PORT AUTHORITY NY NJ
AIR LAND RAIL SEA

# Engineering CAD Standard

***Last Updated: 01/01/2021***
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## CHANGES TO THE STANDARDS 2020

| 2020 | File/Section | Description |
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| | 1.7 Project Directory (Vault) | Vault Section and information Deleted |
| | 1.11 Compliance CAD Report | Updated Images |
| | 1.15 Appendix A through Appendix E | Moved to the beginning of the appendices |
| | 1.17 – Contract Border and Title Sheets | Updated Images |
| | 1.9 Confidential and Con fidential Privilege Projects | Updated Images |
| | 1.6.1 through 1.6.4 | Moved to the beginning of 1.6 CAD Practice section |
| | 1.5.3.1 General Folder Rules | New table displaying the general rules of each folder in the folder structure |
| | 1.5.5.4.1 Plotsheet Plan Type | New Plan types added for Index of Drawings and Cover Sheets |
| | 1.9.2 Confidential Projects | The use of the Cover Sheet for Confidential Drawings |
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| | 1.9.4 C & CP Contract Drawing Set | New requirements for the creation of the contract set containing Unmarked, C and CP content |

# 1.0 CAD STANDARD

## 1.1 FOREWORD

The CAD Standard outlined within this document was established to provide guidance for the preparation of the Engineering / Architecture (E/A) Design Division and Construction Division (CMD) of the Port Authority of New York and New Jersey's (PANYNJ) contract documents.

This document is intended for use by both in-house personnel as well as outside consultants involved in creating or updating PANYNJ facilities' Computer Aided Drafting (CAD) data.

## 1.2 PURPOSE

This Standard establishes requirements and procedures for the preparation and milestone records (submissions) of CAD based drawings throughout the project life cycle. Adherence to this standard ensures that the Design and Construction Divisions of the PANYNJ shall produce andreceive data in a consistent format. The adherence to the PA Standard also ensures the consistency of the information the information within each discipline and the efficient exchange of information between disciplines.

The level of required understanding of the CAD Standard determines by the role of individual assign to the project. For CAD operators, designers, and functional supervisors a thorough knowledge of all CAD related elements associated with a project is crucial. The project manager however only requires a general knowledge of the EAD CAD Standard and the means by which it is employed to create a project. Both levels of knowledge will be possible through the use of this manual.

The CAD system adopted by the PANYNJ is comprised of several Autodesk products. Throughout this manual terminology and references will be made that are unique to Autodesk and primarily, different AutoCAD based software applications.

Supported Design Software Products
**AutoCAD** 2018
**AutoCAD** Architecture 2018
**AutoCAD** Civil 3D 2018
**AutoCAD** Map 3D 2018
**AutoCAD** MEP 2018
**AutoCAD** Raster Design 2018

### 1.2.1 ABOUT THIS STANDARD

The chapters within this standard describe how the E/A Design Division and CMD Construction Division uses AutoCAD and how to configure AutoCAD to support the E/A Design Division and CMD Construction Division CAD Standard, which it has adopted.

The appendices, which follow, support the chapters in several ways. Each discipline has been assigned an appendix to explain information specific to their functional group. In addition, appendices have been provided to support CAD related subject matter, which is common throughout all disciplines. Finally, some appendices have been created to support internal E/A Design Division staff only; these appendices will be for internal use; however, they have been supplied with the document for both in-house and consultant staff.

## 1.3 ACRONYMS AND ABBREVIATIONS

The following are Acronyms and Abbreviations used throughout this document.

| Acronym | Definition |
|---|---|
| APJ | Autodesk Project File |
| C3D | Autodesk AutoCAD Civil 3D |
| C | Confidential |
| CMD | Construction Management Division |
| CP | Confidential Privileged |
| CTB | Color Dependent Plot Style Table |
| DST | Drawing Sheet File |
| DWG | AutoCAD drawing file |
| DWT | AutoCAD template file |
| EAD | Engineering Architecture Design |
| EOL | Engineering on Line |
| EOP | Engineer of Projects |
| FAC | Facility Code |
| K:\ | Internally Mapped Network Drive pointing to \\Patcav56\K_Drive |
| LE/A | Lead Engineer or Architect |
| LT | Linetype scale |
| M:\ | Internally Mapped Network Drive pointing to \\Patccsrv2\Cad\Cad |
| MEP | Autodesk AutoCAD MEP |
| MS | Model Space |
| N:\ | Internally Mapped Network Drive pointing to \\Patccsrv1\Cad\Archive |
| PANYNJ | Port Authority of New York and New Jersey |
| PC3 | Plotter Configuration file |
| PDF | Portable Document Format file |
| PID | Project Identification Number |
| PMP | Plotter Model Parameter file |
| PS | Paper Space |
| RVT | Autodesk Revit |
| VDC | Virtual Design and Construction |

## 1.4 ACCESSING CAD STANDARD

The CAD Standard includes a series of support files. All support files are provided in a folder named "CAD_Standards\2018", which is located on K:\Application\EAD\CAD_Standards\2018 folder of the PANYNJ network for in-house user.Consultant can download the standards and supporting files in Port Authority NY & NJ Engineering Available Documents. The "CAD_Standards\2018" folder contains one general "**All_Disciplines**" sub-folder and eight discipline specific sub-folders as illustrated in **Figure 1.2.1-2**.

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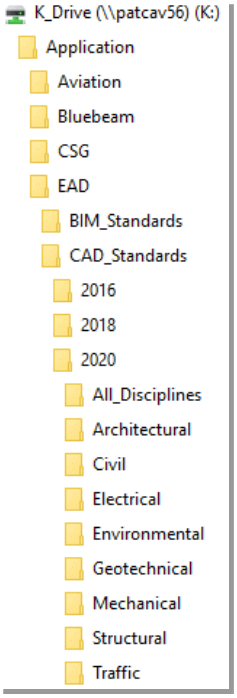



**Figure 1.2.1-2**

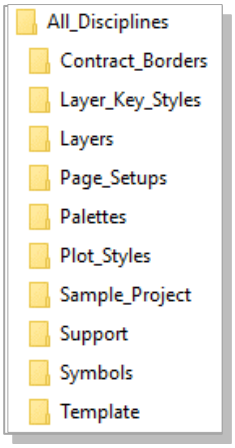



**Figure 1.2.1-1**

The “All_Disciplines” sub-folder contains all cross-discipline support files. Both folder structures for PA employees and on-site consultants are illustrated in Figure 1.2.1-1.

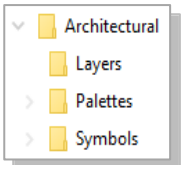



**Figure 1.2.1-3**

Each Discipline sub-folder is divided into three sub-folders which contain all the discipline specific support files. An example of this folder structure is illustrated in Figure 1.2.1-3.

The layer and symbol content for each discipline can be referenced in the appendices.

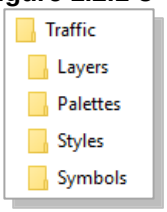



**Figure 1.2.1-4**

The Traffic and Geotechnical sub-folders contain one additional folder – styles. Figure 1.2.1-4 displays the folder structure that is shared by Traffic and Geotechnical.

The Civil discipline contains folders for civil3d objects in addition to the sub-folders mentioned before. Figure 1.2.1-5 demonstrates the folder structure for the civil discipline.

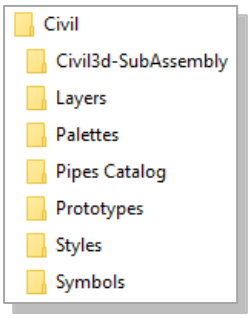



**Figure 1.2.1-5**

### 1.4.1 USING THE STANDARD FILES

The CAD_Standards directory contains two primary types of files: files that do not require ongoing user interaction and files that do.

The first type refers to support files accessed automatically by AutoCAD once they have been copied to the proper support folders. Outside consultants should copy these files to the appropriate directories or create an AutoCAD profile pointing to the files as necessary, refer to **1.5 Project Directory Structure and File Naming Convention.**

The second type refers to files such as which the user must configure within the project. For instructions on creating a title sheet or working with the contract borders, refer to **1.8 Plan Set Preparation**.

### 1.4.2 AUTOCAD CIVIL 3D

When using C3D, project design and data should be stored in the MODEL folder of the appropriate discipline.

M:\<Facility Name>\<PID Number>\<Discipline>\Model\

Consultantshall make sure the path for the design or data content in the model folder to be ste as a relastive path as such:

…..<PID Number>\<Discipline>\Model\

For a more in depth breakdown on how to use C3D within the PANYNJ reference the Civil 3D Standard which is included within **1.21.5 Civil 3D**. For C3D requirements go to VDC Requirements.

## 1.5 PROJECT DIRECTORY STRUCTURE AND FILE NAMING CONVENTION

The E/A Design Division CAD Standard provides a structure for the organization of CAD projects within the department to improve coordination between functional groups of E/A Design Division and its consultants.

### 1.5.1 PROJECT DIRECTORY STRUCTURE

Internally CAD projects are stored on the CAD volume, with an internal mapping to the drive letter “M:\”. The “M:\” drive contains a sub-directory for each facility named using its facility code as displayed in Table 1.5.1-A.

**Table 1.5.1-A**

| Facility Code | Facility Name |
|---|---|
| AMT | Automobile Marine Terminal |
| BB | Bayonne Bridge |
| BRKMT | Brooklyn Port Authority Marine Terminal |
| EP | Elizabeth Port Authority Marine Terminal |
| EWR | Newark Liberty International Airport |
| FERRY | Ferry Transportation |
| GB | Goethals Bridge |
| GWB | George Washington Bridge and Bus Terminal |
| HCMF | Harrison Car Maintenance Facility |
| HELI | Downtown Manhattan Heliport |
| HH | Howland Hook Marine Terminal |
| HT | Holland Tunnel |
| IPY | Industrial Park at Yonkers |
| JFK | John F. Kennedy International Airport |
| JSTC | Journal Square Transportation Center |
| LGA | LaGuardia Airport |
| LT | Lincoln Tunnel |
| MULTI | Multi Facility Projects |
| NFC | Newport Financial Center |
| NJMT | New Jersey Marine Terminals |
| NLCC | Newark Legal and Communication Center |
| OBX | Outerbridge Crossing |
| PABT | Port Authority Bus Terminal |
| PACD | Port Authority Police Academy |
| PATC | Port Authority Technical Center |
| PATH | Port Authority Trans-Hudson Corporation |
| PHQ | Police Headquarters |
| PJ | Port Jersey |
| PN | Port Newark |
| PRTC | Police Rescue Training Center |
| RLLC | Cross Harbor Rail Road NY/NJ |
| SWF | Stewart International Airport |
| TEB | Teterboro Airport |
| TLPT | Staten Island Teleport |
| WTC | World Trade Center |

### 1.5.2 PROJECT IDENTIFICATION NUMBER

The Project Identification Number (PID) is a unique Identification assigned for all EAD projects.

The EOP is responsible for getting the PID number from the Facility Project Manager at the kick-off meeting and distributing it to all discipline task leaders involved in the project. The LE/A is responsible for distributing the PID number to their outside consultants. The LE/A will request the creation of the project folder structure through the use of the on-line form by selecting the following link Project Folder Creation Request Form. Refer to **1.19.6 Request Project Folder Structure**.

The "M:\" drive is divided into Facility Folders, each containing project specific sub-folders. These project folders are named using the eight (8)-digit PID number. **Figure 1.5.1-1** illustrates this concept using a project at Goethals Bridge with a PID number of 01234567.

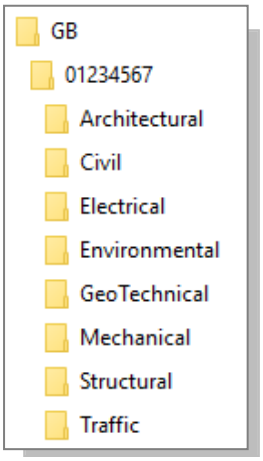



**Figure 1.5.1-1**

### 1.5.3 DISCIPLINE FOLDERS

Every discipline is provided with a folder in the project directory in which all design related data is to be stored. Each discipline folder has a series of standardized sub-folders which are to contain the various types of design data.

**Figure 1.5.3-1** illustrates these standardized sub-folders using the Architectural folder as an example.

The Model, Plotsheet and Publish folders should always contain the current version of all CAD drawings related to the project.

For more information on the usage of these folders refer to the section titled Discipline Folder Rules of this standard.

For more information on the Plotsheets_CP and PDF_CP folders refer to **1.9 Confidential & Confidential Privileged Projects** of this standard.

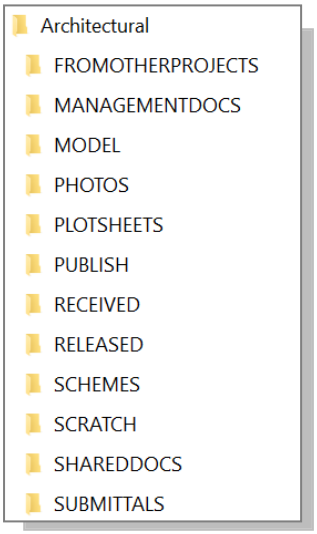



**Figure 1.5.3-1**

#### 1.5.3.1 GENERAL RULES OF THE DISCIPLINES FOLDERS

All folders have a pre-set of rules that inhouse and consultant shall follow. The rules on **Table 1.5.3-A** displays, for specific discipline, the use of each folders for consistency through out the projects for the Port Authority. For more information on each folders reference section **1.5.3.2 Rules of the FromOtherProjects Folder** through section **1.5.3.14 Rules of the MileStoneSubmissions Folder.**

**Table 1.5.3-A**

| Folder | Folder Rules | | | |
|---|---|---|---|---|
| | Sub-folders Permitted | Read-write Permissions | Access for Other Disciplines (Read Permission) | Archived |
| From Other Projects | ✓ | ✓ | | |
| Management Docs | ✓ | ✓ | | ✓ |
| Model | | ✓ | ✓ | ✓ |
| Photos | ✓ | ✓ | ✓ | ✓ |
| Plotsheet | | ✓ | ✓ | ✓ |
| PDF | | ✓ | ✓ | ✓ |
| Publish | | ✓ | ✓ | ✓ |
| History | ✓ | ✓ | ✓ | ✓ |
| Data Shortcut | ✓ | ✓ | ✓ | ✓ |
| Received | ✓ | ✓ | | |
| Released | ✓ | ✓ | | |
| Schemes | ✓ | ✓ | | |
| Shared Docs | ✓ | ✓ | ✓ | |
| Submission | ✓ | ✓ | ✓ | ✓ |

#### 1.5.3.2 RULES OF THE FROMOTHERPROJECTS FOLDER

The FromOtherProjects folder will contain drawings and data that have been taken from other projects that relate to the current project. If a file from another project is required for reference purposes only and is not going to be included as part of the contract set it will be stored in this directory. If a file is required to be part of the contract set, then it will be copied to the Model folder and must comply with the current CAD Standard. Related contracts and reference documents are shared in Livelink with the consultants in Stage I through Stage III.

#### 1.5.3.3 RULES OF THE MANAGEMENTDOCS FOLDER

The ManagementDocs folder will contain all non-drawing related project data. Spreadsheets, documents, specifications, memos, estimates, etc. will be stored in this folder.

#### 1.5.3.4 RULES OF THE MODEL FOLDER

All design work and annotation must be stored inside AutoCAD drawings saved within the Model folder. The CAD Standard refers to these design drawings as Model files.

Images and Office documents referenced or linked by drawing files will also be stored in the Model folder and must comply with the rules for Model files. References to OLE objects are not permitted. Follow the rules on **Table 1.5.3-A** for the rules of the folder. The only exception to the creation of sub-folders are the folders created when ACA, C3D and MEP are used.

#### 1.5.3.5 RULES OF THE PHOTOS FOLDER

The Photos folder will contain all digital photographs relevant to the project, with the exception of those used on contract drawings. Drawings are not permitted to reference photographs from this folder. In order to reference a photograph within a drawing file, copy the image into the Model folder and refer to **1.5.3.4 Rules of the Model Folder** for proper usage. There are no file naming requirements for images stored within the folder. Follow the rules on **Table 1.5.3-A** for the rules of the folder.

#### 1.5.3.6 RULES OF THE PLOTSHEETS FOLDER

All layouts for plotted sheets will be saved inside AutoCAD drawings stored within the Plotsheets folder. The CAD Standard refers to these layout drawings as Plotsheet Files. These files are assembled sheets used for plotting. These drawings consist of a series of external references. Only Plotsheets files will be stored within this folder. Follow the rules on **Table 1.5.3-A** for the rules of the folder.

All paper drawings in the Contract Set will have a corresponding Plotsheet file in the Plotsheets folder, the only exception is the Title Sheet.

##### *1.5.3.6.1 Rules of the PDF Folder*

A PDF is an industry standard non-editable file format. Refer to section 1.5.5.5 for PDF requirements.

The PDF folder will always contain the most recent milestone version of the PDF file(s). Earlier milestone files once copied to the SUBMITTALS folder for the milestone will be either deleted from the PDF folder or overwritten in place.

#### 1.5.3.7 RULES OF THE PUBLISH FOLDER

The Publish folder will be used as a sharing mechanism between disciplines. A discipline may copy Model files into its own Publish folder, making them available for other disciplines to reference. Other disciplines are not permitted to copy these files but will instead externally reference them directly from the owner's Publish folder. The lead discipline's Publish folder will contain the Contract Border for the project.

There will be only one Contract Border per project. **The only exception to this rule is when new drawings are added to the Contract Set as part of a Stage IV – PACC**. Refer to **1.6.12.7 Stage IV**_PACC for instructions.

It is important that this methodology for referencing design files from other disciplines be followed. If a user copies design files from another discipline's Model, Plotsheets or Publish folder then they must take ownership of the file. By taking ownership the discipline copying the file will then be responsible for all CAD Standards compliance of that file as if it were created by that discipline. Only copies of Model files for other disciplines to references shall be stored in the Publish folder. The owning discipline is not able to reference file from its own Publish folder. Follow the rules on **Table 1.5.3-A** for the rules of the folder.

#### 1.5.3.8 RULES OF THE HISTORY FOLDER

The History folder is the only sub-folder permitted within the Publish folder. If a single file is to be published more than once, the file that exists in the Publish folder will be moved to a dated sub-folder within the History folder. The updated version of the file will then be copied into the root of the Publish folder. This will allow other disciplines to continue to reference older or time-phased versions of reference drawings if required by their design schedule by changing the external reference path to the dated sub-folder within the History folder. Only copies of previously published files will be copied to the History folder. Follow the rules on **Table 1.5.3-A** for the rules of the folder.

#### 1.5.3.9 RULES OF THE _DATASHORTCUTS FOLDER

The _DataShortcuts folder is only populated in the folder structure for disciplines that use AutoCAD Civil3D as an authoring application. This folder exists only under CIVIL and GEOTECHNICAL Publish folder.

- This is the folder selected when setting up the Data Shortcut using Civil 3D the Toolspace Prospector.
- Sub-folders are permitted within the _DataShortcuts folder (Refer to **1.5.8 Folder Naming Convention** for proper usage).
- The _DataShortcuts folder has read-write permissions assigned to the owning discipline.
- Other disciplines have read permissions assigned to the _DataShortcuts folder.
- The _DataShortcuts folder will be archived with the project.

Follow the rules on **Table 1.5.3-A** for the rules of the folder.

#### 1.5.3.10 RULES OF THE RECEIVED FOLDER

The Received folder will contain a dated archive of design information received from other disciplines and outside sources. This folder is intended as a record to identify exactly what information was provided on what date. Follow the rules on **Table 1.5.3-A** for the rules of the folder.

#### 1.5.3.11 RULES OF THE RELEASED FOLDER

The Released folder will contain a dated archive of design information provided to other disciplines and outside sources. This folder is intended as a record to identify exactly what information was provided and on what date. Follow the rules on **Table 1.5.3-A** for the rules of the folder.

#### 1.5.3.12 RULES OF THE SCHEMES FOLDER

The Schemes folder will contain various schemes of a design as well as any temporary design data. This folder provides the designer with an area in which to make trial changes to a design and a place to store temporary files. If a scheme is created and is later chosen as the final design version, the files stored under

that scheme are to be copied to the Model folder. Follow the rules on **Table 1.5.3-A** for the rules of the folder.

#### 1.5.3.13 RULES OF THE SHAREDDOCS FOLDER

The SharedDocs folder will be used as a sharing mechanism between disciplines. A discipline may copy ManagementDocs files into its own SharedDocs folder, making them available for other disciplines. Files stored within the SharedDocs folder are not to be referenced into any contract drawings and are provided for information only. Only copies of ManagementDocs files shall be stored in this folder, Model files are not permitted within the SharedDocs folder. Follow the rules on **Table 1.5.3-A** for the rules of the folder.

#### 1.5.3.14 RULES OF THE MILESTONESUBMISSIONS FOLDER

The Submittals folder is a location for storing independent (duplicate) copies of project information as it appears at each milestone of the project. While the root Model, Plotsheets and Publish folders contain the current versions of drawings which will evolve throughout the life cycle of the project, the Submittals folder will preserve the state of those drawings at the moment of each milestone.

Sub-folders have been created for each submission milestone from Stage I through Stage IV, **Figure 1.5.3-3** displays the sub-folders that have been created. Sub-folders are permitted within the StageIII_PA-Review, StageIII_Addendum and StageIV_PACC folders, by replacing the "XX" with the proper submission number. Follow the rules on **Table 1.5.3-A** for the rules of the folder.

For more information regarding the specific submittal milestones, refer to **1.6.12 Submissions.**

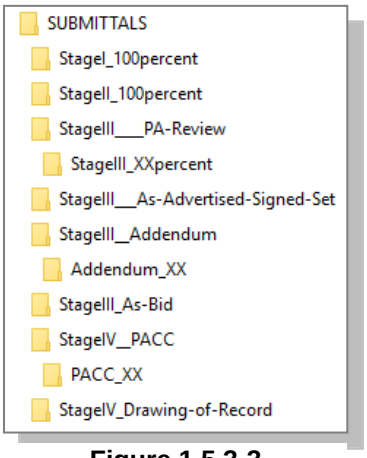



**Figure 1.5.3-3**

### 1.5.4 SAMPLE PROJECT

To simplify the exchange of information between the various PANYNJ departments, divisions and function groups as well as between consultants and contractors, every attempt will be made to adhere to both the drive mapping and directory structures defined within this section.

A sample project folder structure has been provided with the CAD Standard as shown in **Figure 1.5.4-1**.

The project folder structure requires the replacement of "Facility Name" with the Facility Code provided in **1.5.1 Project Directory Structure** and the letters "PID" with the eight (8) digit Project Identification Number proved by the LEA.

A copy of the project folder structure can be found at:

K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Sample_Project

The following link is the location of the Sample Project for Consultants:

All_Disciplines_Support_Files\Sample Project

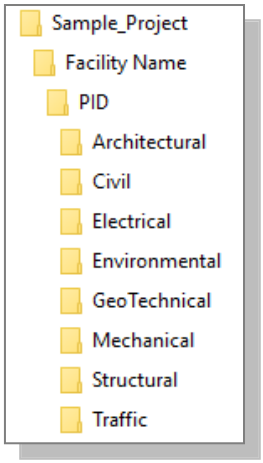



**Figure 1.5.4-1**

### 1.5.5 FILE NAMING CONVENTION

All electronic project files such as DWG, PDF, Images and Office documents referenced by a contract drawing, will be named following the CAD Standard File Naming Convention.

#### 1.5.5.1 DISCIPLINE CODES

There are eight (8) disciplines within the E/A Design Division of the PANYNJ. All files referenced by contract drawings will be named beginning with the appropriate Discipline Code. The only exception to this rule is the Contract Border file. Sub-discipline codes can be used for MODEL and PLOTSHEET file naming.

**Table 1.5.5-A**

| Code | Discipline |
|---|---|
| A | Architectural |
| C | Civil |
| E | Electrical |
| N | Environmental |
| G | Geotechnical |
| M | Mechanical |
| S | Structural |
| T | Traffic |

#### 1.5.5.2 CONTRACT BORDER FILE

The Contract Border file contains general information about the project.

| Acronym | Description |
|---|---|
| PID | Eight Digit Project Identification Number |
| CB | Contract Border |

The filename will take the form of:

- PID-CB.dwg (ex. 01234567-CB)

Since one Contract Border file is used by all disciplines of the project, no discipline code is used in its file name. The filename will also contain no spaces or description.

Consultants may create their own Contract Border file only if they are the Lead Discipline. Otherwise, they will request the Contract Border from the EAD LE/A and place it in the Lead Discipline's Publish folder.

If new drawings are added to the Contract Set during a Stage III via an Addendum or in Stage IV - PACC the original Contract Border cannot be used. A new Contract Border will be issued by the Lead Discipline and the new issue date will be included within the Revision Stamp and as the drawing date. The new Contract Border will be issued with the name appended with the date the Addendum is issued and named as follows:

- PID-CB-YYYY_MM_DD.dwg (ex. 01234567-CB-2018_03_02)

The original Contract Border will remain un-changed and both files will co-exist within the Publish folder.

##### *1.5.5.2.1 Configuring the Contract Border*

To create the project border, open the "Contract_Border.dwg" file provided with this standard fill in all attribute information requested and save it to your discipline's PUBLISH folder with the name following the format described in **1.5.5.2 Contract Border File**.

As with the Title Sheet, the "WORK ORDER No." line has been turned off by default and layer GN-ANNO-TTLB-WRKO is to be turned on if a WORK ORDER No. needs to be entered.

For a listing of Contract Border files that have been provided with this standard refer to **1.18 Appendix D – Distribution Files.**

#### 1.5.5.3 MODEL FILES

Model files are working drawing files containing the actual design geometry and annotations; they may also include externally referenced files from either the discipline's own Model folder or other disciplines' Publish folders. The file names will take form of:

| Acronym | Description |
|---|---|
| D | Discipline Code (Refer to **Table 1.5.5-A**) |
| PID | Eight Digit Project Identification Number |
| FP | Model File Plan Type (Refer to **Table 1.5.5-B**) |
| 01 | Sequence Modifier (If used will be two digits) |
| User Description | A description of up to 24 characters, including spaces. The following characters are not permitted<br>< > / \ " " : ; ? * \| , = ' & % |

- DPID-FP01-UserDescription.dwg (M01234567-SPK01-North Wind.dwg)

Refer to the list of approved Model File Plan Types listed in **Table 1.5.5-B.**

Once defined a model file's name will not change through the life of the project. This restriction is required due to the nature of externally referencing Model files.

**Table 1.5.5-B** lists all allowable Model File Plan Types. For a listing of common Model File Plan Types for particular disciplines, refer to that specific discipline's appendix. The Model File Plan Types shown in Table 1.5-C is not discipline specific and available for use by all disciplines.

**Table 1.5.5-B**

| Model File Plan Type | Description |
|---|---|
| 3D | 3D Isometric |
| AA | Asbestos Abatement |
| ALN | Alignment Plan |
| AN | Annotations |
| AP | Auxiliary Power Plan |
| ASL | Asbestos Sample Location |
| BSE | Background Drawing |
| CD | Communication System Plan |
| CFP | Concrete Framing Plan |
| COM | Communication Plan |
| CP | Control Plan |
| CPP | Corrosion Protection Plan |
| CS | Construction Staging |
| CSD | Control Schematic |

| Model File Plan Type | Description |
|---|---|
| D | Decking Plan |
| DAT | Microsoft Office Document |
| DTL | Detail |
| EL | Exterior Elevation |
| EM | EMCS Plan |
| EP | Enlarge Plan |
| EV | Environmental Plan |
| FA | Fire Alarm |
| FD | Foundation Plan |
| FNP | Furniture Plan |
| FP | Floor Plan |
| FPW | Floor Plan Wall |
| FR | Framing Plan |
| FS | Fire Suppression Plan |

| Model File Plan Type | Description |
|---|---|
| GP | Grounding Plan |
| GRD | Grading Plan |
| GT | Geotechnical Plan |
| HDP | HVAC Ductwork Plan |
| HP | Hydraulic Profile |
| ICM | ITS Communication Plan |
| IDX | Index of Drawings |
| IEL | Interior Elevation |
| IMG | Image |
| JL | Joist Girder Load Diagram |
| KP | Keyplan |
| LA | Lead Abatement |
| LIP | Lighting Plan |
| LP | Landscape Plan |
| LR | Lightning Protection Plan |
| LSL | Lead Paint Sample Location |
| MD | Machine Design Plan |
| MH | Material Handling Plan |
| MIS | Miscellaneous |
| MLS | Marking Lighting & Signage |
| MT | Maintenance of Traffic Plan |
| NOT | Notes and Specifications Plan |
| ONL | One Line Diagram |
| PAV | Paving Plan |
| PB | Presentation Border |
| PIP | Piping Plan |
| PJ | Project Location |
| PL | Part Plan |
| PLP | Plumbing Plan |
| PM | Pavement Marking Plan |
| PP | Power Plan |
| PPL | Pre-cast Panel Layout Plan |
| PPP | Pollution Prevention Plan |
| PRF | Profile |
| QP | Equipment Plan |
| RCP | Reflected Ceiling Plan |
| RE | Reinforcement Plan |
| RI | Riser Diagram |
| RL | Removal |

| Model File Plan Type | Description |
|---|---|
| RM | Remediation Plan |
| RP | Roof Plan |
| SCH | Schedule |
| SE | Soil Erosion Plan |
| SEC | Section |
| SF | Stair Framing Plan |
| SG | Signal Plan |
| SK | Sketch |
| SNP | Sign Plan |
| SO | Sequence of Operation Plan |
| SP | Site Plan |
| SPK | Sprinkler Plan |
| SPP | Specialty Piping Plan |
| ST | Steel Framing Plan |
| STG | Staging Plan |
| TB | Truss Bracing Plan |
| TOP | Topographic Plan |
| TRK | Track Plan |
| UTL | Utility Plan |
| WD | Wiring Diagram |
| WET | Wetland Plan |
| WG | Wind Girt Plan |
| WTP | Water Treatment Plan |
| WWT | Wastewater Treatment Plan |
| XB | X Bracing Plan |

The Sequence Modifier is restricted to the following two options:

- Option 1 – Without using the Sequence Modifier

  For Example:

  M01234567-SPK-Level 2 North Wing.dwg

  M01234567-SPK-Level 2 South Wing.dwg

  M01234567-SPK-Level 4 North Wing.dwg

  M01234567-SPK-Level 4 South Wing.dwg

- Option 2 – Using the Sequence Modifier

  For Example:

  M01234567-SPK02-North Wing.dwg

  M01234567-SPK02-South Wing.dwg

  M01234567-SPK04-North Wing.dwg

  M01234567-SPK04-South Wing.dwg

Note that each discipline can choose which of the options they will follow for the project.

#### 1.5.5.4 PLOTSHEET FILES

Plotsheet files are drawings assembled as sheets for plotting consisting of an externally referenced Contract Border, an inserted Drawing_Info block and externally referenced Model files from either the discipline's own Model folder or other disciplines' Publish folders. The filename will take the form of:

| Acronym | Description |
|---|---|
| D | Discipline Code (Refer to **Table 1.5.5-A**) |
| PID | Eight Digit Project Identification Number |
| PT | Plotsheet Plan Type (Refer to **Table 1.5.5-C**) |
| XX | Series Modifier (Refer to **Section 1.5.6**) |
| 01 | Sheet Number |

- DPID-PTXX01.dwg (ex. M01234567-SP001.dwg)

For multiple layouts in one Plotsheets file the filename will take form of:

- DPID-PTXX01_PTXX02.dwg (E01234567-ES001_ES004.dwg)

The Plotsheet file is not permitted to have a user description appended to its name.

Sheet Set Manager has been adopted for the use of Plotsheet creation. When using Sheet Set Manager, a .dst file format shall be submitted in the Plotsheets folder and the filename will take form of:

- DPID.dst (E01234567.dst)

*1.5.5.4.1 Plotsheet Plan Type*

Plotsheet Plan Types organize the contract drawings within the contract document set, they are the alphabetic character components of the sheet number depicted in the lower right-hand corner of the plotted sheet.

A listing of the Plotsheet Plan Types usable by specific discipline appears in **Table 1.5.5-C.**

**Table 1.5.5-C**

| Useable By | Description | Plotsheet Plan Type |
|---|---|---|
| Confidential and Confidential Privileged | Cover Sheet (See Section 1.9.4) | CV |
| All Disciplines | Index of Drawing Sheet (see Section 1.9.4) | IX |
| | General Project Sheets (Regional Plan, Project General Notes, etc.) | G |
| | Stage IV Sketch Sheets (For Stage IV use only) | SK |
| | Construction Staging or Sequence Plan | CS |
| | Title Sheet | TS |
| Architectural | Architectural Plan | A |
| | Landscape Plan | LS |
| Civil | Civil Plan | C |
| | Marking Lighting & Signage | ML |
| Electrical | Electrical Plan | E |
| | Corrosion Protection Plan | CP |
| | Electronics Plan | ES |
| | Fire Alarm Plan | FA |
| | Marking Lighting & Signage | ML |
| Environmental | Environmental Plan | N |
| Geotechnical | Geotechnical Plan | GT |
| Mechanical | Mechanical HVAC Plan | M |
| | Baggage Handling Plan | B |
| | Fire Protection Plan | FP |
| | Plumbing Plan | P |
| | Sprinkler Plan | SP |
| | Vertical Transportation Plan | VT |
| Structural | Structural Plan | S |
| Traffic | Traffic Plan | T |
| | Intelligent Transportation Systems | ITS |
| | Maintenance of Traffic | MT |
| | Signal Plan | SG |

#### 1.5.5.5 PDF FILES

PDF files will be created at full-size, directly from the AutoCAD drawing files. Two forms of PDF files can exist, Single Sheet and Multi Sheet.

The PDF filename will take the form of:

| Acronym | Description |
|---|---|
| D | Discipline Code (Refer to **Table 1.5.5-A**) |
| PID | Eight Digit Project Identification Number |
| PT | Plotsheet Plan |
| XX | Series Modifier (Refer to Section **1.5.6 Drawing Number Conventions**) |
| 01 | Single Sheet Number |
| XX01_XX20 | Starting Sheet Number to Ending Sheet Number |

- DPID-PTXX01.pdf (Single Sheet)
- DPID-PTXX01_PTXX20.pdf (Multi Sheet)

The PDF file is not permitted to have a user description appended to its name.

PDF files will be submitted as multi-sheet files at every milestone submission of the project and will be created:

- From the current set of Plotsheet files
- Full Size (either 22x34 or 34x56)
- In black and white (exception: graphic signage type sheets)
- In consecutive order
- Grouped together by Discipline Plotsheet Plan Type and drawing number

When using a Series drawing arrangement, the PDF files will be named by grouping them together by Plotsheet Plan Type.
DWF files are not permitted as substitutions for PDF files.

For Example:

- T01234567-G001_G007.pdf
- T01234567-T101_T307.pdf

In addition, a multi-sheet contract set PDF is required by the LE/A. Once the individual discipline's PDFs are submitted to the LE/A, a multi-sheet contract set of the drawings needs to be created and saved in the Lead Discipline's PDF folder. This should be assembled according to the Drawing Index and named by the eight-digit PID number, milestone description and date.

For Example:

- 01234567.pdf

### 1.5.6 DRAWING NUMBER CONVENTIONS

The Port Authority CAD Standards supports three options of sheet numbering, numbering by "One-Digit-Series", numbering by "Two-Digit-Series" or numbering by "Counter" alone. At the start of each project the

LE/A will determine which numbering option will be used. This (and only this) option will be used by all disciplines for every contract drawing produced for the project.

When a "Series" numbering system is chosen by the LE/A, each disciplines Task Leader will be responsible for the determination of what drawing types are assigned to each of the available counters in the series. This information will be distributed within the discipline by the Task Leader.

These three formats **cannot** co-exist on the same project. The Sheet Number will take the form of:

| Option One | | |
|---|---|---|
| **Plotsheet Plan Type** | **Series Number (1 through 9)** | **Counter Number (01 through 99)** |
| S | 1 | 01 |

| Option Two | | |
|---|---|---|
| **Plotsheet Plan Type** | **Series Number (01 through 99)** | **Counter Number (01 through 99)** |
| S | 01 | 01 |

| Option Three | |
|---|---|
| **Plotsheet Plan Type** | **Counter Number (001 through 999)** |
| S | 001 |

Option One (One-digit series)

For projects with nine or less series the sheet number format will include a one or two letter Plotsheet Plan Type followed by a one-digit series number followed by a zero-padded, two-digit sheet "counter" number.

- Use digits "0" through "9" as the series numbers
- Series number can be skipped
- Counter numbers must be consecutive numbers beginning at "01" for each series.
  - D_Series Number_Drawing Counter
  - Example: S101

Option Two (Two-digit series)

For projects with ten or more series the sheet number format will include a one or two letter Plotsheet Plan Type followed by a two-digit series number followed by a two-digit sheet "counter" number.

- Use digits "01" through "99" as the series numbers
- Series numbers can be skipped
- Counter numbers must be consecutive numbers beginning at "01" for each series.
  - D_Series Number_Drawing Counter
  - Example: S0101

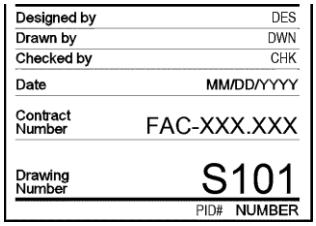
Option Three (Without Series)

For projects that are not using a series the sheet number format will include a one or two letter Plotsheet Plan Type followed by a zero-padded three-digit sheet "counter" number.

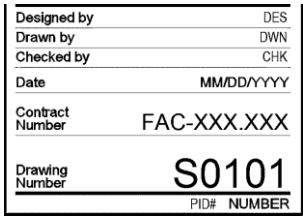
- Counter numbers must be consecutive numbers beginning at "001"
- D_Counter Number

- Example: S001

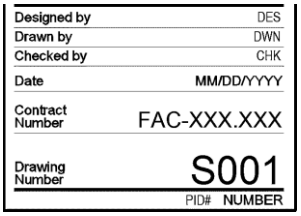
The following images display how the three options would appear on a Plotsheet.




**Option 1**




**Option 2**




**Option 3**

### 1.5.7 LAYERING SCHEME DEFINITION

All layers contained within E/A Design Division drawings have been defined using variations of the Tri-Services and the AIA layer guidelines and standards. All disciplines use a layer standard that is similar.

| Field | Description | Length |
|---|---|---|
| Discipline | Discipline Code | Table 1.5.7-A |
| Major | Major grouping of features that have common characteristics | 4 Chr |
| Minor | Sub grouping of Major category | 4 Chr |
| Description | Extended description of layers for clarity | 4 Chr |
| Phase | Indication of the information's current Phase | Table 1.5.7-B |

**Table 1.5.7-A**

| CODE | Discipline |
|---|---|
| A | Architectural |
| L | Landscape |
| C | Civil |
| E | Electrical |
| N | Environmental |
| G | Geotechnical |
| M | Mechanical |
| S | Structural |
| T | Traffic |
| GN | General |

**Table 1.5.7-B**

| CODE | PHASE |
|---|---|
| EXST | Existing |
| OTHR | Work by others |
| RELO | Relocation |
| RMVL | Removal |
| TEMP | Temporary |
| FUTR | Future (if needed) |

**Note** that the discipline codes listed in **Table 1.5.7-A** are for layer definitions only. Sub-discipline codes should not be used for layer naming.

The major components of a standard layer name are defined as follows:

Discipline-Major-Minor-Description-Phase

For Example:

- C-UTIL-STRM-IDEN or C-UTIL-STRM-SYMB-RELO or C-UTIL-STRM-SYMB-RMVL

The field position and character count in each component of the layer stratagem is always to be preserved for standard layer naming. The underscore "_" character is used to both pad and fill unused character spaces in fields or fill entire unused fields. Character padding is always appended to the right side of the fields designation.

For Example:

S-BEAM-STL_-____-EXST

The E/A Design Division layering stratagem consists of nine discipline groups and a general group that corresponds to spatial data layers to assist in the isolation of information for design purposes and for the translation and use with GIS. Although every attempt has been made to create an all-encompassing standard, reality dictates that additions will need to be made to the layer stratagem. In the case that additions are required, they will only be accepted as additions to minor or description categories. If an addition is required to the Standard layer list for the discipline or major categories, then a Request to Change Standard Form is required. Project specific layers can be used and should follow the layer naming convention in Section 1.5.7. Refer to **1.15.1 Request to Change Standard**.

