IBPMS KERALA

PreDCR User Manual

Kerala State Industrial Development Corporation Ltd. (KSIDC)

Prepared by

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Installation and Registration

System Requirements -

- Pentium IV or better (or compatible processor)
- 2 GB *RAM (Mini.* Requirement)
- Windows 7 and above
- AutoCAD and Zwcad

Installation -

To install PreDCR software on your computer follow the given steps :

1. Download the installer from www.ibpms.kerala.gov.in website.
2. Run the PreDCR installer by double clicking on set up file.
3. Follow the steps in installer wizard to complete the installation.

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

below.

Introduction

PreDCR is 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 corresponding layer. 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 Polylineor not etc. PreDCR will highlight all the failed entities if any.

PreDCR can be used to mo*per AutoDCR software requirements.*

For automating the process of Development Codify/make and verify the existing or new proposal drawing 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*** ntrol 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. And there must be in 1:1 mt. Scale.

- 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 Center Line of Main Road, Internal Road, Railway Line , Drain line, Water Line and Electric Line).

- 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 Polylinemust 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 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.*

- Floor Polylineline must be having all the Arch details inside it

- 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.

- Proposal drawing must be having _OtherDetail Polylinehaving the other details to be taken in final printing such as Elevation. Septic Tank Detail, Rain Water Harvesting Detail etc.

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Types of proposal

(Separate drawing files are required for Land-division (Sub-div. & Reconstitution) cases and for Building Development Case

1. **Amalgamation**: By drawing initial plots (with unique plot names) on _Plot layer and amalgamated plot on _Reconstitution layer. Give unique name to amalgamated plot on '_Reconstitution' layer.e.g.Recon1.

2. **Land Division (Sub Division)** - By drawing initial plots (with unique plot names) on _Plot layer and subdivided plot on _Subdivision layer. Give unique name to all sub-divided plot on '_sub-division' layer.e.g.SD1, SD2 etc.

3. **Proposed Development or Building Permission** - By drawing plot on plot layer with PropWork inside plot having all the Proposed Bldg details

4. **Open Layout** - By drawing main plot (with unique plot names) on _Plot layer and Individual plot on _IndivSubPlot layer. Give unique name to all individual plot .e.g.ID1, ID2 etc. Open layout should contain all layout related entities such as Internal Road, Organized Open Space, Amenity etc drawn inside the Plot poly.

PreDCR layers information

Layer name	Description	Naming Convention	short command
_AccessoryUse	AccessoryUses which are allowed in Margins or Layout & Free from FSI should be drawn as a closed polyline with text inside it.	Name of the AccessoryUse can be assigned from Mark>AccessoryUse tool.	SSTR
_AccessRoad	Draw AccessRoad as a closed polyline with text specifying its width.eg.1.5 m. wide AccessRoad.		R6
_ArchProj	Draw Architectural projections such as Chhajjas, Weather Shade, Lofts, Canopies, Porch and Front Steps as Closed Polyline. By Using "Mark>Projections" Tool, concerned Text will be inserted automatically inside the polyline.		AP
_Balcony	Draw Each individual Balcony as closed Polyline with Text on same layer. Balcony & Sit Out can be present in Floor and It must overlap ResiFSI.	Mark>Balcony>Balcony Mark>Balcony>Service Verandah"	BL
_Building	Building Polylineis used to group all floor plans and sections of the same Building. (This is just a logical Group of Building). If the Building is Typical for Multiple PropWorks or Wings, Naming Convention should be as Below. (Note: Area or size of Building Polylinedoesn't have any meaning in AutoDCR)	Naming Convention will be provided by Tool>Assign Name A (Bldg.Name) inside Bldg.Polyline& A-1 (Bldg.Name) inside Pwork Poly	BLD
_Column	Column layer is closed Polylineshould be inside of Floor		
_CommFSI	Draw a closed FSI PolyLine, which is used as a Commercial Purpose.		CMFS
_CompoundWall	Closed polyline of compound wall to be drawn on this layer overlapping plot.	1.5m. high compound	CW
_Courtyard	Draw a closed polyline which is a fully or partially enclosed space permanantly open to the sky within a building at any level: inner Courtyard being enclosed on all sides and outer Courtyard having one unenclosed side.		

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_Door	Insert a particular size Polylinefor Door using Insert->Door from PreDCR menu. (Note: Default DoorHeight will be 2.1 mt.)	RS, D, D1, D2 etc.	DR
_DrainLine	Draw a Drainage or Sewage line as a open polyline for using Drainage Line on this layer.		DL
_DriveWay	Draw closed Polylineinside of Floor or Plot, overlapping with inserted car parkings and Ramp/AccessRoad/MainRoad	Drive way	
_ElectricLine	Electric line shall be drawn as open Polyline with Text whose insertion Point lies on the Polyline. (Note : High or Low Voltage capacity must be written at a starting of Text)	Mark>Electric Line	L1
_ExistingRoad	Draw an Existing/Proposed DP Road as a closed Polyline with text inside it. It should overlap with Plot (Note: Road width must be written at a starting of Text)	12.00 m. wd. internal DP Road	R3
_ExStructure	Draw an Existing Structure as a closed Polyline in the Existing building inside the Plot with Text inside it.	Mark>Existing Structure> To be retained/ To be demolished	ES
_Floor	Floor Polyline should be drawn as a closed Polyline with Text on same Layer. This is just a logical Group of all floor Entities. Direction Ref Circle: Insert Dimension Ref Circle inside each floor Polyline at the same point. You can insert it on common areas of the bldg. such as lobby, staircase, lift etc. (Note: Area or size of Floor doesn't have any meaning in AutoDCR) Floor Name: Floor Plan will be automatically link with Section by matching the Floor Name. If the Floor is Typical Floor, It should be Named with Proper Naming convention.	Naming Convention will be provided by Tool>Assign Name>Floor name Name of floor should be in given format: TYPICAL-1,4 FLOOR PLAN TYPICAL-1-5 FLOOR PLAN TYPICAL-2&3 FLOOR PLAN Ground Floor Plan	FLR
_FloorInSection	Draw a closed polyline which is the height of that floor (slab top to slab top) This poly only used for checking floor height. For assigning the name of FloorInSection then used Assigned name option for PreDCR tool menu.	Inside SectionFloor: SECOND FLOOR, THIRD FLOOR, GROUND FLOOR.	SECF
_GroundLevel	Draw a open polyline below the plinth in the section which is used for checking a total building height from this line.	GL	GL
_IndFSI	Draw a closed Polyline, which is used as a Industrial Purpose.		IFSI
_IndivSubPlot	For plotting layout draw individual subplots on '_indivsubplot' layer inside main plot which will be on '_Plot' layer.		
_InternalRoad	Draw a Closed Polyline with Centre Line (Ltype-CentreLine) & Single Text inside each.	7.50 m wd. Internal Road	R2
_Lift	A closed polyline on the inner dimensions of the lift should be drawn on this layer with Text "Lift". Machine Room shall be also drawn in same Layer with Text "Machine Room"	Mark>Lift>Lift/ Lift Machine Room/ Fire Escape Lift/ Hydraulic Lift	LFT

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Layer	Description	Mark/Assign	Code
_LocationPlan	Draw closed Polyline (Boundary) with text around the location plan (Key Plan)	Location Plande-	
_MainRoad	Draw a closed Polyline with Text, which should be abutting with the Plot closed Poly. (Note: Road width must be written at the starting of Text)	Mark>MainRoad> Cul-De-Sac/ Notified Road/ Un-notified Road	R1
_Marginline	No need to draw. This layer will be auto generated by PreDCR		L3
_NalaRoad	Draw a open polyline on this layer. And PreDCR will generate its RWARea of the offset which should be inside/intersecting with plot inside of plot in RoadWidening Layer.		
_NetPlot	No need to draw NETPLOT. This layer will be auto generated by PreDCR		NPLT
_NotInProposal	Plot area which is not in possession or not in proposal to be drawn as a closed polyline on this layer		NIP
_NPLTBoundary	Notional Plot Boundary means Imaginary Plot Boundary from Building in case of Mixed Use or Mixed Structure in same plot.		
_OtherDetail	Make one Boundary/Closed PolylineLine around the Details of Septic Tank, Rain Water, Elevation etc.	Mark>Other Detail>	OTRD
_OtherPLTBoundary	Draw Closed Poly Line for other Plot Boundary as per Records and mark it as required using PreDCR tool.	Mark>Other Plot Boundary	
_Parking	Draw a closed Polyline for Parkings. And also use Insert tool to insert desired Parking Polyline in the drawing.		PK
_Passage	Draw a closed polyline with center line on passage. It should be inside of Floor and overlap with UnitBUA/Staircase/Lift	Assign Name>Passage Name	PAS
_Plot	Draw a closed Polyline which will represent the Plot Layout. Plot will contain all Proposed Works (buildings, wings), open space, Internal Roads, Parking etc		PLT
_Podium	Draw a closed polyline. Podium should be inside plot covering PropWork if any.		
_PrintItems	No need to draw. This layer will be auto generated by PreDCR		
_PropWork	PWork is a building profile and shall be drawn inside plot. Draw a closed polyline for Proposed Work. Direction Ref Circle: Insert Direction Ref Circle inside PWork Polyline at the same point as in Floor polyline.		PW
_RailLine	Railway line shall be drawn in the layout plan as a Open Polyline(Ltype-CentreLine) & Text specifying guage of that railway line inside it.		L2
_Ramp	Draw a closed polyline in floor plans and/or plot. Naming convention for ramp is "---m. long and ---m. high and ---m. width ramp-1". give unique name to each Ramp to be marked by Assign Name	Assign Name>Ramp Name Select which type ramp and enter size	SECR
_RecreationalArea	Draw Common Plot / Open space as closed polyline reserved as Common Plot on this layer.		RCA

