

# Mobile District Advanced Modeling (AM) Bulletin File Naming Convention SAM AMB 2018-01

Based on the standards produced by the



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**Mobile District**  
**Engineering Division**  
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Aug 2018

1. New bulletin 2018-01
2. Added document properties and fields

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## Preface

The advanced modeling (AM) file naming convention herein are based on the latest version of the A/E/C CAD Standard and the A/E/C Graphics Standard as developed and maintained by the CADD/BIM Technology Center. The standard leaves options open for multiple reasons including allowance for local variances and requirements as well as client requirements. In this document, the A/E/C CAD Standard will be referred to as the AEC CAD Standard, the A/E/C Graphics Standard will be referred to as the AEC Graphics Standard. For internal users, local copies of both documents are located in Projectwise under [AEC Standards](#), or online at <https://cadbimcenter.erdcdren.mil>.

For simplicity, AutoCAD template files, Revit template files and Microstation seed files will be referred to generically as templates.

Information appearing between the symbols **!\*** and **\*/** are information for internal Mobile District users.

## CAD Model Files and Sheet Files

### General Information

For consistency, new model and sheet files are to be created from the project template files. Project template files are specific versions of templates adopted at the start of the project. Since templates can change over time, it is important that every file on a project is developed from the same set of templates.

### CAD Border Files

Typically there should only be one border per project. However, occasionally, a project requires multiple borders for multiple buildings or sites. Border file(s) are referenced by all sheet files created for a particular project and include information such as project title, location, date, etc.

**!\*** The EN-TS project coordinator will create the border file(s) needed upon establishing a new project folder in ProjectWise. The new border file(s) will be saved to the \borders sub-directory of the appropriate project. **\*/**

CAD border files are named in accordance with the AEC CAD Standard as follows:

Variable Project Code field per AEC CAD Standard				
8-digit Project Code	1-digit spacer	Border File Designator	2-digit Sheet Sequence	File extension
MBY20001	-	BORDER	01	.dwg .dgn

Example Border file: **MBY20001-BORDER01.DWG**

### CAD Model Files

Model files are named in accordance with the AEC CAD Standard as follows. Refer to the AEC CAD Standard for the list of discipline designators (Table 2-1) and model file types (Table 2-2).

Variable Project Code field per AEC CAD Standard					
8-char Project Code	1-digit spacer	2-char Discipline Designator	2-char Model File Type	2-digit Sequence	File extension
<b>MBY20001</b>	<b>-</b>	<b>A-</b>	<b>FP</b>	<b>01</b>	<b>.dwg .dgn</b>

Example Architectural CAD Floor Plan model 1: **MBY20001-A-FP01.DWG**

### CAD Sheet Files

Sheet files are named in accordance with the AEC CAD Standard as follows. Refer to the AEC CAD Standard for the list of sheet file discipline designators (Table 2-3) and sheet type designators (Table 2-4).

Variable Project Code field per AEC CAD Standard					
8-digit Project Code	1-digit spacer	2-digit Discipline Designator	1-digit Sheet Type	2-digit Sheet Sequence	File extension
<b>MBY20001</b>	<b>-</b>	<b>A-</b>	<b>1</b>	<b>01</b>	<b>.dwg .dgn</b>

Example Architectural Floor Plan sheet file: **MBY20001-A-101.DWG**

## Revit Model Files

Revit file naming presents a unique challenge due to the variation in compositions that are possible within a single Revit model. The current AEC CAD Standard does not address this topic and there is also currently no USACE standard.

In the interim, the Mobile District will use the following Revit file naming convention that must be documented in the BIM PxP for each project.

### *Holistic Discipline Models*

A holistic discipline model is one in which one entire major discipline design is encompassed within one single model file. Holistic Discipline Models shall use the 4-character discipline designator in Table 1 below.

Holistic Discipline	Abbreviation
Architectural	ARCH
Structural	STRC
Interiors	INTR
Mechanical	MECH
Plumbing	PLMB
Fire Protection	FIRE
Electrical	ELEC
Telecommunications	TELC
Civil	CIVL
General - Coordination	GENL

Table 1: Holistic Discipline Model file designators

Variable Project Code field per AEC CAD Standard				
8-char Project Code	1-digit spacer	4-char Discipline Designator	2-digit Sequence	File extension
MBY20001	-	ARCH	01	.rvt

Example holistic discipline design model 1: **MBY20001-ARCH01.RVT**

### *Segregated Discipline Models*

There are many ways in which Revit models can be segregated, depending on a project's logical structure, complexity, team composition, and technological limitations.

