CIVIT-CAD: PLAN-DRAFT

DRAWING TEMPLATE UTILITY

(Standard Drawing Protocol)

HELP MANUAL



Eivit PLAN

BY



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1. INSTALLATION AND REGISTRATION

1.1 SYSTEM REQUIREMENTS

OPERATING SYSTEM

Microsoft® Windows® 10 Anniversary Update (version 1803 or higher)

Microsoft Windows 8.1 with Update KB2919355

Microsoft Windows 7 SP1

Note: Windows 32-bit is not supported.

PROCESSOR

Minimum: 2.5-2.9 gigahertz (GHz) or faster processor.

Recommended: 3.0+ gigahertz GHz or faster processor. 5.4. Memory

Minimum: 8 GB RAM

Recommended: 16 GB RAM

MINIMUM DISPLAY RESOLUTION

Conventional Displays - 1360x768 with True Colour, and 125% Desktop Scaling (120 DPI) or less recommended

High Resolution & 4K Displays - Resolutions up to 3840x2160 with True Colour (Windows 10 64-bit and capable display card)

Conventional Displays - 1920x1080 with True Colour, and 125% Desktop Scaling (120 DPI) or less recommended

High Resolution & 4K Displays - 3840x2160 with True Colour (Windows 10 64-bit and capable display card)

DISPLAY CARD

Minimum: 1 GB GPU with 29 GB/S Bandwidth and DirectX 11 compliant

Recommended: 4 GB GPU with 106 GB/S Bandwidth and DirectX 11 compliant

DISK SPACE

Installation of 6.0 GB

POINTING DEVICE

MS-Mouse compliant

.NET FRAMEWORK

.NET framework version 3.5

1.2 INSTALLATION

To install CivitPlan-Draft software on your computer follow the given steps:

- 1. Download the installer from provided link
- 2. Run the CivitPlan-Draft installer by doing "Run as Administrator" clicking on set up file.
- 3. Follow the steps in installer wizard to complete the installation.
- 4. After installing set up **CivitPlan**-Draft will automatically get update if you have connect with internet and **CivitPlan**-Draft icon will change as bellow.

After successful installation, a **CivitPlan**-Draft shortcut will be placed on your computer desktop as shown below.



Figure 1: CivitPlan-Draft Shortcut on Desktop

2. INTRODUCTION

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

Using **CivitPlan**-Draft 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 **CivitPlan** requirement all building items like proposed plot, proposed work should be drawn on corresponding layer. Short commands are provided to activate any layer in **CivitPlan**-Draft. 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. **CivitPlan**-Draft will highlight all the failed entities if any.

CivitPlan-Draft can be used to modify/make and verify the existing or new proposal drawing as per CivitPlan software requirements. Users are free to use AutoCAD commands and or CivitPlan-Draft commands to achieve the main purpose which is: <u>Drawing the architectural plan in DWG format as per CivitPlan software requirements.</u>

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. 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 Passage, Internal Road, Railway Line, Drain line, Water Line and Electric Line).
- Building Sub-Items <u>must be exactly inside of outer closed polygon as per their place</u>
 <u>in architectural plan.</u> 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 CivitPlan-Draft 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 CivitPlan 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.

*: AutoCAD is a product of AutoDesk.

- 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 Poly line 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 poly having the other details to be taken in final printing such as Elevation. Septic Tank Detail etc.

2.1 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 '_subdivision' layer.e.g. SD1, SD2 etc.
- 3. **Proposed Development or Building Permission** By drawing plot on plot layer with pwork 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.

2.2 CIVITPLAN-DRAFT LAYERS INFORMATION

Layer name	Description	Naming Convention	Short command
_AccessoryUse	Accessory Uses which are allowed in Margins or Layout & Free from FSI should be drawn as a closed polyline with text inside it.	Name of the Accessory Use can be assigned from Mark> AccessoryUse tool.	SSTR
_ArchProj	Draw Architectural projections such as Chhajjas, Flower-Bed, Cupboards, Lofts, Canopies, Otta and Front Steps as Closed Polyline .By Using "Mark>Arch.Projections" Tool, concerned Text will be inserted automatically inside the polyline. Canopy/porch will come in plot & other projections will come with floor plans.		AP
_Amenity	Draw Amenity space as a closed polyline which is reserve for utilities, services and conveniences.		AMN
_Balcony	Draw Each individual Balcony as closed Polyline with Text on same layer. Balcony can be present in: Plot: It must overlap with PWork(if not enclosed) Floor: It must overlap ResiFSI. Enclosed Balcony can be Marked by using Tool "Mark>Balcony>Enclosed"		BL
_Building	Building poly is 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 Pworks or Wings, Naming Convention should be as Below. (Note: Area or size of Building Poly doesn't have any meaning in CivitPlan)	Naming Convention will be provided by Tool> Assign Name A (Bldg.Name) inside Bldg.Poly & A-1 (Bldg.Name) inside Pwork Poly	BLD

Layer name	Description	Naming Convention	Short command
_CommonPlot/ _RecreationalGn d	Common plot layer is used to indicate place of common plot in drawing		
_Column	Columns Should be drawn on _Column layer as a closed polyline.		
_UnitBUA/ _UnitArea	A Closed poly with Text on this layer represents a BuiltUp Area or Tenement Area. It should cover total area of one Tenement.		СРТ
_CommFSI/ _CommFAR	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 wall.	CW
_Door	Door shall be drawn as a closed polyline with Text & specified Door Height. (Note: Default DoorHeight will be 2.1 mt.)	D-2.2mt. , D1-2.4 mt.	DR
_DriveWay	Draw a DRIVEWAY as a closed polyline.		
_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	L1
_ExStructure	Draw an Existing Structure as a closed Polyline with Text inside it.		ES
_Floor	Floor poly should be drawn as a closed Polyline with Text on same Layer. This is just a logical Group of all floor Entities. Direction Ref Circle: Insert Dimension Ref Circle inside each floor poly 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 does't have any meaning in CivitPlan) 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	Section floor poly will represent each floor section with its name inside SectionFloor : Floor Plan will be automatically link with SectionFloor by matching the	Inside SectionFloor: SECOND FLOOR, THIRD FLOOR, GROUND FLOOR.	SECF

Layer name	Description	Naming Convention	Short command
	Floor Name. If the FloorPlan is Typical Floor Plan, It should be Named with Proper Naming Convention.		
_GroundLevel	The Ground level line should be drawn as an open polyline in the section poly.	·	
_IndF\$I/_IndFAR	Draw a closed FSI 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 Each Internal Road as 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".		LFT
	(Note: Lift machine Room poly should be drawn as "Dashed" LType)		
_MainRoad	Draw Main Road as a closed Poly with Text, which should be abutting with the Plot closed Poly. (Note: Road width must be written at the starting of Text)	24.00 m wd. Main T.P. Road	RI
_Marginline	Margin Polylines will be created by CivitPlan -Draft by using Tool "Mark>Margins"		L3
	(Note: User need not do anything on this layer.)		
_NetPlot	No need to draw NETPLOT. This layer will be auto generated by CivitPlan -Draft		NPLT
_NotInProposal	Plot area which is not in possession or which is not in proposal to be drawn as a closed polyline on this layer.		NIP
_OtherDetail	Make one Boundary/Closed Poly Line around the Details which is to be taken in final Printout		OTRD
_OTS/_Courtyar d	Draw OTS area as a closed Polyline with Text inside FSIArea & inside Section Poly on _OTS Layer. All inner and outer OTSs should be drawn on this layer. OTS can be be present in the floor plan and its section in the Section poly but on the same "_OTS" layer.		CWK
	OTS layer is use to indicate different marking of DUCT, Void, Double height in building in below marking.		
	CivitPlan-Draft Tool>mark>OTS.		

Layer name	Description	Naming Convention	Short command
_Parking	Draw a closed Polyline for Parkings on "_Parking" Layer. U can also use Insert tool to insert desired Parking Poly in your drawing.		PK
_Plot	Draw a closed poly which will represent the Plot layout		PLT
_PropWork	PWork is a building profile and shall be drawn inside plot. Draw a closed polyline for Proposed Work on "_PropWork" Layer.		PW
	Direction Ref Circle: Insert Dimension Ref Circle inside PWork poly at the same point as in Floor polye. You can insert it on common areas of the bldg. such as lobby, staircase, lift etc.		
_Printitem/ _OtherDetail	To show section line in drawing		
_Podium	Podium shall be drawn on '_Podium' layer as a closed polyline. Podium should be inside plot covering Pworks if any.		
_Passage	Draw a closed polyline on "_Passage" Layer to represent passage. (RoadWidth must be written in Starting of the Text)		PAS
	(Note: If Premium for Passage is going to be Paid, Passage should be marked by using Tool.) Mark>Passage>Free from FAR		
_RailLine	Railway line shall be drawn in the layout plan as a Open Poly (Ltype-CentreLine) & Text which insertion point lies on the Polyline.		L2
_Ramp	Draw a Ramp as a closed polyline with CentreLine (L-type-Centre Line) & Text inside it in Plan. Draw RampSection as a closed polyline with Text same as in Plan.		SECR
_OtherPLTBound ary	To show different boundary of plot.		
_OrganizedOpe nSpace/ _RecreationalGn d	Draw a closed polyline on "_OrganizedOpenSpace" Layer to represent the area for recreational purpose.		OPS
_RoadCurvature	To show junction of two road		
_ReservArea	If there in any Reservation Area in Plot, it should be drawn as a closed Polyline with Text inside same Layer.		RSA

Layer name	Description	Naming Convention	Short command
_ResiFSI \ _ResiFAR	A Closed poly 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 "_ResiFSI" Layer.		MFS
_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 Poly by CivitPlan software.		R5
_Room	A closed polyline for each room with its text inside should be drawn on this layer.		RU
_RefugeArea	Refuge area to be drawn in plan as a closed polyline on this layer.		
_Section	Section poly 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, Tank etc.		SEC
	(This is just a logical Group of Sectional Entity). (Note: Area or size of Floor does't have any meaning in CivitPlan)		
_SectionalItem	Draw a SectionalItem as a closed polyline which is the height of the AC Duct/Beam/Slab/Sunk Slab of that floor. This poly only used for checking clear floor height by deducting this Sectional Item height		SECTITEM
_SitePlan	The encapsulating poly around the Site/Key Plan with the Text & Scale inside it. (Note: Scale should be written as described. Scale:1:500)		STP
_SpecialUseFSI / _SpecialUseFAR	FSI ploy for all other building uses like educational, institutional etc. except resi.,comm. ind. use should be drawn on this layer.		SUF
_StairCase	Total Staircase area should be drawn as a closed polyline with text inside it.		STR
	This Main Stair Poly should contain Intermediate Landing, Floor Landing & Each Tread as an open polyline.		
	Intermediate & Floor Landing Poly can be Marked by CivitPlan-Draft Tool "Mark>Staircase>Int. or Floor Landing"		
_Sanitation	Use CivitPlan -Draft>Insert>Sanitation command to insert a Sanitation Block at specific point. Insertion point of Sanitation block should be inside Floor Poly.		

Layer name	Description	Naming Convention	Short command
_SubDivision	For Land Division Proposal, Draw each SubPlot (Subdivided Plot) as a Closed Polyline having Text/Mtext on _SubDivision layer.		SBD
_Terrace	A closed polyline on _Terrace layer is a terrace. All kind of terraces like common top floor terrace as well as common terrace on any floor should be drawn on this layer.		TER
_Tree	Use CivitPlan -Draft>Insert>Tree command to insert a Tree Block at specific point. Insertion point ofTree block should be inside Plot Poly.		
_TempStructure	Area for temporary structures to be drawn as closed polyline on this layer.		
_Wall	Draw Wall as a closed Polyline. No text is read in Wall layer		
_WaterBody	Draw Water Body as closed polyline.		R4
_Window	Draw a closed polyline on _Window" Layer to represent window. You can also use Insert tool to insert window poly for particular size.		WND

2.3 CIVITPLAN-DRAFT TOOLS

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



Figure 2: CivitPlan-Draft Tool Bar

Create New Project:

Edit Project:

Create Layers in the drawing (PDCRCL):

Fix Poly (PDCRPE):

Mark Margin (PDCRMARGIN):

Verify close Poly (PDCRVD):

Verify the Current Drawing (PDCRVT):

Show Objection List (PDCROLST):

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Show CivitPlan-Draft Report:

Create New Project 2.3.1



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. Proposed Development (Building Permit): Proposal having Development. It should not involve any Land Division or Reconstitution.
- b. Land Division/Amalgamation: Proposal having Land Subdivision or Amalgamation.

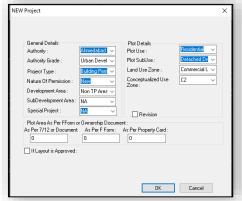


Figure 3: Create New Project

Edit Project 2.3.2



This command is used to edit the already filled Proposal details information in the create new project tool dialog box. As soon as you active this tool the following dialog appears.

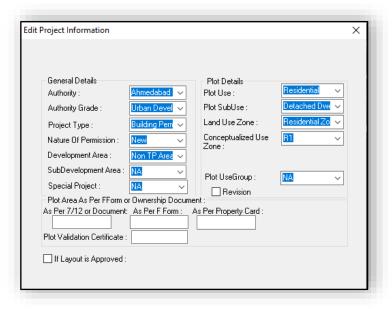


Figure 16: Edit Project

Create Layers in the drawing 2.3.3



This command will create layers required for CivitPlan and as per the Project Type you have selected. i.e. For Proposed Development type Proposal listed layers will be generated in drawing

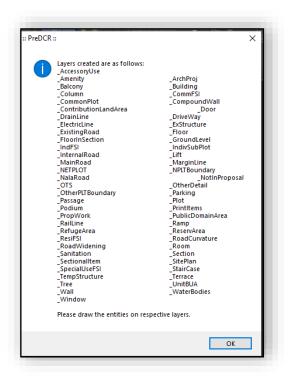


Figure 17: Create Layers

2.3.4 Fix Poly



Use this command once on the final drawing which will process all the polylines on the Drawing Formatting Tool 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.

2.3.5 Mark Margin (PDCRMARG

Use this command to mark side of the plot as Front, Rear or Side. Also you have to assign Plot width and Plot depth in drawing using same tool.

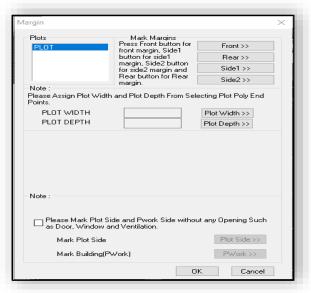


Figure 18: Mark Margin

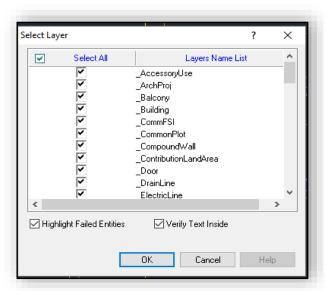
Mark the Plot side which is overlapped with Main Road as Front, opposite side as Rear & other sides as Side Margin. Assign Plot width & Depth in Drawing.

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

2.3.6 Verify close Poly



This command will verify the current drawing as required by **CivitPlan**. It will verify that LWPOLYLINE entities on the selected layers are closed and contain one text.



2.3.7 Verify the Current Drawing



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.

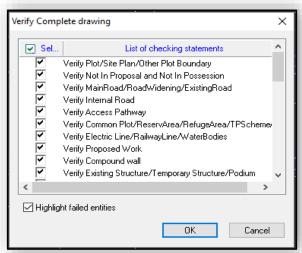


Figure 19: Verify the Current Drawing

Oln the "Verify All Drawing Dialog" you can select the layout or building objects to be checked. To view the result, press OK button. **CivitPlan**-Draft 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.

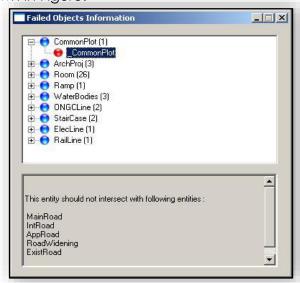


Figure 20: Failed Entity Information

Show Objection List 2.3.8



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 CivitPlan-Draft Report 2.3.9



This command will generate the CivitPlan-Draft Report having all the Project details. All the verified and failing entities having Information will be shown in this Report.

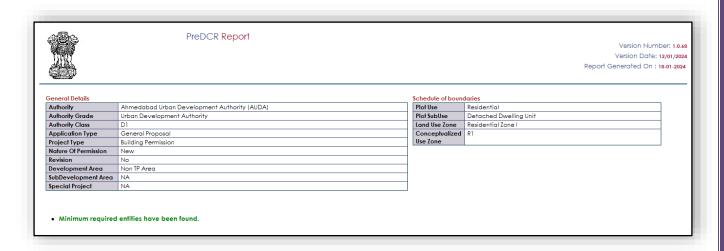


Figure 21: CivitPlan-Draft Report

2.4 SPECIAL TOOLS

2.4.1 Use Special tools using CivitPlan-Draft Menu

Mark:

Insert:

Assign Name:

Tool:

Use Mark tool using CivitPlan-Draft Menu 2.4.2

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

Other Plot Boundary:

Not In Proposal:

PWork:

Room:

OTS:

Floor In Section:
SectionalItem:
Staircase:
<u>Lift:</u>
Ramp:
Residential FSI Marking:
Commercial FSI Marking:
Industrial FSI Marking:
Special Use FSI Marking:
<u>FSI:</u>
Unit BUA:
Balcony:
<u>Projections:</u>
Main Road:
Road Widenings:
Exisitng Road:
Building:
Floor:
Exisitng Structure:
Accessory Use:
Electric Line:
<u>Drainage Line or Sewage Line:</u>
<u>Water Bodies:</u>
Other Details:
<u>Wall:</u>
<u>Internal Road:</u>
Ground Level:
<u>Margin</u>
PWork:
Centrally AC Building: Mark PWork for Centrally AC Bldg
Pwork(Default): Mark Normal PWork
Room:

WC for Handicapped: Mark Room Poly for WC for Handicapped.

Parking:

Toilet for Handicapped: Mark Room Poly for Toilet for Handicapped.

AC Room: Mark Room Poly for AC Room

Room (Default): Mark Normal Room Poly

OTS:

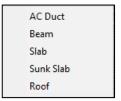
CutOut (Free from FSI/BUA): Mark Void poly for Central Open Space/Atrium which area is taken free from FSI and Built up area as **CutOut**

Void (Default): Mark Normal Void Poly for Double Height portion or the area which is taken free from FSI

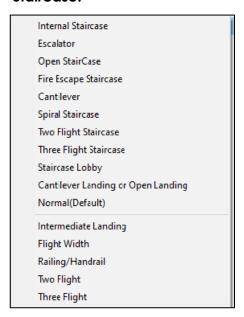
OTS (Default): Mark Normal OTS Poly

Double Height: Mark Normal Double Height Poly.

Sectional Item:



Staircase:



Marking to be provided in each Staircase

- Intermediate Landing (PDCRMIL): Mark Intermediate Floor Landing Width (Open Poly) inside staircase as Intermediate Landing.
- Flight Width (PDCRMFW): Mark Flight width (Open Poly) inside staircase as Flight Width.
- Floor Landing (PDCRMFL): Mark Floor Landing width (Open Poly) inside staircase as Floor Landing.

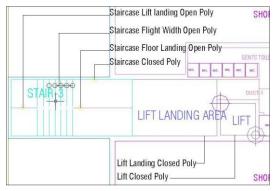


Figure 22: Staircase & Lift Marking

• Lift:

Lift Machine Room: Mark Lift as Lift Machine Room

Fire Escape Lift: Mark Lift as Fire Escape Lift

Hydraulic Lift: Mark Lift as Hydraulic Lift

Lift Lobby : Mark lobby as Lift Lobby

Lift (Default): : Mark Normal Lift as Lift

SpecialUseFSI markings:

FSI Area used for other than Residential, Commercial and Industrial purpose shall be drawn on _SpecialUseFSI Layer and shall be marked as per its Use

Educational: Mark SpecialUseFSI poly as "Educational" for area used as Educational Purpose

Medical/Hospital: Mark SpecialUseFSI poly as "Medical" for area used as Medial Purpose

Assembly: Mark SpecialUseFSI poly as "Assembly" for area used as Assembly

Storage: Mark SpecialUseFSI poly as "Storage" for area used as Storage Purpose

Institutional: Mark SpecialUseFSI poly as "Institutional" for area used as Institutional Purpose.

Hotel: Mark SpecialUseFSI poly as "Hotel" for area used as Hotel Purpose.

Public Utility: Mark SpecialUseFSI poly as "Public Utility" for area used as Public utility Purpose.

Agriculture: Mark SpecialUseFSI poly as "Agriculture" for area used as Agriculture Purpose.

Construction in common plot:

Religious: Mark SpecialUseFSI poly as "Religious" for area used as Religious Purpose.

• FSI:

Free FSI@ Basement Area Existing FSI

FSI to be Demolished

Approved FSI under SpecialScheme/OldDCRule

Work without Permission

Normal(Default)

• UnitBUA:

Splitted Tenement

Normal(Default) FLAT

UnitBUA other than Tenement

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: Mark Balcony as Service Verandah

Unmark (Default): Use this marking to unmark above marking

• Projection:

Steps: Mark Architectural Projection as steps

Loft: Mark Architectural Projection as Loft

Canopy: Mark Architectural Projection as Cantilever Portico

Porgola: Mark Architectural Projection as Porgola

Arch. Projection: Mark Architectural Projection as Arch. Projection

Chhajja: Mark Architectural Projection as Chhajja.