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_RefugeArea	Refuge area to be drawn in floor plan as a closed polyline on this layer		
_ReservArea	If there in any Reservation Area in Plot, it should be drawn as a closed Polyline with Text inside it		RSA
_ResiFSI	A Closed Polyline with Text on this layer represents a Residential FSI or Floor FSI. It will cover whole area which is considered in FSI Area per Floor. Note: - It is same as previous "_ResiFAR" Layer.	Mark> Residential FSI Markings>Special Residential/ Residential	MFS
_RoadCurvature	Draw a Road Curvature as a closed polyline at Road junctions, including 'Y' junctions in site plan.		
_RoadWidening	Road Acquisition/Road Widening area shall be drawn as a closed Polyline with Text on same layer inside Plot Entity. Margin will be generated & checked from Roadwidening Polyline by AutoDCR software.	Mark> Road Widening>Surrendered Free of Cost/ UnMark	R5
_Room	A closed polyline for each room with its text inside should be drawn on this layer.	Assign Name>Room	RU
_Sanitation	Insert a Sanitation Block at specific point. Insertion point of Sanitation block should be inside Floor Poly.	Insert>Sanitaion> WC/ WB/ UR	
_Section	A closed Polyline with Text on same Layer. It is used to group all Sectional detail like Floor Sections, Plinth, Staircabin, Lift etc. (This is just a logical Group of Sectional Entity)	Section	SEC
_SectionalItem	A closed polyline which is the height of the AC Duct/Beam/Slab/Sunk Slab of that floor. This Polyline only used for checking clear floor height by deducting this Sectional Item height	Mark>Sectional Item> Slab/ Beam/ Tie Beams	SECTITEM
_SitePlan	A closed Polyline around the Site Plan with the Text & Scale inside it.	Site plan	STP
_SpecialUseFSI	This FSI polyline for all other building uses like Educational, Assembly, Storage, Medical etc. except Resi., Comm, Ind. use should be drawn on this layer.	Mark> SpecialUseFSI Markings>Educational/ Medical/ Assembly etc.	SUF
_StairCase	Total Staircase area should be drawn as a closed polyline with text inside it. This Main Stair Polyline should contain Intermediate Landing, Floor Landing & Each Tread as an open polyline. Intermediate & Floor Landing Polyline can be Marked by PreDCR Tool "Mark>Staircase>Int. or Floor Landing"	Mark>Staircase, Select which type of Stair you need from list	STR
_StreetLevel	Draw the Street level line as open polyline below the plinth in section which is used for checking a total building height from this line.	SL	SBD
_TempStructure	Area for temporary structures to be drawn as closed polyline on this layer.	Temporary Structure	
_Terrace	A closed polyline on all kind of terraces like common top floor terrace as well as common terrace on any floor should be drawn on this layer.	Terrace	TER
_TPSchemeArea	Future TPScheme area Deduction shall be drawn on this layer if present in proposal. This can be any area		

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	reserved for / by Authority for future TPScheme area.		
_UnitBUA	Draw a closed polyline which is a total floor area including walls consumed by one unit within a building.	Mark>UnitBUA> Splitted Unit/ Normal/ Shop/ Office etc.	CPT
_Void	If the space is not Chowk then it can be void. All ducts (where ventilation is not taken) and double height rooms can be drawn in void layer.	Mark>Void> CutOut/ Void	VD
_Wall	Draw Wall as a closed Polyline. No text is reqd in normal wall. Draw same layer on Parapet wall and Hand Rails and mark it.	PreDCR>Wall> Wall for HandRail/ Parapet wall	
_WaterBody	Draw Water Body as closed polyline inside the plot.	Mark>WaterBodies> Minor/ Major	R4
_Window	Insert a particular size Polyline for Door using Insert->Window from PreDCR menu.	W, W1, W2, FW etc	WND

PreDCR Tools

While running the PreDCR software, you will get option to select AutoCAD version. You can select any of AutoCAD version to run the PreDCR Application. You will get PreDCR Tool bar and PreDCR Menu in that AutoCAD Application only. A detail for each tool is described below.

Figure 2: PreDCR Tool Bar

 Create New Project:

Create DCR Layers in the drawing(PDCRCL): Fix Poly (PDCRPE):

Mark Margin (PDCRMARGIN):

Verify Close Poly (PDCRVD):

Verify the Current Drawing (PDCRVT): Show Objection List (PDCROLST):

Show PreDCR Report:

Create New Project:

This command will Create New project for current drawing. As soon as you active this tool the following dialog appears. In which you have to fill all the Proposal details. Also it is mandatory to select Type of Project as

a. Prop. Development: Proposal having Development. It should not involve any LandDivision or Reconstitution
b. Land Division/Amalgamation: Proposal having Land Subdivision or Amalgamation

Create Layers in the drawing (PDCRCL):

This command will create layers required for AutoDCR and as per the Project Type you have selected. i.e.
For Proposed Development type Proposal listed layers will be generated in drawing file.
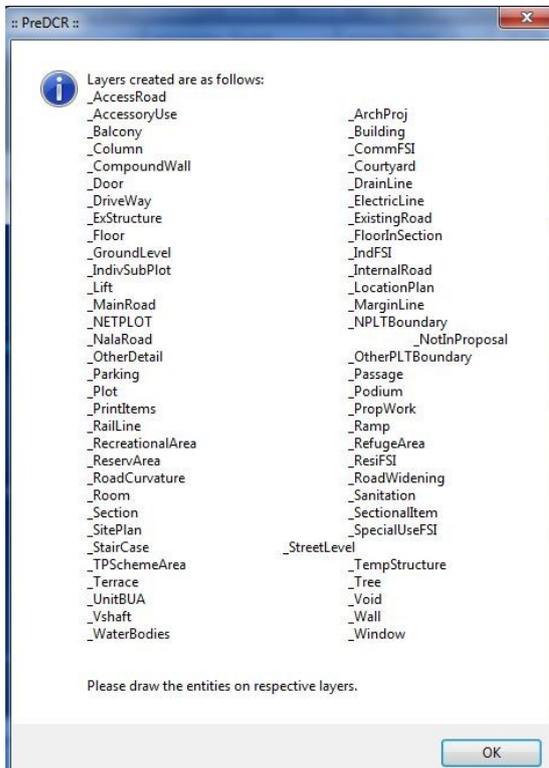
Fix Polyline(PDCRPE):

Use this command once on the final drawing which will process all the polylines on the PreDCR layer and remove extra vertices found on polyline or duplicate entity. This command should be used (before verifying the drawing) every time you add any new entity in the drawing.

Mark Margin (PDCRMARGIN):

Use this command to mark side of the plot as Front, Rear and Side.
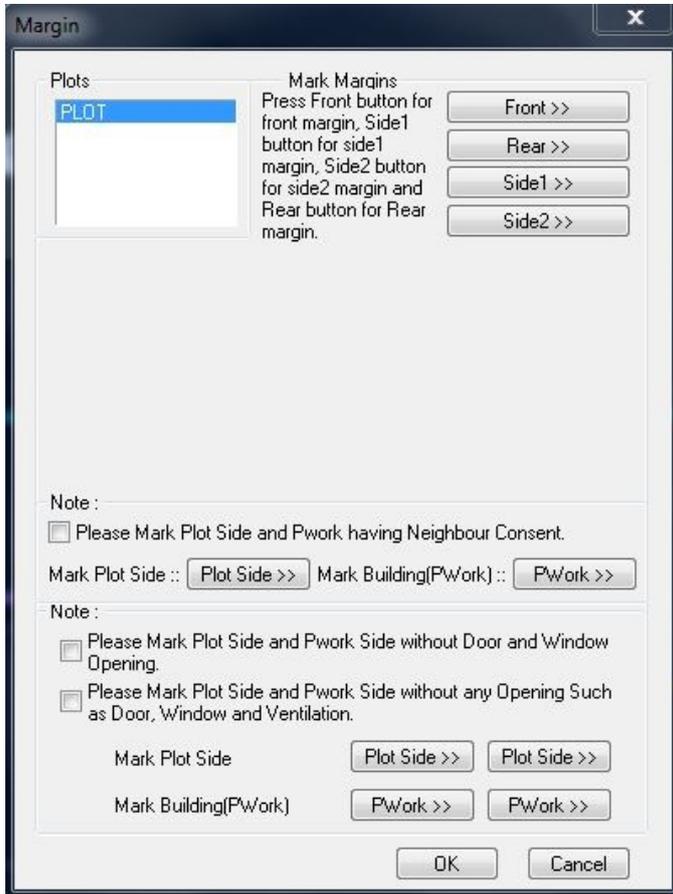
Mark the Plot side which is overlapped with MainRoad as Front , opposite side as Rear & other sides as Side Margin.

Mark the Plot side and PWork when No Door/Window or Ventilation is taken from any side of the Plot or Neighbour Consent is taken on any side.

Verify close Polyline(PDCRVD):

This command will verify the current drawing as required by AutoDCR. It will verify that LWPOLYLINE entities on the selected layers are closed and contain one text.
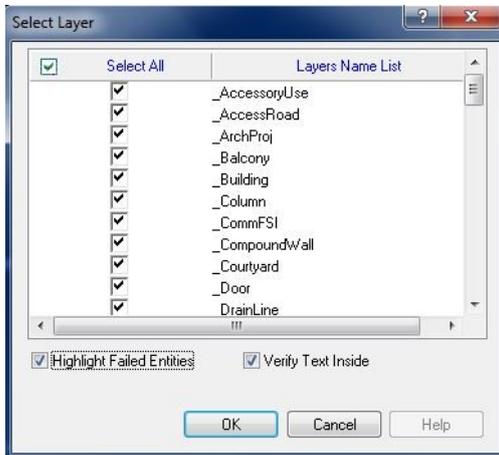
Verify the Current Drawing (PDCRVT):

Use this command to verify the layout and building level objects in the current drawing plan. Major checks are as follows:
- 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.
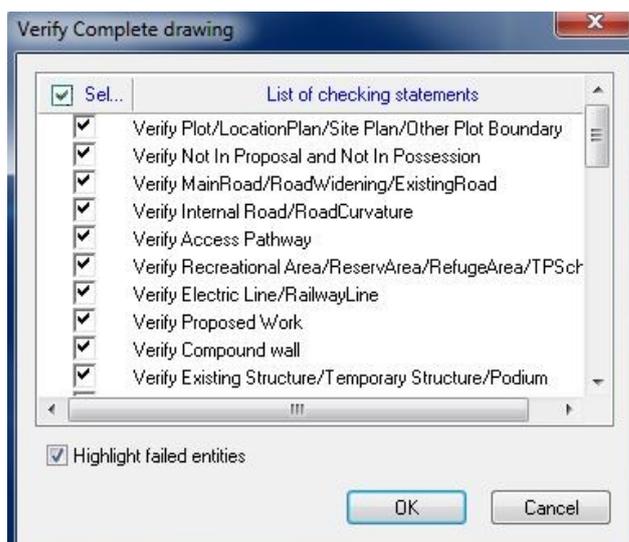
In the "Verify All Drawing Dialog" you can select the layout or building objects to be checked. To view the result, press OK button. PreDCR will start checking all corresponding objects in the currently open drawing and then display the status as OK or list of failed objects with the reason of failing in the dialog as shown in Figure.
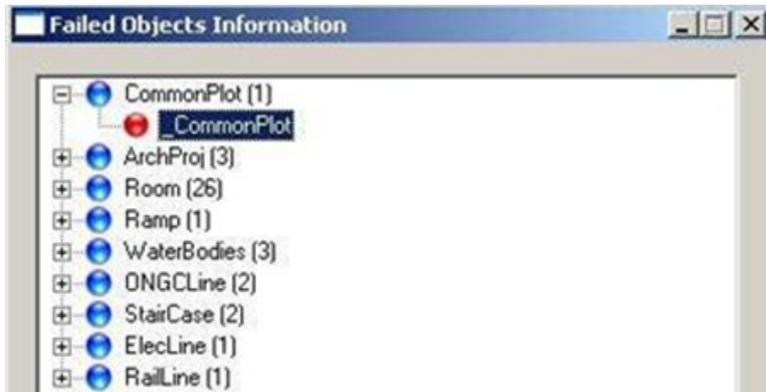
Show Objection List (PDCROLST):