### 1.5.8 Folder Naming Convention

For the folders allowed to create sub-folders within the pre-defined folder structure will take the form of:

| Acronym | Description |
|---|---|
| YYYY | Four digit Year |
| MM | Two digit Month |
| DD | Two digit Day |
| User Description | A description of up to 24 characters, including spaces. The following characters are not permitted<br>< > / \ " " : ; ? * \| , = ' & % |

- YYYY_MM_DD-User Description

## 1.6 CAD Practices and Procedures

CAD drawing files must be consistently formatted in order to provide an effective method of data dissemination and retrieval. To that end, these standards will guide the user in the requirements of layer naming, graphic symbology, lettering styles, drawing units and other drawing related features.

### 1.6.1 CAD Environment Setup

In order to plot successfully using this standard, some configuration of the AutoCAD environment will be necessary. This configuration will only need to be done once and will streamline plotting moving forward.

### 1.6.2 Coordinate Systems

In an effort to organize, consolidate and standardize the information generated and consumed by all divisions within the agency, Coordinate Systems must be used on all projects. Go to the VDC Requirements **section 5.4** for the default horizontal and Vertical systems.

### 1.6.3 TEMPLATE DRAWING SETUP

For proper plotting and consistency, the CAD Standard makes use of template drawing files. Supplied with this standard are two primary template files:

- PA-deci-feet.dwt" for Decimal units
- PA-arch-inch.dwt" for Architectural units

All templates are essentially blank drawings saved with the extension ".dwt", that have been started from scratch, been assigned a unit type and make use of a CTB file. In addition, both templates have the Text Style LINEFONT defined for use with the CAD Standard linetypes. If you currently have a drawing template ensure that your template has the "Use Color Dependent Plot Styles" option selected and the "Default plot style table" set to "PA-MasterFULL.ctb" as shown in **Figure 1.6.3-1**. These options are found under the "Plot Style Table Settings" button of the Plot and Publish tab in the Options dialog box.

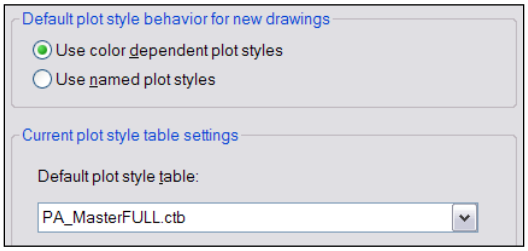



**Figure 1.6.3-1**

### 1.6.4 UNITS

Every object created is measured in drawing units. Before drawing can begin, the drawing units used will need to be decided based on the type of plan being drawn. All drawings will be created at actual size with the unit convention decided on.

Template files have been provided for both, Architectural units (inches) and Decimal units (feet). These templates can be found at:

K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Template

Consultant can find the template by downloading the support files and go to:

All_Discipline_Support_File/Template

The creation of all drawings will be accomplished by using one of the two templates provided with the CAD Standard. By adhering to this process problems will be avoided when loading custom EAD linetypes. For a listing of which templates are typically used by each discipline refer to **Table 1.6.4-A**.

**Table 1.6.4-A**

| Architectural Units | Decimal Units |
|---|---|
| Architectural | Civil |
| Electrical | Environmental |
| Mechanical | Geotechnical |
| Structural | Traffic |

### 1.6.5 ENTITY AND LAYER LINETYPES

Standard E/A Design Division linetypes have been created for use with all design documents. These linetypes have been assigned to their respective layers in the <Layers.dwt> drawings, which have been

provided for each discipline as part of this standard. Special linetypes supplied require the use of a textstyle named LINEFONT, starting a drawing with the template drawings provided as part of this standard will ensure that the linetypes are loaded correctly. All entities will have their linetype assigned “bylayer”.

To ensure correct linetype scaling settings for Plotsheet drawings the “LTScale” and “PSLTScale” variables will be set to “1” prior to plotting. This sets all linetypes to be scaled based on the paper space viewport scale factor.

For design (MODEL) files, which utilize model space, will have the “LTScale” variable set to the drawing scale. “MSLTSCALE” should be set to ‘0’

For discipline specific linetype usages refer to **1.20 Appendix F – Architectural Discipline** through **1.27 Appendix M – Traffic Discipline**. All entities will be drawn on the specified layers and must have color assigned to “bylayer”. Layer color assignments are included in the layer definitions provided.

For discipline specific color usages refer to **1.20 Appendix F – Architectural Discipline** through **1.27 Appendix M – Traffic Discipline**.

### 1.6.6 BLOCKS

A pre-arranged group of geometry that can be inserted at scale into a drawing. is defined by AutoCAD as a “block”. There are two (2) types of blocks provided in this standard, Scalable and Non-Scalable blocks. Standard blocks have been provided as part of this standard.

For discipline specific symbol definitions refer **1.20 Appendix F – Architectural Discipline** through **1.27 Appendix M – Traffic Discipline**.

#### 1.6.6.1 SCALABLE BLOCKS

Scalable blocks are created with the intent that they will appear the same size when plotted at different scales.

- Blocks are created on Layer “0” and will automatically take on the characteristics of the layer they are inserted on. All blocks will be inserted on the layer identified within this standard.
- For ease of use, the insertion scale factor of each scalable block will depend on the plot scale.
- Any text associated with the block should be on layer “0”, color set to “212”

#### 1.6.6.2 NON-SCALABLE BLOCKS

Non-Scalable symbols are created with the intent that they will appear at true size for all plot scales.

- Blocks are created on Layer “0” and will automatically take on the characteristics of the layer they are inserted on. All blocks shall be inserted on the layer identified within this standard.
- The insertion scale factor for all Non-Scalable blocks will be “1”.
- Any text associated with the block should be on layer “0”, color set to “212”

#### 1.6.6.3 CREATING BLOCKS

Blocks must be documented and supplied to the CAD committee in digital format as a single AutoCAD drawing file accompanied by a plot of the block and a Request to Change Standard Form found in **1.15.1 Request to Change Standard.**

- Blocks will be created on Layer “0”. Other layers may be present in the drawing for supplemental information such as no-plot information within the block.
- Blocks will be created using the current version of AutoCAD software in use by the E/A Design Division.

- Colors and Linetypes will always be set to “bylayer”.
- Text within the block will utilize one of the Text Styles provided within this standard so that it is legible upon plotting. Any text associated with the block should be on layer “0”, color set to “212”
- The block will be drawn so that the insertion point is located appropriately and is at 0,0,0.
- The “base” of the drawing will be set to 0,0,0.
- The block drawing will be purged of all unused blocks, layers, linetypes, text styles, etc.

### 1.6.7 PLOTTED LINEWEIGHTS

**Table 1.6.7-A**

| Variable | Value |
|---|---|
| Color | Black |
| Dither | On |
| Virtual Pen Number | Automatic |
| Linetype | Use Object Linetype |
| Adaptive | On |
| Line End Style | Use Object End Style |
| Line Join Style | Miter |
| Fill Style | Use Object Fill Style |

The colors used in the layer definitions provided within this standard correspond to plotted pen weights. AutoCAD products make use of a CTB file to assign pen weights to object colors. All Contract Drawings are to be plotted using the “PA-Master.ctb” file that is provided with this standard. Many variables within the CTB file remain constant throughout the pen assignments, these variables are defined in Table 1.6.7-A. The pen numbers, lineweights and percent screening assigned to the pens used in the “PA-MasterFull.ctb” file is displayed inTable 1.6.7-B. The values displayed in Table 1.6.7-A and Table 1.6.7-B are for Contract Drawings, disciplines are permitted to use their own ctb files for presentation and Stage I documentation purposes.

**Table 1.6.7-B**

| Pen | Color | Weight | Screen |
|---|---|---|---|
| 1 | | 0.0100 | 100% |
| 2 | | 0.0140 | 100% |
| 3 | | 0.0200 | 100% |
| 4 | | 0.0360 | 100% |
| 5 | | 0.0080 | 100% |
| 6 | | 0.0240 | 100% |
| 7 | | 0.0080 | 100% |
| 8 | | 0.0080 | 100% |
| 9 | | 0.0080 | 100% |
| 10 | | 0.0140 | 100% |
| 11 | | 0.0180 | 100% |

| Pen | Color | Weight | Screen |
|---|---|---|---|
| 12 | | 0.0100 | 100% |
| 13 | | 0.0280 | 100% |
| 14 | | 0.0080 | 100% |
| 15 | | 0.0140 | 100% |
| 20 | | 0.0180 | 100% |
| 21 | | 0.0080 | 100% |
| 23 | | 0.0200 | 100% |
| 24 | | 0.0320 | 100% |
| 30 | | 0.0400 | 100% |
| 31 | | 0.0080 | 100% |
| 32 | | 0.0200 | 100% |

| Pen | Color | Weight | Screen |
|---|---|---|---|
| 33 | | 0.0240 | 100% |
| 35 | | 0.0240 | 100% |
| 37 | | 0.0080 | 100% |
| 40 | | 0.0200 | 100% |
| 41 | | 0.0140 | 100% |
| 42 | | 0.0080 | 100% |
| 43 | | 0.0240 | 100% |
| 46 | | 0.0040 | 100% |
| 50 | | 0.0200 | 100% |
| 51 | | 0.0280 | 100% |
| 52 | | 0.0240 | 100% |

| Pen | Color | Weight | Screen |
|---|---|---|---|
| 53 | | 0.0040 | 100% |
| 54 | | 0.0100 | 100% |
| 60 | | 0.0160 | 100% |
| 61 | | 0.0100 | 100% |
| 62 | | 0.0080 | 100% |
| 71 | | 0.0100 | 100% |
| 80 | | 0.0100 | 100% |
| 81 | | 0.0200 | 100% |
| 82 | | 0.0140 | 100% |
| 83 | | 0.0080 | 100% |
| 90 | | 0.0240 | 100% |
| 92 | | 0.0120 | 100% |
| 93 | | 0.0080 | 100% |
| 96 | | 0.0100 | 100% |
| 100 | | 0.0160 | 100% |
| 110 | | 0.0080 | 100% |
| 120 | | 0.0200 | 100% |
| 121 | | 0.0140 | 100% |
| 130 | | 0.0100 | 100% |
| 131 | | 0.0200 | 100% |
| 132 | | 0.0040 | 100% |
| 133 | | 0.0080 | 100% |

| Pen | Color | Weight | Screen |
|---|---|---|---|
| 140 | | 0.0240 | 100% |
| 141 | | 0.0320 | 100% |
| 142 | | 0.0180 | 100% |
| 143 | | 0.0080 | 100% |
| 144 | | 0.0720 | 100% |
| 148 | | 0.0100 | 30% |
| 150 | | 0.0280 | 100% |
| 170 | | 0.0200 | 100% |
| 172 | | 0.0240 | 100% |
| 180 | | 0.0040 | 100% |
| 190 | | 0.0080 | 100% |
| 110 | | 0.0080 | 100% |
| 120 | | 0.0200 | 100% |
| 121 | | 0.0140 | 100% |
| 130 | | 0.0100 | 100% |
| 131 | | 0.0200 | 100% |
| 132 | | 0.0040 | 100% |
| 133 | | 0.0080 | 100% |
| 140 | | 0.0240 | 100% |
| 141 | | 0.0320 | 100% |
| 142 | | 0.0180 | 100% |
| 143 | | 0.0080 | 100% |

| Pen | Color | Weight | Screen |
|---|---|---|---|
| 144 | | 0.0720 | 100% |
| 148 | | 0.0100 | 30% |
| 150 | | 0.0280 | 100% |
| 170 | | 0.0200 | 100% |
| 172 | | 0.0240 | 100% |
| 180 | | 0.0040 | 100% |
| 190 | | 0.0080 | 100% |
| 191 | | 0.0140 | 100% |
| 192 | | 0.0240 | 100% |
| 194 | | 0.0200 | 100% |
| 200 | | 0.0100 | 100% |
| 201 | | 0.0280 | 100% |
| 202 | | 0.0100 | 100% |
| 210 | | 0.0160 | 100% |
| 211 | | 0.0320 | 100% |
| 212 | | 0.0140 | 100% |
| 220 | | 0.0200 | 100% |
| 221 | | 0.0040 | 100% |
| 222 | | 0.0100 | 100% |
| 223 | | 0.0040 | 100% |
| 230 | | 0.0160 | 100% |
| 231 | | 0.0240 | 100% |

| Pen | Color | Weight | Screen |
|---|---|---|---|
| 232 | | 0.0440 | 100% |
| 234 | | 0.0160 | 100% |
| 240 | | 0.0040 | 100% |
| 241 | | 0.0080 | 100% |
| 242 | | 0.0040 | 100% |
| 244 | | 0.0080 | 100% |
| 250 | | 0.0040 | 80% |
| 251 | | 0.0080 | 70% |
| 252 | | 0.0080 | 60% |
| 253 | | 0.0080 | 50% |
| 254 | | 0.0040 | 40% |
| 255 | | 0.0480 | 100% |

### 1.6.8 TEXT STYLES AND HEIGHTS

To promote consistency in Contract Drawings as well as prevent the use of "third-party" un-licensed AutoCAD font files, and to ensure a consistent plotted appearance of text, only ARIAL.TTF, ARIALN.TTF, and RomanS fonts are permitted for use on Contract Drawings. It should be noted that RomanS font is not permitted for general use, being reserved specifically for use in Line Types that contain text.

Six Text Styles have been provided as part of this standard. Two of the Text Styles provided (ARIAL, and Linefont) are used for Contract Border, Drawing Information or Linetype definitions and are not permitted for general use by the disciplines. The remaining four Text Styles provided, which are permitted for use by the disciplines are created as annotative styles and utilize ARIAL.TTF font. Annotative styles allow the AutoCAD product to scale the text heights appropriately based on the scale of the plotted drawing. The Text Styles provided are:

| Text Style | Plotted Height | Annotative | Font | Description of Usage | Usable by Disciplines |
|---|---|---|---|---|---|
| PA – 0.10 | 0.10" | Yes | ARIAL.TTF | Normal Text | Yes |
| PA – 0.15 | 0.15" | Yes | ARIAL.TTF | Headings | Yes |
| PA – 0.20 | 0.20" | Yes | ARIAL.TTF | Titles | Yes |
| PA – 0.25 | 0.25" | Yes | ARIAL.TTF | Alternate Titles | Yes |
| Linefont | 0.10" | No | RomanS.shx | Linetype Definitions | No |
| ARIAL | Varies | No | ARIAL.TTF | Contract Border and Drawing Info | No |

### 1.6.9 DIMENSION AND LEADER STYLES

To promote consistency in Contract Drawings only the Dimension and Leader Styles that have been provided as part of this standard are permitted for use. Three Dimension Styles and eight Multi-Leader Styles that have been provided are:

| Dimension Style | Arrow Head | Content | Unit Type |
|---|---|---|---|
| PA-Arrow | Closed Filled Arrow | 0.10" Mtext | Inches |
| PA-Arrow-Deci | Closed Filled Arrow | 0.10" Mtext | Feet |
| PA-Tick | Tick | 0.10" Mtext | Inches |

### 1.6.10 TABLE STYLES

As with the text and dimension styles, the EAD CAD Standard has provided Table Styles as part of this standard in an attempt to promote consistency throughout the creation of Contract Drawings.

| Table Style | Description of Usage |
|---|---|
| PA-Table | General Tables |

### 1.6.11 EXTERNAL REFERENCE FILES

Files that are "attached" using AutoCAD's XREF command should always use the coordinate 0,0 for two-dimensional files or 0,0,0 for three-dimensional files as the insertion point and a zero rotation angle.

All external reference drawings will be attached as “Overlays”. By adhering to this process, all users will be able to use drawings within their own disciplines as well as drawings from other disciplines without concern for circular references and other potential problems. The path type will be set to “Relative Path”, for both, external reference drawings and external reference images, this process will ensure the proper exchange of drawings and/or images between in-house staff and outside consultants.

### 1.6.12 SUBMISSIONS

CAD files in DWG and PDF format, accompanied with hardcopies are required at 100% Milestone Submissions.

Until project completion, all current working drawings are saved in the MODEL, PLOTSHEETS and PUBLISH folders of each discipline’s root directory.

At the completion of every milestone, each discipline will copy its MODEL, PLOTSHEETS and PUBLISH folders, into the appropriate milestone sub-folder within SUBMITTALS. Refer to **1.5.3.14 Rules of the MileStoneSubmissions Folder** for a listing of Submittal Folders provided.

Once the folders have been copied, the involved Task Leaders will notify the LEA, who will then notify the CAD Support Group for Cad compliance report, refer to **1.11 Compliance CAD Standards Report**. Upon notification, the CAD Support Group will only move files from the discipline’s SUBMITTALS folder to the ARCHIVE server.

The SUBMITTALS folder is for internal use only. Consultants are required to submit the entire Project Folder Structure as outlined in **1.5.1 Project Directory Structure and File Naming Convention** containing not only the Discipline folder in which their drawings are saved but also all other Discipline folders from which external references were made.

#### 1.6.12.1 STAGE I_100PERCENT

Stage I (Conceptual Design) is used to develop design concepts, confirm Facility scope, determine anticipated construction costs and schedules and to compare alternatives before proceeding with Design Development (Stage II) or Final Design (Stage III).

#### 1.6.12.2 STAGE II_100PERCENT

Stage II (Design Development) is used to develop the chosen design concept, further refine anticipated construction costs and schedules before proceeding to final design (Stage III).

#### 1.6.12.3 STAGE III_PA-WIDE REVIEW (100%)

The Stage III (Final Design) effort includes preparation of contract documents that will be used for construction. The procedures vary for alternate delivery methods such as Work Order Contracts, Design/Bid/Build, Design/Build Contracts and Design/Build/Operate/Maintain Contracts.

PA Wide Review usually happens when the project is between 90% to 95% complete, this may vary depending on the project specifics. When a project reaches PA-Wide Review, full-sized PDFs are required to begin the Electronic Review Process.

#### 1.6.12.4 STAGE III_AS-ADVERTISED-SIGNED-SET

The signed and sealed, updated based on PA-Wide 100% submission comments review, final submission plotted on Permalife® paper is the “As Advertised Signed Set”. All original signatures shall be in blue ink.

#### 1.6.12.5 STAGE III_ADDENDUM

The Addendum Set contains drawings that have been modified or new drawings that have been issued after the original As Advertised Signed Set was signed, sealed and issued. Not all addenda contain drawings; some may only contain specifications or other revised contract information pertinent to bidders. Therefore, an Addendum Set may contain non-consecutive addenda sub-folders. The StageIII_Addendum folder should only contain the Addenda sub-folder in which drawings were required. This folder should not contain the entire set of CAD files; it should only contain the Addenda files.

The revision procedures detailed in section **1.8.3.4 Making Revisions in Contract Drawings** apply to Addenda.

#### 1.6.12.6 STAGE III_AS-BID

The As-Bid Set incorporates all the addenda that have been issued during the bid period and the As Advertised drawings, specifications and contract book sections that have not been modified by Addenda.

#### 1.6.12.7 STAGE IV_PACC

The PACC Set (Post Award Contract Changes) contains As Bid drawings that have been modified or new drawings that have been issued after the Contract was awarded.

The revision procedures detailed in section **1.8.3.4 Making Revisions in Contract Drawings** apply to PACC Sets.

#### 1.6.12.8 STAGE IV_DRAWING-OF-RECORD

The Drawing-of-Record Set is the set of drawings created after construction is completed.

## 1.7 PLOT SETUP

All drawings will be plotted from a paper space layout tab. The tab will be named the same as the sheet number being plotted. Full-size and Half-size sheets may be plotted from a single layout by utilizing page setups. Multiple layouts are not to be used for the separation of Full-size and Half-size sheets. Multiple layouts may be used for the plotting of multiple sequential sheets.

**Stage I CAD Standard**

In an effort to streamline the CAD projects a comprehensive CAD Standard has been developed. Although this standard was intended for use with projects that are at Stage II or beyond, many of the ideas are to be implemented during the Stage I effort.

### 1.7.1 PAGE SETUP

Page Setups enable the user to save specific settings within the AutoCAD plotting environment. The Page Setups created for the in-house designers make use of PC3, PMP and CTB files as well as configuration changes. PC3 files are typically copied to the “Plotters” folder under the root AutoCAD installation directory. The Page Setups created for in-house use are located on the internal network at:

K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Page_Setups

The Page Setups that contains the PC3, PMP and CTB of the Port Authoriy are for the use of in-house designers since they are configured for the plotters within the Agency. Outside consultants will not have access to the Port Authority’s plotters but may want to develop page setups using the Authority standards.

## 1.8 PLAN SET PREPARATION

### 1.8.1 AUTOCAD 2018 CONFIGURATION (PLOTTING BY LAYOUT)

AutoCAD 2018 options must be modified to ensure proper placement of the Contract Border in the paper space layout environment.

To make the required modifications, right click within the drawing pane and select Options. From within the Options dialog, select the Display tab and make the changes shown in **Figure 1.8.1-1** to the "Layout Elements" portion of the tab and then select "OK".

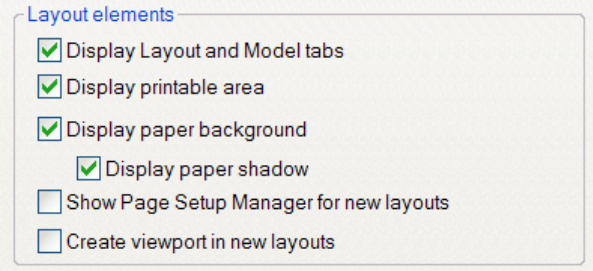



**Figure 1.8.1-1**

The Layout Elements settings that were changed affect the workstation and will not need to be reconfigured in future sessions.

### 1.8.2 PLAN SET TITLE SHEET

The term "Title Sheet" refers to the topmost sheet of the plan set. The use of block attributes will ensure consistency between contracts and improve the appearance of all contract sets. It is important to maintain the integrity of the Title Sheet.

#### 1.8.2.1 TITLE SHEET CONFIGURATION

The Title Sheet drawing has purposely been created in paper space. As a result, this border drawing cannot be inserted as a block or externally referenced into other drawing files. The process for defining t Title Sheet is as follows.

- Begin by opening the Title_Sheet.dwg file located at:
    - K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Contract_Borders (In-house)
    - All_Discipline_Support_File\Template (Consultant)
- Once open, Save the drawing to the appropriate project sub-folder.
- Enter the appropriate values for each attribute provided in the Title Sheet.

#### 1.8.2.2 ENTERING TITLE SHEET INFORMATION

Each Title Sheet drawing file provided with the standard has three signature lines defined. They are:

- Chief of Design, E/A Design Division
- Program Director "XX" or Sr. Program Manager "XX" or Program Manager "XX"
- Chief Engineer/Director

There are two possible options for the signature lines. Refer to **Table 1.8.2-A** and **Table 1.8.2-B** to identify which option to use based on your contract type and cost and to determine which Layers are to be turned off for each option.

**Table 1.8.2-A**

| Contract Type | Engineer's Estimate | Title Sheet Signatures Required | Option to Use |
|---|---|---|---|
| S/M/WBE Contracts | Up to $1,000,000 | Chief of Design, E/A Design Division<br>Facility Sr. Program Manager / Program Manager | Option 1 |
| | Above to $1,000,000 | Chief of Design, E/A Design Division<br>Facility Program Director<br>Chief Engineer/Director | Option 2 |
| Work Order Drawings and Standard Contracts | Up to $2,500,000 | Chief of Design, E/A Design Division<br>Facility Sr. Program Manager / Program Manager | Option 1 |
| | Above to $2,500,000 | Chief of Design, E/A Design Division<br>Facility Program Director<br>Chief Engineer/Director | Option 2 |

**Table 1.8.2-B**

| Layer Name | Status for Option 1 | Status for Option 2 |
|---|---|---|
| GN-ANNO-TTLB-CHIF | OFF | ON |
| GN-ANNO-TTLB-PDIR | OFF | ON |
| GN-ANNO-TTLB-PMAN | ON | OFF |

Under no circumstance will the Title Sheet block atributes be exploded or modified. **Figure 1.8.2-1** shows the default Title Sheet provided with the EAD CAD Standard. The "WORK ORDER No." line has been turned off by default and layer GN-ANNO-TTLB-WRKO is to be turned on if a WORK ORDER No. needs to be entered.

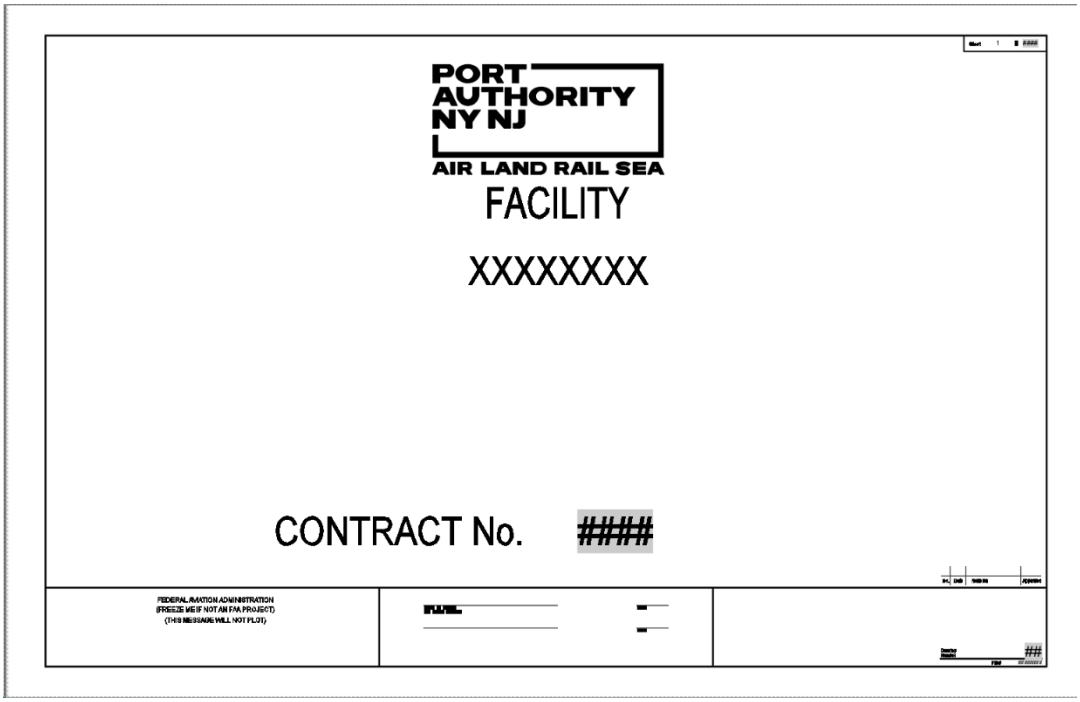



**Figure 1.8.2-1**

The “PROGRAM DIRECTOR” line contains an attribute, which by default is set to XX. The XX value is to be replaced with one of the following options:

- TB&T
- PORT COMMERCE
- AVIATION
- PATH
- SECURITY

Under the Contract Number the letters “FAC” are to be replaced with the appropriate Facility Code listed in **Table 1.5.5-A** and then followed by the Contract Number itself.

Multiple stamps have been provided within the Title Sheet and are to be turned on/off when necessary. The stamps provided and the layers on which they are stored are show in **Table 1.8.2-C**.

**Table 1.8.2-C**

| Stamp | Layer Name |
|---|---|
| FAA | GN-ANNO-TTLB-FAA |
| Law Review | GN-ANNO-STMP-LAWR |
| Preliminary | GN-ANNO-STMP-PRLM |
| Submission | GN-ANNO-STMP-SUBM |

#### 1.8.2.3 USING THE REVISION BLOCK WITHIN THE TITLE SHEET

A revision block named "Drawing_Info – Stamp_Revision.dwg" has been provided with the EAD CAD Standard. When revisions are made, this block is to be inserted using an endpoint snap to the upper left corner of the previous revision line. **Figure 1.8.2-2** displays where the revision stamp is to be inserted. The stamp is located on the network at:

"K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Contract_Borders\Stamps"

"All_Discipline_Support_File\Contract Border\Stamp" (Consultant)

Once inserted the revision block will prompt the user for information pertaining to the revision. Under no circumstances will the revision block be exploded or modified.

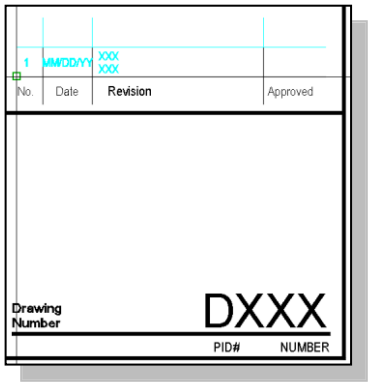



**Figure 1.8.2-2**

#### 1.8.2.4 PLOTTING THE TITLE SHEET

The layout for the Title Sheet will be configured to use one of the page setups supplied within this standard. As previously stated, outside consultants will need to configure the page setups for their own use and for the particular environment they are working in. After importing an appropriate page setup, the Title Sheet will be configured to plot by layout and use the PA-MasterFull.ctb plot style.

### 1.8.3 PLAN SET PLOT SHEETS

Plotsheet files are drawing files assembled as sheets for printing. These drawings consist only of external reference files, see section **1.6.11**, and the items indicated below. No line work is permitted within Plotsheet drawings in either Model or Paper space with the following exceptions:

- North Arrows
- Graphic Scales
- Revision Clouds and Revision Cloud Text
- Match Lines and Match Line Text
- View Titles
- Block with the prefix "Drawing_Info"
- Architectural Plotsheets

All Plotsheet files shall make use of a relevant PANYNJ Graphic Scale symbol. Such a scale bar is critical for any party viewing the drawings to be able to verify distances within the drawing. It is mandatory to include a standardized PANYNJ Graphic Scale, available through the PANYNJ CAD Standards website, on each Plotsheet drawing.

In order to comply with this standard, each project will have a single Contract Border that will be created by the Lead Discipline and will be stored in that discipline's PUBLISH folder. All other disciplines will externally reference the border from the Lead Discipline's PUBLISH folder. This border will contain all information pertinent to the project itself. Once the Contract Border is properly referenced into each sheet the appropriate "Drawing_Information" block is to be inserted into each layout tab. The Drawing_Information block will contain all drawing specific information. Illustrations of the Contract Borders provided can be found in **1.17 Appendix C – Contract Borders and Title Sheets**.

Outside consultants are required to reproduce the folder structure as specified in **1.5 Project Directory Structure and File Naming Convention** by copying the Sample Project and replacing the Facility name and PID with those of the current project. All backgrounds (including the Contract Border) provided by the E/A Design Division will go into their respective discipline folders.

#### 1.8.3.1 REFERENCING THE CONTRACT BORDER

To create a Plotsheet file, begin by externally referencing the Contract Border that was configured in the previous section. The border is to be referenced into a paper space layout, that has been configured following the steps outlined in **1.7 Plot Setup**, with an insertion point of 0,0. Under no circumstances will the contract border be exploded, renamed or modified.

#### 1.8.3.2 INSERTING THE DRAWING INFORMATION

Once the Contract Border has been externally referenced the "Drawing_Info.dwg" block will need to be inserted. This block will be inserted with an insertion point of 0,0 and all attribute information is to be filled out.

The "Drawing_Info.dwg" block contains a pair of lines that state "Original Signed By" and "Original Signee". These lines of text are stored on the layer GN-ANNO-TTLB-SIGN, which by default is turned off. The "Original_Signee" attribute field is to be filled in using the name of the person that signed the drawings. The layer with this information shall be turned on once the Stage III is completed and contract drawings are signed by the Chief discipline Engineer. **Figure 1.8.3-1** and **Figure 1.8.3-2** display this text OFF and ON. Note, this attribute is only required for internal use and outside consultants need not turn on this layer. For information on the correct process for outside consultants refer to **1.8.3.7 Using the Signature Stamps**.


**Figure 1.8.3-1**

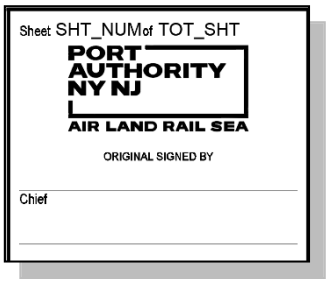



**Figure 1.8.3-2**

When entering the "Discipline Group" and "Discipline Sub-Group" attribute fields users will need to refer to Table 1.8.3-A for the proper values to be used within these fields.

**Table 1.8.3-A**

| Discipline Group | Discipline Sub-Group |
|---|---|
| Architecture | |
| | Landscape |
| Civil | |
| Electrical | |
| | Power |
| | Electronics |
| | Corrosion Protection |
| Environmental | |
| General | |
| | Construction Staging |
| Geotechnical | |
| Mechanical | |

| | |
|---|---|
| | Fire Protection |
| | HVAC |
| | Plumbing |
| Structural | |
| Traffic | |
| | Maintenance of Traffic |

To promote consistency and easy identification of the people involved in the project the Designed By, Drawn By and Checked By attribute fields are to be filled out following the next example:

For Example:

Filippo Brunelleschi would fill out the field as F.Brunellesc

Note that spaces before or after the period are not permitted. The process used to create Contract Borders allows for flexibility in editing and updating information both at the project level as well as at the drawing level. If a project level change is required, then the PID-CB.dwg file can be opened and modified and if a drawing level change is required then the individual drawing can be opened and modified.

#### 1.8.3.3 CREATING A VIEWPORT

When a viewport is created in Paper Space, it is to be placed on the appropriate layer for that discipline, typically <discipline>"-ANNO-VPRT". Once the viewport is created the scale of the viewport must be set. All Division files are created to be plotted with a scale of 1:1, which means that the viewports created will need to have a scale assigned to them. Once the viewport scale has been assigned and the drawing information has been centered within the view, the viewport display should be set to locked.

#### 1.8.3.4 MAKING REVISIONS IN CONTRACT DRAWINGS

Two types of revisions can happen in a Contract Drawing Set: Partial Revisions and Additions. A partial revision is when only portions of the Contract Drawings have been changed and an Addition takes place when an additional Contract Drawing is added to the Drawing Set.

*Regardless of the revision type, users will be required to place the "Drawing_Info – Stamp_Triangle.dwg" block in the drawing pane, near the revised entities. A revision cloud is also to be placed around the area that is being revised. The revision cloud is not required for new drawings.*

For Partial Revisions:

A Revision Cloud will be placed either in Model Space or in Paper Space surrounding just the area of the drawing where changes were made. The Stamp Triangle will be placed right next to the Revision Cloud with an arc linking it to the cloud including the Revision Number,see Figure 1.8-6. The Revision Block will be inserted including the Revision Number as well as the Date, the Description and the Initials of the person that approved the changes (Refer to 1.8.3.6). The initials should be an original signature, in blue ink, for the current revision, If a new revision to the same drawing is required, the first revision initials should be added in AutoCAD and the initials for the new revision should be added in an original signature in blue ink.

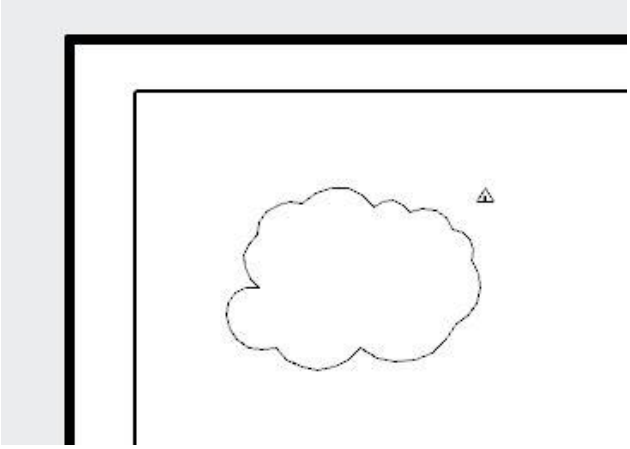


**Figure 1.8.3-3**

For Additions:

The entry for the Sheet in the Drawing Index will be bubbled with a Revision Cloud. The Revision Block will be inserted including the Revision Number as well as the Date, the Description and the Initials of the person who approved the changes. A new Contract Border shall be issued, reference **1.5.5.2 Contract Border File** for the file name of the Contract Borders use on addition sheets. Lastly, the sheet counter text "Sheet _ of _", displayed on the new drawing, must reflect the location of the new sheet and total number of sheets in the set.


**Figure 1.8.3-4**

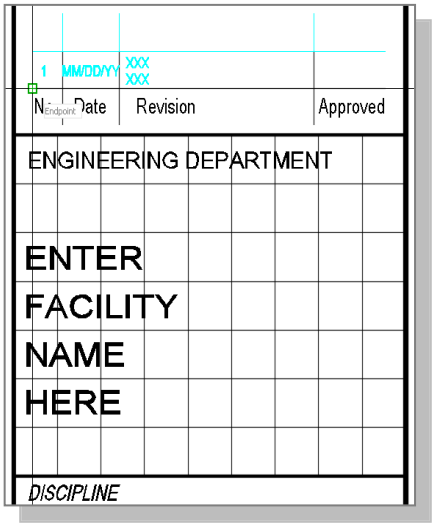



**Figure 1.8.3-5**

Note that for any drawings that are added within a series (as opposed to the end of the series), all drawings following the inserted drawing must be renumbered correctly so that drawing numbers remain unique. Any drawings that have had their drawing number changed as a result of the addition of a drawing within a series must have the drawing number bubbled on the Sheet itself as well as in the Drawing Index, since the corresponding entry for the drawing shall be modified. When a drawing is removed from the contract set, the Drawing Index will also have the drawing name removed.

### 1.8.3.5 USING THE REVISION BLOCK WITH THE CONTRACT BORDER

A revision block named “Drawing_Info – Stamp_Revision.dwg” has been provided with the CAD Standard. When revisions are made, this block is to be inserted using an endpoint snap to the upper left corner of the previous revision line. **Figure 1.8.3.5** displays where the revision stamp is to be inserted. The stamp is located on the network at:

K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Contract_Borders\Stamps (in-house)

All_Discipline_Support_File\Contract Border\Stamp (Consultant)

Once inserted the revision block will prompt the user for information pertaining to the revision. Under no circumstances will the revision block be exploded or modified.

A revision cloud is to be placed around the area of revision whenever a revision is made. Also, note that when an entirely new sheet is added to the set as a revision, the date of the sheet should be the date of the revision, not the original signature date (a revision note is still required on the new sheet).

### 1.8.3.6 USING THE SUBMISSION STAMPS

Submission stamps have been provided for both the Contract Border and Contract Border – OS (oversize) sheets and can be found at:

K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Contract_Borders\Stamps

All_Discipline_Support_File\Contract Border\Stamp (Consultant)

The submission stamps will be inserted as blocks within the Contract Border with an insertion point of 0,0. The following submission types have stamps provided with this standard:

- Law-Review
- Preliminary
- QA-Submission
- Percent Submission

**Figure 1.8.3-6** displays how the submission stamp types appear on the Contract Border.

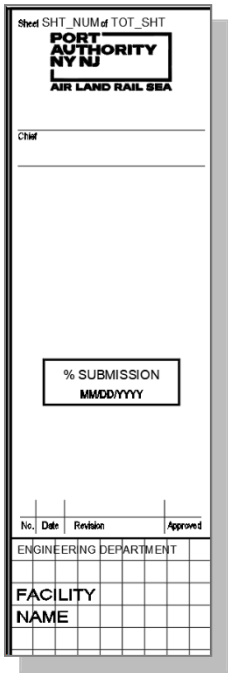



**Figure 1.8.3-6**

### 1.8.3.7 USING THE SIGNATURE STAMPS

Signature stamps have been provided for both the New York and New Jersey Professional Engineer and Registered Architect and are to be used by outside consultants in-lieu of Consultant Logos. The word “Drawing_Info – Stamp_” has been prefixed at the beginning of each stamp to indicate that these stamps are to be placed within the individual layout tabs and not directly into the Contract Border file. The signature stamps provided within this standard are located at:

K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Contract_Borders\Stamps

All_Discipline_Support_File\Contract Border\Stamp (Consultant)

The use of the Signature stamps by outside consultants will require that the GN-ANNO-TTLB-PANU layer be turned off. This layer contains the signature lines for the in-house staff and is not needed when outside consultants are signing the sheets.

