

SEPS+BIM

Space and Equipment Planning System
+
Building Information Modeling

Part 1 Guidelines for Creating BIM Templates

VA



U.S. Department
of Veterans Affairs

Office of Construction & Facilities Management

 Prepared by ONUMA 3-28-2015

1

SEPS+BIM

Space and Equipment Planning System

+

Building Information Modeling

Part 1

Guidelines for

Creating BIM Templates

3-15-2015

Image: US Department of Veterans Affairs Logo

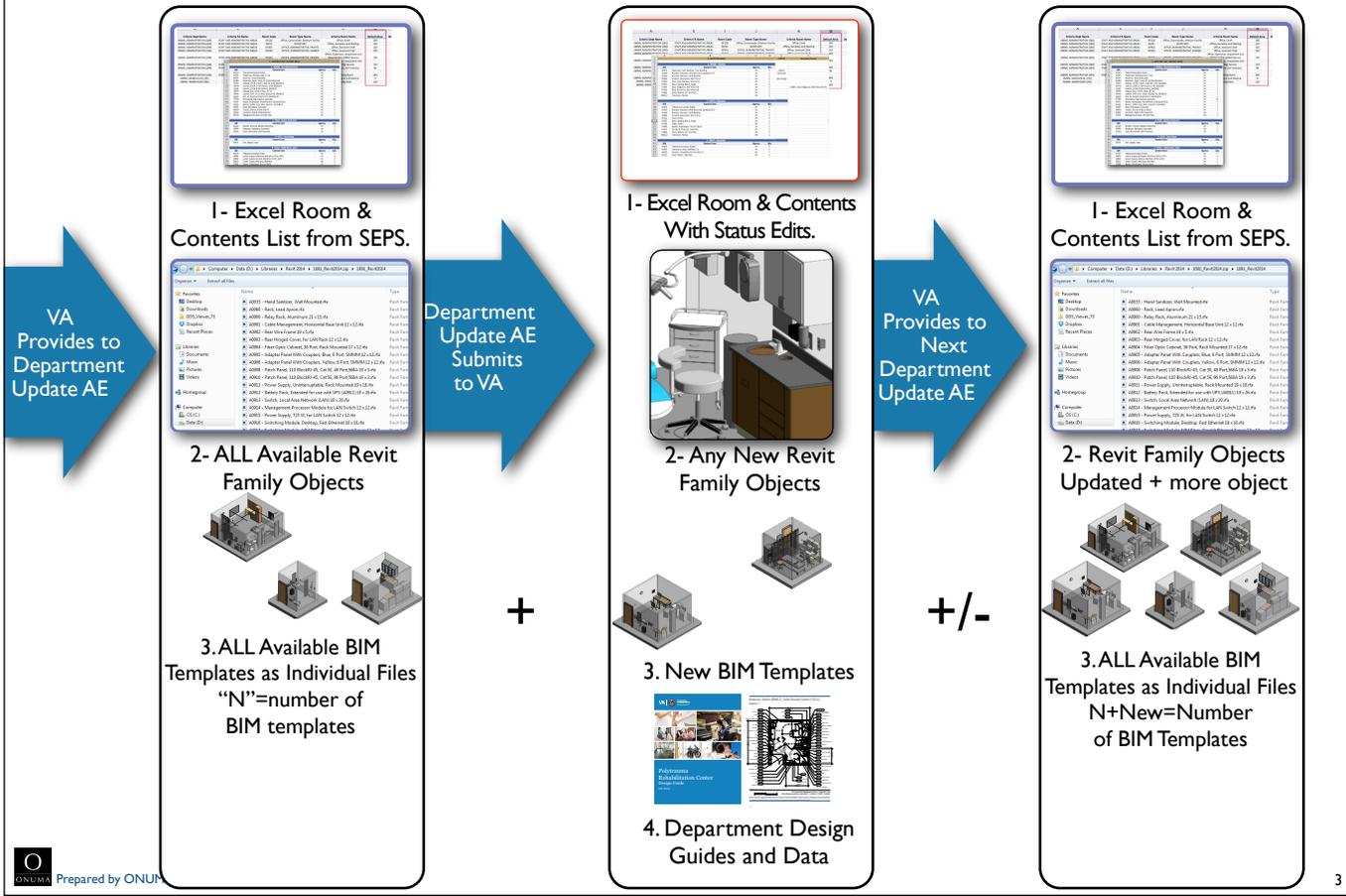


Image: Sample screen shots and images of the overall process for training on how to use the SEPS BIM process showing the type of data and technical files that VA provides at the start of the department update process and what the department update AE is to provide back to VA as deliverable.

VA Provides to Department Update AE:

- 1- Excel Room & Contents List from SEPS.
- 2- ALL Available Revit Family Objects
- 3. ALL Available BIM Templates as Individual Files “N”=number of BIM templates

Department Update AE Submits to VA

- 1- Excel Room & Contents With Status Edits.
- 2- Any New Revit Family Objects
- 3. New BIM Templates
- 4. Department Design Guides and Data

VA Provides to Next Department Update AE

- 1- Excel Room & Contents List from SEPS.
- 2- Revit Family Objects Updated + more object
- 3. ALL Available BIM Templates as Individual Files
N+New=Number of BIM Templates