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.
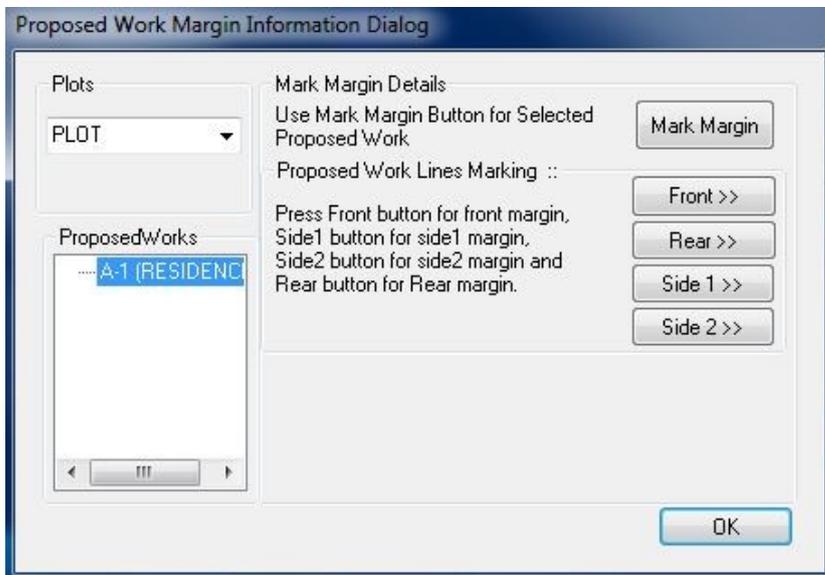
Show PreDCR Report (PDCRRPT):

This command will generate the PreDCR Report having all the Project details. All the verified and Failing entities having Information will be shown in this Report.

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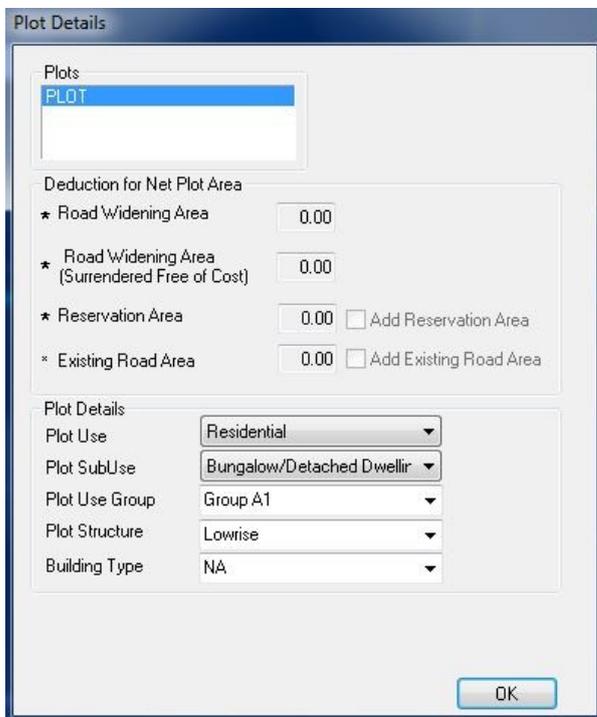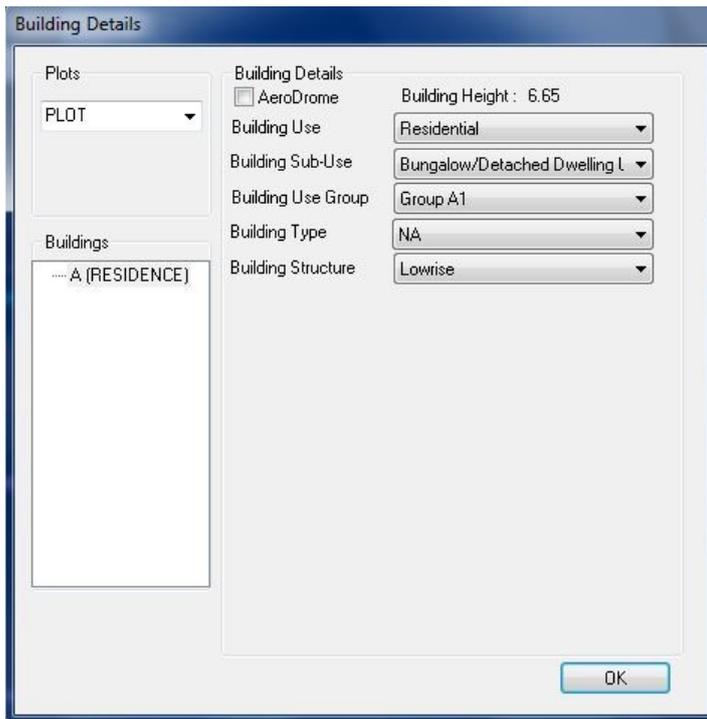
A Dialog box will come after 3 steps of this PreDCR report checking. In this dialog box we can mark four yards of each Prop.Works in the same plot. Press OK after mark yards.

PreDCR report will generate after marking all PropWork four yards

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Corporation Ltd.
KSIDC

PreDCR Report

Trivandrum

Version Number: 1.0.18
Version Date: 27/01/2021
Report Generated On : 12-05-2021

General Details

Application No.	
local body	Trivandrum
local body type	Municipal Corporation
Authority Class	
Application Type	General Proposal
Permit type	Building Permission
Nature Of Permission	New Construction
Revision	No
Special Project	NA

Schedule of boundaries

Occupancy	Residential
Plot SubUse	Bungalow/Detached Dwelling Unit
Development Area	Detail Town Planning Scheme (Sanctioned and Published)
DevelopmentPlan	NA
LandUse Zone	NA
Abutting Road Width	

- Minimum required entities have been found.

Building and Existing Building Details

Building USE/SUBUSE Details

Name	Use	SubUse	Use Group	Type	Structure	Height	Floor No		
PLOT	Residential	Bungalow/Detached Dwelling Unit	Group A1	NA	Lowrise	-	0		
A (RESIDENCE)	Residential	Bungalow/Detached Dwelling Unit	Group A1	NA	Lowrise	6.65	2		
First Floor...	Residential	Bungalow/Detached Dwelling Unit	Group A1	-	-	3.10	0		
Residential FSI	Residential	Bungalow/Detached Dwelling Unit	Group A1	-	-	-	-	-	-
Ground Floor...	Residential	Bungalow/Detached Dwelling Unit	Group A1	-	-	3.10	0		
Residential FSI	Residential	Bungalow/Detached Dwelling Unit	Group A1	-	-	-	-	-	-

- The Entities In The Drawing Have Been Drawn Properly As Per AutoDCR Standard.

Special Tools
Use Special tools using PreDCR Menu

Mark	▶
Wall	▶
Margin	
Insert	▶
Assign Name	▶
Tool	▶

Use Mark tool using PreDCR Menu

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

Other Plot Boundary:

As Per Site
As Per Revenue Record
As Per Document

Not In Proposal

Area Not In Possession
Not In Proposal (Default)

PWork:

Centrally AC Bldg
PWork (Default)

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Room:

W.C. for Handicapped

Toilet for Handicapped

Gents Toilet

Ladies Toilet

AC Room

Room (Default)

Void:

CutOut (Free from FSI/BUA)

Void (Default)

Parking:

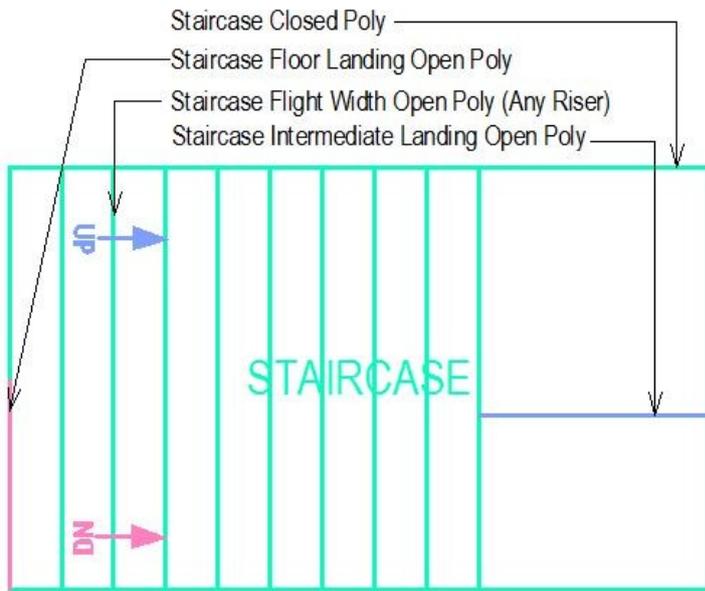| Mechanical Parking ▶	Two stack Parking
Parking (Default)	Three stack Parking
	Four Stack Parking

Floor in Section:

Floor In section to be Demolished

AC Room Floor

Floor In section (Default)
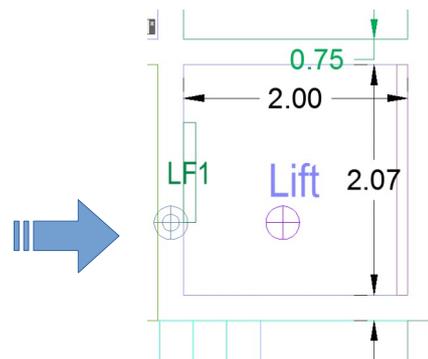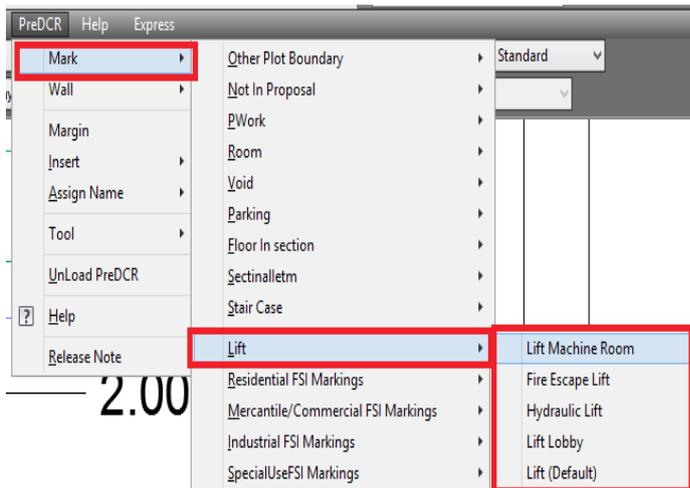
Plinth

Raised ground level

Sectional Item:

AC Duct

Beam

Slab

Sunk Slab

Roof

Joists or Beams

Tie Beams

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Staircase:

Lift:

Residential FSI Markings:

Special Residential
Residential (Default)

Mercantile/Commercial FSI Markings:

Mercantile/Commercial
Office/Business

Industrial FSI Markings:

Small Industrial
Industrial (Default)

Special Use FSI Markings:

Educational
Medical/Hospital
Assembly
Storage
Hazardous

FSI:

Free FSI@ Basement Area
Existing FSI
FSI to be Demolished
Impact/Sanctioned FSI
Normal(Default)

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UnitBUA:

Splitted Unit

Normal(Default) FLAT
Dormitory
UnitBUA other than Unit
Two Room Unit
DWELLING UNIT
EWS UNIT
LIG UNIT
MIG UNIT
SHOP
OFFICE
ProfOFFICE
GODOWN
SCREEN
GUEST ROOM
CLASS ROOM
Administration Area
Public Utility Area
OTHER

Balcony:

Service Verandah
UnMark(Default)

Projection:

Weather shade
SunShade
Steps
Loft
Canopy
Porch/Portico
Cantilever porch
Chhajja
Arch Proj
Cornice
Barsati

Main Road:

Cul-De-Sac
Notified Road
Un-notified Road
Pedestrian Lane/Streets leading to Residential Colony
UnMark(Default)

Road Widenings:

Surrendered Free of Cost
UnMark(Default)

Floor:

Proposed for Occupancy
Approved for Occupancy
Normal (Default)

Existing Structure:

To be demolished
To be retained
Sanctioned as per Old DCRule or Special Permission

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AccessoryUse:

Rain Water Harvesting

Soak Pit

Septic Tank

Garbage Pit

Toilet

Servant Quarter

Garage

Under ground water tank

Pump Room

Well

Security Room

Transformer Room

Meter Room

Security Cabin

Electric Room

Internal Sanitation Shafts

Air Conditioning Duct

Vertical Sun Breakers/Box Louvers

Architectural Bands

Cornices

Open Platforms

Towers

Torrents

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Domes

Loft

Galleries

Pent house

Covered Swimming Pool

Open Swimming Pool

A C Plant Room

Solar Heating System

Generator Room

Refuse chute

Office room

Sump Tank

Sewage Treatment Plant

AHU

Effluent Treatment Plant

Overhead WaterTank

Safe Deposite Vault

Gate Goomty

Waste water recycling

Ground water recharging system

Parking Shed

Bio Gas

Solar Energy Installation

Electric Line:

Low and Medium Voltage Lines and Service Lines

High Voltage Lines up to including 33000 volts eline

Extra High Voltage Lines beyond 33KV

WaterBodies

Bank of the river

River embankment

Minor Waterbody

Black Sea

Sea Wall

Major Waterbody

Other Detail:

Elevation
Service Plan
Septic Tank Detail
Rain Water Storage Tank Detail
Certificate
Project Title
Parking Layout Plan
Key Plan
Compound wall details
Stair Cabin details
Lift Cabin details
Parking Plan

Use Wall tool using PreDCR Menu

Following commands are provided to mark various walls in your drawing. Draw various walls using _Wall layer and mark with following options.

R.C.C.Wall

Wall for HandRail

Parapet Wall

Partition Wall

Glass

External Wall

Margin

Refer "Mark Margin" Tool

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Use Insert tool using PreDCR Menu

Following commands are provided to insert various blocks/Text in your drawing

Parking ▶
Terrace Norms ▶
SectionLine
Door
Fire Door
Entrance Door
Window
Mechanical Ventilation
Sanitation ▶
Direction Ref Circles
North Direction
Tree
StairCase Up Direction
StairCase Dn Direction
Ramp Up Direction
Ramp Dn Direction
Man Hole

- **Parking:**

Car
Physically Handicapped Car
Scooter
Cycle
Visitor's Car Parking
Transport Vehicle
Loading/Unloading

- **Terrace Norms:**

Slope of Roof and R.W.P
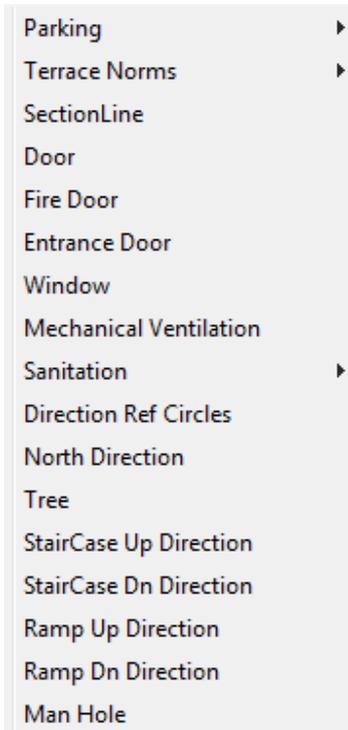
- **Sanitation:**

Use this command to insert block for Water Closet, Wash Basin & Urinals for Sanitation for any Use except Residential Use.

WC
WB
UR

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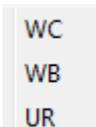
Use Assign Name tool using PreDCR Menu

Building and Prop.Work:

Room:

Professional Office:

Floor Name:

Ramp Name:

Passage Name:

Lift Name as per NBC

- • **Building and Prop.Work:**
  - o **Building and PropWork** (PDCRBLDPWNL): Use this command to assign the names to Building and its corresponding PropWork at Layout.
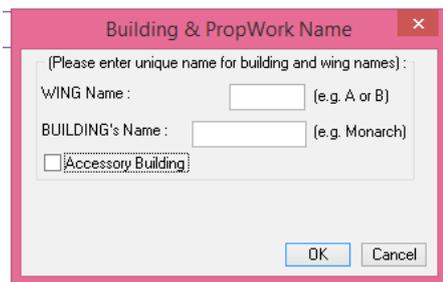
Assign Building & Pwork Name

Note: Each Bldg & **PWork(**BUA in Layout) entity name must be assigned through **PreDCR**.

PreDCR Assign Room
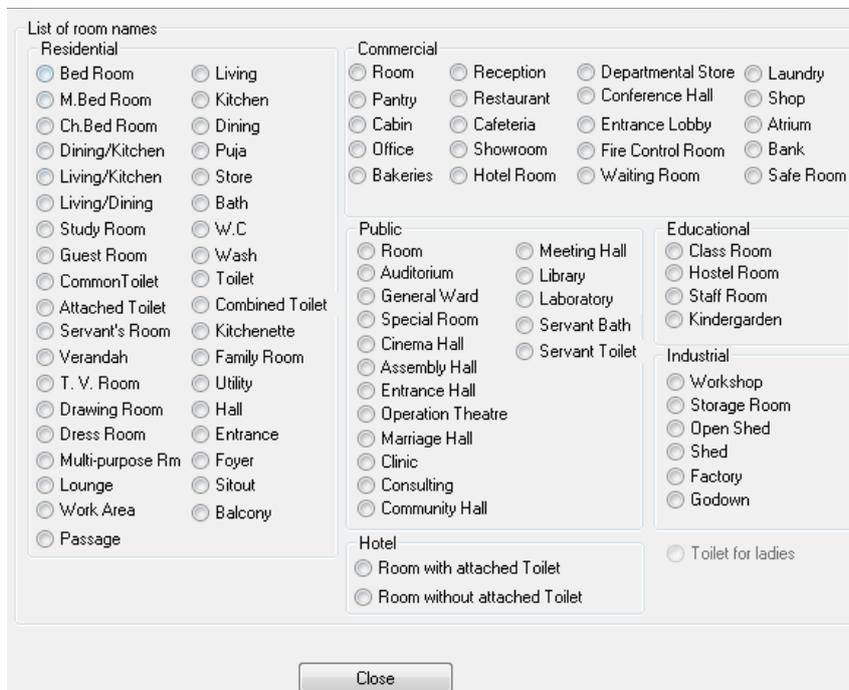
Assign Room Name

While Assigning Room name, PreDCR will insert the name of Room and size of Room.
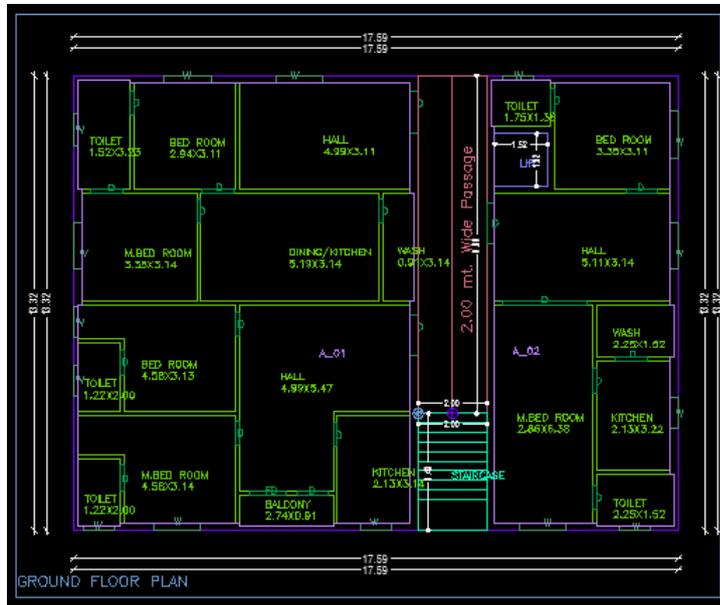
- **Professional Office:**
  - o   Use this option to assign name to Professional office room in the residential building.

