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The following information is subject to change.

Overview

The IDS Revit Architectural project model has been developed as an integrated design system. The model has standardized text, dimensions, line styles, worksets, defined phases, view types, predeveloped views, and sheets, as well as a well-organized project browser, view templates, and filters. Visibility control of elements within linked Mechanical, Electrical, and Structural models has also been built into the project model. This integrated design system has been developed to the IDS standards and has automated many of the design and documentation processes. The purpose of this document is to give individuals developing projects within the IDS Revit Architectural project model a thorough understanding of the model and the IDS standards incorporated in it as well as the IDS processes. Due to the tight integration and standardization, it's essential that everyone working within the IDS Revit Architectural project model fully understand it and follow the standards and guidelines outlined within this document. Deviating from it will have adverse effects on not only the Architectural project model, but the other discipline project models as well.

Revit models are a virtual representation of an existing or new building as it will be in the future. When the building design has more than one construction phase, either successive or concurrent, one or more phases are implemented within the Revit project models to control the visibility of building elements throughout the design and documentation process. The IDS Revit Architectural project model has been developed with five phases named Existing, New Construction, New Construction (A), New Construction (B), and New Construction (C). The last three phases were developed as placeholders for possible future phases of design. Each of the five phases have predeveloped views with assigned view templates to kick-start the design process. The last three phases have predeveloped views with the prefix (A), (B), and (C), respectively. Views of the New Construction phase initially do not have a phase prefix. However, a prefix indicating the phase may be added to these views if the project becomes multi-phased.

At the beginning of a project, typically only the Existing and New Construction phase views are used in the development of the building design. Views predeveloped within any of the three additional phases should not be used in this case. If the project becomes multi-phased, the BIM Coordinator will work with the design team to rename the New Construction (A) phase, and any other phase, if necessary to indicate the purpose of the phase as well as change the prefix of the views, sheets, and other elements of the project as necessary.

Graphic Standards

Many of the IDS Graphics Standards have been built into IDS Revit Architectural project model so that there is a consistent appearance and method to creating projects.

Text Styles

The following is the list of IDS Standard Text Styles. Do not modify these text styles or create new text styles.

IDS Standard Text Styles:

- | | |
|--|---|
| • 0.09375 3/32" Arial Narrow (Opaque) | This style is used when the text must not be blocked by other elements. |
| • 0.09375 3/32" Arial Narrow (Transparent) | This style is the default used for most text strings. |
| • 0.09375 3/32" Arial Narrow (Working Text) | This style displays red and is used to indicate that the text requires review for use in the project. This text style is used as a temporary style as well as to aid in detailing and should be changed to either 0.09375 3/32" Arial Narrow (Opaque) or (Transparent) once it has been reviewed for accuracy in the project. |
| • 0.12500 1/8" Arial Narrow | This style is used for subtitles of notes, schedules, etc. |
| • 0.25000 1/4" Arial Narrow | This style is used for titles of notes, schedules, etc. |

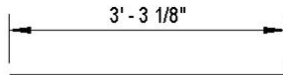
The following text styles are used exclusively for Design Presentation views:

- DP 0.09375 3/32" Arial - Black
- DP 0.09375 3/32" Arial - Gray
- **DP 0.09375 3/32" Arial - Red**
- DP 0.12500 1/8" Arial – Black
- DP 0.12500 1/8" Arial – Gray
- **DP 0.12500 1/8" Arial – Red**
- DP 0.25000 1/4" Arial - Black
- DP 0.25000 1/4" Arial - Gray
- **DP 0.25000 1/4" Arial – Red**

Dimension Styles

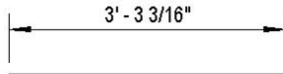
The following is a list of IDS Standard Dimension Styles. Do not modify them or create new dimension styles. If views are loaded into the model that contain dimensions that use dimension styles other than those listed below, the dimension style should be changed to one listed below and the loaded dimension style should be purged from the project model. Only use the 3/32" Arial Narrow (1/8" Precision) or 3/32" Arial Narrow (1/16" Precision) dimension styles for Construction Documentation. The three other dimension styles are used as a temporary style or to aid in detailing and should be changed to either 3/32" Arial Narrow (1/8" Precision) or 3/32" Arial Narrow (1/16" Precision).

IDS Standard Dimension Styles:



Linear - 3/32" Arial Narrow (1/8" Precision)

The default linear dimension style. Used for all plans, elevations, sections and details with the exception of casework.



Linear - 3/32" Arial Narrow (1/16" Precision)

Used for plans, elevations, sections and detailing of casework.



Linear - 3/32" Arial Narrow (Working)

This style displays red and is used to indicate that the dimension requires review for use in the project. This dimension style is used as a temporary style as well as to aid in detailing and should be changed to either

Linear - 3/32" Arial Narrow (1/8" Precision) or

Linear - 3/32" Arial Narrow (1/16" Precision).

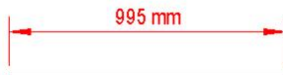


Linear - 3/32" Arial Narrow (1/16" Precision - Fractional Inches)

This style displays red and is used to indicate that the dimension requires review for use in the project. This dimension style is used as a temporary style to aid in detailing for coordination with manufacturer details and shop drawings and should be changed to either

Linear - 3/32" Arial Narrow (1/8" Precision) or

Linear - 3/32" Arial Narrow (1/16" Precision).



Linear - 3/32" Arial Narrow (Metric)

This style displays red and is used to indicate that the dimension requires review for use in the project. This dimension style is used as a temporary style to aid in detailing for coordination with manufacturer details and shop drawings and should be changed to either

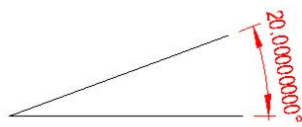
Linear - 3/32" Arial Narrow (1/8" Precision) or

Linear - 3/32" Arial Narrow (1/16" Precision).



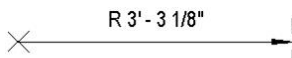
Angular - 3/32" Arial Narrow

The default angular dimension style. Set to a two decimal precision.