Signature stamps are to be inserted with an insertion point of 0,0 and are required to have all appropriate attribute fields filled in. The stamp is dynamic and has visibility states. It should be inserted and then edited. Note that when filling in the Consultant company information only the company name and address is to appear, not the logo. If a sub-consultant is used, then the primary consultant will fill in their company name using the first NYPE Consultant and the second NYPE Consultant attribute fields and the sub-consultant will fill in their company name using the Sub-Consultant1 and Sub-Consultant2 attribute fields. Bi-State drawing information stamps are provided and should be used when it's appropriate.

On the left side of **Figure 1.8.3-7** the Contract Border with the GN-ANNO-TTLB-PANU layer for in-house use turned on is displayed, on the middle of **Figure 1.8.3-7** the Contract Border with that layer turned off and a consultant signature stamp inserted is displayed and on the right side of **Figure 1.8.3-7** the Contract Border with that layer turned off and the Bi-state consultant signature stamp inserted is displayed.

The seal for the Architectural and/or Engineering firm should be shaded or stamped in the open space under the NJ/NY PE/RA consulting firm name.

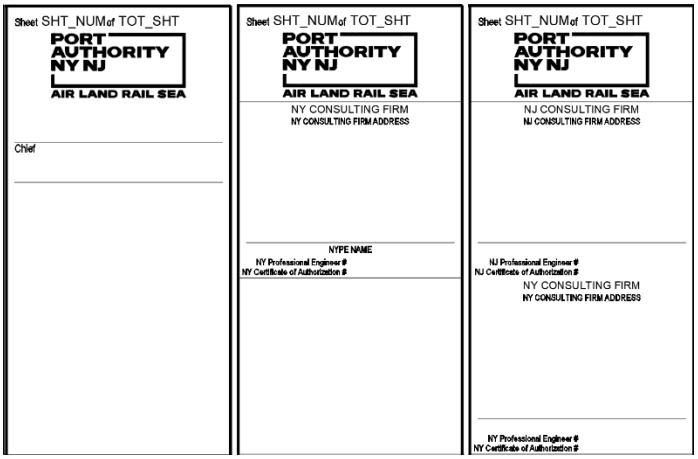



**Figure 1.8.3-7**

### 1.8.3.8 USING THE CONFIDENTIAL PRIVILEGED STAMPS

Confidential Privileged Stamps have been provided for both, the Contract Border and Contract Border - OS (oversize version). The Confidential Privileged Stamps are to be inserted as blocks with an insertion point of 0,0 on each individual sheet unless the entire project is considered Confidential and Privileged, in which case the stamps can be placed within the Contract Border. The Confidential Privileged Stamps provided with this standard are located at:

K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Contract_Borders\Stamps

All_Discipline_Support_File\Contract Border\Stamp (Consultant)

**Figure 1.9.3-4** illustrates a Contract Border with a Confidential Privileged Stamp (Drawing_Info - Stamp_CPbar.dwg) inserted.

## 1.9 CONFIDENTIAL & CONFIDENTIAL PRIVILEGED PROJECTS

Confidential and Confidential Privileged Projects are those in which unique circumstances may require different guidelines be followed in order to comply with the CAD Standards. The contents of this document will be followed in addition to the ones already specified in the CAD Standards, unless specifically instructed otherwise within this section.

### 1.9.1 PURPOSE

The Port Authority C & CP Standard Compliance outlined is established to provide guidance for the preparation of the EAD Division of the Port Authority of New York and New Jersey's contract documents that contain Confidential and Confidential Privileged information.

This document is intended for use by both in-house personnel as well as outside consultants involved in creating construction documents for the Port Authority. It establishes requirements and procedures for the preparation and submission of CAD based drawings throughout the project life cycle. Adherence to this standard ensures that the E/A Design Division and the Construction Division of the PANYNJ will receive and produce data in a consistent format.

For more information on practices and procedures on protected information projects it can be found on Engineering Department Protected Information Practices and Procedures.

### 1.9.2 CONFIDENTIAL PROJECTS

Confidential Projects contain highly sensitive information that if lost or made public could seriously damage or compromise the Port Authority and/or public safety and security. Confidential information includes, but is not limited to, methods utilized to mitigate vulnerabilities and threats, such as identity, location, design construction and fabrication of security systems.

For that reason, if aspects being worked on as part of a project drawing are considered Confidential, they will need to be handled differently than standard contract drawings.

If information on a drawing is considered to be Confidential, then that model drawing is to be stored in the Model_C folder. Any plotsheet drawing that contains Confidential information must be stored in the Plotsheets_C folder. It is permitted to reference non-Confidential information from outside the Confidential folder into a Confidential project. If a model file that has been deemed Confidential needs to be shared across disciplines, then the file is to be copied to the Publish_C folder.

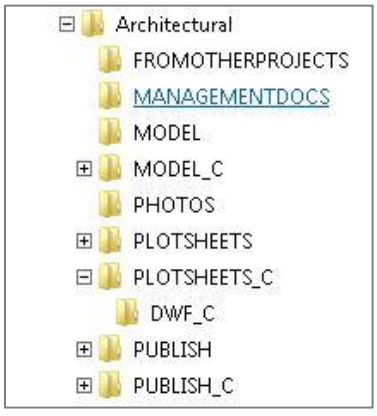



**Figure 1.9.2-1**

**Cover sheets shall be used to divide the complete set** into Unmarked, Confidential and Confidential Privileged drawings, the cover sheet files are found inside the Contract Border folder of the standardize files. If a project contains Confidential sheets then they must be separated out into their own set with its

own Cover Sheet. The Confidential Stamp markings at the top, bottom and right side of the pages must be displayed, identifying the project as Confidential. This is accomplished by turning on and thawing the "GN-ANNO-TTLB-CONF" layer. Confidential Cover Sheet doesn't require the use of the Warning stamp.

All interior Confidential pages within the set must also be marked Confidential at the top, bottom and right side of the page. Sets of documents that are folded or rolled must be marked so that the marking is visible on the outside of the set once folded or rolled. This is accomplished by inserting the "Drawing_Info – Stamp_Cbar.dwg" block into paper space of the Plotsheet drawing containing the Confidential information. The "Drawing_Info – Stamp_Cbar.dwg" block is to be inserted with an insertion point of 0,0,0 on layer 0 and is not to be exploded or modified in any way. All of the Confidential Markings are displayed in **Figure1.9.2.2** and **Figure 1.9.2-3**.

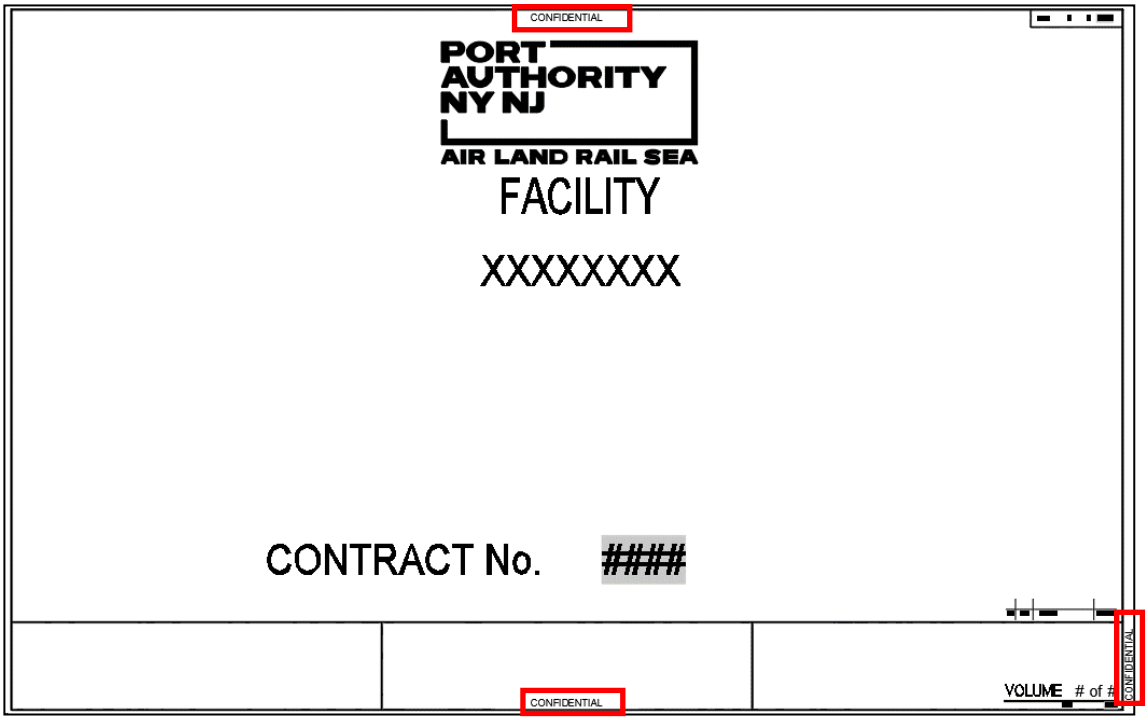



**Figure 1.9.2-2**


**Figure 1.9.2-3**

Confidential and Unmarked drawings will be separated into two sets, for more referred to section **1.9.4 C & CP Contract Drawing Set**. On the Drawing Index sheet, names of Confidential drawings shall be listed to inform the viewer that additional drawings have protected information. This drawing shall take the form "<Drawing Title> (Protected Information Volume X)", where <Drawing Title> is the title of a Confidential drawing and X is the Volume number as shown in **Figure 1.9.2-4** below.

INDEX OF DRAWINGS

| DRAWING NO. | SHEET TITLE |
|---|---|
| | GENERAL |
| TS001 | TITLE SHEET |
| IX001 | INDEX OF DRAWINGS |
| | |
| | CIVIL |
| C001 | NOTES, LEGEND AND ABBREVIATION |
| C002 | SITE PLAN (PROTECTED INFORMATION VOL. 2) |
| | |
| | ELECTRICAL |
| E001 | NOTES, LEGEND AND ABBREVIATION |
| E002 | ELECTRICAL DETAILS (PROTECTED INFORMATION VOL. 3) |
| | |
| | |

**Figure 1.9.2-4**

For more information on the handling and submitting of Confidential projects refer to “The Port Authority of New York & New Jersey Information Security Handbook”.

### 1.9.3 CONFIDENTIAL PRIVILEGED PROJECTS

Confidential Privileged Projects contain extremely sensitive security or public safety information that if lost or made public could seriously damage or compromise the Port Authority and/or public safety and security. Confidential Privileged information includes, but is not limited to, any information identifying vulnerabilities, capabilities, threats, operational methodologies and/or security related design criteria.

For that reason, if aspects being worked on as part of a project drawing are considered Confidential Privileged they will need to be handled differently than standard contract drawings.

If information on a drawing is considered to be Confidential Privileged, then that model drawing is to be stored in the Model_CP folder. Any plotsheet drawing that contains Confidential Privileged information must be stored in the Plotsheets_CP folder. It is permitted to reference non-Confidential information from outside the CP folder into a Confidential Privileged plotsheet drawing. If a model file that has been deemed Confidential Privileged needs to be shared across disciplines, then the file is to be copied to the Publish_CP folder.

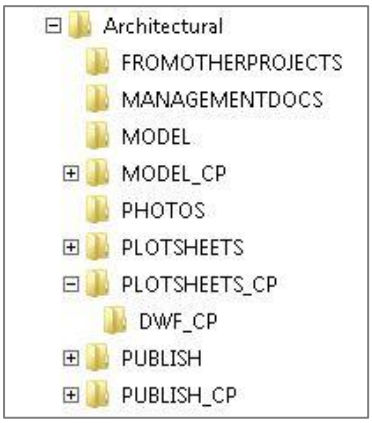



**Figure 1.9.3-1**

**Cover sheets shall be used to divide the contract set** into Unmarked, Confidential and Confidential Privileged drawings, the cover sheet files are found inside the Contract Border folder of the standardize files. If a project contains any Confidential Privileged sheets then they must be separated out into their own set with its own Cover Sheet. The Confidential Information Warning Sign (CP - WARNING.dwg) must be displayed on the Cover Sheet of the Confidential Privileged set, along with markings at the top, bottom and right side of the page identifying the project as Confidential Privileged. This is accomplished by turning on and thawing the "GN-ANNO-TTLB-CP__" layer. The Warning Sign is displayed in **Figure 1.9.3-2 and Figure 1.9.3-3.**

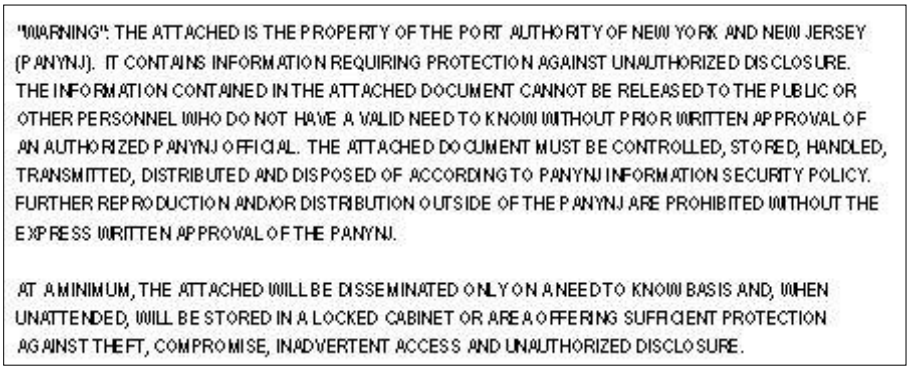



**Figure 1.9.3-2**

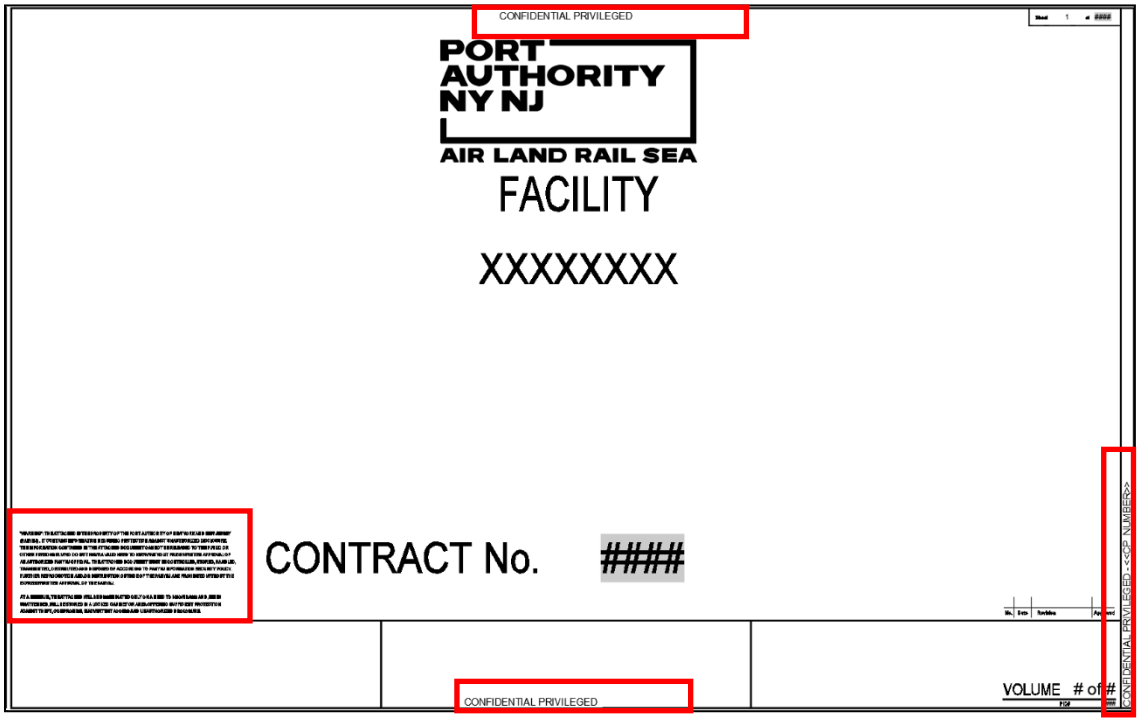



**Figure 1.9.3-3**

All interior pages within the set must also be marked at the top, bottom and right side of the page. Sets of documents that are folded or rolled must be marked so that the marking is visible on the outside of the set once folded or rolled. This is accomplished by inserting the “Drawing_Info – Stamp_CPbar.dwg” block into paper space of the Plotsheet drawing containing the Confidential Privileged information. The “Drawing_Info – Stamp_CPbar.dwg” block is to be inserted with an insertion point of 0,0,0 on layer 0 and is not to be exploded or modified in any way.

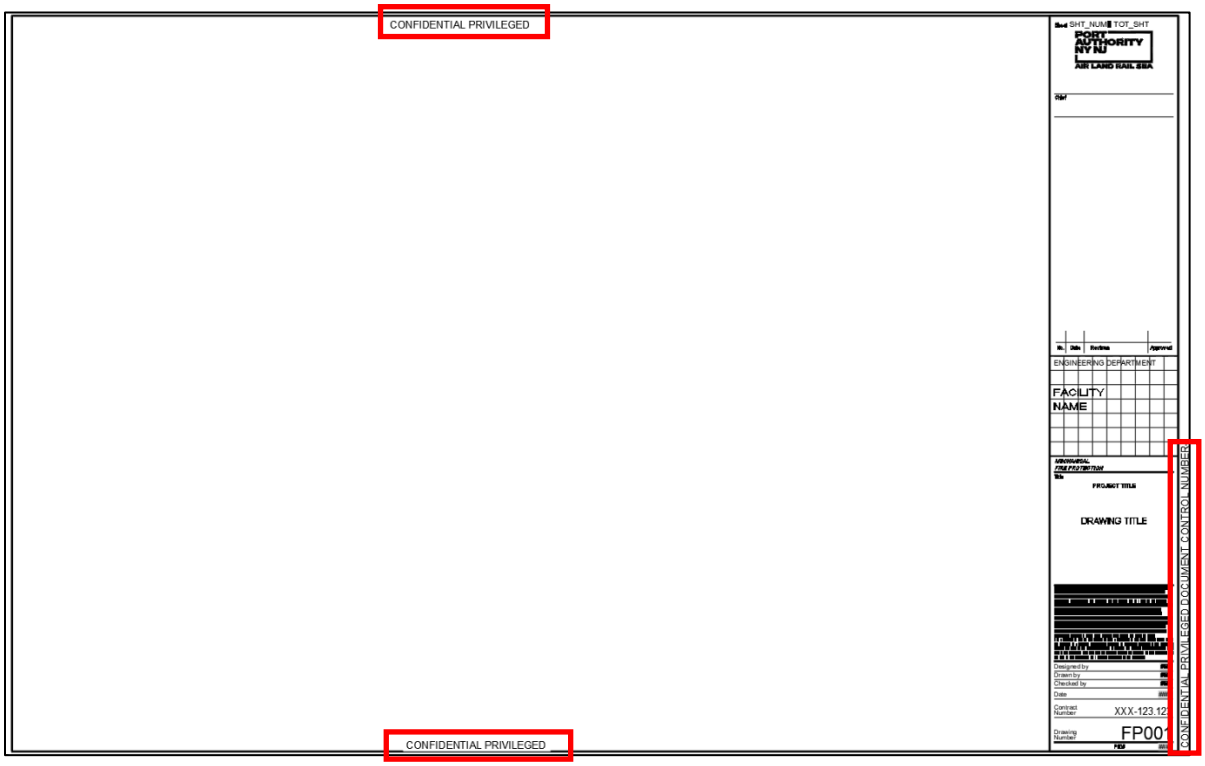



**Figure 1.9.3-4**

Projects identified as Confidential Privileged are assigned a Confidential Privileged Document Control Number. This markings are to appear on the top, bottom and right side of each printed sheet next to the Confidential Privileged markings and is also stored on the GN-ANNO-TTLB-CP__ layer for title sheets and within the “Drawing_Info – Stamp_CPbar.dwg” block. All of the Confidential Privileged Markings are displayed in **Figure 1.9.3-3** and **Figure 1.9.3-4**.

On the Drawing Index sheet, names of Confidential Privileged drawings that are separated out of the main drawing set should be listed to inform the viewer that additional drawings are available and should take the form "<Drawing Title> (Protected Information Volume X)", where <Drawing Title> is the title of a Confidential Privileged drawing and X is the Volume number as shown in **Figure 1.9.2-4**.

For more information on the Document Control Number and the handling and submitting of Confidential Privileged projects refer to “The Port Authority of New York & New Jersey Information Security Handbook”.

### 1.9.4 C & CP CONTRACT DRAWING SET

This document defines what are the requirements that Confidential and Confidential Privileged Projects shall contain prior to submission to the Port Authority. If a project contains both C & CP drawings, then the Contract Set shall be divided into three volumes as stated in section 1.9.2 and 1.9.3. The set containing the unmarked drawings will be Volume 1, the set containing confidential drawings will be Volume 2, the set containing the confidential privileged drawings will be Volume 3 and shall be marked in the index drawings as the following:

- <Drawing Title> ( Volume 1)
- <Drawing Title> (Protected Information Volume 2)

- <Drawing Title> (Protected Information Volume 3)

Each volume shall have a Cover sheet and an Index of drawings with the number of the volume in the file name. The following requirements on

Table 1.9.4-A and Table 1.9.4-B only applies when Confidential and Confidential Privilege documents are part of the Contract Set.

**Table 1.9.4-A**

| Standard Projects | | | |
|---|---|---|---|
| Items Included Per Set | Unmarked Set | Confidential Set | Confidential Privileged Set |
| Title Sheet* | ✓ | | |
| Cover Sheet | | ✓ | ✓ |
| Warning Label (Title Sheet Only) | | | ✓ |
| Signature Lines (Title Sheet) | ✓ | | |
| Index of Drawings | ✓ | ✓ | ✓ |
| Security Markings | | ✓ | ✓ |
| Document Control Numbers | | | ✓ |

**Table 1.9.4-B**

| Security Projects Only | | | |
|---|---|---|---|
| Items Included Per Set | Volume 1 | Volume 2 | Volume 3 |
| Title Sheet* | ✓ | | |
| Cover Sheet | | ✓ | ✓ |
| Warning Label (Title Sheet Only) | ✓ | ✓ | ✓ |
| Signature Lines (Title Sheet) | ✓ | | |
| Index of Drawings | ✓ | ✓ | ✓ |
| Security Markings | ✓ | ✓ | ✓ |
| Document Control Numbers | | | ✓ |

The Title Sheet is the first sheet of the first volume in the Contract Set. The cover sheets are duplicate title sheets sans the drawing number and signature lines, see **Figure 1.9.4-1** and **Figure 1.9.4-2** for reference. The Title Sheet, Cover Sheet and Index of drawings sheets will have unique names to distinguish them from the design/construction plotsheet files.

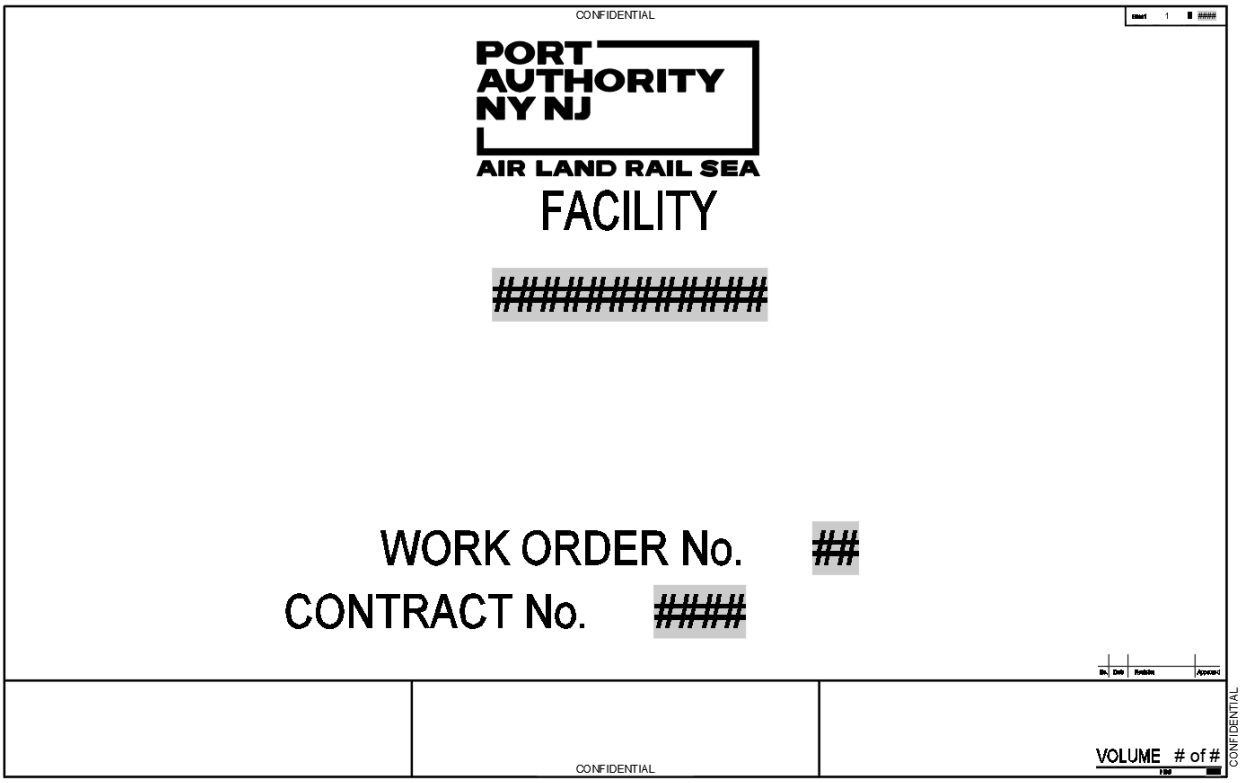



**Figure 1.9.4-1**

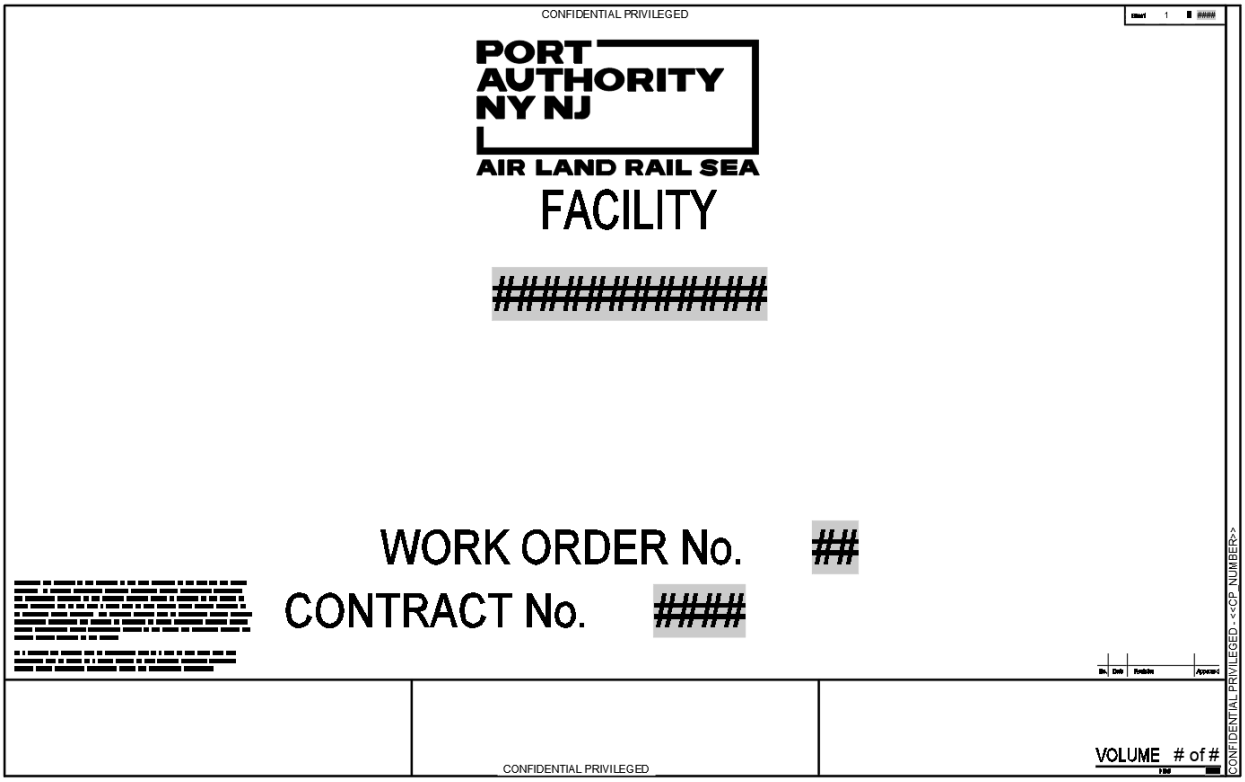



**Figure 1.9.4-2**

The volume number must be noted in the bottom right corner of the Cover sheet, when multiple volumes are produced. The title sheet is dynamic and has visibility states that allows the Volume attributes to be filled. If the project does not contain any Confidential or Confidential Privileged information the volume number will not be noted on the Title sheet of that set.

## 1.10 DELIVERABLES

The CAD Standard adopts AutoCAD as the "Standard CAD Software". Consultants are required to submit electronic CAD files in a format compatible with the current version of AutoCAD software in use by the E/A Design Division of the PANYNJ.

Softcopy submittals (electronic CAD files) must include all information presented on the hardcopy submittals (plots). This precludes the use of sticky-backs, graphic tapes, hand lettering and anything else that is placed on the drawing after it is plotted excepting any signatures and seals.

Consultants are required to submit CAD files accompanied with hardcopies every time a project reaches a 100% submittal milestone. This includes, but is not limited to, PA Review Set, Percent Submittal Set, Addendum Set, As Bid Set, PACC Set, Drawing of Record Set, etc. Refer to **Section 1.6.12 Submissions.**

When submitting files on electronic media, the AutoCAD drawing file version should be noted.

If terrain model files are requested for the project, the consultant will submit these files in XML format.

If alignment files are requested for the project, the consultant will submit alignment files in XML format.

If a coordinate geometry point database is requested for a project, the consultant will supply this database as an XML file.

When requested, these files will be submitted with the project structure intact, as outlined in **Section 1.4.2 AutoCAD Civil 3D**.

### 1.10.1 MEDIA AND FORMAT

AutoCAD drawing files will be submitted on media CDs. All disks are to be delivered virus free.

Final hardcopies of each sheet must use the PANYNJ Contract Border identified in this standard and must be submitted at full size, either 22x34 or 34x56. Submitted hardcopies must use archival paper with Permalife® plotter paper specifications. Engineering Department staff will verify that submissions contain the "Permalife 25% cotton content" watermark. Authorized professional signatures must use blue ink.

### 1.10.2 IDENTIFICATION

All CDs submitted to the E/A Design Division of the PANYNJ will be labeled with the following information:

- Consultant's name and Project Identification Number (PID)
- Contact name and phone number of consulting project manager
- Discipline-Facility (e.g. Civil-JFK)
- Submittal Date and Percent Completed
- Data Format (e.g. AutoCAD Version .dwg)
- File Name(s) on CD
- As much information as possible should be printed on both the CD label and the CD case. If all the information will not fit on either the CD label or the CD case, the information can be listed in an orderly manner in a text file that will be copied to the CD in electronic format.

### 1.10.3 PROJECT WEBSITES

The PANYNJ developed a "Project Extranet" to enhance collaboration between in-house designers and outside consultants, as well as with different departments and divisions throughout the agency. All Project Websites have a folder structure similar to that described in **1.5 Project Directory Structure and File Naming Convention** of this standard.

Please refer to the project specifics to determine if a Project Website is available for use. If so, all transfer of digital information should be made via the website. Transfer of data via email or CDs is not permitted if a project website is available.

If a Project Website is available for the project the Project Website link will be provided along with a Username and a Password.

## 1.11 COMPLIANCE CAD STANDARDS REPORT

In an effort to confirm the compliance of the CAD Standard, the use of the Compliance report shall be filled based on the status of all submitted files. CAD Standards reviews are applicable to all projects, in-house and/or consultant that are issued either for construction contracts or work orders.

### 1.11.1 WORK ORDER & CONSTRUCTION CONTRACT PA WIDE CAD REVIEW

- Review is mandatory for all Contract Drawings
    - Initial failures are issued to the LEA and Task Leaders
        - 3 weeks are provided for the correction of the files
    - At the end of the 3-week period a Report is issued to the Assistant Chiefs, Principals, LEA and Task Leaders
    - During the PA Wide Review drawings will be analyzed and a FINAL pass/fail Report will be issued.
        - Drawings will not be reviewed after the PA Wide Review period.
- Requirements
    - Timeframe: Required at the on-set of PA Wide Review
    - Initiated by the LEA via EOL request form
        - Only for **PA Wide Review** upon receipt of the request the CAD Support Group is to upload the files to Live Link for electronic review and notify the Contract Engineer of the initiation of PA Wide Review.
- Final Report is issued the Assistant Chiefs, Principals, LEA and Task Leaders

All items on the CAD Standards Review Report are required to be in compliance with CAD Standards in order for the project to pass, this is followed by a Notes section that includes comments pertaining to the review.

This form will be reviewed on a regular basis and is subject to changes. If a change is approved, it will be posted on the E/A Design Division CAD Standard website http://www.panynj.gov/business-opportunities/engineering-documents-bim-cad-standards.html and incorporated into the next revision of this document.

The following two pages illustrate the CAD Standards Review Report and are to be used as a checklist for checking CAD Standard compliance prior to submitting drawings. (See**Figure 1.11.1-1**and **Figure 1.11.1-2**

**Project information Items**

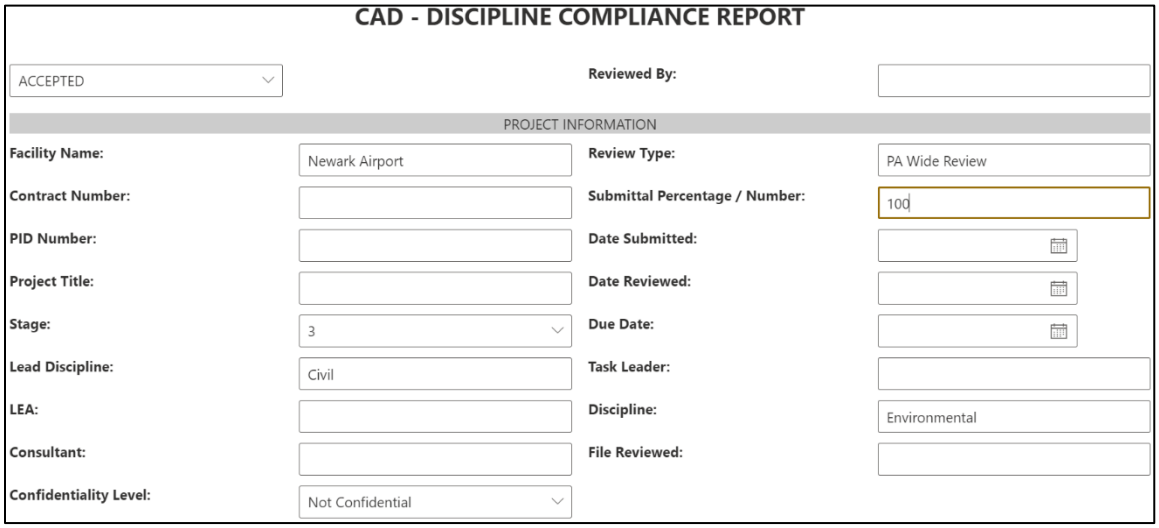



**Figure 1.11.1-1**

**Mandatory Items**

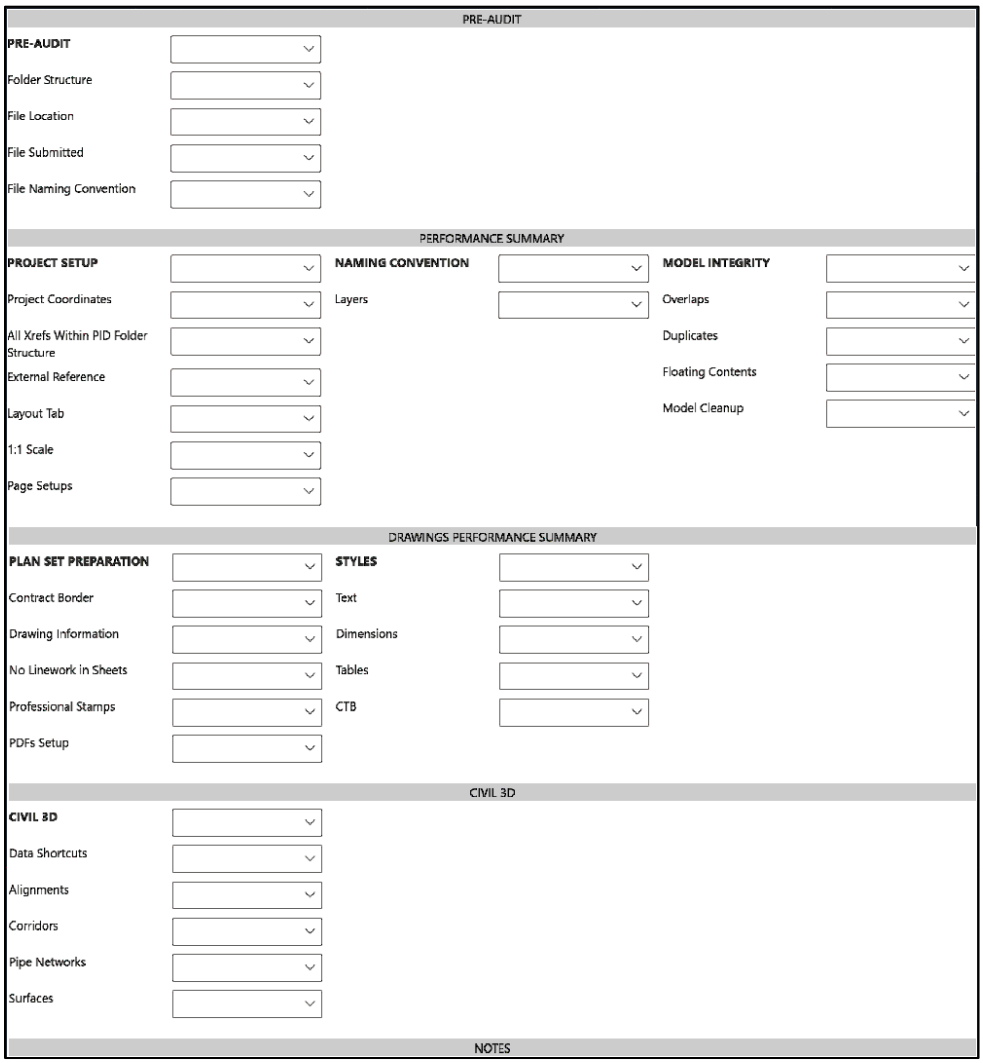



**Figure 1.11.1-2**

## 1.12 CAD STANDARD UPDATE AND REVISION PROCEDURES

The dynamic nature of CAD technology and the engineering process dictates that this document will change over time. Changes to this document will be made by following strict procedures and guidelines.

Changes may be made based on errors and omissions, as well as to enhance or update the standards based on changes in the CAD environment. All requested changes to this document must be accompanied by a Request to Change Standard form provided in **1.15.1 Request to Change Standard**.

Updates to this document and the related support files will be made as required. Updates will be posted on https://www.panynj.gov/port-authority/en/business-opportunities/engineering-available-documents.html. For in-house the updates shall be posted on K:\Application\EAD\CAD_Standards\2018 and K:\Documentation\Standards Documents.

## 1.13 CONTACT AND SUPPORT INFORMATION

Questions regarding the standards provided within this document should be directed to the VDC Support Group at: 212-435-6102 or engcadd@panynj.gov

## 1.14 CONCLUSION

This document is a comprehensive standard for the creation of contract drawings for the PANYNJ. All drawings submitted to the E/A Design Division must adhere to the conventions documented here. The VDC Support Group will use automated procedures to verify compliance with this standard.

