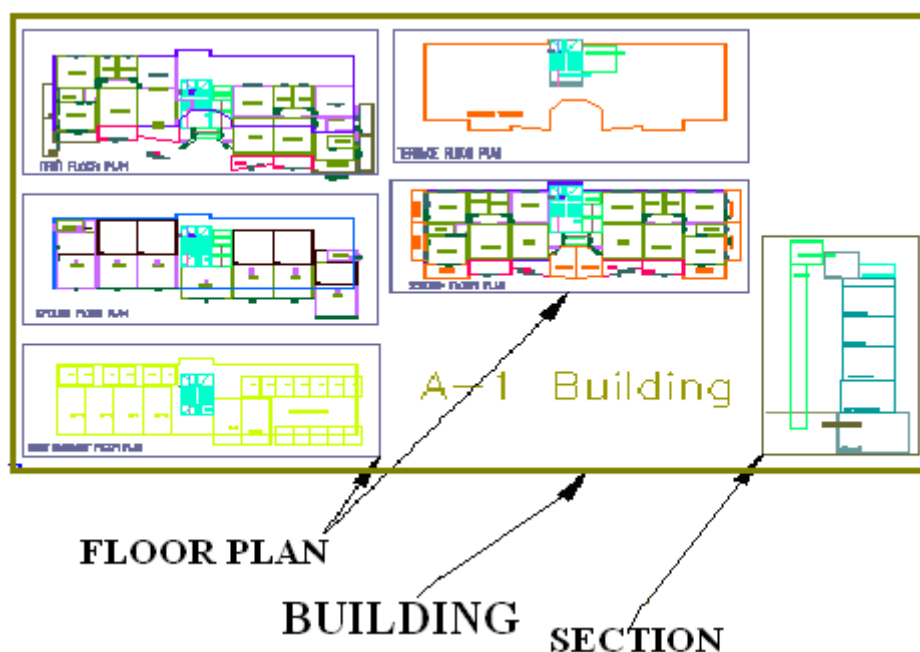
17) Make the current layer "**Staircase**" and draw all the riser on this layer which is a open polyline. Also draw two extra line on this layer which is showing a floor landing and intermediate landing. Then mark this landing for using staircase landing option from PreDCR menu. Also mark the staircase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



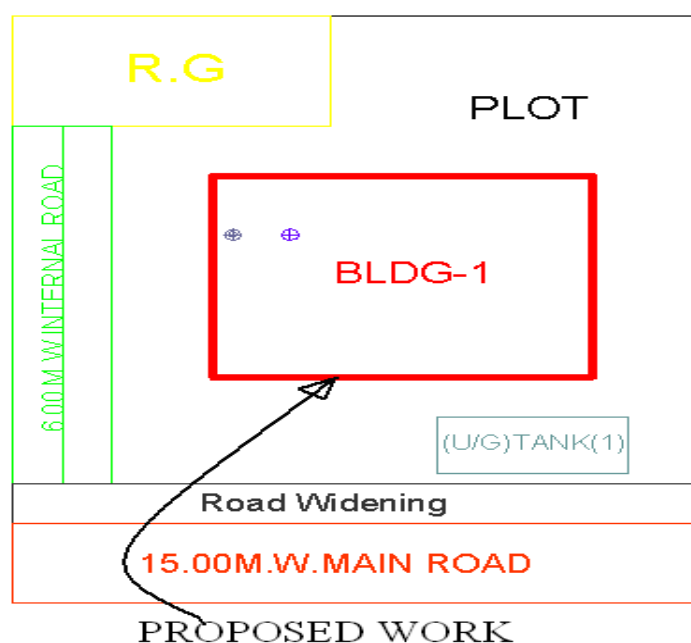
18) Make the current layer is "**_Ground Level**" and draw an open polyline on this layer which is place below the plinth level.



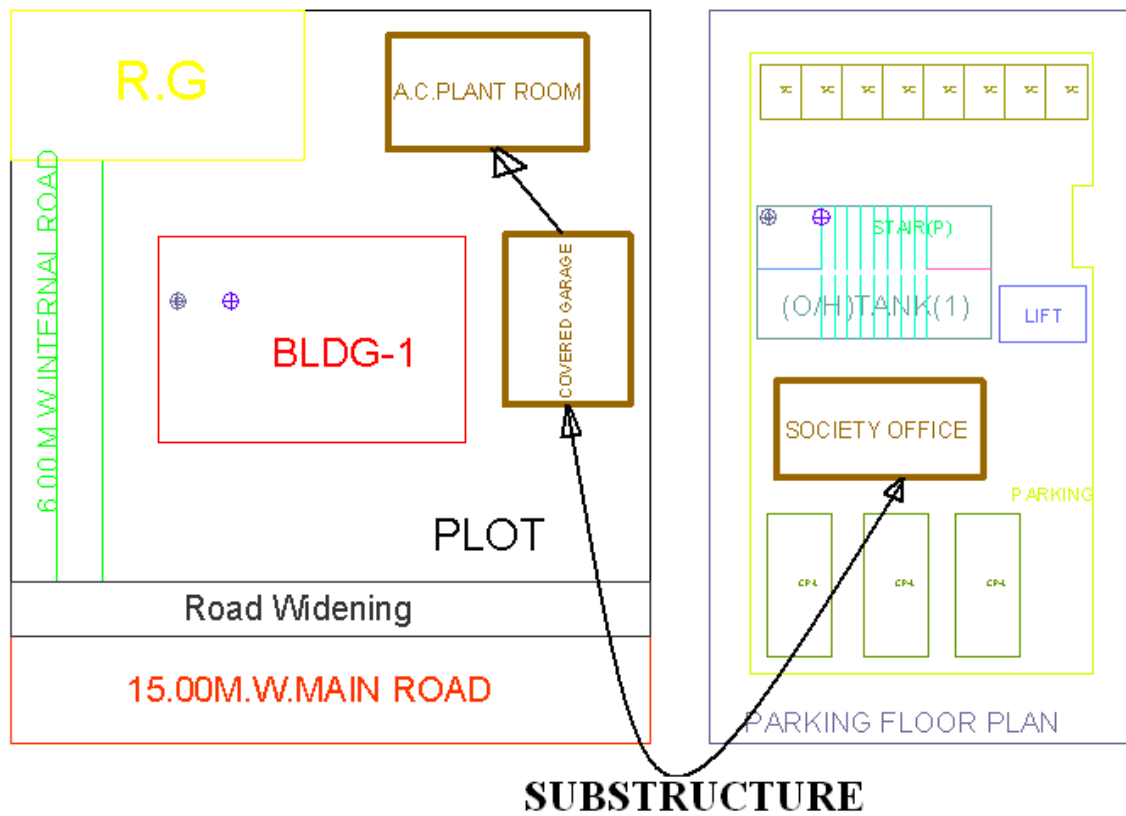
Make the current layer is "**_Building**" and draw a boundary on this layer which is having a group of all the floors with section



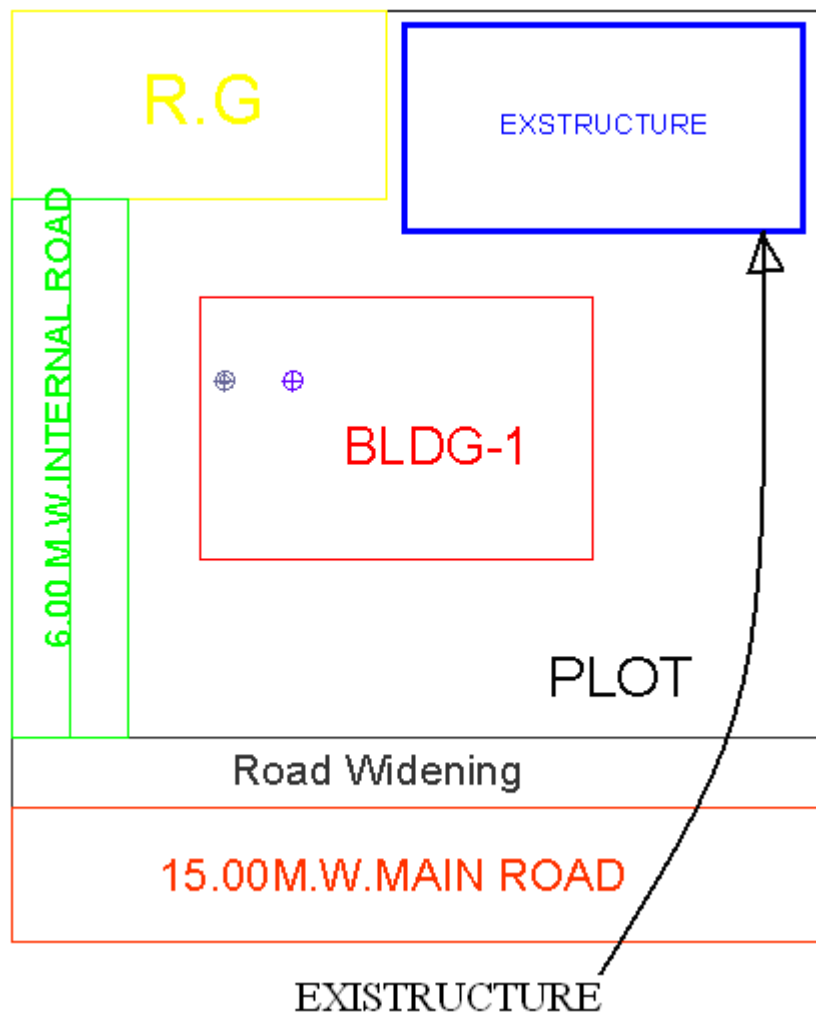
Make the current layer is “**_Proposed Work**” and **draw** a total coverage on this layer. Assigned this proposed work by using "PreDCR->Assigned name -> Building & proposed Work from PreDCR menu.



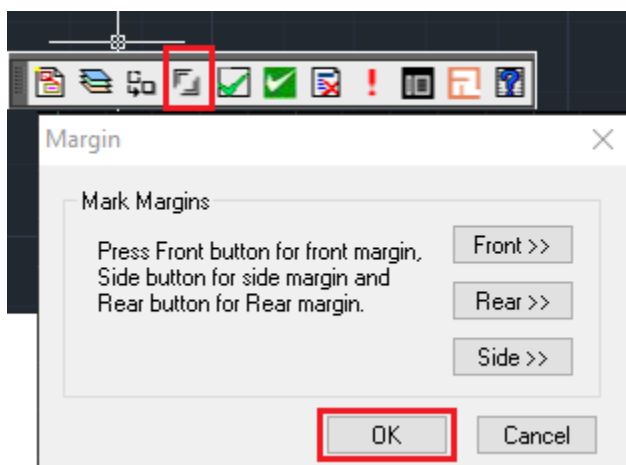
If project having any Substructure then draw a closed polyline on “**_Substructure**” layer. Also mark this substructure by using " PreDCR-> Mark-> Substructure from PreDCR menu bar.



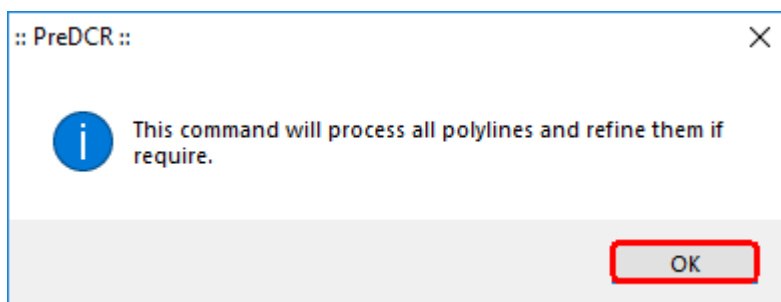
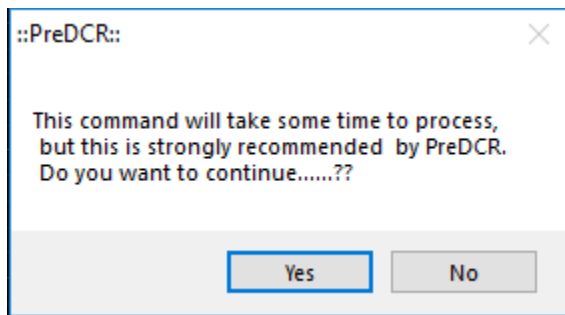
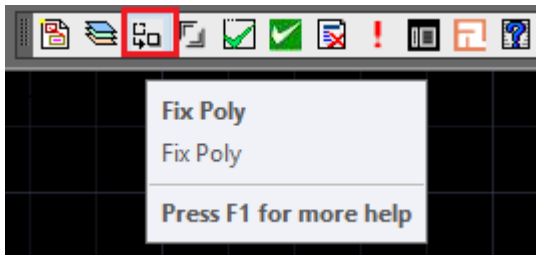
If project having any Existing structure then draw a closed polyline on "**_Restructure**" layer. Also mark this Restructure by using " PreDCR-> Mark-> Restructure from PreDCR menubar.



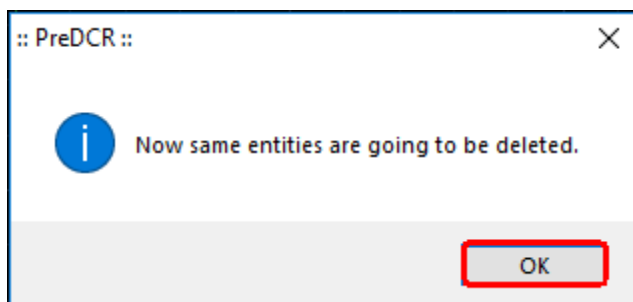
Mark the margins by using Mark-> margin from PreDCR menu bar



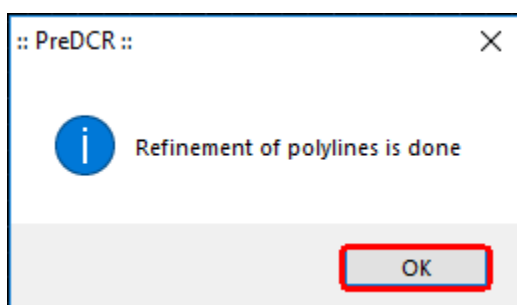
After converting all the Layers use the **"Fix poly"** option from PreDCR menu bar.



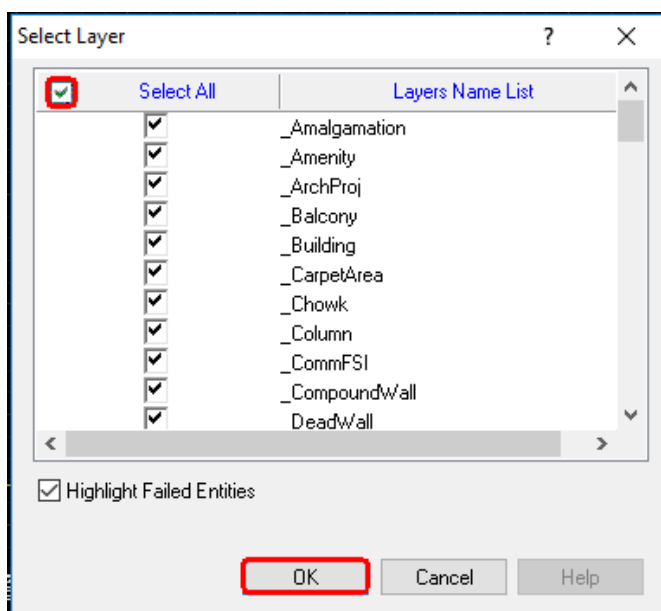
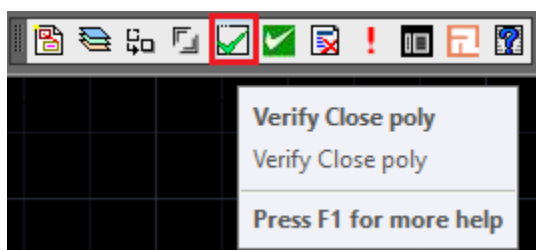
Just click on "OK"



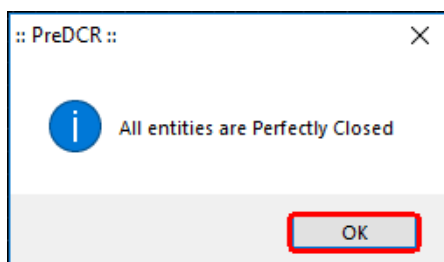
Just click on "OK"



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

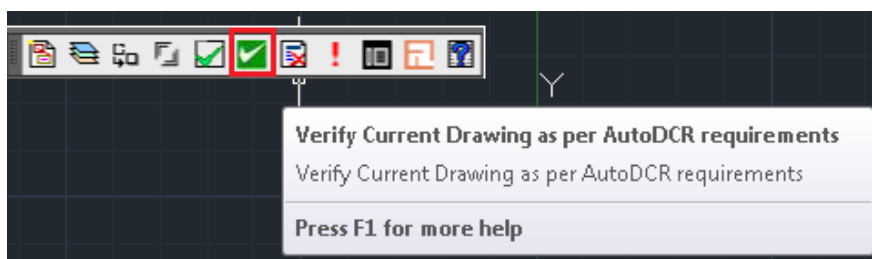


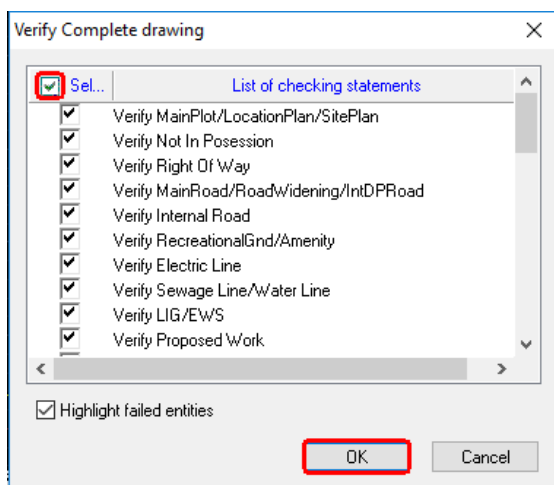
Just click on "OK"



Just click on "OK"

When u will get these message "All entities are Perfectly Closed" then select the **"Verify Current Drawing as per AutoDCR requirements"** option from PreDCR menu.

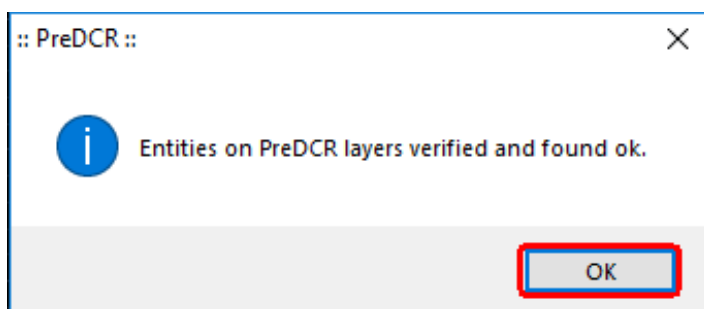




Just click on "OK"



Just click on "OK"



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

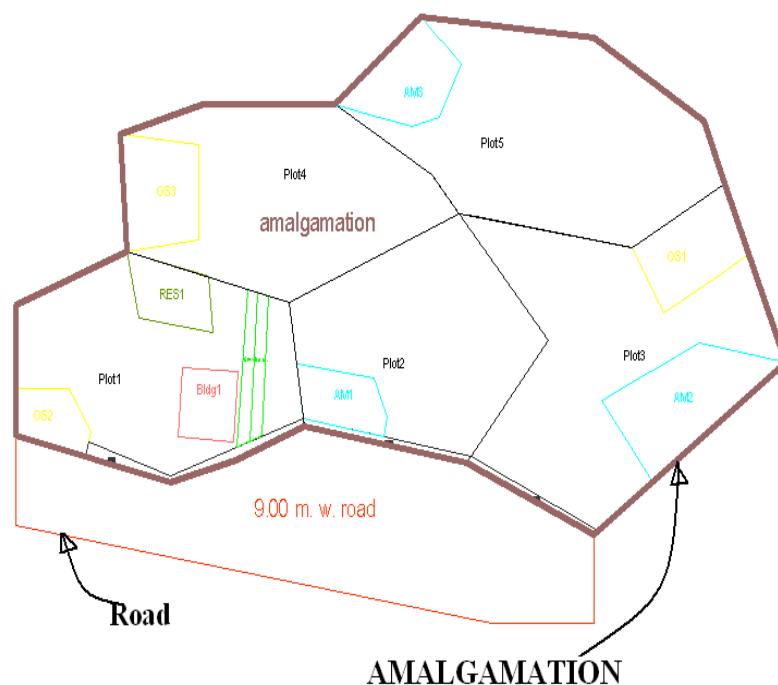
PreDCR Layer Information:

_Amalgamation:

Description :

Draw Amalgamation layer as a closed polyline over which two or more plots to be amalgamated.