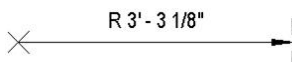
Angular - 3/32" Arial Narrow (Working)

This style displays red and is used to indicate that the dimension requires review for use in the project. This dimension style is used as a temporary style. Once the dimension is verified, it should be deleted or changed to changed to Angular - 3/32" Arial Narrow.



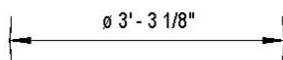
Radial - 3/32" Arial Narrow

The default radial dimension style set to a 1/8" precision.



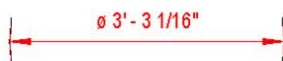
Radial - 3/32" Arial Narrow (Working)

This style displays red and is used to indicate that the dimension requires review for use in the project. This dimension style is used as a temporary style. Once the dimension is verified, it should be deleted or changed to changed to Radial - 3/32" Arial Narrow.



Diameter - 3/32" Arial Narrow

The default radial dimension style set to a 1/8" precision.



Diameter - 3/32" Arial Narrow (Working)

This style displays red and is used to indicate that the dimension requires review for use in the project. This dimension style is used as a temporary style. Once the dimension is verified, it should be deleted or changed to changed to Diameter - 3/32" Arial Narrow.

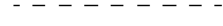
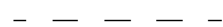
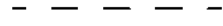
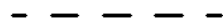
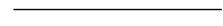
Line Styles

The IDS Standard Line Styles are illustrated below. The naming convention consists of a double or single period prefix, the name of the line pattern, and the line weight. The double or single period prefix lists them before the out-of-the-box line styles. The IDS Standard Line Styles are the required line styles used for design and detailing over the out of the box line styles.

Do not use any line style with left/right angle brackets <> as prefix/suffix in its name. These line styles are Revit system line styles used to represent certain elements in a specific way. The one exception is the <Invisible lines> line style found when editing Filled Regions, In-place families, and in some loadable families, e.g., Detail Items.

Do not modify the IDS Standard Line Styles and do not create new line styles or line patterns.

IDS Standard Line Styles:

	..Center 1/4 01
	..Center 1/8 01
	..Dash 1/16 01
	..Dash 1/16 02
	..Dash 1/16 03
	..Dash 1/16 04
	..Dash 1/16 05
	..Dash 1/8 01
	..Dash 1/8 02
	..Dash 1/8 03
	..Dash 1/8 04
	..Dash 1/8 05
	..Dash Double 1/32 01
	..Hidden 1/8 01
	..Solid 01
	..Solid 01 Gray
	..Solid 01 Red
	..Solid 02
	..Solid 03
	..Solid 03 Gray
	..Solid 03 Red
	..Solid 04
	..Solid 05
	..Solid 05 Gray
	..Solid 05 Red
	..ADA Clearances
	..Construction Line
	..Control Joint
	..Demo Annotation
	..Elevation Control Joint
	..Elevation Grade Line
	..Elevation Outline
	..Wall Fire Rated 1 HR
	..Wall Fire Rated 2 HR
	..Wall Fire Rated 3 HR
	..Wall Fire Rated 30 MIN.
	..Wall Smoke Tight Partition

Note: The .Wall Fire Rated 3 HR and .Wall Fire Rated 30 MIN. are rarely used together within the same project. Consult the project BIM Coordinator if the project requires both.

Worksets

The following list of worksets are used to divide elements into logical groups so that when a workset is turned on or off, within a given view, the elements placed on the respective workset will be visible or not visible depending on the workset visibility setting. This process is used on the linked models as well. The visibility settings of the host model and linked models worksets are controlled by the View Templates of the Architectural project model. IDS has developed a comprehensive set of worksets that work well within the A/M/E project models. This development conforms to the IDS Standards for Construction Documentation. Do not create any workset for any reason without first consulting with Project BIM Coordinator. Creating worksets without consulting with Project BIM Coordinator first will have an adverse impact on the Architectural project model as well as the Mechanical and Electrical project models.

IDS Standard Worksets:

- **Architectural** Used to model walls, curtain walls, doors, windows, and other building elements that make up the building model. Also, include rooms and room separation lines on this workset.
- **Architectural Rendering** Used to place entourage and materials for renderings. This workset is turned off in all Documentation views except for Interior Elevations views.
- **Electrical** Used to place all Architectural light fixtures for renderings. Once the electrical department has placed light fixtures in their model, this workset can be turned off. This workset is turned off in all Documentation views except for Ceiling Plans and Enlarged RCP views.
- **Finish - Floors** Used to model the finish flooring for the building. This workset is turned off in all Documentation views except for the Finish Plan views.
- **Finish - Walls** Used to model the wall finish for the building. The walls are placed in front of constructed walls. Line work may also be included. This workset is turned off in all Documentation views except for Interior Elevation views.
- **Furniture** Used to place chairs, tables, and other types of furniture. This workset is turned off in all Documentation views except for Furniture views.
- **Mechanical** Used to place all Architectural air terminals for renderings. Once the Mechanical department has placed air terminals in their model, this workset can be turned off. This workset is turned off in all Documentation views except for Ceiling Plans and Enlarged RCP views.
Note: Plumbing fixtures should be placed on the Architectural workset.
- **Programming Massing** Used for modeling massing elements during the programming phase of the project.
- **Site** Used to place elements residing outside, but not attached to the building, e.g., canopies, dumpster screening, seating area elements, etc. This workset is turned off in all Documentation views except for the Site Plan views.
- **Structural** Used to model the existing structural elements of the building that may or may not be models in the structural model proper.
- **zLink ACAD** Link all drawings on this workset.
- **zLink Electrical** The Electrical model is linked onto this workset.
- **zLink Mechanical** The Mechanical model is linked onto this workset.
- **zLink Structural** The Structural model is linked onto this workset.
- **zMatchline** Used for the building matchlines. On some projects, matchlines may be in different locations in different models.
- **zShared Levels and Grids** Used for all levels and column grids.

Worksets with a prefix of z are common to the A/M/E models. These are secondary worksets used for linked AutoCAD drawings and Revit models, as well as datum elements, e.g., levels, grids, and matchlines within the host model.