- **Floor Name:**
  - o   Use this command to assign names to Floor and it's corresponding SectionFloors.
    As soon as you use this command the following Dialog Box appears. Now select particular floor name which you want to assign.
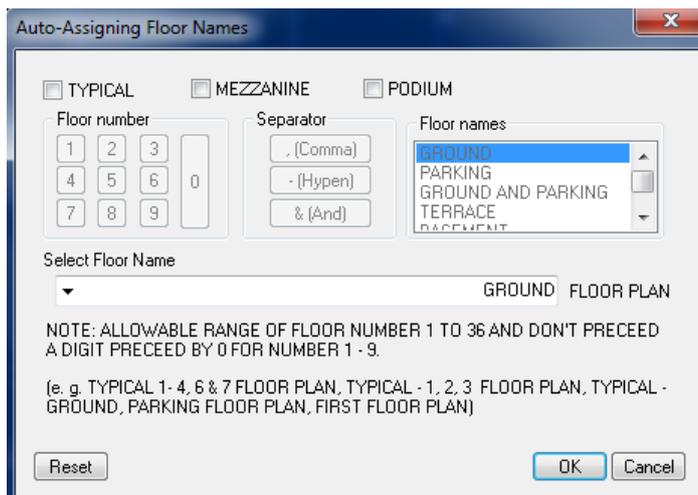
Assign Floor Name

  - o   Each Floor-SectionFloor name must be assigned through Assign Name>Floor Name Tool.
  - o   Each Floor & SectionFloor must be having same Floor name without any Spelling Mistake
  - o   Typical Floor Name must be assign by using [Comma],[Hyphen] and [And]

• **Ramp Name:**

Use this command to assign name to Ramp
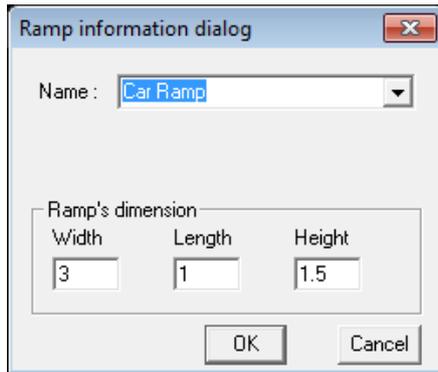
• **Passage Name:**

Use this command to assign name to Passage
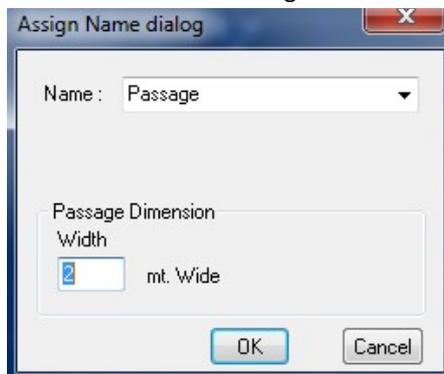
• **Lift Name as per NBC:**

Use this command to assign name to Lift as per NBC

Use other tool using PreDCR Menu

- **Show Only PreDCR Layers:**
    - o **All PreDCR layers (PDCRSPL):**
      This command will turn off all the layers in the drawing except PreDCR layers
    - o **Building level layer (PDCRSBL):**
      This command will turn on all the building plan level PreDCR layers in the drawing.
    - o **Layout level layer (PDCRSLL):**This command will turn on all the Layout plan level PreDCR layers in the drawing.

- **Show Only DCR Layers (PDCRSDL):**
  This command will turn off all the layers in the drawing except DCR layers.

- **Show Only Other Layers (PDCRSOL):**
  This command will turn off all the DCR and PreDCR layers in the drawing.

- **Show All layers (PDCRSAL);**
  This command will turn on all layers in the drawing.

- **Calculate Deducted Area (PDCRCDA):**
  This command will compute the area of closed polygon after deducting closed polygons found inside.

- **Calculate Total Area (PDCRCTA):**
  This command will compute the total area of all selected closed polygons.

- **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.

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

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

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

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Do's and Don'ts:

Follow the basic Instructions while making the drawing in PreDCR format.

What you must do:

- FSI Area used for Residential and Special Residential purpose only should be drawn on **_ResiFSI layer**
- FSI Area used for Commercial purpose only should be drawn on **_CommFSI layer**
- FSI Area used for Industrial purpose only should be drawn on **_IndFSI layer**
- FSI Area used for any other purpose should be drawn on **_SpecUseFSI layer**
- Parking Stall must be inserted using PreDCR > Insert > Parking tool.
- Direction Reference Circle must be inserted on Each Floor Plan of the Building and its corresponding PropWork on the same Place by using PreDCR > Insert > Direction Ref Circle.
- Plot layout Plan, Detailed floor plan and building section for all Buildings should be in Metric scale and in Single drawing file & must be in 1:1 Scale
- If in Layout plan two Mirror Proposed work are provided, user has to provide two separate building details for both Mirror-Proposed work.
- Each side of the Plot must be marked by Mark > Margin tool.

- **If proposal is for Addition/Alteration or Extension in One Building** then
    - o Proposed and Existing Floor area must be drawn on PreDCR Layer. E.g. For Addition/Alteration in Residential case, Proposed area on each floor shall be drawn on _ResiFSI Layer where Existing Floor area shall be also drawn on _ResiFSI Layer as a different Polyline and it must be marked as Existing FSI using PreDCR > Mark > FSI >Existing Option.
    - o Also user has to draw _FloorInSection for Existing floor too. He has to draw all the internal Detail such as UnitBUA, Room, Door, Window inside FSI Polyline marked as Existing. All those internal Polylines drawn for Existing area shall be marked as Existing using PreDCR > Mark > Existing Work option.
    - o In a same case, the Coverage area of that Building considering Proposed + Existing area must be drawn on _PropWork layer only. No _Existing Structure Polyline is needed.
- _ExistingStructure layer shall be used only for the Existing Building in Layout which is not having any Building Detail in Drawing.
- Parking below Building must be drawn inside Building & Parking provided at any Open space in Layout Plan must be drawn at Plot.
- Each Floor-FloorInSection Floor & Bldg-PropWork Name must be assigned by PreDCR > Assign Name tool only.
- Each Internal Road must be drawn as an Individual IntRoad Polylinehaving Centre Line inside.
- For Land Division (SubDivision) type of Proposal, _Plot Polyline shall be drawn as a container of each SubPlot & _SubDivision Polylineshall be drawn for each SubPlot .
- Stair cabin detail must be drawn at Terrace Floor Plan only.
- No FSI should be drawn at Basement/Cellar Floor, if Such Basement/Cellar Floor is to be used for parking purpose only.
- No FSI or Hollow Plinth should be drawn at Ground floor, if Such Floor is to be used for parking purpose only.

- Drawing for Development, Land Division Proposals for same Project must be provided in Separate drawing file.

- Balcony shall be drawn outside the FSI Poly.
- Arch. projection must be drawn on _ArchProjection Layer and marked as required using PreDCR > Mark > Projection tool.
- Always use TEXT command to name any Entity. If user wants to use MTEXT then make sure that MTEXT box must be fully inside such entity.
- Do provide the detail in Metric scale only. E.g. Text in _MainRoad shall be like "3.0 mt. wide road"
- _UnitBUA or _IndUnit area must be drawn individually for each Tenement not for Each Room. And it should be named as per Tenement No.

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What you must not do:

- Do not provide any detail in other than Metric Scale. e.g. Text in _MainRoad shall not be like "3.0 mt. or 10'0" wide road"
- Do not write/show any Dimension on PreDCR Layer.
- Do not show any _OtherDetail inside Plot Poly.
- Do not draw Parking inside FSI Poly.
- Do not give different name to _UnitBUA or _IndUnit Polylineif it is for single Tenement.
- Do not draw _Plot Polyline inside _Building Poly.
- Do not draw _FloorInSection Polyline for Terrace floor for a Staircabin Ht. It should be drawn for Parapet Ht. only.

PreDCR OutPut in Drawing:

As the PreDCR report is generated, User will get auto generated Tables in Drawing file as distinguished below.

- **Area Statement:**
  - Project Data: PreDCR will show all project data given at New project Dialog in Drawing under Area Statement.

AREA STATEMENT: Trivandrum	VERSION NO.: 1.0.19
	VERSION DATE: 27/01/2021
PROJECT DETAIL :	
Application No. : -	Occupancy : Mercantile/Commercial
	Plot SubUse : Shop
Region : -	Plot Near by Religious Structure : -
District : -	Land Use Zone : NA
Application Type : General Proposal	Land Sub Use Zone : -
Permit Type : Building Permission	Abutting Road Width : -
Nature of Development : New Construction	Plot No. : -
Location : Detail Town Planning Scheme (Sanctioned and Published)	Survey No. : -
Sub Location : NA	North : -
	South : -
Village Name : -	East : -
	West : -

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- Area Details: PreDCR will calculate all the proposed area and show in Drawing under Area Statement.

AREA DETAILS :		SQ.MT.
AREA OF PLOT (Minimum)	(A)	551.96
AREA OF PLOT	(A-Deductions)	551.96
Vacant Plot Area		503.25
COVERED CHECK		
Proposed Covered Area (8.82 %)		48.71
Total Prop. Covered Area (8.82 %)		48.71
FAR CHECK		
Commercial FSI		50.43
Proposed FSI Area		50.43
Total Proposed FSI Area		50.43
BUILT UP AREA CHECK		
Proposed BuiltUp Area		50.43
Total BuiltUp Area		50.43
ARCH / ENGG / SUPERVISOR (Regd)	OWNER	
DEVELOPMENT AUTHORITY	LOCAL BODY	

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- **FSI and BuiltUp Area statements:**
  - **Floor wise FSI statement:** PreDCR will show each floor area calculation with deductions (if any). Sameway Tenement Nos. per floor and Other than Tenement Area will be shown in this Table.
  - **Total FSI statement:** PreDCR will show Building/Block wise FSI and BuiltUp area calculation.