How to draw :



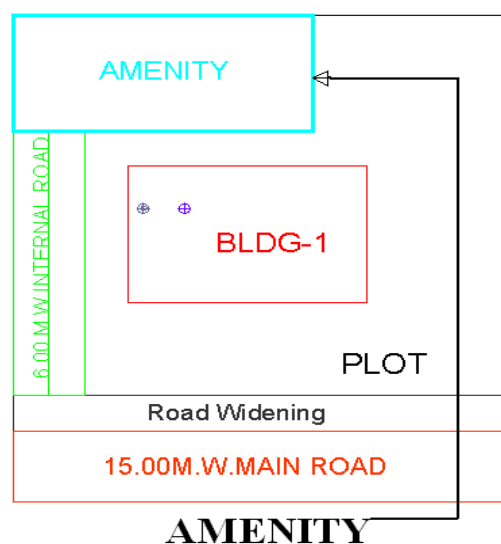
_Amenity:

Description :

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

Shortcut Command :-AMN

How to draw :



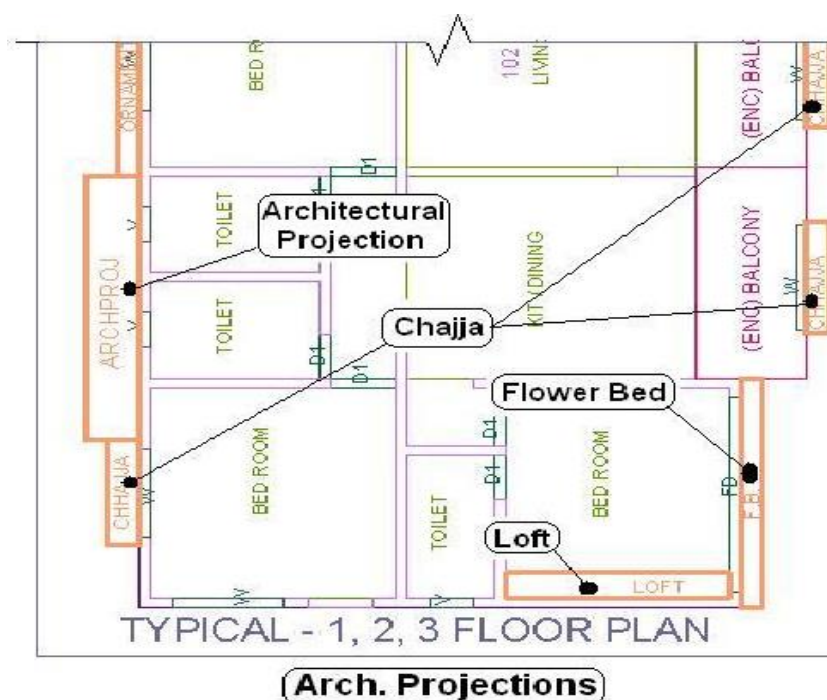
_ArchProj:

Description :

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

Shortcut Command :AP

How to draw :-



Balcony

Description :

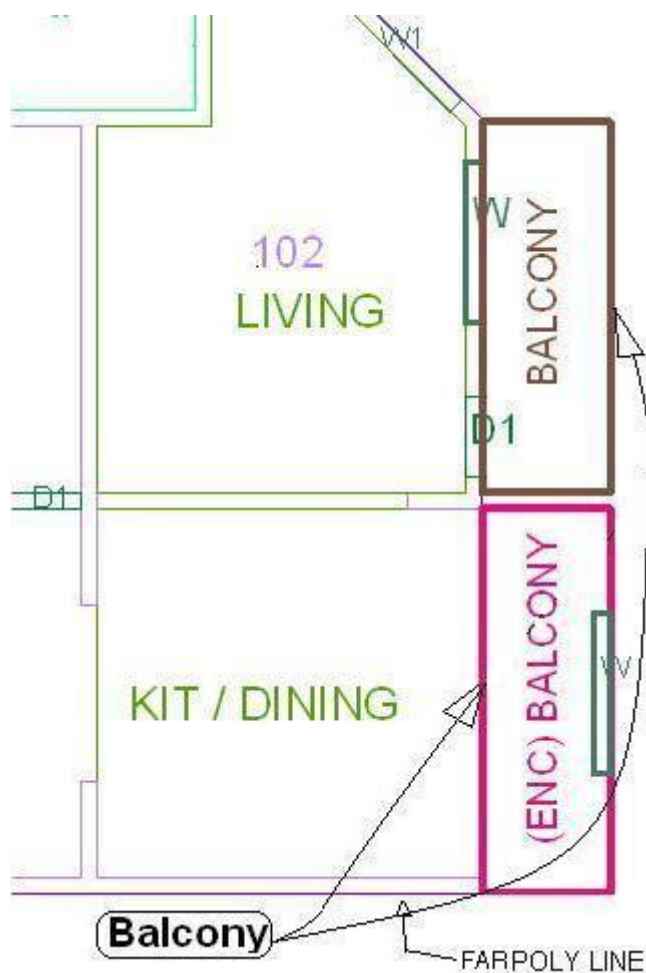
- Draw a balcony as a closed polyline which is a horizontal projection including parapet to serve as a sitting out place. Name of balcony must be inside and on _Balcony layer.

Balcony can be present in:

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

Shortcut Command : BL

How to draw : -



_Building

Description :-

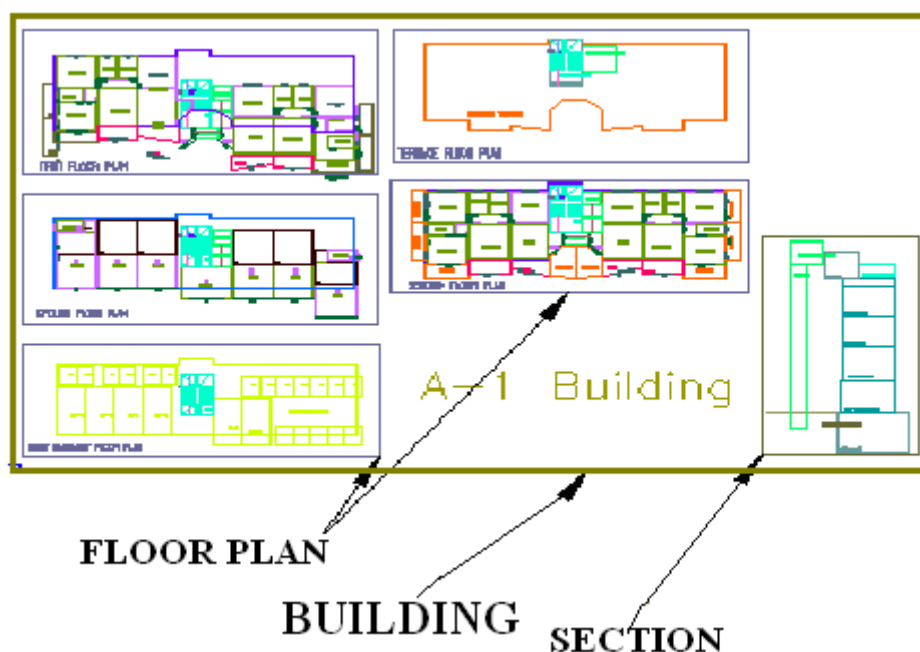
- Building is used to group all floor plans of the same building. Draw a closed poly enclosing all the floor plans and section of the same building on _Building layer. Note: As written above, dimension or area of this building poly has no meaning in AutoDCR. This is just an logical group of all floors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

Building names can be.

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

Shortcut Command : BLD

How to draw :



_Carpet area

Description :

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

Shortcut command : CPT

How to draw : -



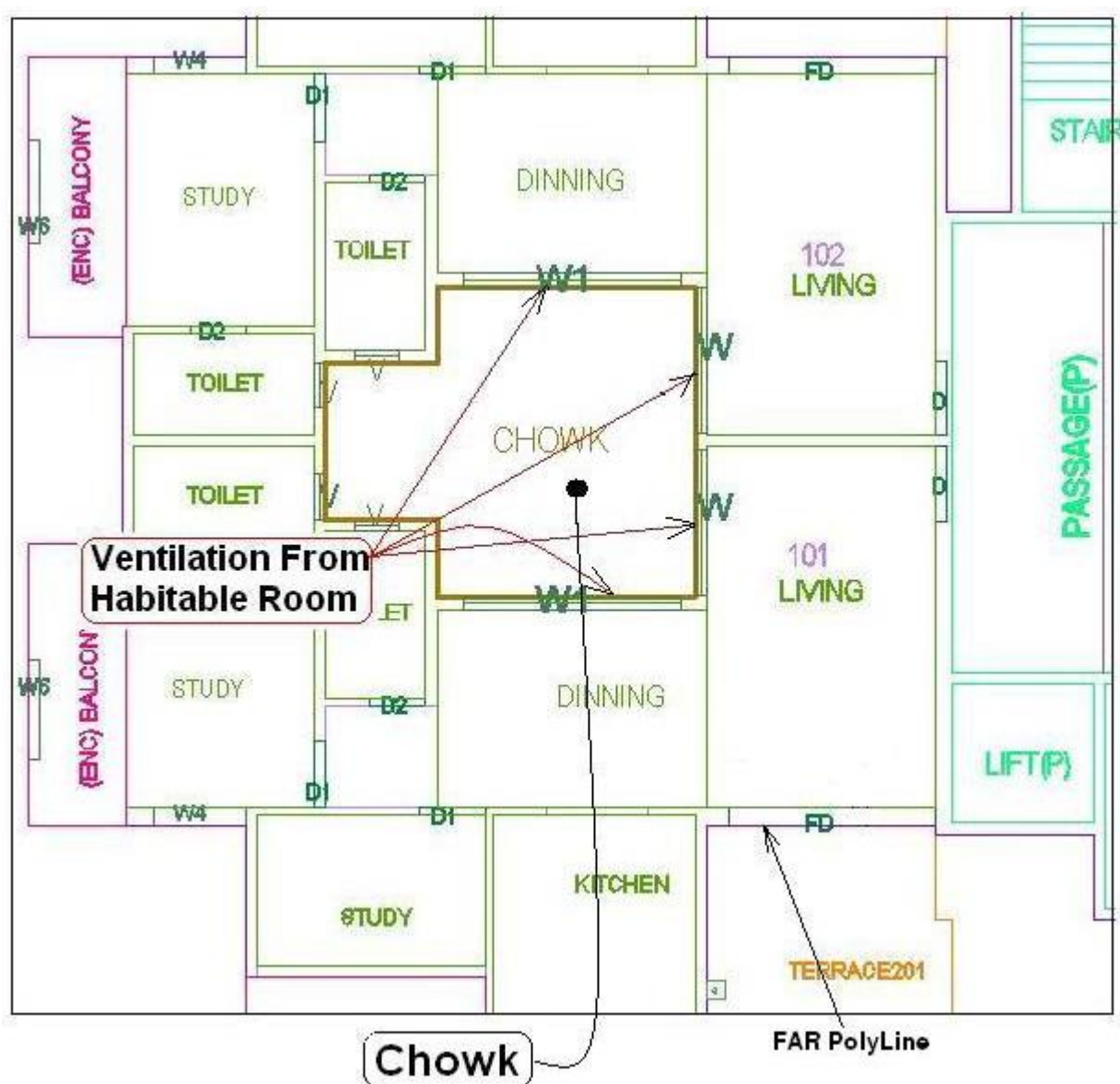
_Chowk

Description :

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

Shortcut Command : CWK

How to draw :



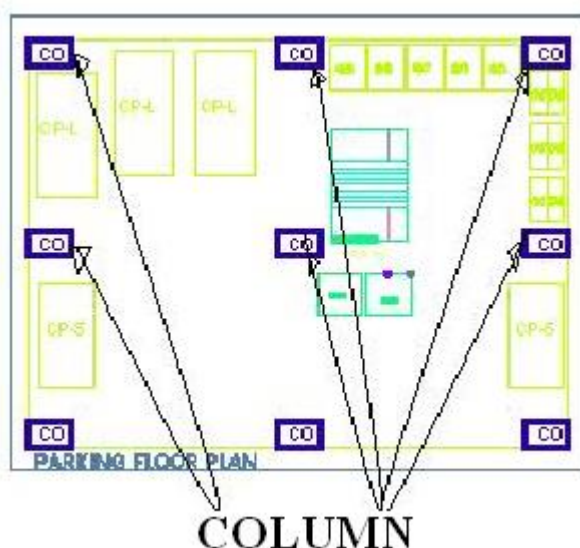
Column

Description :

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

Shortcut Command : CPL

How to Draw:-



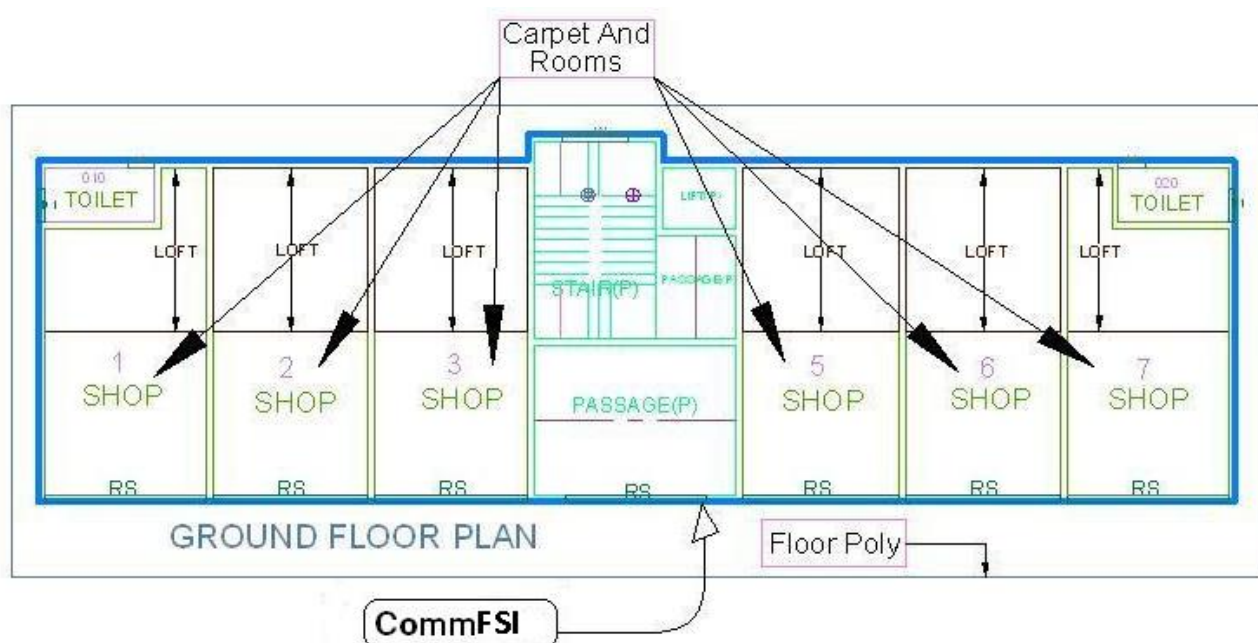
_CommFSI

Description:

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

Shortcut Command : CMFS

How to draw:



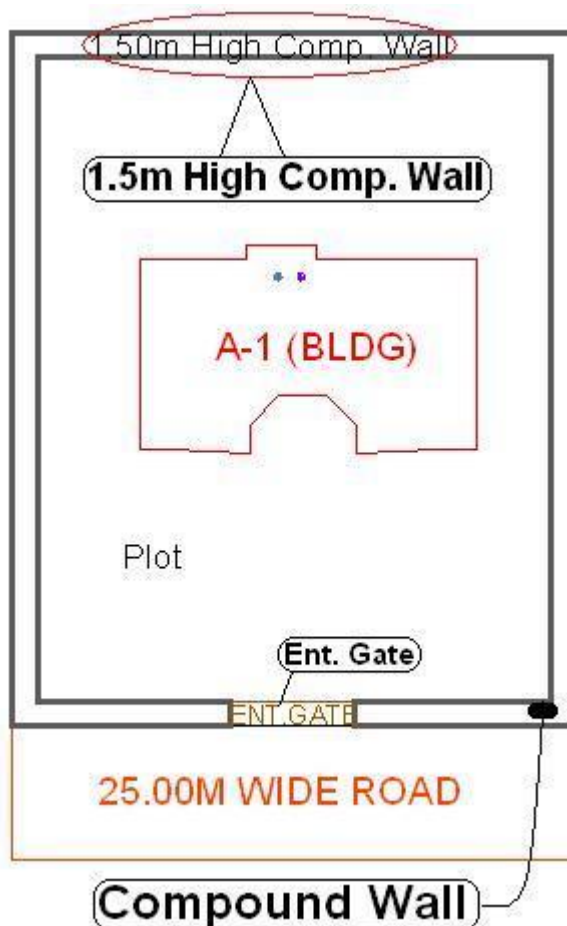
_Compound Wall

Description :

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

Shortcut Command : CW

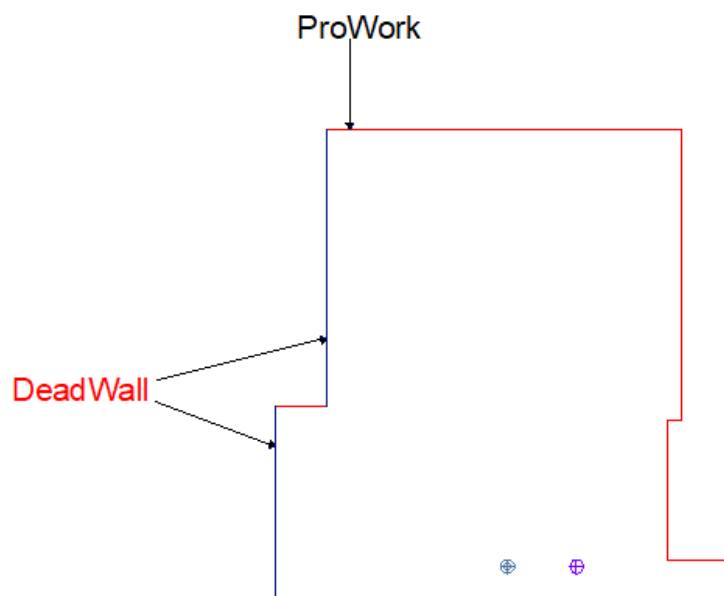
How to draw : -



_DeadWall

Description :

Draw open polyline overlapping with proposed work on a side from where ventilation is not taken and should be draw inside the plot

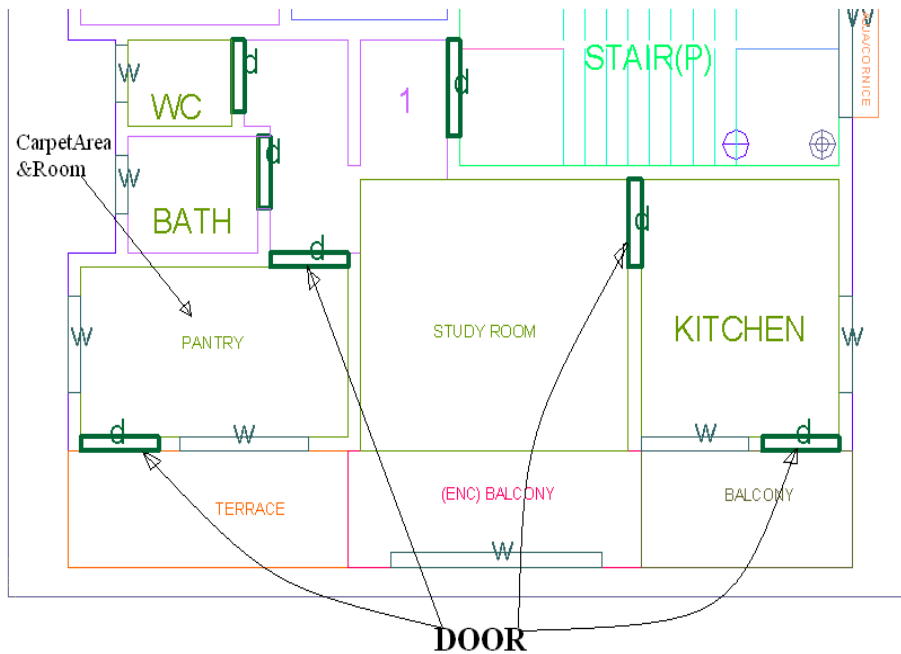
How to draw : -***_DisputedArea*****Description :**

DisputedArea is a closed Polyline which is drawn on “_DisputedArea” layer. It must be drawn inside MainPlot.

_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 : -**

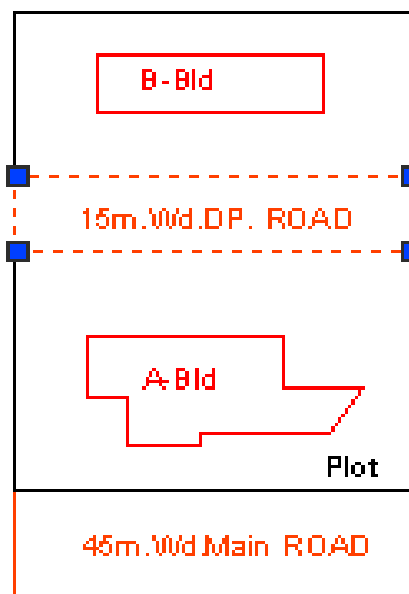


DP Road

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.

How to draw : -



Internal D.P. Road

_DriveWay

Description :

Draw a closed poly line on “_Driveway” layer which is inside parking area to show and check driveway rule.

_Electric Line

Description : -

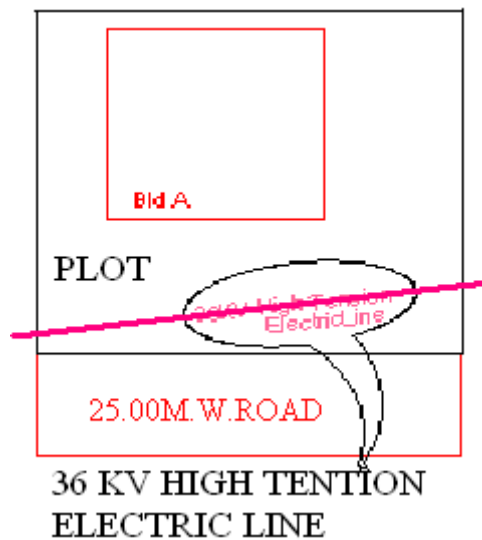
Electric line will be present in the layout plan and shall pass through plot entity as a non closed polyline.

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

For e.g. 33 KV High Tension Line

Shortcut Command : LI

How to draw : -



_Elevation

Description :-

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

Shortcut :-**How to draw :-****_EWS****Description: -**

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

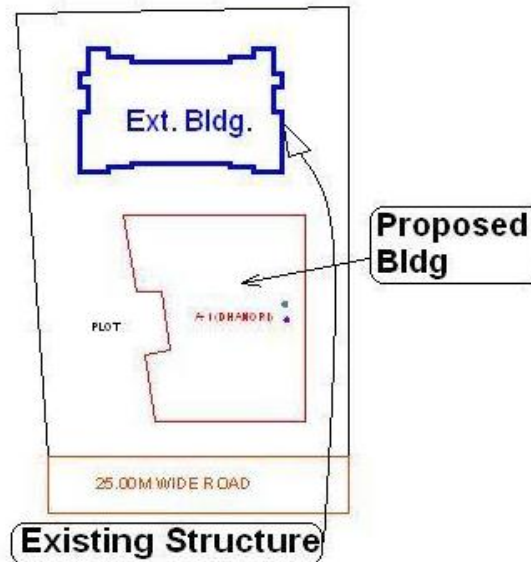
How to draw :-

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

_ExStructure:-

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

Shortcut Command : EX**How to draw :-**



_FireEscapeChute

Description: -

Draw an Closed Polyline on _"FireEscapeChute" layer.