## 1.15 APPENDIX A – UPDATES AND REVISIONS

### 1.15.1 REQUEST TO CHANGE STANDARD

*Engineering CAD/BIM Support Group* — THE PORT AUTHORITY OF NY & NJ

*E/A Design Division CAD Standards*

**DISCLAIMER**

By making this submission you, the submitter, agrees that no contractual confidential relationship is established between you and the issuer of this Standard. If your material is incorporated into this Standard, you will not be compensated. In addition, if the material which you have submitted on this form is protected by any copyright, patent, trademark, or other proprietary right, then you are granting the issuer of this Standard a non-exclusive, royalty-free, perpetual and fully transferable license to use the materials in connection with this Standard.

**SUBMITTER INFORMATION**

| | |
|---|---|
| Name | |
| Date | |
| Company | |
| Address | |
| Address | |
| City, State, ZIP | |
| Phone | |
| Email | |

**APPROVED BY**

| | |
|---|---|
| Architectural | |
| Civil | |
| Electrical | |
| Environmental | |
| Geotechnical | |
| Mechanical | |
| Structural | |
| Traffic | |
| CAD Support | |

**CAD STANDARD INFORMATION**

Version of Standard to Update

**CHANGE INFORMATION**

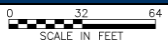
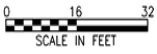
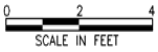
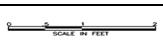
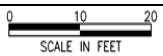
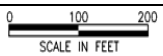
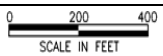
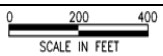
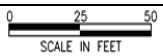
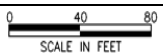
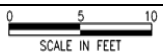
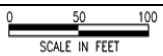
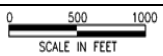
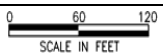
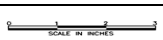
| | |
|---|---|
| Section to be Changed | Appendices |
| Change Type | Edit |

Change Description

**APPROVAL / DENIAL INFORMATION**

## 1.16 APPENDIX B – COMMON SYMBOLOGY

### 1.16.1 GRAPHIC SCALE BARS

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | BS1_32in-1ft.dwg | D-ANNO-SYMB | Scale Bar 1/32”=1’-0” |
|  | BS1_16in-1ft.dwg | D-ANNO-SYMB | Scale Bar 1/16”=1’-0” |
|  | BS1_2in-1ft.dwg | D-ANNO-SYMB | Scale Bar ½”=1’-0” |
|  | BS1_4 in-1ft.dwg | D-ANNO-SYMB | Scale Bar ¼”=1’-0” |
|  | BS1_8in-1ft.dwg | D-ANNO-SYMB | Scale Bar 1/8”=1’-0” |
|  | BS3_16 in-1ft.dwg | D-ANNO-SYMB | Scale Bar 3/16”=1’-0” |
|  | BS3_32in-1ft.dwg | D-ANNO-SYMB | Scale Bar 3/32”=1’-0” |
|  | BS3_4in-1ft.dwg | D-ANNO-SYMB | Scale Bar ¾”=1’-0” |
|  | BS3_8in-1ft.dwg | D-ANNO-SYMB | Scale Bar 3/8”=1’-0” |
|  | BS1-1_2in-1ft.dwg | D-ANNO-SYMB | Scale Bar 1-1/2”=1’-0” |
|  | BS1in-1ft.dwg | D-ANNO-SYMB | Scale Bar 1”=1’-0” |
|  | BS1in-10ft.dwg | D-ANNO-SYMB | Scale Bar 1”=10’-0” |
|  | BS1in-100ft.dwg | D-ANNO-SYMB | Scale Bar 1”=100’-0” |
|  | BS1in-20ft.dwg | D-ANNO-SYMB | Scale Bar 1”=20’-0” |
|  | BS1in-200ft.dwg | D-ANNO-SYMB | Scale Bar 1”=200’-0” |
|  | BS1in-25ft.dwg | D-ANNO-SYMB | Scale Bar 1”=25’-0” |
|  | BS3in-1ft.dwg | D-ANNO-SYMB | Scale Bar – 3”=1’-0” |
|  | BS1in-30ft.dwg | D-ANNO-SYMB | Scale Bar 1”=30’-0” |
|  | BS1in-40ft.dwg | D-ANNO-SYMB | Scale Bar 1”=40’-0” |
|  | BS1in-400ft.dwg | D-ANNO-SYMB | Scale Bar 1”=400’-0” |
|  | BS1in-5ft.dwg | D-ANNO-SYMB | Scale Bar 1”=5’-0” |
|  | BS1in-50ft.dwg | D-ANNO-SYMB | Scale Bar 1”=50’-0” |
|  | BS1in-500ft.dwg | D-ANNO-SYMB | Scale Bar 1”=500’-0” |
|  | BS1in-60ft.dwg | D-ANNO-SYMB | Scale Bar 1”=60’-0” |
|  | BSFULL.dwg | D-ANNO-SYMB | Scale Bar 1”=1” |

The letter “D” under the Layer Name is to be replaced by the specific Discipline’s Discipline Code.

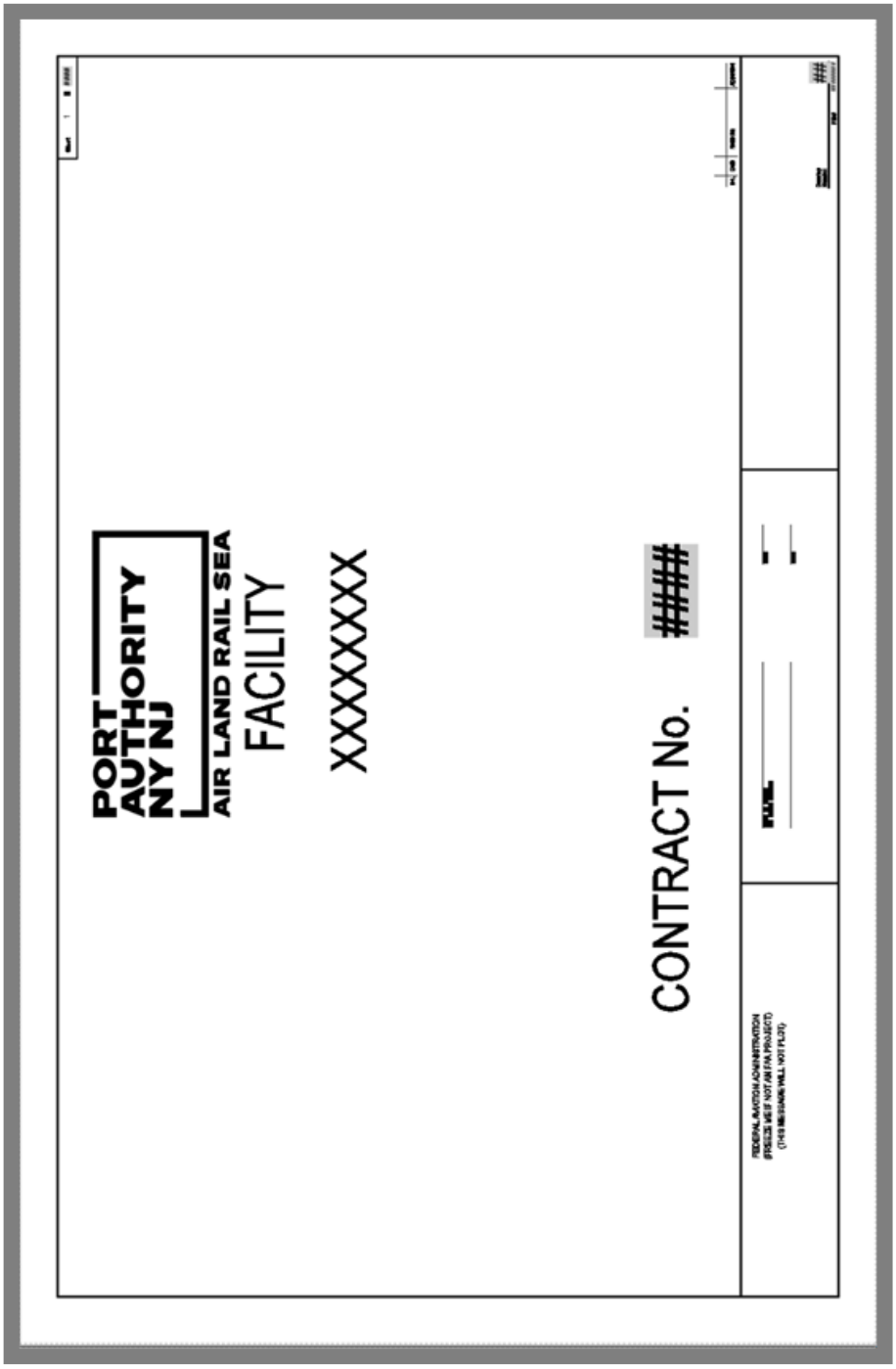
### 1.16.2 NORTH ARROWS

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|   | N_ARROW1.dwg | D-ANNO-SYMB | North Arrow |
|  | N_ARROW2.dwg | D-ANNO-SYMB | North Arrow |

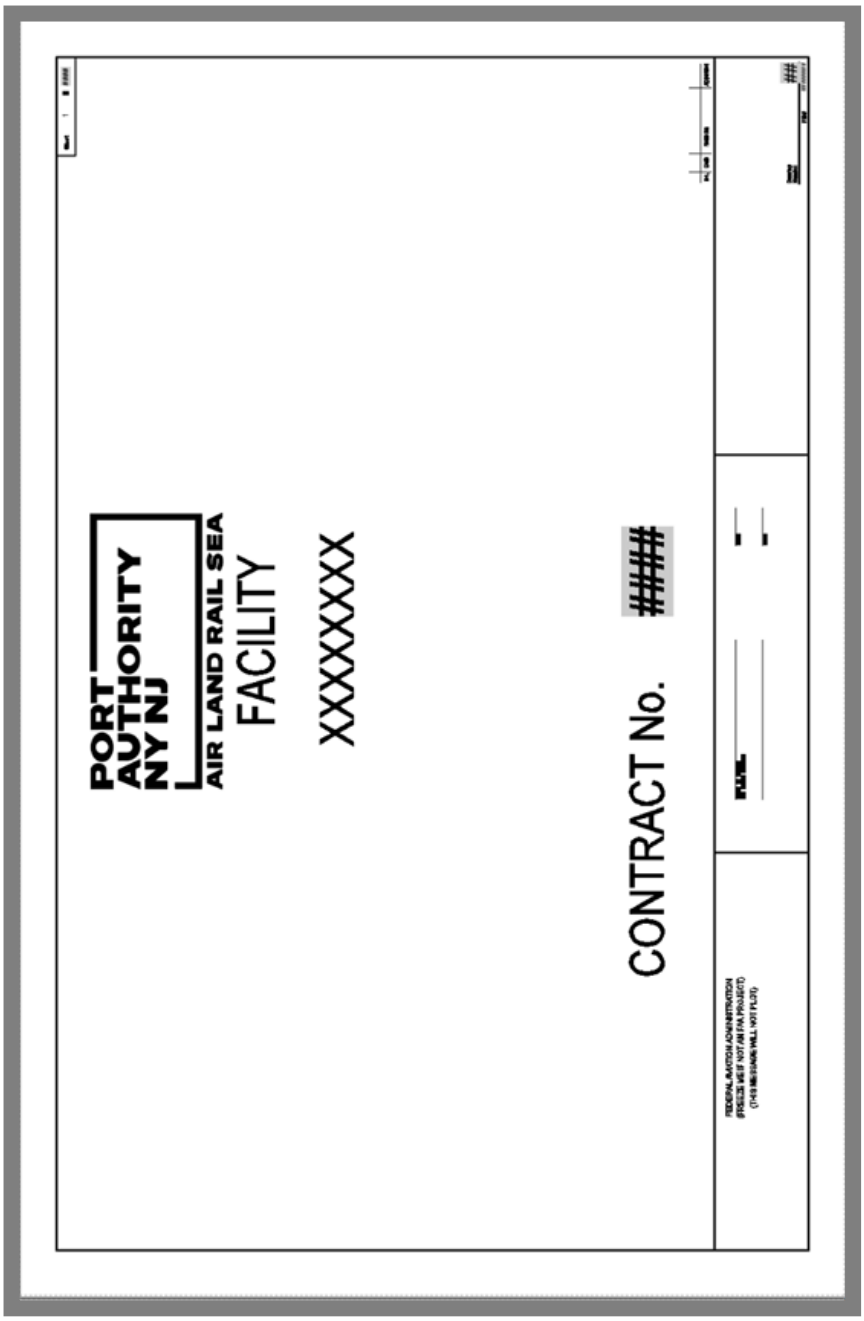
The letter “D” under the Layer Name is to be replaced by the specific Discipline’s Discipline

## 1.17 APPENDIX C – CONTRACT BORDERS AND TITLE SHEETS

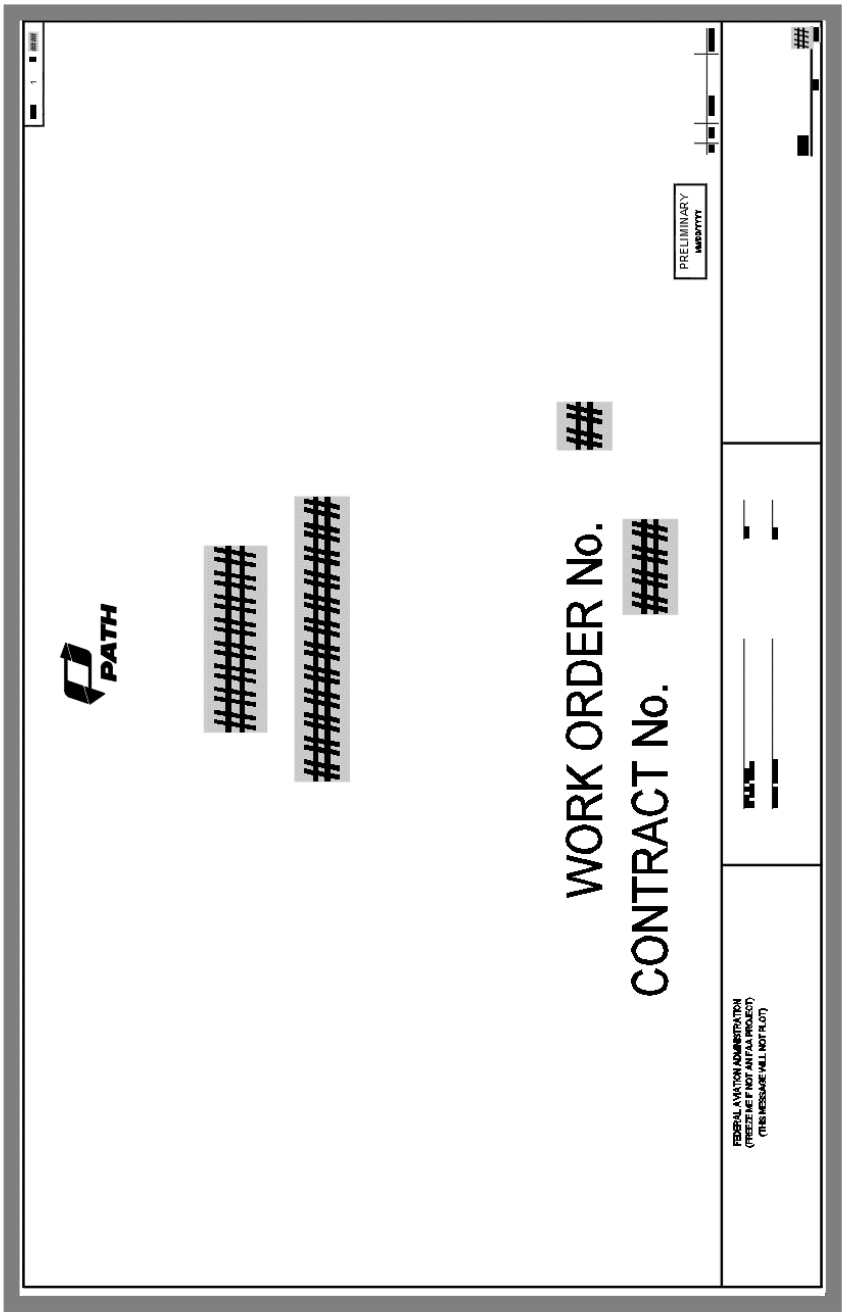
### 1.17.1 TITLE SHEET



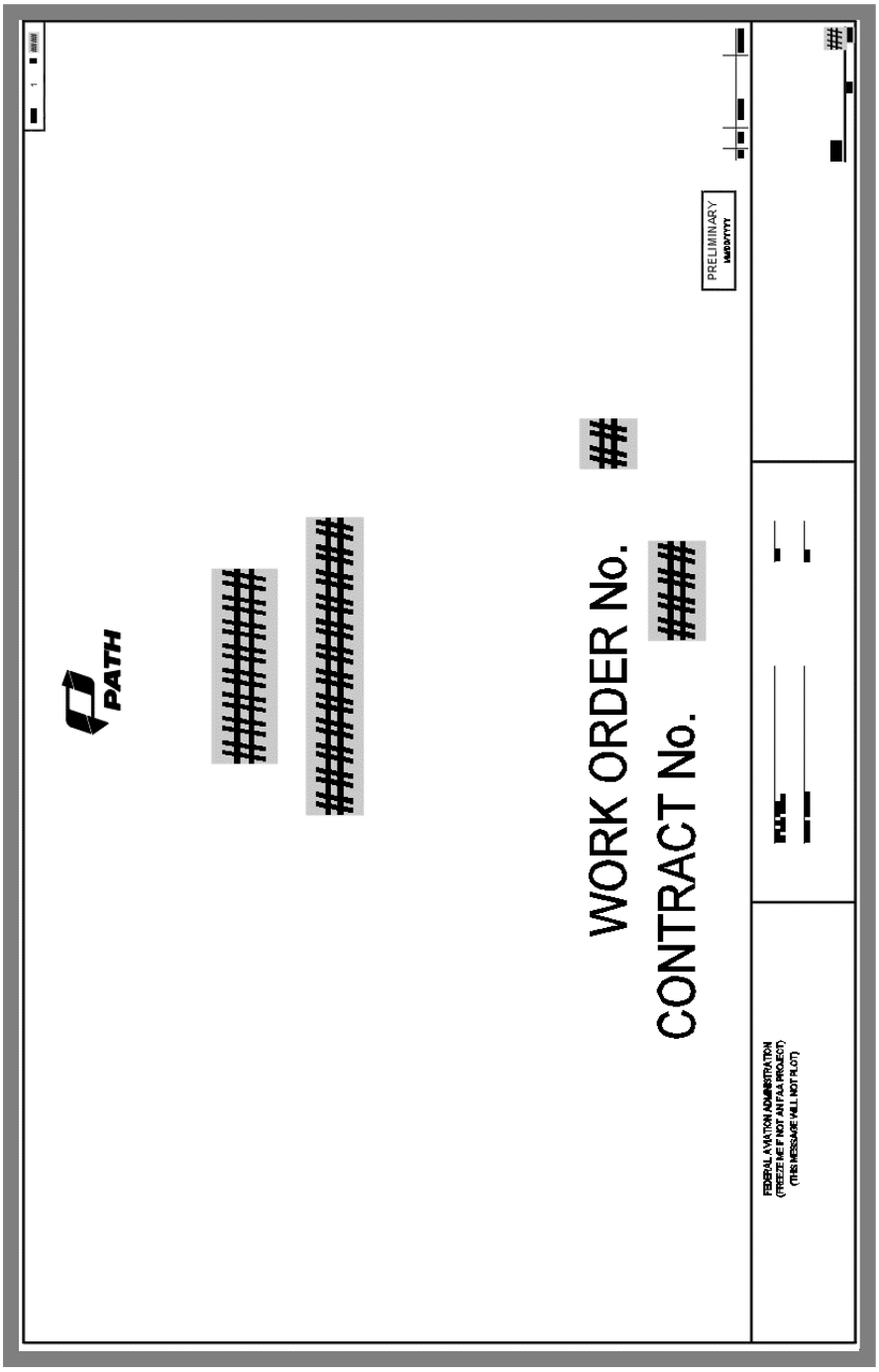
### 1.17.2 TITLE SHEET OVERSIZED (OS)



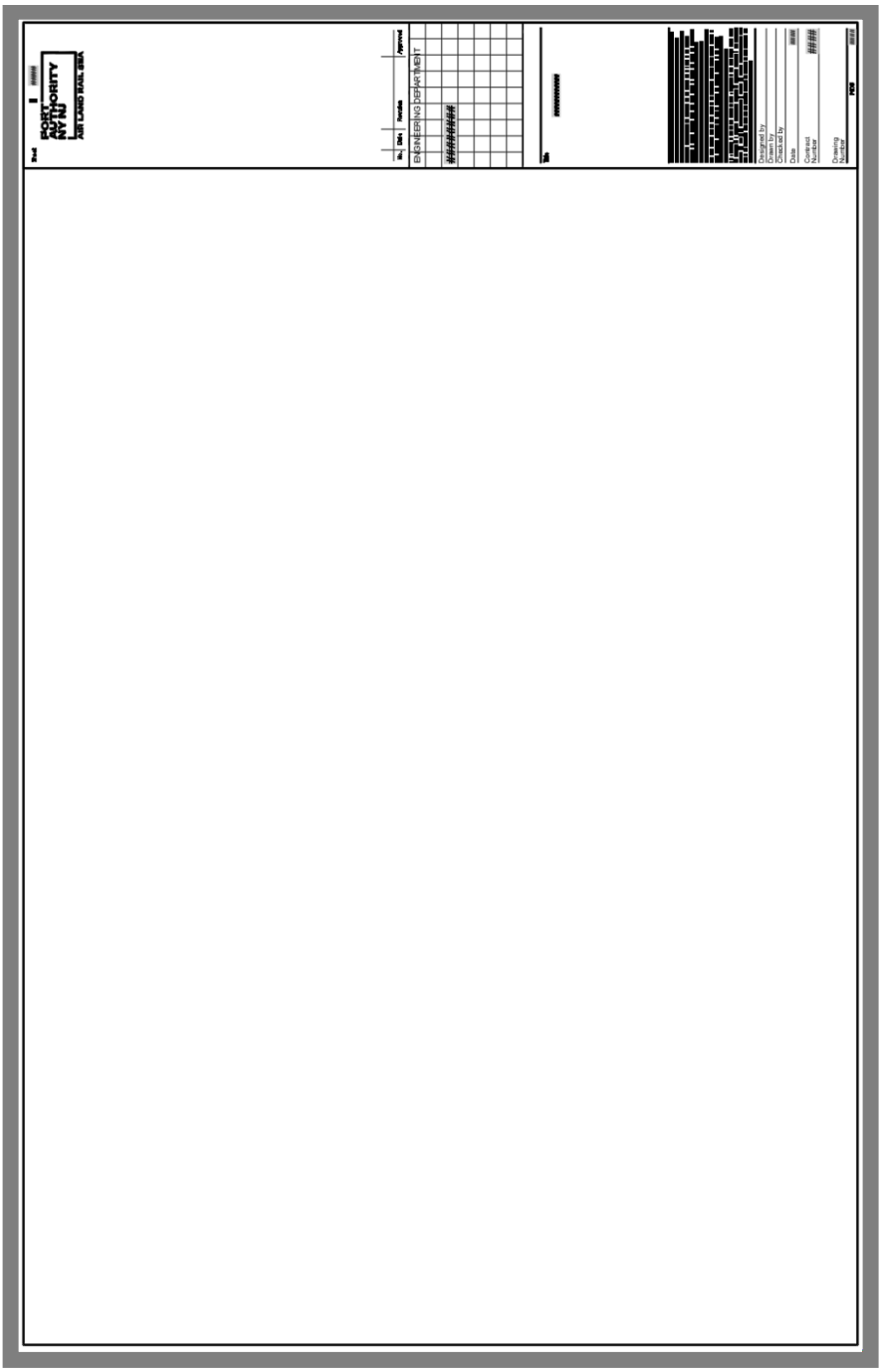
### 1.17.3 TITLE SHEET PATH



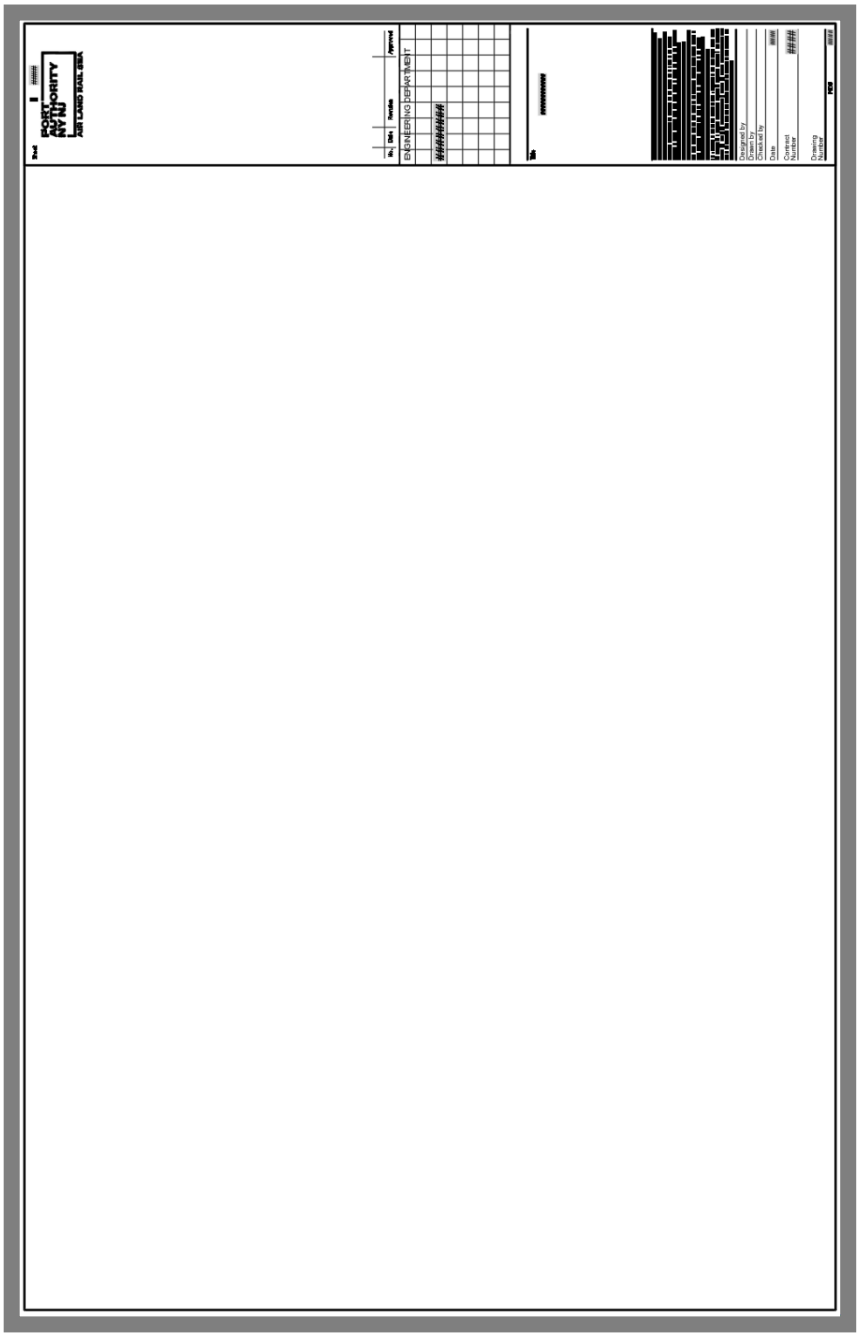
### 1.17.4 TITLE SHEET PATH OVERSIZED (OS)



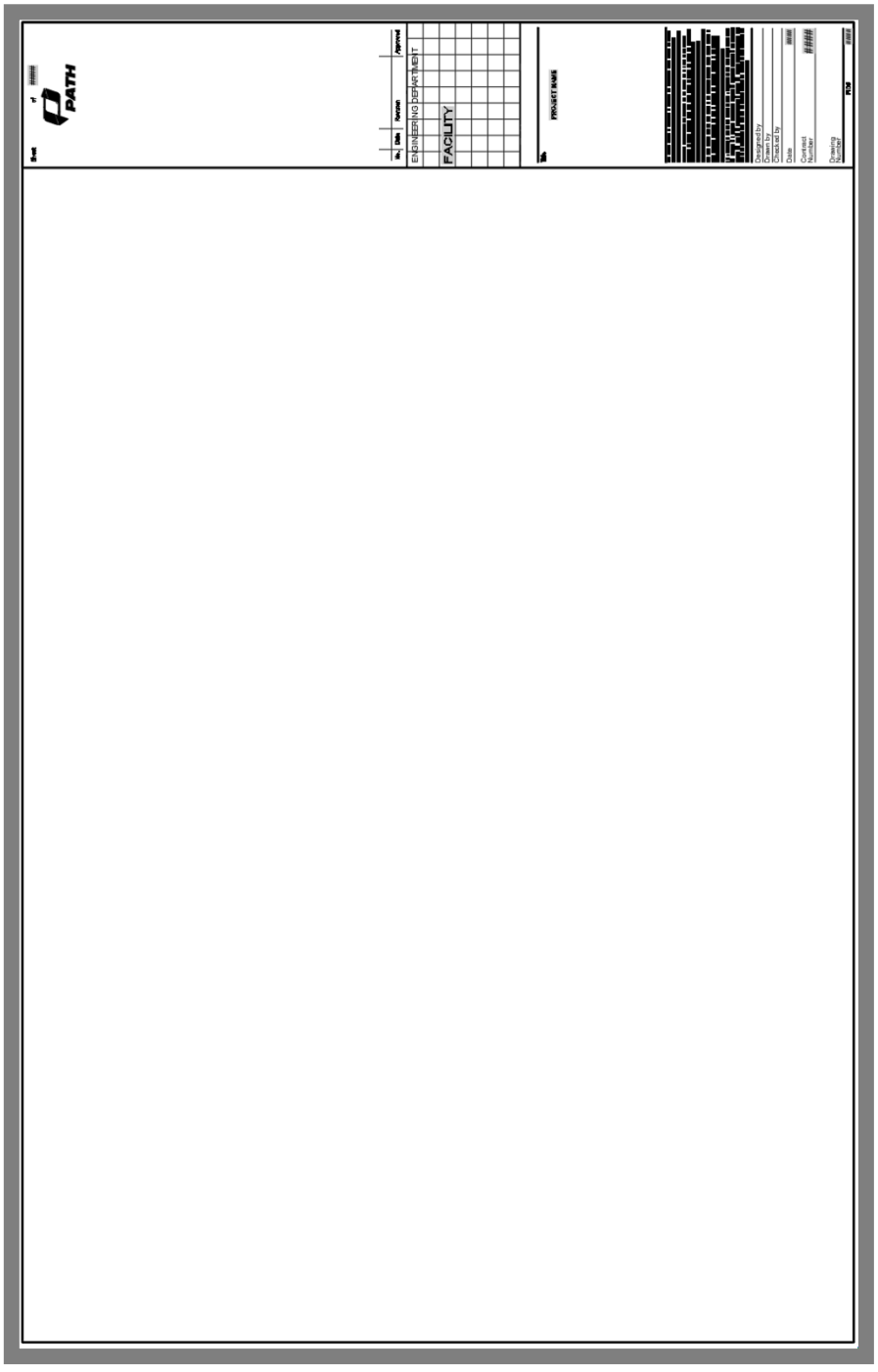
### 1.17.5 CONTRACT BORDER



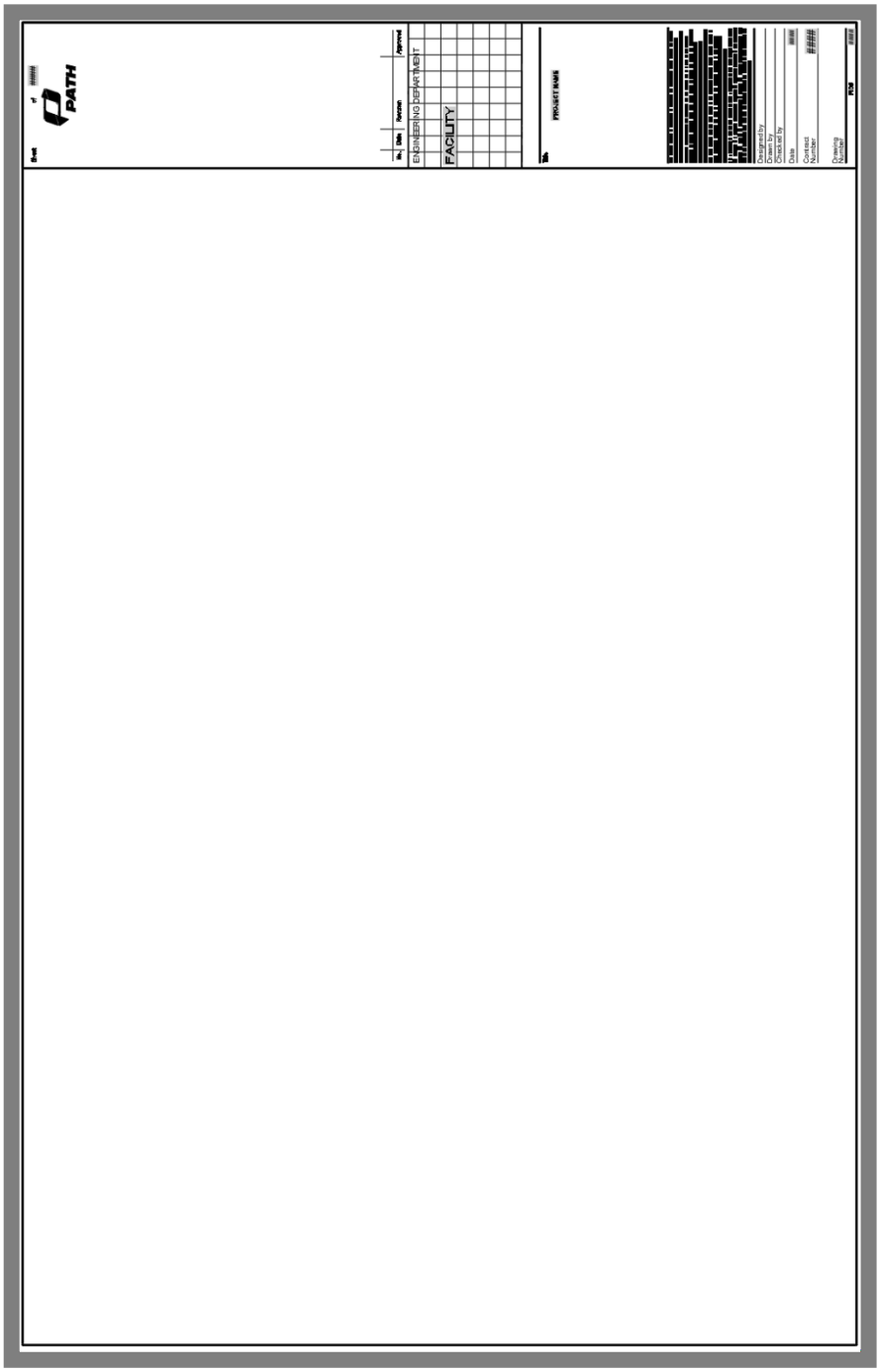
### 1.17.6 CONTRACT BORDER OVERSIZED (OS)