FSI & Unit Details (Table 4c-1)

Building	No. of Same Bldg	Total Built Up Area (Sq.mt.)	Deductions (Area in Sq.mt.) Balcony (50% Free from FAR)	Proposed FSI Area (Sq.mt.) Commercial	Total FSI Area (Sq.mt.)
A (OWNER)	1	52.15	1.72	50.43	50.43
Grand Total :	1	52.15	1.72	50.43	50.43

- **Set Back Details:**

COLOR INDEX

PLOT BOUNDARY	⬛
ABUTTING ROAD	🟩
PROPOSED WORK (COVERAGE AREA)	🟥
EXISTING (To be retained)	🟦
EXISTING (To be demolished)	🟨

PARKING CALCULATION:

Parking Type	Prop No.	Prop Area
Other Parking	4	96.86
Total Area	4	96.86

MARGIN DETAIL:

Building / Wing Name	Road Name	Front Margin	Rear Margin	Side 1 Margin	Side 2 Margin
A-1 (BUILDING)	12.50 M WIDE ROAD	3.31	1.50	1.01	3.20

- PreDCR will show the actual proposed Setbacks from Building to each Plot sides

- **Parking Calculation:**
  - PreDCR will show proposed Parking calculation as provided in drawing.

- **Balcony Calculation:**
  - PreDCR will show proposed Balcony calculation as provided in drawing.

BALCONY CALCULATION

FLOOR	SIZE	AREA	TOTAL AREA
FIRST FLOOR	1.12 X 7.59 X 1	8.50	8.50
GROUND FLOOR	1.56 X 3.17 X 1	4.95	4.95
SECOND FLOOR	1.12 X 7.59 X 1	8.50	8.50
Total	-	-	21.95

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Building Height generation:

- PreDCR will auto generate the Total Building Height and Individual Floor Height in Sectional Details of Building in Drawing.
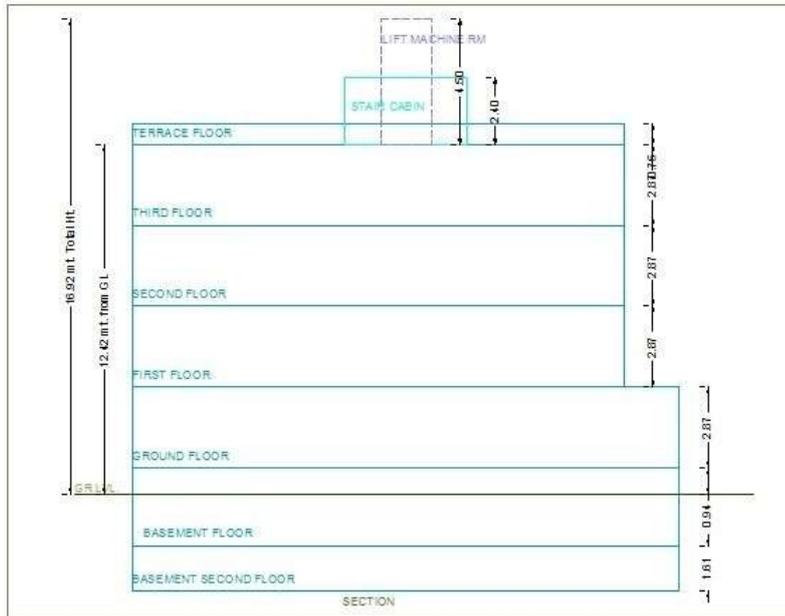
- **Ground Coverage Area:**
    - PreDCR will auto generate the Prop. Ground Coverage area and fill Hatch inside in Proposal Drawing.
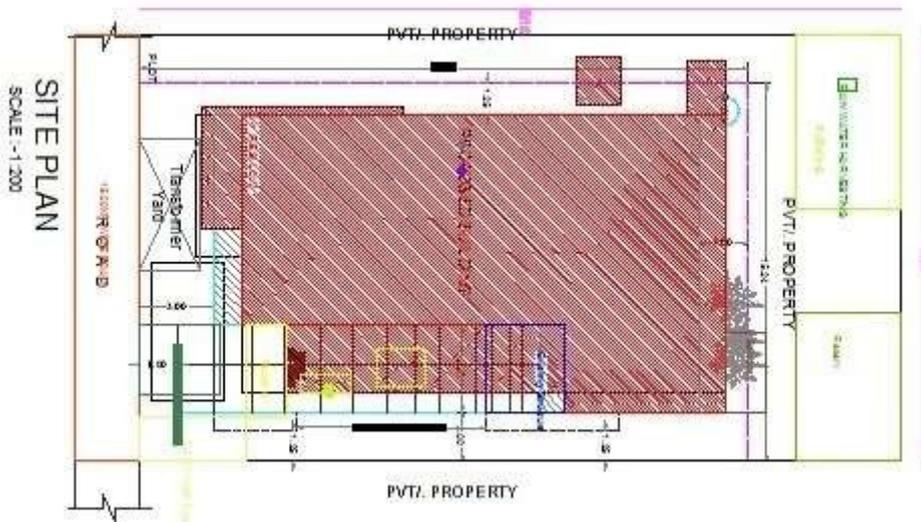
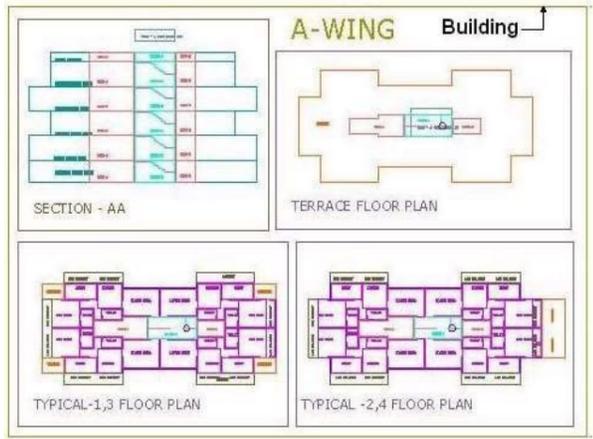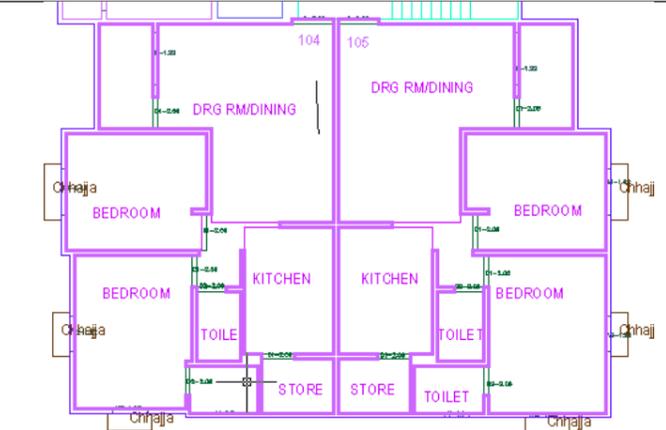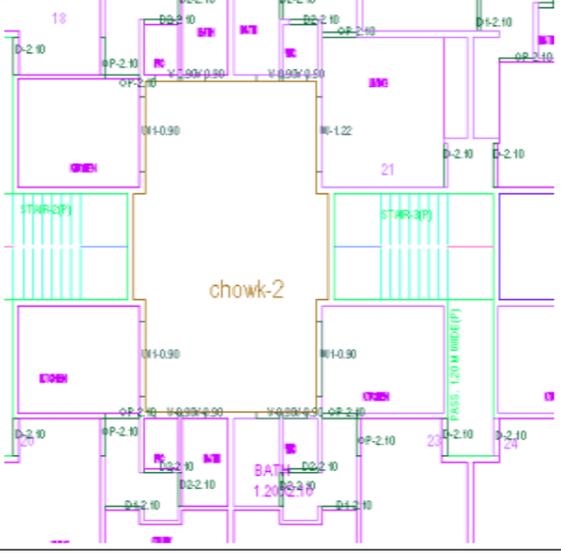- **Schedule of Opening:**
  - PreDCR will auto generate the Schedule of Openings (Doors and Windows) for each Building

SCHEDULE OF JOINERY :

NAME	LENGTH	HEIGHT	NOS.
D1	0.80	2.10	01
D1	0.90	2.10	14
D1	1.20	2.10	05
O	1.01	2.10	01
O	1.77	2.10	01
O	1.81	2.10	01

SCHEDULE OF JOINERY :

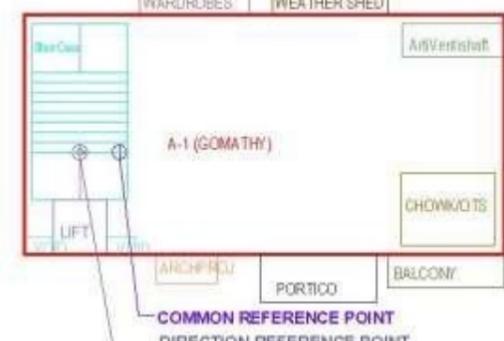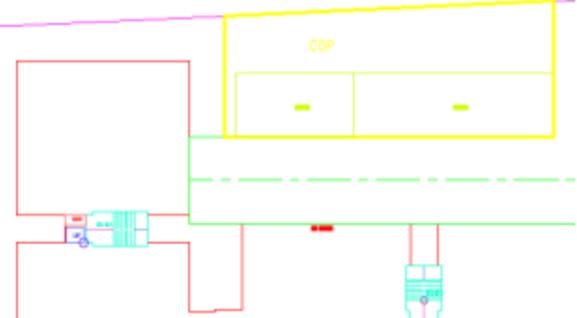| NAME	LENGTH	HEIGHT	NOS.
W	2.00	1.20	08