How to draw :-

It must be drawn inside floor

_FireTower

Description: -

Draw an Closed Polyline on _"FireTower" layer.

How to draw :-

It must be drawn inside floor

_Floor

Discription:

Draw a Floor as a closed polyline to the boundary of the lower surface in a story on which one normally walk in a building and including mezzanine floor also. The floor at ground level with a direct

access to a street or open space shall be called the ground floor, the floor above it shall be termed as Floor 1 with the next higher floor being termed as Floor 2 and so on upward. For giving the name of each floor use the assign named option from the PreDCR menu. Also draw each floor separately. While giving name to the typical floor then use a Typical option from **Assigned name -> Floor name** option from PreDCR menu bar.

Shortcut Command : FLR

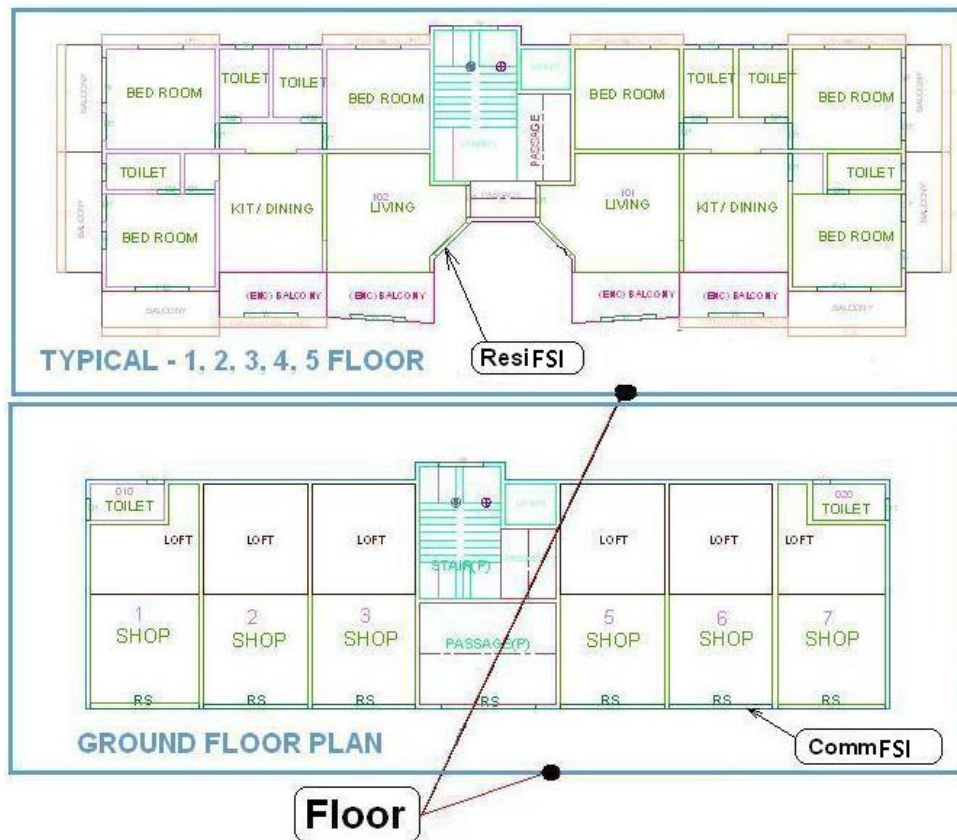
Reference Circle: - All Floor poly must contain a circle with its center on common point for whole building on layer "_ResiFSI". Usually it can be placed inside either Common Liftwell or stair/Inner Chowk as their locations are common for all floors.

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

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

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

How to draw :-



FloorInSection :

Description :

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

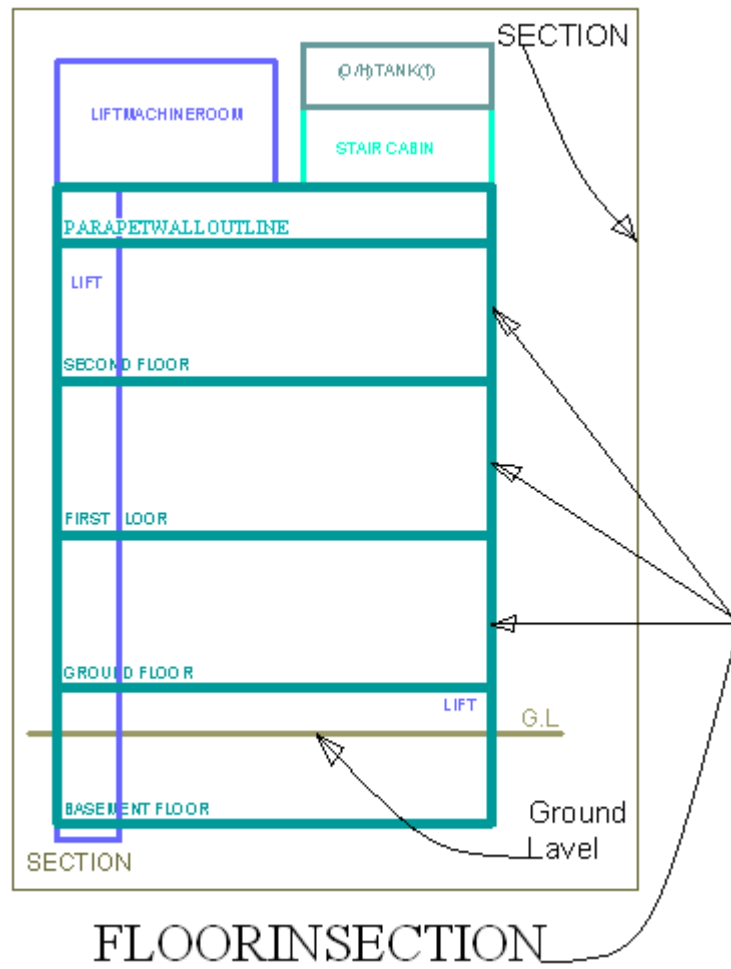
In this closed poly of section draw sections of all floors with stair cabin, inner Chowk, Liftwell machine room, Ventilation shaft, water tanks etc. as shown in the figure.

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

This section poly will present inside the building poly.

Shortcut Command : SEC

How to draw : -



_FSISurrenderToCorpo

Description: -

Draw an Closed Polyline on _"FSISurrenderToCorpo" layer.

How to draw :-

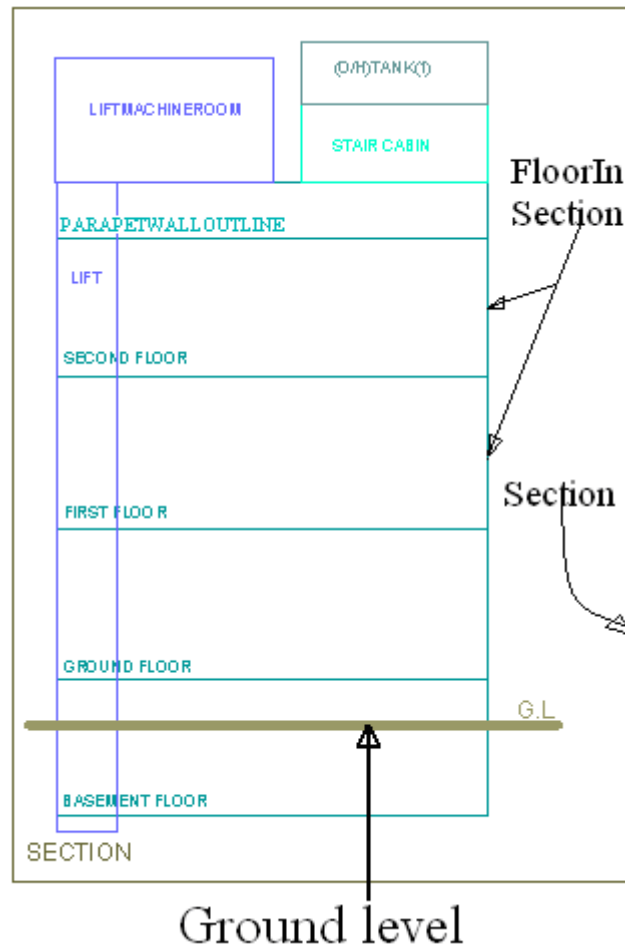
It must be drawn inside MainPlot.

_Ground Level

Description :-

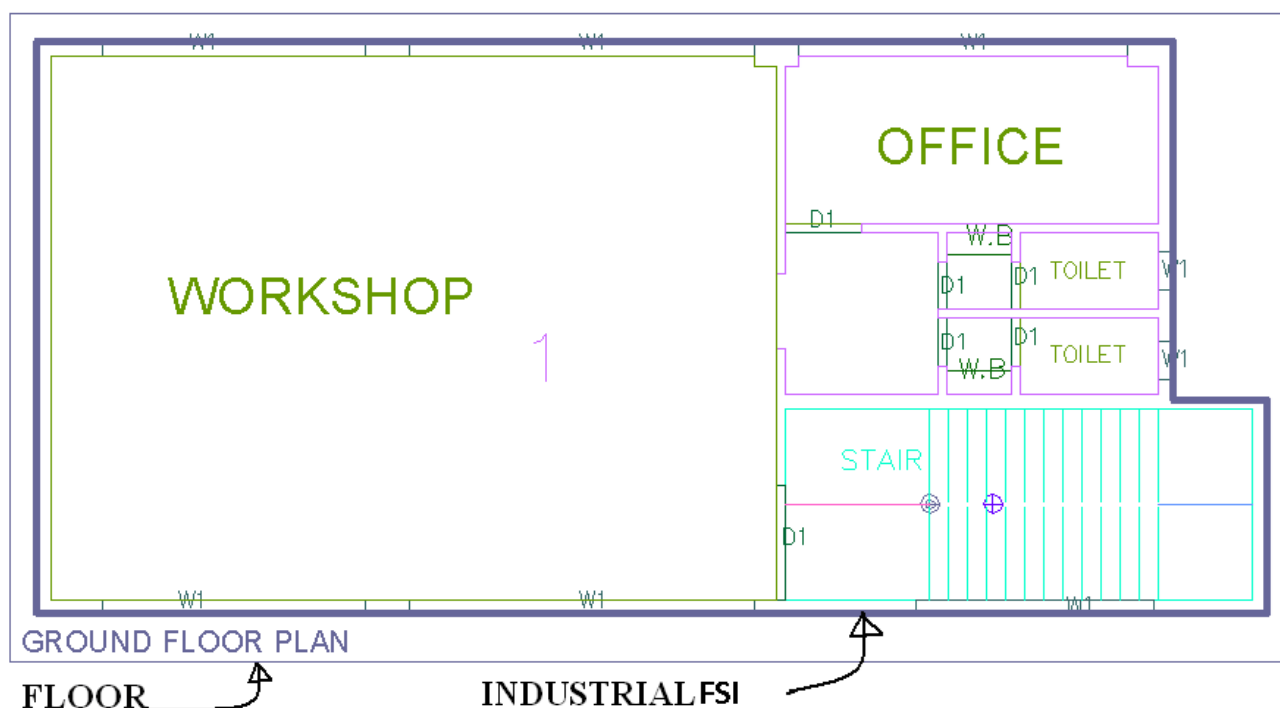
Draw the Ground level line as open polyline in section .It is used for checking a total building height from this line.

Shortcut Command : GL

How to draw :-**IndFSI****Description :-**

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

Shortcut Command :IFS**How to draw :-**



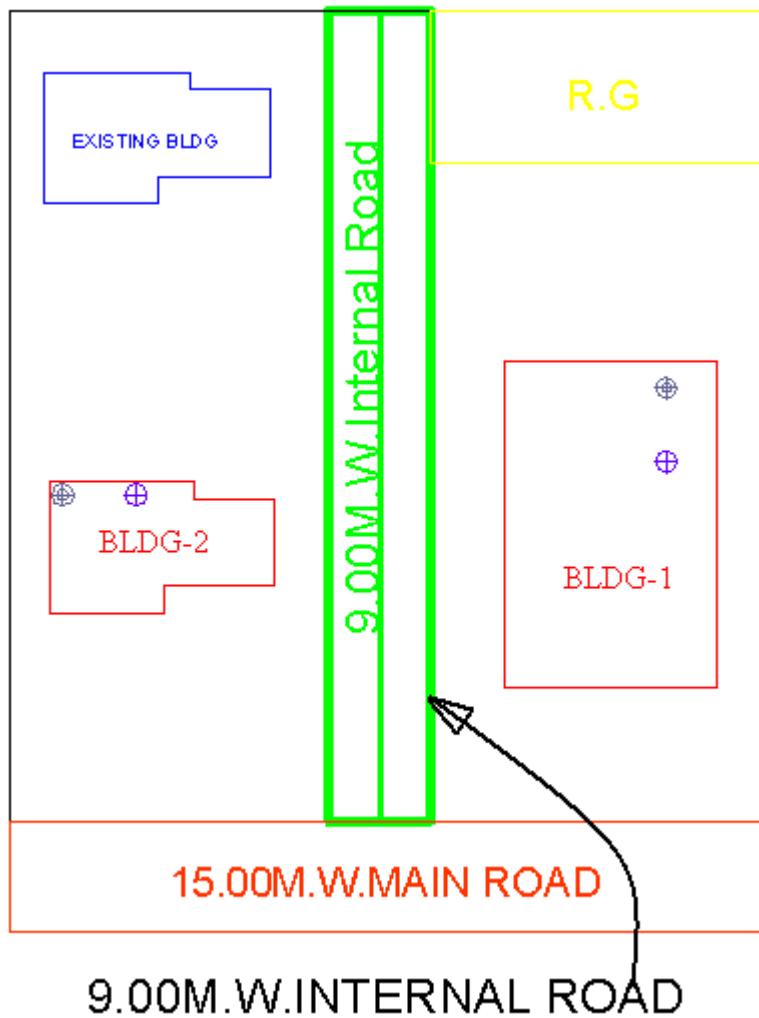
Internal Road

Description :

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

Shortcut Command : R2

How to draw : -



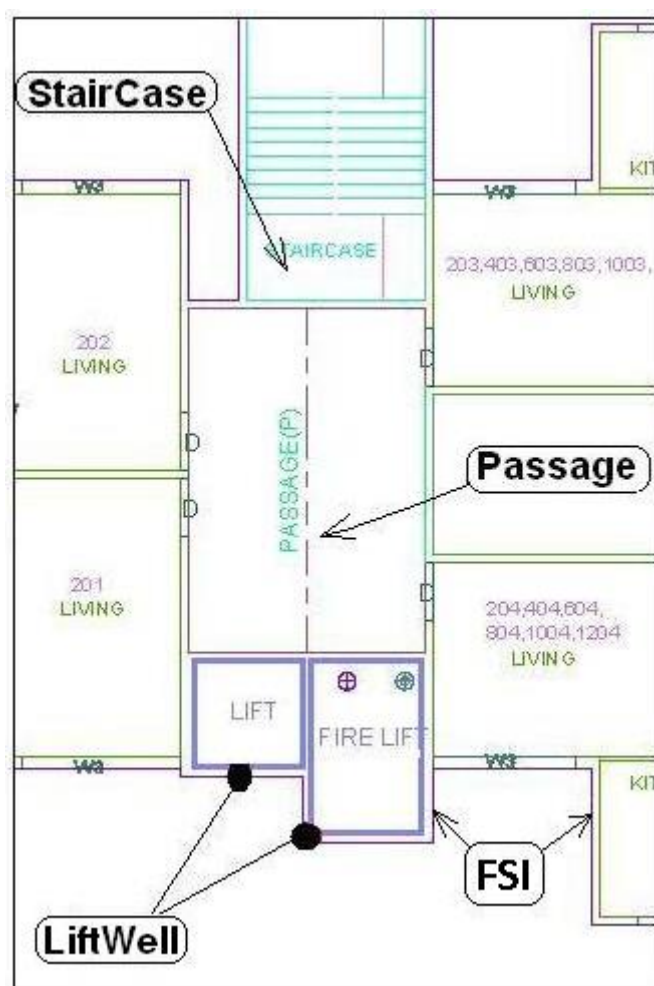
Liftwell

Description :

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

Shortcut Command : LFT

How to draw :



Layer: _LIG

Description :

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

How to draw :

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

_Location Plan

Description :

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

Shortcut Command : LCP

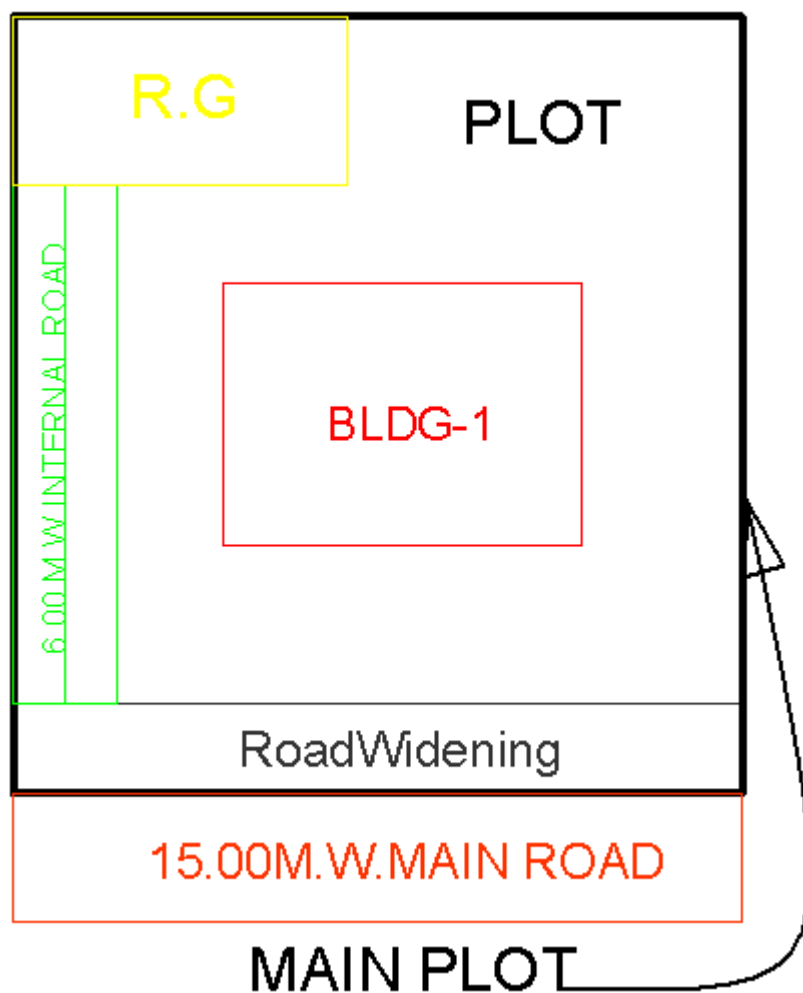
Main Plot

Description:

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

Shortcut Command: PLT

How to draw :



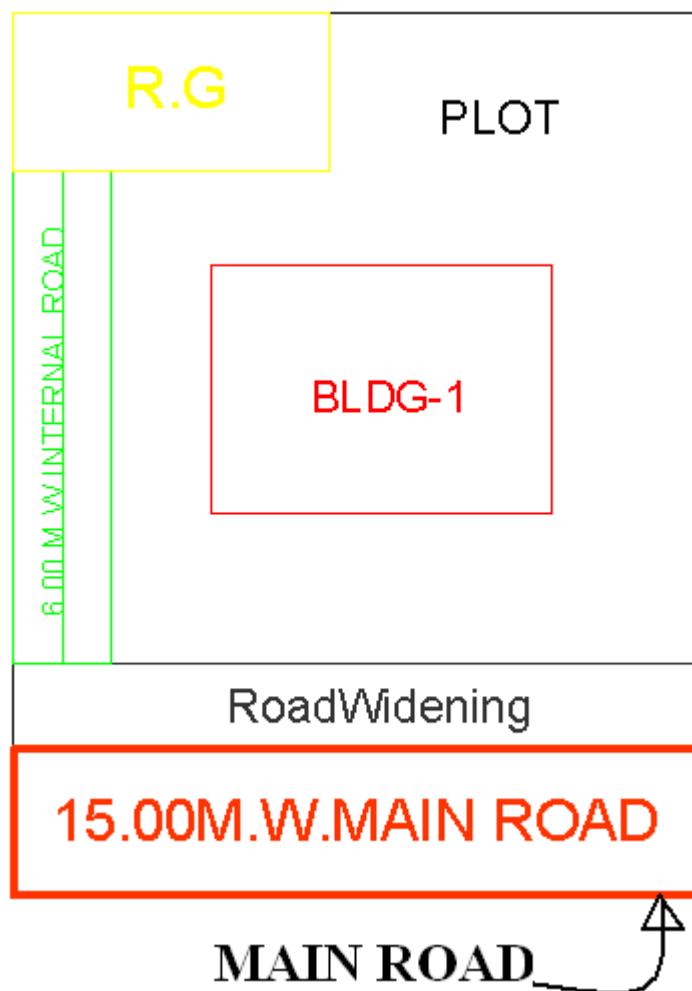
_Main Road

Description :

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

Shortcut Command : R1

How to draw : -



_Margin Line

Description :

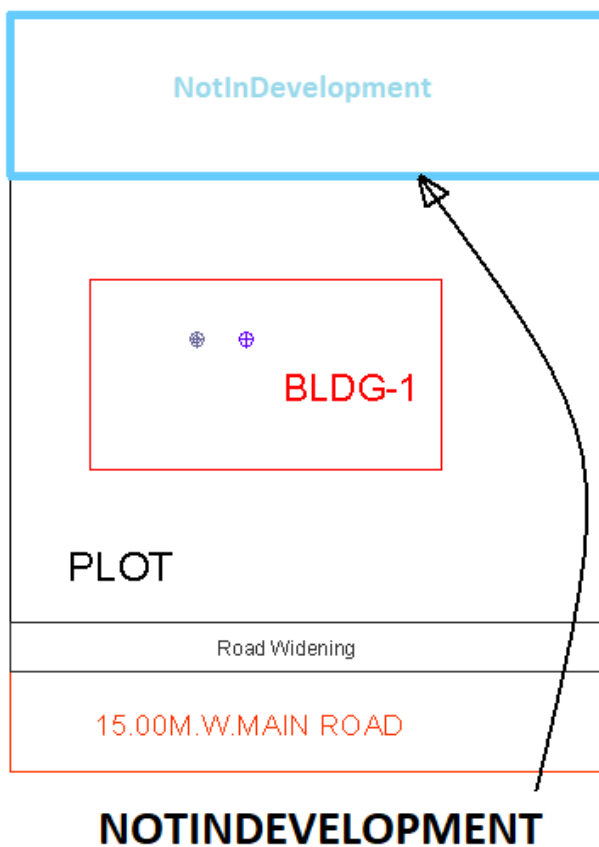
No need to draw Margin Line, Just use **Mark Margin** tool for it. This layer is not provided for users. AutoDCR uses '_Margin Line' layer for it's own internal use.