1- Rooms Excel File

Criteria Dept Name	Criteria FA Name	Room Code	Room Type Name	Criteria Room Name
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT / OUTPATIENT UNITS: RECEPTION AREAS	LOB01	LOBBY, SEATING AREA	Lobby
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT / OUTPATIENT UNITS: RECEPTION AREAS	REC01	RECEPTION	Reception
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT / OUTPATIENT UNITS: RECEPTION AREAS	TLT01	TOILET	Toilet, Visitor
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT / OUTPATIENT UNITS: RECEPTION AREAS	BX001	EXCHANGE, VENDING (EQUIPPED BY OTHERS)	Vending Area
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT UNIT: PATIENT AREAS	WRC01	WAITING	Sub Waiting
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT UNIT: PATIENT AREAS	BRP11	Bedroom, PRC, 1 Bed	Patient Room, One Bed
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT UNIT: PATIENT AREAS	TLT52	TOILET/SHOWER, INPATIENT	Bathroom, Patient
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT UNIT: PATIENT AREAS	TLT52	TOILET/SHOWER, INPATIENT	Bathroom, Patient, Shower Litter
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT UNIT: PATIENT AREAS	BRP72	Bedroom, PRC, Isolation, 1 Bed	Isolation Patient Room, One-Bed
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT UNIT: PATIENT AREAS	TLT52	TOILET/SHOWER, INPATIENT	Isolation Bathroom, Patient
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT UNIT: PATIENT AREAS	BRAR1	ANTEROOM, ISOLATION, NEGATIVE PRESSURE	Isolation, Anteroom
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT UNIT: PATIENT AREAS	FSCD1	FOOD SERVICE, CAFETERIA DINING ROOM	Dining Room, Congregate
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT UNIT: PATIENT AREAS	DAYR1	DAYROOM	Living Room, Family Support Multipurpose Room, Family Support
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT UNIT: PATIENT AREAS	CRA02	CONFERENCE ROOM, MEDIUM	Day Room
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT UNIT: PATIENT AREAS	DAYR1	DAYROOM	Day Room
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT UNIT: PATIENT AREAS	CMP01	COMPUTER ROOM	Recreational Computer Activities Room

2- Content Excel File

2 - RECEPTION AREA				
1 - WRC01 - Waiting				
JSN	Content Item	Agency	Qty	
A5076	Dispenser, Hand Sanitizer, Free Standing	VA	1	
A5210	Bracket, Television, Wall Mounted, w/Adjust Arm	VA	1	
A5220	Bracket, Television, Wall Backing	VA	1	
A6046	Artwork, Decorative, With Frame	VA	1	
F0206	Chair, Side, Bariatric, With Arms	VA	1	
F0305	Chair, Waiting Room, Single	VA	3	
F2300	Rack, Magazine, Wall Mounted	VA	1	
F2310	Rack, Pamphlet, Wall Mounted	VA	1	
F3200	Clock, Battery, 12" Diameter	VA	1	
M0515	Television, Plasma	VA	1	
2 - PLAY1 - Playroom				
JSN	Content Item	Agency	Qty	
A1010	Telecommunication Outlet	VA	1	
A5210	Bracket, Television, Wall Mounted, w/Adjust Arm	VA	1	
A5220	Bracket, Television, Wall Backing	VA	1	
A6046	Artwork, Decorative, With Frame	VA	2	
F0215	Chair, Child's	VA	4	
F0305	Chair, Waiting Room, Single	VA	2	
F0760	Table, Child's	VA	1	
F2000	Basket, Wastepaper, Round, Metal	VA	1	
F2045	Furniture, Playroom, Assorted	VA	1	
F3200	Clock, Battery, 12" Diameter	VA	1	
M0515	Television, Plasma	VA	1	
3 - REC01 - Reception				
JSN	Content Item	Agency	Qty	
A1010	Telecommunication Outlet	VA	2	
A1015	Telephone, Desk, Multiple Line	VA	2	
A6105	Counter, Reception Control, Built-In	VA	1	
F0275	Chair, Swivel, High Back	VA	1	

- VA will provide two Excel files.
 1. One lists all the rooms and associated RoomCodes
 2. Content in the rooms and JSN numbers of the objects.
- Your task is to use the Excel files and update them to match the design guide update and deliver them back to VA.
- The Room Code and JSN Object numbers need to be maintained in order for VA to keep track of the data and changes.
- The Excel files are a direct output from SEPS and reflect the current default standards for these rooms and content.

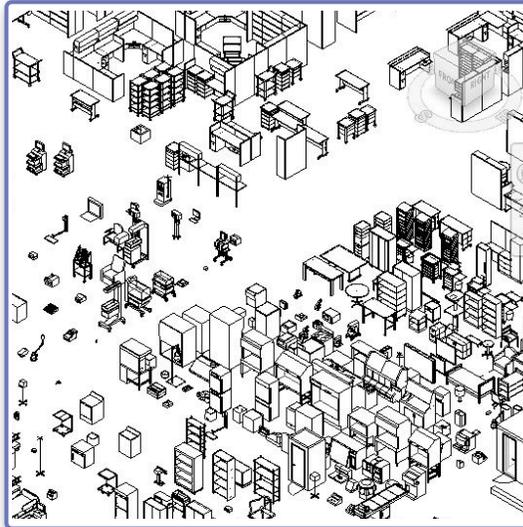
Image: Sample image of list of rooms and list of content of rooms from SEPS in Excel that is provided by VA to Department Update AE

1- Rooms Excel File 2- Content Excel File

- VA will provide two Excel files.
 1. One lists all the rooms and associated RoomCodes
 2. Content in the rooms and JSN numbers of the objects.
- Your task is to use the Excel files and update them to match the design guide update and deliver them back to VA.
- The Room Code and JSN Object numbers need to be maintained in order for VA to keep track of the data and changes.
- The Excel files are a direct output from SEPS and reflect the current default standards for these rooms and content.