Naming Conventions

Autodesk Construction Cloud Project and Project Folder

BIM 360 has been rebranded as Autodesk Construction Cloud (ACC). The naming convention of ACC projects is typically the name of the client. The name of the client may be followed by a four digit number in parenthesis that indicate the version of Revit used for the project. In some cases, within the project files folder there are one or more folders representing a client building. For example, Utica Community Schools (2023) is an ACC project, and within the project files folder is Beacon Tree Elem where all of the Revit project models are located.

Revit Architectural Model

The Revit model naming convention is the name of the client, the name of the building followed by a hyphen and two digits indicating the version of Revit used for the project. For example, Baker Tilly 1000 Town Center-A23. Baker Tilly is the client's name. 1000 Town Center is the building's name.

When the client and/or building name is long, the Revit model naming convention is to use abbreviation when appropriate. For example, VBPS McBride MS-A23. VBPS is the abbreviation for the client's name Van Buren Public Schools. McBride MS is the building name with MS as the abbreviation for Middle School.

Revit Views

The naming convention for views that are placed on sheets is to capitalize the entire view name. For example, FIRST FLOOR NEW WORK PLAN. The predeveloped views in both the Design Presentation and Documentation categories of the Project Browser are capitalized and can be placed on sheets. Most view names of the predeveloped Legends and Schedules are capitalized as well. When a view's Title on Sheet parameter is used, the value entered should be capitalized as well as the view name. Views that are not designated to be placed on sheets only have the first letter of each word in the view name capitalized. For example, First Floor New Work . All views created by the design team should follow this naming convention.

The information below relates to views designated for the New Construction phase of the project. These views initially do not have a prefix indicating a phase. See [Naming Convention for Multi-Phased Projects](#) below for information about the use of prefixes for views in a multi-phased project.

Coordination Views

Predeveloped Floor and Ceiling Plan views within the Coordination Category are named by the associated level and the view Sub-Category either Demolition or New Work. For example, First Floor New Work. Coordination Views are not designated to be placed on sheets and should only have the first letter of each word in the view name capitalized.

Plan Views - Documentation

Floor and Ceiling Plan views within the Documentation Category are named by the associated level and the view Sub-Category followed by the word PLAN. For example, FIRST FLOOR NEW WORK PLAN. If the floor plans are set up as areas, add a suffix AREA followed by the name of the area. For example, FIRST FLOOR NEW WORK PLAN AREA A.

Enlarged Plan Views

Enlarged Plan views have the prefix ENLARGED PLAN - followed by the view location or room name(s) and, in some cases, number(s). For example, ENLARGED PLAN - KITCHEN 131. However, Enlarged Toilet Rooms are named ENLARGED TOILET ROOM PLAN - followed by the view location and/or room number(s). For example, ENLARGED TOILET ROOM PLAN - 158.

Legend

Legends can only be listed alpha-numerically in the Project Browser. Therefore, IDS has established a naming convention to organize legends in a manner that makes it easy to identify their use as well as the sheet phase they belong to. The naming convention consist of a sheet number, a hyphen followed by the intended use of the view. For example, A1 - LEGEND - DEMOLITION PLAN.

Schedules

The schedule naming convention varies depending on the use of the schedule. Schedules in the four New Construction Schedule Groups have a naming convention consisting of a sheet number, a hyphen followed by the intended use of the view. For example, A9.1 - SCHEDULE - ROOM FINISH.

Sheets

Refer to [Predeveloped Architectural Sheets.pdf](#) for a complete list.

Naming Convention for Multi-Phased Projects

As stated previously, Revit models are a virtual representation of an existing or new building as it will be in the future. When the building design has more than one construction phase, either successive or concurrent, one or more phases are implemented within the Revit project models to control the visibility of building elements throughout the design and documentation process. The IDS Revit Architectural project model has been developed with five phases named Existing, New Construction, New Construction (A), New Construction (B), and New Construction (C). The last three phases were developed as placeholders for possible future phases of design. Each of the five phases have predeveloped views with assigned view templates to kick-start the design process. The last three phases have predeveloped views with the prefix (A)., (B)., and (C). respectively. Views within the New Construction phase do not have a phase prefix unless the project becomes a multi-phased, and a prefix has been added to identify the phase the views represent.

Note: The prefixes (A), (B), and (C) are placeholder values that should be changed when a project becomes multi-phased.

At the beginning of a project, typically only the Existing and New Construction phase views are used in the development of the building design. Views predeveloped within any of the three additional phases should not be used unless the project becomes multi-phased. If the project becomes multi-phased, the BIM Coordinator will work with the design team to rename the New Construction (A) phase, and any other phase, if necessary to indicate the purpose of the phase as well as change the prefix of the views, sheets, and other elements of the project as necessary.

Additional views, sheets, and view templates have been created that are associated to these placeholder phases. Because the actual phase name of the views, sheets, and view templates is typically not known prior to the start of a project, a naming convention was established to distinguish these additional views, sheets, and view templates of one phase from the other phases.

Phases

Initially phases are named Existing, New Construction, New Construction (A), New Construction (B), and New Construction (C). When a project becomes multi-phased, typically, there are two scenarios to rename the phases.

In the two scenarios below, the first project is named Media Center Reno, and the second project is named STEM.

Scenario 1

The New Construction phase views have been developed and New Construction sheets have been formally issued for the project named Media Center Reno. Later, prior to the completion of the Media Center Reno project, a second separate project is contracted named STEM.

The following tasks would take place:

- No changes would be made to the name of the New Construction phase or any of the associated views or sheets.
- The New Construction (A) phase would be renamed to 1-STEM.
- The views associated to the phase 1-STEM would be renamed replacing the prefix (A) with a 1.
- The sheets associated to New Construction (A) Sheet Phase parameter would be reassigned as 1-STEM.
- The sheets would be renumbered replacing the prefix (A) with a 1.

The procedure utilized in Scenario 1 can be repeated for subsequent phases/projects within the project model.

Scenario 2

The New Construction phase views have been developed, but New Construction sheets have not had any formal issuances for the project named Media Center Reno. A second separate project is contracted named STEM.