### 1.17.7 CONTRACT BORDER PATH



### 1.17.8 CONTRACT BORDER PATH OVERSIZED (OS)



## 1.18 APPENDIX D – DISTRIBUTION FILES

This section identifies the files supplied for general use within the CAD Standard. The entire CAD Standard can be found internally at K:\Application\EAD\CAD_Standards\2018 or externally downloaded from:
Port Authority NY & NJ Engineering Available Documents

| **K:\Application\Palettes** | |
|---|---|
| | Contains all Tool Palette files (.atc) specific to that discipline. |
| **K:\Application\Plotter** | |
| | Contains all Plotter Configuration files (.pc3) specific to that discipline. |
| **K:\Application\Plotter\Plot_Styles** | |
| PA – MasterCOLOR.ctb | Plot Style for plotting Drawings in Color. |
| PA – MasterFULL.ctb | Plot Style for plotting Full Scale Drawings. |
| PA – MasterHALF.ctb | Plot Style for plotting Half Scale Drawings. |
| PA - MasterQUARTER.ctb | Plot Style for plotting Quarter Scale Drawings. |
| **K:\Application\Plotters\PMP Files** | |
| | Contains all Plotter Model Parameter files (.pmp) specific to that discipline. |
| **K:\Application\EAD\CAD_Standards\2018** | |
| | Contains the "EAD_CAD_Standard" and "Request to Change Standard" documents. |
| All_Disciplines | Contains all cross discipline support files and content. |
| <Discipline> | Contains all discipline specific support files and content. |
| **K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Contract_Borders** | |
| Border - ANSI A - Horizontal.dwg | 8.5x11 landscape border for use in non-contract drawings. |
| Border - ANSI A - Vertical.dwg | 8.5x11 portrait border for use in non-contract drawings. |
| Border - ANSI B - Horizontal.dwg | 11x17 landscape border for use in non-contract drawings. |
| Border - ANSI B - Vertical.dwg | 11x17 portrait border for use in non-contract drawings. |
| Contract_Border - OS.dwg | 34x56 border for contract drawings. |
| Contract_Border_PATH - OS.dwg | 34x56 border for Port Authority Trans Hudson contract drawings. |
| Contract_Border_PATH.dwg | 22x34 border for Port Authority Trans Hudson contract drawings. |
| Contract_Border.dwg | 22x34 border for contract drawings. |
| Drawing_Info - OS.dwg | Drawing information block for use with 34x56 borders. |
| Drawing_Info.dwg | Drawing information block for use with 22x34 borders. |
| Drawing_Info_PATH,dwg | Drawing information block (Port Authority Trans Hudson) for use with 22x34 borders |
| Drawing_Info_PATH - OS,dwg | Drawing information block (Port Authority Trans Hudson) for use with 34x56 borders |
| Title_Sheet - OS.dwg | 34x56 title sheet for contract drawings. |
| Title_Sheet - PATH - OS.dwg | 34x56 title sheet for Port Authority Trans Hudson contract drawings. |
| Title_Sheet - PATH.dwg | 22x34 title sheet for Port Authority Trans Hudson contract drawings. |
| Title_Sheet.dwg | 22x34 title sheet for contract drawings. |

| **K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Contract_Borders\Stamps** | |
|---|---|
| Contract_Border – Stamp_Law-Review.dwg | Law Review submission stamp for use on 22x34 borders. |
| Contract_Border – Stamp_Law-Review - OS.dwg | Law Review submission stamp for use on 34x56 borders. |
| Contract_Border – Stamp_Preliminary.dwg | Preliminary submission stamp for use on 22x34 borders. |

| | |
|---|---|
| Contract_Border – Stamp_Preliminary - OS.dwg | Preliminary submission stamp for use on 34x56 borders. |
| Contract_Border – Stamp_QA-Submission.dwg | Quality Assurance submission stamp for use on 22x34 borders for FTA projects. |
| Contract_Border – Stamp_QA-Submission - OS.dwg | Quality Assurance submission stamp for use on 34x56 borders for FTA projects. |
| Contract_Border – Stamp_Submission.dwg | Percent submission stamp for use on 22x34 borders. |
| Contract_Border – Stamp_Submission - OS.dwg | Percent submission stamp for use on 34x56 borders. |
| CP - WARNING.dwg | Confidential Privileged Warning sign for use on stamp for use on 22x34 borders for CP drawings. |
| CP - WARNING - OS.dwg | Confidential Privileged Warning sign for use on 34x56 borders for CP drawings |
| Drawing_Info - Stamp_Cbar.dwg | Confidential stamp for use on 22x34 borders for C drawings. |
| Drawing_Info – Stamp_Cbar – OS.dwg | Confidential stamp for use on 34x56 borders for C drawings. |
| Drawing_Info - Stamp_CPbar.dwg | Confidential Privileged stamp for use on 22x34 borders for CP drawings. |
| Drawing_Info – Stamp_CPbar – OS.dwg | Confidential Privileged stamp for use on 34x56 borders for CP drawings. |
| Drawing_Info – Stamp_PERA.dwg | Single or Multiple consultant company providing NJ/NY RA or PE signatures on 22x34 drawings. |
| Drawing_Info - Stamp_PERA - OS.dwg | Single or Multiple consultant company providing NJ/NY RA or PE signatures on 34x56 drawings. |
| Drawing_Info - Stamp_PERA_Bi-State.dwg | Multiple consultant company providing NJ & NY RA or PE signatures on 22x34 drawings. |
| Drawing_Info - Stamp_PERA_Bi-State - OS.dwg | Multiple consultant company providing NJ & NY RA or PE signatures on 34x56 drawings. |
| Drawing_Info - Stamp_Revision.dwg | Revision stamp for use on both 22x34 and 34x56 drawings. |
| Drawing_Info - Stamp_Triangle.dwg | Revision triangle marker for placement near revision clouds. |
| **K:\Application\Fonts** | |
| HELV-2F.SXH | Font used for Contract Border and Title Sheet information. |
| HELV-M.SHX | Font used for Contract Border, Title Sheet & Alternate Title information. |
| **K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Layer Key Styles** | |
| PA_LKS-ACA2018 - Architectural | Layer Key Styles for use by the Architectural Discipline within ACA |
| PA_LKS-ACA2018 - Structural | Layer Key Styles for use by the Structural Discipline within ACA |
| **K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Page Setups** | |
| 115Bway.dwg | Drawing file containing pre-configured page setups for plotting drawings to devices located at 115 Broadway. |
| Architectural.dwg | Drawing file containing pre-configured page setups for plotting drawings to devices located within the Architectural Plotter Room at 4 WTC. |
| Civil.dwg | Drawing file containing pre-configured page setups for plotting drawings to devices located within the Civil Plotter Room at 4 WTC. |
| Electrical.dwg | Drawing file containing pre-configured page setups for plotting drawings to devices located within the Electrical Plotter Room at 4 WTC. |
| Environmental.dwg | Drawing file containing pre-configured page setups for plotting drawings to devices located within the Environmental Plotter Room at 4 WTC. |
| Geotechnical.dwg | Drawing file containing pre-configured page setups for plotting drawings to devices located within the Geotechnical Plotter Room at 4 WTC. |
| Mechanical.dwg | Drawing file containing pre-configured page setups for plotting drawings to devices located within the Mechanical Plotter Room at 4 WTC. |
| PA – PDF (High Quality Print).dwt | Drawing file containing pre-configured page setups for high quality full and over-sized PDF creation |

| | |
|---|---|
| Structural.dwg | Drawing file containing pre-configured page setups for plotting drawings to devices located within the Structural Plotter Room at 4 WTC. |
| Traffic.dwg | Drawing file containing pre-configured page setups for plotting drawings to devices located within the Traffic Plotter Room at 4 WTC. |
| K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Palettes | |
| | Generic Tool Palettes for use by all disciplines. |

| | |
|---|---|
| **K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Sample Project** | |
| | Contains a Sample Folder Structure that mimics the Folder Structure used when new projects are created. |
| **K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Support** | |
| PA.shx | Shape file used by certain line types. |
| PA - Design.lin | Line type definition file containing custom line types. |
| **K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Symbols** | |
| BS1-1_2in-1ft.dwg | 1 1/2” = 1’ Bar Scale |
| BS1_2in-1ft.dwg | 1/2” = 1’ Bar Scale |
| BS1_4in-1ft.dwg | 1/4” = 1’ Bar Scale |
| BS1_8in-1ft.dwg | 1/8” = 1’ Bar Scale |
| BS1_16in-1ft.dwg | 1/16” = 1’ Bar Scale |
| BS1_32in-1ft.dwg | 1/32” = 1’ Bar Scale |
| BS1in-1ft.dwg | 1” = 1’ Bar Scale |
| BS1in-1in.dwg | 1” = 1” Bar Scale |
| BS1in-5ft.dwg | 1” = 5’ Bar Scale |
| BS1in-10ft.dwg | 1” = 10’ Bar Scale |
| BS1in-20ft.dwg | 1” = 20’ Bar Scale |
| BS1in-25ft.dwg | 1” = 25’ Bar Scale |
| BS1in-30ft.dwg | 1” = 30’ Bar Scale |
| BS1in-40ft.dwg | 1” = 40’ Bar Scale |
| BS1in-50ft.dwg | 1” = 50’ Bar Scale |
| BS1in-60ft.dwg | 1” = 60’ Bar Scale |
| BS1in-100ft.dwg | 1” = 100’ Bar Scale |
| BS1in-200ft.dwg | 1” = 200’ Bar Scale |
| BS1in-400ft.dwg | 1” = 400’ Bar Scale |
| BS1in-500ft.dwg | 1” = 500’ Bar Scale |
| BS3_4in-1ft.dwg | 3/4” = 1’ Bar Scale |
| BS3_8in-1ft.dwg | 3/8” = 1’ Bar Scale |
| BS3_16in-1ft.dwg | 3/16” = 1’ Bar Scale |
| BS3_32in-1ft.dwg | 3/32” = 1’ Bar Scale |
| BS3in-1ft.dwg | 3” = 1’ Bar Scale |
| BS6in-1ft.dwg | 6” = 1’ Bar Scale |
| N_ARROW1.dwg | North Arrow within Bubble |
| N_ARROW2.dwg | North Arrow |
| K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Template\SSM | |
| PA – SheetSet Master.dst | Sheet set manager template for all the disciplines. |
| PA – SSM Contract Borders - arch-inch.dwt | Drawing Template for Architectural Unit based Plotsheet drawings in Vault |

| | |
|---|---|
| PA – SSM Contract Borders - deci-feet.dwt | Drawing Template for Decimal Unit Plotsheet based drawings in Vault |
| **K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Template** | |
| PA – arch-inch.dwt | Drawing Template for Architectural Unit based drawings. |
| PA – deci-feet.dwt | Drawing Template for Decimal Unit based drawings. |
| K:\Application\EAD\CAD_Standards\2018\<Discipline>\Layers | |
| | Contains all Layer template files (.dwt) specific to that discipline. |
| **K:\Application\EAD\CAD_Standards\2018\<Discipline>\Symbols** | |
| | Contains all the symbol library files (.dwg) used by that discipline. |

## 1.19 APPENDIX E – USING STANDARD FORMS ON EOL (INTERNAL USE ONLY)

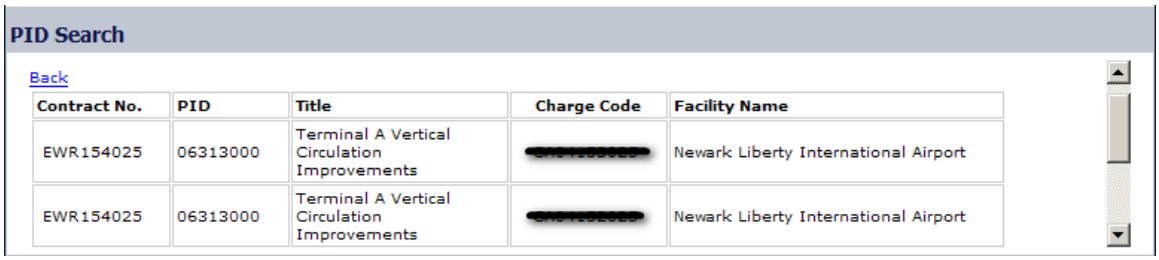
### 1.19.1 PID SEARCH

The PID Search can be used to find additional information pertaining to a project such as the Contract Number, PID, Title, Charge Code(s) and Facility name by searching based on either the PID, Contract Number or Project Title.


To use this form:

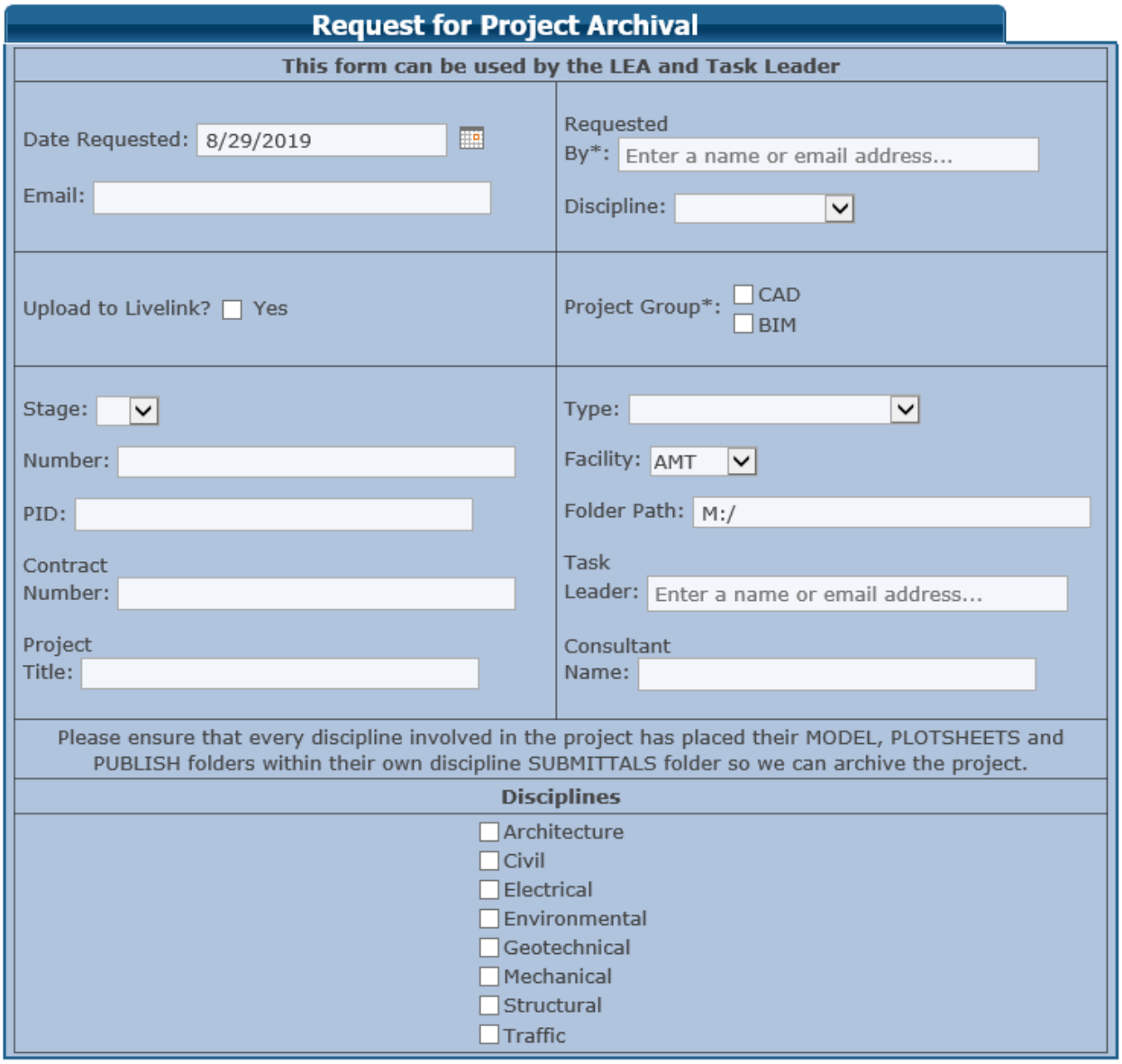
1. Pick the appropriate category that you want to search for, the options are PID, Contract Number or Title.
2. Type in the appropriate search information based on the category you are searching in.
3. Select Submit

Once the query is finished a list of all projects matching your criteria will be displayed with the following information Contract Number, PID, Title, Charge Code and Facility Name.



### 1.19.2 REQUEST PROJECT ARCHIVAL

This form is used to request that a project be archived from the Project "M:" drive to the Archive "N:" drive in order to preserve a contract sets files at a particular milestone. Please ensure that all disciplines involved place the appropriate folders within the appropriate Submittals folder for their discipline prior to requesting the Project Archival.



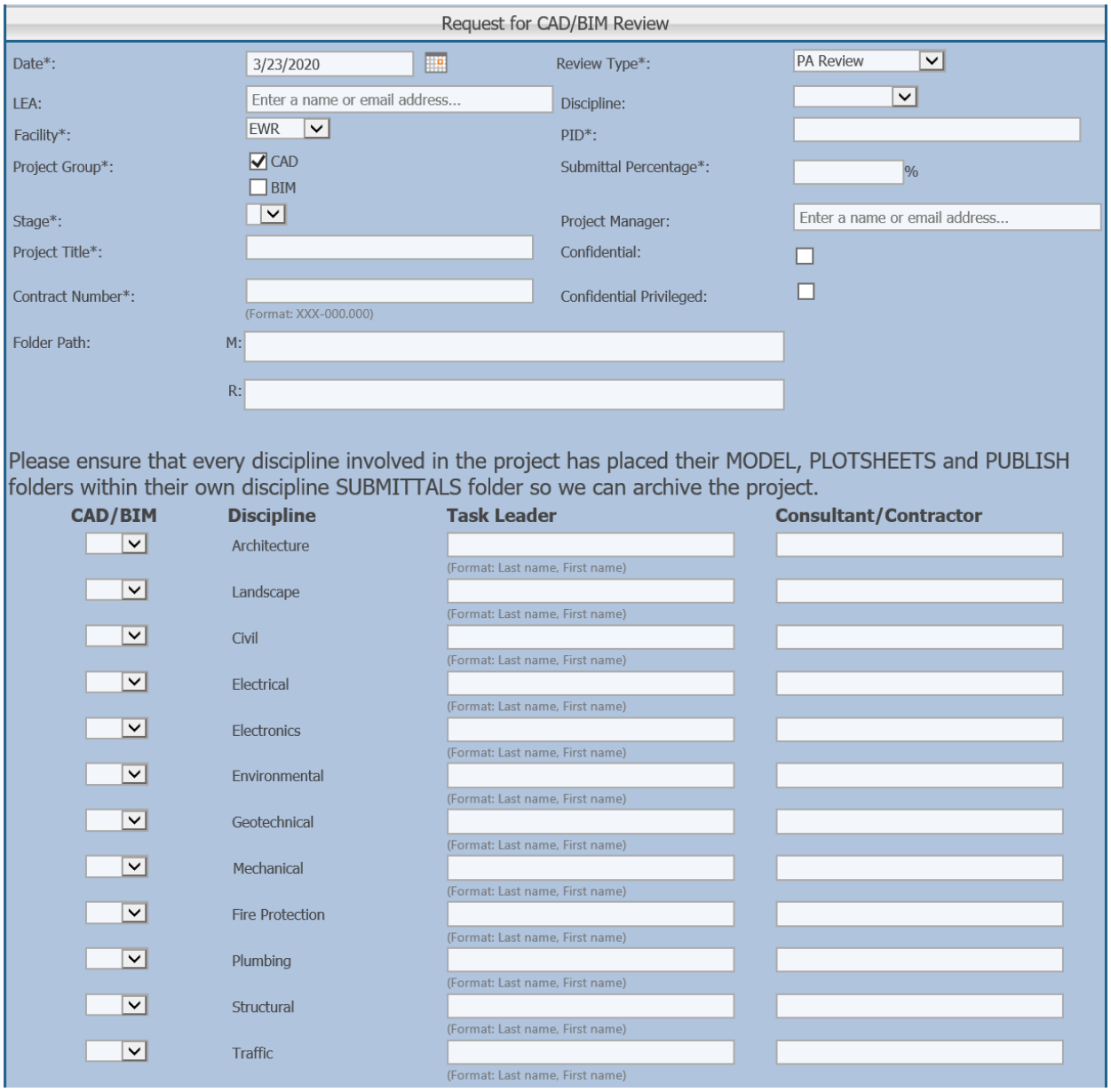
To use this form:

1. **Requested By**: Either the LEA or the Task Leader may request for an Archival.
2. **Email:** It is mandatory that you supply a valid email address to receive a confirmation of your request. This email will also be used to notify you as soon as the request has been processed.
3. **Discipline:** Pick which Discipline you belong to.
4. **Upload to Livelink:** Check this box if you would like files uploaded to a project website on Livelink.
5. **Project Group:** It is mandatory that you select CAD to engage the process to review the submitted CAD files.
6. **Stage:** Enter what stage the project is in, I, II, III or IV.
7. **Type:** Enter the type of submittal this is, PA Review, As-Advertised, 50% Submittal, etc.
8. **Contract Number:** Provide the Contract Number.
9. **Facility:** Enter the facility the project is for.
10. **PID:** Enter the PID of the project
11. **Folder Path:** Provide the path to the folder that needs to be archived.
12. **Disciplines:** Check all the disciplines involved in this project. This will ensure that all the involved disciplines' folders are archived.

### 1.19.3 REQUEST PROJECT CAD DRAWINGS

This Section Currently Under Construction

### 1.19.4 REQUEST FOR MANDATORY CAD REVIEW



Request for CAD/BIM Review

Date*: 3/23/2020 Review Type*: PA Review

LEA: Enter a name or email address... Discipline:

Facility*: EWR PID*:

Project Group*: CAD Submittal Percentage*: %

BIM

Stage*: Project Manager: Enter a name or email address...

Project Title*: Confidential:

Contract Number*: Confidential Privileged:

(Format: XXX-000.000)

Folder Path: M:

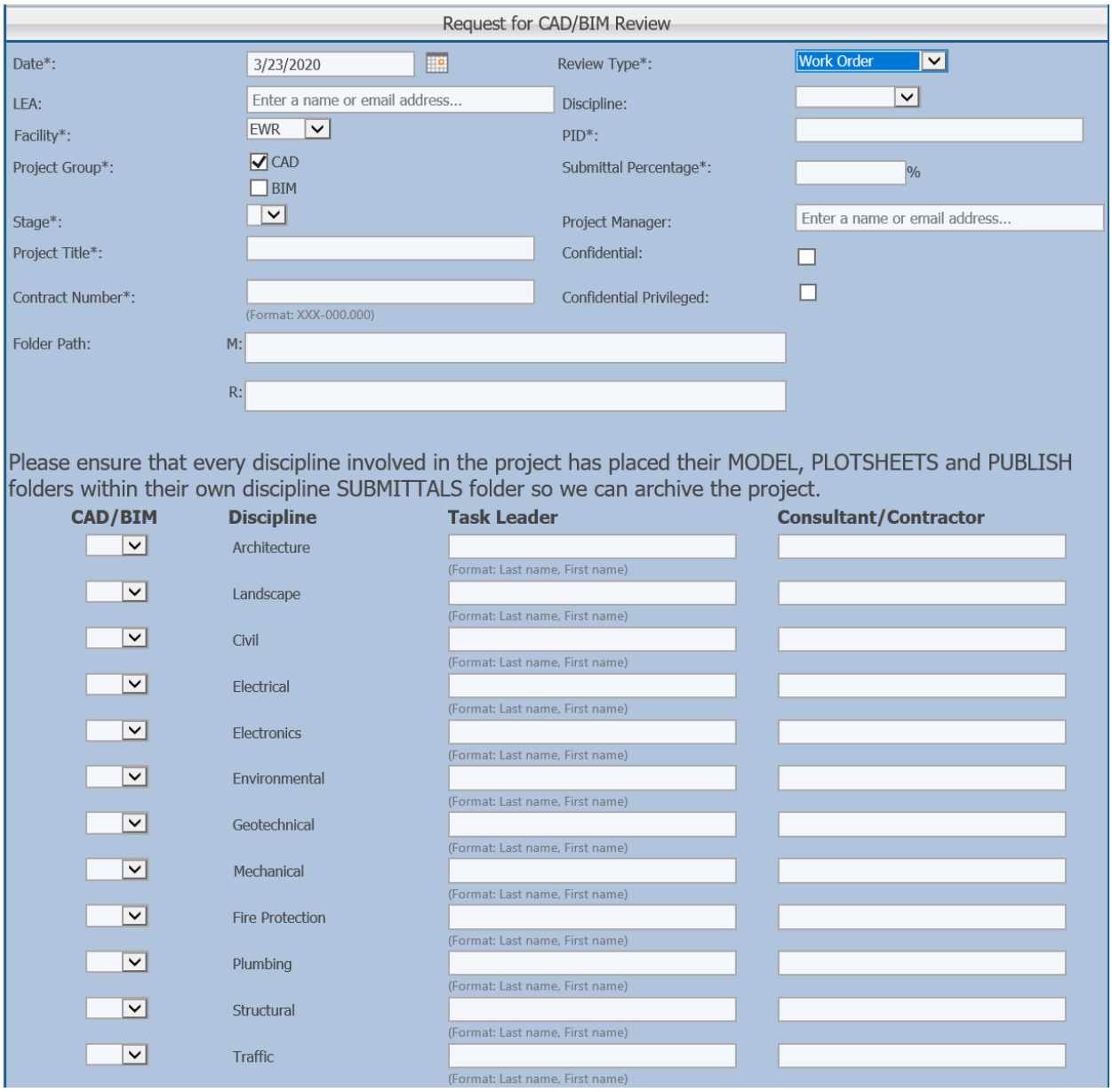
R:

Please ensure that every discipline involved in the project has placed their MODEL, PLOTSHEETS and PUBLISH folders within their own discipline SUBMITTALS folder so we can archive the project.

| CAD/BIM | Discipline | Task Leader | Consultant/Contractor |
|---|---|---|---|
| | Architecture | (Format: Last name, First name) | |
| | Landscape | (Format: Last name, First name) | |
| | Civil | (Format: Last name, First name) | |
| | Electrical | (Format: Last name, First name) | |
| | Electronics | (Format: Last name, First name) | |
| | Environmental | (Format: Last name, First name) | |
| | Geotechnical | (Format: Last name, First name) | |
| | Mechanical | (Format: Last name, First name) | |
| | Fire Protection | (Format: Last name, First name) | |
| | Plumbing | (Format: Last name, First name) | |
| | Structural | (Format: Last name, First name) | |
| | Traffic | (Format: Last name, First name) | |

1. **Type of Review:** Pick the type of Review (Interim or PA Wide Review)
2. **LEA**: Only the LEA may request for a Mandatory CAD Review. It is important to provide the name of the LEA for the results of the CAD Review.
3. **Project Group:** It is mandatory that you select CAD to engage the process to review the submitted CAD files.
4. **Stage:** Please provide the Stage the project is currently at the time the request was sent.
5. **Project Title:** Provide the Title of the Project.
6. **Contract Number:** Provide the Contract Number.
7. **Official:** For official reviews select “Yes”. This needs to be selected for Mandatory CAD Review.
8. **Discipline:** Enter the discipline that the LEA belongs to.
9. **Facility:** Enter the facility the project is for.
10. **Charge Code:** Enter the Charge Code to be used by the CAD Support Group for CAD Standards Review.
11. **PID:** Enter the PID of the project.
12. **PA Wide Review Date:** Provide the PA Wide Review date of the project.
13. **Project Manager:** Provide the name of the Program Manager of the project to be review.
14. **Disciplines/Taskleaders/Consultant name:** Check all the disciplines involved in this project. This will ensure that all the involved disciplines’ drawings are reviewed. Please ensure that all disciplines place their drawings in their appropriate submittal folders. It is important that the names of the Task leaders are provided in order to provide them with the results of the CAD Standards review. If a consultant has prepared the drawings for a particular discipline the consultant company name must also be provided because the requirements of CAD Standards compliance are slightly different for consultants.

### 1.19.5 REQUEST FOR MANDATORY WORK ORDER CAD REVIEW




1. **LEA**: Only the LEA may request for a Work Order CAD Review. It is important to provide the name of the LEA for the results of the CAD Review.
2. **Project Group:** It is mandatory that you select CAD to engage the process to review the submitted CAD files.
3. **Discipline:** Enter the discipline that the LEA belongs to.
4. **Charge Code:** Enter the Charge Code to be used by the CAD Support Group for CAD Standards Review.
5. **Contract Number:** Provide the Contract Number.
6. **PID:** Enter the PID of the project.

7. **Project Title:** Provide the Title of the Project.
8. **Stage:** Enter what stage the project is in, I, II, III or IV.
9. **Facility Name:** Enter the facility the project is for.
10. **Folder Path:** Provide the path to the folder that needs to be reviewed.
11. **Official:** For official reviews select “Yes”. This needs to be selected for Mandatory CAD Review.
12. **Disciplines/Taskleaders/Consultant name:** Check all the disciplines involved in this project. This will ensure that all the involved disciplines’ drawings are reviewed. Please ensure that all disciplines place their drawings in their appropriate submittal folders. It is important that the names of the Task leaders are provided in order to provide them with the results of the CAD Standards review. If a consultant has prepared the drawings for a particular discipline the consultant company name must also be provided because the requirements of CAD Standards compliance are slightly different for consultants.

### 1.19.6 REQUEST PROJECT FOLDER STRUCTURE

**Request Project Folder Structure**

The purpose of this form is to provide the PA Help Desk with enough information to create and maintain a Project Folder on the network to store all electronic documents related to the project.

**ATTENTION: BEFORE SUBMITTING A REQUEST, PLEASE MAKE SURE THAT THERE IS NO EXISTING FOLDER FOR THE PROJECT.**

| | |
|---|---|
| Date Requested * | 8/29/2019 |
| Requested By * | Enter a name or email address... |
| Email | |
| Drive * | ☑ M:<br>☐ R: |
| PID * | |
| Facility Name * | JFK |
| Project Name | |
| Contract Number | |
| Project Manager | Enter a name or email address... |
| LEA | Enter a name or email address... |
| Consultant Name | |
| Confidential and Privilege Project | No |

| Discipline Folder | Note: Only fill out this portion if this is a C&P Project. Names of People that should have access to the Confidential & Privilege folder. |
|---|---|
| Architectural | Enter names or email addresses... |
| Civil | Enter names or email addresses... |
| Electrical | Enter names or email addresses... |
| Environmental | Enter names or email addresses... |
| Geotechnical | Enter names or email addresses... |
| Mechanical | Enter names or email addresses... |
| Structural | Enter names or email addresses... |
| Traffic | Enter names or email addresses... |

1. **Requested By:** Person requesting the creation of the folder structure
2. **Email:** It is mandatory that you provide a valid email address to receive a confirmation of your request. This email will also be used to notify you as soon as the request has been processed
3. **Drive:** Select “M” for creation of Folder Structure on the M drive for CAD Projects.
4. **PID:** Enter the PID of the project
5. **Facility Name:** Enter the facility the project is for
6. **Project Name:** Complete title of the project
7. **Contract Number:** Enter the Contract Number
8. **Charge Code:** Enter the Charge Code to be used by the CAD Support Group for CAD Standards Review.
9. **Project Manager:** Enter the name of the Project Manager.
10. **LEA:** Name of the LEA
11. **Confidential Privileged Project:** Specify if it is a Confidential Privileged project or not
12. **Names of People that should have access to the CP folder:** If this is a Confidential Privileged project, the person requesting for the folder structure must specify the names of the people who should be granted access to the CP folder.

# 1.20 APPENDIX F – ARCHITECTURAL DISCIPLINE

## 1.20.1 CONTENT PREFERENCES

## 1.20.2 LAYER STRATAGEM

### 1.20.2.1 ARCHITECTURAL WORK

| DISCIPLINE | MAJOR | MINOR | DESC | COLOR | LINETYPE | PLOTS | DESCRIPTION |
|---|---|---|---|---|---|---|---|
| A | ANNO | BUS_ | | 5 | Continuous | Yes | BUSES |
| A | ANNO | BREK | | 5 | Continuous | Yes | BREAK LINE |
| A | ANNO | CARS | | 46 | Continuous | Yes | CARS |
| A | ANNO | CHNG | | 51 | DIVIDE4 | Yes | IDENTIFICATION OF UPDATED WORK |
| A | ANNO | CLIN | | 46 | CENTER5 | Yes | GENERAL PLAN/ELEVATION/SECTION CENTERLINE |
| A | ANNO | COLS | BUBL | 4 | Continuous | Yes | COLUMN CENTERLINE IDENTIFICATION |
| A | ANNO | COLS | CLIN | 46 | CENTER5 | Yes | COLUMN CENTERLINE EXTENSION USED WITH NOTES |
| A | ANNO | DETL | BUBL | 255 | DASHED5 | Yes | DETAIL BUBBLE OUTLINE (Indicate blow-up or detail) |
| A | ANNO | DIMS | | 1 | Continuous | Yes | DIMENSIONS |
| A | ANNO | DIMS | GUID | 5 | DOT8 | Yes | DIMENSION GUIDE LINE |
| A | ANNO | ELEV | FFLR | 1 | Continuous | Yes | SPOT ELEVATION SYMBOL (or block insertion layer) |
| A | ANNO | ELEV | GUID | 1 | DOT8 | Yes | VERTICAL ELEVATION SYMBOL LINE |
| A | ANNO | ELEV | VERT | 1 | Continuous | Yes | VERTICAL ELEVATION SYMBOL ON SECTION/ELEVATION |
| A | ANNO | IDEN | DETL | 3 | Continuous | Yes | DETAIL SYMBOL AND EXTENSION LINE TO BUBBLE |
| A | ANNO | IDEN | DOOR | 1 | Continuous | Yes | DOOR NUMBER SYMBOL; HARDWARE GROUP ETC. |
| A | ANNO | IDEN | ELEV | 3 | Continuous | Yes | ELEVATION SYMBOL (or block insertion layer) |
| A | ANNO | IDEN | FURN | 1 | Continuous | Yes | FURNITURE IDENTIFICATION SYMBOL |
| A | ANNO | IDEN | GLAZ | 1 | Continuous | Yes | WINDOW NUMBER SYMBOL BLOCK INSERTION LAYER |
| A | ANNO | IDEN | ROOM | 1 | Continuous | Yes | ROOM IDENTIFICATION (SHOWN AS A BLOCK) |
| A | ANNO | IDEN | SCUT | 3 | Continuous | Yes | SECTION CUT SYMBOL (or block insertion layer) |
| A | ANNO | IDEN | WALL | 1 | Continuous | Yes | PARTITION TYPE IDENTIFICATION SYMBOL |
| A | ANNO | LGND | | 212 | Continuous | Yes | LEGENDS AND SYMBOLS ASSOCIATED WITH LEGENDS |
| A | ANNO | LGND | DISC | 1 | Continuous | Yes | LEGEND DISCLAIMER |
| A | ANNO | MLIN | | 4 | DIVIDE2 | Yes | MATCH LINE |
| A | ANNO | NOTE | | 212 | Continuous | Yes | BLOCKS OF MISCELLANEOUS NOTES; BOILER PLATE NOTES AND FRAMES |
| A | ANNO | PEOP | | 46 | Continuous | Yes | PEOPLE, PEDESTRIANS etc. |
| A | ANNO | REDL | | 10 | Continuous | Yes | REDLINE |
| A | ANNO | SCUT | GUID | 212 | DOT8 | Yes | SECTION CUT LINE CONNECTING SECTION HEAD AND TAIL |
| A | ANNO | SYMB | AROW | 5 | Continuous | Yes | DIRECTIONAL ARROW |
| A | ANNO | SYMB | MISC | 3 | Continuous | Yes | MISCELLANEOUS SYMBOLS |
| A | ANNO | SYMB | NPLT | 200 | Continuous | No | MISCELLANEOUS SYMBOLS- NOT PLOTTED |
| A | ANNO | SYMB | NRTH | 5 | Continuous | Yes | NORTH ARROW |
| A | ANNO | SYMB | SCLE | 1 | Continuous | Yes | SCALE BAR |
| A | ANNO | TEXT | | 212 | Continuous | Yes | TEXT (Generated by Leader; Quick Leader or Multi-Leader) |
| A | ANNO | TEXT | CLL_ | 1 | Continuous | Yes | CONTRACT LIMIT LINE TEXT |
| A | ANNO | TEXT | DATE | 5 | Continuous | Yes | PRESENTATION DATE |
| A | ANNO | TEXT | LEDR | 5 | Continuous | Yes | TEXT LEADER LINE (if drawn separately) |
| A | ANNO | TEXT | MISC | 5 | Continuous | Yes | SECONDARY TEXT |
| A | ANNO | TEXT | MLIN | 5 | Continuous | Yes | MATCH LINE TEXT |

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|---|---|---|---|---|---|---|---|
| A | ANNO | TEXT | PROP | 1 | Continuous | Yes | PROPERTY LINE TEXT |
| A | ANNO | TEXT | ROWL | 212 | Continuous | Yes | RIGHT OF WAY TEXT |
| A | ANNO | TEXT | STRE | 46 | Continuous | Yes | STREET NAME TEXT |
| A | ANNO | TRAN | | 46 | Continuous | Yes | TRAINS, SUBWAYS & MONORAILS |
| A | ANNO | TRUK | | 46 | Continuous | Yes | TRUCKS |
| A | ANNO | TTLB | | 51 | Continuous | Yes | DRAWING TITLE WITH SCALE BAR |
| A | ANNO | TTLB | PRES | 5 | Continuous | Yes | DRAWING TITLE ON PRESENTATION BORDER |
| A | ANNO | VPRT | | 200 | Continuous | Yes | VIEW PORT |
| | | | | | | | |
| A | REFN | AREA | OTLN | 255 | DASHED4 | Yes | AREA CALCULATION BOUNDARY LINES |
| A | REFN | AREA | TEXT | 6 | Continuous | Yes | AREA CALCULATION, ROOM NUMBER, TENANT IDENTIFICATION NUMBERS (Shown As Text) |
| A | CLNG | | | 1 | Continuous | Yes | CEILING GRID - TILE PATTERN |
| A | CLNG | BEAM | | 5 | Continuous | Yes | STEEL BEAM IN RCP PLANS |
| A | CLNG | LGHT | | 1 | Continuous | Yes | LIGHT FIXTURES or block insertion layer |
| A | CLNG | OPNG | | 1 | Continuous | Yes | CEILING/ROOF PENETRATIONS |
| A | CLNG | OVHG | | 5 | Continuous | Yes | OVERHANG OUT-LINE SHOWN ON REFLECTED CEILING PLAN (Only) |
| A | CLNG | RDFF | | 1 | Continuous | Yes | RETURN AIR DIFFUSERS |
| A | CLNG | SDFF | | 1 | Continuous | Yes | SUPPLY DIFFUSERS |
| A | CLNG | SHFT | OVHD | 46 | DASHED5 | Yes | SHAFT PENETRATIONS OVERHEAD |
| A | CLNG | SIGN | | 1 | Continuous | Yes | GENERAL OVERHEAD SIGNAGE |
| A | CLNG | SKLT | | 5 | Continuous | Yes | SKYLIGHT OUT-LINE SHOWN ON REFLECTED CEILING PLAN (Only) |
| A | CLNG | SOFF | | 212 | Continuous | Yes | CEILING SOFFIT EDGES |
| A | CLNG | SPKR | | 1 | Continuous | Yes | SPEAKER |
| A | CLNG | SPRN | | 1 | Continuous | Yes | SPRINKLER |
| A | COLS | | | 51 | Continuous | Yes | COLUMNS or block insertion layer |
| A | COLS | STL_ | | 3 | Continuous | Yes | STRUCTURAL STEEL FOR COLUMNS or block insertion layer |
| A | COLS | STL_ | HIDN | 5 | HIDDEN4 | Yes | STRUCTURAL STEEL ELEMENTS HIDDEN |
| A | COLS | STL_ | STRS | 46 | Continuous | Yes | ARCHITECTURAL STEEL COLUMNS IN STAIR |
| A | COLS | BASE | PLAT | 5 | Continuous | Yes | COLUMN BASE PLATE |
| A | COLS | BEAM | | 46 | Continuous | Yes | STRUCTURAL BEAM ELEMENTS or block insertion layer |
| A | COLS | BEAM | ABVE | 46 | DASHED5 | Yes | STRUCTURAL BEAM ELEMENTS ABOVE |
| A | COLS | CLIN | | 46 | CENTER5 | Yes | STRUCTURAL COLUMN CENTERLINE |
| A | COLS | CONC | | 51 | Continuous | Yes | CONCRETE COLUMNS |
| A | COLS | DETL | | 1 | Continuous | Yes | COLUMN DETAIL |
| A | COLS | ENCL | | 212 | Continuous | Yes | COLUMN ENCLOSURE |
| A | COLS | HIDN | | 5 | HIDDEN4 | Yes | HIDDEN COLUMN ELEMENTS |
| A | COLS | MISC | | 5 | Continuous | Yes | MISCELLANEOUS COLUMNS ELEMENTS |
| A | COLS | PCST | | 3 | Continuous | Yes | PRECAST CONCRETE COLUMNS |
| A | COLS | PILE | | 5 | Continuous | Yes | COLUMN PILES |
| A | DOOR | | | 212 | Continuous | Yes | FULL HEIGHT DOOR or block insertion layer |
| A | DOOR | HEAD | | 212 | Continuous | Yes | DOOR HEADERS (APPEAR ON REFLECTED CEILING PLAN (Only)S) |
| A | DOOR | JAMB | | 212 | Continuous | Yes | DOOR JAMB |
| A | DOOR | PRHT | | 1 | Continuous | Yes | PARTIAL HEIGHT DOOR; SWING AND LEAF |
| A | DOOR | SWNG | | 5 | DASHED4 | Yes | DOOR SWING (ONLY WHEN DRAWN AS LINEWORK) |
| A | ELEV | STL_ | | 212 | Continuous | Yes | STEEL COLUMNS ELEVATION |
| A | ELEV | STL_ | DETL | 5 | Continuous | Yes | STEEL FLANGE/WEB IN ELEVATION |
| A | ELEV | BALC | | 1 | Continuous | Yes | ELEVATION OF BALCONY ELEMENTS |
| A | ELEV | BLDG | BYND | 145,145,145 | Continuous | Yes | BUILDING ELEVATIONS IN THE DISTANCE |
| A | ELEV | BOLL | | 46 | Continuous | Yes | SECURITY BOLLARD ELEVATION |
| A | ELEV | BYND | | 1 | Continuous | Yes | MATERIALS BEYOND |
| A | ELEV | CNPY | | 1 | Continuous | Yes | CANOPY ELEVATIONS |
| A | ELEV | COLS | | 5 | Continuous | Yes | ELEVATION OF COLUMN ELEMENTS |
| A | ELEV | COLS | STL_ | 1 | Continuous | Yes | ARCHITECTURAL STEEL COLUMN ELEVATION |
| A | ELEV | COLS | BYND | 46 | Continuous | Yes | ELEVATION OF COLUMNS IN THE DISTANCE |
| A | ELEV | COLS | CONC | 212 | Continuous | Yes | ELEVATION OF CONCRETE COLUMNS |
| A | ELEV | COLS | ENCL | 212 | Continuous | Yes | COLUMN ENCLOSURE ELEVATION |