_NETPLOT**Description :**

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

NotInDevelopment :**Description :**

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

Shortcut Command: NID**How to draw : -**

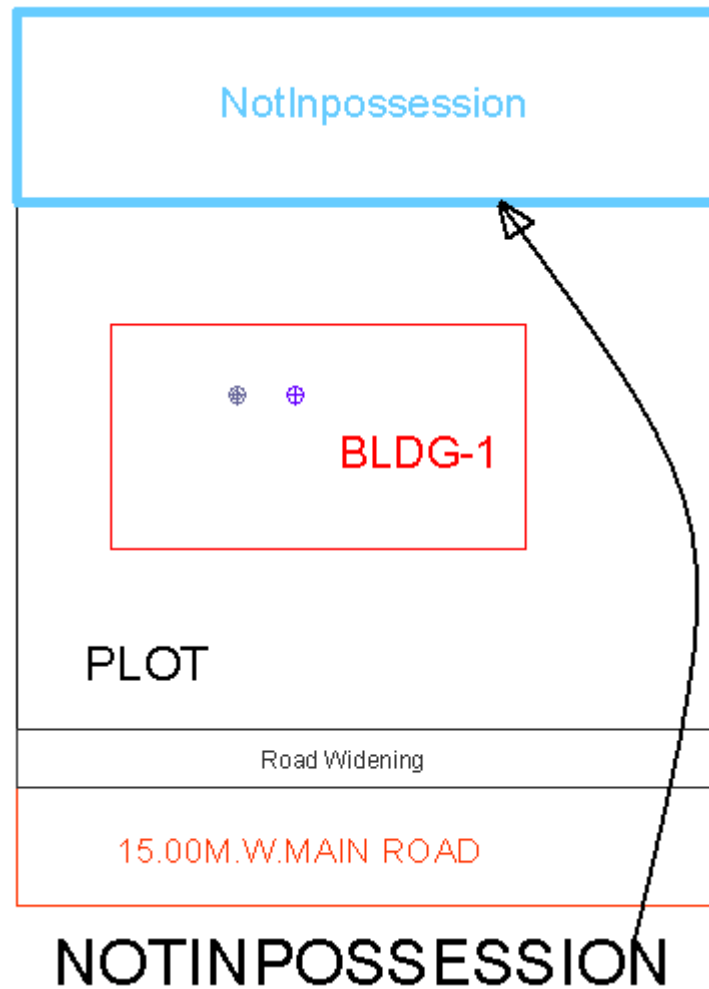
NotInPossession :

Description :

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

Shortcut Command: NIP

How to draw : -



_Parking

Description :

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

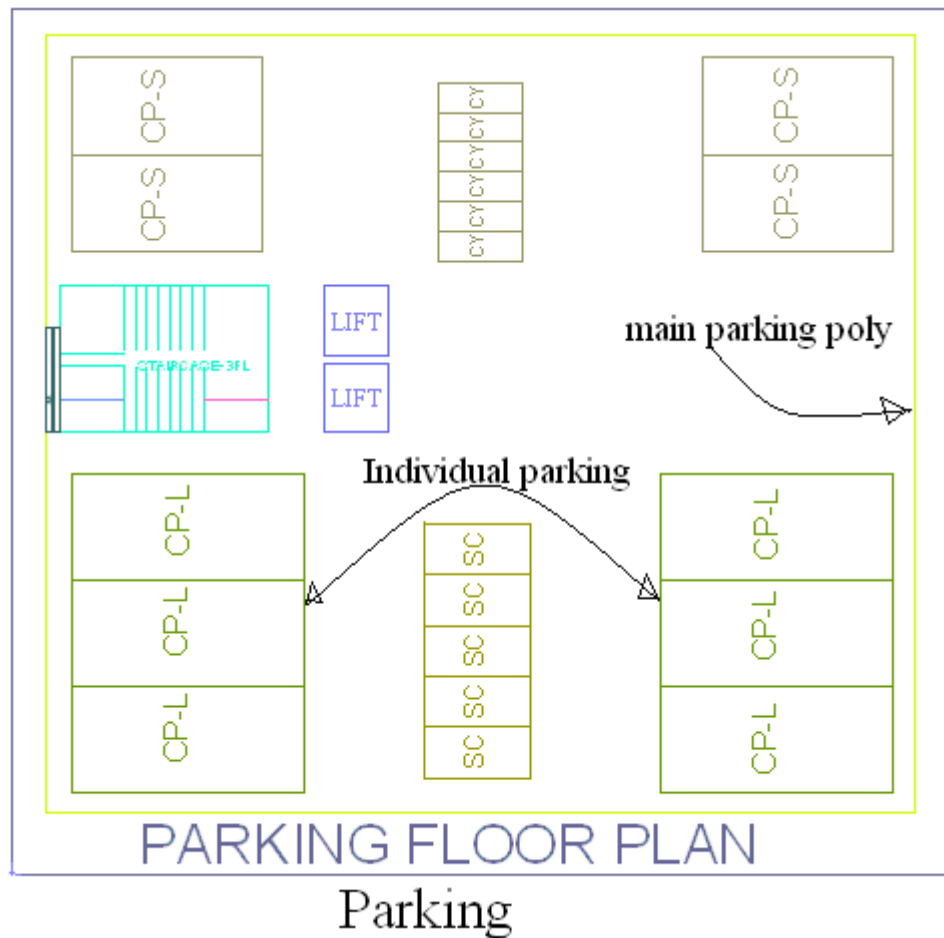
Shortcut Command : PK

Parking Name :

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

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

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

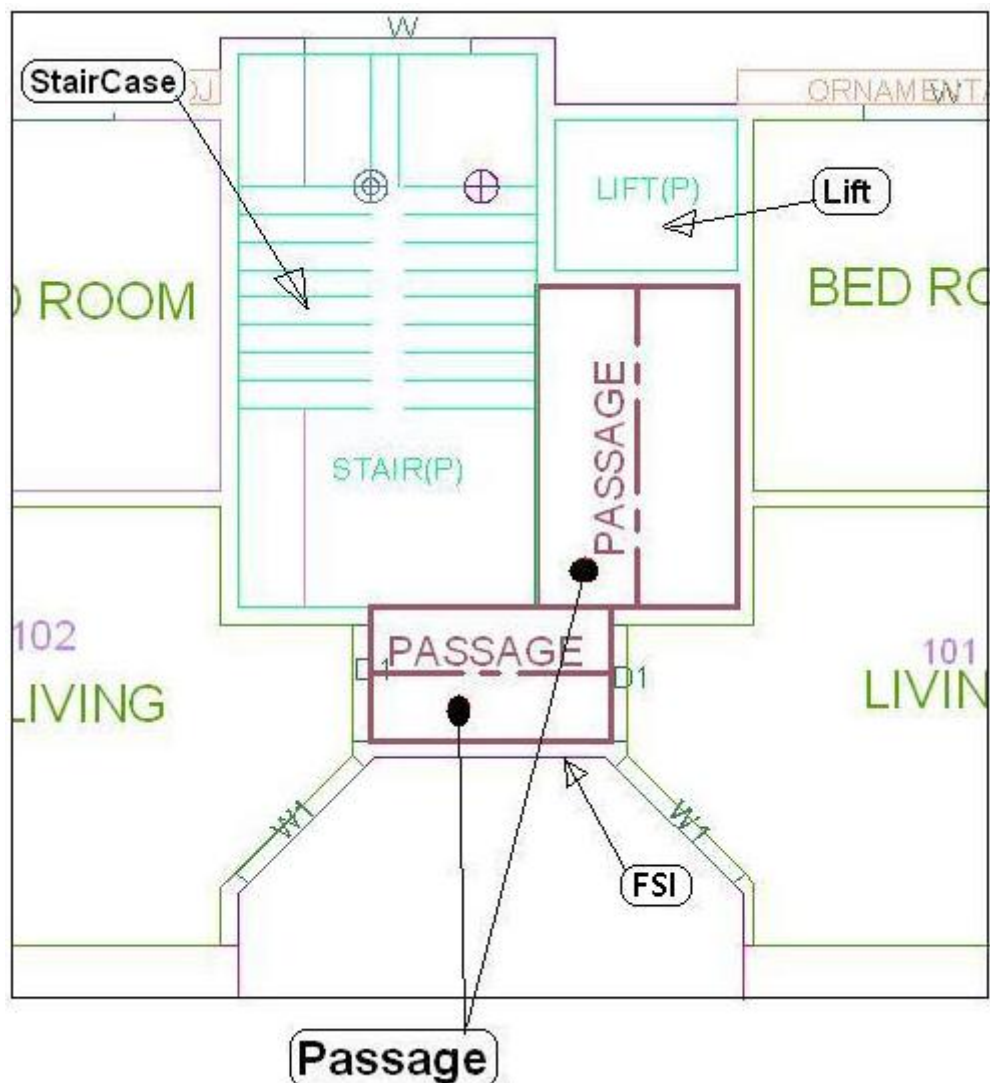
How to draw : -***_Passage*****Description :**

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

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

Shortcut Command :PAS

How to draw:-



_PlotSurroundingDetails:

Description :

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

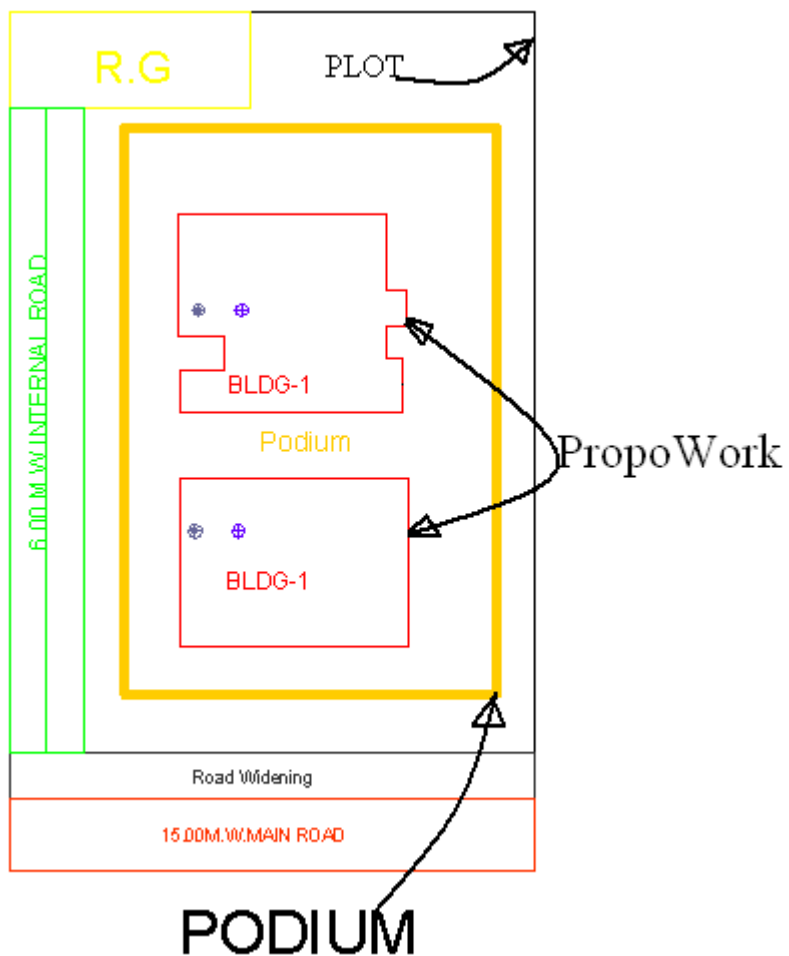
_Podium

Description :

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

Shortcut Command: -POD

How to draw :-



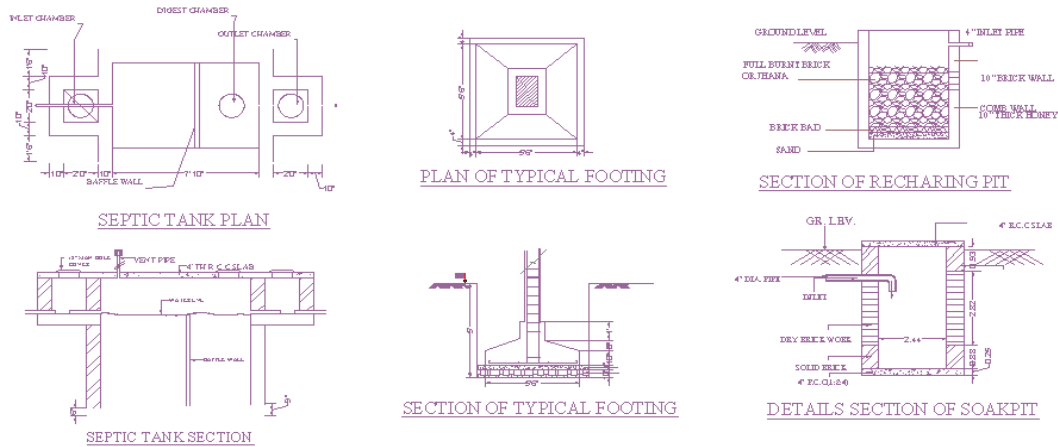
_PrintAdditionalDetail:-

Description:-

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

Shortcut Command:-

How to draw:-



_PropAccessRoad

Description :

Draw a Propose Access Road as a closed polyline inside the Main Plot layer.

_PropWork

Description :

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

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

XY (Z)

X is Wing name.

Y is wing number.

Z is Building name.

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

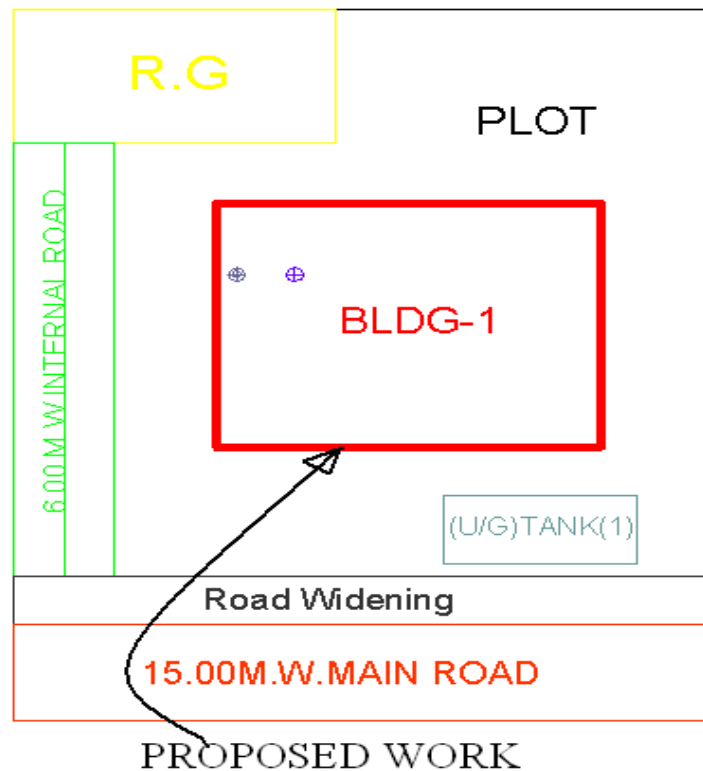
A1 (Monarch), A2 (Monarch)

B1 (Monarch), B2 (Monarch)

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

Shortcut Command:- PW

How to draw :-



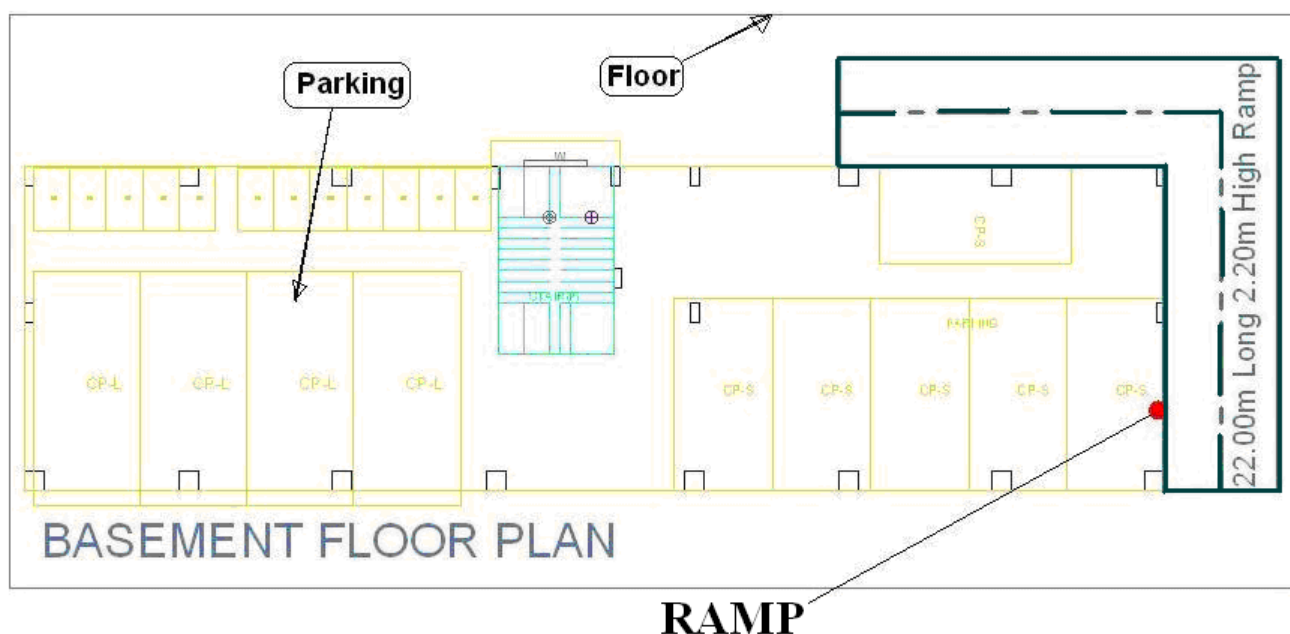
Ramp

Description :

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

Shortcut Command :-RP

How to draw :-



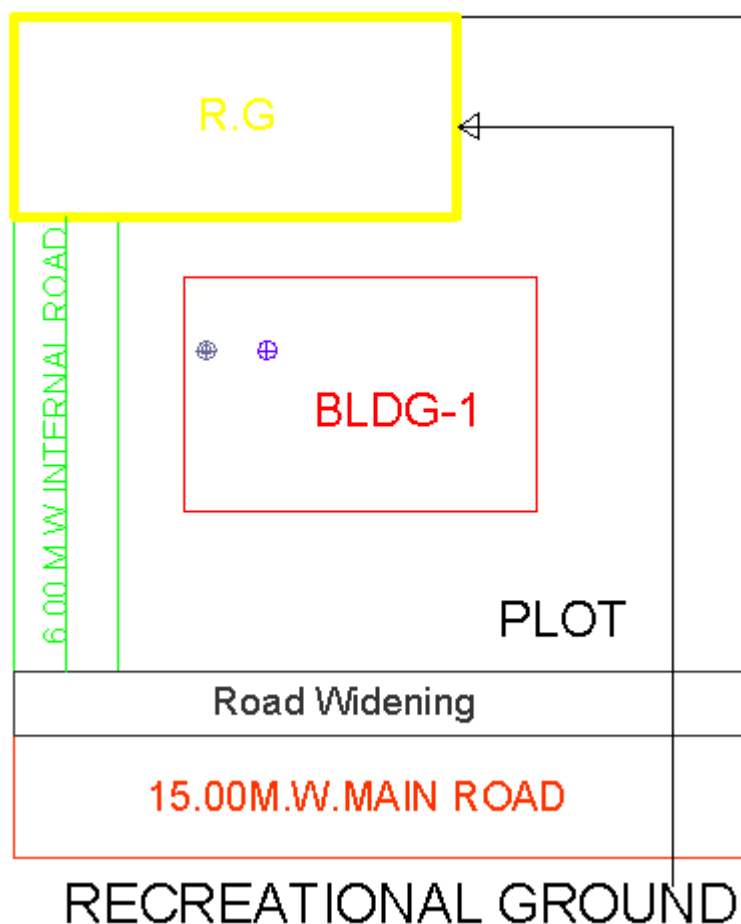
Recreational Ground

Description :