The following tasks would take place:

- The New Construction phase would be renamed to 1-Media Center Reno.
- The views associated to the 1-Media Center Reno phase would be renamed adding the prefix 1 followed by a period.
- The sheets associated to New Construction Sheet Phase parameter would be reassigned as 1-Media Center Reno.
- The sheets would be renumbered adding the prefix 1 followed by a period.
- The New Construction (A) phase would be renamed to 2-STEM.
- The views associated to the 2-STEM phase would be renamed replacing the prefix (A) with a 2.
- The sheets associated to New Construction (A) Sheet Phase parameter would be reassigned as 2-STEM.
- The sheets would be renumbered replacing the prefix (A) with a 2.

The procedure utilized in Scenario 2 can be repeated for subsequent phases/projects within the project model.

The process of properly renaming and setting up phases, views, and sheets can be automated by using Dynamo. Contact the BIM Coordinator for assistance.

Predeveloped Views

For the three placeholder phases of the project:

- The naming convention for plan, section, elevation, 3D, and drafting views is a prefix consisting of either (A), (B) or (C) followed by a period. For example, (A).FIRST FLOOR NEW WORK PLAN.
- The naming convention for schedules developed for placement on project sheets is the same as above.
- The naming convention for legends developed for placement on project sheets is the same as above with the addition of a dot as the first character of the prefix, e.g., ·(A). added as a prefix to the names of the legends. The dot is a unique character that sorts the legends, in the Project Browser, after the legends used for the New Construction phase of the project. For example, ·(A).A1 - LEGEND - DEMOLITION PLAN.

There is a second group of legends that has a dot prefix, that is listed after the previous legends. These legends are placed on multiple sheets, once for each of the four phases of the predeveloped sheets.

- The naming convention for annotation families used for Key Noting is the family name, a space and a suffix consisting of either NC, NC(A), NC(B) or NC(C). NC is the abbreviation for New Construction. For example, IDS_Anno - Keynote A1 - Demo NC.
- The naming convention of view templates is the view template name, a space and a suffix consisting of either NC, NC(A), NC(B) or NC(C). NC is the abbreviation for New Construction. For example, IDS DOC OVERLAY - DEMO ROOM TAGS NC.

If the project becomes multi-phased, the naming convention utilized above should be implemented.

Revit Models

Unless otherwise agreed to, only one Revit model will be maintained per design discipline. For example, one Architectural, one Mechanical, one Electrical, and one Structural model, etc. All relevant discipline specific design data will be maintained in these models.

For existing buildings, the existing structural is normally developed within the Architectural model. Typically, the Civil design is developed utilizing Civil 3D or AutoCAD. Depending on the scope of the project, additional Revit models may be required.

Autodesk Construction Cloud (ACC) - BIM 360

All Revit models and AutoCAD drawings relevant to the project are to be maintained on the Autodesk Construction Cloud (ACC) also referred to as ACC. IDS will maintain the ACC project site. If the client has multiple buildings that have been or are in design, each building will have its own subfolder within the ACC project.

Once the Revit project models have been placed on the ACC, the models should not be replaced with a different model. Replacing a model will cause it to no longer be linked into any of the other models within the project even if the model has the exact same name.

File Linking

All Revit models and Autodesk drawings must first be placed on ACC before linking them into any Revit model on ACC.

In the architectural project model, there are three Revit models, IDS Electrical-E23 (DO NOT REMOVE), IDS Mechanical-M23 (DO NOT REMOVE), and Structural (DO NOT REMOVE), used as placeholder models for the development of Construction Document. When a consultant model, such as Structural, needs to be linked into the Architectural project model, do not link the model using the Link Revit function. Select the Structural (DO NOT REMOVE) placeholder model from the list of linked models, then use the Reload from option and select the project Structural model placed on ACC.

When linking either Revit models or Autodesk drawings, first set the proper [Workset](#). Typically, all Autodesk drawings are placed on the zLink ACAD workset. However, each linked Revit model requires its own workset so that if needed, the workset can be turned off, thus turning off the visibility of the linked model or unloading the linked model during the Open model process. The workset naming convention for linked models is zLink <Discipline>. For example, zLink Food Service.

Unless otherwise directed, when linking a Revit model, use the Auto - Internal Origin to Internal Origin for Positioning field.

Always link Autodesk drawings. Never import them into a Revit project model. When linking an Autodesk drawings, use the Black and White option for the Colors field.

Project Dashboard

The Project Dashboard is the Starting View for the Revit Architectural project model. The Project Dashboard contains several schedules such as the Building Levels and Project Drawing Lists, to assist in maintaining a coordinated project. It also contains schedules that track deviations to some of the IDS Standards. The Building Levels schedule is an exception. It lists all levels from all of the models. It displays the workset name as red of any level that is not zShared Levels and Grids. This naming convention is an IDS standard that is not required to be followed within the non IDS models.

Project Dashboard Schedules

- | | |
|---|---|
| <ul style="list-style-type: none">• Building Levels• Project Drawing List For The New Construction Sheet Phase | <p>Lists all levels in the Architectural model as well as all linked models.</p> <p>Lists all sheets of the Architectural and linked models for the New Construction phase.</p> |
|---|---|

If any entries appear in red in any of the following schedules, they should address immediately.

- | | |
|---|--|
| <ul style="list-style-type: none">• Views in the ASSIGN VIEW TEMPLATE OR DELETE Category• Non-Documentation or Design Presentation Views Placed On A Sheet• Views, Other Than -User, Named With "Copy"• Plan Views Whose Type Have Been Changed• Grids On An Incorrect Workset• Rooms - <Phase> Not on the Architectural Workset• Rooms - <Phase> Not Enclosed, Not Placed or Redundant | <p>Lists view(s) created and automatically placed in the .ASSIGN VIEW TEMPLATE OR DELETE Category of the Project Browser. These views should be applied with the proper View Template that corresponds to each view or the view(s) should be deleted if no longer needed.</p> <p>Lists view(s) that has been placed on any sheet that is not a Documentation or Design Presentation view.</p> <p>Lists view(s)</p> <p>Lists Plan View(s) whose view type has been changed. Typically, the change is to Enlarged Plan.</p> <p>Lists grids placed on worksets other than zShared Levels and Grids.</p> <p>Lists room(s) of <Phase> that are not on the Architectural Workset.</p> <p>Lists any room of <Phase> that is not enclosed by walls or room separation lines, created in a Room Schedule, but not placed in the model view or was created in the model and was deleted, but not deleted from a Room Schedule or the Room element was placed multiple times.</p> |
|---|--|

Note: <Phase>, shown above, indicates any of the phases of the project. At the beginning of the design, <Phase> refers to the Existing, New Construction, New Construction (A), New Construction (B), and New Construction (C) phases. The names of the phases may change as the project(s) within the model are developed.