3- Revit Family Objects Aligned with DoD MILSTD 1691 - JSNs



- Go get the Revit Family Objects Here:
http://onuma.com/transfer/1691_Revit2014/
- VA and DoD DHA share approximately 2,100 room content objects in MILSTD 1691. These objects are being converted into BIM Revit Families as part of the work to update a department.
- Your task is to take the Revit Families as is and build missing ones using the described method that are needed for the BIM Room Templates for the department that your firm is updating.



Image: Sample image of list of Revit Family objects and 3d thumbnails of some of the objects in BIM.

3- Revit Family Objects Aligned with DoD MILSTD 1691 - JSNs

- Go get the Revit Family Objects Here:
•http://onuma.com/transfer/1691_Revit2014/
- VA and DoD DHA share approximately 2,100 room content objects in MILSTD 1691. These objects are being converted into BIM Revit Families as part of the work to update a department.
- Your task is to take the Revit Families as is and build missing ones using the described method that are needed for the BIM Room Templates for the department that your firm is updating.



4- Revit BIM Templates Matching SEPS VA Room Codes

- [Parent Directory](#)
- [BRIT1.rvt](#)
- [BRUN1.rvt](#)
- [CLR01.rvt](#)
- [CMP02.rvt](#)
- [CRA01.rvt](#)
- [CRA02.rvt](#)
- [DAYR1.rvt](#)
- [DNTG1.rvt](#)
- [DR001.rvt](#)
- [DUTY1.rvt](#)
- [EXOS1.rvt](#)
- [EXRG3.rvt](#)
- [LBVP1.rvt](#)
- [MEDP1.rvt](#)



- VA will provide access to the current Revit BIM Templates that Match SEPS VA Room Codes: <http://onuma.com/transfer/SEPS/> **NOTE: This is a temporary links until the VA TiL gets updated**
- VA and DoD are in the process of modeling the SEPS spaces into BIM room templates.
- The intent is during a departmental criteria update more of the BIM Templates will be created and added to this repository.
- Your task is to use the existing Revit BIM Templates as guides to build new BIM Templates of rooms identified for Guide Plates in the department you are assigned to update if they currently don't exist or need to be modified.

Image: Sample list of Revit BIM Templates and thumbnail 3d views of some BIM Templates with equipment in them.

4- Revit BIM Templates Matching SEPS VA Room Codes

- VA will provide access to the current Revit BIM Templates that Match SEPS VA Room Codes:
 - <http://onuma.com/transfer/SEPS/>
- VA and DoD are in the process of modeling the SEPS spaces into BIM room templates.
- The intent is during a departmental criteria update more of the BIM Templates will be created and added to this repository.
- Your task is to use the existing Revit BIM Templates as guides to build new BIM Templates of rooms identified for Guide Plates in the department you are assigned to update if they currently don't exist or need to be modified.



Go to SEPS



1. If exact match to your department function and room contents is found in SEPS: use the room

A. Go to <http://onuma.com/transfer/SEPS/> to see if the room exists as a BIM Room Template

NOTE: This is a temporary links until the VA TiL gets updated

- If content and layout matches: use BIM Room Template as is



2. If exact match is not found in SEPS:

A. Define room layout and new content, and edit existing BIM Room Template as required.

NOTE: This is a temporary links until the VA TiL gets updated

B. Go to <http://onuma.com/transfer/SEPS/> to find if similar room exists.

- Note differences in Excel file, and edit the existing BIM Room Template as required.
- If no similar room exists, enter new room criteria in Excel file and create new BIM Room Template.



Go to SEPS

1. If exact match to your department function and room contents is found in SEPS: use the room

A. Go to <http://onuma.com/transfer/SEPS/> to see if the room exists as a BIM Room Template

- If content and layout matches: use BIM Room Template as is

2. If exact match is not found in SEPS:

A. Define room layout and new content, and edit existing BIM Room Template as required.

B. Go to <http://onuma.com/transfer/SEPS/> to find if similar room exists.

- Note differences in Excel file, and edit the existing BIM Room Template as required.
- If no similar room exists, enter new room criteria in Excel file and create new BIM Room Template.



7- Excel File Data Submittals

Each submittal to VA will include two Excel files:

One for update SEPS Room Contents (medical equipment and furnishings)

Another for updated SEPS Rooms (room and area)

Both shall notate changes to the data and BIM in the status column and Revit Family column.

Submittal

Content (Medical Equipment and Furnishings)

A	B	C	D	E	F
2. RECEPTION AREA				STATUS	New Revit Family
1. WAIT/CL - Waiting					
JSN	Content Item	Agency	Qty		
A0076	Dispenser, Hand Sanitizer, Free Standing	VA	1	Added	
A0210	Bracket, Television, Wall Mounted, w/Adjust Arm	VA	1	Removed	
A0222	Bracket, Television, Wall Backing	VA	1		
A0046	Artwork, Decorative, With Frame	VA	1	Qty change	
F0005	Chair, Side, Seating, With Arms	VA	1		
F0805	Chair, Waiting Room, Single	VA	3		
F2300	Rack, Magazine, Wall Mounted	VA	1		F2300 - Rack, Magazine, Wall Mounted.rfa
F2310	Rack, Pamphlet, Wall Mounted	VA	1		
F2300	Clock, Battery, 12" Diameter	VA	1		
M0511	Television, Plasma	VA	1		
3. PLAT1 - Playroom					
JSN	Content Item	Agency	Qty		
A1010	Telecommunication Outlet	VA	1		
A0210	Bracket, Television, Wall Mounted, w/Adjust Arm	VA	1		
A0220	Bracket, Television, Wall Backing	VA	1		
A0046	Artwork, Decorative, With Frame	VA	2		
F0211	Chair, Child	VA	4		
F0300	Chair, Waiting Room, Single	VA	2		
F0700	Table, Child	VA	1		
F2000	Basket, Washopaper, Round, Metal	VA	1		
F2045	Furniture, Playroom, Assembled	VA	1		
F3200	Clock, Battery, 12" Diameter	VA	1		
M0511	Television, Plasma	VA	1		
3. RECP5 - Reception					
JSN	Content Item	Agency	Qty		
A1010	Telecommunication Outlet	VA	2		
A0110	Telephone, Desk, Multiple Line	VA	2		
A0105	Counter, Reception Counter, Built In	VA	1		
R0776	Chair, Reception Waiting Room	VA	1		