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

Shortcut Command: -OPS

How to draw :-



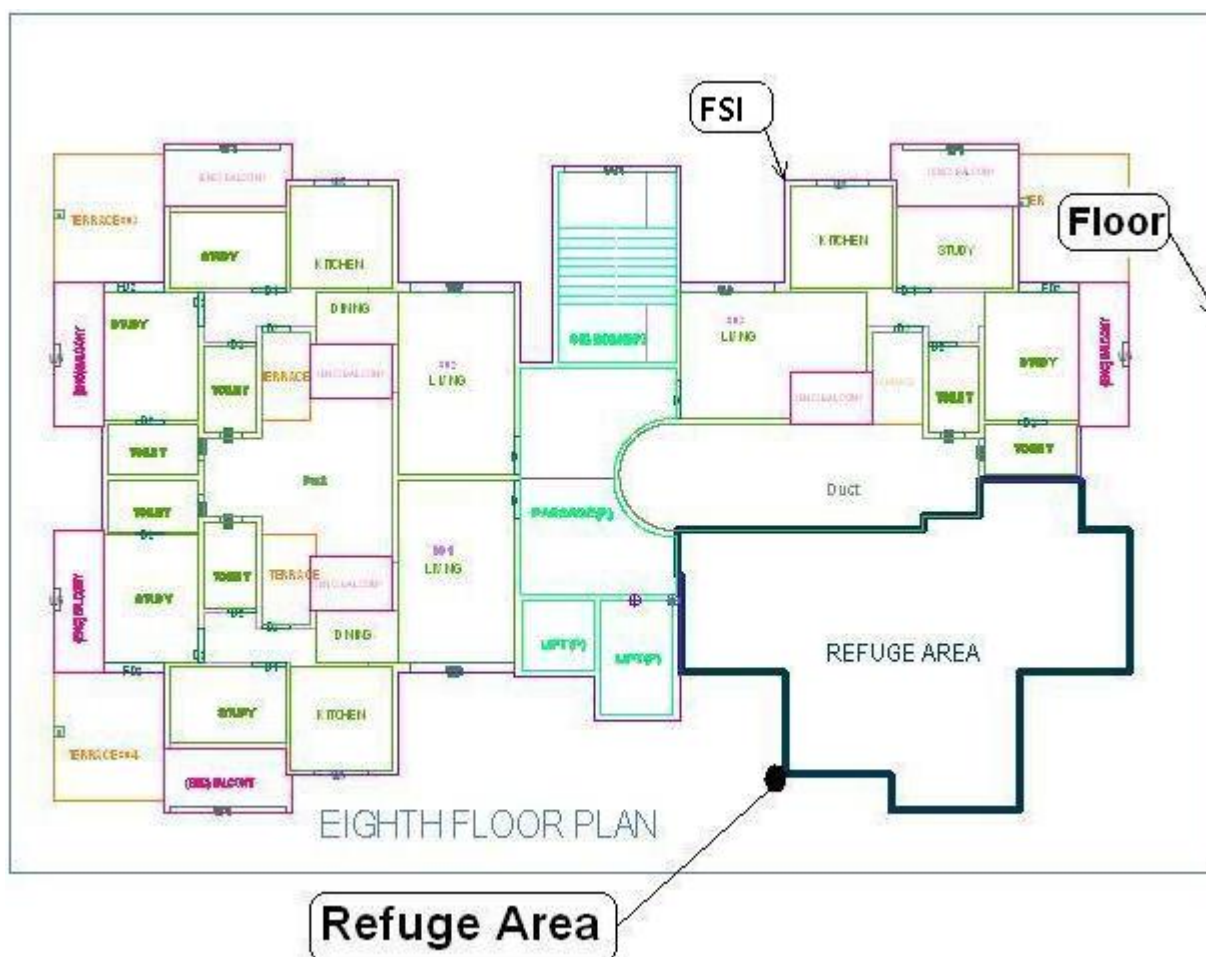
Refuge Area

Description :

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

Shortcut Command : RFG

How to draw :



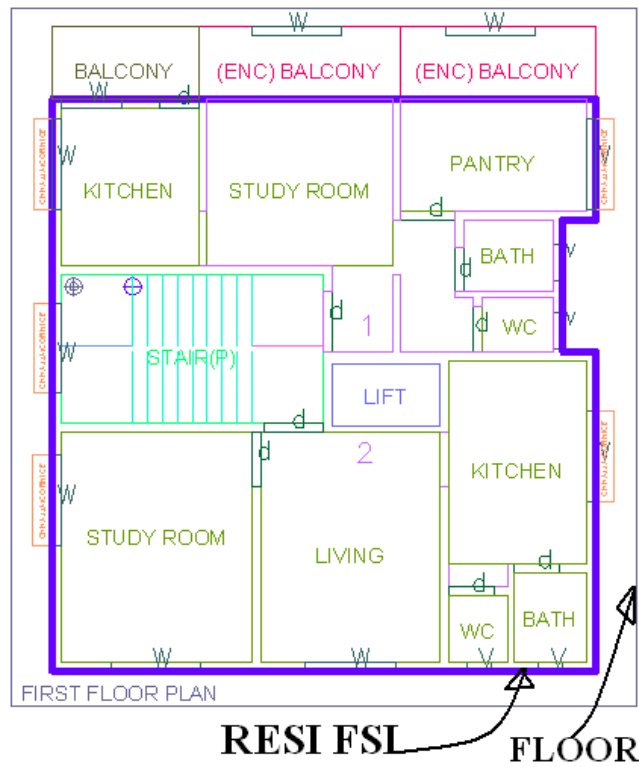
_ResiFSI

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 :-



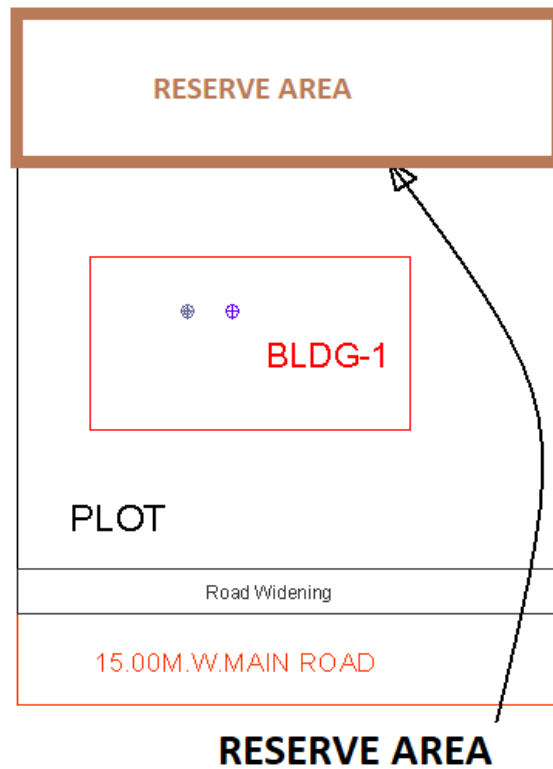
ReserveArea :

Description :

Plot area which falls under Reserve Area to be drawn as a closed polyline on this layer.

Shortcut Command:

How to draw :



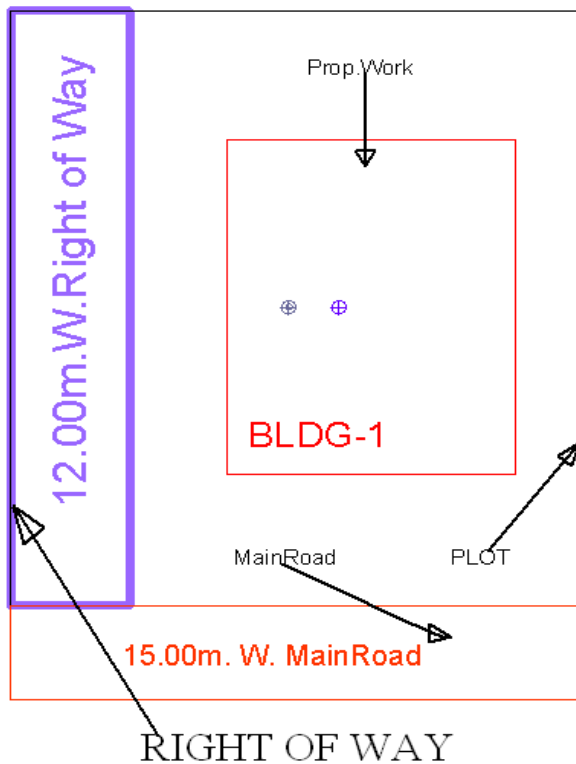
_Right-of-Way

Description :

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

Shortcut Command : ROW

How to draw : -



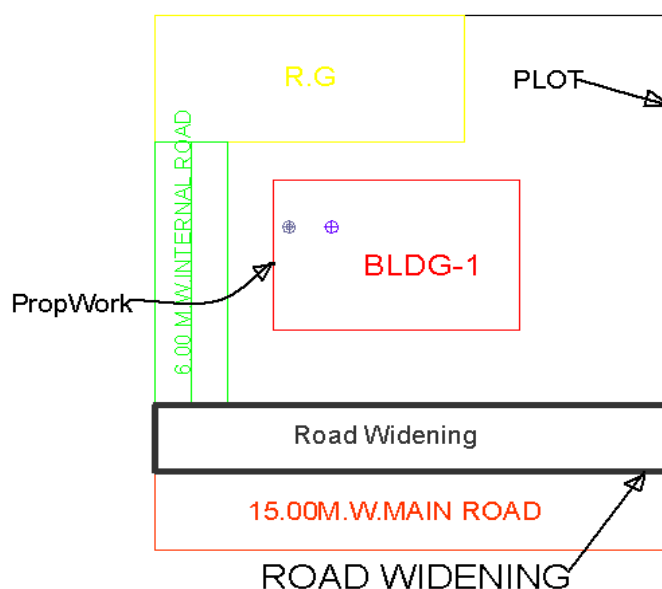
_Road Widening

Description :

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

Shortcut Command : R5

How to draw : -



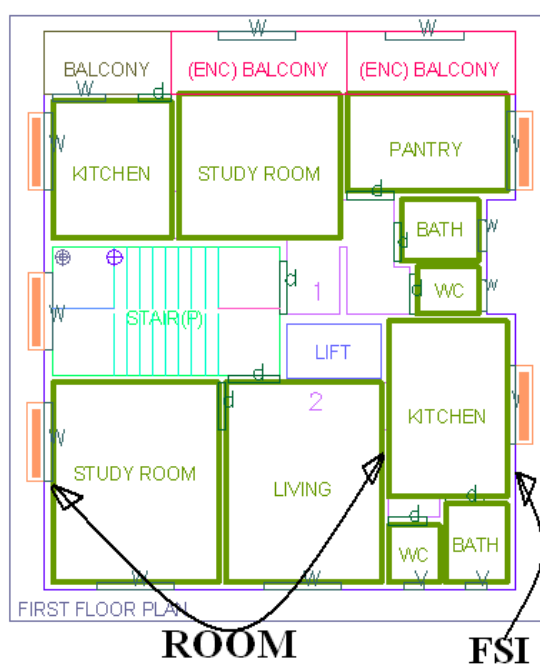
_Room

Description :

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

Shortcut Command : RU

How to draw :-



Section

Description :

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

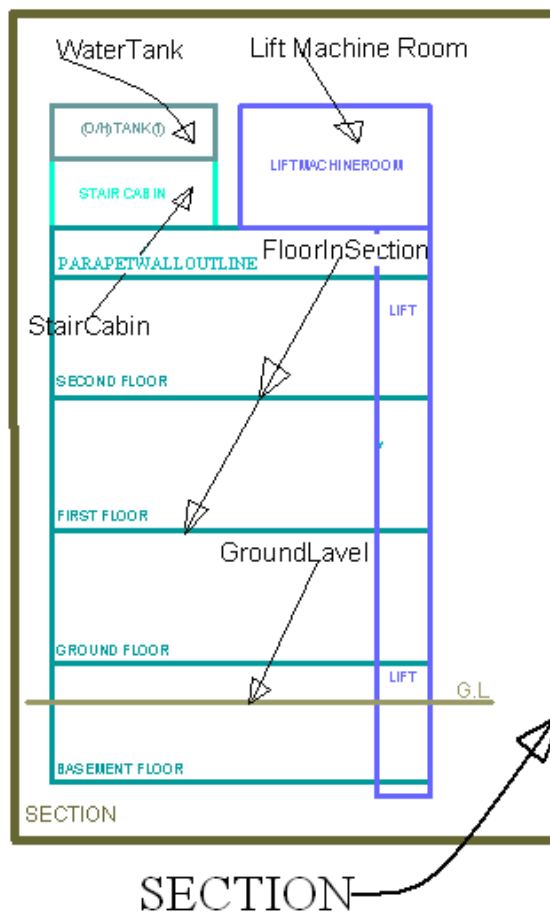
In this closed poly of section draw sections of all floors with stair cabin, inner Chowk, Liftwell machine room, Ventilation shaft, water tanks etc. as shown in the figure.

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

This section poly will present inside the building poly.

Shortcut Command : SEC

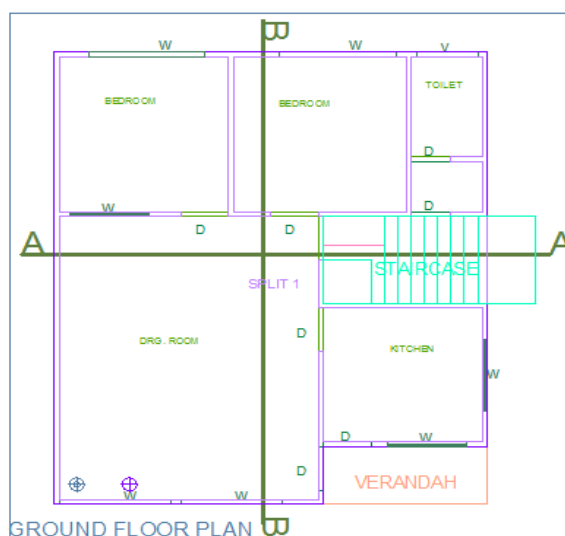
How to draw :



_Section Line

Description: -

Draw a section line on “_SectionLine” layer to represent building section.



_ServiceDuct

Description: -

Draw a closed polyline on Service duct layer.

How to draw : -

It must drawn inside Floor poly.

_ServiceRoad

Description: -

Draw a closed polyline on Service road layer.

How to draw : -

It must drawn inside MainPlot poly.

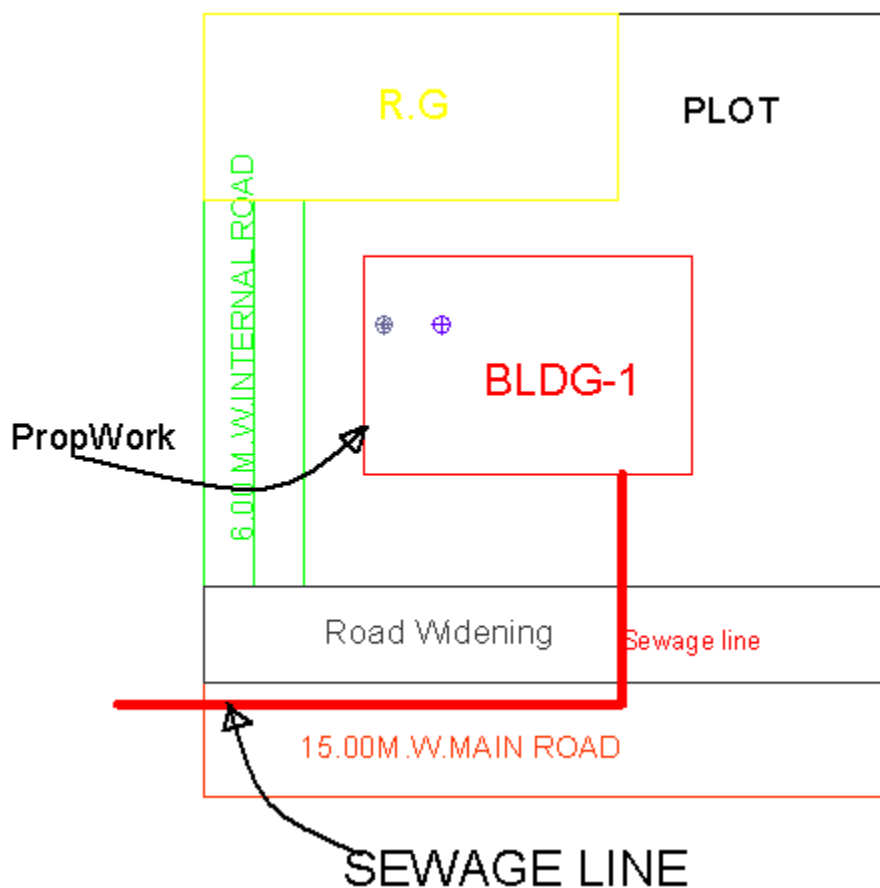
Sewage Line

Description: -

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

Shortcut Command : L5

How to draw : -



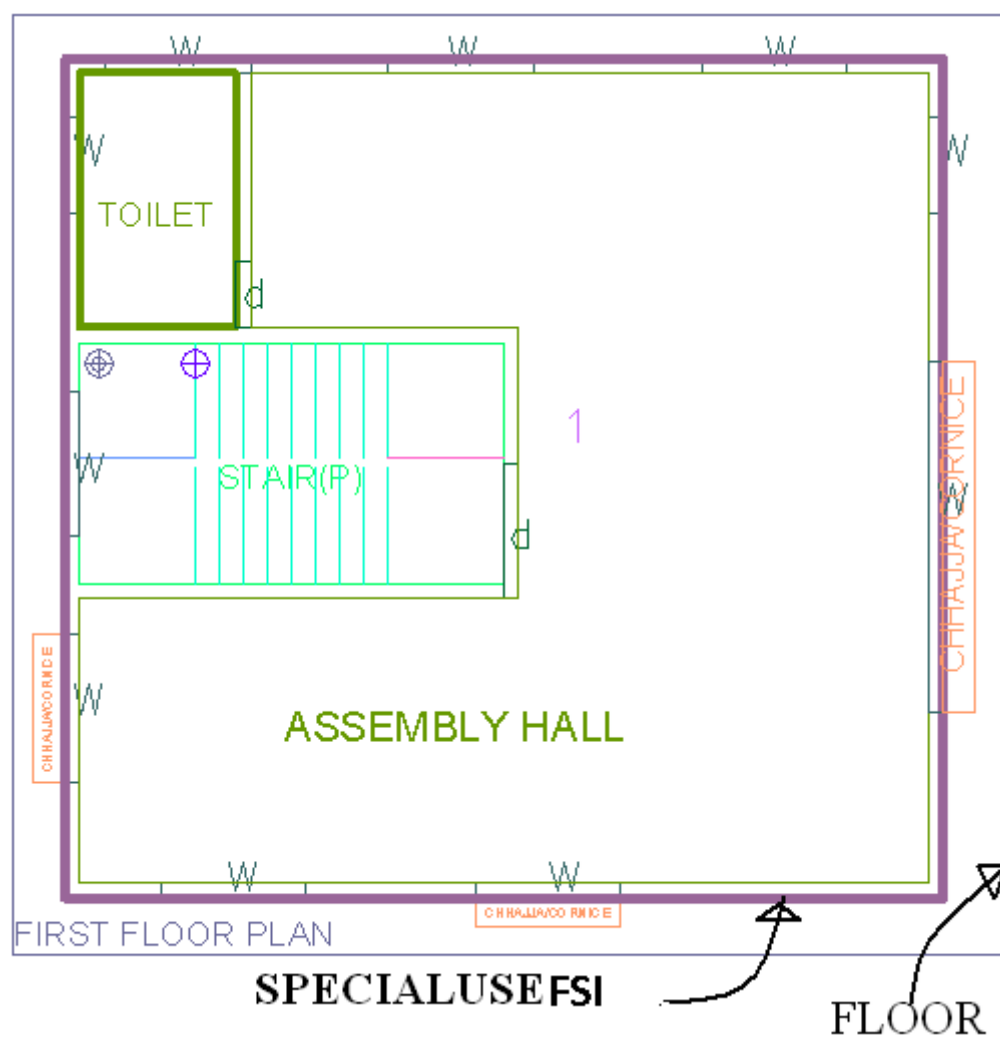
SpecialUseFSI

Description :-

FSI play 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 : -



_Splay

Description: -

Draw a closed polyline on Splay layer.

How to draw : -

It must drawn overlapping with MainPlot poly and Road widening.

_Staircase

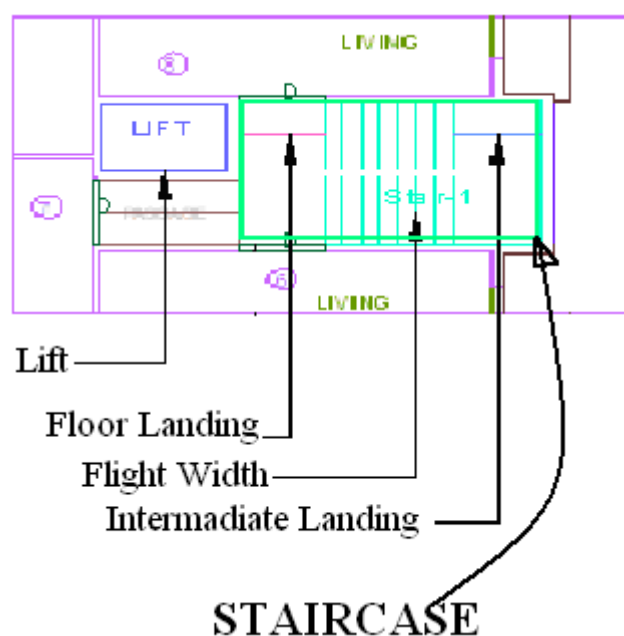
Description :

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 : -

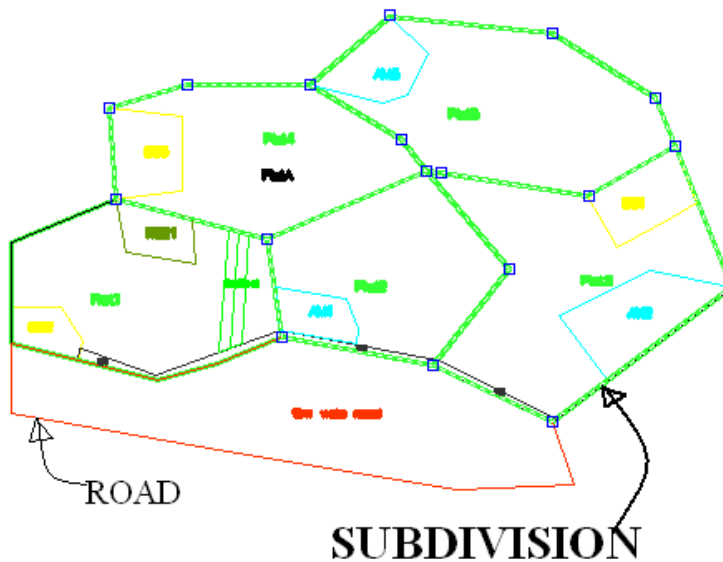


_SubDivision

Description: -

In Subdivision one plot is divided into more than one plots. Draw a closed polyline on Subdivision layer as shown

How to draw : -



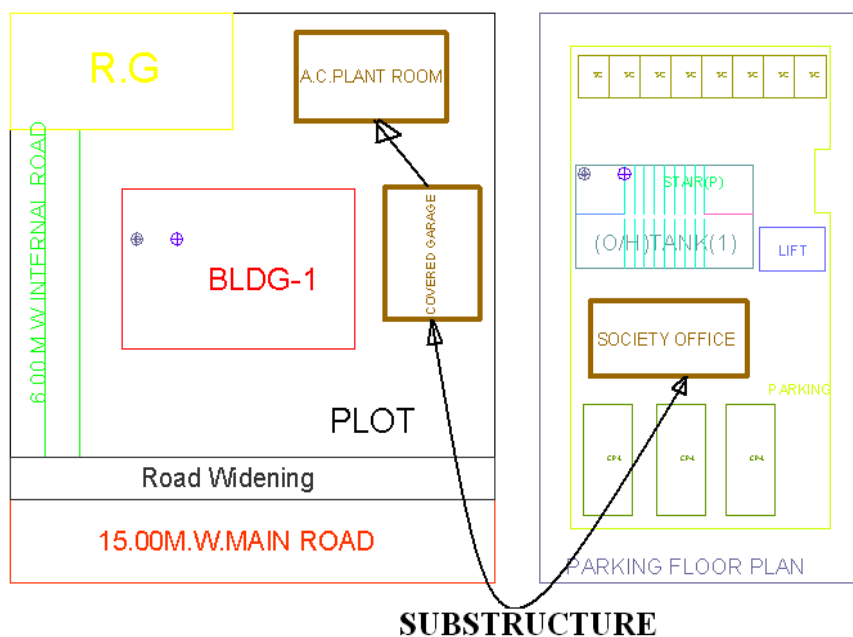
_Substructure

Description :

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

Shortcut Command : SSTR

How to draw :



_Tank

Description :

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

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

Tank Name+ Type +Capacity

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

For e.g.