Project Browser Organization - Views

Views are grouped in the Project Browser by Phase, Category, Family and Type, and Sub-Category parameters. Then sorted by Level.

- **Phase** There are five phases named Existing, New Construction, New Construction (A), New Construction (B), and New Construction (C). Unless mandated otherwise, the New Construction phase will be the primary work phase within the project model. All New Construction plan, elevation, section views, etc. reside in this phase within the Project Browser.
Note: Drafting views are not phased and therefore reside in a ??? folder within the Project Browser.
- **Category** Design views are placed in Categories based on the purpose of the view. There are five primary categories:
 - .ASSIGN VIEW TEMPLATE OR DELETE category is a temporary location where some new views are placed. It is not a permanent location for them. Applying a different view template to a view in this category will move it into a different category of the Project Browser and help in maintaining a well-organized project.
 - Coordination category are views used to review the building design. A Coordination view displays most elements within the range of the view, while the Documentation views are filtered to display the elements relative to the view's Sub-Category. Coordination views should not be placed on any sheets.
 - Design Presentation category are views created for placement on Design sheets.
 - Documentation category contains views created for placement on the Construction Documents sheets.
 - ·User <User Initials> category is specific to individual user. See [User Views](#) for more detail.
- **Family and Type** This groups the views by their Family Types, e.g., Floor Plans, Ceiling Plans, Elevations, etc.
- **Sub-Category** The Sub-Categories designates views by their intended purpose.
 - The Coordination Category, the Sub-Category of views are classified as:
 - Demolition
 - New Work
 - The Documentation Category, the Sub-Category of views are classified as:
 - Composite
 - Demolition
 - Finish
 - Furniture
 - Life Safety
 - New Work
 - Signage
 - Site
 - ·Demolition Room Tag Overlay For NC Sheets.

Levels

To accelerate the design process, the IDS Architectural project model has been developed with twelve levels - Basement, First Floor through Tenth Floor, and Roof. With the exception of the Roof Level, each level has at least 57 plan views associated to it. These views have been developed for each of the phases, categories, and sub-categories of the project.

Most IDS projects are one or two story buildings. For buildings that have fewer than ten stories, the unused levels should be deleted. By deleting these levels, all views associated to the deleted levels will automatically be deleted as well. The plan views associated to the Roof Level have been set up with View Templates specifically for the different types of Roof Plans. Do not delete the Roof Level, then rename another level to be the Roof Level. Instead, use the Roof Level as intended and change its elevation appropriately.

When creating levels used to indicate building elements such as Top of Steel, uncheck the Make Plan View option from the Option Bar and deselect the Building Story option from the Properties pallet. Make sure that the level is placed on the zShared Levels and Grids workset.

The length of the level lines should extend past the exterior of the building.

As levels are developed or modified, coordinate with the other disciplines early in the design process to ensure that the levels are accurate across all models.

View Types

There are several types of plan, elevation, and section views that have been developed within the IDS Architectural Revit project model. Each of these view types have been configured to show or hide specific types of elements based on IDS Standard for Construction Documentation. The Documentation view types have also been configured to only display enlarged plan, elevation, and section symbology based on the view template assigned to the view type.

For example, in the FIRST FLOOR NEW WORK PLAN view, all elevation types other than Interior and Exterior will be hidden. While in an Enlarged Plan Toilet Room view, all elevation types other than Enlarged Plan Toilet Room will be hidden. If a specific elevation type is placed in a plan view that has that type of elevation hidden, the elevation will be created, but the elevation symbology will not be visible in the plan view. This functionality follows the IDS standard for view creation as well as saving time as a user does not have to manually select these elevations/sections symbols in several views and hide them. Even though elevations and sections may be hidden in some Documentation views, all elevations and sections created in a given Documentation Floor/Ceiling Plan will be displayed in the corresponding Coordination Floor/Ceiling Plan views. Refer to [Workflow of Revit IDS View Types - Ver 3.pdf](#) for an illustration of what view types are visible in the other view types.

User Views

Before discussing the other view types, the User View category and User Views should be discussed. The User View category and User Views were developed to give users the ability to create their own views and to control the visibility of elements within these views.

User Views can be used to analyze the building design to locate and correct design and coordination issues that may not be apparent in Coordination and Documentation views. All visibility settings within a User View are controlled by the user via the view's Visibility Graphics Overrides, not by a view template like other view types within the project model. The User View Template will place the User Views in the category of ·User <User Initials>. This groups all User Views in one area of the Project Browser. Because the Project Browser is organized by Phase then by category, User Views of different phases will be placed in separate phases of the Project Browser, then in a ·User category. This means that User Views can be located in multiple areas of the Project Browser.

User Views can be plan, elevation, section and/or 3D views. A project model can contain many User Views of a single user or several users. Each IDS user has their own User View category. For example, ·User JDB.

There are two ways to create a User View:

- Duplicate a view and change its View Template to a User View - View Template. This will move the view to the ·User View category and all view settings are now controlled by Visibility Graphic settings of the view.
- that were set by the previous view template.
- Create a section and select a User View type from the Type Selector.

Note: User sections should not be created in any Design Presentation or Documentation view. The section will be created; however, it will not be visible in these view categories.

Do not place the User View on a sheet. User Views do not conform to the IDS Standard for Construction Documentation. If a User View is placed on a sheet, it will be listed in the Project Dashboard-Non-Documentation or Design Presentation Views Placed On A Sheet schedule of the Project - Dashboard. The view should be removed for the sheet as quickly as possible.