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|---|---|---|---|---|---|---|---|
| A | ELEV | COLS | HIDN | 5 | DASHED4 | Yes | ELEVATION OF HIDDEN COLUMN ELEMENTS |
| A | ELEV | CURB | | 46 | Continuous | Yes | CURB ELEVATION |
| A | ELEV | DECK | | 1 | Continuous | Yes | METAL DECK IN ELEVATION |
| A | ELEV | DOOR | | 5 | Continuous | Yes | DOOR ELEVATION |
| A | ELEV | DOOR | BYND | 46 | Continuous | Yes | DOOR ELEVATION IN THE DISTANCE |
| A | ELEV | EQPM | | 212 | Continuous | Yes | ELEVATIONS OF EQUIPMENT |
| A | ELEV | ESCL | | 46 | Continuous | Yes | ESCALATOR ELEVATION |
| A | ELEV | ESCL | BYND | 145,145,145 | Continuous | Yes | ESCALATOR ELEVATION IN THE DISTANCE |
| A | ELEV | ESCL | EQPM | 46 | DASHED5 | Yes | ESCALATOR AND EQUIPMENT ELEVATIONS |
| A | ELEV | ESCL | HIDN | 46 | DOT5 | Yes | ESCALATOR ELEVATION HIDDEN |
| A | ELEV | ESCL | MACH | 46 | DASHED5 | Yes | ESCALATOR MACHINERY ELEVATIONS (NON-EQUIPMENT) |
| A | ELEV | EVTR | | 5 | Continuous | Yes | ELEVATOR ELEVATION |
| A | ELEV | EVTR | BYND | 90,90,90 | Continuous | Yes | ELEVATOR ELEVATION IN THE DISTANCE |
| A | ELEV | EVTR | HIDN | 46 | DOT5 | Yes | ELEVATOR ELEVATION HIDDEN |
| A | ELEV | FASA | | 1 | Continuous | Yes | FASCIA ELEVATION |
| A | ELEV | FENC | | 1 | Continuous | Yes | ARCHITECTURAL FENCE ELEVATION |
| A | ELEV | FGPN | | 5 | Continuous | Yes | FIBERGLASS WALL PANELS/JOINTS IN ELEVATION |
| A | ELEV | FURN | | 5 | Continuous | Yes | ELEVATION OF FURNITURE |
| A | ELEV | FURN | PLNT | 5 | Continuous | Yes | SECURITY PLANTER ELEVATION |
| A | ELEV | GLAZ | | 1 | Continuous | Yes | WINDOW AND/OR GLASS ELEVATION |
| A | ELEV | GLAZ | MULL | 46 | Continuous | Yes | WINDOW MULLION ELEVATION |
| A | ELEV | GRAL | | 5 | Continuous | Yes | GUARDRAIL ELEVATION |
| A | ELEV | GRAL | BYND | 46 | Continuous | Yes | GUARDRAIL ELEVATION IN THE DISTANCE |
| A | ELEV | HRAL | | 5 | Continuous | Yes | HANDRAIL ELEVATION |
| A | ELEV | HRAL | BYND | 46 | Continuous | Yes | HANDRAIL ELEVATION IN THE DISTANCE |
| A | ELEV | LGHT | CLNG | 5 | Continuous | Yes | ELEVATION CEILING MOUNTED LIGHT FIXTURE |
| A | ELEV | LGHT | SCON | 5 | Continuous | Yes | ELEVATION WALL MOUNTED LIGHT FIXTURE |
| A | ELEV | LUVR | | 5 | Continuous | Yes | LOUVERS IN ELEVATION |
| A | ELEV | MECH | DUCT | 5 | Continuous | Yes | ELEVATION OF MECHANICAL DUCT |
| A | ELEV | MECH | MISC | 5 | Continuous | Yes | ELEVATION OF MISCELLANEOUS MECHANICAL ELEMENTS |
| A | ELEV | MECH | REGI | 1 | Continuous | Yes | ELEVATION OF MECHANICAL REGISTERS |
| A | ELEV | RAMP | BYND | 5 | Continuous | Yes | RAMP ELEVATION IN THE DISTANCE |
| A | ELEV | RAMP | HIDN | 46 | DASHED4 | Yes | RAMP ELEVATION HIDDEN |
| A | ELEV | ROOF | | 212 | Continuous | Yes | ROOF ELEVATION |
| A | ELEV | ROOF | BYND | 145,145,145 | Continuous | Yes | ELEMENTS OF ROOF ELEVATIONS IN THE DISTANCE |
| A | ELEV | ROOF | GUTR | 90,90,90 | Continuous | Yes | GUTTER AND LEADER - BEYOND |
| A | ELEV | ROOF | HIDN | 46 | HIDDEN4 | Yes | HIDDEN ROOF ELEMENTS ELEVATION |
| A | ELEV | SECU | | 46 | Continuous | Yes | SECURITY ELEMENTS ELEVATION |
| A | ELEV | STRS | | 46 | Continuous | Yes | STAIR ELEVATION |
| A | ELEV | STRS | GRAL | 46 | Continuous | Yes | STAIR GUARDRAIL ELEVATION |
| A | ELEV | STRS | HIDN | 145,145,145 | DASHED4 | Yes | STAIR ELEVATION HIDDEN |
| A | ELEV | STRS | HRAL | 46 | Continuous | Yes | STAIR HANDRAIL ELEVATION |
| A | ELEV | SWAL | | 1 | Continuous | Yes | SLURRY WALL ELEVATION |
| A | ELEV | SWAL | MISC | 46 | Continuous | Yes | SLURRY WALL ELEVATION MISCELLANEOUS |
| A | ELEV | SWAL | TBAK | 46 | Continuous | Yes | SLURRY WALL TIEBACK ELEVATION |
| A | ELEV | VENT | | 212 | Continuous | Yes | VENT ELEVATION |
| A | ELEV | WALL | | 3 | Continuous | Yes | WALL OUTLINE/PERIMETER |
| A | ELEV | WALL | BHND | 5 | Continuous | Yes | WALL ELEMENTS ELEVATION BEHIND |
| A | ELEV | WALL | BYND | 46 | Continuous | Yes | WALL ELEMENTS ELEVATION IN THE DISTANCE |
| A | ELEV | WALL | HIDN | 46 | HIDDEN4 | Yes | ELEMENTS BEHIND WALL PLANE |
| A | ELEV | WALL | MISC | 1 | Continuous | Yes | WALL ELEVATION |
| A | EQPM | | | 212 | Continuous | Yes | EQUIPMENT BLOCK INSERTION LAYER |
| A | EQPM | CMPK | | 5 | Continuous | Yes | TRASH COMPACTOR |
| A | EQPM | CMPK | BLOW | 46 | DOT2 | Yes | TRASH COMPACTOR BELOW |
| A | EQPM | CNVY | | 5 | Continuous | Yes | CONVEYOR BELT |
| A | EQPM | COGN | | 51 | Continuous | Yes | COGENERATION PLANT |
| A | EQPM | FHCB | | 1 | Continuous | Yes | FIRE HOSE CABINET |
| A | EQPM | FIXT | | 5 | Continuous | Yes | LAVATORIES, TOILETS, URINALS |

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|---|---|---|---|---|---|---|---|
| A | EQPM | LIFT | | 46 | Continuous | Yes | CAR LIFT MACHINES |
| A | EQPM | MECH | DUCT | 1 | Continuous | Yes | MECHANICAL DUCT EQUIPMENT |
| A | EQPM | MECH | HVAC | 212 | Continuous | Yes | AIR CONDITIONER/ HEATING UNIT |
| A | EQPM | MISC | | 5 | Continuous | Yes | MISCELLANEOUS EQUIPMENT |
| A | EQPM | NICN | | 5 | DASHED4 | Yes | EQUIPMENT NOT IN CONTRACT |
| A | EQPM | SSTA | | 212 | Continuous | Yes | SUBSTATION EQUIPMENT |
| A | EQPM | VENT | | 212 | Continuous | Yes | MECHANICAL VENT |
| A | ESCL | | | 1 | Continuous | Yes | ESCALATOR BLOCK INSERTION LAYER |
| A | ESCL | ABVE | | 46 | DASHED5 | Yes | ESCALATOR ABOVE (or block insertion layer) |
| A | ESCL | BLOW | | 46 | DOT4 | Yes | ESCALATOR BELOW (or block insertion layer) |
| A | ESCL | ENCL | | 1 | Continuous | Yes | ESCALATOR BODY OUTLINE |
| A | ESCL | HRAL | | 5 | Continuous | Yes | ESCALATOR HANDRAIL |
| A | ESCL | HRAL | PANL | 46 | Continuous | Yes | HANDRAIL INFILL PANEL – GLASS, METAL, ETC. |
| A | ESCL | MACH | HIDN | 46 | DASHED5 | Yes | ESCALATOR MACHINERY HIDDEN |
| A | ESCL | STRS | | 1 | Continuous | Yes | ESCALATOR TREADS |
| A | ESCL | WPNT | NPLT | 255 | Continuous | No | ESCALATOR WORKING POINTS |
| A | EVTR | | | 212 | Continuous | Yes | ELEVATOR BLOCK INSERTION LAYER |
| A | EVTR | CAB_ | | 46 | Continuous | Yes | ELEVATOR CAB |
| A | EVTR | STL_ | | 3 | Continuous | Yes | ELEVATOR STRUCTURAL STEEL |
| A | EVTR | STL_ | PLAT | 1 | Continuous | Yes | ELEVATOR STEEL PLATE |
| A | EVTR | STL_ | POST | 1 | Continuous | Yes | ELEVATOR STEEL POSTS |
| A | EVTR | STL_ | RODS | 1 | Continuous | Yes | ELEVATOR STEEL RODS |
| A | EVTR | BOLS | CHNL | 1 | Continuous | Yes | ELEVATOR BOLSTER CHANNELS |
| A | EVTR | CALL | KIOS | 5 | Continuous | Yes | ELEVATOR CALL KIOSK |
| A | EVTR | CNWT | | 5 | Continuous | Yes | ELEVATOR COUNTER WEIGHTS |
| A | EVTR | CROS | | 51 | Continuous | Yes | ELEVATOR CAB CROSSHEAD |
| A | EVTR | DOOR | | 1 | Continuous | Yes | ELEVATOR DOOR |
| A | EVTR | DOOR | MISC | 5 | Continuous | Yes | MISCELLANEOUS DOOR ELEMENTS |
| A | EVTR | ENCL | | 212 | Continuous | Yes | ELEVATOR ENCLOSURE |
| A | EVTR | EQPM | | 1 | Continuous | Yes | ELEVATOR EQUIPMENT |
| A | EVTR | GLAZ | | 46 | Continuous | Yes | ELEVATOR GLASS |
| A | EVTR | HIDN | | 46 | HIDDEN4 | Yes | HIDDEN ELEVATOR ELEMENTS |
| A | EVTR | HRAL | | 5 | Continuous | Yes | ELEVATOR HANDRAIL |
| A | EVTR | HWAY | EQPM | 8 | Continuous | Yes | ELEVATOR HOIST WAY EQUIPMENT |
| A | EVTR | HYDR | CYLR | 51 | Continuous | Yes | ELEVATOR HYDRAULIC CYLINDER |
| A | EVTR | LUVR | | 46 | Continuous | Yes | ELEVATOR VENT LOUVERS |
| A | EVTR | MISC | | 1 | Continuous | Yes | MISCELLANEOUS ELEVATOR RELATED ELEMENTS |
| A | EVTR | PANL | | 255 | Continuous | Yes | ELEVATOR OPERATING PANEL |
| A | EVTR | PLFM | | 1 | Continuous | Yes | ELEVATOR PLATFORM |
| A | EVTR | SECU | CMRA | 212 | Continuous | Yes | ELEVATOR SECURITY CAMERA |
| A | EVTR | SHFT | | 46 | Continuous | Yes | ELEVATOR SHAFT |
| A | EVTR | SHRD | | 5 | Continuous | Yes | ELEVATOR SHROUD |
| A | EVTR | SILL | | 212 | Continuous | Yes | ELEVATOR SILL/THRESHOLD |
| A | EVTR | SPKR | | 1 | Continuous | Yes | ELEVATOR HANDSFREE SPEAKER PHONE |
| A | EVTR | STIL | | 5 | Continuous | Yes | ELEVATOR STILES |
| A | FLOR | | | 3 | Continuous | Yes | EDGE OF SLAB: AT FLOOR OPENING, OUTLINE OF FLOOR |
| A | FLOR | ABVE | | 1 | DASHED5 | Yes | FLOOR OUTLINE ABOVE |
| A | FLOR | BEAM | | 212 | Continuous | Yes | FLOOR BEAM |
| A | FLOR | BEAM | BLOW | 1 | Continuous | Yes | FLOOR BEAM BELOW |
| A | FLOR | BLOW | | 5 | DASHEDX2 | Yes | FLOOR OUTLINE BELOW |
| A | FLOR | CASE | | 1 | Continuous | Yes | CASEWORK (MANUFACTURED CABINETS) |
| A | FLOR | DOCK | | 5 | Continuous | Yes | LOADING DOCK |
| A | FLOR | DOCK | BLOW | 1 | DOT2 | Yes | LOADING DOCK BELOW |
| A | FLOR | FENC | ARCH | 1 | Continuous | Yes | INTERIOR DECORATIVE FENCE |
| A | FLOR | GRAL | | 5 | Continuous | Yes | GUARDRAILS NOT ATTACHED TO STAIRS |
| A | FLOR | HRAL | | 1 | Continuous | Yes | HANDRAILS NOT ATTACHED TO STAIRS |
| A | FLOR | HRAL | BLOW | 5 | Continuous | Yes | HANDRAILS BELOW |
| A | FLOR | OPNG | | 1 | Continuous | Yes | X REPRESENTING FLOOR OPENING (Excluding Shafts) |
| A | FLOR | OPNG | ABVE | 1 | HIDDEN5 | Yes | FLOOR OPENING ABOVE |
| A | FLOR | OPNG | BLOW | 1 | Continuous | Yes | FLOOR OPEN TO BELOW |
| A | FLOR | OVHD | | 5 | HIDDEN4 | Yes | OVERHEAD ITEMS (SHELVES, ETC.) |
| A | FLOR | OVHG | | 5 | DASHED4 | Yes | OVERHANG OUT-LINE SHOWN ON FLOOR PLAN |
| A | FLOR | PLFM | | 1 | Continuous | Yes | PLATFORM |
| A | FLOR | PLFM | EDGE | 1 | Continuous | Yes | PLATFORM EDGE |
| A | FLOR | PLFM | EXTN | 3 | Continuous | Yes | EXTENSION OF PLATFORM FLOOR |
| A | FLOR | RAIS | | 212 | Continuous | Yes | RAISED FLOORS |

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|---|---|---|---|---|---|---|---|
| A | FLOR | RAMP | | 5 | Continuous | Yes | RAMP |
| A | FLOR | RAMP | ABVE | 5 | HIDDEN-3_TO_3 | Yes | RAMP ABOVE |
| A | FLOR | SCOR | MAJR | 3 | Continuous | Yes | CONTROL AND/OR EXPANSION JOINTS |
| A | FLOR | SCOR | MINR | 5 | Continuous | Yes | TOOLED JOINTS |
| A | FLOR | SECU | | 1 | Continuous | Yes | SECURITY |
| A | FLOR | SLAB | | 3 | Continuous | Yes | FLOOR SLAB EDGE |
| A | FLOR | SLAB | BLOW | 1 | Continuous | Yes | FLOOR SLAB EDGE BELOW |
| A | FLOR | SLAB | BYND | 5 | Continuous | Yes | FLOOR SLAB EDGE BEYOND (VIEWED FROM OPENING ABOVE) |
| A | FLOR | SPCL | | 5 | Continuous | Yes | ARCH. SPECIALTIES (TOILET ROOM ACCESS. DISPLAY CASES) |
| A | FLOR | STRS | | 1 | Continuous | Yes | STAIRS or block insertion layer |
| A | FLOR | STRS | ABVE | 1 | DASHED2 | Yes | STAIRS ABOVE |
| A | FLOR | STRS | BEAM | 46 | Continuous | Yes | STAIRS BEAM |
| A | FLOR | STRS | BLOW | 46 | DOT2 | Yes | STAIRS BELOW |
| A | FLOR | STRS | GRAL | 46 | Continuous | Yes | STAIRS GUARDRAIL |
| A | FLOR | STRS | HIDN | 46 | HIDDEN2 | Yes | STAIRS HIDDEN (STAIR STRUCTURE etc.) |
| A | FLOR | STRS | HRAL | 46 | Continuous | Yes | STAIRS HANDRAIL |
| A | FLOR | STRS | LADR | 46 | Continuous | Yes | LADDER |
| A | FLOR | STRS | MISC | 145,145,145 | Continuous | Yes | STAIRS MISCELLANEOUS |
| A | FLOR | STRS | STRG | 46 | Continuous | Yes | STAIR STRINGER |
| A | FLOR | TACT | | 1 | Continuous | Yes | TACTILE STRIP |
| A | FLOR | TPTN | | 212 | Continuous | Yes | TOILET PARTITIONS |
| A | FLOR | WDWK | | 212 | Continuous | Yes | WOODWORK (FIELD - BUILT CABINETS & COUNTERS - USUALLY DASH) |
| A | FURN | | | 1 | Continuous | Yes | FURNITURE - DESKS, ETC. |
| A | FURN | CHAR | | 1 | Continuous | Yes | CHAIR AND OTHER SEATING |
| A | FURN | CNTR | | 212 | Continuous | Yes | COUNTERS |
| A | FURN | HEAT | | 1 | Continuous | Yes | HEAT SINK |
| A | FURN | KIOS | | 212 | Continuous | Yes | INFO KIOSK |
| A | FURN | MISC | | 1 | Continuous | Yes | FURNITURE PANELS, STORAGE COMPONENTS, ETC. |
| A | FURN | PASM | | 1 | Continuous | Yes | PASSIMETER READER |
| A | FURN | PLTR | | 46 | Continuous | Yes | PLANTER |
| A | FURN | TKVM | | 1 | Continuous | Yes | TICKET VENDING MACHINES |
| A | FURN | TURN | | 1 | Continuous | Yes | TURNSTILES |
| A | GLAZ | | | 212 | Continuous | Yes | WINDOWS,WINDOW WALLS,GLAZED PARTITIONS |
| A | GLAZ | CURT | | 212 | Continuous | Yes | CURTAIN WALLS |
| A | GLAZ | DOOR | | 5 | Continuous | Yes | GLASS DOOR, GLASS PANE |
| A | GLAZ | HDWR | | 5 | Continuous | Yes | GLAZING HARDWARE |
| A | GLAZ | MULL | | 212 | Continuous | Yes | WINDOW MULLIONS |
| A | GLAZ | MULL | MISC | 1 | Continuous | Yes | WINDOW MULLIONS MISCELLANEOUS |
| A | GLAZ | PRHT | | 1 | Continuous | Yes | PARTIAL HEIGHT GLAZED SURFACE |
| A | GLAZ | SILL | EXTR | 5 | Continuous | Yes | WINDOWS SILL EXTERIOR |
| A | GLAZ | SILL | INTR | 212 | Continuous | Yes | WINDOWS SILL INTERIOR |
| A | GLAZ | SKLT | | 5 | Continuous | Yes | SKYLIGHT OUT-LINE SHOWN ON FLOOR PLAN |
| A | GRPH | 3DEE | | 1 | Continuous | Yes | 3D IMAGES |
| A | GRPH | IMAG | | 1 | Continuous | Yes | GENERAL JPEGS, BMP, ETC. |
| A | GRPH | IMAG | ADVT | 1 | Continuous | Yes | GRAPHIC IMAGES i.e. (BILLBOARDS & ADVERTISEMENTS) |
| A | GRPH | IMAG | RENR | 1 | Continuous | Yes | RENDERING AND WATERCOLOR IMAGES |
| A | GRPH | IMAG | SIGN | 1 | Continuous | Yes | GRAPHIC SIGNAGE (FULL COLOR - USING PANTONE COLORS) |
| A | KPLN | | | 212 | Continuous | Yes | KEY PLANS |
| A | KPLN | FURN | TURN | 46 | Continuous | Yes | TURNSTILES IN KEY PLAN |
| A | KPLN | MISC | | 1 | Continuous | Yes | KEY PLAN MISCELLANEOUS |
| A | KPLN | ROOF | LOWR | 251 | Continuous | Yes | LOW ROOF IN KEY PLAN |
| A | KPLN | ROOF | MISC | 252 | Continuous | Yes | ROOF MISCELLANEOUS IN KEY PLAN |
| A | KPLN | TEXT | | 1 | Continuous | Yes | TEXT IN KEY PLAN |
| A | KPLN | WALL | | 1 | Continuous | Yes | MAIN WALLS IN KEY PLAN |

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|---|---|---|---|---|---|---|---|
| A | KPLN | WALL | HIDN | 8 | HIDDEN4 | Yes | HIDDEN WALLS IN KEY PLAN |
| A | KPLN | WALL | MISC | 1 | Continuous | Yes | MISCELLANEOUS WALLS IN KEY PLAN |
| A | PATT | | | 46 | Continuous | Yes | TEXTURES |
| A | PATT | CMU_ | | 90,90,90 | Continuous | Yes | CONCRETE MASONRY UNIT TEXTURES |
| A | PATT | STL_ | | 46 | Continuous | Yes | PRIMARY STEEL TEXTURES |
| A | PATT | STL_ | MISC | 46 | Continuous | Yes | MISCELLANEOUS, STEEL, METAL TEXTURES |
| A | PATT | AREA | | 46 | Continuous | Yes | AREA CROSS HATCHING, MISCELLANEOUS PATTERNING, POCHE |
| A | PATT | CLNG | | 46 | Continuous | Yes | CEILING TEXTURES |
| A | PATT | COLS | | 46 | Continuous | Yes | COLUMN PATTERN |
| A | PATT | CONC | | 90,90,90 | Continuous | Yes | CONCRETE TEXTURES |
| A | PATT | FGPN | | 46 | Continuous | Yes | FIBERGLASS TEXTURES |
| A | PATT | FLOR | | 46 | Continuous | Yes | PAVINGS, TILE, CARPET PATTERNS, MATERIAL PATTERN |
| A | PATT | FURN | | 46 | Continuous | Yes | FINISH PATTERNS |
| A | PATT | GROT | | 46 | Continuous | Yes | GROUT FILL TEXTURES |
| A | PATT | GYBD | | 46 | Continuous | Yes | GYPSUM / DRYWALL TEXTURES |
| A | PATT | INSU | | 46 | Continuous | Yes | FOAM INSULATION BOARD TEXTURES |
| A | PATT | INSU | BATT | 46 | Continuous | Yes | BATTEN INSULATION TEXTURES |
| A | PATT | MISC | | 46 | Continuous | Yes | MISCELLANEOUS TEXTURES |
| A | PATT | PROT | | 46 | Continuous | Yes | PROTECTION BOARD TEXTURES |
| A | PATT | ROOF | | 46 | Continuous | Yes | ROOF SURFACE PATTERNS, HATCHING |
| A | PATT | WALL | | 46 | Continuous | Yes | MATERIAL PATTERNING, WALL INSULATION, HATCHING AND FILL |
| A | PATT | WALL | CONC | 90,90,90 | Continuous | Yes | CONCRETE WALL PATTERNS |
| A | PATT | WOOD | | 90,90,90 | Continuous | Yes | WOOD PATTERN |
| | | | | | | | |
| A | REFN | ALGN | AXIS | 113 | PHANTOM4 | Yes | REFERENCE AXIAL ALIGNMENT |
| A | REFN | AREA | OTLN | 85 | Continuous | Yes | REFERENCE AREA OUTLINE FOR AREA CALCULATIONS NOT PRINTED |
| A | REFN | BLDG | LINE | 85 | HIDDEN | Yes | REFERENCE BUILDING LINE |
| A | REFN | CLIN | | 75 | CENTER5 | Yes | REFERENCE CENTERLINE |
| A | REFN | COLS | BUBL | 200 | Continuous | Yes | REFERENCE COLUMN BUBBLES AND/OR IDENTIFICATION |
| A | REFN | DIMS | | 15 | Continuous | Yes | REFERENCE DIMENSIONS |
| A | REFN | ESCL | | 85 | Continuous | Yes | ANY LINES USED TO CONSTRUCT ESCALATORS |
| A | REFN | FRME | | 211 | Continuous | Yes | REFERENCE SHEET EDGE AND AVAILABLE DRAWING AREA |
| A | REFN | GRID | | 21 | CENTER5 | Yes | REFERENCE GRID FOR DETAILS AND/OR DRAWING LAYOUT |
| A | REFN | GUID | HORZ | 252 | Continuous | Yes | HORIZONTAL CONSTRUCTION LINES |
| A | REFN | GUID | LINE | 151 | Continuous | Yes | GENERAL CONSTRUCTION LINES |
| A | REFN | GUID | VERT | 143 | Continuous | Yes | VERTICAL CONSTRUCTION LINES |
| A | REFN | KPLN | | 201 | Continuous | Yes | REFERENCE KEY PLAN |
| A | REFN | ROOM | | 201 | Continuous | Yes | REFERENCE ROOM TAG |
| A | REFN | NSRT | BLOK | 255 | Continuous | Yes | FIXED BLOCK INSERTION POINT |
| A | REFN | STRS | | 15 | Continuous | Yes | ANY LINES USE TO CONSTRUCT STAIRS |
| A | REFN | TEXT | | 15 | Continuous | Yes | REFERENCE TEXT |
| A | REFN | TEXT | ESCL | 222 | Continuous | Yes | REFERENCE TEXT FOR ESCALATOR DESIGN |
| A | REFN | TEXT | EVTR | 222 | Continuous | Yes | REFERENCE TEXT FOR ELEVATORS DESIGN |
| A | REFN | TEXT | VCIR | 15 | Continuous | Yes | REFERENCE TEXT FOR STAIR DESIGN |
| A | REFN | TRAK | DYNA | 93 | DASHED5 | Yes | REFERENCE TRACK DYNAMIC ENVELOPE |
| A | REFN | VPRT | FRME | 1 | Continuous | Yes | POLYGON REPRESENTING THE VIEW PORT WINDOW AREA DRAWN IN MODEL SPACE |
| A | REFN | WPNT | | 255 | Continuous | Yes | GENERAL WORKING POINTS |
| | | | | | | | |
| A | REVS | BUBL | 0001 | 255 | Continuous | Yes | REVISION CLOUD AND ARC (change number with each revision) |
| A | REVS | SYMB | 0001 | 3 | Continuous | Yes | REVISION TRIANGLE (change number with each revision) |
| A | ROOF | | | 4 | Continuous | Yes | ROOF OUTLINE, ROOF PERIMETER / EDGE, ROOF GEOMETRY |
| A | ROOF | ABVE | | 212 | DASHED4 | Yes | ROOF ABOVE OUTLINE |
| A | ROOF | BLOW | | 46 | Continuous | Yes | ROOF BELOW |
| A | ROOF | CNPY | | 51 | Continuous | Yes | CANOPY GEOMETRY - MAIN |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| A | ROOF | CNPY | MISC | 1 | Continuous | Yes | CANOPY GEOMETRY – SECONDARY |
| A | ROOF | DRAN | | 46 | Continuous | Yes | ROOF DRAIN |
| A | ROOF | EDGE | | 1 | Continuous | Yes | ROOF OUTLINE |
| A | ROOF | GUTR | | 5 | Continuous | Yes | GUTTER AND LEADER |
| A | ROOF | GUTR | BLOW | 46 | Continuous | Yes | GUTTER AND LEADER - BELOW |
| A | ROOF | HIGH | | 3 | Continuous | Yes | HIGH ROOF VIEW FROM THE TOP |
| A | ROOF | LEVL | | 5 | Continuous | Yes | LEVEL CHANGES, PITCH DIRECTIONS AND CANTS |
| A | ROOF | LOWR | | 212 | Continuous | Yes | LOW ROOF |
| A | ROOF | MISC | | 1 | Continuous | Yes | STAIR RISER, STAIR HANDRAIL, NOSING, GUARD RAIL, ROOF FURN. |
| A | ROOF | PPET | | 1 | Continuous | Yes | ROOF PARAPET |
| A | ROOF | PPET | BLOW | 46 | Continuous | Yes | ROOF PARAPET BELOW |
| A | ROOF | RIBS | HIDN | 46 | HIDDEN | Yes | HIDDEN ROOF RIBS |
| A | ROOF | STRS | ABVE | 46 | HIDDEN | Yes | ROOF STAIRS ABOVE |
| A | ROOF | STRS | DRAN | 46 | Continuous | Yes | ROOF STAIRS DRAIN |
| A | SECT | STL_ | | 51 | Continuous | Yes | STRUCTURAL STEEL CUT BY SECTION |
| A | SECT | STL_ | MISC | 46 | Continuous | Yes | SECTION THROUGH MISCELLANEOUS STEEL SHAPES AND COLUMN |
| A | SECT | BEAM | STL_ | 5 | Continuous | Yes | SECTION OF STEEL COLUMN |
| A | SECT | BEAM | CONC | 4 | Continuous | Yes | SECTION OF CONCRETE BEAM |
| A | SECT | CLNG | LGHT | 212 | Continuous | Yes | SECTION OF LIGHT FIXTURE IN CEILING |
| A | SECT | CLNG | PANL | 212 | Continuous | Yes | SECTION OF CEILING PANEL |
| A | SECT | CNPY | | 1 | Continuous | Yes | CANOPY IN SECTION |
| A | SECT | COLS | STL_ | 51 | Continuous | Yes | STEEL COLUMN SECTION |
| A | SECT | COLS | CONC | 51 | Continuous | Yes | SECTION OF CONCRETE COLUMN |
| A | SECT | COLS | DETL | 1 | Continuous | Yes | COLUMN SECTION DETAIL |
| A | SECT | COLS | ENCL | 212 | Continuous | Yes | COLUMN ENCLOSURE SECTION |
| A | SECT | COLS | HDWR | 5 | Continuous | Yes | ELEMENTS ASSOCIATED WITH SECURING COLUMNS TO OTHER ELEMENTS LIKE NUTS, BOLTS, SCREWS, etc. |
| A | SECT | COLS | HIDN | 46 | DASHED4 | Yes | HIDDEN COLUMN SECTION |
| A | SECT | COLS | PCST | 46 | Continuous | Yes | SECTION OF PRECAST CONCRETE |
| A | SECT | CONC | | 51 | Continuous | Yes | SECTION OF CONCRETE |
| A | SECT | CONC | MISC | 5 | Continuous | Yes | SECTION OF MISCELLANEOUS CONCRETE |
| A | SECT | DECK | | 212 | Continuous | Yes | METAL DECK IN SECTION |
| A | SECT | DOOR | | 1 | Continuous | Yes | DOOR IN SECTION |
| A | SECT | DUCT | MISC | 46 | Continuous | Yes | SECTION THRU MISCELLANEOUS MECHANICAL |
| A | SECT | DUCT | RETN | 212 | Continuous | Yes | SECTION THRU MECHANICAL RETURN DUCT |
| A | SECT | DUCT | SUPL | 3 | Continuous | Yes | SECTION THRU MECHANICAL SUPPLY DUCT |
| A | SECT | ESCL | | 3 | Continuous | Yes | ESCALATOR IN SECTION |
| A | SECT | ESCL | HRAL | 5 | Continuous | Yes | ESCALATOR HANDRAIL IN SECTION |
| A | SECT | ESCL | MACH | 3 | Continuous | Yes | ESCALATOR MACHINERY IN SECTION |
| A | SECT | FNDA | | 51 | Continuous | Yes | FOUNDATIONS IN SECTION |
| A | SECT | GLAZ | | 3 | Continuous | Yes | WINDOWS CUT BY SECTION |
| A | SECT | GLAZ | HDWR | 1 | Continuous | Yes | SECTION OF GLAZING HARDWARE |
| A | SECT | GRAL | | 5 | Continuous | Yes | GUARDRAIL SECTION |
| A | SECT | HRAL | | 5 | Continuous | Yes | SECTION OF HANDRAIL |
| A | SECT | JBAR | | 51 | Continuous | Yes | SECTION OF JERSEY BARRIER |
| A | SECT | MCUT | | 51 | Continuous | Yes | MAIN MATERIAL CUT BY SECTION |
| A | SECT | MCUT | HIDN | 1 | DASHED5 | Yes | SECTION OF HIDDEN MATERIAL |
| A | SECT | MCUT | MISC | 1 | Continuous | Yes | SECONDARY MATERIAL CUT IN SECTION |
| A | SECT | MISC | | 3 | Continuous | Yes | MISCELLANEOUS MATERIAL CUT BY SECTION |
| A | SECT | MISC | HIDN | 1 | HIDDEN-3_TO_3 | Yes | HIDDEN MISCELLANEOUS MATERIAL CUT IN SECTION |
| A | SECT | PANL | STNE | 212 | Continuous | Yes | SECTION OF STONE PANEL |
| A | SECT | PIPE | | 1 | Continuous | Yes | SECTION THRU PIPE |
| A | SECT | PIPE | MISC | 5 | Continuous | Yes | SECTION THRU MISCELLANEOUS PIPE ELEMENTS |
| A | SECT | RAMP | | 3 | Continuous | Yes | SECTION OF RAMP |
| A | SECT | RIVR | | 1 | Continuous | Yes | RIVER LINE IN SECTION |
| A | SECT | SEWR | | 3 | Continuous | Yes | SEWER IN SECTION |
| A | SECT | SKLT | | 5 | Continuous | Yes | SKYLIGHT SECTION |
| A | SECT | STRS | | 3 | Continuous | Yes | STAIRS IN SECTION |
| A | SECT | STRS | STRG | 3 | Continuous | Yes | SECTION OF STAIR STRINGER |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| A | SECT | TRAN | | 5 | Continuous | Yes | SECTION OF TRAINS, SUBWAYS & MONORAILS |
| A | SECT | WALL | | 4 | Continuous | Yes | WALLS CUT BY SECTION |
| A | SECT | WALL | FGPN | 212 | Continuous | Yes | FIBER GLASS PANEL AND/OR SYSTEM IN SECTION |
| A | SECT | WALL | GYPB | 1 | Continuous | Yes | GYPSUM WALL BOARD IN SECTION |
| A | SECT | WALL | MISC | 212 | Continuous | Yes | MISCELLANEOUS WALL SECTION |
| A | SECT | WALL | RETN | 3 | Continuous | Yes | RETAINING WALL IN SECTION |
| A | SECT | WALL | SHFT | 3 | Continuous | Yes | SHAFT WALL IN SECTION |
| A | SECT | WDBL | | 5 | Continuous | Yes | WOOD BLOCKING IN SECTION |
| A | SITE | AIRP | | 3 | Continuous | Yes | AIRPORT |
| A | SITE | ALGN | CLL_ | 4 | PHANTOM4 | Yes | CONTRACT LIMIT LINE |
| A | SITE | ALGN | PROP | 1 | DASHDOT4 | Yes | PROPERTY LINE |
| A | SITE | ALGN | ROWL | 3 | PHANTOM5 | Yes | RIGHT OF WAY LINE |
| A | SITE | BLDG | ABVE | 3 | DASHEDX2 | Yes | BUILDING ABOVE OUTLINE |
| A | SITE | BOLL | | 5 | Continuous | Yes | SECURITY BOLLARD |
| A | SITE | CURB | | 5 | Continuous | Yes | CURBS |
| A | SITE | FENC | | 1 | Continuous | Yes | EXTERIOR FENCE |
| A | SITE | FENC | ARCH | 1 | Continuous | Yes | EXTERIOR DECORATIVE FENCE |
| A | SITE | GRID | HZ01 | 46 | Continuous | Yes | PRIMARY X-AXIS COORDINATE GRID |
| A | SITE | GRID | HZ02 | 5 | DOT4 | Yes | SECONDARY X-AXIS COORDINATE GRID |
| A | SITE | GRID | VT01 | 46 | Continuous | Yes | PRIMARY Y-AXIS COORDINATE GRID |
| A | SITE | GRID | VT02 | 5 | DOT4 | Yes | SECONDARY Y-AXIS COORDINATE GRID |
| A | SITE | JBAR | | 5 | Continuous | Yes | JERSEY BARRIER |
| A | SITE | LGHT | | 5 | Continuous | Yes | STREET LIGHT |
| A | SITE | MISC | | 46 | Continuous | Yes | MISCELLANEOUS SITE FEATURES |
| A | SITE | PILE | | 3 | Continuous | Yes | PILES |
| A | SITE | SIGN | | 1 | Continuous | Yes | SITE SIGNAGE |
| A | SITE | STRE | SBAK | 5 | HIDDEN-3_TO_3 | Yes | STREET SETBACKS |
| A | SITE | STRE | STRP | 46 | Continuous | Yes | TRAFFIC STREET STRIPING |
| A | SITE | SWLK | | 5 | Continuous | Yes | SIDEWALK |
| A | SITE | TBAK | | 252 | Continuous | Yes | TIEBACKS |
| A | SITE | TRAF | SLPE | 46 | DASHED5 | Yes | SLOPE |
| A | SITE | TRAK | | 5 | Continuous | Yes | TRACKS |
| A | SITE | TRAK | CLIN | 1 | CENTER | Yes | TRACK CENTERLINES |
| A | SITE | TUNL | | 46 | Continuous | Yes | TUNNEL |
| A | SITE | UNGR | STRU | 90,90,90 | Continuous | Yes | UNDERGROUND STRUCTURE or xref/block insertion layer |
| A | SITE | UNGR | UTIL | 90,90,90 | Continuous | Yes | UNDERGROUND UTILITIES or xref/block insertion layer |
| A | SWAL | | | 51 | Continuous | Yes | SLURRY WALL |
| A | SWAL | TBAK | | 46 | Continuous | Yes | SLURRY WALL TIEBACK |
| A | TONE | | | 50,50,50 | Continuous | Yes | VARIOUS COLOR TONING (USED FOR PRESENTATION - STAGE 1 ONLY) |
| A | TONE | SKY_ | | 197,219,242 | Continuous | Yes | SKY ZONE FILL |
| A | TONE | AIRP | | 90,90,90 | Continuous | Yes | SHADING OF AIRPORT |
| A | TONE | BLDG | | 191,127,255 | Continuous | Yes | BUILDING SECTIONS AND ELEVATIONS |
| A | TONE | COLS | | 175,175,175 | Continuous | Yes | COLUMN ENCLOSURE FILL |
| A | TONE | ELEC | | 102,204,204 | Continuous | Yes | ELECTRICAL, ELECTRONICS, SPACES FILL |
| A | TONE | GRND | | 90,90,90 | Continuous | Yes | SECTION/ELEVATION/PLAN GROUND PLANE |
| A | TONE | MECH | | 102,153,204 | Continuous | Yes | MECHANICAL ZONE FILL |
| A | TONE | OFCE | | 255,223,127 | Continuous | Yes | OFFICE ZONE FILL |
| A | TONE | OPNG | | 240,240,240 | Continuous | Yes | OPEN TO BELOW ZONE FILL |
| A | TONE | OTLN | | 165 | Continuous | Yes | OUTLINE OF TONE FILL |
| A | TONE | OTLN | SKY_ | 61 | Continuous | Yes | SKY FILL OUTLINE |
| A | TONE | OTLN | BLDG | 191 | Continuous | Yes | BUILDING SECTIONS AND ELEVATIONS OUTLINE |
| A | TONE | OTLN | COLS | 253 | Continuous | Yes | COLUMN ENCLOSURE FILL OUTLINE |
| A | TONE | OTLN | GRND | 251 | Continuous | Yes | SECTION/ELEVATION/PLAN GROUND PLANE OUTLINE |
| A | TONE | OTLN | MECH | 153 | Continuous | Yes | MECHANICAL FILL OUTLINE |
| A | TONE | OTLN | OFCE | 41 | Continuous | Yes | OFFICE FILL OUTLINE |
| A | TONE | OTLN | OPNG | 61 | Continuous | Yes | OPEN TO BELOW FILL OUTLINE |
| A | TONE | OTLN | PARK | 254 | Continuous | Yes | PARKING FILL OUTLINE |
| A | TONE | OTLN | PUBL | 40 | Continuous | Yes | PUBLIC FILL OUTLINE |
| A | TONE | OTLN | RETL | 21 | Continuous | Yes | RETAIL FILL OUTLINE |
| A | TONE | OTLN | RIVR | 153 | Continuous | Yes | RIVER FILL OUTLINE |
| A | TONE | OTLN | SECT | 255 | Continuous | Yes | SHADING OUTLINES |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| A | TONE | OTLN | SERV | 141 | Continuous | Yes | SERVICE FILL OUTLINE |
| A | TONE | OTLN | SWAL | 253 | Continuous | Yes | SLURRY WALL OUTLINE |
| A | TONE | OTLN | VCIR | 30 | Continuous | Yes | VERTICAL CIRCULATION FILL OUTLINE |
| A | TONE | PARK | | 215,215,215 | Continuous | Yes | PARKING ZONE FILL |
| A | TONE | PUBL | | 153,204,102 | Continuous | Yes | PUBLIC ZONE FILL |
| A | TONE | RETL | | 255,159,127 | Continuous | Yes | RETAIL ZONE FILL |
| A | TONE | RIVR | | 102,153,204 | Continuous | Yes | RIVER ZONE FILL |
| A | TONE | SERV | | 127,223,255 | Continuous | Yes | SERVICE ZONE FILL |
| A | TONE | SITE | | 175,175,175 | Continuous | Yes | |
| A | TONE | SWAL | | 145,145,145 | Continuous | Yes | SHADING OF SLURRY WALLS |
| A | TONE | UNAS | | 145,145,145 | Continuous | Yes | UNASSIGNED SPACE |
| A | TONE | UTIL | | 215,215,215 | Continuous | Yes | UTILITY SPACE FILL (PLUMBING, PUMP ROOMS, ETC.) |
| A | TONE | VERT | | 255,204,0 | Continuous | Yes | VERTICAL CIRCULATION ZONE FILL |
| A | TONE | WALL | | 145,145,145 | Continuous | Yes | WALL ZONE FILL |
| A | WALL | | | 4 | Continuous | Yes | FULL HEIGHT WALLS, STAIR AND SHAFT WALLS, WALLS TO STRUCTURE |
| A | WALL | ABVE | | 5 | DASHEDX2 | Yes | WALL ABOVE |
| A | WALL | BARR | | 1 | Continuous | Yes | WALL BARRIER OR LINER WALL |
| A | WALL | BLOW | | 5 | DASHED5 | Yes | WALL BELOW |
| A | WALL | BOTH | | 5 | Continuous | Yes | BOOTH WALL |
| A | WALL | CASE | | 212 | Continuous | Yes | WALL MOUNTED CASEWORK |
| A | WALL | CNPY | | 1 | Continuous | Yes | CANOPY WALL |
| A | WALL | FGPN | | 5 | Continuous | Yes | FIBERGLASS WALL PANEL |
| A | WALL | FNSH | | 1 | Continuous | Yes | FINISHES, WOODWORK, TRIM |
| A | WALL | GYPB | | 1 | Continuous | Yes | GYPSUM WALLBOARD |
| A | WALL | KWAL | NFIL | 46 | Continuous | Yes | KALWALL INFILL GRID |
| A | WALL | KWAL | OTLN | 1 | Continuous | Yes | KALWALL MAIN PANEL |
| A | WALL | MISC | | 1 | Continuous | Yes | MISCELLANEOUS WALL |
| A | WALL | MOVE | | 4 | Continuous | Yes | MOVABLE PARTITIONS |
| A | WALL | OTLN | | 4 | Continuous | Yes | BUILDING OUTLINES |
| A | WALL | OTLN | ABVE | 3 | DASHED2 | Yes | OUTLINE OF WALL ABOVE |
| A | WALL | OTLN | BLOW | 1 | DASHDOT | Yes | OUTLINE OF WALL BELOW |
| A | WALL | PRHT | | 3 | Continuous | Yes | PARTIAL HEIGHT WALLS (DON'T APPEAR ON REFLECTED CEILING PLANS) |
| A | WALL | SHER | | 3 | Continuous | Yes | SHEAR WALL |
| A | WALL | SHFT | | 3 | Continuous | Yes | SHAFT WALL |
| A | WALL | SHFT | OPNG | 46 | Continuous | Yes | X REPRESENTING SHAFT OPENING - OPENING IN WALL RELATED TO SHAFTS, ETC |
| A | WALL | STRS | | 212 | Continuous | Yes | WALLS AROUND STAIRS |
| A | WALL | TPTN | | 212 | Continuous | Yes | TOILET PARTITIONS |
| A | WALL | TRAK | | 1 | Continuous | Yes | WALLS AROUND TRACKS |
| A | WALL | TRAK | BLOW | 46 | Continuous | Yes | WALLS AROUND TRACKS BELOW |
| A | WALL | TRAK | HIDN | 50,50,50 | HIDDEN | Yes | HIDDEN WALLS AROUND TRACKS |
| A | WALL | VENT | | 212 | Continuous | Yes | WALL VENTS |
| A | XREF | OLE_ | | 255 | Continuous | Yes | LAYER TO ATTACH OLE LINKED FILES ONTO (i.e. EXCEL, ACCESS OR WORD) |
| A | XREF | BLDG | | 46 | Continuous | Yes | XREF BUILDING ONTO |