TANK-1 (O/H)

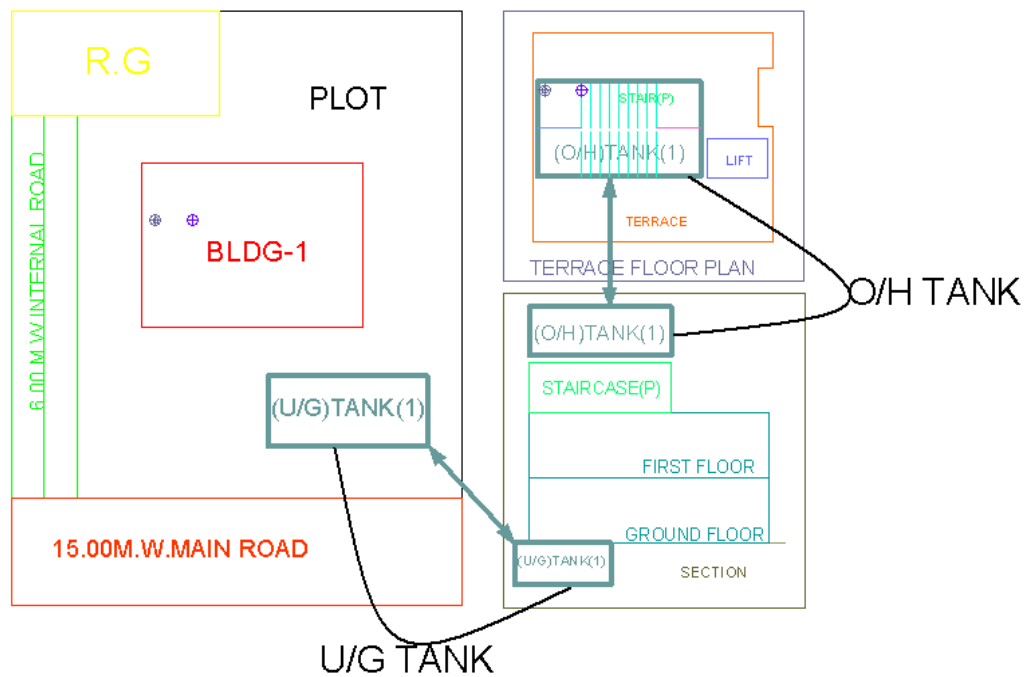
TANK-2 (U/G)

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

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

Shortcut Command : TNK

How to draw : -



_Terrace

Description:-

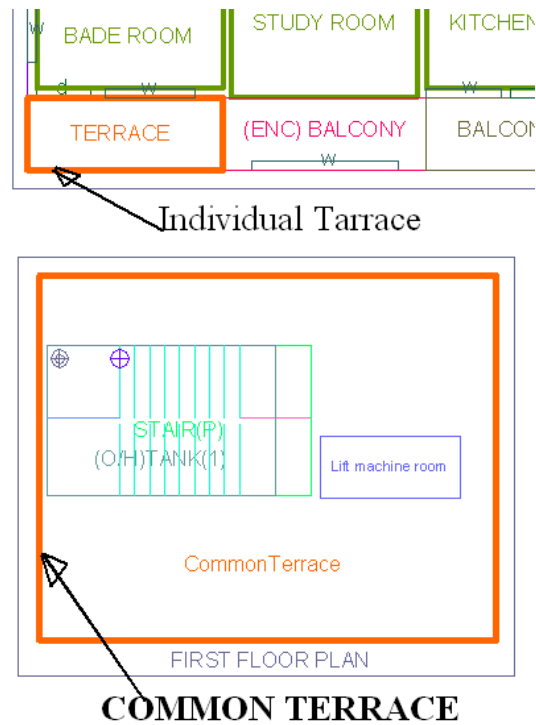
Draw a Terrace as a closed polyline on _Terrace layer which is including parapet wall.

Terrace can be present in:

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

Shortcut Command : TER

How to draw : -



_Tree

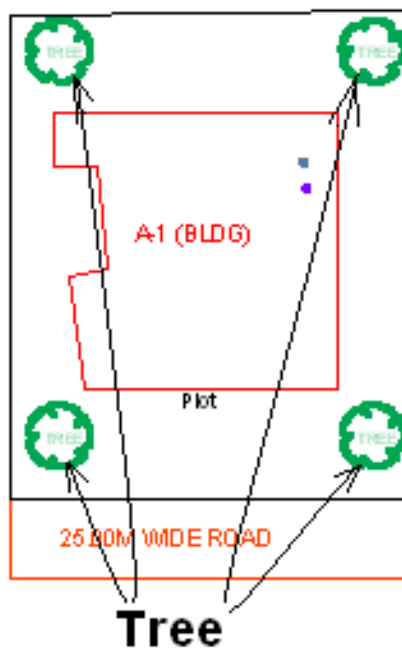
Description :

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

Shortcut Command : TRE

How to draw :

Insert Tree from PreDCR options.



_TreePlantationStrip

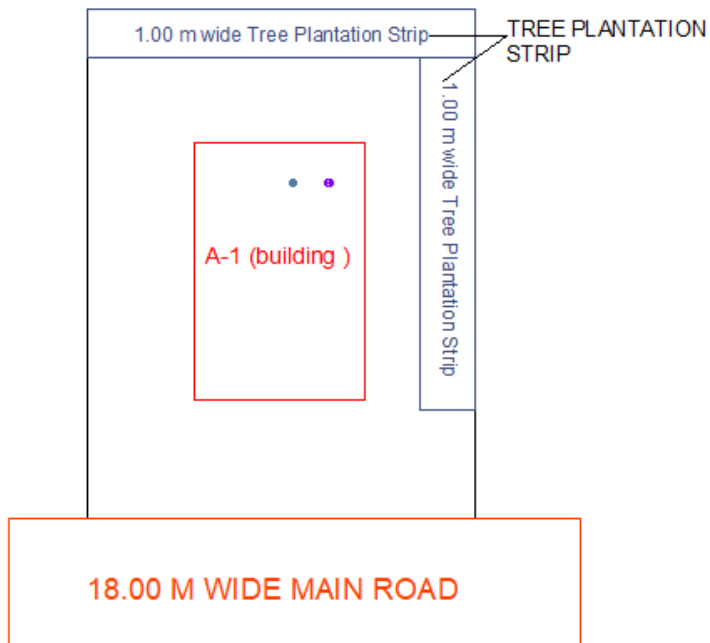
Description :

Tree Strips can be shown on _TreePlantationStrip layer if required to be shown for plantation requirement in plot.

Shortcut Command :

How to draw :

Draw closed Polyline on _TreePlantationStrip layer.



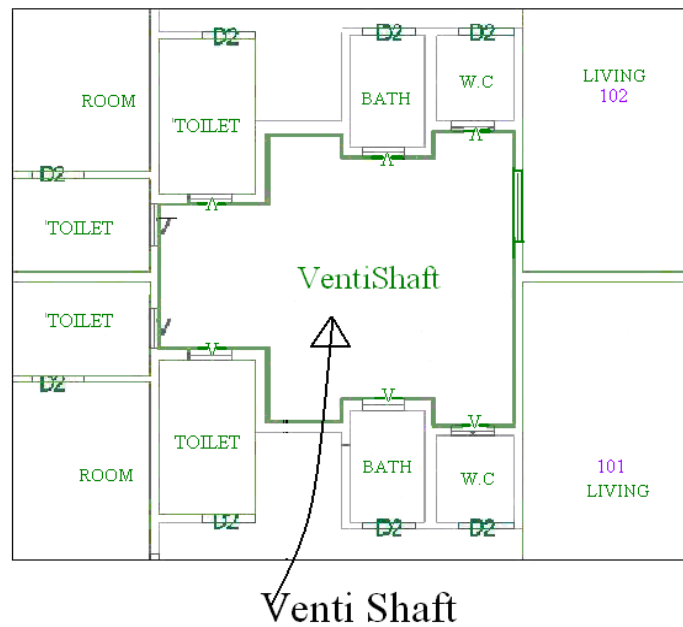
_Ventilation Shaft

Description :

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

Shortcut Command:-AVS

How to draw : -



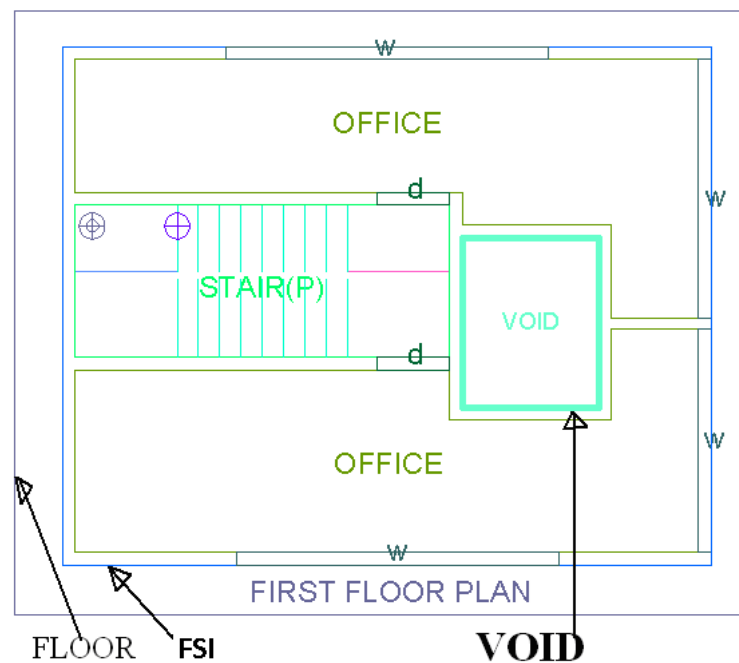
_Void

Description :

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

Shortcut Command : VD

How to draw :



_WaterCourse

Description :

Draw a close polyline on _WaterCourse layer and mark it from Mark option as minor water course or major water course as per your requirement.

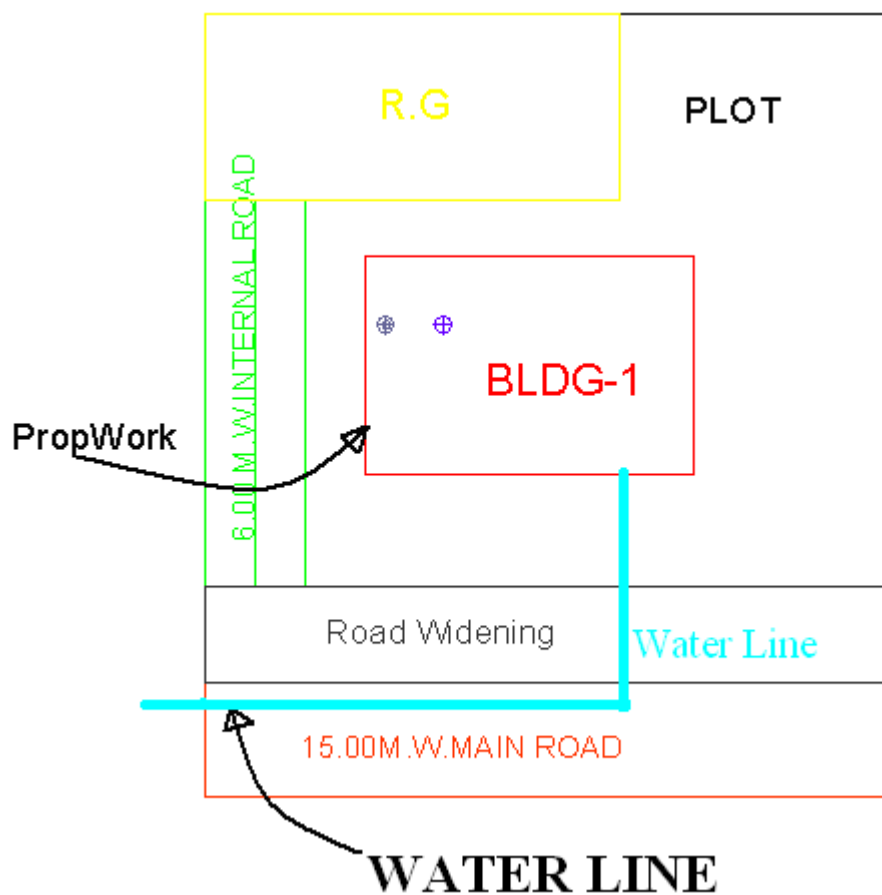
_WaterLine

Description :

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

Shortcut Command : WL

How to draw : -



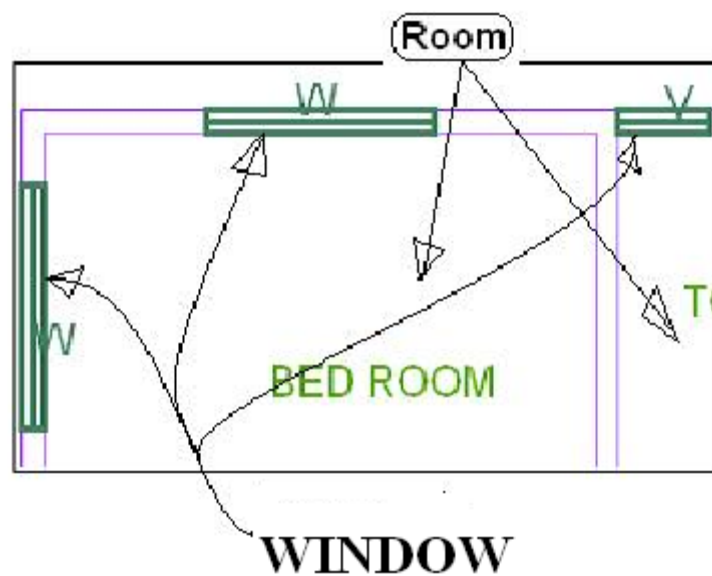
Window

Description :

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

Shortcut Command : WND

How to draw : -



Zone

Description :

Draw a close polyline on _Zone.

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):

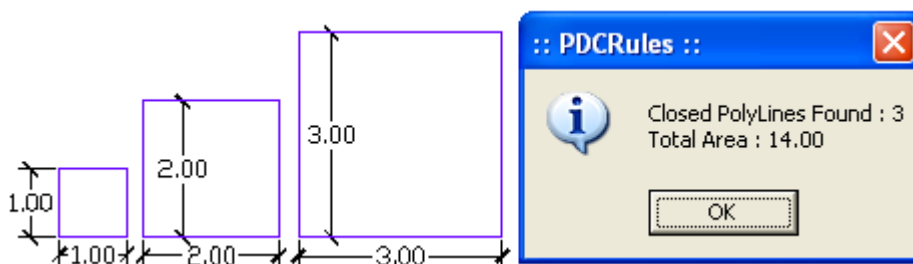
This command will turn on all the Layout plan level layers in the drawing.

Show All layers (PDCRSAL);

This command will turn on all layers in the drawing.

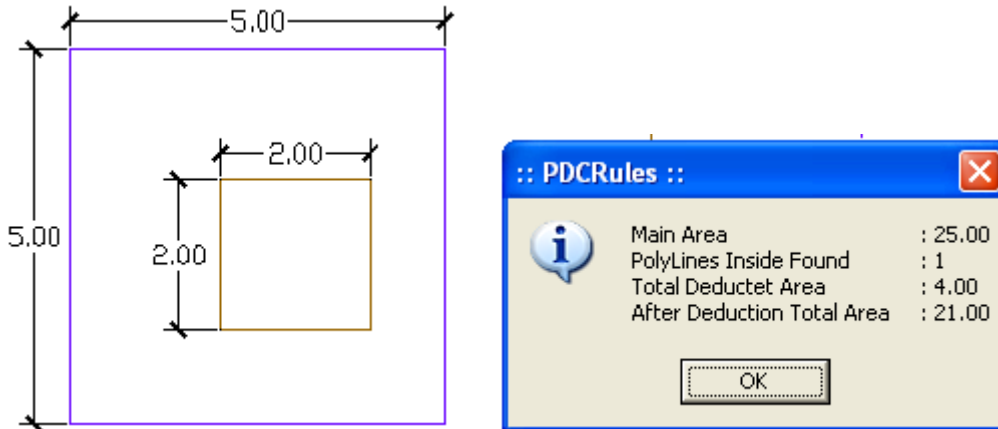
Calculate Total Area (PDCRCTA):

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.

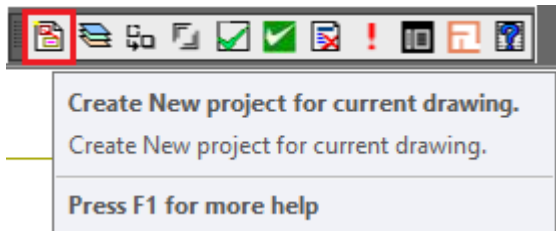
Find Object (PDCRFOB):

This command zoom & highlight object of a given handle.

Set Default ACAD Version (PDCRSDA

Commands

Create New Project (PDCRNWP)

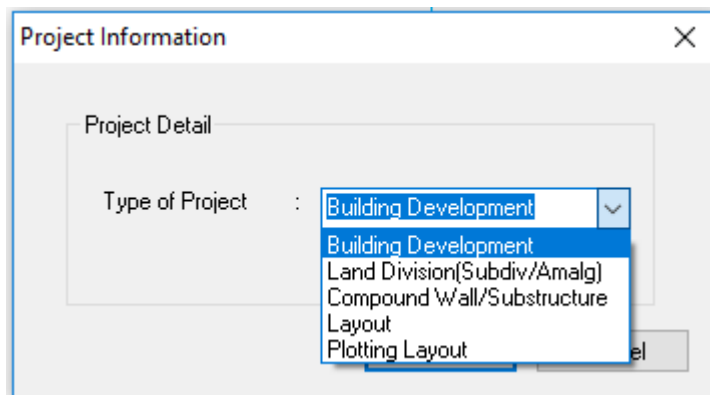


This command will Create New project for current drawing.

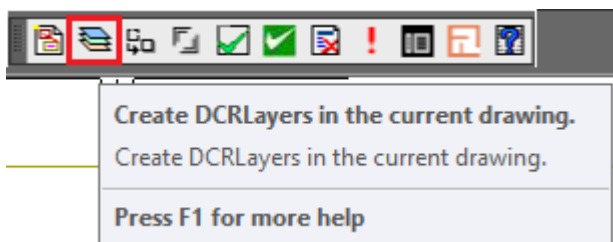
Here you have to select Type of Project as

Proposed Building Development.

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

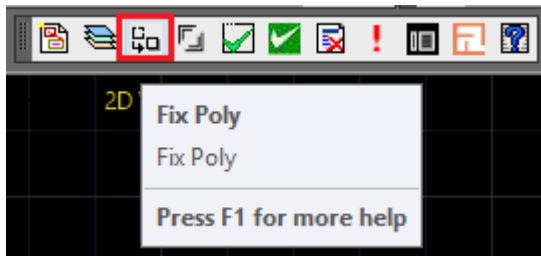


Create AutoDCR Layers (PDCRCL):



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

Fix Poly (PDCRPE):



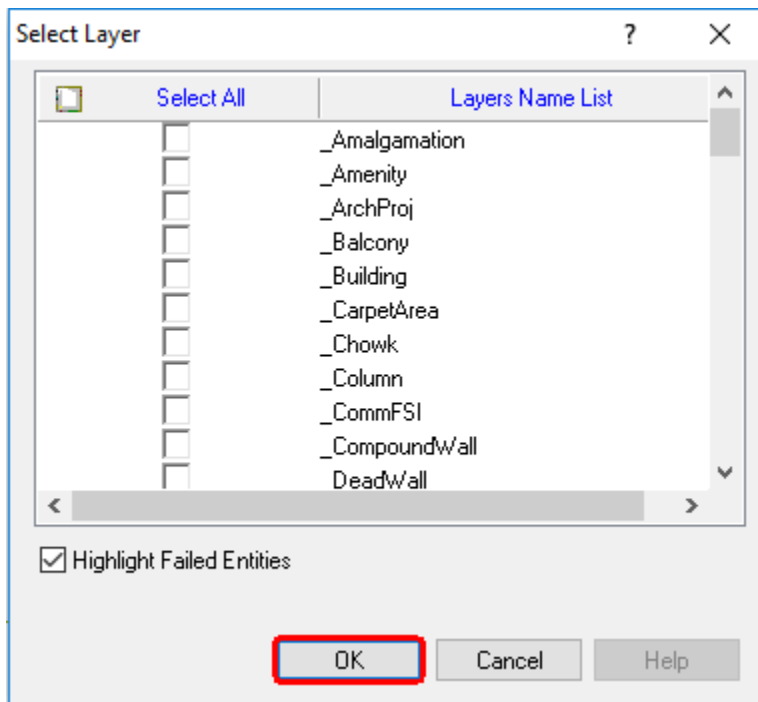
Use this command once on the final drawing which will process all the polyline on the PreDCR layer and remove extra vertices found on polyline. This command can be used before verifying the drawing using Verify commands.