Plan Views

As stated previously, there are predeveloped plan views to help kick-start the design process. These views have View Templates applied to them that control the visibility of the elements and location within the Project Browser.

Additional plan views are created in two ways:

- From the Project Browser, right-click on the view and select Duplicate View, then select either Duplicate or Duplicate with Detailing. The Duplicate as a Dependent function should not be used as there are issues with this function. When a Plan View is duplicated, the new view has the same view properties as the view it was duplicated from. If the new view needs to be designated as a different Sub-Category, change the view's View Template. For example, duplicating the FIRST FLOOR NEW WORK PLAN, then changing its View Template to IDS DOC FLOOR PLAN - FINISH would move the view to the Documentation > Floor Plans > Finish Sub-Category of the Project Browser and change the view's visibility properties to those of the Sub-Category Finish.
- From the View ribbon > Plan View > Floor Plan or Reflected Ceiling Plan function. When using the New Floor Plan function there are several Enlarged Plan types listed. For this function to work properly, select Floor Plan from the Type list. For Ceiling Plans, select Ceiling Plan from the Type list. If an enlarged plan is needed, create an Enlarged Plan using the Callout function. If the view needs to be designated as a different Sub-Category, change the view's View Template.

Note: When using this method, the view will most likely be set to the New Construction (C) phase or the last phase established within the project. If this is the case, change the phase of the view as required. The view will also be placed in the .ASSIGN VIEW TEMPLATE OR DELETE category of the Project Browser. Change the view's view template according to the purpose of the view. This will move it from the .ASSIGN VIEW TEMPLATE OR DELETE category to one specified by the View Template. The .ASSIGN VIEW TEMPLATE OR DELETE category is meant as a temporary location where some new views are placed. It is not a permanent location for them. Applying a different view template to a view in this category will move it into a different category of the Project Browser and help in maintaining a well-organized project.

Do not change the view type of a Floor Plan to an Enlarged Plan or Enlarged RCP regardless of the method used to create it. A Floor Plan should remain a Floor Plan view type and a Ceiling Plan should remain a Ceiling Plan view type. If an Enlarged Plan is needed, then from a Composite Plan or other Floor/Ceiling Plan, create a Callout and select one of the Enlarged Plan view types from the Properties Type Selector.

Enlarged Plans (Callout)

Enlarged Plans are created in Composite or Floor/Ceiling Plans using the Callout function. Enlarged Plan types have been developed for placement in specific Floor/Ceiling Plan types outlined below. These view types have View Templates applied to them that control the visibility of the elements and location within the Project Browser. However, there are two types, Floor Plan and Ceiling Plan, that are the default out-of-the-box view types used for creating Plan views and therefore should never be used to create an Enlarged Plan view.

Enlarge Plan View types:

Place in:

- | | |
|----------------------------------|--|
| • Enlarged Plan Casework | Casework Plan views. |
| • Enlarged Plan Demo | Demo Plan views. |
| • Enlarged Plan Life Safety | Life Safety Plan views. |
| • Enlarged Plan Roof | Roof Plan views. |
| • Enlarged Plan Stair / Elevator | Stair / Elevator Plan views. |
| • Enlarged Plan Toilet Room | New Work Plan views. |
| • Enlarged Plan Toilet Room TYP | New Work Plan views using the Reference Other View option. |
| • Enlarged RCP | Reflected Ceiling Plan views. |

Refer to [Workflow of Revit IDS View Types - Ver 3.pdf](#) for an illustration of what view types can be created in the other view types.

Elevations

There are several types of Elevations. Each Elevation Type has been developed to be placed in a specific Floor/Ceiling Plan Type. The Elevation's symbology will only be displayed in the Floor/Ceiling Plan view type it was developed for. If an Elevation Type is placed in an incorrect Floor/Ceiling Plan view type, the Elevation View is created, but the Elevation Symbology will not be displayed in the Floor/Ceiling Plan view it was created in.

While there are several types of Elevations, there are two Categories of Elevations. Plan Elevations and Enlarged Plan Elevations. Enlarged Plan Elevations have a • dot prefix to separate them from the Plan Elevation types in the Elevations Type drop-down list. Plan Elevations are meant to be placed only in Floor Plan views. While Enlarged Plan Elevations are meant to be placed only in Enlarged Floor Plan views.

If a Plan Elevation is placed in an Enlarged Floor Plan view, the Elevation View is created, but the Elevation Symbology will not be displayed in the Enlarged Floor Plan view. Likewise, if an Enlarged Plan Elevation placed in a Floor Plan view, the Elevation View is created, but the Elevation Symbology will not be displayed in the Floor Plan view.

Elevation Types:

- | | |
|--|---|
| • Elevation Plan View types: | Place in: |
| ○ Casework | Casework plan views. |
| ○ Curtain Wall | Plan views. The elevation type is used to create elevation views of curtain walls but does not display the elevation symbology in any Documentation view. |
| ○ Demo | Demolition plan views. |
| ○ Design Presentation | Design Presentation plan views. |
| ○ Exterior | Exterior plan views. |
| ○ Interior | Interior plan views. |
| ○ Roof | Roof plan views. |
| ○ Signage | Signage plan views. |
| • Enlarged Plan Elevations View types: : | Place in: |
| ○ •Enlarged Plan | Floor Plan views. Use this type when the below types do not apply. |
| ○ •Enlarged Plan Casework | Casework Enlarged plan views. |
| ○ •Enlarged Plan Demo | Demolition Enlarged plan views. |
| ○ •Enlarged Plan Roof | Enlarged Roof plan views. |
| ○ •Enlarged Plan Toilet Room | Enlarged Toilet Room plan views. |

Refer to [Workflow of Revit IDS View Types - Ver 3.pdf](#) for an illustration of what view types can be created in the other view types.

Sections

There are several types of Sections. Each Section Type has been developed to be placed in a specific Plan, Elevation, and Section View Type. The Section's Symbolology will only be displayed in the View Type it was developed for. If a Section Type is placed in an incorrect View Type, the Section View is created, but the Section Symbolology will not be displayed in the Plan, Elevation, and Section View Type it was created in.