Segregated model files shall use the 2-character discipline designator and a 2-character model type designator in Table 2 to identify segregated models.

Table 2: Revit Segregated Model file designators  
*(Based on AEC CAD Standard table 2-2)*

Discipline Designators	Model Type	Description
General		
G-		
	NW	New Construction (New Work)
	XD	Existing/Demolition
	TP	Temporary
	CM	Composite Model (Coordination)
Architectural		
A-		
	EX	Exterior Components
	IN	Interior Components
	DT	Details
Interiors		
I-		
	FU	Furnishings
	EQ	Equipment
Structural		
S-		
	FD	Foundation
	FR	Framing
Mechanical		
M-		
	HP	HVAC
	SP	Specialty Systems
Plumbing		
P-		
	IN	Interior
	EX	Exterior
Fire Protection		
F-		
	FA	Fire Alarm / Detection
	FP	Fire Suppression
	LP	Life Safety
Electrical		
E-		
	CP	Exterior Communication Systems
	EU	Electrical Utilities
	GP	Grounding
	LP	Lighting
	PP	Power
	SS	Special Systems
Telecommunications		
T-		
	QP	Equipment
	DT	Data systems
	TP	Telephone / Data



Variable Project Code field per AEC CAD Standard					
8-char Project Code	1-digit spacer	2-char Discipline Designator	2-char Model Type	2-digit Sequence	File extension
<b>MBY20001</b>	-	<b>M-</b>	<b>HP</b>	<b>01</b>	<b>.rvt</b>

Example Revit segregated discipline mechanical HVAC design model 1: **MBY20001-M-HP01.RVT**

### Coordination Project Models

Federated project models should generally only exist in the form of linked models for the purpose of coordination and shall use the 4-character discipline designator, GENL.

Variable Project Code field per AEC CAD Standard				
8-char Project Code	1-digit spacer	4-char Discipline Designator	2-digit Sequence	File extension
<b>MBY20001</b>	-	<b>GENL</b>	<b>01</b>	<b>.rvt</b>

Example coordination model 1: **MBY20001-GENL01.RVT**

As per industry best practice, Revit central files shall be appended with the designation “\_central” to the end of the file name.

Example Revit holistic discipline design central model 1: **MBY20001-ARCH01\_CENTRAL.RVT**

## Projectwise CAD and Revit File Names & Descriptions

**!** For in-house SAM users, save CAD files in the proper discipline folder of the appropriate ProjectWise project, and save BIM model files in the appropriate project BIM folder. The file name and the document name are to be identical. Use of the Projectwise lock that forces the file name and document name to be synced is encouraged and is set to LOCKED by default. The document description field can be used to provide a more information about file. This is handy for larger projects, but may also be simply set identical to the file/document name on small projects. The following document description convention shall be followed if used. **!**

File/Document Name	File Extension	Document Description
<b>MBY20001-ARCH01</b>	<b>.DWG .DGN .RVT</b>	<b>ARCH01 – PROJECT TITLE (PROJECT NUMBER)</b>
<b>MBY20001-M-HV01</b>		<b>M-HV01 – PROJECT TITLE (PROJECT NUMBER)</b>
<b>MBY20001-GENL01</b>		<b>GENL01 – PROJECT TITLE (PROJECT NUMBER)</b>
<b>MBY20001-A-FP01</b>		<b>A-FP01 – PROJECT TITLE (PROJECT NUMBER)</b>

Examples Revit architectural model document:

File Name: **MBY20001-ARCH01.RVT**

Doc Name: **MBY20001-ARCH01.RVT**

Doc Description: **ARCH01 - Renovate Fire Station Redstone (MBY20001)**

Table 2-2 Model File Types

Discipline	Code	Definition	Discipline	Code	Definition	
General	BS	Border sheet	Interiors (Cont.)	IG	Raster imagery (scanned and photographic)	
	CS	Cover sheet		LG	Legend	
	IG	Raster imagery (scanned and photographic)		QP	Equipment plan	
	KP	Key plan		RP	Furniture plan	
Hazardous materials	DT	Detail		SC	Section	
	EL	Elevation		SH	Schedule	
	IG	Raster imagery (scanned and photographic)		SP	Signage placement plan	
	LG	Legend		WP	System furniture plan	
	PP	Pollution prevention plan		XD	Existing/Demolition plan	
	QP	Equipment plan		Fire protection	3D	Isometric/3D
	SC	Section			DG	Diagram
	XD	Existing/Demolition plan			DT	Detail
Survey/ Mapping	AL	Existing airfield lighting plan			FA	Fire alarm/Detection plan
	CP	Existing communication system plan	FP		Fire suppression plan	
	EU	Existing electrical utilities plan	IG		Raster imagery (scanned and photographic)	
	HP	Existing hydrographic survey and mapping plan	LG	Legend		
	HT	Existing HTCW Utilities Plan	LP	Life safety plan		
	IG	Raster imagery (scanned and photographic)	SC	Section		
	LG	Legend	SH	Schedule		
	PB	Property boundary	XD	Existing/Demolition plan		
	PP	Plan and profile	Plumbing	3D	Isometric/3D	
	PR	Existing profile		DG	Diagram	
	SC	Existing section		DT	Detail	
	SV	Survey and mapping plan		EL	Elevation	
	UP	Existing utilities plan		EP	Enlarged plan	
	Geotechnical	DT		Detail	IG	Raster imagery (scanned and photographic)
		IG	Raster imagery (scanned and photographic)	LG	Legend	
		JP	Joint layout plan	PP	Piping plan	
		LB	Boring log	QP	Equipment plan	
LG		Legend	SH	Schedule		
PV		Pavement site plan	XD	Existing/Demolition plan		
SC		Section	Mechanical	3D	Isometric/3D	
SH		Schedule		DG	Diagram	
SI		Subsurface investigation plan		DT	Detail	
Civil		AF		Airfield plan	EL	Elevation
	BR	Beach renourishment plan		EP	Enlarged plan	
	DT	Detail		HP	HVAC plan	
	EL	Elevation		HS	Hydraulic systems	
	ER	Eco-restoration plan		HT	HTCW utilities plan	
	FC	Flood control plan		IG	Raster imagery (scanned and photographic)	
	GP	Grading plan		LG	Legend	
	IG	Raster imagery (scanned and photographic)	MD	Machine design plan		
	IP	Installation plan/Base map	MH	Material handling plan		
	JP	Joint layout plan	QP	Equipment plan		
	KP	Staking plan	SC	Section		
	LG	Legend	SH	Schedule		
	NG	Navigation/Dredging plan	SP	Specialty piping plan		
	PL	Project location map	XD	Existing/Demolition plan		
	PP	Plan and profile	Electrical	3D	Isometric/3D	
	PR	Profile		AL	Airfield lighting plan	
	SC	Section		AP	Auxiliary power plan	
SH	Schedule	CP		Exterior communication systems plan		
SP	Site plan	DG		Diagram		
TS	Transportation site plan	DT		Detail		
UP	Utilities plan	EU		Electrical utilities plan		
XD	Existing/Demolition plan	GP		Grounding system plan		
Landscape	DT	Detail		IG	Raster imagery (scanned and photographic)	
	EL	Elevation		LG	Legend	
	IG	Raster imagery (scanned and photographic)	LP	Lighting plan		
	IP	Irrigation plan	PP	Power plan		
	LG	Legend	PS	Panel schedule		
	LP	Landscape plan	QP	Equipment plan		
	SC	Section	SH	Schedule		
	SH	Schedule	SS	Special systems plan		
	XD	Existing/Demolition plan	XD	Existing/Demolition plan		
	Structural	3D	Isometric/3D	Telecommunications	DG	Diagram
BP		Bridge plan	DT		Detail	
CP		Column plan	IG		Raster imagery (scanned and photographic)	
CW		Misc. Small civil works structures	LG		Legend	
DT		Detail	QP		Equipment plan	
EL		Elevation	SH		Schedule	
EP		Enlarged plan	TP		Telephone/Data plan	
FC		Flood control structures	XD		Existing/Demolition plan	
FN		Foundation plan	Resource		3D	Isometric/3D
FR		Framing plan			DG	Diagram
IG		Raster imagery (scanned and photographic)		DT	Detail	
LD		Locks and dams plan		EL	Elevation	
LG		Legend		FP	Floor plan	
SC		Section		IG	Raster imagery (scanned and photographic)	
SH		Schedule	LG	Legend		
XD		Existing/Demolition plan	SH	Schedule		
Architectural		3D	Isometric/3D	Other disciplines	3D	Isometric/3D
	AC	Area calculations/Occupancy plan	DG		Diagram	
	CP	Reflected ceiling plan	DT		Detail	
	DT	Detail	EL		Elevation	
	EL	Elevation	FP		Floor plan	
	EP	Enlarged plan	IG		Raster imagery (scanned and photographic)	
	FP	Floor plan	LG		Legend	
	IG	Raster imagery (scanned and photographic)	SH		Schedule	
	LG	Legend	XD		Existing/Demolition plan	
	QP	Equipment plan	Operations		3D	Isometric/3D
RP	Roof plan	DG		Diagram		
SC	Section	DT		Detail		
SH	Schedule	EL		Elevation		
XD	Existing/Demolition plan	FP		Floor plan		
Interiors	3D	Isometric/3D		IG	Raster imagery (scanned and photographic)	
	DT	Detail	LG	Legend		
	EL	Elevation	SH	Schedule		
	EP	Enlarged plan	XD	Existing/Demolition plan		
	FL	Floor patterns				