### 1.20.2.2 LANDSCAPE WORK

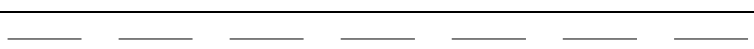
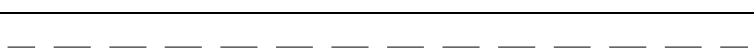
| DISCIPLINE | MAJOR | MINOR | DESC | COLOR | LINETYPE | PLOTS | DESCRIPTION |
|---|---|---|---|---|---|---|---|
| L | GNRL | CHNG | | 51 | DIVIDE4 | Yes | IDENTIFICATION OF UPDATED WORK |
| L | ANNO | _BUS | | 5 | CONTINUOUS | Yes | BUSES |
| L | ANNO | _CLL | | 4 | CONTINUOUS | Yes | CONTRACT LIMIT LINE |
| L | ANNO | _CUT | LINE | 46 | CONTINUOUS | Yes | CUT LINE |
| L | ANNO | BREK | | 5 | CONTINUOUS | Yes | BREAK LINE |
| L | ANNO | sCARS | | 46 | CONTINUOUS | Yes | CARS |
| L | ANNO | CLIN | | 46 | CENTER5 | Yes | CENTERLINE |
| L | ANNO | DIMS | GUID | 1 | DOT8 | Yes | DIMENSION GUIDE LINE |
| L | ANNO | DIMS | | 1 | CONTINUOUS | Yes | DIMENSIONS |
| L | ANNO | DETL | IDEN | 3 | CONTINUOUS | Yes | DETAIL SYMBOL |
| L | ANNO | GDLN | | 102,204,153 | CONTINUOUS | Yes | GUIDELINE |
| L | ANNO | LGND | DISC | 1 | CONTINUOUS | Yes | LEGEND DISCLAIMER |
| L | ANNO | LGND | | 212 | CONTINUOUS | Yes | LEGENDS AND SYMBOLS ASSOCIATED WITH LEGENDS |
| L | ANNO | MLIN | | 4 | DIVIDE2 | Yes | MATCH LINE |
| L | ANNO | NOTE | | 212 | CONTINUOUS | Yes | MISCELLANEOUS NOTES |
| L | ANNO | PEOP | | 46 | CONTINUOUS | Yes | PEOPLE |
| L | ANNO | REDL | | 255,0,0 | CONTINUOUS | Yes | REDLINE |
| L | ANNO | SCUT | AROW | 5 | CONTINUOUS | Yes | DIRECTIONAL ARROW |
| L | ANNO | SCUT | GUID | 212 | DOT8 | Yes | SECTION CUT LINE CONNECTING HEAD AND TAIL |
| L | ANNO | SCUT | SYMB | 3 | CONTINUOUS | Yes | SECTION CUT SYMBOL |
| L | ANNO | SYMB | MISC | 3 | CONTINUOUS | Yes | MISCELLANEOUS SYMBOLS |
| L | ANNO | SYMB | NRTH | 5 | CONTINUOUS | Yes | NORTH ARROW |
| L | ANNO | SYMB | SCLE | 1 | CONTINUOUS | Yes | SCALE BAR |
| L | ANNO | SYMB | | 3 | CONTINUOUS | Yes | SYMBOL BLOCK INSERTION LAYER |
| L | ANNO | TEXT | _CLL | 1 | CONTINUOUS | Yes | CONTRACT LIMIT LINE TEXT |
| L | ANNO | TEXT | DATE | 5 | CONTINUOUS | Yes | PRESENTATION DATE |
| L | ANNO | TEXT | LEDR | 5 | CONTINUOUS | Yes | TEXT LEADER LINE |
| L | ANNO | TEXT | MISC | 5 | CONTINUOUS | Yes | SECONDARY TEXT |
| L | ANNO | TEXT | MLIN | 212 | CONTINUOUS | Yes | MATCH LINE TEXT |
| L | ANNO | TEXT | PLIN | 1 | CONTINUOUS | Yes | PROPERTY LINE TEXT |
| L | ANNO | TEXT | ROWL | 212 | CONTINUOUS | Yes | RIGHT OF WAY TEXT |
| L | ANNO | TEXT | TITL | 3 | CONTINUOUS | Yes | TITLE TEXT |
| L | ANNO | TEXT | | 212 | CONTINUOUS | Yes | TEXT |
| L | ANNO | TEXT | STRE | 1 | CONTINUOUS | Yes | STREET NAME TEXT |
| L | ANNO | TRAN | | 46 | CONTINUOUS | Yes | TRAINS, SUBWAYS & MONORAILS |
| L | ANNO | TRUK | | 46 | CONTINUOUS | Yes | TRUCKS |
| L | ANNO | TTLB | PRES | 5 | CONTINUOUS | Yes | DRAWING TITLE ON PRESENTATION BORDER |
| L | ANNO | VPRT | | 200 | CONTINUOUS | No | VIEW PORT CREATION LAYER |
| L | ANNO | VPRT | TONE | 255,255,255 | CONTINUOUS | Yes | VIEW PORT SHADE (FOR PRESENTATION) |
| L | AREA | IDEN | | 40 | CONTINUOUS | No | AREA CALCULATION |
| L | AREA | OTLN | | 40 | CONTINUOUS | No | AREA CALCULATION BOUNDARY LINES |
| L | AREA | PATT | HTCH | 41 | CONTINUOUS | No | AREA HATCH |
| L | AREA | PLNT | | 40 | CONTINUOUS | No | PLANT NAME AND QUANTITY |
| | | | | | | | |
| L | CHRT | _BDR | | 3 | CONTINUOUS | Yes | CHART BORDER |
| L | CHRT | LINE | | 1 | CONTINUOUS | Yes | CHART LINE |
| L | CHRT | TEXT | | 212 | CONTINUOUS | Yes | CHART TEXT |
| L | CHRT | TITL | | 212 | CONTINUOUS | Yes | CHART TITLE |
| L | ELEV | BYND | | 135,135,135 | CONTINUOUS | Yes | ELEVATION or SECTION OBJECTS IN THE DISTANCE |
| L | ELEV | TREE | BYND | 135,135,135 | CONTINUOUS | Yes | TREES IN THE DISTANCE (BACKGROUND) |
| L | ELEV | HIDN | | 1 | HIDDEN2 | Yes | ELVATION or SECTION OBJECTS OBSCURED BY FORGROUND OBJECTS |
| L | ELEV | SHRB | BYND | 135,135,135 | CONTINUOUS | Yes | SHRUB THE DISTANCE (BACKGROUND) |
| L | GRAD | INDX | | 212 | CONTINUOUS | Yes | MAJOR CONTOUR LINES |
| L | GRAD | INTR | | 46 | CONTINUOUS | Yes | MINOR CONTOUR LINES |
| L | GRAD | TEXT | | 212 | CONTINUOUS | Yes | MAJOR CONTOUR LINE LABEL TEXT |
| | | | | | | | |
| L | KPLN | _BDR | | 3 | CONTINUOUS | Yes | KEY PLAN BORDER |
| L | KPLN | HTCH | | 46 | CONTINUOUS | Yes | KEY PLAN HATCH |
| L | KPLN | TEXT | | 1 | CONTINUOUS | Yes | KEY PLAN TEXT |
| L | PLAN | _HDR | | 5 | CONTINUOUS | Yes | HEADER |
| L | PLAN | _ROW | | 1 | PHANTOM5 | Yes | RIGHT OF WAY LINE |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L | PLAN | ABTM | | 3 | CONTINUOUS | Yes | BRIDGE ABUTMENT |
| L | PLAN | ARCH | MISC | 175,175,175 | CONTINUOUS | Yes | ARCHITECTURAL MISCELLANEOUS |
| L | PLAN | BLDG | ABVE | 1 | DASHED | Yes | BUILDING ABOVE OUTLINE |
| L | PLAN | BLDG | HTCH | 46 | CONTINUOUS | Yes | BUILDING HATCH |
| L | PLAN | BLDG | | 4 | CONTINUOUS | Yes | BUILDING OUTLINE |
| L | PLAN | BOLL | | 212 | CONTINUOUS | Yes | BOLLARD |
| L | PLAN | BRDG | | 46 | CONTINUOUS | Yes | BRIDGE |
| L | PLAN | BULB | HTCH | 15 | CONTINUOUS | Yes | BULB FILL |
| L | PLAN | BULB | | 5 | CONTINUOUS | Yes | AREA TO RECEIVE BULB PLANTING |
| L | PLAN | CNPY | | 46 | DASHED2 | Yes | CANOPY |
| L | PLAN | COLS | | 46 | CONTINUOUS | Yes | COLUMN |
| L | PLAN | CONC | ACNT | 17 | CONTINUOUS | Yes | CONCRETE ACCENT BAND |
| L | PLAN | CONC | HTCH | 135,135,135 | CONTINUOUS | Yes | CONCRETE FILL |
| L | PLAN | CONC | _JNT | 1 | CONTINUOUS | Yes | EXPANSION JOINT |
| L | PLAN | CONC | SCLN | 1 | CONTINUOUS | Yes | CONCRETE SCORELINE |
| L | PLAN | CONC | | 5 | CONTINUOUS | Yes | AREA TO RECEIVE CONCRETE |
| L | PLAN | CURB | BACK | 5 | CONTINUOUS | Yes | BACK OF CURB |
| L | PLAN | CURB | FACE | 212 | CONTINUOUS | Yes | FACE OF CURB |
| L | PLAN | CIVL | WQFT | 175,175,175 | CONTINUOUS | Yes | WATER QUALITY FILTRATION TRENCH |
| L | PLAN | EROS | HTCH | 5 | CONTINUOUS | Yes | EROSION CONTROL MAT FILL |
| L | PLAN | EROS | | 212 | CONTINUOUS | Yes | AREA TO RECEIVE EROSION CONTROL MAT |
| L | PLAN | FENC | _CLF | 212 | FENCE | Yes | CHAIN LINK FENCE |
| L | PLAN | FENC | _PIC | 212 | FENCE | Yes | PICKET FENCE |
| L | PLAN | FURN | | 1 | CONTINUOUS | Yes | SITE FURNITURE |
| L | PLAN | GMLH | HTCH | 5 | CONTINUOUS | Yes | GRAVEL MULCH FILL |
| L | PLAN | GMLH | | 1 | CONTINUOUS | Yes | AREA TO RECEIVE GRAVEL MULCH |
| L | PLAN | JBAR | | 135,135,135 | CONTINUOUS | Yes | JERSEY BARRIER |
| L | PLAN | LGHT | LDSP | 1 | CONTINUOUS | Yes | LANDSCAPE LIGHT |
| L | PLAN | LGHT | | 1 | CONTINUOUS | Yes | STREET LIGHT |
| L | PLAN | LINE | _HVY | 4 | CONTINUOUS | Yes | HEAVY LINEWORK |
| L | PLAN | LINE | _MED | 3 | CONTINUOUS | Yes | MEDIUM LINEWORK |
| L | PLAN | LINE | FINE | 1 | CONTINUOUS | Yes | FINE LINEWORK |
| L | PLAN | LINE | XFIN | 46 | CONTINUOUS | Yes | EXTRA FINE LINEWORK |
| L | PLAN | LMOD | | 1 | CONTINUOUS | Yes | LIMIT OF DISTURBANCE |
| L | PLAN | MISC | ELEC | 175,175,175 | CONTINUOUS | Yes | MISCELLANEOUS ELECTRICAL |
| L | PLAN | MISC | OTLN | 31 | CONTINUOUS | Yes | MISCELLANEOUS HATCH OUTLINE |
| L | PLAN | MISC | | 1 | CONTINUOUS | Yes | MISCELLANEOUS SITE FEATURES |
| L | PLAN | PILE | | 5 | CONTINUOUS | Yes | PILES |
| L | PLAN | PRNL | HTCH | 1 | CONTINUOUS | Yes | PERENNIAL FILL |
| L | PLAN | PRNL | | 5 | CONTINUOUS | Yes | AREA TO RECEIVE PERENNIALS |
| L | PLAN | PROP | | 1 | DASHDOT4 | Yes | PROPERTY LINE |
| L | PLAN | RRIP | | 46 | CONTINUOUS | Yes | RIP RAP FILL |
| L | PLAN | SCRN | HTCH | 1 | CONTINUOUS | Yes | STONE SCREENINGS FILL |
| L | PLAN | SCRN | | 212 | CONTINUOUS | Yes | AREA TO RECEIVE STONE SCREENINGS |
| L | PLAN | SEED | HTCH | 212 | CONTINUOUS | Yes | SEED FILL |
| L | PLAN | SEED | | 31 | CONTINUOUS | Yes | AREA TO RECEIVE SEED |
| L | PLAN | SHRB | HTCH | 1 | CONTINUOUS | Yes | SHRUB FILL |
| L | PLAN | SHRB | | 212 | CONTINUOUS | Yes | AREA TO RECEIVE SHRUBS |
| L | PLAN | SLEV | | 5 | CONTINUOUS | Yes | IRRIGATION SLEEVE |
| L | PLAN | SLFN | | 1 | DASHDOT | Yes | SILT FENCE |
| L | PLAN | SPAD | EDGE | 90,90,90 | DASHED5 | Yes | SPADE CUT EDGE |
| L | PLAN | SPOT | ELEV | 1 | CONTINUOUS | Yes | SPOT ELEVATION |
| L | PLAN | SSPL | HTCH | 175,175,175 | CONTINUOUS | Yes | SALT SPLASH FILL |
| L | PLAN | SSPL | TYPA | 46 | CONTINUOUS | Yes | EWR TYPE A SALT SPLASH |
| L | PLAN | SSPL | TYPB | 46 | CONTINUOUS | Yes | EWR TYPE B SALT SPLASH |
| L | PLAN | SSPL | JFK | 1 | CONTINUOUS | Yes | JFK SALT SPLASH |
| L | PLAN | SSPL | LGA | 1 | CONTINUOUS | Yes | LGA SALT SPLASH |
| L | PLAN | SSPL | SWF | 1 | CONTINUOUS | Yes | SWF SALT SPLASH |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L | PLAN | SWLK | | 175,175,175 | CONTINUOUS | Yes | SIDEWALK |
| L | PLAN | TEXT | | 212 | CONTINUOUS | Yes | PLAN TEXT |
| L | PLAN | TRAF | __GR | 175,175,175 | CONTINUOUS | Yes | GUARD RAIL (W-BEAM OR BOX BEAM) |
| L | PLAN | TRAF | _PRK | 90,90,90 | CONTINUOUS | Yes | PARKING STALLS |
| L | PLAN | TRAF | HCAP | 90,90,90 | CONTINUOUS | Yes | HANDICAP PARKING |
| L | PLAN | TRAF | MISC | 175,175,175 | CONTINUOUS | Yes | MISCELLAENOUS TRAFFIC ITEMS |
| L | PLAN | TRAF | SIGN | 175,175,175 | CONTINUOUS | Yes | TRAFFIC SIGN |
| L | PLAN | TRAF | WHST | 175,175,175 | CONTINUOUS | Yes | WHEEL STOPS |
| L | PLAN | TRAF | | 175,175,175 | CONTINUOUS | Yes | GENERAL PAVEMENT MARKINGS |
| L | PLAN | TRAK | | 46 | CONTINUOUS | Yes | TRACKS |
| L | PLAN | TREE | _ORN | 5 | CONTINUOUS | Yes | ORNAMENTAL TREE |
| L | PLAN | TREE | EVER | 1 | CONTINUOUS | Yes | EVERGREEN TREE |
| L | PLAN | TREE | CNPY | 46 | CONTINUOUS | Yes | CANOPY TREE |
| L | PLAN | TREE | PBOX | 46 | CONTINUOUS | Yes | TREE PROTECTION BOX |
| L | PLAN | WALL | RETN | 212 | CONTINUOUS | Yes | RETAINING WALL |
| L | PLAN | WATR | EDGE | 5 | DASHEDX2 | Yes | WATER EDGE |
| L | PLAN | WETL | __GS | 1 | CONTINUOUS | Yes | GOOSE STAKE FLAG |
| L | PLAN | WETL | MHW | 1 | DASHED5 | Yes | MEAN HIGH WATER |
| L | PLAN | WETL | MLW | 1 | HIDDENX2 | Yes | MEAN LOW WATER |
| L | PLAN | WETL | _WFF | 212 | CONTINUOUS | Yes | WATER FOWL FENCING |
| L | REVS | BUBL | | 3 | CONTINUOUS | Yes | REVISIONS BUBBLE |
| L | REVS | SYMB | | 3 | CONTINUOUS | Yes | REVISIONS TEXT |
| L | SCHD | PLNT | | 255 | CONTINUOUS | Yes | PLANT SCHEDULE INSERTION LAYER (AutoCAD Table) |
| L | SCHD | PLNT | _BDR | 4 | CONTINUOUS | Yes | PLANT SCHEDULE BORDER |
| L | SCHD | PLNT | LINE | 212 | CONTINUOUS | Yes | PLANT SCHEDULE LINES |
| L | SCHD | PLNT | TEXT | 1 | CONTINUOUS | Yes | PLANT SCHEDULE TEXT |
| L | SCHD | PLNT | TITL | 3 | CONTINUOUS | Yes | PLANT SCHEDULE TITLE |
| L | SECT | CARS | | 5 | CONTINUOUS | Yes | VEHICLES |
| L | SECT | CONC | HTCH | 1 | CONTINUOUS | Yes | CONCRETE FILL |
| L | SECT | CONC | | 5 | CONTINUOUS | Yes | AREA TO RECEIVE CONCRETE |
| L | SECT | DGAB | | 90,90,90 | CONTINUOUS | Yes | DGABC |
| L | SECT | EROS | | 212 | CONTINUOUS | Yes | EROSION CONTROL MAT |
| L | SECT | ERTH | HTCH | 135,135,135 | CONTINUOUS | Yes | EARTH FILL |
| L | SECT | ERTH | | 255,191,0 | CONTINUOUS | Yes | AREA TO RECEIVE EARTH |
| L | SECT | __GC | | 5 | CONTINUOUS | Yes | GROUND COVER |
| L | SECT | GRAV | MLCH | 46 | CONTINUOUS | Yes | GRAVEL MULCH |
| L | SECT | LINE | FINE | 1 | CONTINUOUS | Yes | FINE LINEWORK |
| L | SECT | LINE | _MED | 3 | CONTINUOUS | Yes | MEDIUM LINEWORK |
| L | SECT | LINE | XFIN | 46 | CONTINUOUS | Yes | EXTRA FINE LINEWORK |
| L | SECT | LINE | _HVY | 4 | CONTINUOUS | Yes | HEAVY LINEWORK |
| L | SECT | MISC | HTCH | 175,175,175 | CONTINUOUS | Yes | MISCELLANEOUS HATCH |
| L | SECT | MISC | OTLN | 255,191,127 | CONTINUOUS | Yes | MISCELLANEOUS OUTLINE |
| L | SECT | PEOP | | 5 | CONTINUOUS | Yes | PEOPLE |
| L | SECT | PRNL | | 1 | CONTINUOUS | Yes | PERENNIAL |
| L | SECT | PROF | __GL | 5 | DOT2 | Yes | PROFILE GUIDELINES |
| L | SECT | PROF | | 3 | CONTINUOUS | Yes | PROPOSED PROFILE |
| L | SECT | PROF | TEXT | 212 | CONTINUOUS | Yes | PROFILE TEXT |
| L | SECT | SAND | HTCH | 1 | CONTINUOUS | Yes | SAND SETTING BED |
| L | SECT | SHRB | | 1 | CONTINUOUS | Yes | SHRUB |
| L | SECT | TEXT | | 212 | CONTINUOUS | Yes | SECTION TEXT |
| L | SECT | TREE | BYND | 135,135,135 | CONTINUOUS | Yes | TREE IN BACKGROUND |
| L | SECT | TREE | EVRG | 5 | CONTINUOUS | Yes | EVERGREEN TREE |
| L | SECT | TREE | _ORN | 46 | CONTINUOUS | Yes | ORNAMENTAL TREE |
| L | SECT | TREE | | 1 | CONTINUOUS | Yes | CANOPY TREE |
| L | SITE | BLDG | ABVE | 212 | DASHED | Yes | BUILDING ABOVE OUTLINE |
| L | SITE | BLDG | HTCH | 135,135,135 | CONTINUOUS | Yes | BUILDING FILL |
| L | SITE | BLDG | SHDW | 175,175,175 | CONTINUOUS | Yes | BUILDING SHADOW |
| L | SITE | BLDG | | 4 | CONTINUOUS | Yes | BUILDING OUTLINE |
| L | SITE | CONC | ACNT | 127,63,63 | CONTINUOUS | Yes | CONCRETE ACCENT BAND |
| L | SITE | CONC | HTCH | 135,135,135 | CONTINUOUS | Yes | CONCRETE FILL |
| L | SITE | CONC | | 5 | CONTINUOUS | Yes | AREA TO RECEIVE CONCRETE |
| L | SITE | _HDR | | 135,135,135 | CONTINUOUS | Yes | HEADER (FLUSH CURB) |
| L | SITE | LAWN | HTCH | 178,204,102 | CONTINUOUS | Yes | LAWN FILL |
| L | SITE | LAWN | | 255,191,127 | CONTINUOUS | Yes | AREA TO RECEIVE LAWN |
| L | SITE | LDSP | HTCH | 223,255,127 | CONTINUOUS | Yes | LANDSCAPE FILL |
| L | SITE | LDSP | | 46 | CONTINUOUS | Yes | LANDSCAPED AREA |
| L | SITE | MISC | HTCH | 90,90,90 | CONTINUOUS | Yes | MISCELLANEOUS HATCH |
| L | SITE | PRNL | HTCH | 1 | CONTINUOUS | Yes | PERENNIAL FILL |
| L | SITE | PRNL | SHDW | 175,175,175 | CONTINUOUS | Yes | PERENNIAL SHADOW |
| L | SITE | PRNL | | 212 | CONTINUOUS | Yes | AREA TO RECEIVE PERENNIALS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L | SITE | SHRB | HTCH | 1 | CONTINUOUS | Yes | SHRUB FILL |
| L | SITE | SHRB | SHDW | 175,175,175 | CONTINUOUS | Yes | SHRUB SHADOW |
| L | SITE | SHRB | | 212 | CONTINUOUS | Yes | AREA TO RECEIVE SHRUBS |
| L | SITE | SSPL | HTCH | 90,90,90 | CONTINUOUS | Yes | SALT SPLASH FILL |
| L | SITE | SSPL | | 1 | CONTINUOUS | Yes | AREA TO RECEIVE SALT SPLASH |
| L | SITE | TREE | SHDW | 175,175,175 | CONTINUOUS | Yes | TREE SHADOW |
| L | SITE | TREE | CNPY | 1 | CONTINUOUS | Yes | CANOPY TREE |
| L | SITE | TREE | EVER | 1 | CONTINUOUS | Yes | EVERGREEN TREE |
| L | SITE | TREE | _ORN | 5 | CONTINUOUS | Yes | ORNAMENTAL TREE |
| L | SITE | WATR | _HVY | 127,255,255 | CONTINUOUS | Yes | HEAVY WATER FILL |
| L | SITE | WATR | LGHT | 127,255,255 | CONTINUOUS | Yes | LIGHT WATER FILL |
| L | SITE | WATR | _MED | 102,204,204 | CONTINUOUS | Yes | MEDIUM WATER FILL |
| L | SITE | WETL | CHAN | 102,178,204 | CONTINUOUS | Yes | CHANNEL |
| L | SITE | WETL | IVA | 102,204,0 | CONTINUOUS | Yes | IVA WETLAND PLANTS |
| L | SITE | WETL | SPAR | 255,223,127 | CONTINUOUS | Yes | SPARTINA |
| L | XREF | _BDR | | 7 | CONTINUOUS | Yes | XREF BORDER AND ATTRIBUTES |
| L | XREF | CLIP | | 7 | CONTINUOUS | Yes | XCLIP |
| L | XREF | CURB | | 7 | CONTINUOUS | Yes | XREF CURBS |
| L | XREF | _DTL | | 7 | CONTINUOUS | Yes | XREF DETAILS |
| L | XREF | SCRN | | 7 | CONTINUOUS | Yes | XREF OF SCREENED BACKGROUND |
| L | XREF | NOTE | | 7 | CONTINUOUS | Yes | XREF SPECS AND NOTES |
| L | XREF | SECT | | 7 | CONTINUOUS | Yes | XREF SECTIONS |
| L | XREF | SITE | | 7 | CONTINUOUS | Yes | XREF SITE PLAN |

### 1.20.3 LINETYPES

| Name | Description | Example |
|---|---|---|
| CENTER | Centerline (1x) |  |
| CENTER5 | Centerline (0.20x) |  |
| Continuous | Continuous |  |
| DASHDOT | Dashdot (1x) |  |
| DASHDOT4 | Dashdot (0.25x) |  |
| DASHED | Dashed (1x) |  |
| DASHED2 | Dashed (0.50x) |  |
| DASHED4 | Dashed (0.25x) |  |
| DASHED5 | Dashed (0.20x) |  |
| DASHEDX2 | Dashed (2x) |  |
| DIVIDE2 | Divide (0.50x) |  |
| DIVIDE4 | Divide (0.25x) |  |

| Name | Description | Example |
|---|---|---|
| DOT2 | Dot (0.50x) |  |
| DOT4 | Dot (0.25x) |  |
| DOT5 | Dot (0.20x) |  |
| DOT8 | Dot (0.125x) |  |
| FENCE | Fence (1x) |  |
| HIDDEN | Hidden (1x) |  |
| HIDDEN2 | Hidden (0.50x) |  |
| HIDDEN4 | Hidden (0.25x) |  |
| HIDDEN5 | Hidden (0.20x) |  |
| HIDDEN-3_TO_3 | Hidden (1.5x) |  |
| HIDDENX2 | Hidden (2x) | |
| PHANTOM4 | Phantom (0.25x) |  |
| PHANTOM5 | Phantom (0.20x) |  |

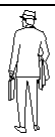
## 1.20.4 SYMBOLS

### 1.20.4.1 DRAFTING CONVENTIONS

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | 22x34PSG.dwg | Varies | 22 x 34 Layout Guide |
|  | ABBREV_1.dwg | Varies | List of Abbreviations and Symbols |
|  | ARROW.dwg | Varies | Arrow Head |
|  | BREAK.dwg | Varies | Break Line |
|  | CLINE.dwg | Varies | Center Line |
|  | COLNO.dwg | Varies | Column Number for Contract Drawings |
|  | COLNOE.dwg | Varies | Column Number for Existing Columns |
|  | COLNOP.dwg | Varies | Column Number for Presentation Drawings |
|  | DETNO2.dwg | Varies | Contract Drawing Label – No Scale Bar |
|  | DETNO3.dwg | Varies | Presentation Drawing Label |
|  | DETNO.dwg | Varies | Contract Drawing Label |
|  | DETNODBL.dwg | Varies | Double Contract Drawing Label |
|  | DETNO-SM.dwg | Varies | Contract Drawing Label – Condensed |
| | DIMGUIDE.dwg | Varies | Guideline Used with Dimensions for Contract Drawings |
|  | DOORNO.dwg | Varies | Door Number |
|  | EXIT-1WAYDIR.dwg | Varies | Directional Exit Sign |
|  | EXIT-2WAYDIR.dwg | Varies | Multi-Directional Exit Sign |
|  | EXIT.dwg | Varies | Exit Sign |
|  | EXIT-DBL-1WAYDIR.dwg | Varies | Double-Sided Directional Exit Sign |

| | | | |
|---|---|---|---|
|  | EXIT-DBL-2WAYDIR.dwg | Varies | Double-Sided Multi-Directional Exit Sign |
|  | EXIT-DBL.dwg | Varies | Double-Sided Exit Sign |
|  | INSUL.dwg | Varies | Insulation |
|  | INT-ELEV.dwg | Varies | Interior Elevation |
|  | LEVELINE.dwg | Varies | Level Line |
|  | LOCALSEC.dwg | Varies | Presentation Section Mark |
|  | OUTLET.dwg | Varies | Electric Outlet |
|  | PARTTYPE.dwg | Varies | Partition/Wall Type |
|  | RETURN.dwg | Varies | Mechanical Return Duct Symbol |
|  | REV-NO.dwg | Varies | Revision Tag |
|  | RM-NO.dwg | Varies | Room Number |
|  | SPEAKER.dwg | Varies | Speaker |
|  | SPNKHD.dwg | Varies | Sprinkler Head |
|  | SUPPLY.dwg | Varies | Mechanical Supply Duct |
|  | TARG1.dwg | Varies | Detail/Section/Elevation Label |
|  | TARGELEV.dwg | Varies | Elevation Symbol |
|  | TARGSEC.dwg | Varies | Complete Section Symbol |
|  | TARGSECHEAD.dwg | Varies | Section Head Symbol |
|  | TARGSECTAIL.dwg | Varies | Section Tail Symbol |
|  | W-ARROW.dwg | Varies | Presentation Arrow |
|  | WIN-NO.dwg | Varies | Window Type |

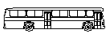
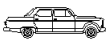
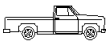
### 1.20.4.2 2D PEOPLE

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | MAN01.dwg | Varies | Man Standing |
|  | MAN02.dwg | Varies | Man Walking |
|  | MAN03.dwg | Varies | Man Sitting |
|  | MAN04.dwg | Varies | Man Standing – Back View |
|  | MAN05.dwg | Varies | Man Standing – Side View |
|  | MAN06.dwg | Varies | Man Walking 2 |
|  | MAN07.dwg | Varies | Man Standing 2 |
|  | MAN08.dwg | Varies | Man Outline |
|  | PEOPLE01.dwg | Varies | Man and Woman Walking |
|  | PEOPLE02.dwg | Varies | Man and Woman Walking 2 |
|  | PEOPLE03.dwg | Varies | Two Women Walking |

| | | | |
|---|---|---|---|
|  | PEOPLE04.dwg | Varies | Man and Woman Standing |
|  | PEOPLE05.dwg | Varies | Father and Child |
|  | PEOPLE06.dwg | Varies | Mother and Daughter |
|  | PEOPLE07 dwg | Varies | Two Men Standing |
|  | PEOPLE08.dwg | Varies | Two Men Side View |
|  | PEOPLE09.dwg | Varies | Outline – Three People |
|  | PEOPLE10.dwg | Varies | People Waiting to Get on Bus |
|  | WOMAN01.dwg | Varies | Woman Telling Time |
|  | WOMAN02.dwg | Varies | Woman Walking |
|  | WOMAN03.dwg | Varies | Woman Walking 2 |
|  | WOMAN04.dwg | Varies | Woman Standing |
|  | WOMAN05.dwg | Varies | Woman Lying Down |

| | | | |
|---|---|---|---|
|  | WOMAN06.dwg | Varies | Woman Outline 1 |
|  | WOMAN07.dwg | Varies | Woman Outline 2 |

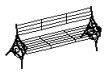
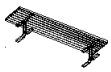
### 1.20.4.3 2D VEHICLES

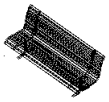
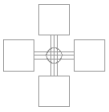
| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | 02EBUS01.dwg | Varies | School Bus |
|  | 02EBUS02.dwg | Varies | City Bus |
|  | 02ECAR01.dwg | Varies | Hatchback Car |
|  | 02ECAR02.dwg | Varies | Sedan Car |
|  | 02ECAR04.dwg | Varies | Classic Car |
|  | 02ECAR06.dwg | Varies | Flatbed Pickup Truck |
|  | 02ECAR08.dwg | Varies | Porsche |
|  | 02ECAR09.dwg | Varies | Porsche with Spoiler |
|  | 02ECAR10.dwg | Varies | Lotus Espirit |
|  | 02ECAR11.dwg | Varies | Sports Car |
|  | 02ECAR12.dwg | Varies | Car Sedan |

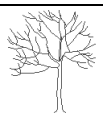
| | | | |
|---|---|---|---|
|  | 02ECAR14.dwg | Varies | Old Car |
|  | 02ECAR19.dwg | Varies | Lamborghini |
|  | 02ECAR21.dwg | Varies | Eurovan |
|  | bus1.dwg | Varies | Minibus |
|  | bus03-cross-country-bus.dwg | Varies | Cross-Country Bus |
|  | BUS-2.DWG | Varies | City Bus 3 |
|  | BUS.DWG | Varies | City Bus 2 |
|  | BUS-F.dwg | Varies | Bus – Front View |
|  | BUS-pl.dwg | Varies | Bus and Taxi – Top View |
|  | car03-mercedes-benz.dwg | Varies | Mercedes-Benz – Side View |
|  | car05-station-wagon.dwg | Varies | Station Wagon |
|  | car07-vette.dwg | Varies | Chevrolet Corvette |
|  | car13-police-car.dwg | Varies | Police Cruiser |
|  | car20-bmw3251.dwg | Varies | BMW 325i |

| | | | |
|---|---|---|---|
|  | car22-sedan.dwg | Varies | Midsize Sedan |
|  | CARB.DWG | Varies | Car – Front View |
|  | CAREL.DWG | Varies | Sports Car – Side View |
|  | CORSAIR2.DWG | Varies | Corsair Jet |
|  | mercedes-front.dwg | Varies | Mercedes-Benz – Front View |
|  | minibus.dwg | Varies | Minibus – Multiple Views |
|  | MOTORCY.dwg | Varies | Motorcycle |
|  | PTRUCK-2.DWG | Varies | Pickup Truck with Plexiglas Cover |
|  | TAXI-F.dwg | Varies | Taxi |
|  | TRUCKPL.dwg | Varies | Truck – Top View |
|  | volkswagen.dwg | Varies | Volkswagen Beetle |

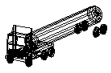
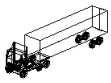
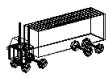
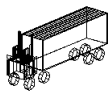
#### 1.20.4.4 3D SITE AMENITIES

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | 3DBENC1.dwg | Varies | 3D Bench 1 |
|  | 3DBENC2.dwg | Varies | 3D Bench 2 |
|  | 3DBENC3.dwg | Varies | 3D Bench 3 |

| | | | |
|---|---|---|---|
|  | 3DBENC4.dwg | Varies | 3D Bench 4 |
|  | 3DDECI1.dwg | Varies | 3D Deciduous Tree 1 |
|  | 3DDECI2.dwg | Varies | 3D Deciduous Tree 2 |
|  | 3DDECI3.dwg | Varies | 3D Deciduous Tree 3 |
|  | 3DDECI4.dwg | Varies | 3D Deciduous Tree 4 |
|  | 3DEVERG2.dwg | Varies | 3D Evergreen Tree 1 |
|  | 3DEVERG.dwg | Varies | 3D Evergreen Tree 2 |
|  | lamppost.dwg | Varies | Lamppost |
|  | SHRUB-1.dwg | Varies | Shrub 1 |
|  | SHRUB-2.dwg | Varies | Shrub 2 |
|  | SHRUB-3.dwg | Varies | Shrub 3 |
|  | STLIGH-1.dwg | Varies | Street Light |
|  | TREE-1.dwg | Varies | Tree 1 |
|  | TREE-1A.dwg | Varies | Tree 1a |

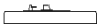
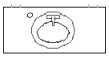
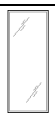
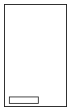
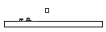
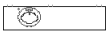
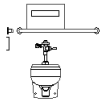
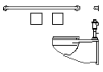
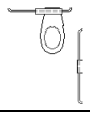
| | | | |
|---|---|---|---|
|  | TREE-3.dwg | Varies | Tree 3 |
|  | TREE-4.dwg | Varies | Tree 4 |
|  | TREE-5.dwg | Varies | Tree 5 |
|  | TREE-6.dwg | Varies | Tree 6 |
|  | TREESC-1.dwg | Varies | Tree 7 |

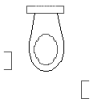
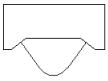
### 1.20.4.5 3D VEHICLES

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | 3DTRCK2.dwg | Varies | 3D Truck |
|  | 3DTRCK3.dwg | Varies | 3D Truck 2 |
|  | 3DTRCK4.dwg | Varies | 3D Truck 3 |
|  | 3DTRCK5.dwg | Varies | 3D Truck 4 |
|  | 3DTRCK.dwg | Varies | 3D Truck 5 |
|  | bus.dwg | Varies | Bus |
|  | ferry-boat.dwg | Varies | Ferry Boat |

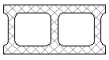
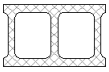
### 1.20.4.6 FIXTURES

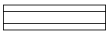
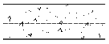
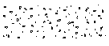
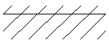
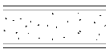
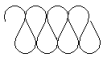
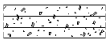
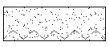
| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|

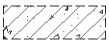
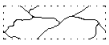
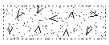
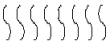
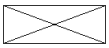
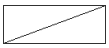
| | | | |
|---|---|---|---|
|  | LAV4-frt.dwg | A-EQPM-FIXT | Four-Sink Lavatory – Front View |
|  | LAV4-top.dwg | A-EQPM-FIXT | Four-Sink Lavatory – Top View |
|  | LAV-frt.dwg | A-EQPM-FIXT | Lavatory – Front View |
|  | LAV-sid.dwg | A-EQPM-FIXT | Lavatory – Side View |
|  | LAV-TOP.dwg | A-EQPM-FIXT | Lavatory – Top View |
|  | MIRR1.dwg | Varies | Horizontal Mirror |
|  | MIRR2.dwg | Varies | Vertical Mirror |
|  | NAP-FRT.dwg | Varies | Front Elevation of Napkin Dispenser (Female) |
|  | NURS-FRT.dwg | Varies | Nursing Station – Front View |
|  | NURS-TOP.dwg | Varies | Nursing Station – Top View |
|  | TOIL1-frt.dwg | A-EQPM-FIXT | Toilet – Front View |
|  | TOIL1-sid.dwg | A-EQPM-FIXT | Toilet – Side View |
|  | TOIL1-top.dwg | A-EQPM-FIXT | Toilet – Top View |
|  | TOIL2-frt.dwg | A-EQPM-FIXT | Toilet 2 – Front View |

| | | | |
|---|---|---|---|
|  | TOIL2-sid.dwg | A-EQPM-FIXT | Toilet 2 – Side View |
|  | TOIL2-top.dwg | A-EQPM-FIXT | Toilet 2 – Top View |
|  | TOWEL.dwg | Varies | Towel Dispenser |
|  | URI-frt.dwg | A-EQPM-FIXT | Urinal – Front View |
|  | URI-sid.dwg | A-EQPM-FIXT | Urinal – Side View |
|  | URI-top.dwg | A-EQPM-FIXT | Urinal – Top View |

### 1.20.4.7 MATERIAL CONVENTIONS

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | CARPET.dwg | A-FLOR-PATT | Carpet |
|  | CEILING.dwg | Varies | Ceiling |
|  | CMU04.dwg | Varies | 4-Inch Glazed Brick Masonry |
|  | CMU06.dwg | Varies | 6-Inch Glazed Brick Masonry |
|  | CMU08.dwg | Varies | 8-Inch Glazed Brick Masonry |
|  | CMU10.dwg | Varies | 10-Inch Glazed Brick Masonry |
|  | COARSE.dwg | Varies | Coarse, Pourus Fill |
|  | CONC01.dwg | Varies | Concrete |

| | | | |
|---|---|---|---|
|  | CONC02.dwg | Varies | 4-Inch Concrete |
|  | DECKTOP2.dwg | Varies | Metal Deck and Concrete Topping Longitudinal Cross-Section |
|  | DECKTOP.dwg | Varies | Metal Deck and Concrete Topping Cross-Section |
|  | EARTH.dwg | Varies | Earth |
|  | FINE.dwg | Varies | Fine, Porous Fill |
|  | GLAZE-B.dwg | Varies | Glazed Brick Masonry |
|  | GYPBD.dwg | Varies | Gypsum Board |
|  | H-REIN.dwg | Varies | Horizontal Concrete Reinforcement |
|  | INSUL.dwg | Varies | BATT Insulation |
|  | MTLDECK.dwg | Varies | Metal Deck Cross Section |
|  | PARTICLE.dwg | Varies | Particleboard |
|  | PLASTER.dwg | Varies | Lath and Plaster |
|  | PLYWOOD1.dwg | Varies | Millwork Plywood |
|  | PLYWOOD2.dwg | Varies | Plywood |

| | | | |
|---|---|---|---|
|  | PRECONC.dwg | Varies | Pre-Cast Concrete |
|  | RESIL.dwg | Varies | Resilient Flooring |
|  | RKTMP.dwg | Varies | ??? |
|  | STONE.dwg | Varies | Cut Stone |
|  | TERRAZZO.dwg | Varies | Terrazzo |
|  | TILE.dwg | Varies | Ceramic Tile |
|  | WDBLOCK.dwg | Varies | Wood Blocking |
|  | WDSHIM.dwg | Varies | Wood Shim |
|  | WOOD.dwg | Varies | Wood |

### 1.20.5 CONTENT PREFERENCES

The following represents examples of the file structure and naming conventions used by the Architectural Unit.