(Note: Even though any Projection is considered in FSI Area, Each Projection (except Loft) must be drawn outside & overlapped with the FSI Poly at Floor LvI or with PWork at Layout LvI and each Arch. Projection must be marked through CivitPlan-Draft Mark>Projection Option)

MainRoad:

Service Road:

Approved Internal Road:

Highway:

Unmark (Default):

Road Widening:

Surrendered Free of Cost: Mark RoadWidening poly as Surrendered Free of Cost when RoadWidening area is considered for calculating the Permissible FSI Area/Coverage area

• Existing Work:

This command is used to mark the part of Building as an Existing work.

When Any Existing Bldg detail is provided, draw each entity on **CivitPlan**-Draft Layer and mark each of them as "Existing Work"

Existing Structure:

To be demolished (PDCRMREXWD): Mark an Existing work which is to be demolished as "To be demolished".

To be retained (PDCRMREXWR): Mark an Existing work as to be Considered for calculation without any corresponding Bldg Detail as "To be retained"

Sanctioned as per BPS or Special permission: Mark as Existing work which is already constructed and approved as per Old DCRule or special permission.

Work without Permission:

Approved Existing Structure:

Accessory Use:

Rain Water Harvesting Rain Water Storage Tank Percolating pit Percolating Well Soak Pit Septic Tank LetterBox Garbage Pit Community-Bin Toilet Toilet for Handicapped Person Servant Quarter Parking Garage Under ground water tank Pump Room Well Security Room Transformer Room Meter Room Security Cabin Fire Hydrants Electric SubStation Telephone distribution equipment A C Plant Room Solar Heating System Generator Room Refuse chute Office room Swimming Pool Sump Tank Sewage Treatment Plant **Effluent Treatment Plant**

• Other Details:

Elevation

Service Plan

Septic Tank Detail

Rain Water Storage Tank Detail

Certificate

Project Title

Parking Layout Plan

Key Plan

Foundation Details

Percolation Well Details

Specifications

Compound wall details

Stair Cabin details

Lift Cabin details

Parking Plan

Drainage Sectional Detail

LandScape Plan

Electric Transformer detail

Rain Water Harvesting detail

Security Guard Booth

A.C.Plant Room detail

Pump Room detail

Generator Room detail

Servant quarter detail

Office Room detail

Sump Tank detail

Sewage Treatment Plant detail

AHU detail

Effluent Treatment Plant detail

Filtration Plant

Waste Water Recycling System detail

Entrance Gate detail

Soak Pit detail

(**Note**: User has to make one Boundary around the details as above and any other which details are need to be taken in final Printing and which are not used while **CivitPlan**-Draft Conversion.

Margin:

Refer Mark Margin Tool

2.4.3 Use Insert tool using CivitPlan-Draft Menu

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

Parking:

Terrace Norms:

Section Line:

Fire Door:

Entry:

Mechanical Ventilation:

Tree:

Staircase Up Direction:

Staircase Dn Direction:

Ramp Up Direction:

Ramp Dn Direction:

Man Hole:

Door:

Window:

Sanitation Text:

Direction Reference Circle:

Inspection Chamber:

North Direction:

Parking:

- Car: Insert Car Parking Unit
- o Physically Handicapped Car: Insert Phisically Handicapped Car Parking Unit
- o Two Wheeler: Insert Two Wheeler Parking Unit
- o Truck: Insert truck parking unit
- Heavy Vehicle: Insert heavy Vehicle Parking Unit
- Loading/UnLoading: Insert Loading/UnLoading Vehicle Parking Unit
- Ambulance Parking: Insert ambulance Vehicle Parking Unit

• Door:

 Door (PDCRIDRNAM): Use this command to insert Door Poly at specific point. Door must be overlapped with Room at one side.



Give Door Name and Dimension as per drawing. Door Poly with Text will be inserted in drawing.

• Window:

Window (PDCRIWNDNAM): Use this command to insert Window Poly at specific.
 Window must be overlapped with Room at one side & at other side with the Entity from which Room is getting ventilation



Figure 4: Insert Window

Give Window Name and Dimension as per drawing. Window Poly with Text will be inserted in drawing. Ventilation taken from Slab/Top must be named as SkyLight

Sanitation Text:

- Urinals: Use this command to insert Text for Urinals for Sanitation for any Use except Residential Use.
- Water Closet: Use this command to insert Text for WC used for Sanitation for any Use except Residential Use.
- Wash Basin: Use this command to insert Text for WB used for Sanitation for any Use except Residential Use.
- Bath: Use this command to insert Text for Bath for any Use except Residential Use.

• Direction Reference Circle:

Direction Ref Point: Use this command to insert Direction Ref Point (Orientation) inside
 Floor and PropWork.

North Direction:

o North Direction: Insert North Direction in Drawing

Terrace Norms: Insert slope of roof and R.W.P.

• Fire Door: Insert Fire Door

Staircase Up Direction: Insert Up direction in staircase

• Staircase Dn Direction: Insert Dn direction in staircase

Ramp Up Direction: Insert Up direction in ramp

Ramp Dn Direction: Insert Dn direction in ramp

Man Hole: Insert manhole

• Inspection Chamber: Insert inspection chamber

Tree: Insert tree

• Section Line: Insert section line

• Entry: Insert ENTRY

Mechanical Ventialtion: Insert mechanical ventilation.

2.4.4 Use Assign Name tool using CivitPlan-Draft Menu

Building and Prop.Work:

Room:

Floor Name:

Ramp Name:

Passage Name:

Lift Name as per NBC:

Professional Office:

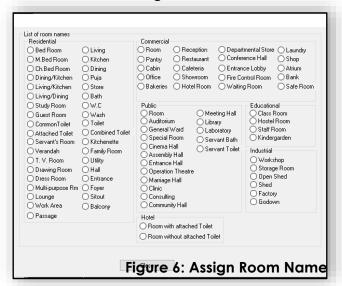
- Building and Prop.Work:
 - Building and PropWork (PDCRBLDPWNL): Use this command to assign the names to Building and its corresponding PropWork at Layout.



Figure 5: Assign Building & Pwork Name

(Note: Each Bldg & PWork(BUA in Layout) entity name must be assigned through this tool)

- Room:
 - Use this command to assign names to Different Room



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While Assigning Room name, CivitPlan-Draft will insert the name of Room and size of Room.

• Floor Name:

ROUND FLOOR PLAN

- Use this command to assign names to Floor and it's corresponding Section Floors.
 As soon as you use this command the following Dialog Box appears. Now select particular floor name which you want to assign.
- o Each Floor-SectionFloor name must be assigned through Assign Name>Floor Tool.
- Each Floor & SectionFloor must be having same Floor name without any Spelling
 Mistake
- Typical Floor Name must be assign by using Comma, Hyphen and & through Assign Name>Floor

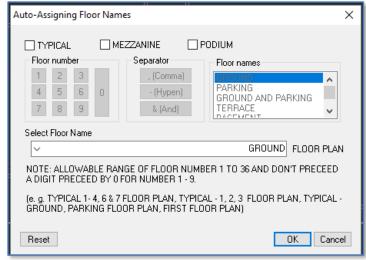
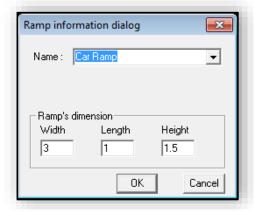


Figure 7: Assign Floor Name

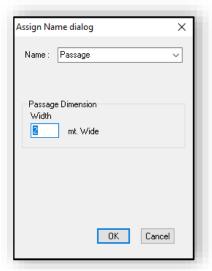
• Ramp Name:

Use this command to assign name to Ramp



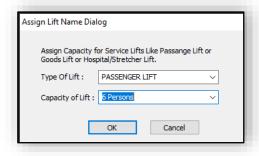
• Passage Name:

Use this command to assign name to Passage enter the width



Lift Name as per NBC :

Use this command to assign name to LIFT select the type of lift with capacity



• Professional Office:

Use this command to assign name to room poly as 'Professional Office'.

2.4.5 Use other tool using CivitPlan-Draft Menu

- **Give Unique no. to Parking (PDCRPKN):** This command is used to give unique numbers to different Parking Poly
- Shortest distance (PDCRFSD): This command will find the shortest distance between two
 entities.
- Show Only CivitPlan-Draft Layers:
 - All CivitPlan-Draft layers (PDCRSPL): This command will turn off all the layers in the drawing except CivitPlan-Draft layers
 - Building level layer (PDCRSBL): This command will turn on all the building plan level
 CivitPlan-Draft layers in the drawing.
 - Layout level layer (PDCRSLL): This command will turn on all the Layout plan level CivitPlan-Draft 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 **CivitPlan**-Draft 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 CivitPlan-Draft layers
- Find Closed Entities (PDCRFNDC): Highlight closed entities on CivitPlan-Draft layer.

- **Shortest distance (PDCRFSD):** This command will find the shortest distance between two entities.
- **Spelling check (_spell):** This tool is used for spelling checking.
- Find Object (PDCRFOBJ): This command zoom & highlight object of a given handle.

2.5 DO'S AND DON'TS

Follow the basic Instructions while making the drawing in CivitPlan-Draft format.

What you must do:

- 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
- Drawing should be in 2D format only, There should not be any 3rd dimension entity or entity on Z coordinate in the drawing.
- 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.
- Plot and Plot surrounding details must be drawn inside _SitePlan polyline.
- All the other details like Elevation, Key Plan, Location Plan, Percolation well details should be drawn inside _OtherDetail polyline and should be marked as required.
- 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 CivitPlan-Draft > 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 CivitPlan-Draft > Insert > Direction Ref Circle.
- If proposal is for Addition/Alteration or Extension in One Building then

- Proposed and Existing Floor area must be drawn on **CivitPlan**-Draft 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 **CivitPlan**-Draft > Mark > FSI > Existing Option.
- Also user has to draw_FloorInSection for Existing floor too. He has to draw all the internal Detail such as Carpet area, Room, Door, Window inside FSI poly marked as Existing. All those internal Polylines drawn for Existing area shall be marked as Existing using CivitPlan-Draft > 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 _ExistingStructure Poly 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 CivitPlan-Draft
 Assign Name tool only.
- Each Internal Road must be drawn as an Individual IntRoad Poly having Centre Line inside.
- For Land Division (SubDivision) type of Proposal, _Plot Poly shall be drawn as a container of each SubPlot & _SubDivision poly shall be drawn for each SubPlot .
- For Amalgamation type of Proposal, _Amalgamation Poly shall be drawn as a container of each Plot to be amalgamated & _Plot poly shall be drawn for each Plot.
- 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, Amalgamation 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
 CivitPlan-Draft > Mark > Projection tool.
- SubStructure or Accessory Use must be drawn on _SubStructure Layer and Marked as required using **CivitPlan**-Draft > Mark > SubStructure 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"
- _CarpetArea or _IndUnit area must be drawn individually for each Tenement not for Each Room. And it should be named as per Tenement No.
- Staircase must contain each Riser line as a Open Polyline on _Staircase layer
- GreenStrip must be drawn on _OrganisedOpenSpace and marked as Green Strip by
 CivitPlan-Draft>Mark>OrganisedOpenSpace>GreenStrip tool

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 CivitPlan-Draft Layer.
- Do not show any _OtherDetail inside Plot Poly.
- Do not draw Parking inside FSI Poly.
- Do not give different name to _CarpetArea or _IndUnit Poly if it is for single Tenement.
- Do not draw _Plot Poly inside _Building Poly.
- Do not draw _FloorInSection poly for Terrace floor for a Staircabin Ht. It should be drawn for Parapet Ht. only.
- Separate Project must be provided in Separate drawing file.
- Do not provide any Dimensions for CivitPlan-Draft entities. CivitPlan-Draft will autogenerate
 the dimensions of entity.
- Do not provide Room Name or dimension on basic drawing. Provide Room name using
 CivitPlan-Draft>Assign Name>Room tool only.

 Do not provide Door and Window name on basic drawing. Provide Door-Window name using CivitPlan-Draft>Insert>Door/Window tool only.

2.6 CIVITPLAN-DRAFT OUTPUT IN DRAWING

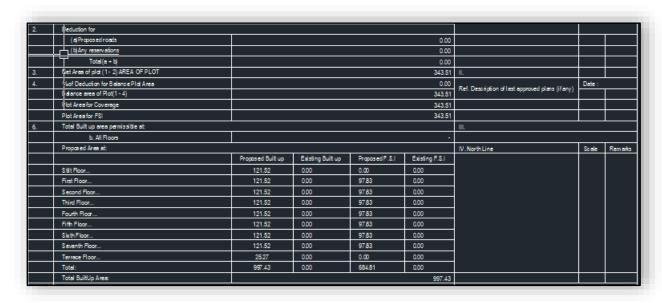
As the **CivitPlan**-Draft report is generated, User will get auto generated Tables in Drawing file as distinguished below.

Area Statement:

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

A	AREA STATEMENT	VERSION NO:: 1.0.68
^	AREA STATEMENT	VERSION DATE: 12/01/2024
	PROJECT DETAIL:	
	Application No. : -	Plot Use :Residential
	Nature of Permission :New	Plot SubUse :Detached Dwelling Unit
	Authority :Ahmedabad Urban Development Authority (AUDA)	Land Use Zone :Residential Zone I
	Authority Grade : Urban Development Authority	Land SubUse Zone :R1
	Authority Class :D1	City Survey No : -
	Application Type :General Proposal	Final Plot No : -
	Project Type : Building Permission	Plot/SubPlot No : -
	Location : Non TP Area	Revenue Survey No/Survey No : -
	SubLocation :NA	Original Plot No : -
	Name Of Road : -	Block No:-
	Ward : -	TP/DTP scheme No : -
		AbuttingRoadWidth: -
	AREA DETAILS :	Sq.Mts.

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

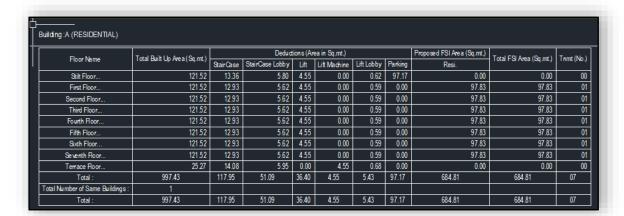


FSI and BuiltUp Area statements:

o **Floor wise FSI statement: CivitPlan**-Draft will show each floor area calculation with deductions (if any). Someway Tenement Nos. per floor and Other than Tenement Area will be shown in this Table.

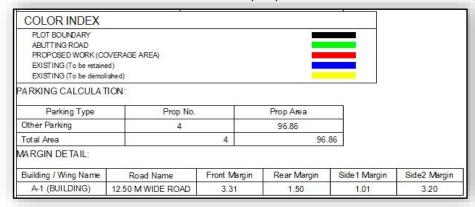
o **Total FSI statement: CivitPlan**-Draft will show Building/Block wise FSI and BuiltUp area calculation.

	Building N	Name	Total	
Floor Name	A (RESIDE	NTIAL)		
	Proposed Built Up Area (Sq.mt.)	Proposed FSI Area (Sq.mt.)	Total Proposed Built Up Area (Sq.mt.)	Total FSI Area (Sq.mt.)
Stilt Floor	121.52	0.00	121.52	0.00
First Floor	121.52	97.83	121.52	97.83
Second Floor	121.52	97.83	121.52	97.83
Third Floor	121.52	97.83	121.52	97.83
Fourth Floor	121.52	97.83	121.52	97.83
Fifth Floor	121.52	97.83	121.52	97.83
Sixth Floor	121.52	97.83	121.52	97.83
Seventh Floor	121.52	97.83	121.52	97.83
Terrace Floor	25.27	0.00	25.27	0.00
Total :	997.43	684.81	997.43	684.81



Set Back Details:

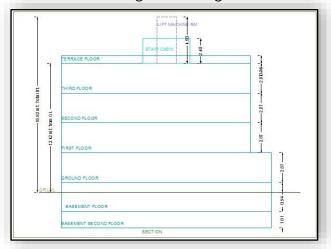
o **CivitPlan**-Draft will show the actual proposed Setbacks from Building to each Plot sides



Parking Calculation:

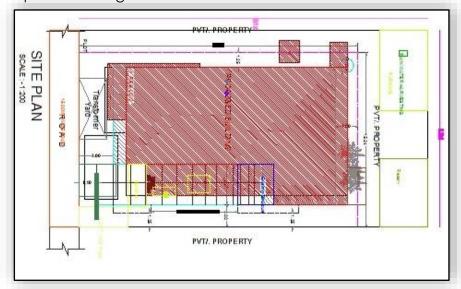
- o **CivitPlan**-Draft will show proposed Parking calculation as provided in drawing.
- Building Height generation:

 CivitPlan-Draft will auto generate the Total Building Height and Individual Floor Height in Sectional Details of Building in Drawing.



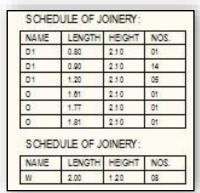
• Ground Coverage Area:

 CivitPlan-Draft will auto generate the Prop. Ground Coverage area and fill Hatch inside in Proposal Drawing.



• Schedule of Opening:

 CivitPlan-Draft will auto generate the Schedule of Openings (Doors and Windows) for each Building.



(Note: Main Entity Color must be ByLayer color, Where SubEntity on the same Layer would be having a different color)

For Proposed Development Proposal:

Layer name	Description	Naming Convention	
_ArchProj:	Draw Architectural Projections such as Weather shed		WEATHER SHED ARCHPROJ WARDROBES
_AirShaft	Draw a closed poly with Text for Artificial Ventilation Shaft or Duct.		LIVING ROOM V LOFT
_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 "		ArtiVentishaft ARCHPROJ BALCONY
_Building	Building poly is 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 Poly does't have any meaning in CivitPlan)	Naming Convention Should be Provided A(Bldg.Nam e) inside Bldg. Poly	A-WING Building SECTION - AA TERRACE FLOOR PLAN TYPICAL-1,3 FLOOR PLAN

_UnitBUA	A Closed poly with 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 poly inside one Bldg.		DRG RM/DINING O Hajja BEDROOM TOILE STORE TOILET Chijaja Chijaja Chijaja Chijaja Chijaja
OTS	Draw OTS area as a closed Polyline with Text on _OTS Layer.		18 P2 10 P2
_CommFSI • Free FSI @Baseme nt • Existing FSI	Draw a closed FSI PolyLine, which is used as a Commercial Purpose. (Line type of Existing FSI poly should be ACAD_ISI02W100)		CHOOMERICOR FLORING PARKING
_CompoundWall	Closed polyline of compound wall to be drawn on this layer overlapping plot.	1.2m. high compound wall.	

_Door	Door shall be drawn as a closed polyline with Text. (Text's Insertion Point must be Inside Poly)	D D1 FD RS	KITCHEN D2-2.06 BEDROOM C W2-1.5 TOILET D2-2.06 TOILET V-0.6 TOILET Chhaila
_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	Evaluation TO BE DEMOLISH1
_ExStructure : • Exist.work To be Demolished • Exist.work To be Retained	Draw an Existing work as a closed Polyline with Text inside it.		18.00 mt. WIDE ROAD

_Floor

Floor poly should be drawn as a closed Polyline with Text on same Layer. This is just a logical Group of all floor Entities.

Common Reference
Point Draw a circle
on _ResiFSI layer
inside each floor poly
at 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 poly at 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

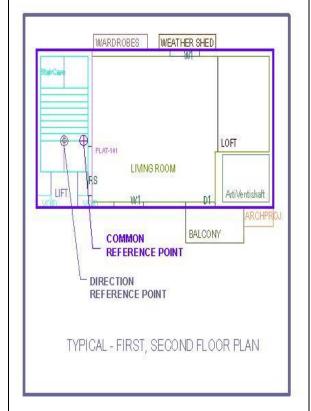
Floor Name: Floor Plan will be automatically link with Section by matching the Floor Name. If the Floor is Typical Floor, It should be Named with Proper Naming convention.

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 Naming
Convention
will be
Provided as
per shown in
Description



	CIVIT-CAD DRAWING TEMPLATE UTILITY Help Manua
provided by using Hyphen(-), Comma (,) and (&) in proper manner.	