The information on this sheet are for reference only. Standards and policies are subject to change. (Aug 2018)

Border Files

Variable Project Code field per AEC CAD Standard				
8-digit Project Code	1-digit spacer	Border File Designator	2-digit Sheet Sequence	File extension
MBY20001	-	BORDER	01	.dwg .dgn

Model Files

Variable Project Code field per AEC CAD Standard					
8-char Project Code	1-digit spacer	2-char Discipline Designator	2-char Model File Type	2-digit Sequence	File extension
MBY20001	-	A-	FP	01	.dwg .dgn

Sheet Files

Variable Project Code field per AEC CAD Standard					
8-digit Project Code	1-digit spacer	2-digit Discipline Designator	1-digit Sheet Type	2-digit Sheet Sequence	File extension
MBY20001	-	A-	1	01	.dwg .dgn

Table 2-1 Discipline Designators

Discipline	Designator
General	G
Hazardous materials	H
Survey/Mapping	V
Geotechnical	B
Civil	C
Landscape	L
Structural	S
Architectural	A
Interiors	I
Fire protection	F
Plumbing	P
Mechanical	M
Electrical	E
Telecommunications	T
Resource	R
Other disciplines	X
Operations	O

Table 2-4 Sheet Type Designators

Sheet Type	Designator
General (symbols legend, notes, etc.)	0
Plans (horizontal views and combination plan and profile)	1
Elevations and profiles (vertical views)	2
Sections (sectional views, cross sections, etc.)	3
Large scale views (Scaled up reproductions of plans, elevations, or sections that are not details)	4
Details	5
Schedules and diagrams	6
User defined	7
User defined	8
3D Representations (isometrics, perspectives, photographs)	9

Table 2-3 Sheet File Discipline Designators

Discipline	Designator	Description	Discipline	Designator	Description	Discipline	Designator	Description		
General	G-	All general	Landscape	LD	Landscape demolition	Mechanical	MD	Mechanical demolition		
	GI	General information		L-	All Landscape		M-	All Mechanical		
	GC	General contract		LS	Landscape site		MH	Mechanical HVAC		
	GR	General resource		LG	Landscape grading		MI	Mechanical Instrumentation		
				LI	Landscape irrigation		MP	Mechanical piping		
Hazardous materials	H-	All hazardous materials	LL	Landscape lighting	MS		Mechanical site			
	HA	Asbestos	LP	Landscape planting	MY		Mechanical hydraulic systems			
	HC	Chemicals	LR	Landscape relocation	MW		Mechanical distributed energy			
	HL	Lead	Structural	SD	Structural demolition		Electrical	ED	Electrical demolition	
	HP	PCB		S-	All Structural			E-	All Electrical	
	HR	Refrigerants		SS	Structural site	EI		Electrical instrumentation		
	Survey/Mapping	V-		All Survey/Mapping	SB	Structural substructure		EL	Electrical interior lighting	
VA		Aerial survey		SF	Structural framing	EP		Electrical interior power		
VB		Boundary		SC	Structural components	ET		Electrical telecommunications		
VC		Computed points		SR	Structural reinforcement	EY		Electrical interior auxiliary systems		
VF		Field survey		ST	Structural superstructure	EA		Electrical airfield lighting and nav aids		
VH		Hydrographic survey		Architectural	AD	Architectural demolition		EC	Electrical cathodic protection	
VI		Digital survey			A-	All Architectural		EG	Electrical grounding	
VN		Node points	AS		Architectural site	EW	Electrical distributed energy			
VS		Staked points	AE		Architectural elements	Telecommunications	TD	Telecommunications demolition		
VU		Combined utilities	AI		Architectural interiors		T-	All Telecommunications		
VL	Land	AG	Architectural graphics		TA		Audio visual			
Geotechnical	B-	All geotechnical	AF		Architectural finishes		TC	Clock and program		
	BB	Boring logs	Interiors		AD		Interior demolition	TI	Intercom	
	BS	Stratigraphy			I-		All Interiors	TM	Monitoring	
	Civil	CD			Civil demolition		IN	Interior design	TN	Data networks
		C-		All Civil	IF		Interior furnishings	TT	Telephone	
		CS		Civil site	IG		Interior graphics	TY	Security	
		CG		Civil grading	Fire Protection		FD	Fire protection demolition	TS	SCADA
		CT		Civil transportation		F-	All Fire protection	Resource	R-	All resource
		CP		Civil paving		FA	Fire protection detection and		RC	Resource civil
		CU		Civil utilities		FX	Fire protection suppression		RS	Resource structural
CI		Civil improvements		Plumbing		PD	Plumbing demolition		RA	Resource architectural
CB		Civil beach renourishment	P-		All Plumbing	RM	Resource mechanical			
CE		Civil ecosystem restoration	PS		Plumbing site	RE	Resource electrical			
CF	Civil flood control	PL	Plumbing fixtures		RR	Resource real estate				
CH	Civil shore protection	PP	Plumbing piping		RG	Resource green				
CN	Civil navigation	Other disciplines	X-		All					
CO	Civil operation and maintenance		O-	All						
CR	Civil recreation									
CX	Civil security									