Verify Drawing:

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

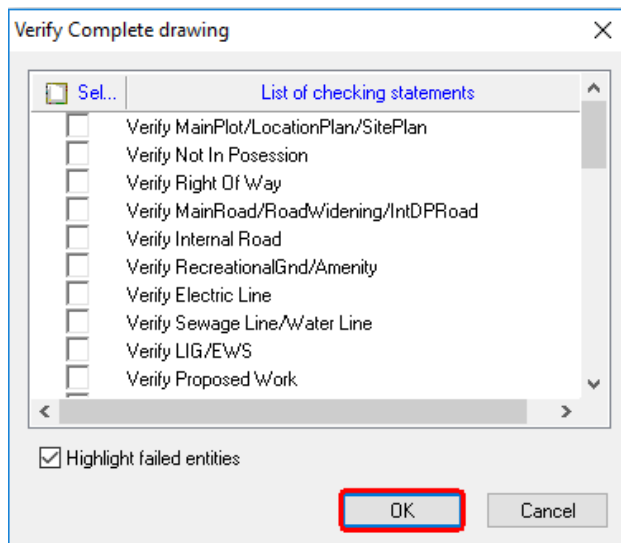
- a) Verify Close Entities (PDCRVD):** Verify that LWPOLYLINE entities on the selected layers are closed and contain one text.





B) Verify Current 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.

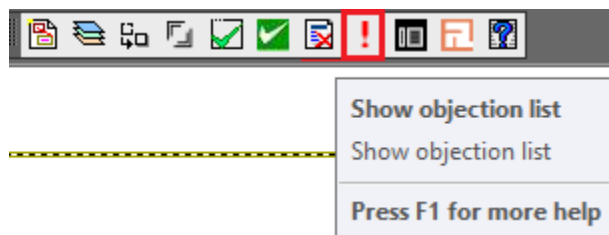
Check if these entities are drawn as closed LWPOLYLINE.

Name text is given to all objects.

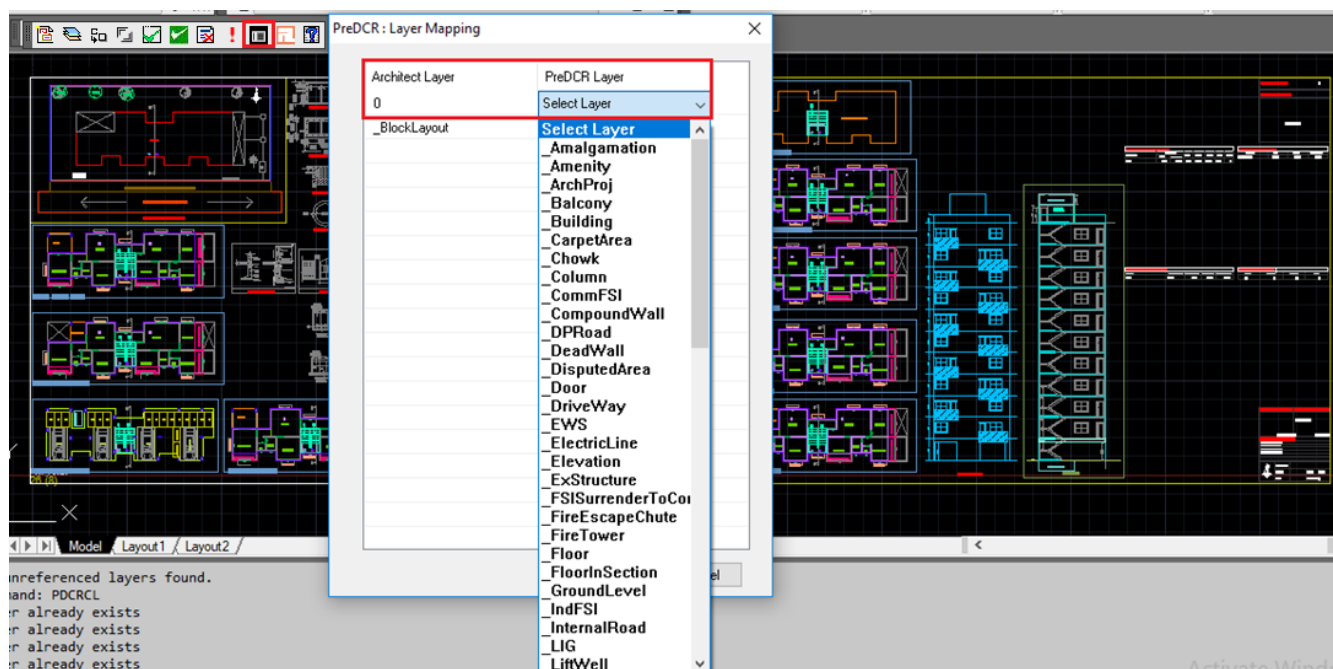
Entities are placed exactly inside their parent objects (container).

Naming conventions are followed properly.

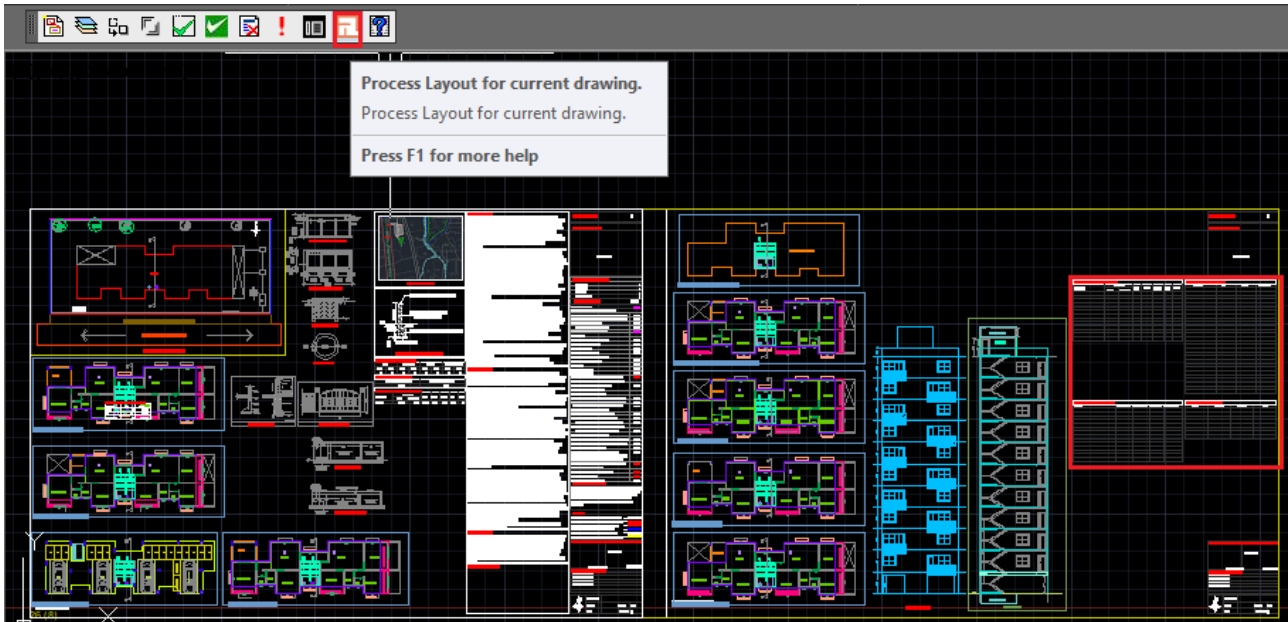
c) Objection List (PDCROLST): This command gives the list of all minimum required entities which are not there in your drawing. If all required entities found then it gives a message that "minimum required entities are present in drawing".



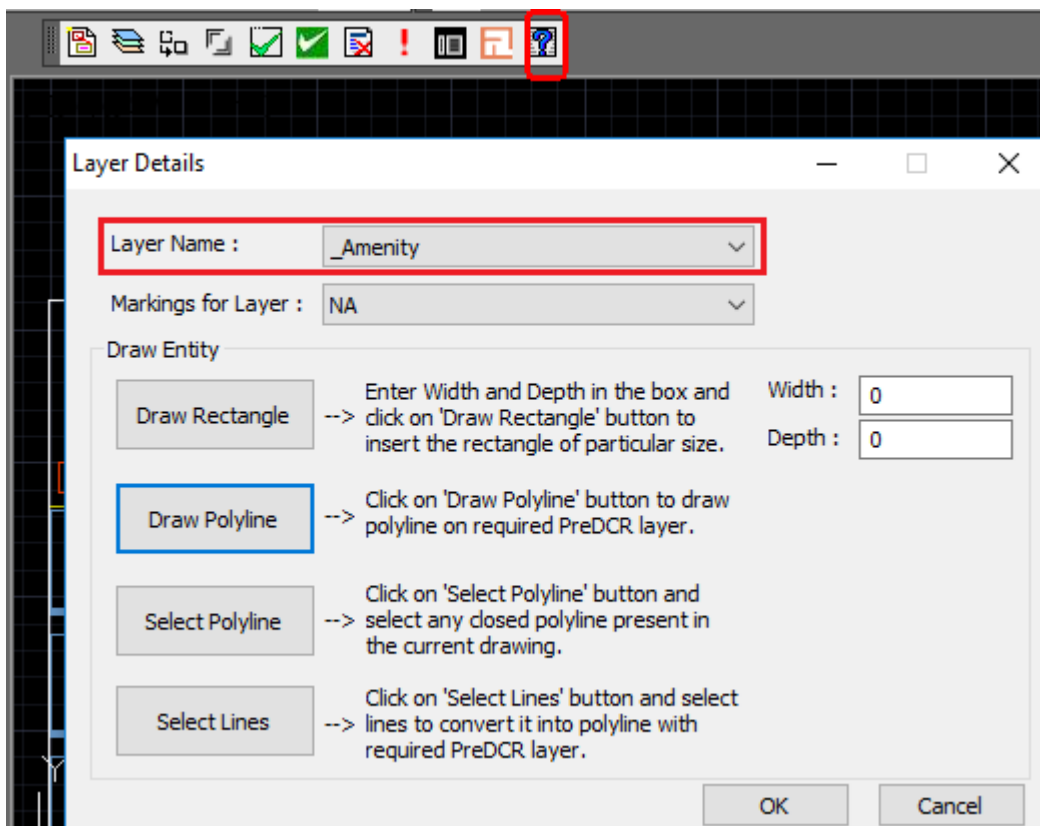
d) Layer mapping feature – User can easily convert any Architect layer to PreDCR layer from drop down option.



e) **Process Layout** – Blank rows will get inserted as per drawing



f) **Active help** – User can Draw, join, shift any Rectangle, Polyline to any PreDCR layer from Layer Name Drop down.



Markings

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

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

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

Mark-> Floor-> Sprinklered Floor: mark Entire floor as a Sprinklered floor using this marking option.

Mark-> Individual Subplot-> Mark Plot type and areas: Mark individual subplot using this marking option.

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

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

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

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

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

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

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

Mark-> Road Widening-> To be added in FSI: Mark Road Widening as to be added in FSI overlapping with Main Road and Main Plot.

Mark-> Road Widening->Normal (Default): Mark Road Widening as Normal (Default): overlapping with Main Road and Main Plot.

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

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

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

Width.

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

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

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

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

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

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

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

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

Mark->Ramp-> **One way:** Mark ramp as a One-way ramp.

Mark->Ramp-> **Two way:** Mark ramp as a Two-way ramp.

Mark->**Lift Machine room-> Mark** lift machine room.

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

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

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

Mark->Carpet Area-> Slum Development->sale or rehab (PDCRUMFSI): Mark Carpet Area as a slum development sale or rehab Normal

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

Mark->Balcony-> Enclosed Balcony: Mark balcony as Enclosed Balcony.

Mark->Balcony-> Unmark (default): Mark balcony as Unmark (default)

Mark->Terrace-> Common terrace: Mark terrace as Common terrace.

Mark->Terrace-> Individual terrace: Mark terrace as Individual terrace.

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

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

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

Mark -> Parking-> Composite Parking: Mark parking (1 Car and 2 Scooter) as a Composite parking.

Mark->Projection-- >

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

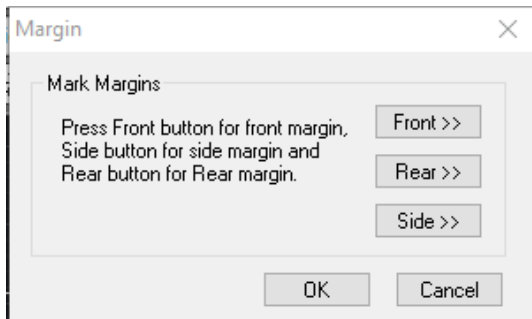
Mark->Substructure -> Storage : Mark Sub Structure as a storage.

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

Mark->Special use FSI ->

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

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



Mark->Water Course-> Nallah: Original or Canalised -Mark Water Course as Original or Canalised.

Mark->Water Course-> Major Water Course -Mark Water Course as Major Water Course

Insert entities

Insert->Parking-> Car -> Small Car (2.3m. X 4.5m.) or Large Car (2.5m. X 5.0m.)

((PDCRICP) -> Use this command to insert car-parking poly at selected point.

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

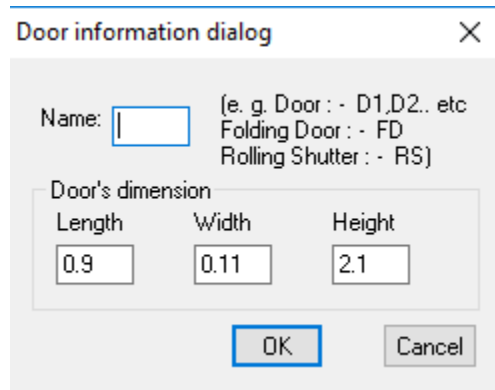
Insert-> Parking-> Cycle (PDCRISP) ->Use this command to insert Cycle parking poly at selected point.

Insert-> Parking-> Loading/Unloading (PDCRISP) ->Use this command to insert Loading/Unloading parking poly at selected point.

Insert->Parking-> Visitor's Parking -> Car or Scooter ((PDCRICP) -> Use this command to insert Visitors parking poly at selected point.

Insert->Parking-> Puzzle Paring -> Small Car (2.1m. X 5.0m.) or Large Car (2.3m. X 5.8m.) ((PDCRICP) -> Use this command to insert car-parking poly at selected point.

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



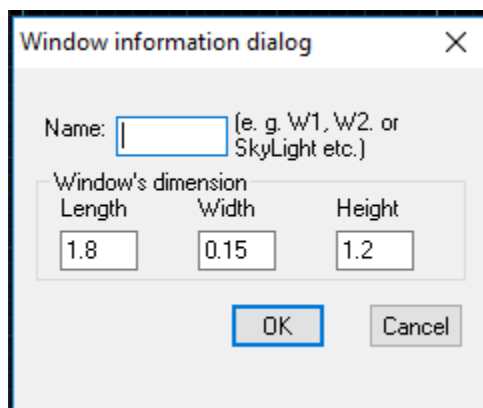
Door information dialog

Name: (e. g. Door : - D1,D2.. etc
Folding Door : - FD
Rolling Shutter : - RS)

Door's dimension

Length	Width	Height
<input type="text" value="0.9"/>	<input type="text" value="0.11"/>	<input type="text" value="2.1"/>

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



Window information dialog

Name: (e. g. W1, W2. or
SkyLight etc.)

Window's dimension

Length	Width	Height
<input type="text" value="1.8"/>	<input type="text" value="0.15"/>	<input type="text" value="1.2"/>

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

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

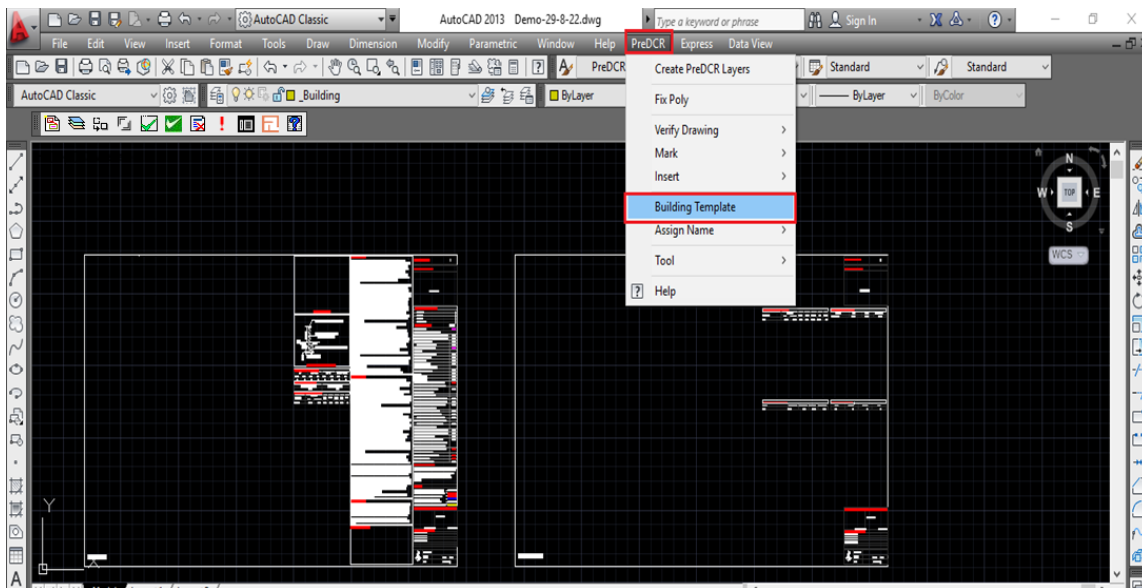
11. Insert → Tree (PDCRINTR): Use this command to insert Tree. Insert Trees showing location of Trees in your plot.

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

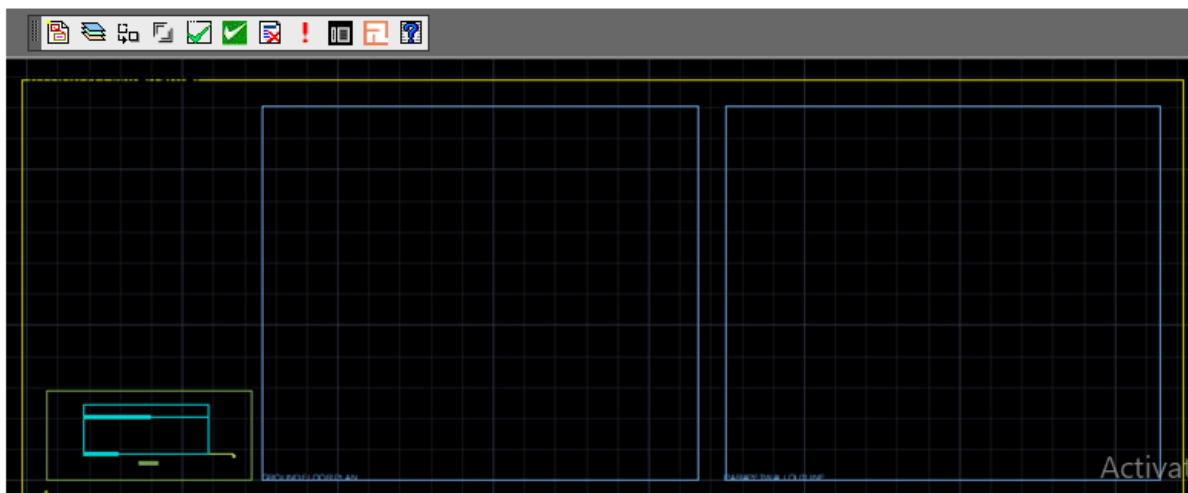
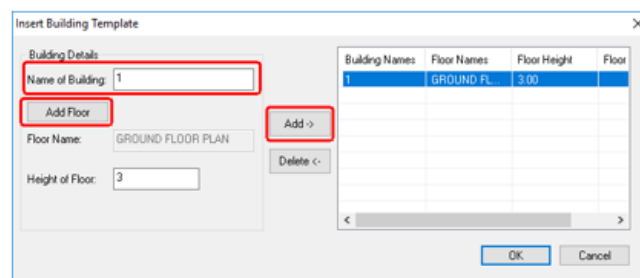
13. Insert-> Stair UP/DN Direction : Use this command to insert Staircase UP and Staircase DOWN direction. UP and DN direction indicating the flight direction of your staircase.

Building Template

Insert Building templates from PreDCR->Building template.



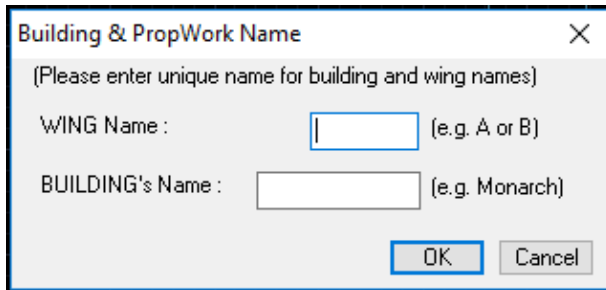
Give inputs as name of building, add floors and its floor height, click Add and then click OK, blank template will get inserted in drawing.



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.



Building & PropWork Name [X]

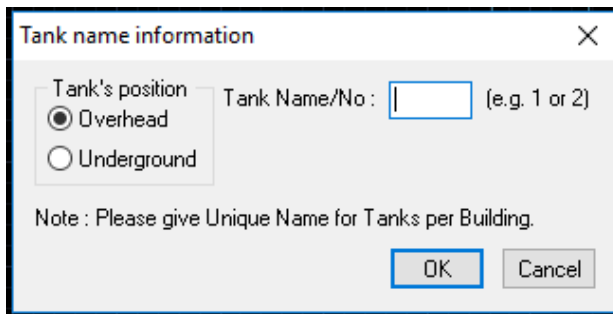
(Please enter unique name for building and wing names)

WING Name : (e.g. A or B)

BUILDING's Name : (e.g. Monarch)

OK Cancel

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



Tank name information [X]

Tank's position
☒ Overhead
☐ Underground

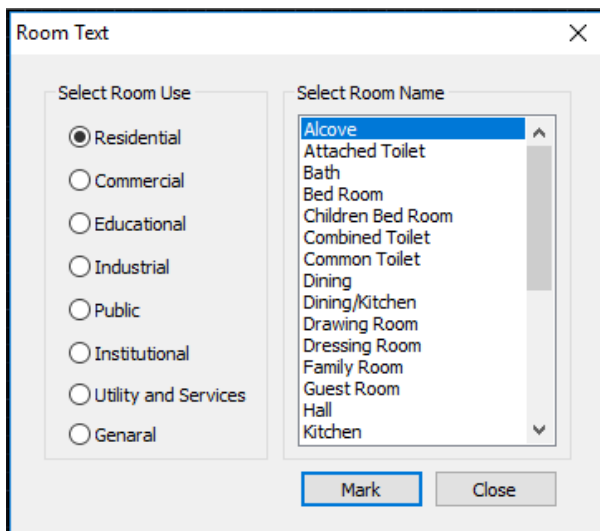
Tank Name/No : (e.g. 1 or 2)

Note : Please give Unique Name for Tanks per Building.