Status

Family

Rooms

A	E	I	J	K	O	P	BW	BX
Criteria Dept Name	Criteria FA Name	Room Code	Room Type Name	Criteria Room Name	Default Area	Default Staff	Status	Revit & BIM Template
POLYTRAIUMA REHABILITATION CENTER (113)	INPATIENT / OUTPATIENT UNITS RECEPTION AREAS	LOB01	LOBBY SEATING AREA	Lobby	200	0		
POLYTRAIUMA REHABILITATION CENTER (113)	INPATIENT / OUTPATIENT UNITS RECEPTION AREAS	RECP1	RECEPTION	Reception	125	0	Area Change	Yes
POLYTRAIUMA REHABILITATION CENTER (113)	INPATIENT / OUTPATIENT UNITS RECEPTION AREAS	TL701	TOILET	Toilet, Visitor	60	0		
POLYTRAIUMA REHABILITATION CENTER (113)	INPATIENT / OUTPATIENT UNITS RECEPTION AREAS	BR001	EXCHANGE ROOMS (EQUIPPED BY OTHERS)	Vending Area	20	0	Deleted	
POLYTRAIUMA REHABILITATION CENTER (113)	INPATIENT UNIT: PATIENT AREAS	WR021	WAITING	Sub Waiting	100	0		
POLYTRAIUMA REHABILITATION CENTER (113)	INPATIENT UNIT: PATIENT AREAS	BR071	Bedroom, PREC, 1 Bed	Patient Room, One Bed	175	0	Added	Yes
POLYTRAIUMA REHABILITATION CENTER (113)	INPATIENT UNIT: PATIENT AREAS	TL732	TOILET/SHOWER, INPATIENT	Bathroom, Patient	60	0		
POLYTRAIUMA REHABILITATION CENTER (113)	INPATIENT UNIT: PATIENT AREAS	TL732	TOILET/SHOWER, INPATIENT	Bathroom, Patient, Shower/Letter	60	0		
POLYTRAIUMA REHABILITATION CENTER (113)	INPATIENT UNIT: PATIENT AREAS	BR072	Bedroom, PREC, Isolation, 1 Bed	Isolation Patient Room, One-Bed	0	0		Yes
POLYTRAIUMA REHABILITATION CENTER (113)	INPATIENT UNIT: PATIENT AREAS	TL732	TOILET/SHOWER, INPATIENT	Isolation Bathroom, Patient	60	0		
POLYTRAIUMA REHABILITATION CENTER (113)	INPATIENT UNIT: PATIENT AREAS	BR081	ANTEROOM, ISOLATION, NEGATIVE PRESSURE	Isolation, Anteroom	100	0		Yes
POLYTRAIUMA REHABILITATION CENTER (113)	INPATIENT UNIT: PATIENT AREAS	FS021	FOOD SERVICE, CATERING DINING ROOM	Dining Room, Congregate	18	0		
POLYTRAIUMA REHABILITATION CENTER (113)	INPATIENT UNIT: PATIENT AREAS	DR081	DARKROOM	Living Room, Family Support	250	0		
POLYTRAIUMA REHABILITATION CENTER (113)	INPATIENT UNIT: PATIENT AREAS	CR082	CONFERENCE ROOM, MEDIUM	Multipurpose Room, Family Support	350	0		
POLYTRAIUMA REHABILITATION CENTER (113)	INPATIENT UNIT: PATIENT AREAS	DR081	DARKROOM	Day Room	250	0		
POLYTRAIUMA REHABILITATION CENTER (113)	INPATIENT UNIT: PATIENT AREAS	CR091	COMPUTER ROOM	Recreational Computer Activities Room	110	0		

Track Changes

Image: Sample image of Excel file of room content and list of rooms with mark ups showing Status, Family and Track Changes columns.

Each submittal to VA will include two Excel files:
 One for update SEPS Room Contents (medical equipment and furnishings)
 Another for updated SEPS Rooms (room and area)
 Both shall notate changes to the data and BIM in the status column and Revit Family column.