_FloorInSection	Section floor poly will 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.	FIRST FLOOR LIFT SHAFT GROUND FLOOR
_GroundLevel and _Street Level	The Ground level and Strret Level line should be drawn as an open polyline in the section poly.		STILT FLOOR STILT FLOOR PARKING FLOOR FLAN SECTION
_IndFSI • Free FSI @Baseme nt • Existing FSI	Draw a closed FSI Polyline, which is used as a Industrial Purpose. (Line type of Existing FSI poly should be ACAD_ISI02W100)		
_ IndivSubPlot	For plotting layout draw individual subplots on '_indivsubplot' layer inside main plot which will be on '_Plot' layer.		Plot

_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	7.50 ML WIDE INTERNAL ROAD VET UNIT COLOR. (DARSHAN)
_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		STORE STAIF
_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	PIC SCOOMIT MADE BOAD STATE OF STATE O
_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/Reser vation 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.		
_Parking	Draw a closed Polyline for Parkings on "_Parking" Layer. You can also use Insert tool to insert Parking Poly in your drawing. Car Parking-CP, Two-Wheeler Parking-TW, Transport vehicle-TV		STILT FLOOR PLAN
_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	09-125 09
_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	COP 7.50 Mt. WIDE APPROACH ROAD (DARSHAN)

_Plot	Draw Plot as a closed Polyline with Text inside it. At Layout Plan & Key Plan		24 38Mt WIDE BOAD
_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.Nam e) inside Bldg. Poly & A- 1(Bldg.Name) Inside Prop.Work Poly	A-1 (GOMATHY) A-1 (GOMATHY) A-1 (GOMATHY) ARCHPROU PORTICO COMMON REFERENCE POINT DIRECTION REFERENCE POINT
_RailLine	Railway line shall be drawn in the layout plan as a Open Poly (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.	At starting of ramp name you mention ramp Length n Height	PARINO

	Draw RampSection as a closed polyline with Text same as in Plan.	Ex 30.0mt. Long 1.80mt. High Ramp	
_ReservArea	If there is any Reservation Area in Plot, Reservation Area should be drawn as a closed Polyline with Text inside same Layer.		A1 (PATEL) RESERVATION T ANN ROAD
_ResiFSI • Free FSI @Baseme nt • Existing FSI	A Closed poly 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.		TO THE STATE OF TH
	(Line type of Existing FSI poly should be ACAD_ISI02W100)		
_RoadWidening • Surrendere d Free of Cost	A closed polyline with Text around the RoadWidening area should be drawn on same Layer.		6 MT M
	Margin will be generated & checked from Roadwidening Poly by CivitPlan		PLOT ROAD WIDENING T.5 WT MAIN ROAD T.5 WT MAIN ROAD
	If Roadwidening area is marked as Surrendered Free of Cost		

_StairCase • Intermediate landing • Flight Width • Floor Landing	be drawn on this layer. (Line type of Existing FSI poly should be ACAD_ISI02W100) Total Staircase area should be drawn as a closed polyline with text inside it. This Main Stair Poly should contain Intermediate Landing as well as Floor Landing area inside.	Give Proper Naming convention for other staircase like Open staircase, Open Landing, Fabricated/s piral 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)		TRANSFORMER METER ROOM RECOMMENDATER HARVESTING Electric/Switch Gear Room TRANSFORMER METER ROOM ROOM RAIN WATCHMAN ROOM

_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	Section Terrace Roor Plan Second Floor Plan Ground Floor Plan Ground Floor Plan TANK-2(U/S) Capacity=26000Ltr Proposed Work A-1(Monarch)
_Terrace	Terrace should be drawn as a closed Polyline with Text on same Layer.		OF DITERACE OF DI
_Void	Void should be Draw as Closed Poly with Text inside in same layer		Open Landing W41 WARDROBES STAIRCASE LIVING ROOM KITCHEN FAB/SPIRAL STAIR CHOWK/OTS ARCHPROJ BALCONY

_WaterBodies _WaterLine	Water body should be Drawn in Close poly with text inside Waterline shall be Drawn As open poly		
_Window	on this Layer Draw Closed Poly & insert Text in same Layer with window ht.	W-1.20,W1- 0.90,V-0.60	TOILET D2-2.06 TOILET W2-1.22 Chhajja
_Amenity	Draw Amenity space as a closed polyline which is reserve for utilities, services and conveniences.	AMN	Amenšy Areas A-Rin
_Column	Columns Should be drawn on _Column layer as a closed polyline.		

CIVIT-CAD DRAWING TEMPLATE UTILITY Help Manual

_NalaRoad

Draw Nala Road open poly on this layer. And **CivitPlan**-Draft will generate its RWARea of the offset which should be inside/intersecting with plot insde of plot in RoadWidening Layer.



For Land Division Proposal :

For Land Division Proposal :

Layer name	Layer Colour	Description	Naming Convention	
_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		ROAD WIDENING Plots Flots Plots Pl



Tutorial 1

CivitPlan-Draft Installation



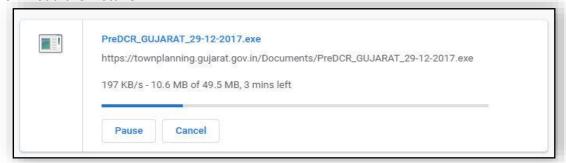


CIVITPLAN-DRAFT SOFTWARE DOWNLOADING AND INSTALLATION

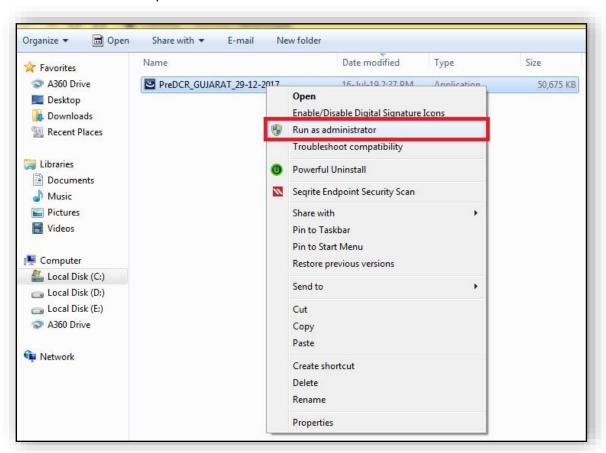
To download the CivitPlan-Draft Software please get the Download link

To install CivitPlan-Draft software on your computer please follow the given steps:

1. Download the installer.

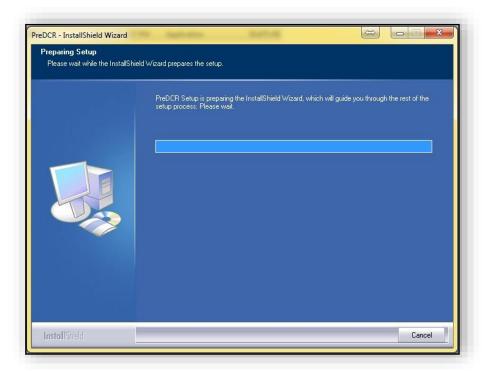


2. After downloading the set up , Run the **CivitPlan**-Draft installer by right click and do run as administrator on set up file.

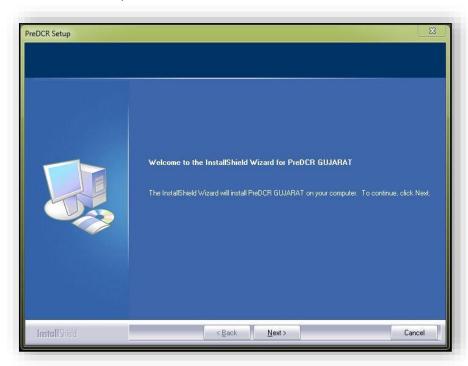


3. Follow the steps in installer wizard to complete the installation.

Step 1 – Run the CivitPlan-Draft installer by right click and do run as administrator on set up file.



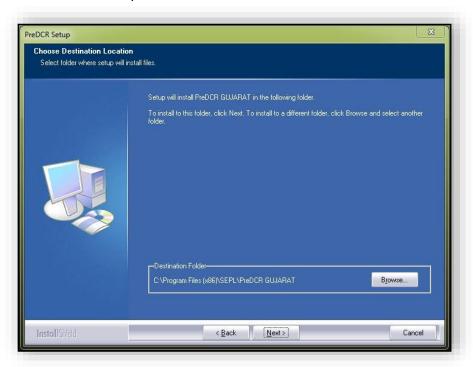
Step 2 - Click on 'Next' to proceed



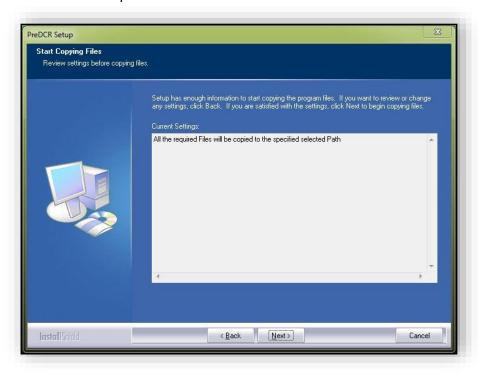
Step 3 – Insert Company Name and click on 'Next' to proceed



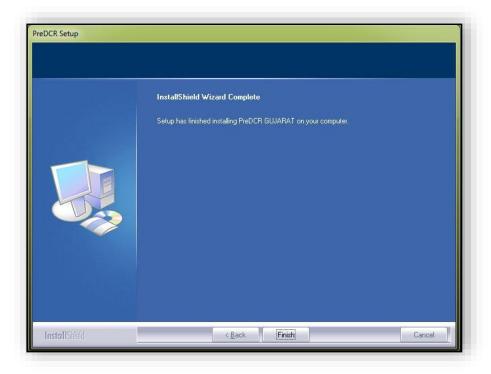
Step 4 – Click on 'Next' to proceed



Step 5 - Click on 'Next' to proceed



Step 6 – Setup has finished installing CivitPlan-Draft clicked on 'Finish'.



After successful installation, a CivitPlan-Draft shortcut will be placed on your computer desktop.

Double click on the **CivitPlan**-Draft icon on your desktop.

Add desktop icon screenshot.

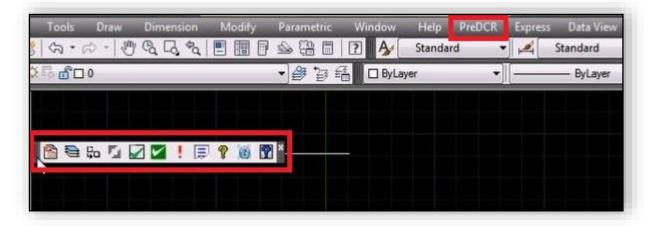
Following screen will pop up for selection CAD version.

Please select CAD version to run the CivitPlan-Draft.

Add latest screenshot.



CivitPlan-Draft Tool bar and CivitPlan-Draft Menu will be loaded in the CAD Application.





 $^{^*}$ CivitPlan-Draft and AutoDCR are the products of SoftTech Engineers Ltd.

Tutorial 2

CivitPlan-Draft Conversion of Open Layout Drawing

HOW TO CONVERT LAYOUT DRAWING FOR PREPARATION OF SUBMISSION DRAWING IN CIVITPLAN-DRAFT?

a. Double click on the **CivitPlan**-Draft icon on your desktop.

Add CivitPlan-Draft icon Screenshot.

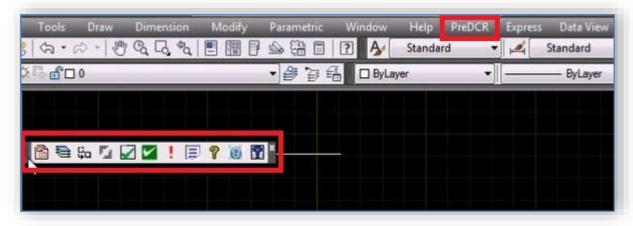
Also check is this latet screenshot



Following scre en will pop up for selection CAD version.

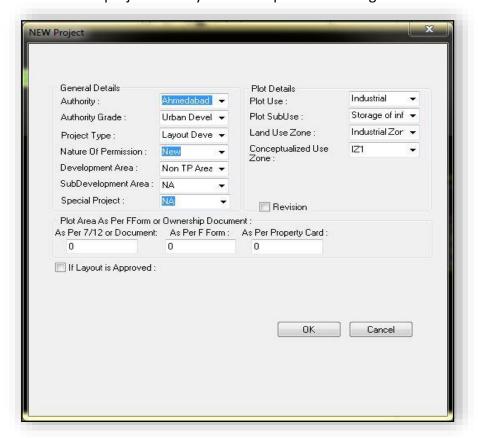
Please select CAD version to run the CivitPlan-Draft.

CivitPlan-Draft Tool bar and CivitPlan-Draft Menu will be loaded in the CAD Application.



1) Create New Project:

This command will Create New project for current selected drawing. Let's create new project for 'Layout Development 'drawing:



Always remember that Plot layout should be there in one AutoCAD drawing file. And there must be in 1:1 mt. Scale.

As soon as you active this tool the following dialog appears.

Here you have to fill all the 'Proposal details' as follows.

It is mandatory to select 'Type of Project'.

Select following fields from the drop down in General Details:

- i) Select the required 'Authority' from the drop down.
- ii) Select the 'Authority Grade'
- iii) Select 'Project Type': 'Layout Development'.
- iv) Select 'Nature of Permission' from the drop down.
- v) Select 'Development Area 'from drop down
- vi) Select 'Sub Development Area 'from drop down
- vii) Select 'Sub Development Area 'from drop down

*AutoCAD is a product of AutoDesk.

Similarly in Plot Details, select following fields from the drop down:

 $[^]st$ CivitPlan-Draft and AutoDCR are the products of SoftTech Engineers Ltd.

- i) Select 'Plot use' as per requirement
- ii) Select 'Plot Sub use'
- iii) Select land use zone
- iv) Select 'Conceptualize use zone'
- v) In case you are making drawing for 'revision' then check the 'Revision 'box.

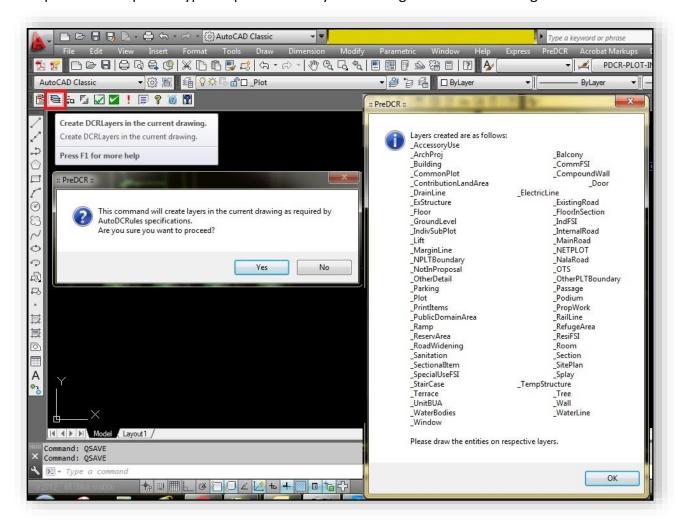
Fill up the plot area as per FForm or ownership documents 7/12 information.

2) Create Layers in the drawing:

This command will create layers required for **CivitPlan** and as per the 'Project Type' you have selected. i.e. Here we have selected 'Layout'.

Select 'Yes' in the CivitPlan-Draft dialog box.

For Proposed Development type Proposal listed layers will be generated in drawing file.



Start CivitPlan-Draft drafting of Layout Proposal:

Start with Building plan drafting:

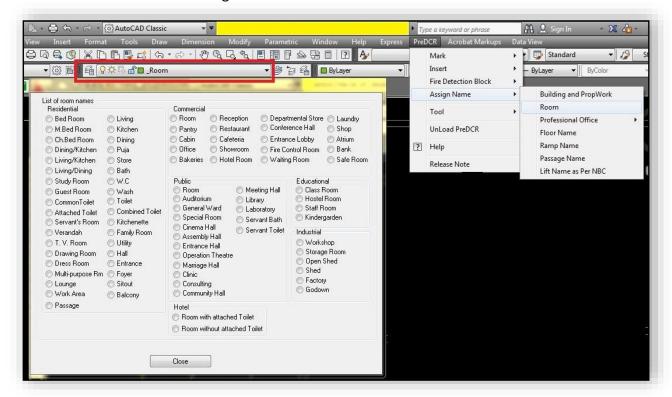
1) **Select '_Room' layer:** Draw a closed polyline for each room with its text inside should be drawn on this layer as shown.

To assign room name pls follow the process:

For ex:

Go to CivitPlan-Draft → Assign Name → List of room names → Select 'Shed'

Go to CivitPlan-Draft → Assign Name → List of room names → Select 'Toilet'



You can select room as per requirement.

2) Select ' Wall' layer: Draw Wall as a closed Poly line.

Go to CivitPlan-Draft'→Mark→Wall →R.C.C wall

There are following option to mark the 'Wall'.

R.C.C. Wall

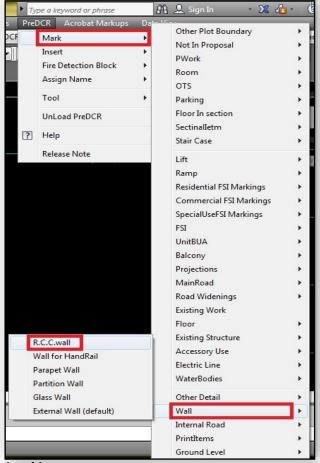
Wall for handrail

Parapet Wall

Partition Wall

Glass Wall

External Wall (Default)



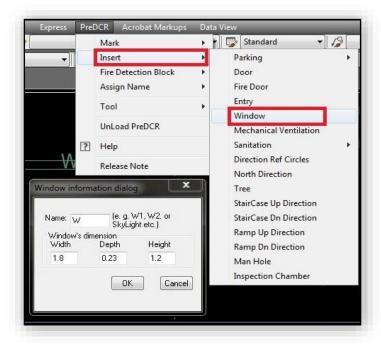
3) Select '_Window' layer:

To insert 'Window', **CivitPlan**-Draft menu→Insert→Window.

In window information dialog box:

Pls fill up the information,

For ex: 'Width' = 1.8 m , 'Depth'=0.23m , 'Height'=1.2 m and 'Name' =W as shown.



4) To insert 'Ventilator' pls follow the process same as Window:

Select ' Window' layer:

To insert 'Window', CivitPlan-Draft menu→Insert→Window.

In window information dialog box:

Pls fill up the information as per requirement.

For ex: 'Width' = 0.6 m, 'Depth'=0.23m, 'Height'=1.2 m and 'Name' = V as shown.

For ventilator in 'Name' = 'V' is fill up instead of 'W'.

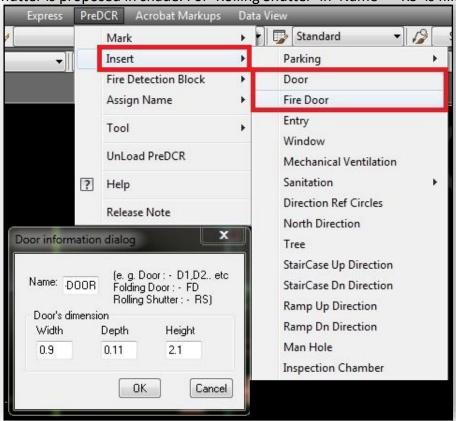
Select '_Door' layer:

To insert 'Door', go to CivitPlan-Draft menu→Insert→Door.

In door information dialog box:

Pls fill up the information,

For ex: 'Width'=4m, 'Depth'=0.23m, 'Height' =2.1mand 'Name' = Rolling shutter as shown. As rolling shutter is proposed in shade. For 'Rolling Shutter' in 'Name' = 'RS' is filled up instead of 'D'.

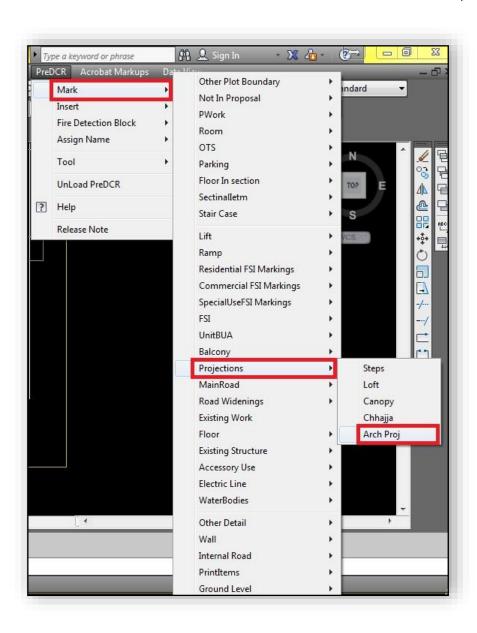


Select '_ArchProj 'layer: Draw Architectural projections such as whether shed ,steps, loft, canopy, chhajjas and arch proj as Closed Polyline.

CivitPlan-Draft → Mark → Projections → Arch Proj.

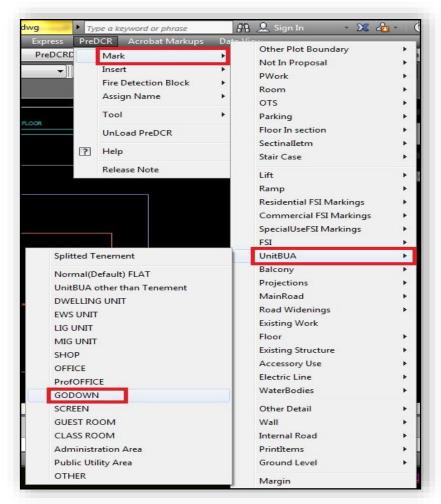
Concerned Text will be inserted automatically inside the polyline.

 $[^]st$ CivitPlan-Draft and AutoDCR are the products of SoftTech Engineers Ltd.

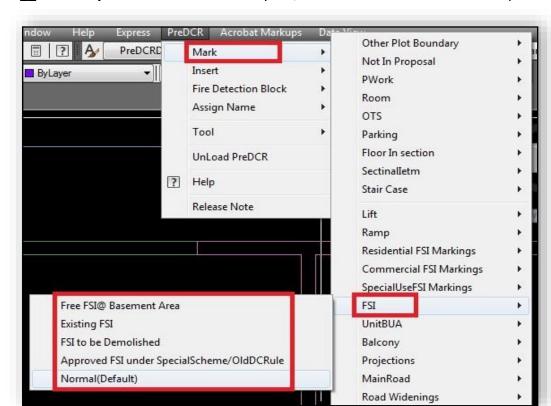


7) **Select '_UnitBUA' layer:** Draw a Closed poly with MText on this layer represents a BuiltUp Area or Tenement Area. It should cover total area of one Tenement.

CivitPlan-Draft → Mark → Unit BUA -> select Godown.

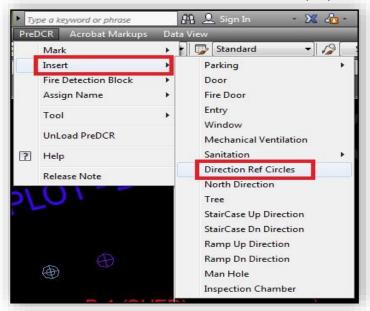


There are many options available for unit BUA marking .Pls selct as per the requirement.



8) **Select '__IndFSI' layer:** Draw a closed FSI Polyline, which is used as a Industrial Purpose as shown.

- 9) Select _Terrace layer: Draw a closed polyline on _Terrace layer is a terrace. All kind of terraces like common top floor terrace as well as common terrace on any floor should be drawn on this layer.
- **10) Select '_Floor' layer:** Floor poly should be drawn as a closed Polyline. Draw separate 'Floor' poly for each floor plan.
- 11) Direction Ref Circle: Insert Dimension Ref Circle inside each floor poly at the same point.