**Revit Holistic Model Files**

A model in which one entire major discipline design is encompassed within one single model file.

Variable Project Code field per AEC CAD Standard				
8-char Project Code	1-digit spacer	4-char Discipline Designator	2-digit Sequence	File extension
MBY20001	-	ARCH	01	.rvt

**Revit Segregated Model Files**

Model files can be segregated, depending on a project's logical structure, complexity, team composition, and technological limitations.

Variable Project Code field per AEC CAD Standard					
8-char Project Code	1-digit spacer	2-char Discipline Designator	2-char Model Type	2-digit Sequence	File extension
MBY20001	-	M-	HP	01	.rvt

Revit Holistic Model File Designators	Holistic Discipline Model	Designators
	Architectural	ARCH
	Structural	STRC
	Interiors	INTR
	Mechanical	MECH
	Plumbing	PLMB
	Fire Protection	FIRE
	Electrical	ELEC
	Telecommunications	TELC
	Civil	CIVL
	General - Coordination	GENL

**Revit Coordination Model Files**

Variable Project Code field per AEC CAD Standard				
8-char Project Code	1-digit spacer	4-char Discipline Designator	2-digit Sequence	File extension
MBY20001	-	GENL	01	.rvt

Revit Segregated Model file designators	Discipline Designators	Model Type	Description
	General		
G-			
	NW		New Construction (New Work)
	XD		Existing/Demolition
	TP		Temporary
	CM		Composite Model (Coordination)
Architectural			
A-			
	EX		Exterior Components
	IN		Interior Components
	DT		Details
Interiors			
I-			
	FU		Furnishings
	EQ		Equipment
Structural			
S-			
	FD		Foundation
	FR		Framing
Mechanical			
M-			
	HP		HVAC
	SP		Specialty Systems
Plumbing			
P-			
	IN		Interior
	EX		Exterior
Fire Protection			
F-			
	FA		Fire Alarm / Detection
	FP		Fire Suppression
	LP		Life Safety
Electrical			
E-			
	CP		Exterior Communication Systems
	EU		Electrical Utilities
	GP		Grounding
	LP		Lighting
	PP		Power
	SS		Special Systems
Telecommunications			
T-			
	QP		Equipment
	DT		Data systems
	TP		Telephone / Data

File/Document Name	File Extension	Document Description (Optional)
MBY20001-ARCH01	.DWG .DGN .RVT	ARCH01 – PROJECT TITLE (PROJECT NUMBER)
MBY20001-M-HV01		M-HV01 – PROJECT TITLE (PROJECT NUMBER)
MBY20001-GENL01		GENL01 – PROJECT TITLE (PROJECT NUMBER)
MBY20001-A-FP01		A-FP01 – PROJECT TITLE (PROJECT NUMBER)

1. File Name = Document Name (required)
2. Document Description
  - Defaults to same as file name
  - For larger projects, consider reversing the order of the File / Document name then append the Project Title and Project Number
  - This provides the option to display and sort by the document description field on larger projects such that related files are adjacent

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