OK Cancel

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.



Room Text [X]

Select Room Use

- ☒ Residential
- ☐ Commercial
- ☐ Educational
- ☐ Industrial
- ☐ Public
- ☐ Institutional
- ☐ Utility and Services
- ☐ General

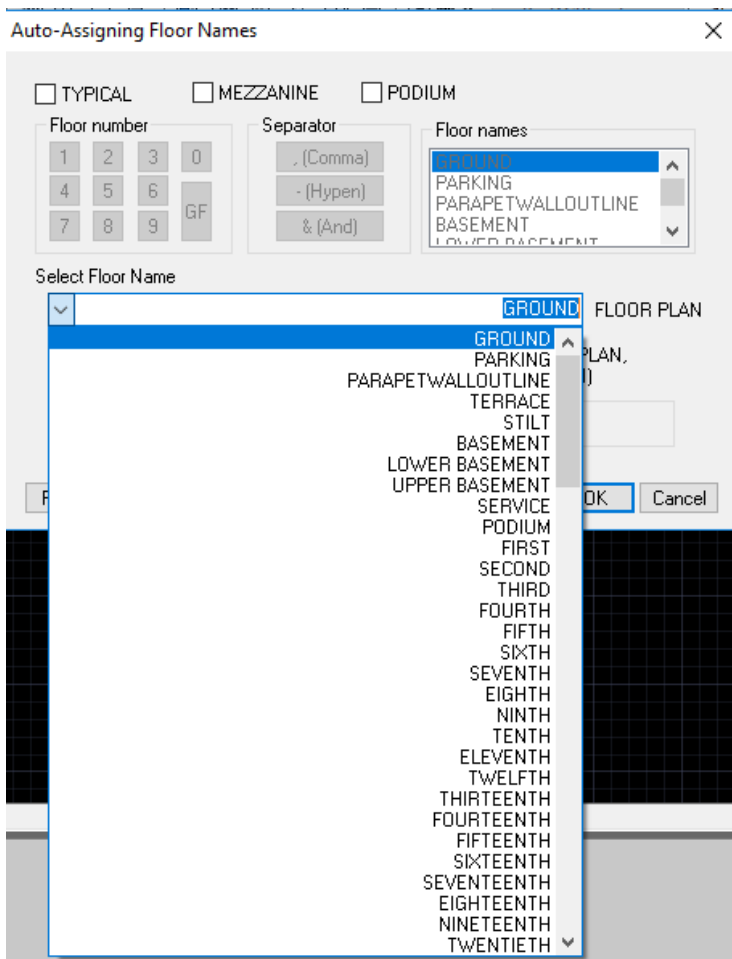
Select Room Name

- Alcove
- Attached Toilet
- Bath
- Bed Room
- Children Bed Room
- Combined Toilet
- Common Toilet
- Dining
- Dining/Kitchen
- Drawing Room
- Dressing Room
- Family Room
- Guest Room
- Hall
- Kitchen

Mark Close

Assign Name->Floor Name (PDCRASFLRNAM): Use this command for assigning name to a floor

poly and its corresponding floor in section poly in section.



Tools

Show Only DCR Layers:

All PreDCR layers (PDCRSPL):

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

Building level layer (PDCRSBL):

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

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

Show Only DCR Layers (PDCRSDL):

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

Show Other Layers (PDCRSOL):

PreDCR help manual: Maharashtra

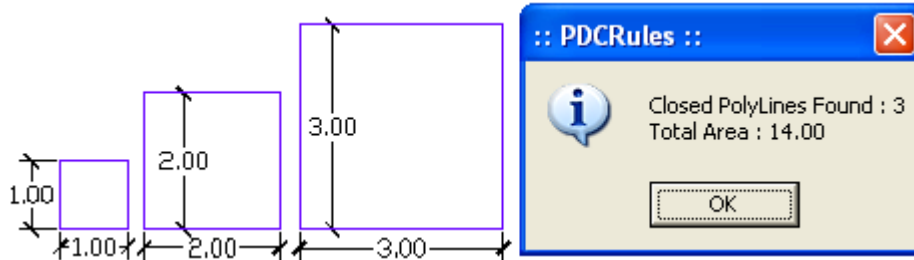
This command will turn off all the DCR and PreDCR layers in the drawing.

Show all layers (PDCRSAL);

this command will turn on all layers in the drawing.

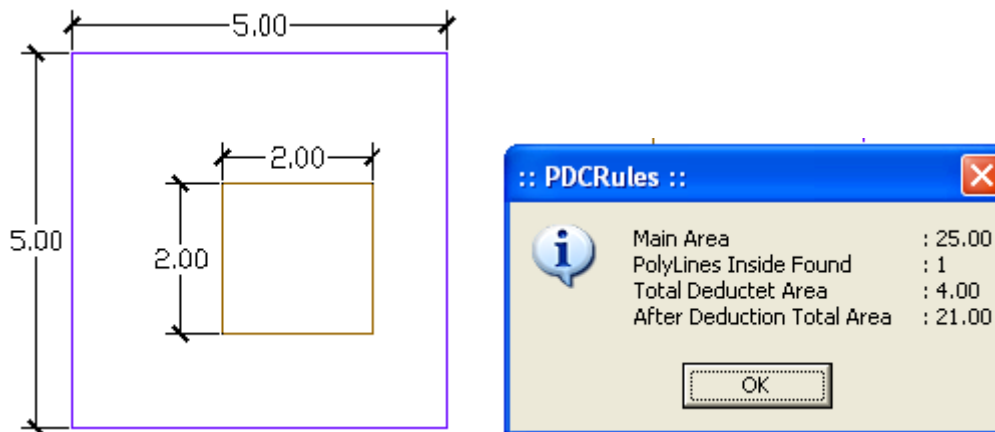
Calculate Total Area (PDCRCTA):

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



Calculate Deducted Area (PDCRCDA):

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



Get All Inside Poly (PDCRFIP):

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

Get All Overlapping Poly (PDCRGOP):

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

Get All Intersecting Poly (PDCRGIP):

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

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

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

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

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

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

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

Set Default ACAD Version (PDCRSDA):

Specifications to be followed-

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

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

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

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

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

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

entity. For example Parking or Open Space poly must be exactly inside the main plot poly. Tools are provided in PreDCR to verify this check.

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

e.g. Each Room should be given the concerned name Using <Assign Name> function of PreDCR Living, Kitchen, Bedroom. Etc. Floor Name: GROUND FLOOR; TYPICAL FLOOR 1,2 & 5-8; TERRACE FLOOR. Floor Items: Room Names should be given properly without using abbreviations so the software can identify perfect entity. This can be done by Assign name facility provided by the software.

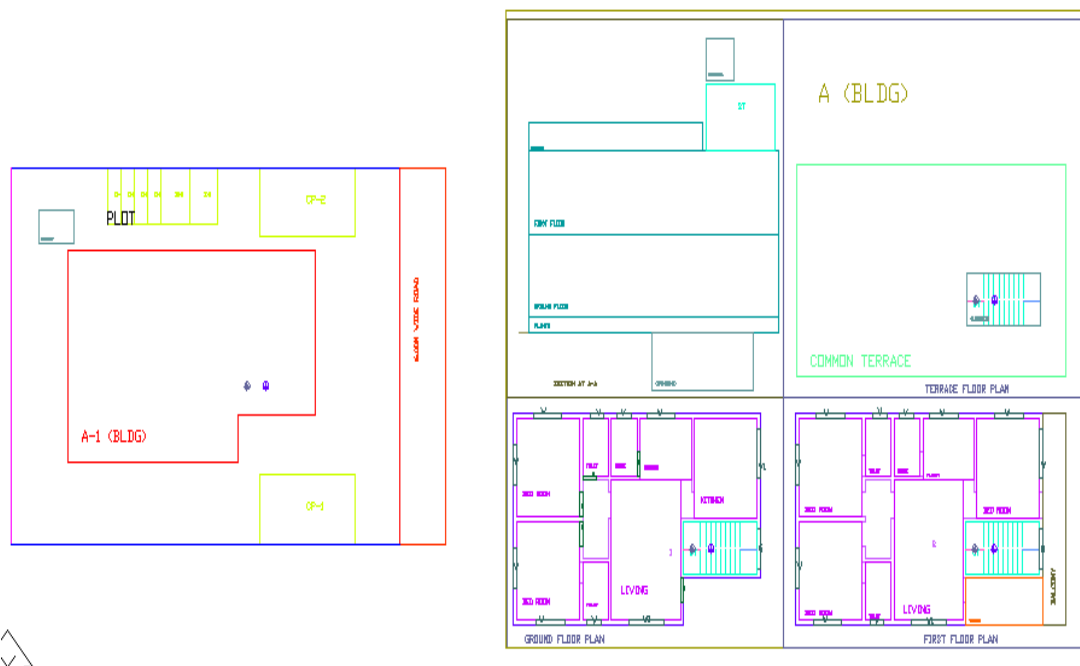
User shall use only following kind of entities for Building Items: -

LWPOLYLINE / TEXT / MTEXT

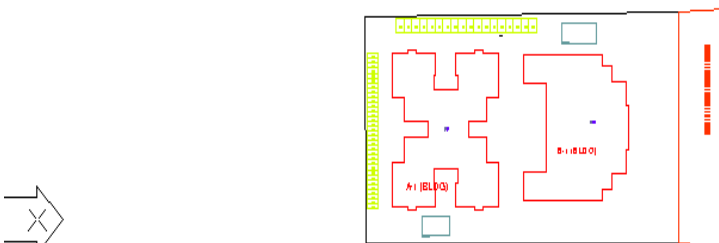
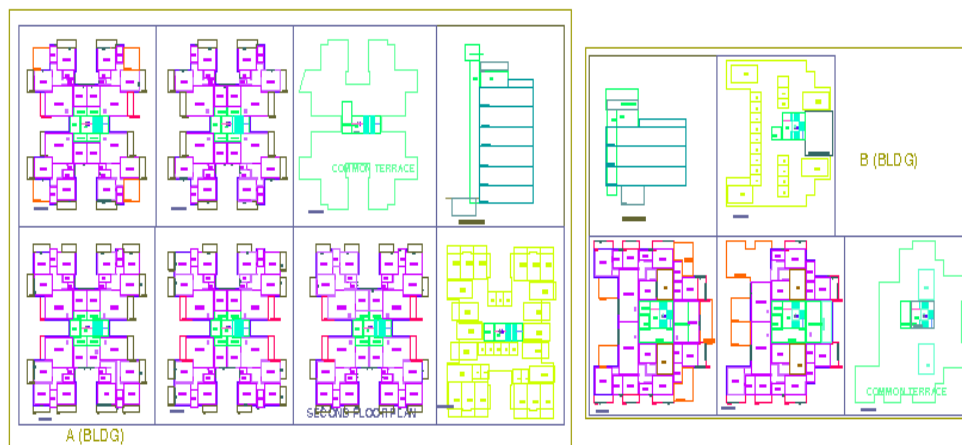
If in a plan two proposed work are mirrored in that case user should provide two separate building plan for each proposed work.

Sample cases

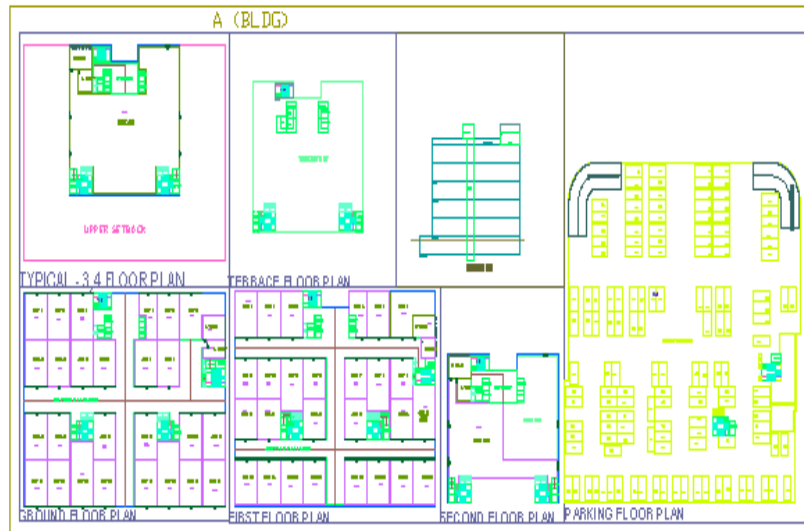
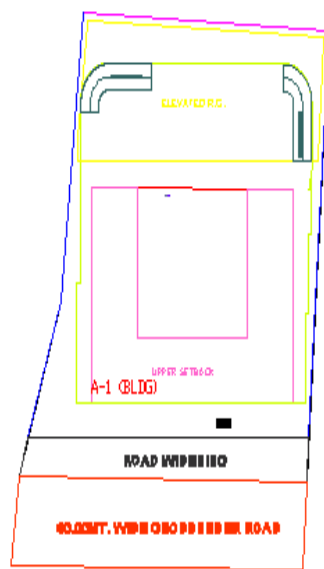
Residential Bldg (Row house)



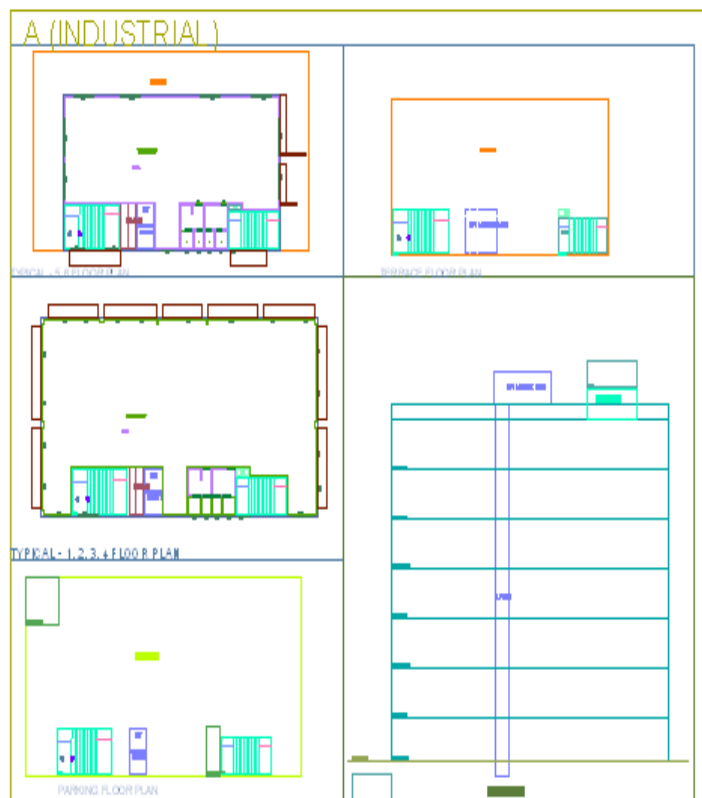
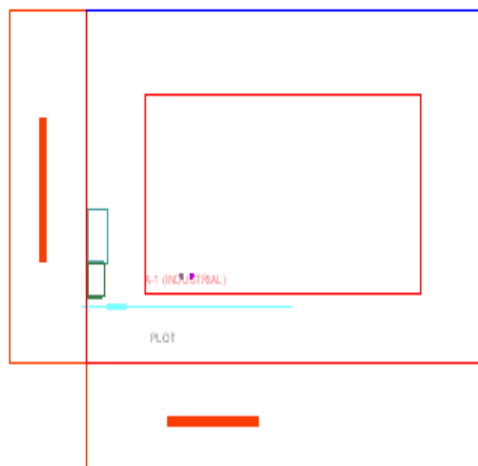
Residential bldg. (Single Detached with two buildings)



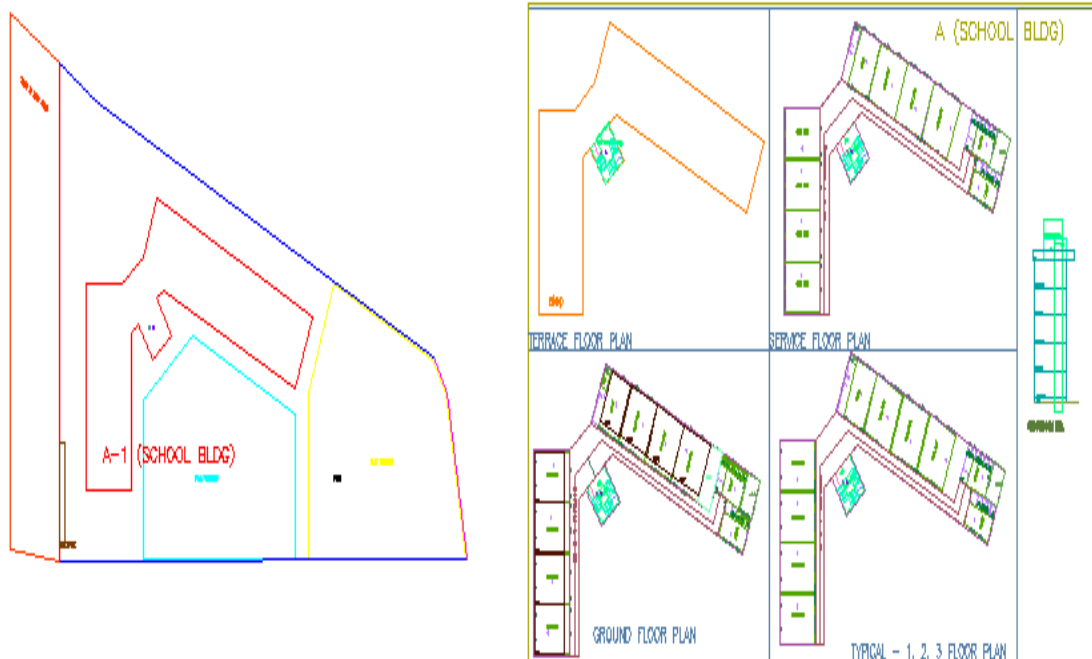
Commercial building



Industrial Building



Special building (School bldg)



Meaning of various PreDCR Messages

"Entity contain more than one text"

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

"Entity not contain any text"

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

"Polyline is not in a proper format"

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

"Entity is not closed"

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

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

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

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

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

"Entity should be outside overlapped with following entities“

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

“Entity must contain one of following entities“

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

Following subentities are not found inside:

Direction Ref Point on layer _Floor,

Type: BLOCK, Color: ByLayer Status:

Common Point on layer _ResiFSI,

Type: BLOCK, Color: ByLayer Status:

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

"The corresponding Building not found with same name"

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

"Mark Substructures using PreDCR mark Substructure tool"

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

"The Lift machine room not found in building"

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

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

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

'Invalid objects, Please Try again'

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

"Section not found"

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

"The corresponding entities not found in section"

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

"The corresponding entities not found in floor"

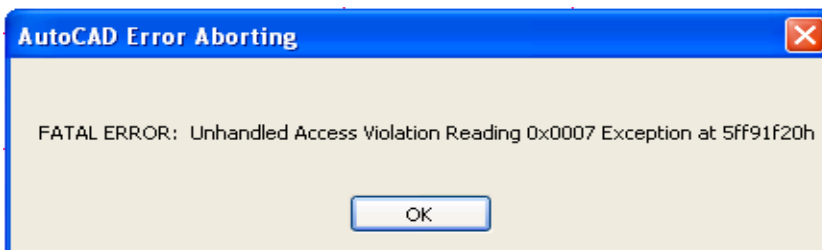
It means that listed entities not present in the floor so show that entities in the floor plan.

"Two Tanks should not have same Name"

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

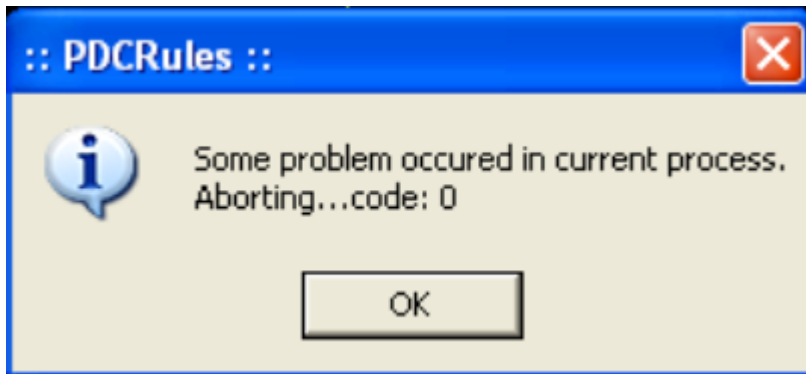
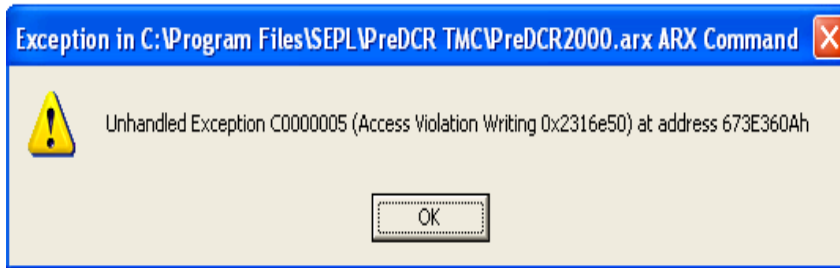
Internal error or Fatal error while verify the drawing

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



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

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



While performing verification if following message comes, then follow the steps
Check each layer separately until you found problematic layer. After that those layers redraw.

Path for giving full rights to System in Registry:

If full rights are not given to system, then PreDCR and AutoDCR will not Process further.

Search **REGEDIT** in search box of windows - **HKEY_LOCAL_MACHINE >> Software >> Microsoft >> Windows >> Current Version >> Policies >> System**. Double click on **EnableLUA**, verify if value is 0; if not, change it to 0 and then Restart computer.

Path of PreDCR Installer in Registry:

HKEY_LOCAL_MACHINE\SOFTWARE\WOW6432Node\CoServer\CoPDCRActivator.

This is the last page of the document