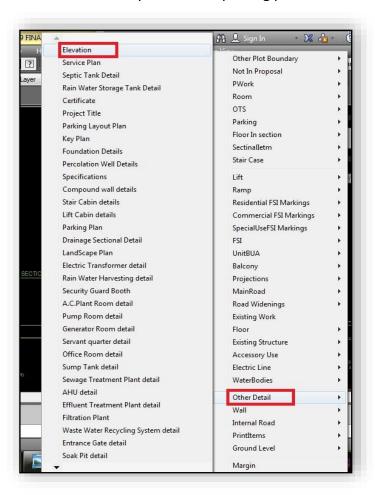
- **12) Select '_OtherDetail' layer :** Make one Boundary/Closed Poly Line around the details which is to be taken in final Printout as shown
 - '__OtherDetail' Layer has marking option in CivitPlan-Draft.

To mark, go to CivitPlan-Draft menu, choose 'Mark' from the drop down.

Select 'Other Detail '

Mark from following option:

- Elevation: Mark closed Polyline around Elevation Detail
- Service Plan: Mark closed Polyline around Service Plan
- Septic Tank Detail: Mark closed Polyline around Septic Tank Detail
- Rain Water Tank Storage Detail: Mark closed Polyline around Rain Water Tank Storage Detail
- Certificate: Mark closed Polyline around Certificate
- Project title: Draw closed Polyline around Project title (write the required text)
- Parking layout plan: Mark closed Polyline around parking layout plan
- Key plan: Mark closed Polyline around Location Plan
- Compound wall details: Mark closed Polyline around Compound wall details
- Staircase cabin detail: Mark closed Polyline around Staircase detail
- Lift cabin details: Mark closed Polyline around Lift cabin details
- Parking plan: Mark closed Polyline around parking plan



Note: User has to make one Boundary around the details as above and any other which details are need to be taken in final Printing and which are not used while **CivitPlan**-Draft Conversion. Here we have selected 'Elevation' to mark '_OtherDetail' layer.

Project title: Draw closed Polyline around Project title (write the required text). Here we have selected 'Project title:' to mark '_OtherDetail' layer. Enter the project name as shown.

Similarly complete the key plan and compound wall details.

13) Select '_Section 'layer : Draw the closed poly around section and 'MText' as shown .



14) Select '_FloorInSection' layer: Section floor poly will represent each floor section.

 $^{^{*}}$ CivitPlan-Draft and AutoDCR are the products of SoftTech Engineers Ltd.

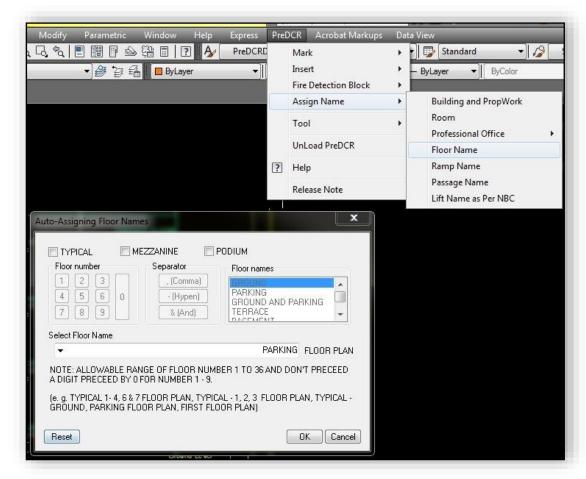
15) To link the floor in section to floor in plan.

Go to CivitPlan-Draft Menu→ Assign name -→ Floor Name.

Fill in the information in 'Auto Assign floor name' dialog' box:

'Select floor name' from drop down (for ex: ground floor)

Select 'OK', then select corresponding floor poly and floor in section poly in the drawing (Fir ex: ground floor poly is selected I plan and section)



Floor Plan will be automatically link with Section Floor by matching the Floor Name.

Pls repeat the same process for other floors with Proper Naming Convention.

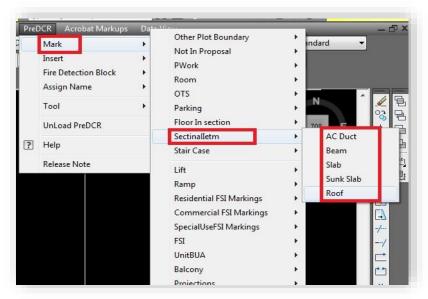
Note: For plinth, Mtext' it.

16) Select '_GroundLevel 'layer: The Ground level line should be drawn as an open polyline in the section poly, Mtext it.

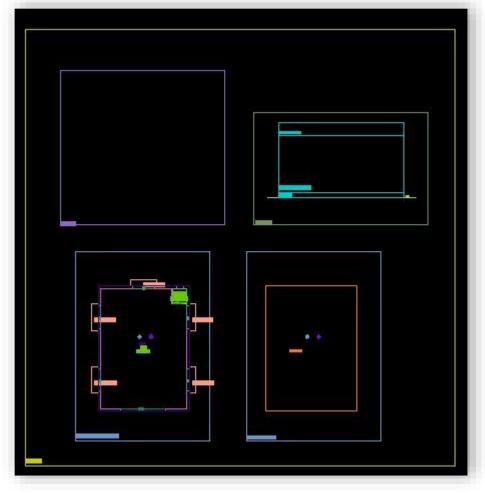
17) Select '_SectionalItem ' layer: Draw a SectionalItem as a closed polyline which is the height of the AC Duct/Beam/Slab/Sunk Slab of that floor.

Go to CivitPlan-Draft Menu→ Mark→ Sectional item→ Select Beam.

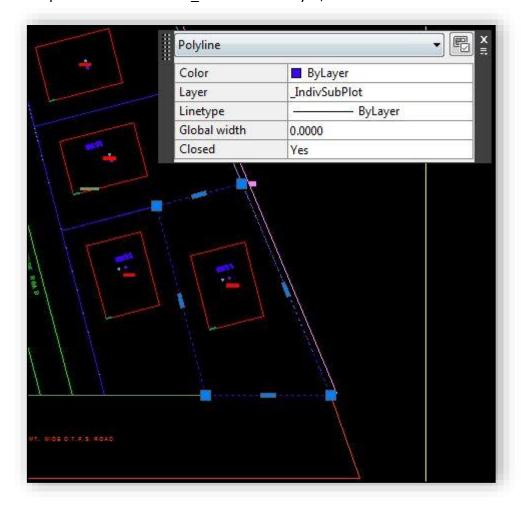
Go to CivitPlan-Draft Menu→ Mark→ Sectional item→ Select Slab.



18) Select '_Building 'layer : Building poly is used to group all floor plans and sections of the same Building.



- **19)** Select '_Plot' layer, Draw a closed poly which will represent the Plot layout as shown. Draw the main plot by using '_Plot' layer and 'Mtext' it.
- **20) Select '_Otherplotboundary' Layer:** Draw a closed poly which will represent the Plot layout as shown. Draw the main plot by using '_Otherplotboundary' layer and 'Mtext' it.
- **21)** Select '_IndivSubPlot 'layer, for plotting layout draw individual subplots on '_indivsubplot' layer inside main plot which will be on ' IndivSubPlot' layer, and 'Mtext' it.

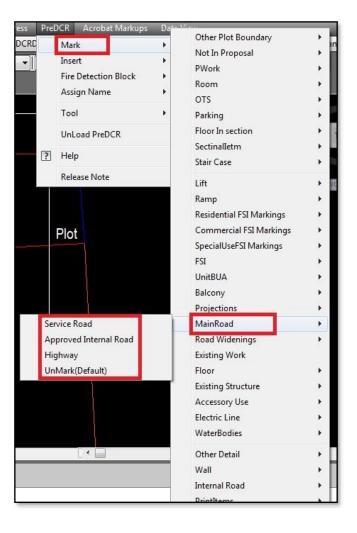


22) Select _InternalRoad layer: Draw Each Internal Road as a Closed Polyline with Centre Line (Ltype-CentreLine) & Single Text inside each internal road.

For ex: Naming convention: 9.00 m wd. approach road (Edit the road width)

- **23) Select '_MainRoad' Layer:** Draw Main Road as a closed Poly with Text, which should be abutting with the Plot closed Poly.
 - '__MainRoad' Layer has marking option in CivitPlan-Draft.

To mark, go to CivitPlan-Draft menu, choose 'Mark' from the drop down.



Select 'Main Road '

Mark from following option:

- Service road
- Approach internal road
- Main road (Default)

Here we have marked it has 'Main Road (Default).

(Note: Road width must be written at the starting of Text)

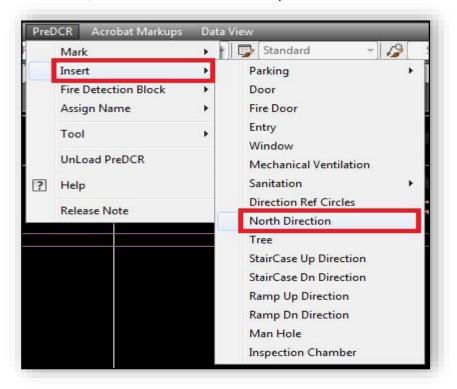
For ex: Naming convention: 18.00 m wd. Main T.P. S Road (Edit the road width)

24) Select '_PropWork' layer: PWork is a building profile and shall be drawn inside plot. Draw a closed polyline for Proposed Work on "_PropWork" Layer.

Direction Ref Circle: Insert Dimension Ref Circle inside PWork poly at the same point as in Floor poly.

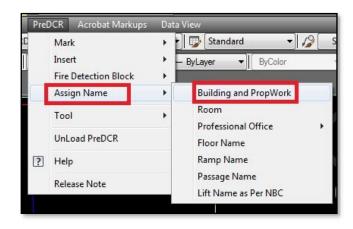
25) North Direction: Insert North Direction in Drawing

Go to CivitPlan-Draft menu, choose 'Insert' from the drop down and select 'North Direction'



26) To link building plan to Pwork.

Go to **CivitPlan**-Draft menu-→ Assign name→ Building and Propwork.



Select 'Building poly' in drawing.

Pls fill up the 'Building and Propwork Name' dialog box:



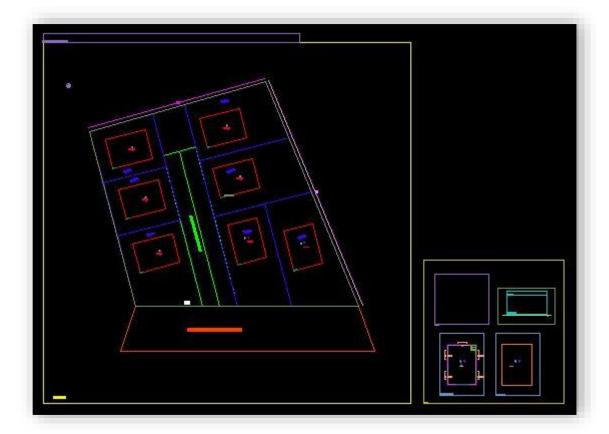
Fill up 'Wing Name' and 'Building Name'

Select Propwork in the drawing.

It will link the building plan to Pwork .

Follow the same linking process to link the other building plan to respective Pwork .

27) Select '_SitePlan' Layer: The encapsulating poly around the Site/Key Plan with the 'MText' it.



After complete the conversions proceed to next tab of the CivitPlan-Draft toolbar:

1) Fix Poly:

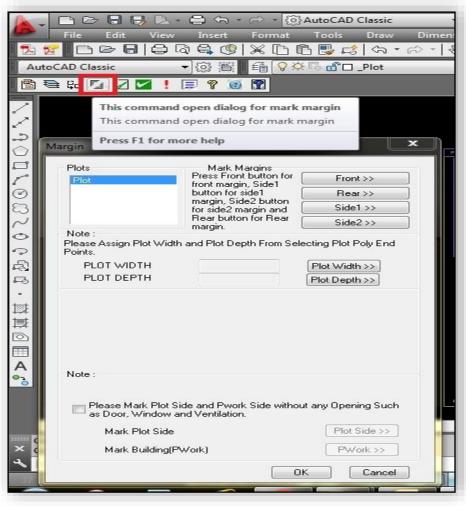


Use this command once on the final drawing which will process all the polylines on the **CivitPlan**-Draft layer and remove extra vertices found on polyline or duplicate entity. This command should be used (before verifying the drawing) every time you add any new entity in the drawing.

2) Mark Margin:

It open 'Margin table' select the plot and give 'Plot width' and 'Plot depth.

Sect 'Front'/'Side1'/'Side2' and 'Rear' side in the drawing. Once done select Ok.



3) Verify close Poly:

This command will verify the current drawing as required by **CivitPlan**. It will verify that LWPOLYLINE entities on the selected layers are closed and contain one text.

Shows 'Select layer box' select 'Ok'.

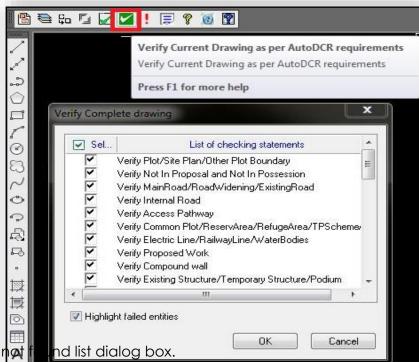


4) Verify the Current Drawing:

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.



Select 'OK' in Entity not

CivitPlan-Draft 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.

 $[^]st$ CivitPlan-Draft and AutoDCR are the products of SoftTech Engineers Ltd.

1) Show Objection List:

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.



2) Show CivitPlan-Draft Report:

In Plot details dialog box select in case of any deduction for road widening area, reservation area, existing road area. Verify plot use and plot sub use.



If all the details are found correct please select 'OK'.

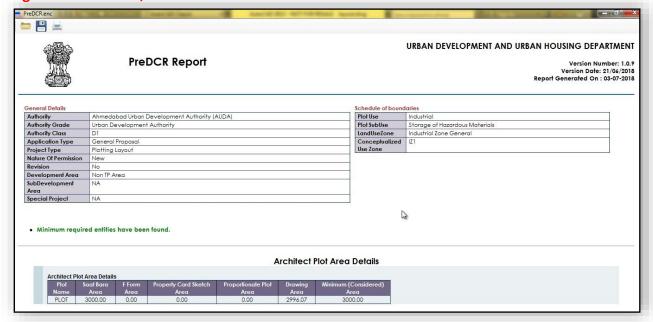
In Building details table verify all the buildings by selecting each one of them. Select Ok.

In Floor details table verify all the floors by selecting each one of them. Select Ok.

This command will generate the **CivitPlan**-Draft Report having all the Project details. All the verified and failing entities having Information will be shown in this Report.

 $[^]st$ CivitPlan-Draft and AutoDCR are the products of SoftTech Engineers Ltd.

Change the screenshot, and add the latest date screenshot.



 $[\]ensuremath{^{*}\text{CivitPlan-Draft}}$ and AutoDCR are the products of SoftTech Engineers Ltd.

Tutorial 3

CivitPlan-Draft Conversion of Amalgamation Drawing

HOW TO CONVERT AMALGAMATION CIVITPLAN-DRAFT DRAWING FOR PREPARATION OF SUBMISSION DRAWING?

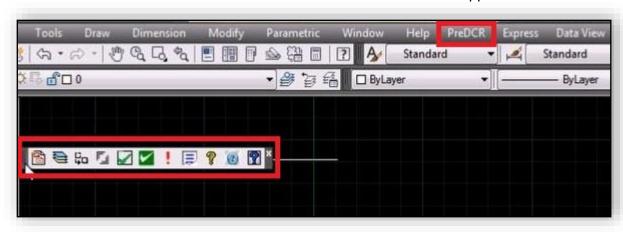
a. Double click on the CivitPlan-Draft icon on your desktop.

Following screen will pop up for selection CAD version.

Please select CAD version to run the CivitPlan-Draft.



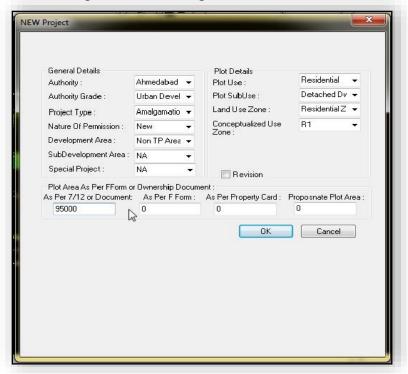
CivitPlan-Draft Tool bar and CivitPlan-Draft Menu will be loaded in the CAD Application.



1) Create New Project:

This command will Create New project for current selected drawing.

Let's create new project for 'Amalgamation 'drawing:



Always remember that Plot layout should be there in one AutoCAD drawing file. And must be in 1:1 metric scale.

As soon as you active this tool the following dialog appears.

Here you have to fill all the 'Proposal details' as follows.

It is mandatory to select 'Type of Project'.

Select following from General Details:

- (a) Select the required 'Authority' from the drop down.
- (b) Select the 'Authority Grade'
- (c) Select 'Project Type': 'Amalgamation'.
- (d) Select 'Nature of Permission' from the drop down.
- (e) Select 'Development Area 'from drop down
- (f) Select 'Sub Development Area 'from drop down
- (g) Select 'Sub Development Area 'from drop down

In Plot Details:

- (a) Select 'Plot use' as per requirement
- (b) Select 'Plot Sub use'
- (c) Select land use zone
- (d) Select 'Conceptualize use zone'
- (e) In case you are making drawing for 'revision' then check the 'Revision 'box.

Fill up the plot area as per FForm or ownership documents 7/12 information.

*: AutoCAD is a product of AutoDesk.

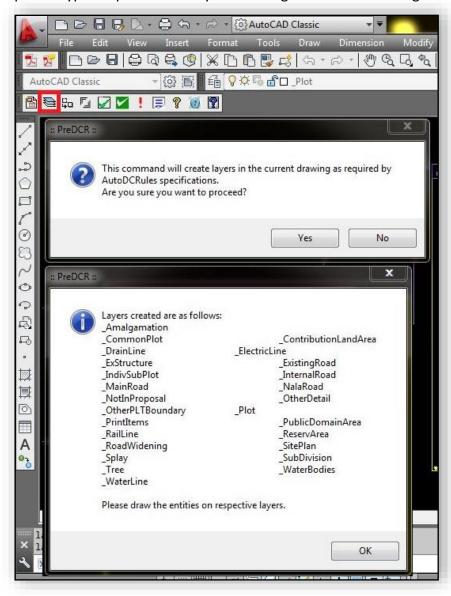
 $[^]st$ CivitPlan-Draft and AutoDCR are the products of SoftTech Engineers Ltd.

2) Create Layers in the drawing:

This command will create layers required for **CivitPlan** and as per the 'Project Type' you have selected. i.e. Here we have selected 'Amalgamation'.

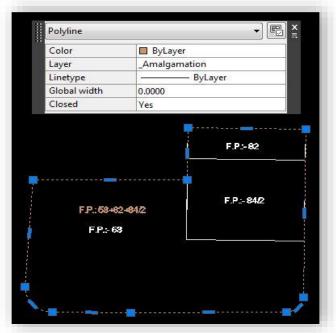
Select 'Yes' in the CivitPlan-Draft dialog box.

For Proposed Development type Proposal listed layers will be generated in drawing file.

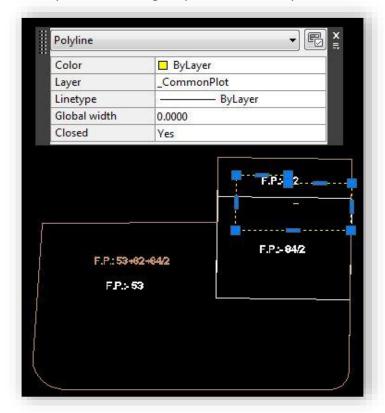


Let's start CivitPlan-Draft drafting:

1) Select '_Amalgamation' Layer: For Amalgamation Proposal, Draw resulting Plot as a closed Polyline having Text/MText on _Amalgamation Layer Draw All Plots inside Amalgamation poly.

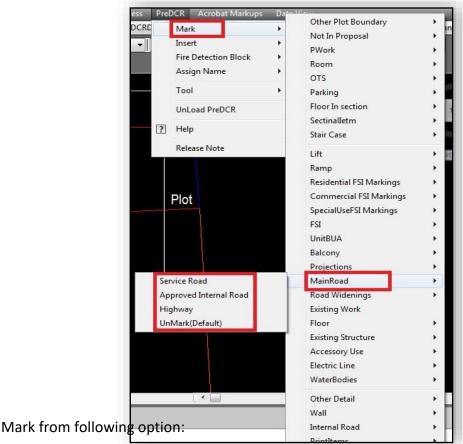


- **2) Select '_Plot' layer:** Draw a closed poly which will represent the Plot layout as shown. Draw all the initials plots by using '_Plot' layer and 'Mtext' it.
- **3) Select '_commonplot' Layer**: Draw Common Plot / Open space as closed polyline reserved as Common Plot on this layer. No Marking Required for this Layer 'Mtext' it.



- **4) Select '_MainRoad' Layer:** Draw Main Road as a closed Poly with Text, which should be abutting with the Plot closed Poly.
 - '__MainRoad' Layer has marking option in CivitPlan-Draft .

To mark, go to CivitPlan-Draft menu, choose 'Mark' from the drop down. Select 'Main Road'



- Service road
 - Approach internal road
 - Highway
 - UnMark (Default)

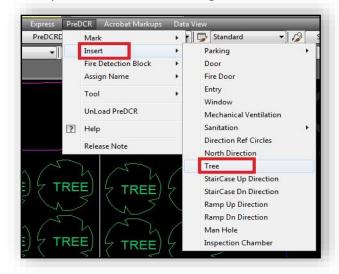
Here we have marked it has 'Unmark (Default).