Submittal
 Content (Medical Equipment and Furnishings)
 Rooms



	A	B	C	D	E	F
1		2 - RECEPTION AREA			STATUS	New Revit Family
2						
3		1 - WRC01 - Waiting				
4	JSN	Content Item	Agency	Qty		
5	A5076	Dispenser, Hand Sanitizer, Free Standing	VA	1	Added	
6	A5210	Bracket, Television, Wall Mounted, w/Adjust Arm	VA	1	Removed	
7	A5220	Bracket, Television, Wall Backing	VA	1		
8	A6046	Artwork, Decorative, With Frame	VA	1	Qty change	
9	F0206	Chair, Side, Bariatric, With Arms	VA	1		
10	F0305	Chair, Waiting Room, Single	VA	3		
11	F2300	Rack, Magazine, Wall Mounted	VA	1		F2300 - Rack, Magazine, Wall Mounted.r
12	F2310	Rack, Pamphlet, Wall Mounted	VA	1		
13	F3200	Clock, Battery, 12" Diameter	VA	1		
14	M0515	Television, Plasma	VA	1		
15						
16		2 - PLAY1 - Playroom				
17	JSN	Content Item	Agency	Qty		
18	A1010	Telecommunication Outlet	VA	1		
19	A5210	Bracket, Television, Wall Mounted, w/Adjust Arm	VA	1		
20	A5220	Bracket, Television, Wall Backing	VA	1		
21	A6046	Artwork, Decorative, With Frame	VA			
22	F0215	Chair, Child's	VA			
23	F0305	Chair, Waiting Room, Single	VA			
24	F0760	Table, Child's	VA			
25	F2000	Basket, Wastepaper, Round, Metal	VA			
26	F2045	Furniture, Playroom, Assorted	VA			
27	F3200	Clock, Battery, 12" Diameter	VA	1		
28	M0515	Television, Plasma	VA	1		
29						
30		3 - RECP1 - Reception				
31	JSN	Content Item	Agency	Qty		
32	A1010	Telecommunication Outlet	VA	2		
33	A1015	Telephone, Desk, Multiple Line	VA	2		
34	A6105	Counter, Reception Control, Built-In	VA	1		
35	F0275	Chair, Swivel, High Back	VA	1		

If an object is added the JSN Number should noted, along with the object name.

If an object is removed from a room, it should be marked as "Removed" in the Status Column

Added objects should be noted with "Added" in the Status Column.

Quantity changes in objects should be marked in the Status Column.

If a new Revit Family Object is Created the name should be placed in this column.

ANY addition to the Status column like the examples here trigger the need for a new Room Code to be reviewed with VA.

Add These Columns E+F to the SEPS Content Tracking Excel File

Image: Screen shot from the Excel Content Tracking Excel File with columns for JSN number, Content Item Name, Agency Name, Quantity, Status, and New Revit Family

Notation added to Excel Columns:

- A. If an object is added the JSN Number should noted, along with the object name.
- E. If an object is removed from a room, it should be marked as "Removed" in the Status Column
- ANY addition to the Status column like the examples here trigger the need for a new Room Code to be reviewed with VA.
- Added objects should be noted with "Added" in the Status Column.
- Quantity changes in objects should be marked in the Status Column.
- F. If a new Revit Family Object is Created the name should be placed in this column.
- Add Columns E+F to the SEPS Content Tracking Excel File



Add "Status and Guide Plates & BIM" Columns to the Excel File

A	E	I	J	K	O	P	BW	BX
Criteria Dept Name	Criteria FA Name	Room Code	Room Type Name	Criteria Room Name	Default Area	Default Staff	Status	RTF & BIM Template
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT / OUTPATIENT UNITS: RECEPTION AREAS	LOB01	LOBBY, SEATING AREA		200	0		
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT / OUTPATIENT UNITS: RECEPTION AREAS	RECP1	RECEPTION		125	0	Area Change	Yes
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT / OUTPATIENT UNITS: RECEPTION AREAS	TLTU1	TOILET	Toilet, Visitor	60	0		
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT / OUTPATIENT UNITS: RECEPTION AREAS	BX001	EXCHANGE, VENDING (EQUIPPED BY OTHERS)	Vending Area	20	0		
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT UNIT: PATIENT AREAS	WRC01	WAITING	Sub Waiting	120	0	Deleted	
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT UNIT: PATIENT AREAS	BRPT1	Bedroom, PRC, 1 Bed	Patient Room, One Bed	175	0		
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT UNIT: PATIENT AREAS	TLTS2	TOILET/SHOWER, INPATIENT	Bathroom, Patient	60	0	Added	Yes
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT UNIT: PATIENT AREAS	TLTS2	TOILET/SHOWER, INPATIENT	Bathroom, Patient, Shower Litter	60	0		
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT UNIT: PATIENT AREAS	BRPT2	Bedroom, PRC, Isolation, 1 Bed	Isolation Patient Room, One-Bed				Yes
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT UNIT: PATIENT AREAS	TLTS2	TOILET/SHOWER, INPATIENT	Isolation Bathroom, Patient				
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT UNIT: PATIENT AREAS	BRAR1	ANTEROOM, ISOLATION, NEGATIVE PRESSURE	Isolation, Anteroom	120	0		Yes
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT UNIT: PATIENT AREAS	FSCD1	FOOD SERVICE, CAFETERIA DINING ROOM	Dining Room, Congregate	18	0		
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT UNIT: PATIENT AREAS	DAYR1	DAYROOM	Living Room, Family Support	250			
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT UNIT: PATIENT AREAS	CRA02	CONFERENCE ROOM, MEDIUM	Multipurpose Room, Family Support	350			
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT UNIT: PATIENT AREAS	DAYR1	DAYROOM	Day Room	250			
POLYTRAUMA REHABILITATION CENTER (111)	INPATIENT UNIT: PATIENT AREAS	CMP01	COMPUTER ROOM	Recreational Computer Activities Room	110	0		

Default Area Changes must be noted.

Any changes must be marked in the Status Column as "Area Change, Deleted, or Added"

Rooms that have been identified as needing Guide Plates and BIM Templates must be noted in this column.