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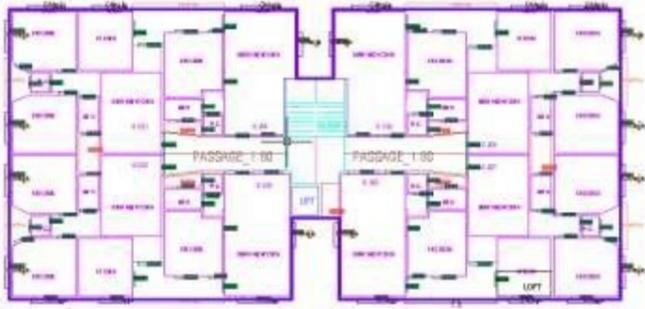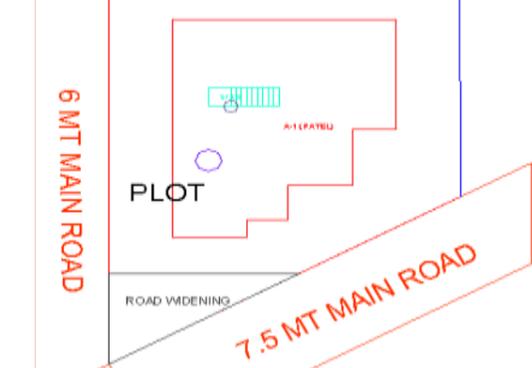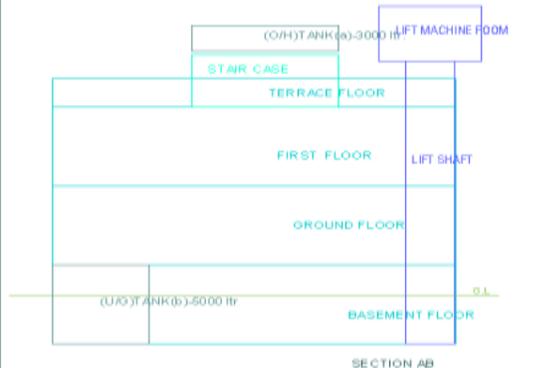**(Note : Main Entity Color must be By Layer color , Where SubEntity on the same Layer would be having a different color)**
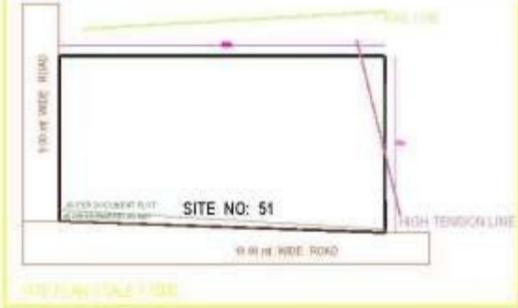
For Proposed Development Proposal:

Layer name	Description	Naming Convention	
_Amenity	Draw amenity Space as closed polyline with Single Text/Mtext inside it on same layer.		
_ArchProj :	Draw Architectural Projections such as Weather shed		
_AirShaft	Draw a closed Polylinewith Text for Artificial Ventilation Shaft or Duct.		
_Balcony • Service Verandah	Draw Each individual Balcony as closed Polyline with Text on same layer. • Service Verandah can be Marked by using Tool "Mark>Balcony> Service Verandah "		
_Building	Building Polylineis used to group all floor plans and sections of the same Building.(*This is just a logical Group of Building*). (*Area or size of Building Polylinedoes't have any meaning in AutoDCR*)	Naming Convention Should be Provided **A(Bldg.Name)** inside Bldg. Poly	
_UnitBUA	A Closed Polylinewith Text on this layer represents a Builtup Area or Tenement Area. (*It should cover total area of one Tenement*) In case of Bunglow(Splited Tenement) give same text to all carpet Polylineinside one Bldg.		
_OTS	Draw OTS area as a closed Polyline with Text on _OTS Layer.		
_CommFSI • Free FSI @Basement • Existing FSI	Draw a closed FSI PolyLine, which is used as a Commercial Purpose. (*Line type of Existing FSI Polylineshould be ACAD_ISI02W100*)		
_CompoundWall	Closed polyline of compound wall to be drawn on this layer overlapping plot.	**0.0**m. high compound wall.	
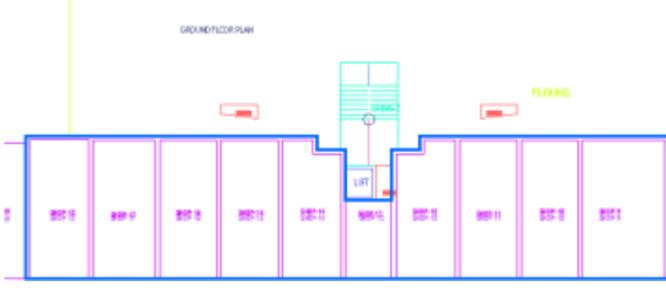
_Door	Door shall be drawn as a closed polyline with Text. Door Height should be given in Text as described here. *(Text's Insertion Point must be Inside Poly)*	D-2.10 D1-2.10 FD-2.40 RS-2.50	
_Electricline	Electric line shall be drawn as open Polyline with Text whose insertion Point lies on the Polyline. (**Note** : High or Low Voltage capacity must be written at a starting of Text)	**High** Tension Line	
_ExStructure : • Exist.work To be Demolished • Exist.work To be Retained	Draw an Existing work as a closed Polyline with Text inside it.		
_Floor	Floor Polylineshould be drawn as a closed Polyline with Text on same Layer. This is just a logical Group of all floor Entities. **Common Reference Point** Draw a circle on _ResiFSI layer inside each floor Polylineat the same point. You can draw it on common areas of the bldg. such as lobby, staircase, lift etc. · **Direction Reference Point** Draw a circle on _Floor layer inside each floor Polylineat the same point. You can draw it on common areas of the bldg. such as lobby, staircase, lift etc. **Note:** Common Reference point & Direction Reference point must be inside Each Floor at same location Floor Name: Floor Plan will be automatically link with Section by matching the Floor Name. If the Floor is Typical Floor, It should be Named with Proper Naming convention. **Naming Convention for Floors** ◦ **Normal Floor: X Floor Plan** ◦ **Typical Floor:** TYPICAL-**X,Y & Z** FLOOR PLAN **Note:** ◦ X represents the Floor Name or No. e.g. First or 1st ◦ Typical Floor Name should be provided by using Hyphen(-), Comma (,) and (&) in proper manner. ◦ Each Floor Plan must be having a corresponding Section Floor.	Naming Convention will be Provided as per shown in Description	
_FloorInSection	Section floor Polylinewill represent each floor section with its name inside SectionFloor : Floor Plan will be automatically link with SectionFloor by matching the Floor Name. If the FloorPlan is Typical Floor Plan, It should be Named with Proper Naming Convention.	Inside SectionFloor: SECOND FLOOR, THIRD FLOOR, GROUND FLOOR.	
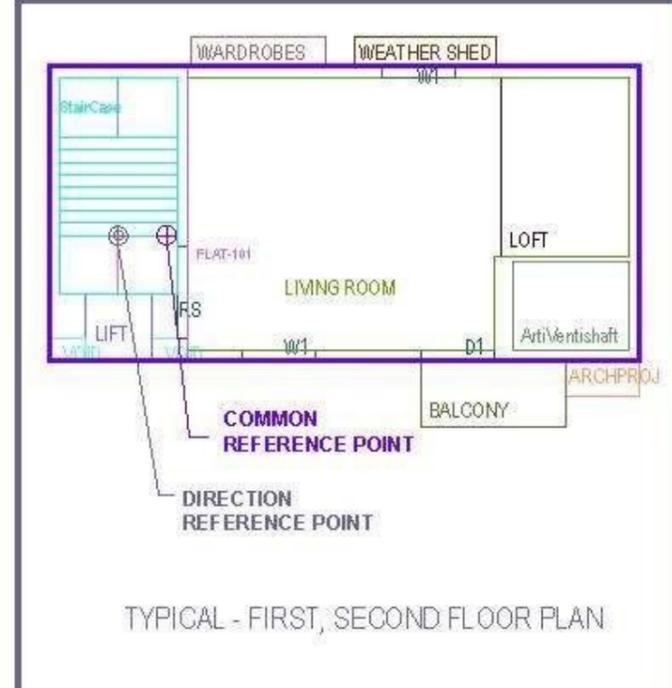
Layer	Description	Dimension	Image
_GroundLevel and _Strret Level	The Ground level and Strret Level line should be drawn as an open polyline in the section poly.		
_IndFSI • Free FSI @Basement • Existing FSI	Draw a closed FSI Polyline, which is used as a Industrial Purpose. *(Line type of Existing FSI Polylineshould be ACAD_ISI02W100)*		
_IndivSubPlot	For plotting layout draw individual subplots on '_indivsubplot' layer inside main plot which will be on '_Plot' layer.		
_IntDPRoad	Draw an Existing/Proposed DP Road as a closed Polyline with text inside it. (**Note**: Road width must be written at a starting of Text)	12.50 m wd. Existing Road	
_InternalRoad	Draw Each Internal Road as a Closed Polyline with Centre Line (Ltype-CentreLine) & Single Text inside each. *(Road Width should come first in Text).)*	7.50 mt. wd. Internal Road	
_Lift	A closed polyline on the inner dimensions of the lift should be drawn on this layer with Text. Lift. Machine Room shall be also drawn in same Layer with Text "Machine Room"(In Dashed line-line type) At terrace Floor & draw corresponding Machine room at Section		
_MainRoad	Draw Each Main Road (Abutting the Plot) as a Closed Polyline with Single Text inside each. *(Road Width should come first in Text)* *(Building Line of Road can be mark by Mark>Bldg.Line tool)*	**12.00** mt. wd. Main Road	
_Marginline	Margin Polylines will be created by System *(User need not do anything on this layer.)*		
_NETPLOT	Netplot area is a Net area after Deduction of RoadWidening/Reservation From Gross Plot area		
_NotInProposal	Plot area which is not in possession or which is not in proposal to be drawn as a closed polyline on this layer.		
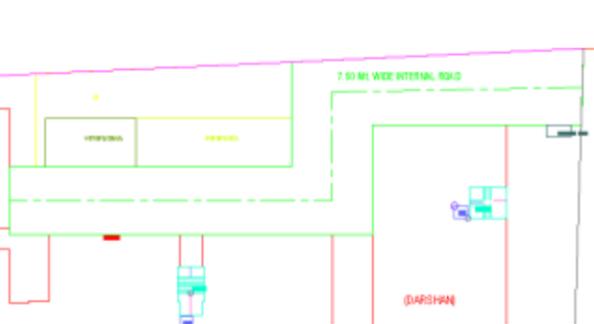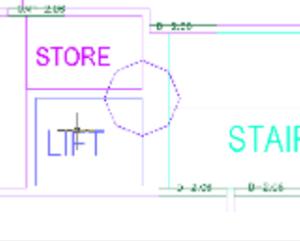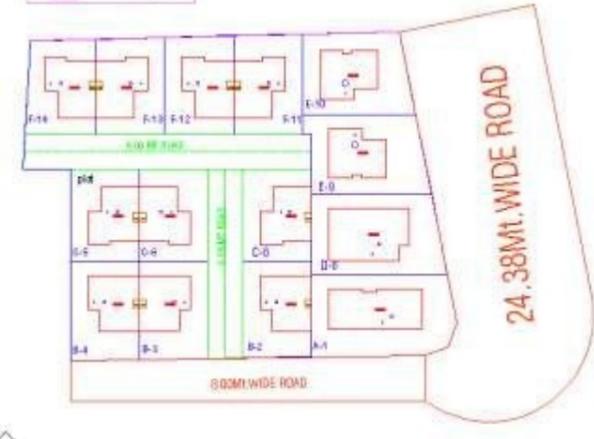
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Layer	Description	Text	Image
_Parking	Draw a closed Polyline for Parkings on "_Parking" Layer. You can also use Insert tool to insert Parking Polylinein your drawing. Car Parking-CP, Two-Wheeler Parking-TW, Transport vehicle-TV		
_Passage	Draw Passage as a Closed Polyline with Centre Line (Ltype-CentreLine) & Single Text inside each.	Text should be start with width of Passage Ex.- 1.80mt. wide Passage	
_AccessRoad	Draw Approach road or AccessRoad as a Closed Polyline with Centre PLine (Ltype-CentreLine) & Single Text.	Text should be start with width of AccessRoad Ex.- 1.50mt. wide AccessRoad	
_Plot	Draw Plot as a closed Polyline with Text inside it. At Layout Plan & Key Plan		
_PropWork	Prop.work is a Built up area(Max.Coverage Area) For Each Building. Draw Prop.work as a closed Polyline with Text inside it. At Layout Plan **Note:** Common Reference point & Direction Reference point must be inside Prop.Work	Naming Convention Should be Provided **A(Bldg.Name)** inside Bldg. Polyline& **A-1(Bldg.Name)** Inside Prop.Work Poly	
_RailLine	Railway line shall be drawn in the layout plan as a Open Polyline(Ltype-CentreLine) & Text which insertion point lies on the Polyline. (Note: Railway Gauge must be written at a starting of Text)	**XXX** Metre Gauge Railway Line	
_Ramp	Draw a Ramp as a closed polyline with CentreLine (L-type-entreLine) & Text inside it in Plan. Draw RampSection as a closed polyline with Text same as in Plan.	At starting of ramp name you mention ramp Length n Height Ex.- 30.0mt. Long 1.80mt. High Ramp	
_RecreationalGnd	Draw a closed polyline on "_RecreationalGnd" Layer to represent reserved as recreational space.		
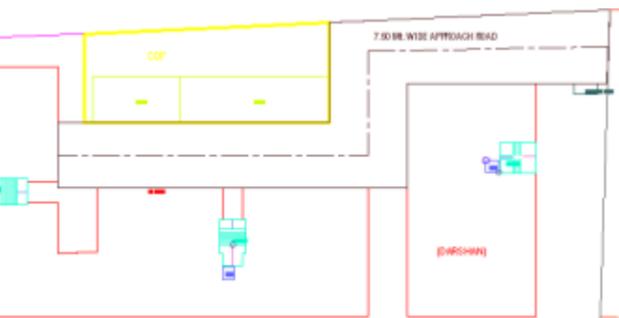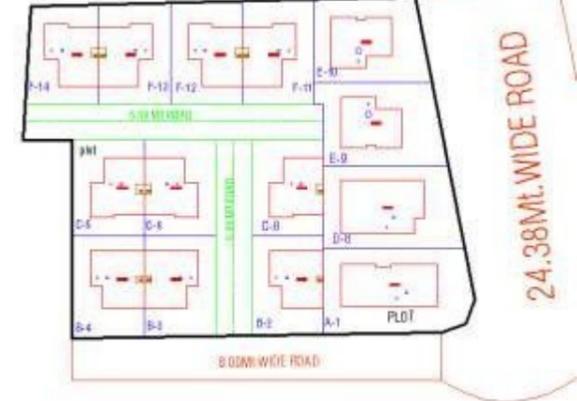
_ReservArea	If there is any Reservation Area in Plot, Reservation Area should be drawn as a closed Polyline with Text inside same Layer.		
_ResiFSI • Free FSI @Basement • Existing FSI	A Closed Polyline with Text on this layer represents a Residential FSI or Floor FSI. It will cover whole area which is considered in FSI Area per Floor. (Line type of Existing FSI Polyline should be ACAD_ISI02W100)		
_RoadWidening • Surrendered Free of Cost	A closed polyline with Text around the RoadWidening area should be drawn on same Layer. Margin will be generated & checked from Roadwidening Polyline by AutoDCR If Roadwidening area is marked as Surrendered Free of Cost		
_Room	A closed polyline for each room with its text inside should be drawn on this layer.		
_Section	Section Polyline should be drawn as a closed Polyline with Text on same Layer. It is used to group all Sectional detail like Floor Sections, Plinth, Staircabin, Lift ,machine Room etc. This is just a logical Group of Sectional Entity. (Note: Area or size of Floor doesn't have any meaning in AutoDCR)		
_SitePlan	The encapsulating Polyline around the Site/Key Plan with the Text & Scale inside it. (Note: Scale should be written as described. Scale:1:500)		
_SpecialUseFSI • Free FSI @Basement • Existing FSI	FSI ploy for all other building uses like educational, institutional etc. except resi.,comm. industrial use should be drawn on this layer. (Line type of Existing FSI Polyline should be ACAD_ISI02W100)		