(Note: Road width must be written at the starting of Text)

For ex: Naming convention: 30.00 m wd. Main T.P. S Road (Edit the road width)

5) Select '_Tree' layer:

Go to **CivitPlan**-Draft menu, choose 'Insert' from the drop down and select 'Tree' Insert the tree block as per architectural drawing.



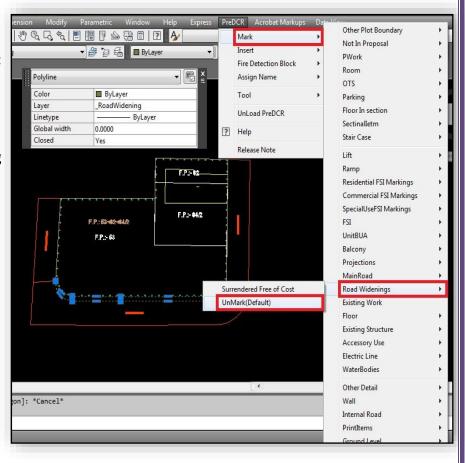
- 6) Select '__Roadwidening' Layer: Road Acquisition/Road Widening area shall be drawn as a closed Polyline with Text on same layer inside Plot Entity. Margin will be generated & checked from Road widening Poly by CivitPlan software.
 - '__Roadwidening' Layer has marking option in CivitPlan-Draft.

 To mark, go to CivitPlan-Draft menu, choose 'Mark' from the drop down.

 Select 'Road Widening'.

Mark from following option:

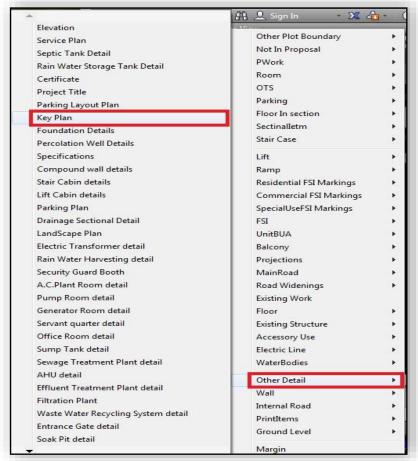
- Surrendered Free of Cost:
 Mark RoadWidening poly
 as Surrendered Free of
 Cost when Road
 Widening area is
 considered for calculating
 the Permissible FSI
 Area/Coverage area
- UnMark (Default)
 Here we have marked it has 'UnMark (Default).



- 7) Select '_SitePlan' Layer: The encapsulating poly around the Site/Key Plan with the Text it.
- 8) Select '_OtherDetail' layer: Make one Boundary/Closed Poly Line around the details which is to be taken in final Printout as shown 'OtherDetail' Layer has marking option in CivitPlan-Draft.

To mark, go to CivitPlan-Draft menu, choose 'Mark' from the drop down.

Select 'Other Detail '



Mark from following option:

- Elevation: Mark closed Polyline around Elevation Detail
- Service Plan: Mark closed Polyline around Service Plan
- Septic Tank Detail: Mark closed Polyline around Septic Tank Detail
- Rain Water Tank Storage Detail: Mark closed Polyline around Rain Water Tank Storage Detail
- Certificate: Mark closed Polyline around Certificate
- **Project title:** Draw closed Polyline around Project title (write the required text)
- Parking layout plan: Mark closed Polyline around parking layout plan
- Key plan: Mark closed Polyline around Location Plan
- Compound wall details: Mark closed Polyline around Compound wall details
- Staircase cabin detail: Mark closed Polyline around Staircase detail
- Lift cabin details: Mark closed Polyline around Lift cabin details
- Parking plan: Mark closed Polyline around parking plan

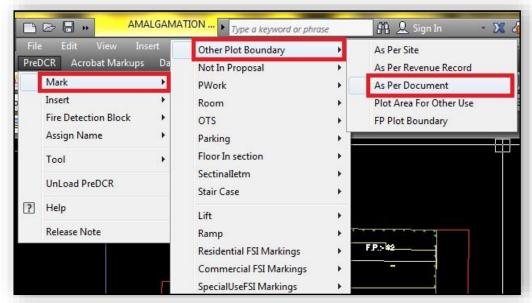
Note: User has to make one Boundary around the details as above and any other which details are need to be taken in final Printing and which are not used while **CivitPlan**-Draft Conversion.

Here we have selected 'Service plan' and 'Key plan' to mark '_OtherDetail' layer.

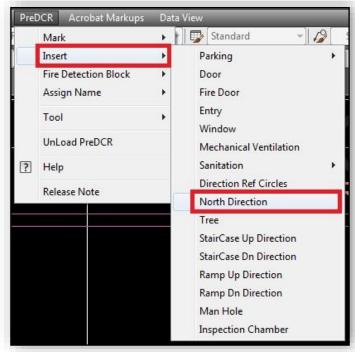
^{*}CivitPlan-Draft and AutoDCR are the products of SoftTech Engineers Ltd.

- 9) Select '_Otherplotboundary' Layer: Draw Closed Poly Line for other Plot Boundary as per Records and mark it as required using CivitPlan-Draft > Mark > Other Plot Boundary tool.

 Mark from following option:
 - As per Site
 - As per Revenue Record
 - As per Document
 - Plot Area For Other Use
 - FP Plot Boundary



5) **North Direction:** Insert North Direction in Drawing
Go to **CivitPlan**-Draft menu, choose 'Insert' from the drop down and select 'North Direction'

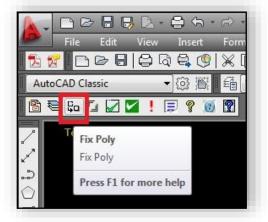


Note: for layer information pls use 'Active Help' tab and select the layer from the drop down: Layer 'Description', 'Marking', 'Basic verification and 'How to draw the layer' information is displayed.

After complete the conversions proceed to next tab of the CivitPlan-Draft toolbar:

1) Fix Poly:

Use this command once on the final drawing which will process all the polylines on the **CivitPlan**-Draft 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.



2) Mark Margin:

It open 'Margin table' select the plot and give 'Plot width' and 'Plot depth. Once done select Ok.



3) Verify close Poly:

This command will verify the current drawing as required by **CivitPlan**. It will verify that LWPOLYLINE entities on the selected layers are closed and contain one text. Shows 'Select layer box' select 'Ok'.



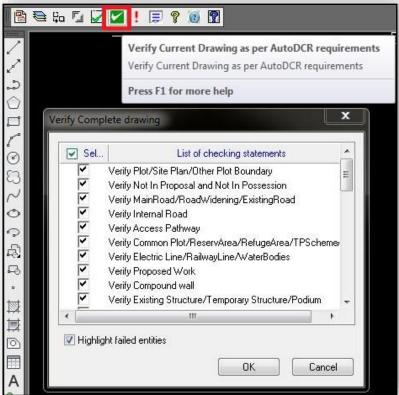
4) Verify the Current Drawing:

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.

Select 'OK' in Entity not found list dialog box.



CivitPlan-Draft 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.

5) Show Objection List:

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.



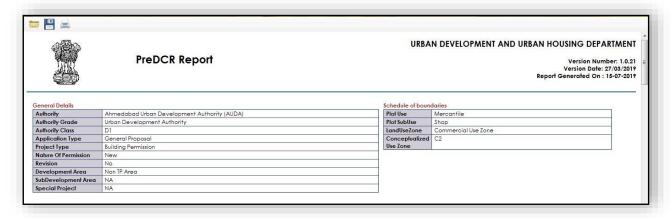
6) Show CivitPlan-Draft Report:

In Plot details dialog box select in case of any deduction for net plot area, plot use and plot use from drop down.

If all the details are found correct pleas select 'OK'.



This command will generate the **CivitPlan**-Draft Report having all the Project details. All the verified and failing entities having Information will be shown in this Report.



Tutorial 4

CivitPlan-Draft Conversion of Subdivision Drawing

HOW TO CONVERT SUBDIVISION CIVITPLAN-DRAFT DRAWING FOR PREPARATION OF SUBMISSION DRAWING?

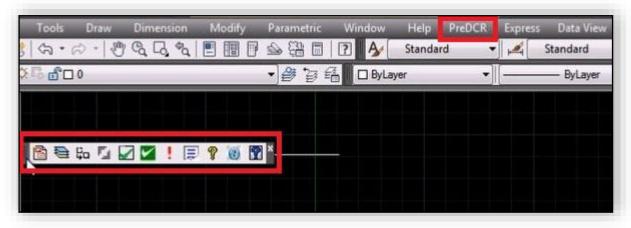
Double click on the CivitPlan-Draft icon on your desktop.

Following screen will pop up for selection CAD version.

Please select CAD version to run the CivitPlan-Draft.



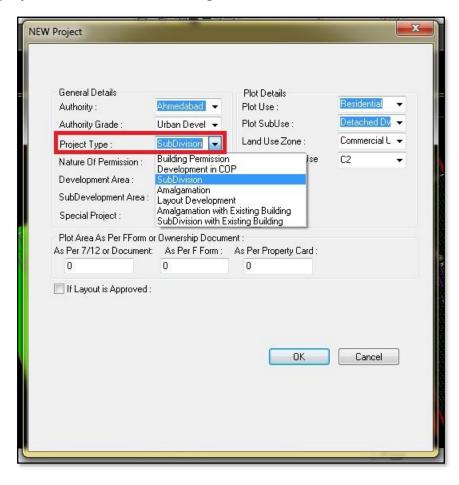
CivitPlan-Draft Tool bar and CivitPlan-Draft Menu will be loaded in the CAD Application.



1) Create New Project:

This command will Create New project for current selected drawing.

Let's create new project for 'Sub division 'drawing:



Always remember that Plot layout should be there in one AutoCAD drawing file. And must be in 1:1 metric scale.

As soon as you active this tool the following dialog appears.

Here you have to fill all the 'Proposal details' as follows.

It is mandatory to select 'Type of Project'.

Select following from General Details:

- i) Select the required 'Authority' from the drop down.
- ii) Select the 'Authority Grade'
- iii) Select 'Project Type': 'Sub division'.
- iv) Select 'Nature of Permission' from the drop down.
- v) Select 'Development Area 'from drop down
- vi) Select 'Sub Development Area 'from drop down
- vii) Select 'Sub Development Area 'from drop down

*AutoCAD is a product of AutoDesk.

Ι

 $[^]st$ CivitPlan-Draft and AutoDCR are the products of SoftTech Engineers Ltd.

In Plot Details:

- i) Select 'Plot use' as per requirement
- ii) Select 'Plot Sub use'
- iii) Select land use zone
- iv) Select 'Conceptualize use zone'
- v) In case you are making drawing for 'revision' then check the 'Revision 'box.

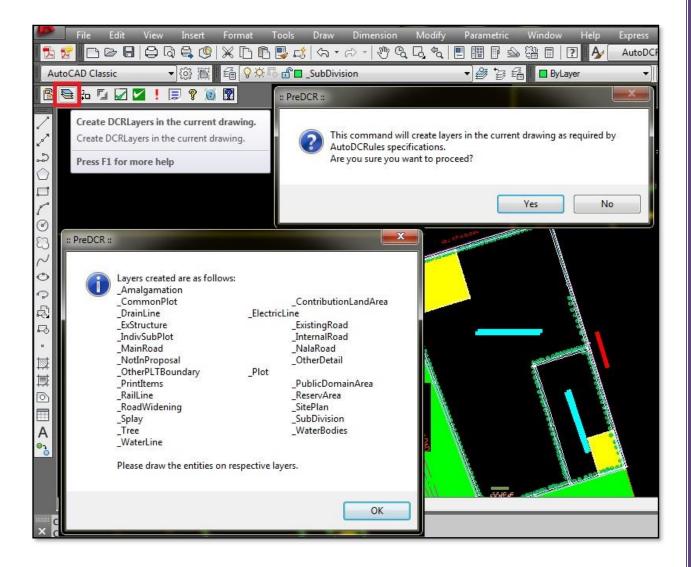
Fill up the plot area as per FForm or ownership documents 7/12 information.

2) Create Layers in the drawing:

This command will create layers required for **CivitPlan** and as per the 'Project Type' you have selected. i.e. Here we have selected 'Sub division'.

Select 'Yes' in the CivitPlan-Draft dialog box.

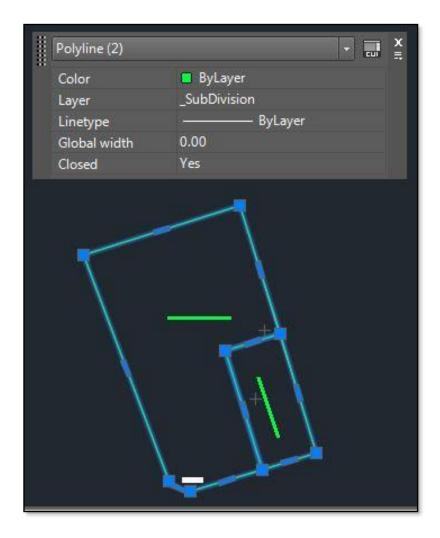
For Proposed Development type Proposal listed layers will be generated in drawing file.



Let's start CivitPlan-Draft drafting of Sub division Proposal:

- 1) Select '_Plot' layer, Draw a closed poly which will represent the Plot layout as shown.

 Draw all the initials plots by using '_Plot' layer and 'Mtext' it.
- 2) Select '_SubDivision' layer , For Land Division Proposal, Draw each SubPlot (Subdivided Plot) as a Closed Polyline having Text/Mtext on _SubDivision layer



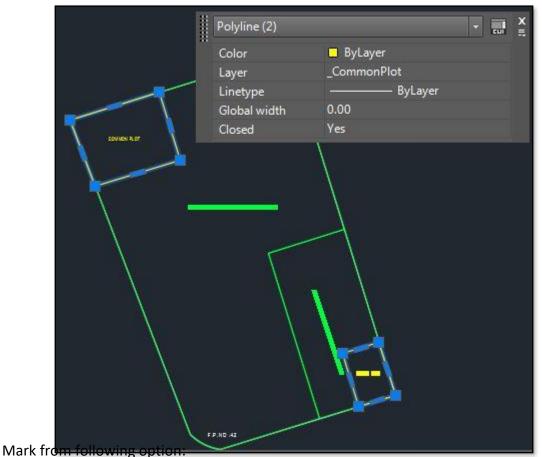
3) Select '_commonplot' Layer: This layer is use for represent common plot at layout level.

Draft the closed poly on common plot and mark as shown.

'__commonplot' Layer has marking option in CivitPlan-Draft .

To mark, go to CivitPlan-Draft menu, choose 'Mark' from the drop down.

Select 'Common Plot' from the drop down.



5 .

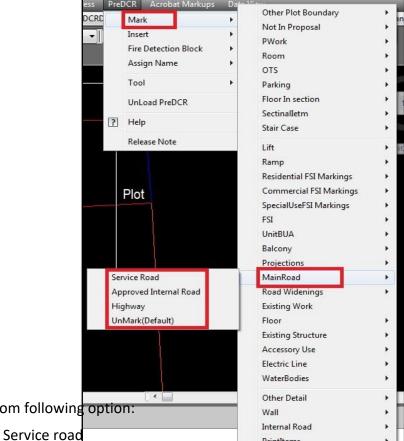
- Thick Plantation
- Common Plot (Default)

Here we have marked it has 'Common plot (Default).

- 4) Select '_MainRoad' Layer: Draw Main Road as a closed Poly with Text, which should be abutting with the Plot closed Poly.
 - '__MainRoad' Layer has marking option in CivitPlan-Draft.

To mark, go to CivitPlan-Draft menu, choose 'Mark' from the drop down.

Select 'Main Road '



Mark from following option:

- Approach internal road
- Main road (Default)

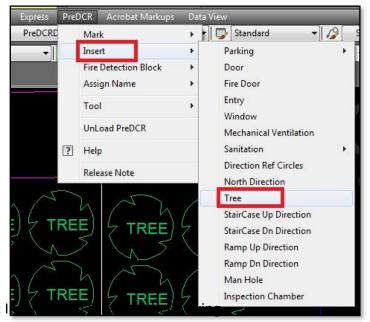
Here we have marked it has 'Main Road (Default).

(Note: Road width must be written at the starting of Text)

For ex: Naming convention: 30.00 m wd. Main T.P. S Road (Edit the road width)

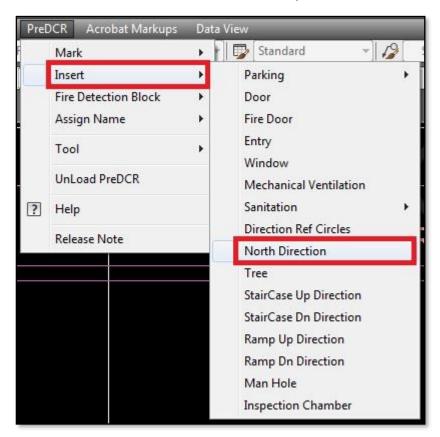
5) Select '_Tree' layer:

Go to **CivitPlan**-Draft menu, choose 'Insert' from the drop down and select 'Tree' Insert the tree block as per architectural drawing.



6) North Direction: I

Go to CivitPlan-Draft menu, choose 'Insert' from the drop down and select 'North Direction'.



7) Select '_OtherDetail' layer: Make one Boundary/Closed Poly Line around the details which is to be taken in final Printout as shown '__OtherDetail' Layer has marking option in CivitPlan-Draft.

To mark, go to **CivitPlan**-Draft menu, choose 'Mark' from the drop down. Select 'Other Detail'



Mark from following option:

- Elevation: Mark closed Polyline around Elevation Detail
- Service Plan: Mark closed Polyline around Service Plan
- Septic Tank Detail: Mark closed Polyline around Septic Tank Detail
- Rain Water Tank Storage Detail: Mark closed Polyline around Rain Water Tank Storage Detail
- Certificate: Mark closed Polyline around Certificate
- Project title: Draw closed Polyline around Project title (write the required text)
- Parking layout plan: Mark closed Polyline around parking layout plan
- **Key plan:** Mark closed Polyline around Location Plan
- Compound wall details: Mark closed Polyline around Compound wall details
- Staircase cabin detail: Mark closed Polyline around Staircase detail
- Lift cabin details: Mark closed Polyline around Lift cabin details
- Parking plan: Mark closed Polyline around parking plan

(Note: User has to make one Boundary around the details as above and any other which details are need to be taken in final Printing and which are not used while **CivitPlan**-Draft Conversion.)

Here we have selected 'Key plan' to mark '_OtherDetail' layer.

8) Select '_SitePlan' Layer: The encapsulating poly around the Site/Key Plan with the Text it.



1) Fix Poly:

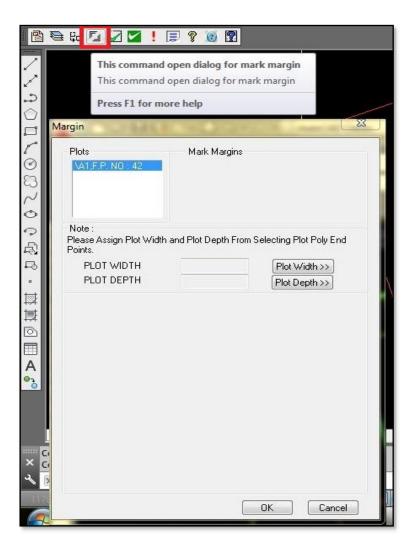
Use this command once on the final drawing which will process all the polylines on the **CivitPlan**-Draft layer and remove extra vertices found on polyline or duplicate entity. This command should be used (before verifying the drawing) every time you add any new entity in the drawing.



2) Mark Margin:

It open 'Margin table' select the plot and give 'Plot width' and 'Plot depth.

Once done select Ok.



3) Verify close Poly:

This command will verify the current drawing as required by **CivitPlan**. It will verify that LWPOLYLINE entities on the selected layers are closed and contain one text.

Shows 'Select layer box' select 'Ok'.



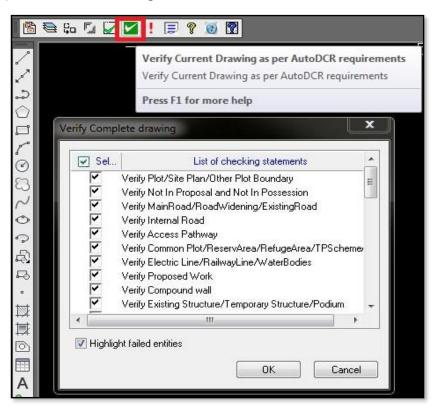
4) Verify the Current Drawing:

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.

Select 'OK' in Entity not found list dialog box.



CivitPlan-Draft 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.

5) Show Objection List:

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.

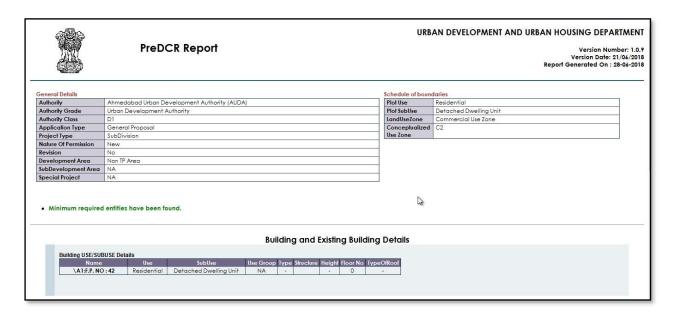


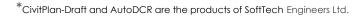
6) Show CivitPlan-Draft Report:

In Plot details dialog box select in case of any deduction for net plot area, plot use and plot use from drop down. If all the details are found correct pleas select 'OK'.



This command will generate the **CivitPlan**-Draft Report having all the Project details. All the verified and failing entities having Information will be shown in this Report.