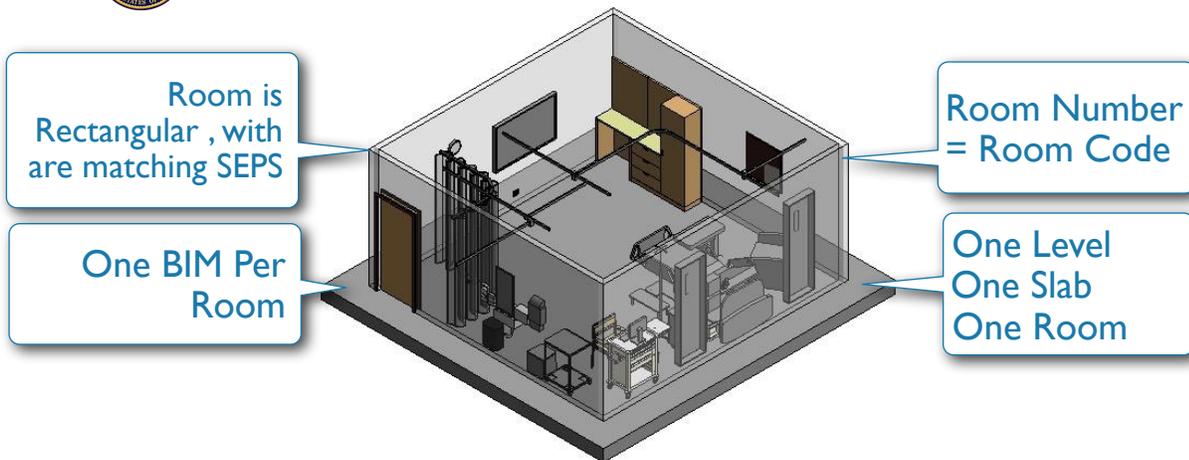
Image: Screen shot from the Excel Room Tracking Excel File with columns for Criteria Dept. Name, Criteria FA Name, Room Code, Room Type Name, Criteria Room Name, Default Area, Default Staff, Status, BIM Template

Notation added to Excel Columns:

O: Default Area Changes must be noted.

BW: Any changes must be marked in the Status Column as "Area Change, Deleted, or Added"

BW & BX: Add "Status and Guide Plates & BIM" Columns to the Excel File. Rooms that have been identified as needing Guide Plates and BIM Templates must be noted in this column.



- For all the new room/spaces to be created in PG 18-9 and for those that CFM deems necessary, a single BIM shall be submitted back to VA as a BIM Template based on the sample BIM template and instructions.
- All objects except doors and windows Revit families are from the 1691 library or newly created families per “Part 2: Technical Guidelines for adding new Revit Families”
- A sample file matching the above criteria can be downloaded from here:
<http://onuma.com/transfer/BRMS1.rvt>

NOTE: This is a temporary links until the VA TiL gets updated

Image: One 3D BIM Room with equipment arranged

Room is Rectangular , with are matching SEPS

One BIM Per Room

Room Number = Room Code

One Level

One Slab

One Room

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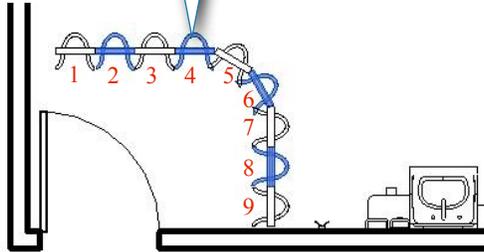
All objects except doors and windows Revit families are from the 1691 library or newly created families per “Part 2: Technical Guidelines for adding new Revit Families”

A sample file matching the above criteria can be downloaded from here:

<http://onuma.com/transfer/BRMS1.rvt>



Each segment is a separate object to match SEPS.



- Selected objects in MLSTD 1691 that are defined in linear feet (curtains, countertops, etc.) shall be used as 1 foot increments in the necessary number to match the SEPS output and the PG 18-5 specification.

Image: 2D Plan view of a curtain track object with multiple segments

Each segment is a separate object to match SEPS.

Selected objects in MLSTD 1691 that are defined in linear feet (curtains, countertops, etc.) shall be used as 1 foot increments in the necessary number to match the SEPS output and the PG 18-5 specification.

**IMPORTANT:**

Note that a BIM Template and Guide Plates are related but different. The BIM deliverable to VA is the BIM Template.