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_StairCase • Intermediate landing • Flight Width • Floor Landing	Total Staircase area should be drawn as a closed polyline with text inside it. This Main Stair Polylineshould contain Intermediate Landing as well as Floor Landing area inside. (*Intermediate Landing & Floor Landing Polylinecolor should be as described*)	Give Proper Naming convention for other staircase like Open staircase, Open Landing, Fabricated/spiral staircase	
_AccessoryUse: • Elect.room • Transformer • Watchman cabin/ SecurityRoom • Servant Quarters • Garage • Rain water Harvesting • Motor room • A C Plant Room • Meter Room • Septic Tank • Sewage Treatment Plant • Lumber Room • Gate Pillar • Lavatory • Pebble Bed • Solar Heating System • Gymnasium • Generator Room • AHU • Electric/Switch Gear Room • Letter Box Room	AccessoryUses which are allowed in Margins or Layout & Free from FSI should be drawn as a closed polyline with text inside it. (Each AccessoryUse *should be drawn As per described Colour*)		
_Tank	Tank clear size should be drawn as a closed Polyline with Text on this Layer in Floor Plan/Layout Plan as well as Section with same Text. (*Note: Tank No. & Capacity should be written in Text*" For Overhead tank- **(O/H)Tank(1)-5000Ltr**. (* 1 is tank No.) For Underground tank- **(U/G)Tank(1)-5000Ltr.** (* 1 is tank No.)	Naming Convention will be Provided as per shown in Description	
_Terrace	Terrace should be drawn as a closed Polyline with Text on same Layer.		
_Void	Void should be Draw as Closed Polylinewith Text inside in same layer		
_WaterBodies	Water body should be Drawn in Close Polylinewith text inside		
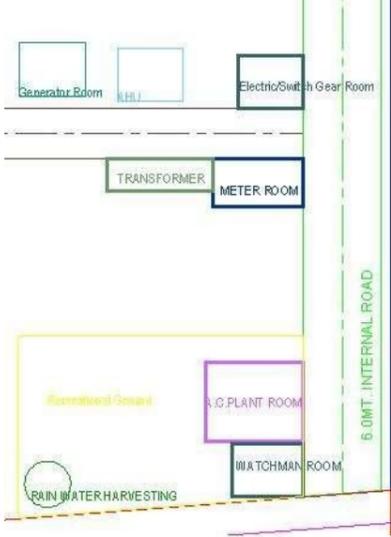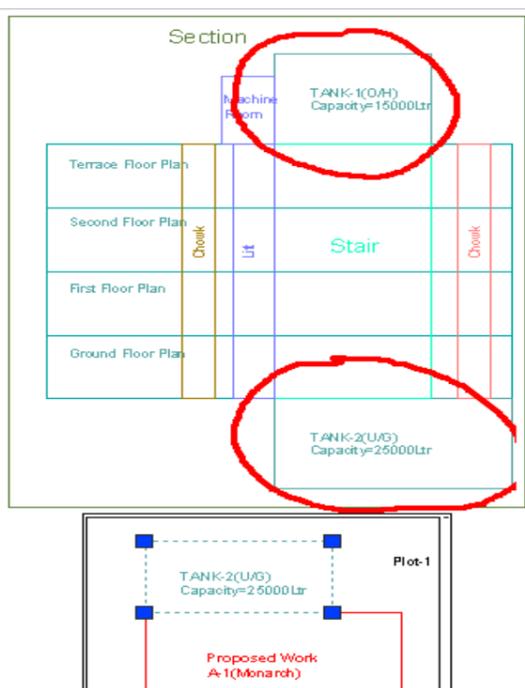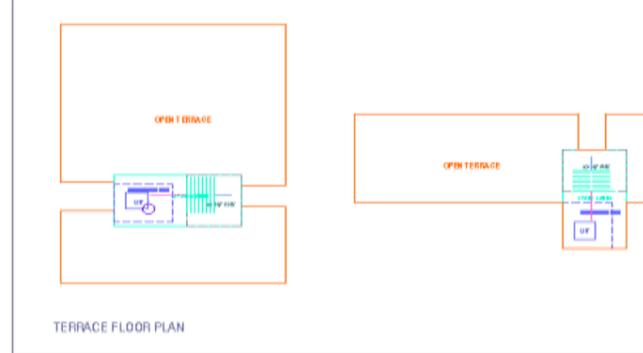
_WaterLine	Waterline shall be Drawn As open poly on this Layer		
_Window	Draw Closed Polyline& insert Text in same Layer with window ht.	W-1.20,W1-0.90,V-0.60	

For Land Division Proposal :

Layer name	Layer Colour	Description	Naming Convention	
_Reconstitution	ByLayer:33	For Reconstitution Proposal, Draw resulting Plot as a closed Polyline having Text/MText on _Reconstitution Layer Draw All Plots inside Reconstitution poly		
_SubDivision	By Layer:100	For Land Division Proposal, Draw each SubPlot (Subdivided Plot) as a Closed Polyline having Text/Mtext on _SubDivision layer Draw All Subplots inside Plot poly		