Digital file submittal requirements to Massport

Massport Tennant Alterations are required to submit digital files for both vertical and horizontal construction to Massport's Tennant Alterations Manager. This includes everything associated with creating construction documents, including design files at 100% Design and As-Built Record submissions at the time of construction completion / project closeout. These are required to be in the form of BIM, CAD (Site Civil) and PDF. In addition, PDF's are to be submitted at project closeout to PMWeb in order to close out the contract record.

A link shall be provided to Massport for the digital transmittal of files. This link shall include, but is not limited to, all Revit, CAD, Civil 3D, PDF Construction Documents, Navisworks, BIMxP, Point Clouds (if applicable), completed excel file of title block information, Written transmittal of files contained in the current submittal, and any other files pertinent to the creation of the construction documents. The Record Drawings shall be in the format required by Massport, and be stamped and signed by the designer of record attesting to their accuracy.

Please see below for what is required on all vertical or horizontal project submissions. They fall into 3 categories: BIM   -   CAD/Civil 3D   -   PDF Construction Documents
Each have their own requirements:

BIM

Consultants must refer to MPA BIM/VDC on TAA Projects Guide for additional detailed information

The following is required:

- Acknowledgement of the provided BIMxP and that the project followed the pre-determined LOD requirements by responsible party (primary designer) signing off on it.

Revit: .rvt
- Arch
- Struc
- MEP
- FP
- All other disciplines

Navis: .nwd, .nwc, .nwf   (if applicable)
- Federated model   .nwd
- Clash Reports   pdf – printable and legible
- Associated files   .nwc / .nwf

Point Clouds: (Native files & Autodesk compatible)   (if applicable)
- Pre-Con existing conditions
- Post construction As-builts
- Registered point cloud in non-vendor specific format (ascii text or las) with XYZI (plus RGB if applicable).
- Register point cloud in Autodesk RCS/RCP format

TAA Deliverable Requirements for all technical files

CAD/Civil 3D: .dwg
- Any related CAD
- Any Civil 3D
- Site Civil data geo referenced to MPA state plane cords

All supporting linked files:
- CAD
- PDF
- Revit
- Sketchup
- Jpegs
- Other…

All supporting trade files:
- CAD
- PDF
- Revit
- Sketchup
- Jpegs
- Other…

SITE CIVIL

For all site / civil design & construction at Massport, MPA DTIG requires the following file types submitted complying to all MPA standards:

Consultants must refer to MPA Site Civil CAD Standard guide 2019 for additional detailed information

AutoCAD & Civil 3D file Standards:
- MPA CAD files shall be individual files per drawing sheet; named (MPA Project No.-Sheet No.dwg)
- Follow MPA standards for <u>all layer naming</u>
- AutoCAD file units must be set to: Decimal, Insertion set to "Unitless", angle precision set to "0.0000"
- UCS set to "World"
- All objects must be in MA State Plane Coordinates
- Horizontal Coordinates: NAD83, EPSG Code is 2249
- Vertical Coordinates: NAD88, EPSG Code is 6360

AutoCAD eTransmit: (always utilize to submit CAD to MPA)
- eTransmit to package all CAD & linked files
- Include all xrefs and associated files used to create CAD files

TAA Deliverable Requirements for all technical files

- Never bind xrefs to their parent files. Xref files shall be attached as 'overlays' and the path types shall be set to 'relative path'. Xrefs shall be uniquely named and prefaced with an 'X' for Xref.In "settings" – be sure to package everything into one (1) parent folder with no sub folders

Point Clouds: (Native files & Autodesk compatible)   (if applicable)
- Pre-Con existing conditions
- Post construction As-builts (prior to back-filling or slab pouring)
- Registered point cloud in non-vendor specific format (ascii text or las) with XYZI (plus RGB if applicable).
- Register point cloud in Autodesk RCS/RCP format

PDF Drawing Sets:

All projects, regardless of design methods (BIM vs CAD) require both design and record/as-built PDF construction documents submitted to MPA Capital Programs in the format listed below

Design / Bid
- One (1) pdf file of conformed set: **TAA####-Entire Design Set.pdf**
- Individual pdf files of said set; named correctly: **TAA####-A101.pdf**

As-Built / Record
- One (1) pdf file of conformed set: **TAA####-Entire Record Set.pdf**
- Individual pdf files of said set; named correctly: **TAA####-A101.pdf**

- The Primary party will also be issued an excel file in which they are required to populate the title block information from each PDF file.