Section View types:	Place in:
• Building	Composite Floor/Roof Plan views.
• Casework	Casework Elevation and Enlarged Plan Casework views.
• Ceiling	Reflected Ceiling Plans, Enlarged RCP, and Interior Elevation views.
• Ceiling SIM	Reflected Ceiling Plans, Enlarged RCP, and Interior Elevation views using the Reference Other View option.
• Ceiling TYP	Reflected Ceiling Plans, Enlarged RCP, and Interior Elevation views using the Reference Other View option.
• Demo	Enlarged Plan Demo Elevation views.
• Design Presentation	Design Presentation Plan and Elevation views.
• Roof	Enlarged Plan Roof, Exterior Wall Section, and Interior Wall Section views.
• Roof SIM	Enlarged Plan Roof views using the Reference Other View option.
• Roof TYP	Enlarged Plan Roof views using the Reference Other View option.
• Stair / Elevator	Plan Elevations views.
• Stair / Elevator SIM	Plan Elevations views using the Reference Other View option.
• Stair / Elevator TYP	Plan Elevations views using the Reference Other View option.
• Toilet Room	Enlarged Plan Toilet Room views.
• Toilet Room SYM	Enlarged Plan Toilet Room Similar views using the Reference Other View option.
• Toilet Room TYP	Enlarged Plan Toilet Room Typical views using the Reference Other View option.
• Wall - Exterior	New Work Floor Plan and Exterior Elevation views.
• Wall - Exterior SYM	New Work Floor Plan and Exterior Elevation views using the Reference Other View option.
• Wall - Exterior TYP	New Work Floor Plan and Exterior Elevation views using the Reference Other View option.
• Wall - Interior	New Work Floor Plan, Enlarged Plan Elevation, and Interior Elevation views.
• .IDS USER <User Initials>	See User Section below.

Refer to [Workflow of Revit IDS View Types - Ver 3.pdf](#) for an illustration of what view types can be created in the other view types.

User Section

User Sections enable a user to create their own sections for design review. User Section views are listed in the Project Browser under the category .User <User Initials> Sections (.User <User Initials>).

For example, .User JDB
Sections (.User JDB)

User Sections should not be placed in Design Presentation or Documentation views. If a User Section is placed in either of these view types, the User Section Symbolology will not be visible in the view. However, the User Section View will be created, and the Section Symbolology will be visible in other corresponding view types such as Coordination and other User Views. Refer to [User Views](#) for more information.

3D Views

When a 3D view is created, it will automatically be assigned the ASSIGN VIEW TEMPLATE OR DELETE view template and the .ASSIGN VIEW TEMPLATE OR DELETE category in the Project Browser. Change the view's view template according to the purpose of the view. This will move it from the .ASSIGN VIEW TEMPLATE OR DELETE category to one specified by the View Template. The .ASSIGN VIEW TEMPLATE OR DELETE category is meant as a temporary location when some new views are created. It is not a permanent location for them. Applying a different view template to a view in this category will move it into a different category of the Project Browser and help in maintaining a well-organized project.

Note: The view will most likely be set to the New Construction (C) phase or the last phase established within the project. If this is the case, change the view's phase as required.

Legends and Schedules

Legends and schedules are the only view types that can be placed on multiple sheets. IDS has taken advantage of this feature by creating several legends and schedules and placing them on corresponding sheets to kick-start the design process. Each phase of sheets has a corresponding phase of legends and schedules. Therefore, when modifying any legend or schedule it's imperative that you are editing the correct phase of that legend or schedule. If you are working on the second phase of the project and mistakenly edit a legend or schedule designated for the first phase, you are altering information for the wrong phase of the project.

Legends

There are several predeveloped legends placed on several predeveloped sheets. These legends are comprised of several types:

- General Notes List of notes relative to the sheets of a design phase.
- Symbol Legends List of symbols relative to the sheets of a design phase.
- Details Drafting views converted to a legends.

.REVISION LEGEND

One legend not placed on any predeveloped sheet is the .REVISION LEGEND. However, before we review this legend, we need to review how several schedules have been developed and why.

Schedules are lists of element data and therefore change as the model changes. If an element is added or deleted from the schedule, the schedule rows will shift up or down. If a revision cloud were placed on a sheet over a schedule row to indicate a revision, and later the row shifted up or down, the revision cloud would stay in its original position and would no longer correspond to the revised element. Because of this, IDS does not use revision clouds over schedules on sheets. Schedules with a suffix of (WORKING) have been developed to give users the ability to make modifications to the parent schedule without changing the appearance of the parent schedule. (WORKING) schedules have one or more parameters that are visible in the schedule but are not visible in the parent schedule. These parameters control aspects of the parent schedule such as the indication of a revision to one or more cells. Selecting one or more of these parameters in a (WORKING) schedule will cause one or more cells of the schedule and parent schedule to turn gray. This method is used to indicate that the cells have been revised from the previous issuance.

The .REVISION LEGEND is a legend intended to be placed on any sheet below or next to a schedule(s) that have been revised from the previous issuance. The legend indicates that one or more scheduled cells has been revised from the previous issuance.

Before the next issuance of the sheet, edit the (WORKING) schedule as required and remove the check mark from any revision parameter. This process can be done automatically by using Dynamo Player and running the following Dynamo graphs:

- Schedule - Color Codes Revision Removal
- Schedule - Door Revision Removal
- Schedule - Room Finish Revision

Contact the BIM Coordinator for assistance with Dynamo and Dynamo Player.

Schedules

Schedules are organized in the Project Browser by the Schedule Group and Schedule type parameters then sorted by the schedule View Name.

Note: In the Schedule Group types list below, the schedule type Building Component Schedule is abbreviated as BCS.