Tutorial 5

CivitPlan-Draft Conversion of Residential Drawing

HOW TO CONVERT RESIDENTIAL CIVITPLAN-DRAFT DRAWING FOR PREPARATION OF SUBMISSION DRAWING?

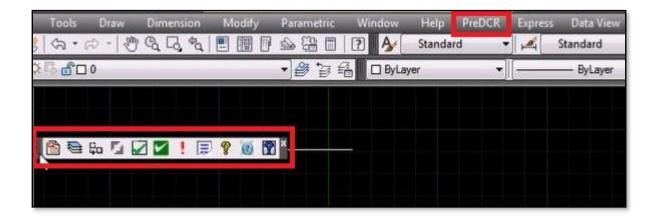
a. Double click on the CivitPlan-Draft icon on your desktop.

Following screen will pop up for selection CAD version.

Please select CAD version to run the CivitPlan-Draft.



CivitPlan-Draft Tool bar and CivitPlan-Draft Menu will be loaded in the CAD Application.



	CivitPlan-Draft Conversion of Residential Drawing
*CivitPlan-Draft and AutoDCR are the products of SoftTech Engineers Ltd.	Page 108

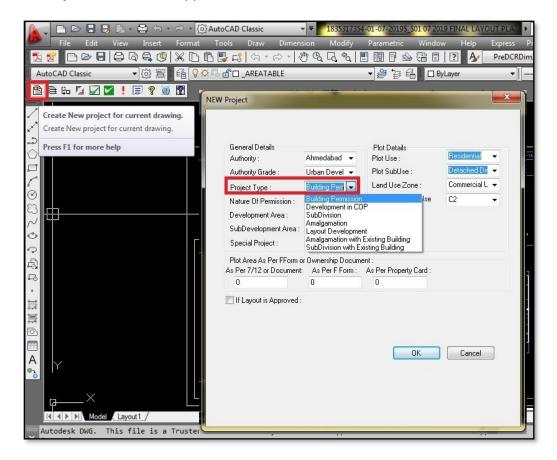
b. How to create 'New Project':

Open the drawing file form 'Open File location'

Click on first icon available in the CivitPlan-Draft toolbar 'Create New Project'.

This command will 'Create New project' for current selected drawing.

Following 'New Project 'window will appear:



(NOTE: Always remember that Plot layout should be there in one AutoCAD drawing file. And there must be in 1:1 mt. Scale)

Please fill all the 'Proposal details' as follows.

It is mandatory to select 'Type of Project'.

Select following fields from the drop down in General Details:

- i) Select the required 'Authority' from the drop down.
- ii) Select the 'Authority Grade'
- iii) Select 'Project Type': 'Building Permission'.
- iv) Select 'Nature of Permission' from the drop down.
- v) Select 'Development Area 'from drop down
- vi) Select 'Sub Development Area 'from drop down (If applicable)
- vii) Select 'Special Project 'from drop down (If applicable)

*AutoCAD is a product of AutoDesk.

 $[^]st$ CivitPlan-Draft and AutoDCR are the products of SoftTech Engineers Ltd.

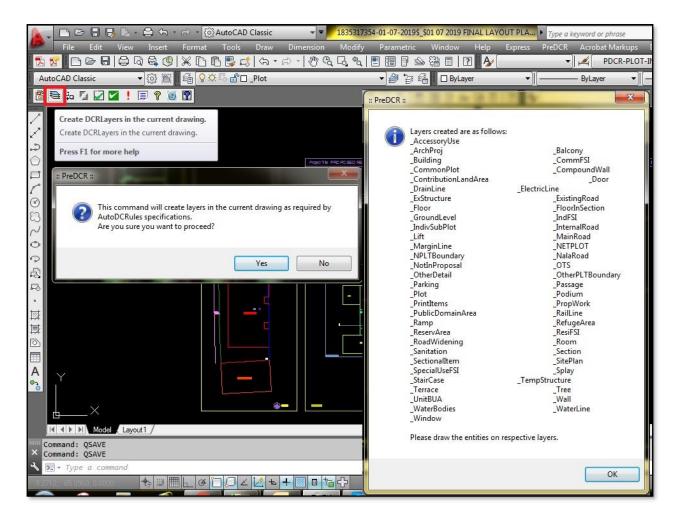
Similarly in Plot Details, select following fields from the drop down:

- i) Select 'Plot use' as per requirement
 (For ex: This is commercial proposal therefor 'mercantile 'is selected)
- ii) Select 'Plot Sub use', 'Shop' is selected as per proposal.
- iii) Select land use zone, as applicable
- iv) Select 'Conceptualize use zone' from the drop down as applicable.
- v) In case you are making drawing for 'Revision' then check the 'Revision 'box.

Fill up the plot area as per FForm or ownership documents 7/12 information.

Select 'OK' once done.

c) Create Layers in the drawing:



This command will create layers required for **CivitPlan** and as per the 'Project Type' selected. i.e. select 'Building Permission'.

Select 'Yes' in the CivitPlan-Draft dialog box.

For Proposed Development type Proposal listed layers will be generated in drawing file.

 $[^]st$ CivitPlan-Draft and AutoDCR are the products of SoftTech Engineers Ltd.

b. How to draft CivitPlan-Draft drawing: Sample Residential drawing is S+2.

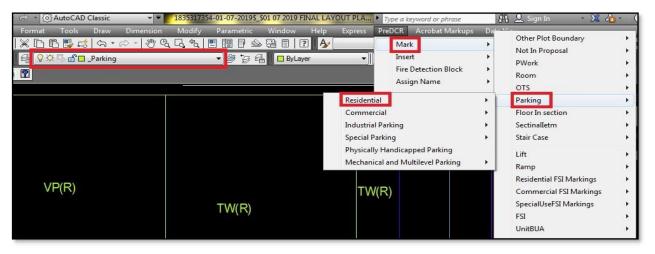
To convert 'Parking floor':

1) Select '_Parking 'Layer: Draw a closed Polyline for Parking's on "_Parking" Layer.

To mark the 'Parking' poly follow the below process:

Go to 'CivitPlan-Draft' menu \rightarrow Mark \rightarrow Parking \rightarrow Mechanical and Multi level Parking \rightarrow Mechanical parking \rightarrow Mechanical Parking. (Please select Marking options as per requirement).

Select 'Parking' poly and 'click 'enter' to mark the selection



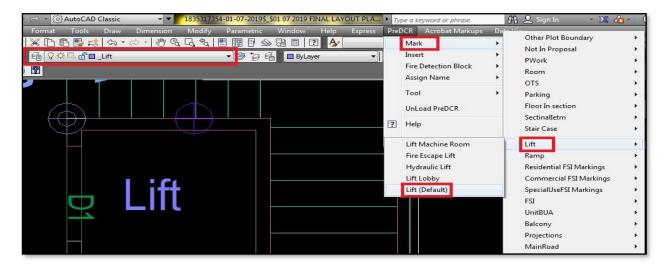
2) Select '_Lift' layer: A closed polyline on the inner dimensions of the lift should be drawn on this layer.

Go to CivitPlan-Draft Menu → Mark→Lift→Lift Default.

There are following option to mark the lift.

Lift Machine Room: Mark Lift as Lift Machine Room

Fire Escape Lift: Mark Lift as Fire Escape Lift Hydraulic Lift: Mark Lift as Hydraulic Lift Lift (Default): Mark Normal Lift as Lift



3) Select '_StairCase' Layer: Total Staircase area should be drawn as a closed polyline.

This Main Stair Poly should contain Intermediate Landing, Floor Landing & Each Tread as an open polyline.

Go to 'CivitPlan-Draft' → Mark → Staircase' → Staircase default.

Go to CivitPlan-Draft'→Insert→Staircase up direction.

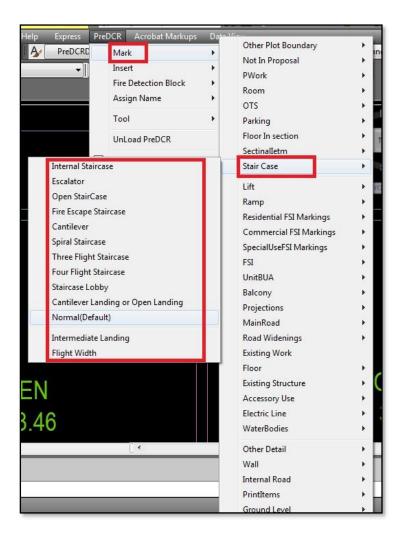
Go to CivitPlan-Draft'→Insert→Staircase down direction.

Insert as per the drawing

Intermediate & Floor Landing Poly can be marked by CivitPlan-Draft Tool

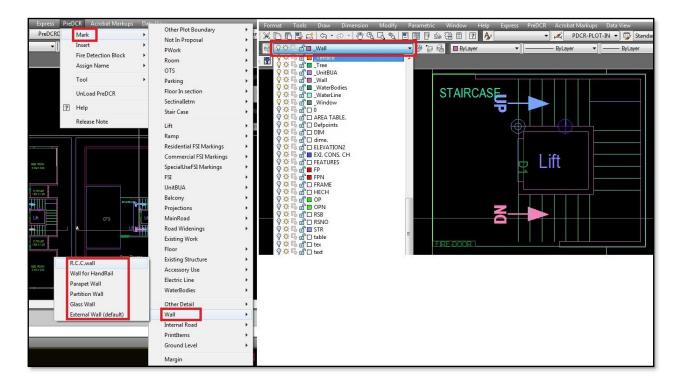
"Mark->Staircase-->Int. or Floor Landing"

In staircase layer stair lobby also drawn on this layer and mark it on marking tool.



4) Select '_Wall' layer: Draw Wall as a closed Poly line.

Go to CivitPlan-Draft'→Mark→Wall →R.C.C wall



5) Select '_Door' layer:

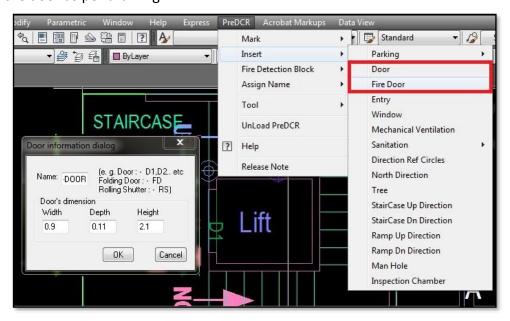
To insert 'Door', go to CivitPlan-Draft menu→Insert→Door.

In door information dialog box:

Pls fill up the information,

For ex: 'Width'=0.9m, 'Depth'=0.11m, 'Height' =2.1m and 'Name' = D as shown.

Insert the door as per drawing.



To convert 'First floor Plan':

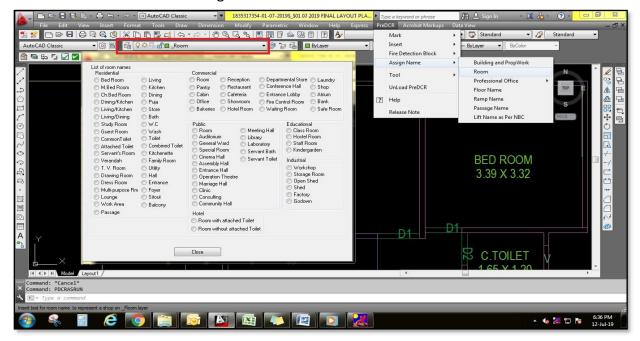
1) Select '_Room' layer: Draw a closed polyline for each room.

To assign room name please follow the process as below:

For ex:

Go to 'CivitPlan-Draft' → Assign Name → List of room names → Select 'Bed Room'

Go to 'CivitPlan-Draft' → Assign Name → List of room names → Select 'Toilet'



2) Select '_Wall' layer: Draw Wall as a closed Polyline.
Go to CivitPlan-Draft'→Mark→Wall →R.C.C wall

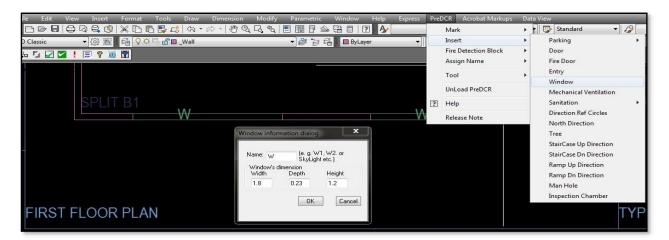
3) Select '_Window' layer:

To insert 'Window', CivitPlan-Draft menu→Insert→Window.

In window information dialog box:

Pls fill up the information as per requirement.

For ex: 'Width' = 1.8m, 'Depth'=0.23m, 'Height'=1.2 m and 'Name' =W as shown.



4) Similarly To insert 'Ventilator' pls follow the process as follows:

Select '_Window' layer:

To insert 'Window', CivitPlan-Draft menu→Insert→Window.

In window information dialog box:

Pls fill up the information as per requirement.

For ex: 'Width' = 0.6 m, 'Depth'=0.23m, 'Height'=1.2 m and 'Name' = V as shown.

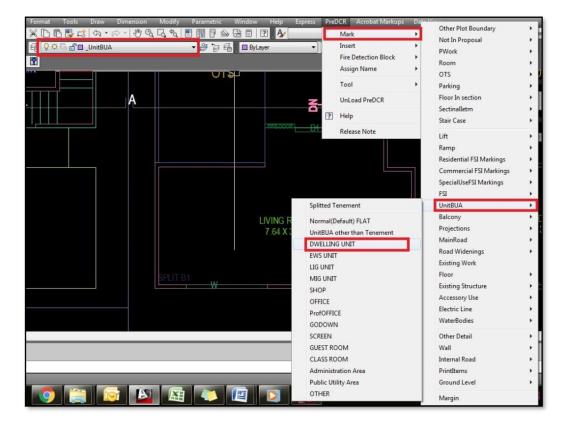
For ventilator in 'Name' = 'V' is fill up instead of 'W'.

- 5) Please follow above mention process for Door, Lift, Staircase conversion
- **6)** Select '_UnitBUA' layer: Draw a Closed poly with MText on this layer represents a BuiltUp Area or Tenement Area. It should cover total area of one Tenement.

CivitPlan-Draft → Mark → Unit BUA → DWELLING UNIT.

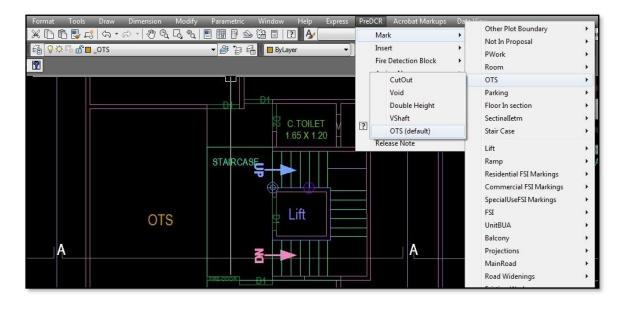
There are many options available for unit BUA marking.

Pls select as per the requirement.



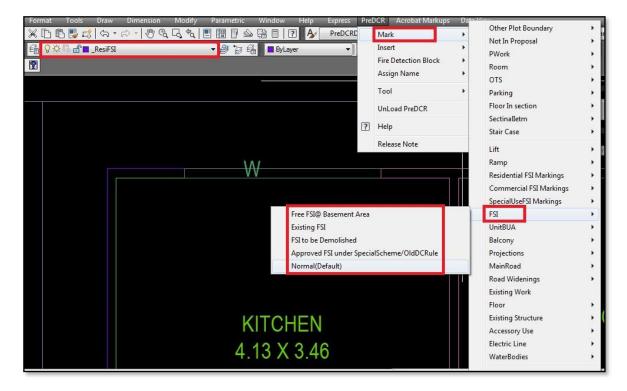
7) Select '_OTS' layer: Draw a OTS as a closed polyline which is a fully or partially enclosed space permanently open to the sky within a building at any level: inner OTS being enclosed on all sides and outer OTS having one unenclosed side.

CivitPlan-Draft → Mark → OTS → OTS (default)



8) Select '_ResiFSI' layer: Closed poly on "_ResiFSI" layer represents a Main FSI or Floor FSI. It will have the entire tenements poly inside on that floor.

CivitPlan-Draft → Mark → FSI → Normal (Default).



Convert 'Second and Third floor Plan' similarly as above mention Process.

To convert 'Terrace floor Plan'

- 1) **Select _Terrace layer:** Draw a Terrace as a closed polyline on _Terrace layer which is including parapet wall. No Marking Required for this Layer.
- 2) **Select '_StairCase' Layer:** Draft the staircase as explained above.
- 3) Select '_Lift' layer: Draft the staircase as explained above.
- 4) Select '_Wall' layer: Draw Wall as a closed Polyline.

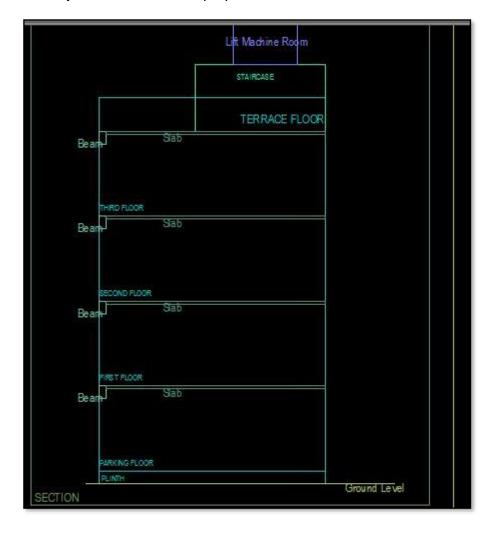
Go to CivitPlan-Draft'→Mark→Wall → Parapet Wall

Following stapes do for all the floor plans.

- 1) Select '_Floor' layer: Floor poly should be drawn as a closed Polyline. Draw separate 'Floor' poly for each floor plan.
- 2) Direction Ref Circle: Insert Dimension Ref Circle inside each floor poly at the same point.

To draw Section and link it with floor plan.

1) Select '_Section 'layer: Draw the closed poly around section and 'MText' as shown.

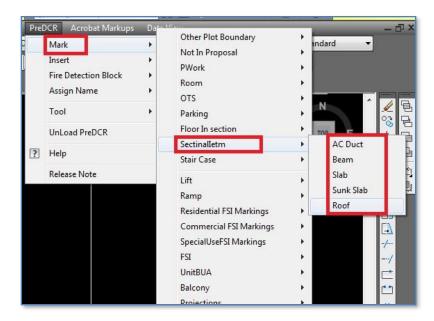


 $^{^{*}}$ CivitPlan-Draft and AutoDCR are the products of SoftTech Engineers Ltd.

- 2) Select '_FloorInSection' layer: Section floor poly will represent each floor section.
- 3) Select '_GroundLevel 'layer: The Ground level line should be drawn as an open polyline in the section poly, Mtext it.
- **4) Select '_SectionalItem 'layer:** Draw a SectionalItem as a closed polyline which is the height of the AC Duct/Beam/Slab/Sunk Slab of that floor.

Go to CivitPlan-Draft Menu→ Mark→ Sectional item→ Select Beam.

Go to CivitPlan-Draft Menu→ Mark→ Sectional item→ Select Slab.



5) Select '_Staircase 'layer: Draw closed poly 'Staircase Headroom' above staircase in section.

Go to CivitPlan-Draft Menu \rightarrow Mark \rightarrow Staircase \rightarrow Normal (Default).

Edit the text as "Staircase Headroom" in section as well as in floor plan.

6) Select '_Lift' layer: A closed polyline on the inner dimensions of the lift should be drawn on this layer.

Go to CivitPlan-Draft Menu \rightarrow Mark \rightarrow Lift \rightarrow Lift machine room.

Mark it in section as well as in plan.

7) To link the floor in section to floor in plan.

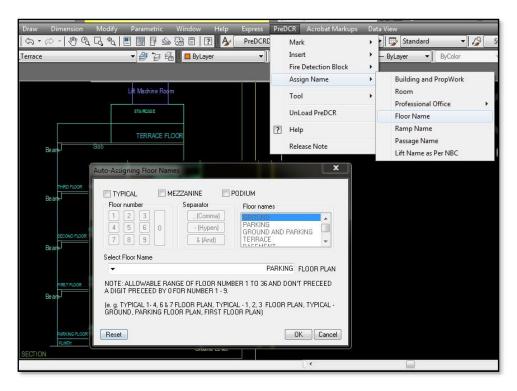
Go to CivitPlan-Draft Menu→ Assign name -→ Floor Name.

Fill in the information in 'Auto Assign floor name' dialog' box:

'Select floor name' from drop down (for ex: Basement)

Select 'OK', then select corresponding floor poly and floor in section poly in the drawing Basement floor is selected in plan and section.

Only 'Plinth' need to Mtext in section.



8) To continue floor name assign select 'Yes' and follow the process as follows:

Fill in the information in 'Auto Assign floor name' dialog' box:

'Select floor name' from drop down (for ex: Parking floor Plan)

Select 'OK', then select corresponding floor poly and floor in section poly in the drawing Ground floor is selected in plan and section.

9) To assign name to typical floor, select 'Yes' and follow the process as follows:

Fill in the information in 'Auto Assign floor name' dialog' box:

Select the check box of 'Typical'

Select floor no.

Select separator

Select other floor no.

Select 'OK'

Select floor poly in section (First and Second floor) and corresponding floor plan.

10) To assign terrace floor name, select 'Yes' and follow the process as follows:

Fill in the information in 'Auto Assign floor name' dialog' box:

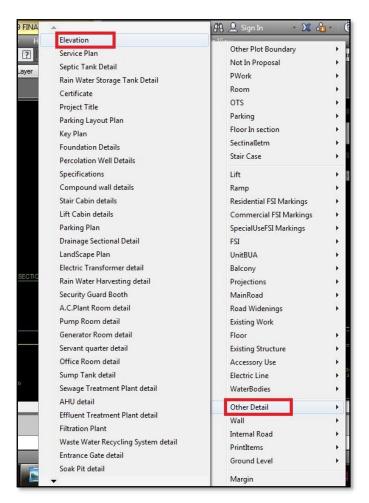
'Select floor name' from drop down (for ex: Terrace floor)

Select 'OK', then select corresponding floor poly and floor in section poly in the drawing Ground floor is selected in plan and section.

