CAD CHECK REVIEW

ABREVIATED CHECKLIST

This is an abbreviated checklist and is in no way authoritative in nature or requirements.
For complete information regarding CAD Check standards review UW contractual documentation.

check-list

DATE:

TO:

FROM:

PROJECT NAME:

PROJECT NO.:

SUBJECT:

CAD Check Standard		Comments
1. Submittal Content		
1A	**Use Owners CMS**	

1B	**Included drawings**
	  Master Sheet index
	    (*Matching PDF and DWG)*	

2. Sheet Title Blocks		
2	**Sheet Title Blocks** Date, UW Proj. Name, Proj. Num, FACNUM, Sheet Name, Sheet Number, Consultant Co. Name, Seal (where required)	
3. BIM Standards		
3A	**Format:** Revit – RVT format	

3B	**Packaging for Submission:**
	  Models must be detached from central
	    All worksets must be relinquished
	    On final export dialog box, UNCHECK the box saying "Export views on sheets and links as external references".
	    Use eTransmit to package model and related files.	

3C	**File Names:** Revit model file names must start with the UW CPD Project Number	
4. CAD Standards		
4A	**Format:** Must be in .Dwg format	

4B	**File Organization:** Each CAD drawing file must represent a single printed sheet.	
4C	**File Names:** Drawing and PDF file names must be titled <Sheet Number> <Sheet Name>. i.e. (A-101 1ST FLOOR PLAN.dwg or (.pdf))	
4D	**Image and .PDF references:** Unreferenced and Unloaded images must be detached from the drawing.	
4E	**External References (Xrefs):** External drawing references are not allowed. External references used during the project must be bound using the 'Bind' option (instead of the 'Insert' option) before submitting.	

PDF Standards		
5A	**Single Sheet .PDF** Each .PDF file must represent a single sheet and must not contain multiple pages.	
5B	**File Names** .PDF file names must match the corresponding .DWG file names except for the file extension.	
5C	**File Creation** .PDF files are to be created by printing from the native CAD/BIM format by printing to PDF. Scanning is not permissible.	
5D	**Layer Content** .PDF files must not contain layers.	
5E	**Image Resolution** All documents must be created with a resolution of no less than 300 dpi.	
5F	**Fonts** All fonts must be embedded in the .PDF.	
5G	**Compression** When compression is used, the algorithm must be LZW, CITT Group 4, or PackBits.	
5H	**Page Size** The .PDF page size must be the same as the original page size if the page were printed.	

CAD, BIM, and PDF
Standards and Requirements

This document details the CAD (Computer Aided Drafting), BIM (Building Information Modeling), and PDF (Portable Document Format) standards and requirements for University of Washington projects. Approval of Record Drawings is required prior to Owner issuing Final Acceptance of the construction contract.

1. **SUBMITTAL CONTENT**
   A. **Transmission**
      - Drawing package to be submitted using Owners' construction management system (CMS).
   B. **Included Drawings**
      - Submittal must include one Master Sheet Index on a single sheet that lists all drawing files submitted for all disciplines, including the sheet containing the Master Sheet Index. Only if the Master Sheet Index cannot fit on a single sheet may it be split over multiple sheet.
         o For each file listed on the Master Sheet Index there must be one matching *.DWG* and one *.PDF*.
         o Each drawing file provided in the submittal must be listed on the Master Sheet Index.
      - If the Master Sheet Index is an OLE object, the index must also be submitted as an Excel *.XLS or Text (.txt, .csv, etc.)* file.

2. **SHEET TITLEBLOCKS**
   Sheets must contain a title block on the right or bottom side of the sheet. Title blocks must include labels and the following information:
      - Date
      - UW Project Name
      - UW Project Number
      - UW Facility Number (FACNUM)
         o Every title block must include all FACNUMs affected by the project.
      - Sheet Name
      - Sheet Number
      - Consultant Company Name
      - Jurisdiction Seal where required by jurisdiction.
         o Example: Within the City of Seattle

3. **BIM STANDARDS**
   A. **Format**
      - BIM models must be submitted in Revit *.RVT* format.
   B. **Packaging for Submission**
      - Models must be detached from central
      - All worksets must be relinquished
      - On final export dialog box, **UNCHECK** the box saying "Export views on sheets and links as external references".
      - Use eTransmit to package model and related files.
   C. **File Names**
      - Revit model file names must start with the UW CPD Project Number

4. <u>**CAD STANDARDS**</u>
   A. **Format**
      - CAD files must be submitted in AutoCAD *.dwg* format.
   B. **File Organization**
      - Each CAD drawing file must represent a single printed sheet.
   C. **File Names**
      - Drawing and PDF file names must be titled *<Sheet Number> <Sheet Name>*.
         o Examples:

               A-101 1ST FLOOR PLAN.dwg

               A-101 1ST FLOOR PLAN.pdf

   D. **Image and *.PDF* References**
      - **Unreferenced** and **Unloaded** images must be detached from the drawing.
         o No **Unreferenced** or **Unloaded** images or PDF underlays should appear in the Xref Manager
   E. **External References (XREFs)**
      - External drawing references are not allowed.
      - External references used during the project must be bound using the 'Bind' option (instead of the 'Insert' option) before submitting.

5. <u>*.PDF* **STANDARDS**</u>
   A. **Single Sheet *.PDF***
      - Each *.PDF* file must represent a single sheet and must not contain multiple pages.
   B. **File Names**
      - *.PDF* file names must match the corresponding *.DWG* file names except for the file extension.
   C. File Creation
      - *.PDF* files are to be created by printing from the native CAD/BIM format by printing to PDF. Scanning is not permissible.
   D. **Layer Content**
      - *.PDF* files must not contain layers.
   E. **Image Resolution (if applicable)**
      - All documents must be created with a resolution of no less than 300 dpi.
   F. **Fonts**
      - All fonts must be embedded in the *.PDF*.
   G. **Compression**
      - When compression is used, the algorithm must be LZW, CITT Group 4, or PackBits.
   H. **Page Size**
      - The *.PDF* page size must be the same as the original page size if the page were printed.
         o Example: ANSI D sized sheet must have a *.PDF* sheet size of 22 x 34.