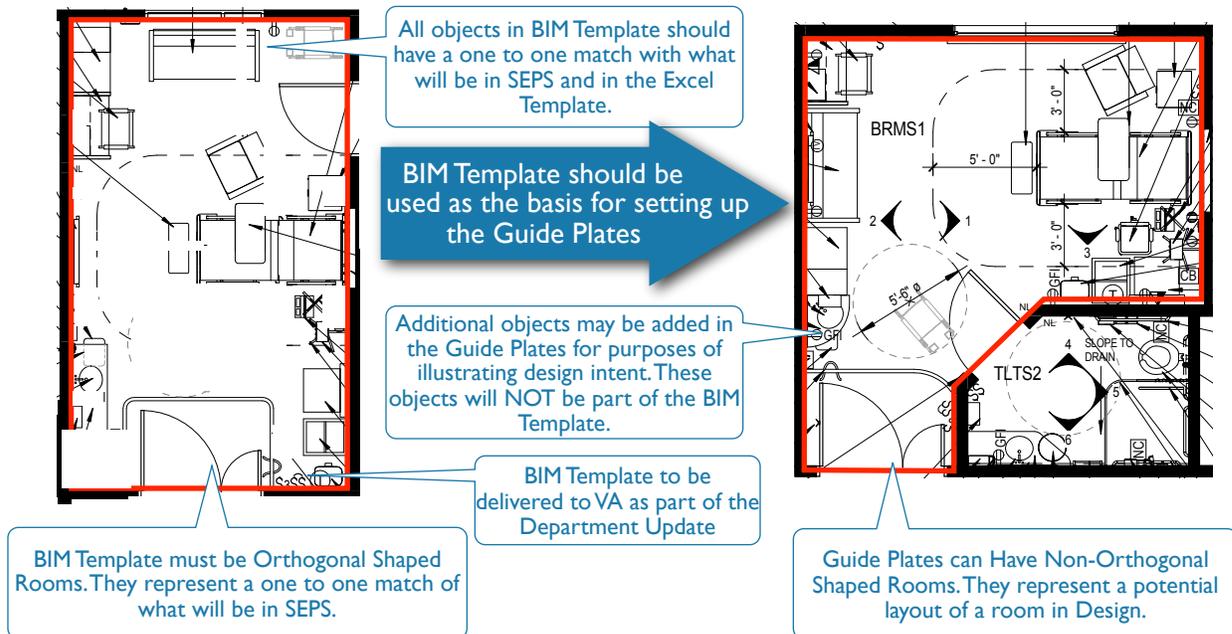


Image: 2D Floor plan sample of typical BIM template room with equipment versus a 2D sample of a typical Guide Plate room.

IMPORTANT:

Note that a BIM Template and Guide Plates are related but different. The BIM deliverable to VA is the BIM Template.

All objects in BIM Template should have a one to one match with what will be in SEPS and in the Excel Template.

BIM Template should be used as the basis for setting up the Guide Plates

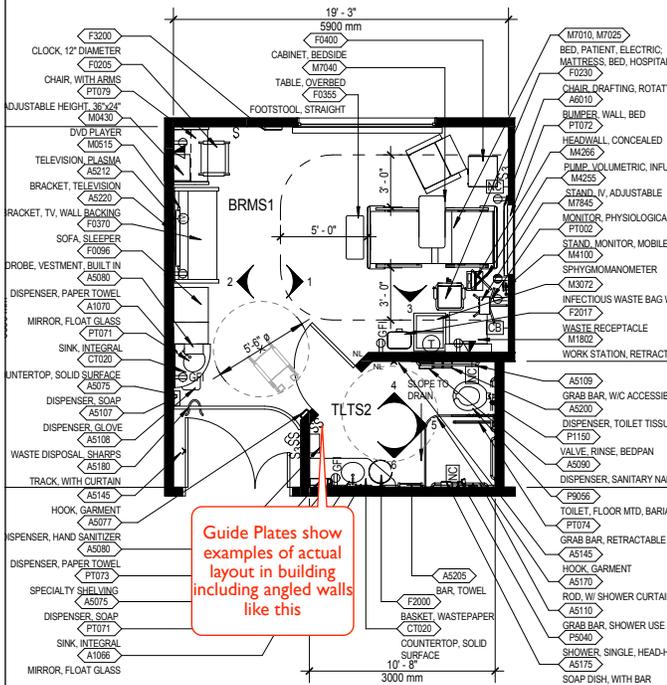
BIM Template to be delivered to VA as part of the Department Update

BIM Template must be Orthogonal Shaped Rooms. They represent a one to one match of what will be in SEPS.

Guide Plates can Have Non-Orthogonal Shaped Rooms. They represent a potential layout of a room in Design.



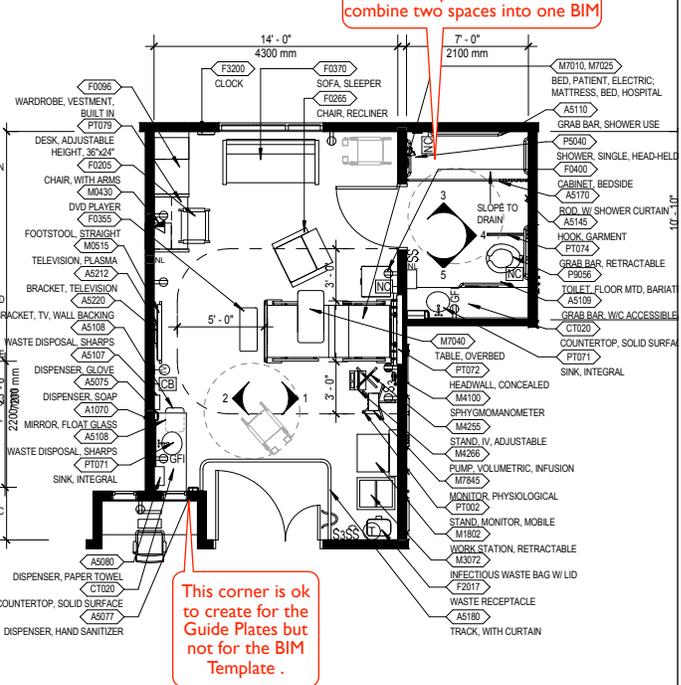
Bedroom, Patient (BRMS1); Toilet/Shower, Patient (TLTS2) - Option 1



SCALE: 3/16" = 1'-0"
 Polytrauma Rehabilitation Center - Inpatient Unit
 Floor/Equipment Plan (300 NSF/27.9 NSM; 75 NSF/7.0 NSM)

Guide plates are graphical representations of selected room types, illustrating the integration of space, components, systems, and equipment. They are not intended to be project specific. Specific infrastructure design requirements are contained in VA Design Manuals and Space Planning Criteria located in the VA Technical Information Library.