Floor Plan will be automatically link with Section Floor by matching the Floor Name.

11) Select '_OtherDetail' layer : Make one Boundary/Closed Poly Line around the details which is to be taken in final Printout as shown '_OtherDetail' Layer has marking option in **CivitPlan**-Draft.

To mark, Go to CivitPlan-Draft menu → Mark → Other details → Elevation



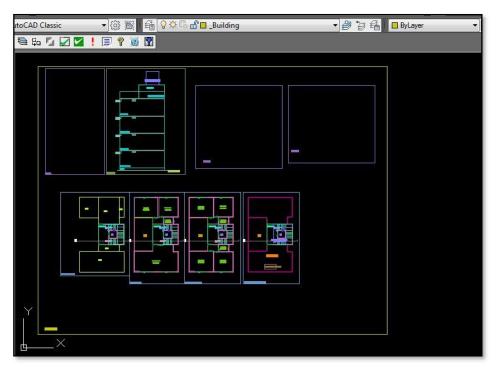
Go to CivitPlan-Draft menu → Mark → Other details → Key Plan.

Go to CivitPlan-Draft menu \rightarrow Mark \rightarrow Other details \rightarrow Project Title.

Enter the title name.

Select the poly inside which project title name is required.

12) Select '_Building 'layer: Building poly is used to group all floor plans and sections of the same Building and other details.



To convert the site plan.

- 1) Select '_Plot' layer, Draw a closed poly which will represent the Plot layout as shown.

 Draw the main plot by using '_Plot' layer and 'Mtext' it.
- 2) Select '_MainRoad' Layer: Draw Main Road as a closed Poly with Text, which should be abutting with the Plot closed Poly.
 - ' MainRoad' Layer has marking option in CivitPlan-Draft .

To mark, go to CivitPlan-Draft menu, choose 'Mark' from the drop down.

Select 'Main Road '

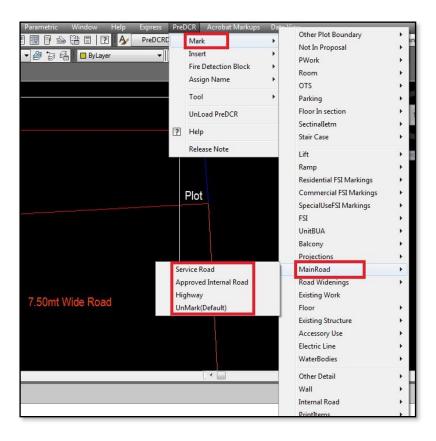
Mark from following option:

- Service road
- Approach internal road
- Main road (Default)

Here we have marked it has 'Main Road (Default).

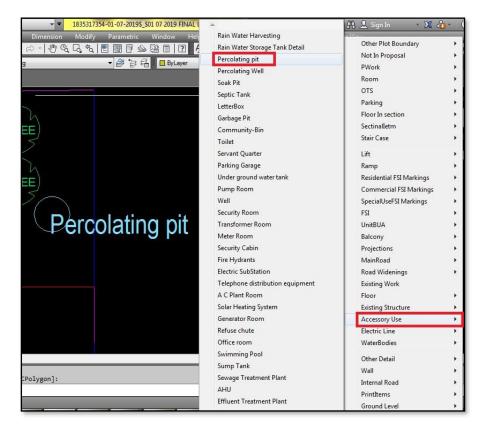
(Note: Road width must be written at the starting of Text)

Naming convention: 7.50 m wd. Main Road (Edit the road width)



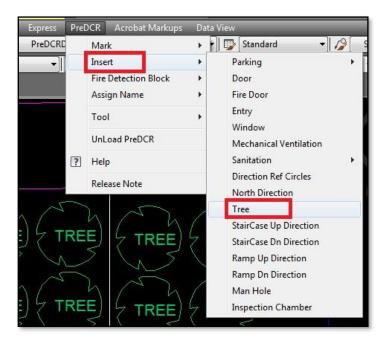
3) Select '_AccessoryUse 'layer: Draw a closed poly around accessories in drawing for ex: Rain water harvesting, water storage tank, percolating well.

Go to CivitPlan-Draft→Mark→Accessory use→percolating well



4) Go to **CivitPlan**-Draft → Insert → Tree.

Give specific insertion point for the tree as per drawing.



5) Select '_PropWork' layer: PWork is a building profile and shall be drawn inside plot. Draw a closed polyline for Proposed Work on "PropWork" Layer.

Dimension Ref Circle inside PWork poly at the same point as in Floor poly.

6) To link building plan to Pwork.

Go to **CivitPlan**-Draft menu-→ Assign name→ Building and Propwork.

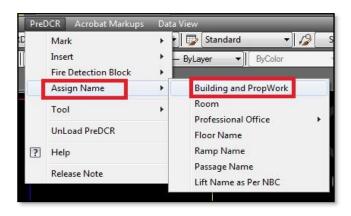
Select 'Building poly' in drawing.

Pls fill up the 'Building and Propwork Name' dialog box:

Fill up 'Wing Name' and 'Building Name'

Select Propwork in the drawing.

It will link the building plan to Pwork.



- 7) Select '_SitePlan' Layer: The encapsulating poly around the Site/Key Plan with the 'MText' it.
- 8) North Direction: Insert North Direction in Drawing

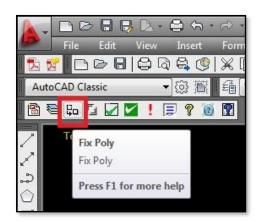
Go to **CivitPlan**-Draft menu, choose 'Insert' from the drop down and select 'North Direction Competed drawing conversion



After complete the conversion proceed to next tab of the CivitPlan-Draft toolbar:

1) Fix Poly:

Use this command once on the final drawing which will process all the polylines on the **CivitPlan**-Draft 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.



2) Mark Margin:

It open 'Margin table'

Sect 'Front'/'Side1'/'Side2' and 'Rear' side in the drawing. Once done select Ok.

Select the plot and give 'Plot width' and 'Plot depth.



3) Verify close Poly:

This command will verify the current drawing as required by **CivitPlan**. It will verify that LWPOLYLINE entities on the selected layers are closed and contain one text. Shows 'Select layer box' select 'Ok'.



4) Verify the Current Drawing:

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.

Select 'OK' in Entity not found list dialog box.



CivitPlan-Draft 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.

5) Show Objection List:

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.



6) Show CivitPlan-Draft Report:

In Plot details dialog box select in case of any deduction for road widening area, reservation area, existing road area .Verify plot use and plot sub use.

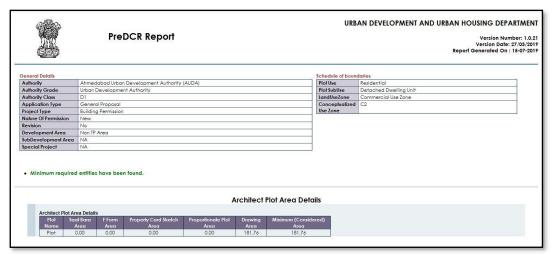


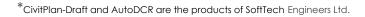
If all the details are found correct pleas select 'OK'.

In Building details table verify all the buildings by selecting each one of them. Select Ok.

In Floor details table verify all the floors by selecting each one of them. Select Ok.

This command will generate the **CivitPlan**-Draft Report having all the Project details. All the verified and failing entities having Information will be shown in this Report.





Tutorial 6

CivitPlan-Draft Conversion of Commercial Drawing

HOW TO CONVERT COMMERCIAL CIVITPLAN-DRAFT DRAWING FOR PREPARATION OF SUBMISSION DRAWING?

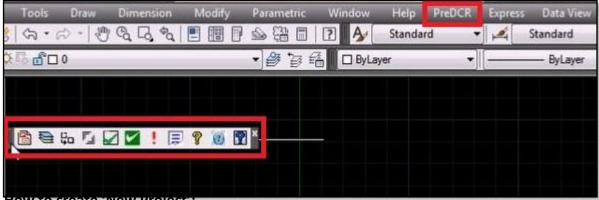
a. Double click on the CivitPlan-Draft icon on your desktop.

Following screen will pop up for selection CAD version.

Please select CAD version to run the CivitPlan-Draft.



CivitPlan-Draft Tool bar and CivitPlan-Draft Menu will be loaded in the CAD Application.



b. How to create New Project:

Open the drawing file form 'Open File location'

Click on first icon available in the CivitPlan-Draft toolbar 'Create New Project'.

This command will 'Create New project' for current selected drawing.

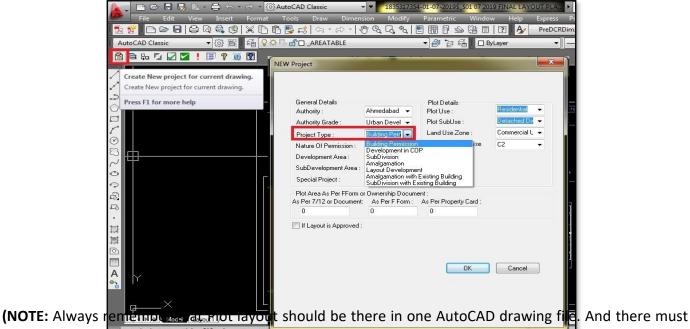
c. How to create 'New Project':

Open the drawing file form 'Open File location'

Click on first icon available in the CivitPlan-Draft toolbar 'Create New Project'.

This command will 'Create New project' for current selected drawing.

Following 'New Project 'window will appear:



be in 1:1 mt. Scale.) This file is a Truster

Please fill all the 'Proposal details' as follows.

It is mandatory to select 'Type of Project'.

Select following fields from the drop down in General Details:

- Select the required 'Authority' from the drop down. i)
- ii) Select the 'Authority Grade'
- iii) Select 'Project Type': 'Building Permission'.
- iv) Select 'Nature of Permission' from the drop down.
- v) Select 'Development Area 'from drop down
- Select 'Sub Development Area 'from drop down (If applicable) vi)
- Select 'Special Project 'from drop down (If applicable) vii)

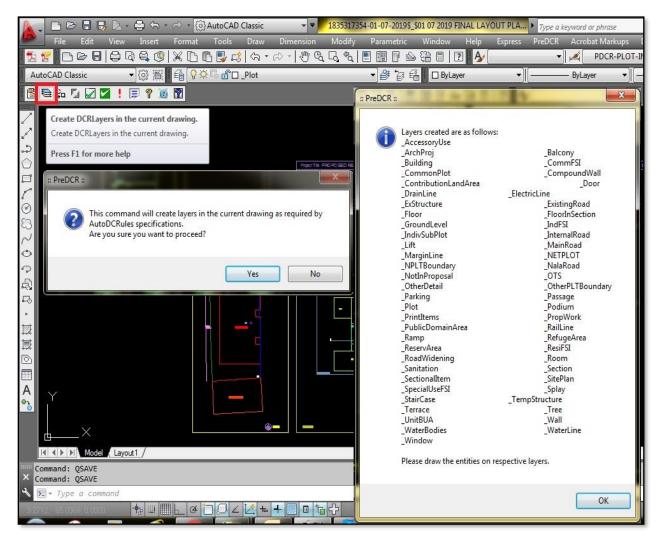
Similarly in Plot Details, select following fields from the drop down:

- Select 'Plot use' as per requirement i) (For ex: This is commercial proposal therefor 'mercantile 'is selected)
- Select 'Plot Sub use', 'Shop' is selected as per proposal. ii)
- Select land use zone, as applicable iii)
- Select 'Conceptualize use zone' from the drop down as applicable. iv)
- In case you are making drawing for 'Revision' then check the 'Revision 'box.

Fill up the plot area as per FForm or ownership documents 7/12 information. Select 'OK' once done.

*AutoCAD is a product of AutoDesk.

d. Create Layers in the drawing:



This command will create layers required for **CivitPlan** and as per the 'Project Type' selected. i.e. select 'Building Permission'.

Select 'Yes' in the CivitPlan-Draft dialog box.

For Proposed Development type Proposal listed layers will be generated in drawing file.

e. How to draft CivitPlan-Draft drawing:

Sample commercial drawing is Basement + Stilt + 2 Floor Start with Building plan drafting:

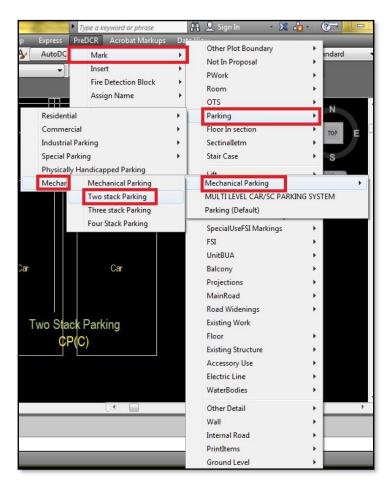
To convert 'Basement floor':

1. Select '_Parking 'Layer: Draw a closed Polyline for Parking's on "_Parking" Layer. To mark the 'Parking' poly follow the below process:

Go to 'CivitPlan-Draft' menu → Mark → Parking → Mechanical and Multi level Parking → Mechanical parking → Mechanical Parking.

(Pls select Marking options as per requirement).

Select 'Parking' poly and 'click 'enter' to mark the selection.

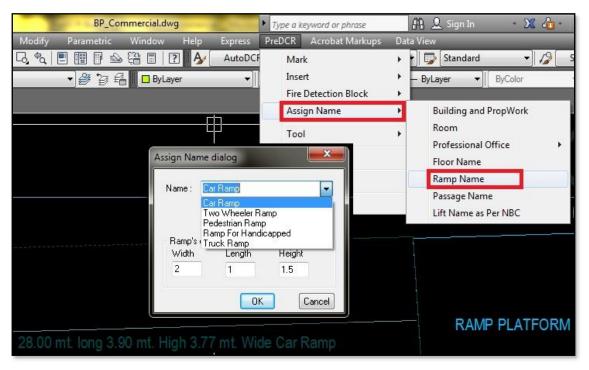


2) Select '_Ramp' layer: Draw a Ramp as a closed polyline with Centre Line.

Go to 'CivitPlan-Draft' menu -> Assign Name -> Ramp Select the 'Ramp' poly to assign name.

In Assign dialog box, Select 'width'/Height' and Length.

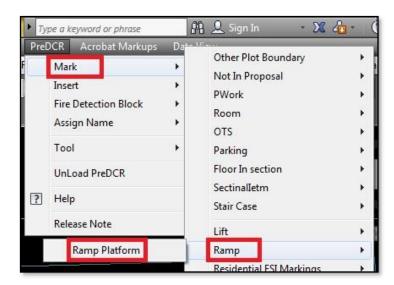
For ex: 'Width' =3.25, Length = 18.20 and Height=2.6 m (As per drawing).



To draft Ramp platform.

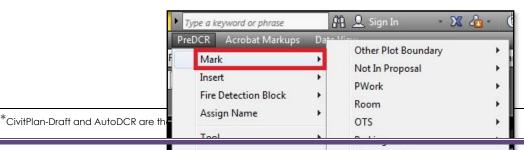
Select '_Ramp' layer, draw the ramp platform as shown.

Go to CivitPlan-Draft Menu \rightarrow Mark \rightarrow Ramp \rightarrow Ramp platform as shown.



3) Select '_Lift' layer: A closed polyline on the inner dimensions of the lift should be drawn on this layer.

Go to CivitPlan-Draft Menu → Mark→Lift→Lift Default.



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There are following option to mark the lift.

Lift Machine Room: Mark Lift as Lift Machine Room

Fire Escape Lift: Mark Lift as Fire Escape Lift

Hydraulic Lift: Mark Lift as Hydraulic Lift

Lift (Default): Mark Normal Lift as Lift

4) Select '_Wall' layer: Draw Wall as a closed Poly line. Go to CivitPlan-Draft'→Mark→Wall →R.C.C wall

There are following option to mark the 'Wall'.

R.C.C. Wall

Wall for handrail

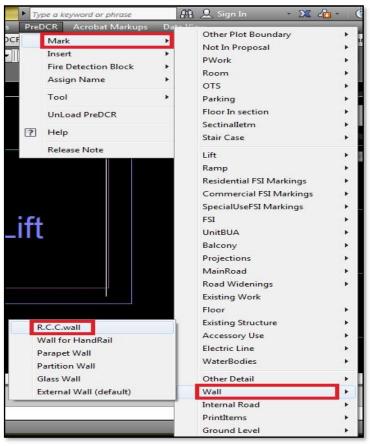
Parapet Wall

Partition Wall

Glass Wall

External Wall (Default)

 $^{^{*}}$ CivitPlan-Draft and AutoDCR are the products of SoftTech Engineers Ltd.

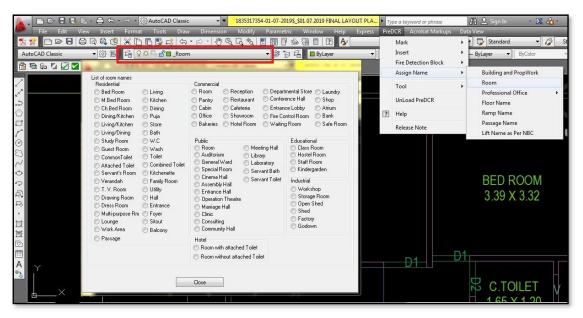


5) Select '_Room' layer: Draw a closed polyline for each.

To assign room name pls follow the process:

For ex:

Go to CivitPlan-Draft→ Assign Name→List of room names→ Select 'Toilet' Go to CivitPlan-Draft→ Assign Name→List of room names→ Select 'Shop' You can select room as per requirement.



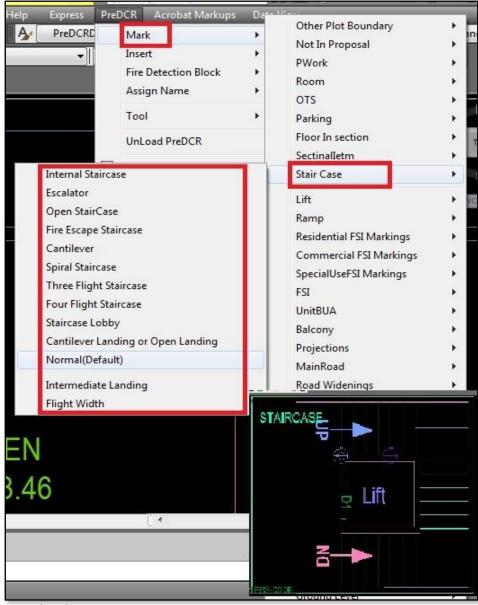
6) Select '_StairCase' Layer: Total Staircase area should be drawn as a closed polyline.

This Main Stair Poly should contain Intermediate Landing, Floor Landing & Each Tread as an open polyline.

Go to 'CivitPlan-Draft' → Mark → Staircase' → Staircase default.

Go to CivitPlan-Draft' → Insert → Staircase up direction.

Go to CivitPlan-Draft' \rightarrow Insert \rightarrow Staircase down direction.



Insert as per the drawing

Intermediate & Floor Landing Poly can be marked by CivitPlan-Draft Tool

"Mark->Staircase-->Int. or Floor Landing"

In staircase layer stair lobby also drawn on this layer and mark it on marking tool.

7) Select '_Door' layer:

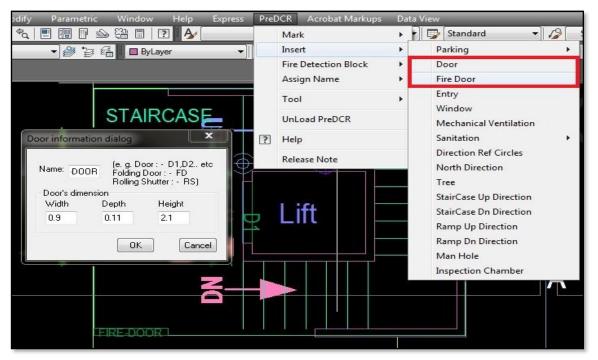
To insert 'Door', go to CivitPlan-Draft menu→Insert→Door.

In door information dialog box:

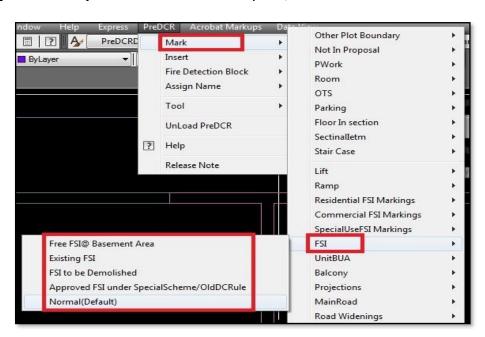
Pls fill up the information,

For ex: 'Width'=0.9m, 'Depth'=0.11m, 'Height' =2.1m and 'Name' = D as shown.

Insert the door as per drawing.



8) Select '_CommFSI' layer: Draw a closed FSI PolyLine, which is used for Commercial Purpose.

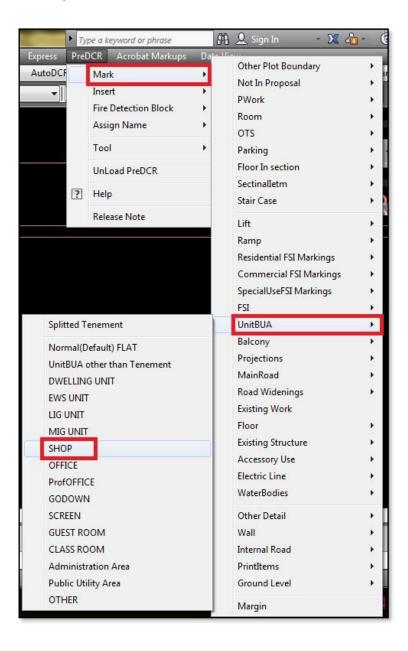


9) Select '_UnitBUA' layer: Draw a Closed poly with MText on this layer represents a BuiltUp Area or Tenement Area. It should cover total area of one Tenement.