The following Schedule Group types are either placed on sheets or can be placed on sheets as required:

Schedule Group types:

Types of Schedules within each group:

- | | |
|--------------------------------|---|
| • New Construction | BCS, Note Block, and Sheet List for the New Construction phase. |
| • New Construction (A) | BCS, Note Block, and Sheet List for the New Construction (A) phase. |
| • New Construction (B) | BCS, Note Block, and Sheet List for the New Construction (B) phase. |
| • New Construction (C) | BCS, Note Block, and Sheet List for the New Construction (C) phase. |
| • Option 1 Area Plan | BCS - AREA PLAN SCHEDULE (OPTION 1) |
| • Sheet List By Volume | Sheet List for Drawing List Volume |
| • Two Column Headers | Note Block for Two Column Headers |
| • Working Color Codes Schedule | BCS - The A9.1 - SCHEDULE - COLOR CODES (WORKING) |

The six Schedule Groups listed below have a dot prefix. The dot lists these schedules at the bottom of the list in the Project Browser.

Schedules in the following Schedule Group types are used for evaluating the model and are not to be placed on any Design Presentation or Document sheets:

- | | |
|------------------|----------------------|
| • ·Abbreviations | • ·Rooms Schedule |
| • ·Key Schedules | • ·View List |
| • ·Miscellaneous | • ·Project Dashboard |

When a schedule becomes too long to fit on one sheet it can be split across two or more sheets by selecting the view in the Project Browser and selecting Split and Place.

Key Notes and Note Block Schedule

Key Notes are created by placing one or more IDS_Anno - Keynote families in one or more views. This will automatically generate an entry in the corresponding Note Block schedule. The data displayed within the schedule resides in the annotation family. Each family has one or more Types. Each Type contains a Text and a Tag parameter. The Tag parameter corresponds to the family Type name, e.g., A1, A2, A3, etc. In the schedule, the Text parameter value is listed to the right of the Tag parameter value.

There are five primary Note Block Schedules. Each has a corresponding annotation family.

Note Block Schedule	Annotation Family
• A1 - DEMOLITION PLAN	IDS_Anno - Keynote A1 - Demo NC
• A2 - NEW WORK FLOOR PLAN	IDS_Anno - Keynote A2 - New Work NC
• A2 - ROOF PLAN	IDS_Anno - Keynote A2 - Roof NC
• A3 - REFLECTED CEILING PLAN	IDS_Anno - Keynote A3 - Ceiling NC
• F2 - FURNITURE PLAN	IDS_Anno - Keynote F2 - Furniture NC

The five primary Note Block Schedules has a version for each project phase New Construction, New Construction (A), New Construction (B), and New Construction (C).

Update the schedules as required. When modifying any schedule, it's imperative that you are editing the correct one. If you are working on the second phase of the project and mistakenly edit a schedule designated for the first phase, you are altering information for the wrong phase or project.

View Templates

Applying a View Template applies multiple visibility and graphic properties to one or more views at one time. View Templates make views in the model look consistent and help to maintain a well-organized Project Browser. When a view template is applied to multiple views, the views will look and behave the same. View Templates can control many visibility settings including those of linked models. View Templates also control the Category and Sub-Category of the views within the Project Browser. Changing a view's View Template can change its Category and/or Sub-Category moving the view to another location within the Project Browser. A View Template can be assigned to one or several views. Because of this, any changes to a view template can affect not just one view, but several views at one time. Do not make any changes to any view template without first discussing the change with the Project BIM Coordinator.

To facilitate the differences that similar views require, four parameters are not controlled by any view template and can be modified for a given view by its Visibility Graphics Overrides.

- Imported Category
- Design Options
- Phase
- View Range

The View Scale parameter can also be modified through the Visibility Graphics Overrides for the follow:

- All Enlarged Plan view types.
- Elevation view types of Demo and ·Enlarged Plan Demo.
- All Section view types except for Casework, Ceiling, Ceiling SIM, and Ceiling TYP.

User View Templates

User View Templates have been designed to place User Views in the ·User <User Initials> category and indicate who's created the view. The User View Templates group all User Views in one area of the Project Browser. Because the Project Browser is organized first by Phase then by Category, multiple User Views that have different phases will be organized in separate phases then by a ·User Category within the Project Browser. This means that User Views can be located in multiple areas of the Project Browser.

If a view is duplicated and a User View Template applied to the view, the view settings will be altered to those of the User View Template.

IDS User View Templates have a prefix of ·IDS USER followed by the user's initials. For example, ·IDS USER JDB. The prefix · is used to sort all User View Templates to the bottom of the View Templates Name list separating them from the other view templates.

Sheets

Numerous sheets have been developed to kick-start the project and help implement the IDS Standard Sheet Number and Naming Convention. Many have legends and schedules placed on them relevant to the sheet type.

Project Browser Organization - Sheets

Sheets are organized in the Project Browser by the Sheet Folder and Sheet Phase parameters then sorted by the Sheet Number parameter.

The Sheet Folder are defined as:

- Programming / Schematic Design
- Construction Documents
- Unused Construction Documents

For the location of:

Programming and Schematic Design sheets.

Construction Documentation (CD) sheets.

sheets that have been predeveloped that are currently unused but may be utilized for CD in the future. When an unused sheet is needed for use as a CD, change its Sheet Folder parameter value to Construction. The sheet will move from the Unused Sheet Folder to the Construction Sheet Folders. Also, set the Appears in Sheet List parameter to include the sheet in the Architectural Sheet List.

- ·Project Dashboard
- ·Typical Std Details (Step 1 Duplicate Sheet)

the ·Project Dashboard sheet.

Typical Standard Details.

Sheet Phase are defined as:

- New Construction
- New Construction (A)
- New Construction (B)
- New Construction (C)

For the location of:

the CD sheets for the first phase of design or project.

the CD sheets for the second phase of design or project.

the CD sheets for the third phase of design or project.

the CD sheets for the fourth phase of design or project.

If the project utilizes only one New Construction phase, sheets in the New Construction Sheet Phase will be used. Sheets in the other Sheet Phases will not be used at this time but may be needed at the later date so they should be maintained within the project model. If the project is multi-phased, rename the New Construction Sheet Phase and all other Sheet Phases to coincide with the project phase naming as required.

Sheet Index and Print Order

The Dept Code and Sheet Number parameters are used to organize sheets in a defined sequence for the Sheet Indexes and for printing.

- The Dept Code is a number parameter used to group and sort sheets for printing. All predeveloped sheets have been assigned a Dept Code number.

Refer to [Predeveloped Architectural Sheets.pdf](#) for a complete list.