Bedroom, Patient (BRMS1); Toilet/Shower, Patient (TLTS2) - Option 3



SCALE: 3/16" = 1'-0"
 Polytrauma Rehabilitation Center - Inpatient Unit
 Floor/Equipment Plan (300 NSF/27.9 NSM; 75 NSF/7.0 NSM)

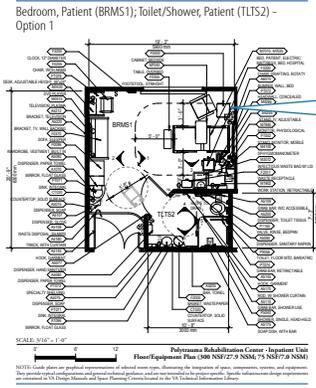
Guide plates are graphical representations of selected room types, illustrating the integration of space, components, systems, and equipment. They are not intended to be project specific. Specific infrastructure design requirements are contained in VA Design Manuals and Space Planning Criteria located in the VA Technical Information Library.

Image: Sample 2D Guide Plate plans with notation how they differ from BIM Templates.

Guide Plates show examples of actual layout in building including angled walls like this.

BIM Templates should not combine two spaces into one BIM.

This corner is ok to create for the Guide Plates but not for the BIM Template .



Guide Plates are used to create PDFs for the Design Guide

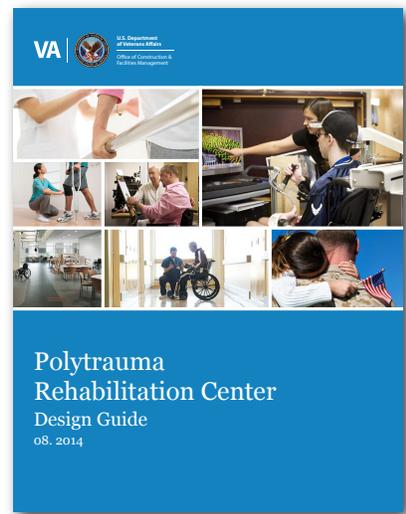
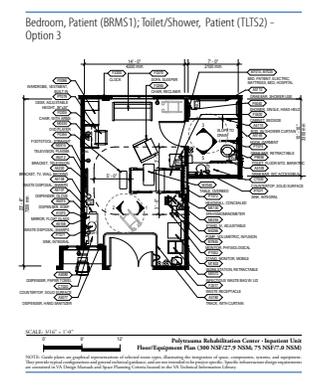
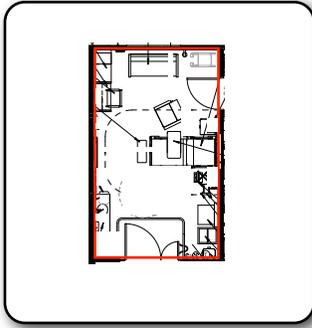


Image: Sample Guide Plates that show them being used for the PDF plans in the Design Guide.

Guide Plates are used to create PDFs for the Design Guide



1A-BIM Template

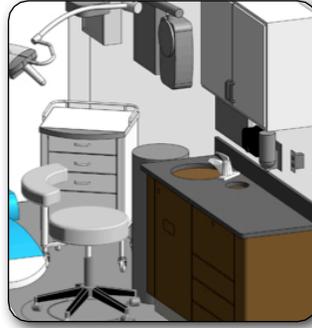


1B-BIM Template



BIM Templates are a one to one match of all the objects and size of space to SEPS

2-NEW BIM OBJECTS

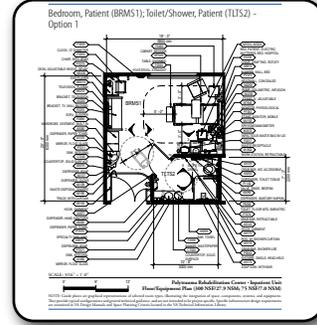


3-Excel of BIM Template & Objects

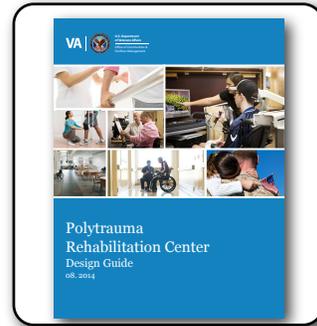
Equipment Name	Quantity	Location	Notes
Medical Exam Table	1	Room 101	Standard Exam Table
Medical Chair	1	Room 101	Adjustable Exam Chair
Medical Cabinet	1	Room 101	Storage for Supplies

Object naming and numbering standards follow MILSTD 1691

4A - Guide Plates



4B - Design Guide



Guide Plates used to layout.

Image: Sample images of 2D and 3D BIMs, BIM Objects, Excel table of equipment, Guide Plates, and Design Guide.

1A-BIM Template

1B-BIM Template

BIM Templates are a one to one match of all the objects and size of space to SEPS

2-NEW BIM OBJECTS

3-Excel of BIM Template & Objects

Object naming and numbering standards follow MILSTD 1691

4A - Guide Plates

4B - Design Guide

Guide Plates used to layout.

SEPS+BIM

Space and Equipment Planning System
+
Building Information Modeling

Part 1 Guidelines for Creating BIM Templates

VA



U.S. Department
of Veterans Affairs

Office of Construction & Facilities Management

 Prepared by ONUMA 3-28-2015

19

SEPS+BIM

Space and Equipment Planning System
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Part 1
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Creating BIM Templates

3-15-2015

Image: US Department of Veterans Affairs Logo