CivitPlan-Draft \rightarrow Mark \rightarrow Unit BUA \rightarrow Shop.

There are many options available for unit BUA marking.

Pls select as per the requirement.



10) Select '_Wall' layer: Draft the wall as explained above

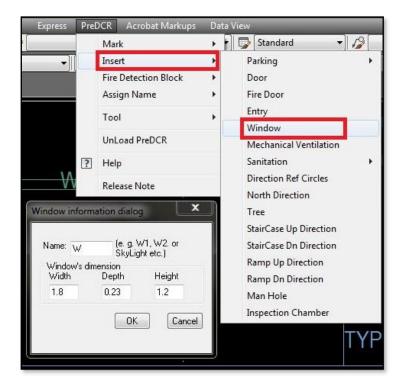
11) Select '_Window' layer:

To insert 'Window', CivitPlan-Draft menu→Insert→Window.

In window information dialog box:

Pls fill up the information as per requirement.

For ex: 'Width' = 1.8m, 'Depth'=0.23m, 'Height'=1.2 m and 'Name' =W as shown.



12) To insert 'Ventilator' pls follow the process as follows:

Select '_Window' layer:

To insert 'Window', CivitPlan-Draft menu→Insert→Window.

In window information dialog box:

Pls fill up the information as per requirement.

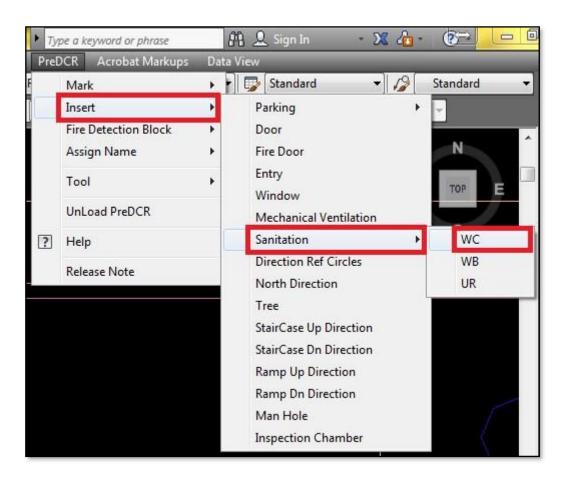
For ex: 'Width' = 0.6 m, 'Depth'=0.23m, 'Height'=1.2 m and 'Name' = V as shown.

For ventilator in 'Name' = 'V' is fill up instead of 'W'.

13) Select ' Door' layer: Insert the 'Door' as explained above.

To convert 'Ground floor':

- 1) Select 'Room' layer: Draw the 'Room' as explained above.
- 2) Select '_Wall' layer: Draft the 'Wall' as explained above.
- 3) Select '_UnitBUA' layer: Draft the 'UnitBUA' as explained above.
- 4) Select 'CommFSI' layer: Draft the 'CommFSI' as explained above.
- **5)** Sanitation: Go to 'CivitPlan-Draft \rightarrow Insert \rightarrow Sanitation \rightarrow WC \rightarrow Select one of the toilet (room poly) for insertion. Select specify insertion point and no. of sanitation.



- 6) Select '_StairCase' Layer: Draft same as explained above.
- 7) Select '_Lift' layer: Draft same as explained above.

Convert 'First and Second floor Plan' similarly as above mention Process.

To convert 'Terrace floor':

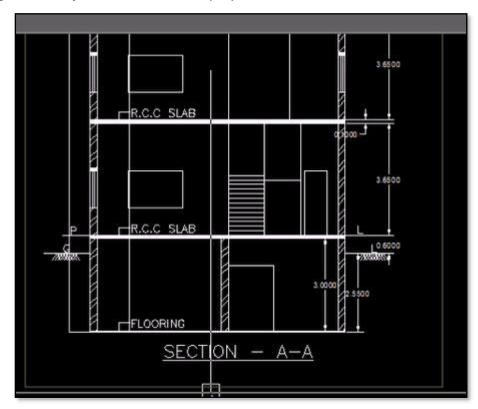
- 1) Select _Terrace layer: Draw a closed polyline on _Terrace layer is a terrace and Mtext it . All kind of terraces like common top floor terrace as well as common terrace on any floor should be drawn on this layer.
- 2) Select '_StairCase' Layer: Draft the staircase as explained above.
- 3) Select 'Lift' layer: Draft same as explained above.

Following stapes do for all the floor plans.

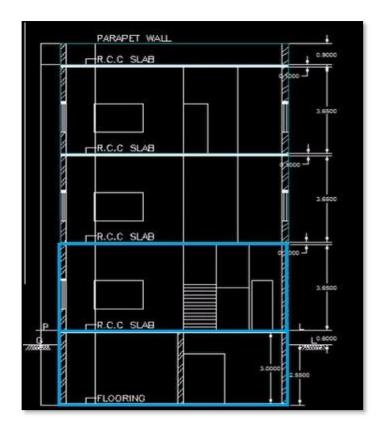
- **4) Select '_Floor' layer:** Floor poly should be drawn as a closed Polyline. Draw separate 'Floor' poly for each floor plan.
- 5) Direction Ref Circle: Insert Dimension Ref Circle inside each floor poly at the same point.

How to draw Section and link it with floor plan?

1) Select '_Section 'layer: Draw the closed poly around section and 'MText' as shown.



2) Select '_FloorInSection' layer: Section floor poly will represent each floor section.

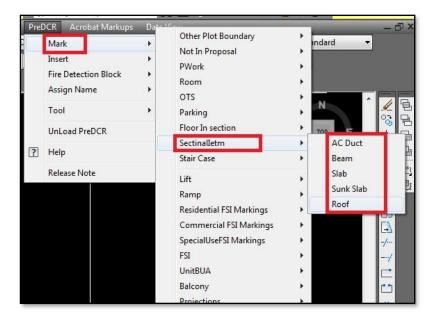


 $^{^{*}}$ CivitPlan-Draft and AutoDCR are the products of SoftTech Engineers Ltd.

3) Select '_SectionalItem 'layer: Draw a SectionalItem as a closed polyline which is the height of the AC Duct/Beam/Slab/Sunk Slab of that floor.

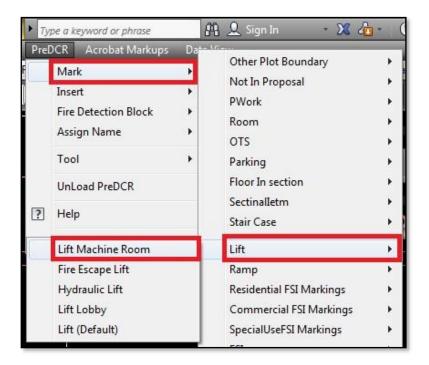
Go to CivitPlan-Draft Menu→ Mark→ Sectional item→ Select Beam.

Go to CivitPlan-Draft Menu→ Mark→ Sectional item→ Select Slab.



- 4) Select '_Staircase 'layer: Draw closed poly 'Staircase Headroom' above staircase in section. Go to CivitPlan-Draft Menu→ Mark→Staircase→Normal (Default). Edit the text as "Staircase Headroom' in section as well as in floor plan.
- 5) Select '_Lift' layer: A closed polyline on the inner dimensions of the lift should be drawn on this layer.

Go to CivitPlan-Draft Menu \rightarrow Mark \rightarrow Lift \rightarrow Lift machine room. Mark it in section as well as in plan.



 $[^]st$ CivitPlan-Draft and AutoDCR are the products of SoftTech Engineers Ltd.

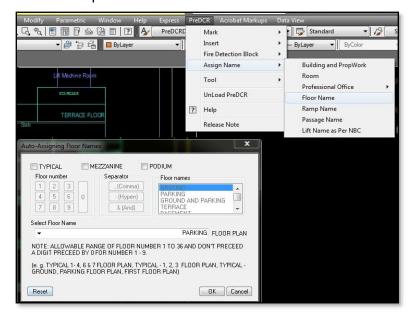
6) To link the floor in section to floor in plan.

Go to CivitPlan-Draft Menu→ Assign name -→ Floor Name.

Fill in the information in 'Auto Assign floor name' dialog' box:

'Select floor name' from drop down (for ex: Basement)

Select 'OK', then select corresponding floor poly and floor in section poly in the drawing Basement floor is selected in plan and section.



7) To continue floor name assign select 'Yes' and follow the process as follows:

Fill in the information in 'Auto Assign floor name' dialog' box:

'Select floor name' from drop down (for ex: Ground floor)

Select 'OK', then select corresponding floor name and floor in section poly in the drawing Ground.

Select 'OK', then select corresponding floor poly and floor in section poly in the drawing Ground floor is selected in plan and section.

8) To assign name to typical floor, select 'Yes' and follow the process as follows:

Fill in the information in 'Auto Assign floor name' dialog' box:

Select the check box of 'Typical'

Select floor no.

Select separator

Select other floor no.

Select 'OK'

Select floor poly in section (First and Second floor) and corresponding floor plan.

9) To assign terrace floor name, select 'Yes' and follow the process as follows:

Fill in the information in 'Auto Assign floor name' dialog' box:

'Select floor name' from drop down (for ex: Terrace floor)

Select 'OK', then select corresponding floor poly and floor in section poly in the drawing Ground floor is selected in plan and section.

Floor Plan will be automatically link with Section Floor by matching the Floor Name.

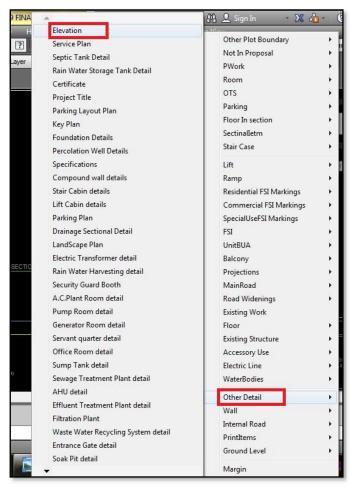
10) Select '_GroundLevel 'layer: The Ground level line should be drawn as an open polyline in the section poly, Mtext it.

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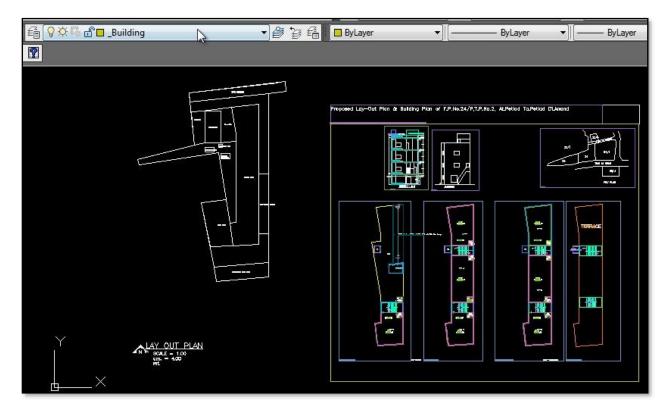
11) Select '_OtherDetail' layer : Make one Boundary/Closed Poly Line around the details which is to be taken in final Printout as shown

'__OtherDetail' Layer has marking option in CivitPlan-Draft.

To mark, Go to CivitPlan-Draft menu → Mark → Other details → Elevation



- **12)** Go to **CivitPlan**-Draft menu → Mark → Other details → Key Plan.
- 13) Go to CivitPlan-Draft menu → Mark → Other details → Project Title. Enter the title name.
 Select the poly inside which project title name is required.
- **14) Select '_Building 'layer:** Building poly is used to group all floor plans and sections of the same Building and other details.



Let's convert the site plan.

- 1) Select '_Plot' layer, Draw a closed poly which will represent the Plot layout as shown. Draw the main plot by using '_Plot' layer and 'Mtext' it.
- **2) Select '_Otherplotboundary' Layer:** Draw a closed poly which will represent the Plot layout as shown. Draw the main plot by using '_Otherplotboundary' layer and 'Mtext' it.
- 3) Select '_MainRoad' Layer: Draw Main Road as a closed Poly with Text, which should be abutting with the Plot closed Poly.
 - '__MainRoad' Layer has marking option in CivitPlan-Draft .

To mark, go to CivitPlan-Draft menu, choose 'Mark' from the drop down.

Select 'Main Road '

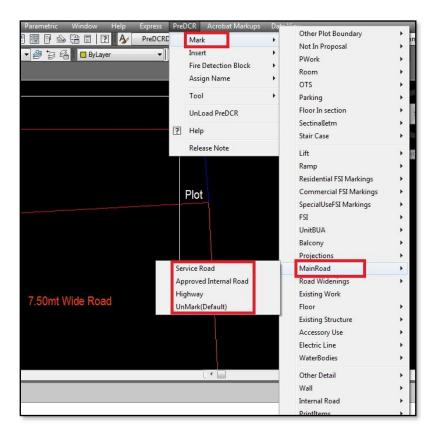
Mark from following option:

- Service road
- Approach internal road
- Main road (Default)

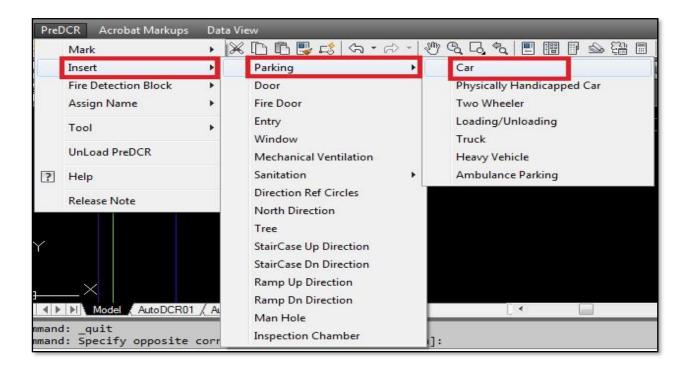
Here we have marked it has 'Main Road (Default).

(Note: Road width must be written at the starting of Text)

Naming convention: 7.50 m wd. Main Road (Edit the road width)



- 4) Select '_Parking' layer: Draw a closed Polyline for Parking's on "_Parking" Layer.
 - Go to CivitPlan-Draft \rightarrow Mark \rightarrow Parking \rightarrow Commercial \rightarrow Car Park.
 - Go to CivitPlan-Draft→Mark→ Parking→Commercial→Heavy motor vehicle parking.
 - Go to CivitPlan-Draft→Mark→ Parking→Commercial→Two wheeler parking.
 - Go to CivitPlan-Draft→Mark→ Parking→Commercial→Visitors parking.



5) Go to CivitPlan-Draft→Insert→ Parking→Loading/Unloading.

Select 'Plot' poly

Give specific insertion point

Specific loading /unloading parking use

No. of parkings.

6) Select '_AccessoryUse 'layer: Draw a closed poly around accessories in drawing for ex: Rain water harvesting, water storage tank, percolating well.

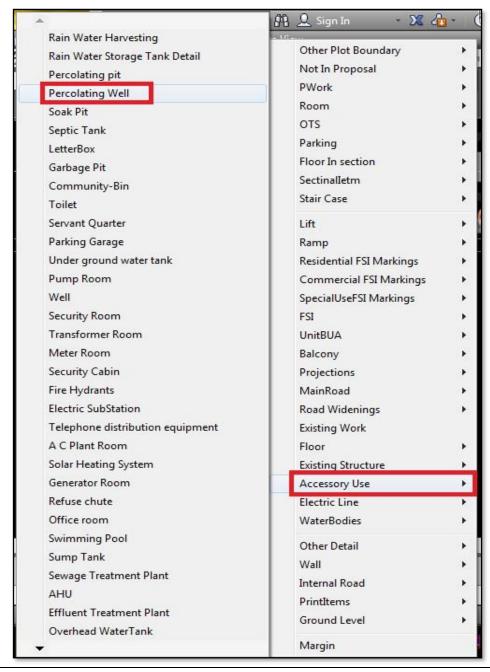
Go to **CivitPlan**-Draft → Mark → Accessory use → Rain water harvesting → Enter the storage tank capacity.

Select the poly and enter.

Go to **CivitPlan**-Draft→Mark→Accessory use→ Rain water storage tank→Enter storage tank capacity.

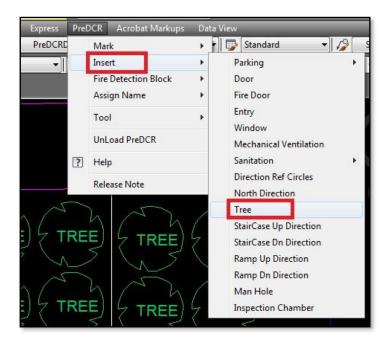
Select the poly and enter.

Go to CivitPlan-Draft→Mark→Accessory use→percolating well



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7) Go to CivitPlan-Draft→Insert→ Tree.
Give specific insertion point for the tree as per drawing.



8) Select '_PropWork' layer: PWork is a building profile and shall be drawn inside plot. Draw a closed polyline for Proposed Work on "_PropWork" Layer.

Dimension Ref Circle inside PWork poly at the same point as in Floor poly.

9) To link building plan to Pwork.

Go to CivitPlan-Draft menu-→ Assign name→ Building and Propwork.

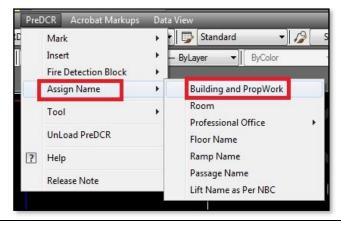
Select 'Building poly' in drawing.

Pls fill up the 'Building and Propwork Name' dialog box:

Fill up 'Wing Name' and 'Building Name'

Select Propwork in the drawing.

It will link the building plan to Pwork.

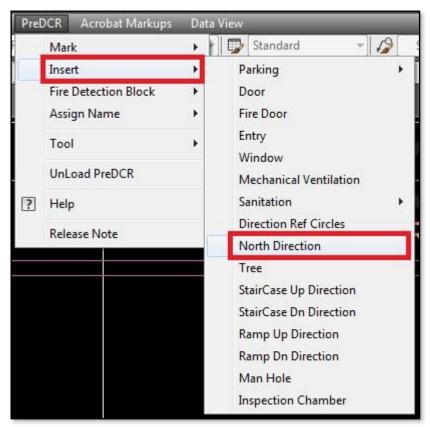


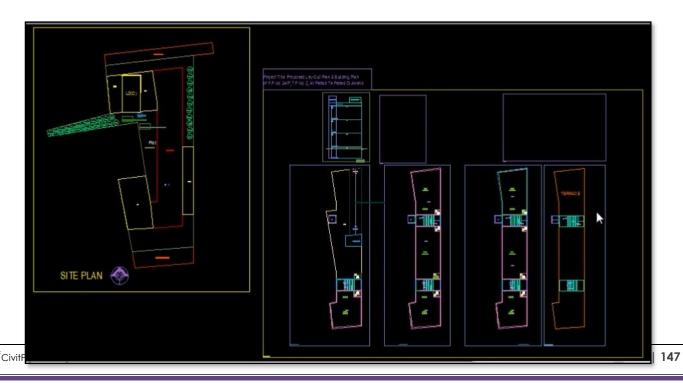


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Follow the same linking process to link the other building plan to respective Pwork .

- 10) Select '_SitePlan' Layer: The encapsulating poly around the Site/Key Plan with the 'MText' it.
- **11) North Direction:** Insert North Direction in Drawing
 Go to **CivitPlan**-Draft menu, choose 'Insert' from the drop down and select 'North Direction





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Let's go to the next tab of the CivitPlan-Draft toolbar:

1) Fix Poly:

Use this command once on the final drawing which will process all the polylines on the **CivitPlan**-Draft 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.

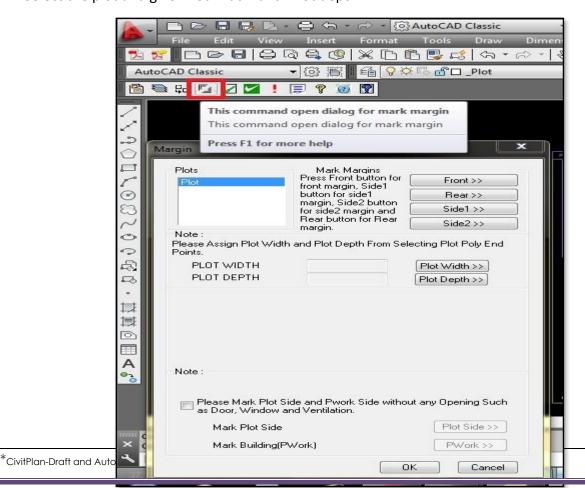


2) Mark Margin:

It open 'Margin table'

Sect 'Front'/'Side1'/'Side2' and 'Rear' side in the drawing. Once done select Ok.

Select the plot and give 'Plot width' and 'Plot depth.



3) Verify close Poly:

This command will verify the current drawing as required by CivitPlan. It will verify that

LWPOLYLINE entities on the selected layers are closed and contain one text.

Shows 'Select layer box' select 'Ok'.



4) Verify the Current Drawing:

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.

Select 'OK' in Entity not found list dialog box.



CivitPlan-Draft 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.

5) Show Objection List:

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.



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6) Show CivitPlan-Draft Report:

In Plot details dialog box select in case of any deduction for road widening area, reservation area, existing road area. Verify plot use and plot sub use.



If all the details are found correct pleas select 'OK'.

In Building details table verify all the buildings by selecting each one of them. Select Ok.

In Floor details table verify all the floors by selecting each one of them. Select Ok.

This command will generate the **CivitPlan**-Draft Report having all the Project details. All the verified and failing entities having Information will be shown in this Report.