Use this template to begin the file structure for your projects on the server. It does not include every instance of every drawing type, but it provides for the drawings types most commonly used in the Architectural/Landscape Unit. The file structure and or naming should not conflict with the current CAD Standards.

### 1.20.6 MODEL FOLDER FILE TYPES

| MODEL FILETYPE | |
|---|---|
| AN01 = COORDINATE GRID | LP06 = LANDSCAPE ENLARGED PLANS |
| AN02 = GENERAL | MIS01 = SITE |
| AN03 = SCHEDULES | MIS02 = COLUMN GRIDS |
| AN04 = REFERENCE | MIS03 = EXISTING CONDITIONS |
| DAT01 = MICROSOFT OFFICE DOCUMENTS | MIS04 = MECHANICAL (use for Schemes, Presentations & Stage I only) |
| DTL00 = ENLARGED PLANS | MIS05 = ELECTRICAL (use for Schemes, Presentations & Stage I) |
| DTL01 = EXTERIOR WALL DETAILS | MIS06 = OTHER AGENCY (NYCT, NYSDOT, LMDC, NJT, ETC) |
| DTL02 = INTERIOR WALLS DETAILS | MIS07 = CIVIL (use for Schemes, Presentations & Stage I only) |
| DTL03 = INTERIOR FINISH DETAILS | MIS08 = PLUMBING (use for Schemes, Presentations & Stage I only) |
| DTL04 = CEILING AND SOFFIT DETAILS | MIS09 = STRUCTURAL (use for Schemes, Presentations & Stage I only) |
| DTL05 = ROOFAND SKYLIGHT DETAILS | MIS10 = LANDSCAPE |
| DTL06 = COLUMN ENCLOSURE DETAILS | MIS11 = ARCHITECTURAL (for Landscape use) |
| DTL07 = STAIR and STAIR LIFT DETAILS | MIS12 = TRAFFIC (use for Schemes, Presentations & Stage I only) |
| DTL08 = ELEVATOR AND WHEELCHAIR LIFT DETAIL | MIS13 = GEOTECHNICAL (use for Schemes, Presentations & Stage I only) |
| DTL09 = ESCALATOR AND MOVING WALKWAY DETAILS | MIS14 = TEMPORARY FACILITIES |
| DTL10 = TOILET DETAILS | MIS15 = CONFLICTS |
| DTL11 = SECURITY AND PEDESTRIAN CONTROLS | MIS16 = CONSTRUCTION STAGING |
| DTL12 = SITE FURNITURE | MIS17 thru MIS99 = USER DEFINED |
| DTL13 = WAYFINDING | RCP01 = REFLECTED CEILING PLANS |
| DTL14 = MISCELLANEOUS DETAILS | RP01 = ROOF PLANS |
| DTL15 thru DTL19 = USER DEFINED | SEC01 = CROSS SECTIONS |
| DTL20 thru DTL29 = LANDSCAPE DETAILS | SEC02 = LONGITUDINAL SECTIONS |
| DTL30 thru DTL99 = USER DEFINED | SEC03 = LANDSCAPE SECTIONS |
| EL01 = EXTERIOR ELEVATIONS | |
| FP01 = FLOOR PLANS | CB = CONTRACT BORDER |
| FPW01 = FLOOR PLAN WALLS | PB01 = PRESENTATION BORDER 34x44 PORTRAIT |
| IEL01 = INTERIOR ELEVATONS | PB02 = PRESENTATION BORDER 34x44 LANDSCAPE |
| IMG01= GRAPHIC IMAGES | PB03 = PRESENTATION BORDER 34x67 |
| IMG02 = 3D DRAWINGS | PB04 = PRESENTATION BORDER ANNOTATION BLOCKS |
| IMG03 = SCANNED IMAGES | |
| IMG04 = USER DEFINED | SK01 = SKETCH BORDER |
| LP00 = LANDSCAPE OVERALL PLANS | AN05 = BORDER KEY PLAN |

| | |
|---|---|
| LP01 = LANDSCAPE PLANTING PLANS | AN06 = BORDER KEY SECTION |
| LP02 = LANDSCAPE PAVING/HARDSCAPE PLANS | AN07 = BORDER LEGEND |
| LP03 = LANDSCAPE GRADING PLANS | |
| LP04 = LANDSCAPE WETLAND MITIGATION | SKA001 = STAGE IV SKETCHES |
| LP05 = LANDSCAPE REMOVALS PLANS | |

### 1.20.6.1 ANNOTATION

AN01 = COORDINATE GRID

- Drawings include any drawings related to the project coordinate system
  - NAD83 or NAD27 – should be obtained from Central Survey
- Where **01** represents the Coordinate Grid category
- The drawing description should define the Coordinate system (*keep compact*) followed by [grid–] then scale) Note: use this system if various scales are required
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-AN01-NYLIFgrid-048.dwg | Attach to quarter scale drawings |
| A[PID]-AN01-NYLIFgrid-096.dwg | Attach to eighth scale drawings |
| A[PID]-AN01-NYLIFgrid-480.dwg | Attach to fortieth scale drawings |

AN02 = GENERAL

- Drawings include any drawings related to the project General sheets
  - Includes overall and Architectural sheets
- Where **02** represents the General sheet category
- The drawing description is preceded by [–] (keep compact)
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-AN02-RegionMap.dwg | Regional Map |
| A[PID]-AN02-GeneralNotes.dwg | Project General Notes |
| A[PID]-AN02-BuildCodeSpecNotes.dwg | Building Code and Specification Notes. |

AN03 = SCHEDULES

- Drawings include any information and drawings related to schedules
- Where **03** represents the Schedule category
- The drawing description is preceded by [–] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-AN03-Index.dwg | Index of Drawings |
| A[PID]-AN03-AbbrevConvention.dwg | List of abbreviations, drawing conventions, Architectural General Notes (for a small project) |
| A[PID]-AN03-SchedDoor.dwg | Door Schedule |

AN04 = REFERENCE

- Drawings include any information and drawings related to schedules
- Where **04** represents the Reference category
- The drawing description is preceded by [–] (*keep compact*)
    - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-AN04- ReferenceSectCuts.dwg | Section cuts used to layout sections overall/details |
| A[PID]-AN04- | |
| A[PID]-AN04- | |

#### 1.20.6.2 MICROSOFT OFFICE LINKED FILES

DAT01 = EXCEL FILES

- Drawings include Microsoft Office Excel files.
- Where **01** represents the MS Linked Files category
- User Defined description
    - A drawing description is *optional*, preceded by [–] (*keep compact*)
        - No spaces between words, use a capital letter to separate words
- May be used to replace schedules generated under AN03 category

Filename Example:

| | |
|---|---|
| A[PID]-DAT01-DwgList.dwg | Index of Drawings |
| A[PID]-DAT01-Cost.dwg | Cost Estimate |

#### 1.20.6.3 DETAILS

DTL00 = ENLARGED PLANS

- Drawings include Enlarged Plans, Sections and Elevations
- Where **00** represents the Enlarged Plan category
- A drawing description is *optional* preceded by [–] (*keep compact*)
    - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-DTL00- FireCommand-Detail.dwg | Includes enlarged plans, elevations and sections |
| A[PID]-DTL00- Bathroom-Detail.dwg | Includes enlarged plans, elevations and sections |
| A[PID]-DTL00- JanitorRoomDetail.dwg | Includes enlarged plans, elevations and sections |

DTL01 = EXTERIOR WALL DETAILS

- Drawings include Plan and Section Detail Blow-ups
- Where **01** represents the Exterior Wall category
- Direction
  - WallExt01 = North WallExt03 = East
  - WallExt02 = South WallExt04 = West
- A drawing description is *optional* preceded by [–] (*keep compact*)
  - Where [**01**] represents the number of sheets in ascending order
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-DTL01-WallsExt00-GeneralDetl01.dwg | include details common to all exterior walls sheet 1 |
| A[PID]-DTL01-WallsExt01-North01.dwg | Sheet 1 |
| A[PID]-DTL01-WallsExt01-North02.dwg | Sheet 2 |
| A[PID]-DTL01-WallsExt02-South.dwg | |
| A[PID]-DTL01-WallsExt03-East.dwg | |
| A[PID]-DTL01-WallsExt04-West.dwg | |

DTL02 = INTERIOR WALLS DETAILS

- Drawings include Plan and Section Detail Blow-ups
- Where **02** represents the Interior Wall category
- Direction
  - WallInt01 = North WallInt03 = East
  - WallInt02 = South WallInt04 = West
- A drawing description is *optional* preceded by [–] (*keep compact*)
  - Where [**01**] represents the number of sheets in ascending order
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-DTL02-WallsInt00-GeneralDetl01.dwg | include details common to all interior walls sheet 1 |
| A[PID]-DTL02-WallsInt01-North01.dwg | Sheet 1 |
| A[PID]-DTL02-WallsInt01-North02.dwg | Sheet 2 |
| A[PID]-DTL02-WallsInt02-South.dwg | |
| A[PID]-DTL02-WallsInt03-East.dwg | |
| A[PID]-DTL02-WallsInt04-West.dwg | |

DTL03 = INTERIOR FINISH DETAILS

- Drawings include Plan and Section Detail Blow-ups including but not limited to
  - Floors, furniture, ticket counters/booths, etc.
- Where **03** represents the Interior Finishes category
- A drawing description is *optional* preceded by [–] (*keep compact*)
  - Where [**01**] represents the number of sheets in ascending order
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-DTL03-(User defined)01.dwg | Sheet 1 |
| A[PID]-DTL03-(User defined)02.dwg | Sheet 2 |
| A[PID]-DTL03-(User defined)01.dwg | Sheet 1 |

DTL04 = CEILING AND SOFFIT DETAILS

- Drawings include Plan and Section Detail Blow-ups
- Where **04** represents the Ceiling and Soffit category
- A drawing description is *optional* preceded by [–] (*keep compact*)
  - Where [**01**] represents the number of sheets in ascending order
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-DTL04-(User defined)01.dwg | Sheet 1 |
| A[PID]-DTL04-(User defined)02.dwg | Sheet 2 |
| A[PID]-DTL04-(User defined)01.dwg | Sheet 1 |

DTL05 = ROOFAND SKYLIGHT DETAILS

- Drawings include Plan and Section Detail Blow-ups of roofs
- Where **05** represents the Roof and Skylight category
- A drawing description is *optional* preceded by [–] (*keep compact*)
  - Where [**01**] represents the number of sheets in ascending order
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-DTL05-*(User defined)*01.dwg | Sheet 1 |
| A[PID]-DTL05-*(User defined)*02.dwg | Sheet 2 |
| A[PID]-DTL05-*(User defined)*01.dwg | Sheet 1 |

DTL06 = COLUMN ENCLOSURE DETAILS

- ❑ Drawings include Plan, Section and Elevation Detail Blow-ups
- ❑ Where **06** represents the Column Enclosure category
- ❑ User Defined description
  - Where [**ColsEncl01**] represents the number of sheets in ascending order
  - A drawing description is *optional*, preceded by [–] (*keep compact*)
    - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-DTL06-ColsEncl01-Mezz.dwg | |
| A[PID]-DTL06-ColsEncl02.dwg | |

DTL07 = STAIR and STAIR LIFT DETAILS

- ❑ Drawings include Plans, Sections, Elevations and Detail blow-ups
- ❑ Where **07** represents the Stair and Stair Lift category
- ❑ User Defined description
  - Where [**Stair01**] represents the actual stair number
  - Where [**Lift01**] represents the actual stair lift number
  - A drawing description is *optional*, preceded by [–] (*keep compact*)
    - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-DTL07-Stair00-GeneralDetl01.dwg | include details common to all stairs sheet 1 |
| A[PID]-DTL07-Stair00-GeneralDetl02.dwg | include details common to all stairs sheet 2 |
| A[PID]-DTL07-Stair01.dwg | |
| A[PID]-DTL07-Stair10-EgressTransitHall.dwg | |
| A[PID]-DTL07-Lift00-GeneralDetl01.dwg | include details common to all stair lift sheet 1 |
| A[PID]-DTL07-Lift00-GeneralDetl02.dwg | include details common to all stair lift sheet 2 |
| A[PID]-DTL07-Lift01.dwg | |
| A[PID]-DTL07-Lift10-EgressTransitHall.dwg | |

DTL08 = ELEVATOR AND WHEELCHAIR LIFTS DETAIL

- Drawings include Plans, Sections, Elevations and Detail Blow-ups
- Where **08** represents the Elevator and/or Wheelchair Lift category
- User Defined description

Filename Example:

| | |
|---|---|
| A[PID]-DTL08-Evtr00-GeneralDetl01.dwg | include details common to all elevators sheet 1 |
| A[PID]-DTL08-Evtr10-PassPATH.dwg | |
| A[PID]-DTL08-Evtr15-PassTransitHall.dwg | |
| A[PID]-DTL08-Evtr01-ServicePATH.dwg | |
| A[PID]-DTL08-Wchr00-GeneralDetl01.dwg | include details common to all wheelchair lifts sheet 1 |
| A[PID]-DTL08-Wchr10-PassPATH.dwg | |
| A[PID]-DTL08-Wchr15-PassTransitHall.dwg | |
| A[PID]-DTL08-Wchr01-ServicePATH.dwg | |

DTL09 = ESCALATOR AND MOVING WALKWAY DETAILS

- Drawings include Plans, Sections, Elevations and Detail blow-ups
- Where **09** represents the Escalator and/or Moving Walkway category
- User Defined description
  - Where [**Escl01**] represents the actual escalator number
  - Where [**Wway01**] represents the actual moving walkway number
  - A drawing description is *optional*, preceded by [–] (*keep compact*)
    - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-DTL09-Escl00-GeneralDetl01.dwg | include details common to all escalators sheet 1 |
| A[PID]-DTL09-Escl00-GeneralDetl02.dwg | include details common to all escalators sheet 2 |
| A[PID]-DTL09-Escl01-.dwg | |
| A[PID]-DTL09-Escl07.dwg | |
| A[PID]-DTL09-Wway00-GeneralDetl01.dwg | include details common to all moving walkways sheet 1 |
| A[PID]-DTL09-Wway00-GeneralDetl02.dwg | include details common to all moving walkways sheet 2 |
| A[PID]-DTL09-Wway01-.dwg | |
| A[PID]-DTL09-Wway07.dwg | |

DTL10 = TOILET DETAILS

- Drawings include Plan, Elevation and Section Blow-ups for
  - Toilet room layouts, locker room layouts, shower stalls
- Where **10** represents the Toilet category
- A drawing description is *optional* preceded by [–] (*keep compact*)
  - Where [**01**] represents the number of sheets in ascending order
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-DTL10-(User defined)01.dwg | Sheet 1 |
| A[PID]-DTL10-(User defined)02.dwg | Sheet 2 |
| A[PID]-DTL10-(User defined)01.dwg | Sheet 1 |

DTL11 = SECURITY AND PEDESTRIAN CONTROLS

- Drawings include Plan, Elevation and Section Detail Blow-ups for
  - Control rooms, fire command stations/booths, baggage equipment, bomb security, etc.
- Where **11** represents the Security and Pedestrian Controls category
- A drawing description is *optional* preceded by [–] (*keep compact*)
  - Where [**01**] represents the number of sheets in ascending order
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-DTL11-(*User defined*)01.dwg | Sheet 1 |
| A[PID]-DTL11-(*User defined*)02.dwg | Sheet 2 |
| A[PID]-DTL11-(*User defined*)01.dwg | Sheet 1 |

DTL12 = SITE FURNITURE

- Drawings include Plan, Elevation and Section Detail Blow-ups for
  - Kiosks, canopies, windscreens, street shelters, etc.
- Where **12** represents the Site Furniture category
- A drawing description is *optional* preceded by [–] (*keep compact*)
  - Where [**01**] represents the number of sheets in ascending order
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-DTL12-(*User defined*)01.dwg | Sheet 1 |
| A[PID]-DTL12-(*User defined*)02.dwg | Sheet 2 |
| A[PID]-DTL12-(*User defined*)01.dwg | Sheet 1 |

DTL13 = WAYFINDING

- Drawings include Plan, Elevation and Section Detail Blow-ups for
  - Signage, graphics
- Where **13** represents the Wayfinding category
- A drawing description is *optional* preceded by [–] (*keep compact*)
  - Where [**01**] represents the number of sheets in ascending order
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-DTL13-(*User defined*)01.dwg | Sheet 1 |
| A[PID]-DTL13-(*User defined*)02.dwg | Sheet 2 |
| A[PID]-DTL13-(*User defined*)01.dwg | Sheet 1 |

DTL14 = MISCELLANEOUS DETAILS

- Drawings include Plan, Elevation and Section Detail Blow-ups
- Where **14** represents the Miscellaneous category
- A drawing description is *optional* preceded by [–] (*keep compact*)
  - Where [**01**] represents the number of sheets in ascending order
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-DTL14-(*User defined*)01.dwg | Sheet 1 |
| A[PID]-DTL14-(*User defined*)02.dwg | Sheet 2 |
| A[PID]-DTL14-(*User defined*)01.dwg | Sheet 1 |

DTL15 thru DTL19 = USER DEFINED

- Drawings include Plan, Elevation and Section Detail Blow-ups
- Where **#** represents the User Defined category
- User Defined description
  - A drawing description is *optional*, preceded by [–] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-DTL##-[*UserDefined*]-[*UserDefined*].dwg | |
| A[PID]-DTL##-[*UserDefined*]-[*UserDefined*].dwg | |
| A[PID]-DTL##-[*UserDefined*]-[*UserDefined*].dwg | |

DTL20 thru DTL29 = LANDSCAPE DETAILS

- Drawings include Plan, Elevation and Section Detail Blow-ups
- Where # represents the User Defined Landscape Detail category
- User Defined description
  - A drawing description is *optional*, preceded by [–] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-DTL##-[*UserDefined*]-[*UserDefined*].dwg | |
| A[PID]-DTL##-[*UserDefined*]-[*UserDefined*].dwg | |
| A[PID]-DTL##-[*UserDefined*]-[*UserDefined*].dwg | |

DTL30 thru DTL99 = USER DEFINED

- Drawings include Plan, Elevation and Section Detail Blow-ups
- Where # represents the User Defined category
- User Defined description
  - A drawing description is *optional*, preceded by [–] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-DTL##-[*UserDefined*]-[*UserDefined*].dwg | |
| A[PID]-DTL##-[*UserDefined*]-[*UserDefined*].dwg | |
| A[PID]-DTL##-[*UserDefined*]-[*UserDefined*].dwg | |

### 1.20.6.4 EXTERIOR ELEVATIONS

EL01 = EXTERIOR ELEVATIONS

- Drawing include Main Exterior Elevations
- Where **01** represents the Exterior Wall direction and/or location
  - 01 = North 03 = East
  - 02 = South 04 = West
- A drawing description is *optional* preceded by [–] (*keep compact*)
  - Where [**01**] represents the number of sheets in ascending order
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-EL01-ViewNorth01.dwg | Exterior elevations looking North Sheet 1 |
| A[PID]-EL01-ViewNorth02.dwg | Exterior elevations looking North Sheet 2 |
| A[PID]-EL02-ViewSouth.dwg | Exterior elevations looking South. Can have multiple sheets |
| A[PID]-EL03-ViewEast.dwg | Exterior elevations looking East. Can have multiple sheets |
| A[PID]-EL04-ViewWest.dwg | Exterior elevations looking West. Can have multiple sheets |

### 1.20.6.5 FLOOR PLANS

FP01 = FLOOR PLANS

- Drawings include any major floor plans including but not limited to:
  - Floor plans, finish plans, detail plans (include additional detail to be shown at a larger scale)
- Where **01** represents the floor level in ascending/descending from the first level chosen
  - The drawing description is preceded by [–] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-FP01-StreetLevel-EL326.dwg | Street Level plan |
| A[PID]-FP01-StreetLevel-EL326Detl01.dwg | Street level plan detail area or sheet 1. can have multiple sheets [represents a detail plan] |
| A[PID]-FP01-StreetLevelExist-EL326.dwg | Existing Street level plan |
| A[PID]-FP02-[User Defined]-EL[user defined].dwg | Level 2 |
| A[PID]-FP02-[User Defined]Exist-EL[user defined].dwg | Existing level 2 |

### 1.20.6.6 FLOOR PLANS WALLS

FPW01 = FLOOR PLANS WALLS

- Drawings include walls used in the floor plan, finish plan and reflected ceiling plan
  - Where **01** represents the floor level in ascending/descending from the first level chosen
- Number should be correspond to floor plan
  - The drawing description is preceded by [–] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-FPW01-StreetLevel-EL326.dwg | Street Level plan walls |
| A[PID]-FPW02-[*User Defined*]-EL[*user defined*].dwg | Level 2 plan walls |

### 1.20.6.7 INTERIOR ELEVATIONS

IEL01 = INTERIOR ELEVATIONS

- Drawing include Interior Elevations
- Where **01** represents the Interior Wall direction and/or location
  - 01 = North 03 = East
  - 02 = South 04 = West
- A drawing description is *optional* preceded by [–] (*keep compact*)
  - Where [**01**] represents the number of sheets in ascending order
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-IEL01-ViewNorth01.dwg | Interior elevations looking North Sheet 1 |
| A[PID]-IEL01-ViewNorth02.dwg | Interior elevations looking North Sheet 2 |
| A[PID]-IEL02-ViewSouth.dwg | Interior elevations looking South. Can have multiple sheets |
| A[PID]-IEL03-ViewEast.dwg | Interior elevations looking East. Can have multiple sheets |
| A[PID]-IEL04-ViewWest.dwg | Interior elevations looking West. Can have multiple sheets |

### 1.20.6.8 GRAPHIC, SCANNED AND 3D IMAGES

IMG01 = GRAPHIC IMAGES

- Drawings include Jpegs, Bmps, Tiffs, etc.
- Where 01 represents the Graphic Images category
- User Defined description
  - A drawing description is optional, preceded by [–] (keep compact)
    - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-IMG01-Sign01.dwg | Signage panel image 1 |
| A[PID]-IMG01-Sign02.dwg | Signage panel image 2 |

IMG02 = 3D DRAWINGS

- Drawings include any 3D drawings created in CAD
- Where **02** represents the 3D Images category
- User Defined description
  - A drawing description is *optional*, preceded by [–] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-IMG02-3D-PlanEL250.dwg | 3D plan for EL. 250 |
| A[PID]-IMG02-3D-*[User Defined]*.dwg | |

IMG03 = SCANNED IMAGES

- Drawings include any Scanned images
- Where **03** represents the Scanned Images category
- User Defined description
  - A drawing description is *optional*, preceded by [–] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-IMG03-PlanEL250.dwg | Scanned image of Removals Plan at elevation 250 (*add a description to indicate what the image is used for. ex:Rmvls)* |
| A[PID]-IMG03-[*User Defined*].dwg | |

IMG04 = USER DEFINED

- Drawings include any 3D representations not covered in IMG01 thru IMG03
- Where **04** represents the User Defined category
- User Defined description
  - A drawing description is *optional*, preceded by [–] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-IMG04-[*UserDefined*]-[*UserDefined*].dwg | |
| A[PID]-IMG04-[*UserDefined*]-[*UserDefined*].dwg | |

### 1.20.6.9 LANDSCAPE

LP00 = OVERALL LANDSCAPE PLANS

- Drawings include any overall Landscape plans
- Where 00 represents the Overall Landscape Plan category
  - The drawing description is preceded by [–] (keep compact)
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-LP00-[User Defined]-[User Defined].dwg | |
| A[PID]-LP00-[User Defined]-[User Defined].dwg | |

LP01 = PLANTING PLANS

- Drawings include any planting plans
- Where **01** represents the Planting Plan category
  - The drawing description is preceded by [–] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-LP01-Plant-[*User Defined*].dwg | |
| A[PID]-LP01-Plant-[*User Defined*].dwg | |

LP02 = PAVING/HARDSCAPE PLANS

- Drawings include any Paving and/or Hardscape Landscape plans
- Where **02** represents the Paving/Hardscape Plan category
- The drawing description is preceded by [–] (*keep compact*)
    - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-LP02-Pave-[*User Defined*].dwg | |
| A[PID]-LP02-Hard-[*User Defined*].dwg | |

LP03 = GRADING PLANS

- Drawings include any Grading Landscape plans
- Where **03** represents the Grading Plan category
- The drawing description is preceded by [–] (*keep compact*)
    - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-LP03-Grade-[*User Defined*].dwg | |
| A[PID]-LP03-Grade-[*User Defined*].dwg | |

LP04 = WETLAND MITIGATION

- Drawings include any Wetland Mitigation plans
- Where **04** represents the Wetland Mitigation category
- The drawing description is preceded by [–] (*keep compact*)
    - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-LP02-WetMit-[*User Defined*].dwg | |
| A[PID]-LP02-WetMit-[*User Defined*].dwg | |

LP05 = REMOVALS PLANS

- Drawings include any Landscape Removals plans
- Where **05** represents the Removals category
- The drawing description is preceded by [–] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-LP02-Rmvl-[*User Defined*].dwg | |
| A[PID]-LP02-Rmvl-[*User Defined*].dwg | |

LP06 = ENLARGED PLANS

- Drawings include any Landscape Enlarged plans
- Where **06** represents the Enlarged Plans category
- The drawing description is preceded by [–] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename Example:

| | |
|---|---|
| A[PID]-LP02-[User Defined]-[User Defined].dwg | |
| A[PID]-LP02-[User Defined]-[User Defined].dwg | |

### 1.20.6.10 MISCELLANEOUS

MIS01 = SITE

- Drawing include Plans used for background information
- Where **01** represents the Site category
- User Defined description
- A drawing description is *optional*, preceded by [–] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename example:

| | |
|---|---|
| A[PID]-MIS01-Site-Bldg.dwg | Background buildings |
| A[PID]-MIS01-Site-Bldg(*user defined*).dwg | Particular background buildings |

| | |
|---|---|
| A[PID]-MIS01-Site-BldgExist.dwg | Existing background buildings |
| A[PID]-MIS01-Site-CurbExist.dwg | Existing curb |

MIS02 = COLUMN GRIDS

- ❑ Drawing include plan, section and elevation column grids
- ❑ Where **02** represents the Column Grid category
- ❑ User Defined description
  - o A drawing description is *optional*, preceded by [–] (*keep compact*)
  - o Description can be a word description or elevation number
  - o No spaces between words, use a capital letter to separate words

Filename example:

| | |
|---|---|
| A[PID]-MIS02-ColGrid-Plan.dwg | Plan column grid |
| A[PID]-MIS02-ColGrid-PlanMezz.dwg | Mezzanine level column grid |
| A[PID]-MIS02-ColGrid-PlanEL276.dwg | Column grid at elevation 276.00’ |
| A[PID]-MIS02-ColGrid-SectCross.dwg | Cross section column grid |
| A[PID]-MIS02-ColGrid-SectLong.dwg | Longitudinal section column grid |
| A[PID]-MIS02-ColGrid-Elev.dwg | Elevation column grid |

MIS03 = EXISTING CONDITIONS

- ❑ Drawing include other Existing Conditions used for background information
- ❑ When inserting existing conditions into a drawing, place elements on a layer marked EXST
  - o Refer to list on K:\Application\EAD\CAD_Standards\2018\Architectural\Layers
- ❑ Where **03** represents the Existing Conditions category
- ❑ User Defined description
  - o A drawing description is *optional*, preceded by [–] (*keep compact*)
  - o No spaces between words, use a capital letter to separate words

Filename example:

| | |
|---|---|
| A[PID]-MIS03-ArrivExist.dwg | Existing arrivals hall plan |
| A[PID]-MIS03-[*User Defined*].dwg | |
| A[PID]-MIS03-WTC-EL250Exist.dwg | WTC existing conditions at El. 250.00’ |

MIS04 = MECHANICAL

- ❑ Use for Pre-Design, Stage 1, Schemes and Presentations. For Stage 2,3 & 4 Xref information from the **Mechanical *PUBLISH*** folder
- ❑ Drawing include plans and sections of Mechanical layouts

- Where **04** represents the Mechanical layout category
- User Defined description
  - A drawing description is *optional*, preceded by [-**Mech**] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename example:

| | |
|---|---|
| A[PID]-MIS04-MechPlan-EL250.dwg | El 250.00' preliminary Mechanical layout |
| A[PID]-MIS04-Mech[*User Defined*].dwg | |

MIS05 = ELECTRICAL

- Use for Pre-Design, Stage 1, Schemes and Presentations. For Stage 2,3 & 4 Xref information from the **Electrical *PUBLISH*** folder
- Drawing include plans and sections of Electrical layouts
- Where **05** represents the Lighting layout category
- User Defined description
  - A drawing description is optional, preceded by [–**Elect**] (keep compact)
  - No spaces between words, use a capital letter to separate words

Filename example:

| | |
|---|---|
| A[PID]-MIS05-ElectPlan-EL250.dwg | El 250.00' preliminary lighting layout |
| A[PID]-MIS05-Elect[*User Defined*].dwg | |

MIS06 = OTHER AGENCY

- Drawing include other Agency Plans used for background information
- Where **06** represents the Other Agency category
- User Defined description
  - A drawing description is *optional*, preceded by [–] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename example:

| | |
|---|---|
| A[PID]-MIS06-NYCT-RWConc.dwg | RW Concourse from New York City Transit |
| A[PID]-MIS06-WFC-Bldg.dwg | World Financial Center Buildings |
| A[PID]-MIS06-WTC-PkngEL250.dwg | World Trade Center parking layout at elevation 250.00' |

MIS07 = CIVIL

- Use for Pre-Design, Stage 1, Schemes and Presentations. For Stage 2,3 & 4 Xref information from the **Civil *PUBLISH*** folder
- Drawing include plans and sections of Civil layouts
- Where **07** represents the Civil layout category
- User Defined description
  - A drawing description is *optional*, preceded by [–Civil] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename example:

| | |
|---|---|
| A[PID]-MIS07-CivilPlan-EL250.dwg | El 250.00' preliminary Civil layout |
| A[PID]-MIS07-Civil[*User Defined*].dwg | |

MIS08 = PLUMBING

- Use for Pre-Design, Stage 1, Schemes and Presentations. For Stage 2,3 & 4 Xref information from the **Mechanical *PUBLISH*** folder
- Drawing include plans and sections of Plumbing layouts
- Where **08** represents the Plumbing layout category
- User Defined description
  - A drawing description is *optional*, preceded by [–**Plumb**] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename example:

| | |
|---|---|
| A[PID]-MIS08-PlumbPlan-EL250.dwg | El 250.00' preliminary Plumbing layout |
| A[PID]-MIS08-Plumb[*User Defined*].dwg | |

MIS09 = STRUCTURAL

- Use for Pre-Design, Stage 1, Schemes and Presentations. For Stage 2,3 & 4 Xref information from the **Structural *PUBLISH*** folder
- Drawing include plans and sections of Structural layouts
- Where **09** represents the Structural layout category
- User Defined description
  - A drawing description is *optional*, preceded by [–**Struct**] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename example:

| | |
|---|---|
| A[PID]-MIS09-StructPlan-EL250.dwg | El 250.00' preliminary Structural layout |
| A[PID]-MIS09-Struct[*User Defined*].dwg | |

MIS10 = LANDSCAPE (for Landscape use only)

- Drawing include Miscellaneous layouts for Landscape
- Where **10** represents the Miscellaneous Landscape layout category
- User Defined description
  - A drawing description is *optional*, preceded by [–] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename example:

| | |
|---|---|
| A[PID]-MIS10-[User Defined]-[User Defined].dwg | |
| A[PID]-MIS10-[User Defined]-[User Defined].dwg | |

MIS11 = ARCHITECTURAL (for Landscape use only)

- Use for Pre-Design and Stage 1. For Stage 2,3,&4 Xref information from the **Architectural *PUBLISH*** folder
- Drawing include plans and sections of Architectural layouts
- Where **11** represents the Architectural layout category
- User Defined description
  - A drawing description is *optional*, preceded by [–**Arch**] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename example:

| | |
|---|---|
| A[PID]-MIS11-ArchPlan-EL250.dwg | El 250.00' preliminary Architectural layout |
| A[PID]-MIS11-Arch[*User Defined*].dwg | |

MIS12 = TRAFFIC

- Use for Pre-Design, Stage 1, Schemes and Presentations. For Stage 2,3 & 4 Xref information from the **Traffic *PUBLISH*** folder
- Drawing include plans and sections of Traffic layouts
- Where **12** represents the Traffic layout category
- User Defined description
  - A drawing description is *optional*, preceded by [–**Traf**] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename example:

| | |
|---|---|
| A[PID]-MIS12-TrafPlan-EL250.dwg | El 250.00' preliminary Traffic layout |
| A[PID]-MIS12-Traf[*User Defined*].dwg | |

MIS13 = GEOTECHNICAL

- Use for Pre-Design, Stage 1, Schemes and Presentations. For Stage 2,3 & 4 Xref information from the **Geotechnical *PUBLISH*** folder
- Drawing include plans and sections of Geotechnical layouts
- Where **13** represents the Geotechnical layout category
- User Defined description
  - A drawing description is *optional*, preceded by [–**Geo**] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename example:

| | |
|---|---|
| A[PID]-MIS13-GeoPlan-EL250.dwg | El 250.00' preliminary Geotechnical layout |
| A[PID]-MIS13-Geo[*User Defined*].dwg | |

MIS14 = TEMPORARY FACILITIES

- Drawing include plan, section and elevation
- Where **14** represents the Temporary Facilities category
- User Defined description
  - A drawing description is *optional*, preceded by [–] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename example:

| | |
|---|---|
| A[PID]-MIS14-PlatformEL250.dwg | Temporary Platform at EL 250.00' |
| A[PID]-MIS14-Stair01.dwg | Temporary Stair No. 1 |
| A[PID]-MIS14-[UserDefined].dwg | |

MIS15 = CONFLICTS

- Drawing include plan, section and elevation
- Where **15** represents the Conflicts category
- User Defined description
  - A drawing description is *optional*, preceded by [–] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename example:

| | |
|---|---|
| A[PID]-MIS15-Conflict-EL250.dwg | El 250.00' conflicts |
| A[PID]-MIS15-Conflict-CrossSect.dwg | Cross sectional conflicts |
| A[PID]-MIS15-Conflict-ElevWest.dwg | West elevation conflicts |

MIS016 = CONSTRUCTION STAGING

- ❑ Drawing include plan, section and elevation
- ❑ Where **16** represents the Construction Staging category
- ❑ User Defined description
  - o A drawing description is *optional*, preceded by [–] (*keep compact*)
  - o No spaces between words, use a capital letter to separate words

Filename example:

| | |
|---|---|
| A[PID]-MIS16-PlanEL250-PH01.dwg | El 250.00' Construction Staging Plan Phase 1 |
| A[PID]-MIS16-PlanEL250-PH02.dwg | El 250.00' Construction Staging Plan Phase 2 |
| A[PID]-MIS16-SectionCross01-PH01.dwg | Construction Staging Cross Section 1 Phase 1 |
| A[PID]-MIS16-SectionCross01-PH02.dwg | Construction Staging Cross Section 1 Phase 2 |
| A[PID]-MIS16-[*UserDefined*]-PH[*Counter*].dwg | |

MIS17 thru MIS99 = USER DEFINED

- ❑ Drawing include plan, section and elevation
- ❑ Where # represents the User Defined category
- ❑ User Defined description
  - o A drawing description is *optional*, preceded by [–] (*keep compact*)
  - o No spaces between words, use a capital letter to separate words

Filename example:

| | |
|---|---|
| A[PID]-MIS##-[*UserDefined*]-[*UserDefined*].dwg | |
| A[PID]-MIS##-[*UserDefined*]-[*UserDefined*].dwg | |
| A[PID]-MIS##-[*UserDefined*]-[*UserDefined*].dwg | |

### 1.20.6.11 REFLECTED CEILING PLANS

RCP01 = REFLECTED CEILING PLANS

- Drawings include any major reflected ceiling plans including but not limited to:
  - Detail plans *(include additional detail to be shown at a larger scale)*
- Where **01** represents the floor level in ascending/descending from the first level chosen
  - The drawing description is preceded by [–] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename example:

| | |
|---|---|
| A[PID]-RCP01-StreetLevel-EL326.dwg | Street Level RCP |
| A[PID]-RCP01-StreetLevel-EL326Detl01.dwg | Street level RCP detail area or sheet 1. *can have multiple sheets [represents a detail plan]* |
| A[PID]-RCP01-StreetLevelExist-EL326.dwg | Existing Street level RCP |
| A[PID]-RCP02-[*User Defined*]-EL[*user defined*].dwg | Level 2 RCP |
| A[PID]-RCP02-[*User Defined*]Exist-EL[*user defined*].dwg | Existing level 2 RCP |

### 1.20.6.12 ROOF PLANS

RP01 = ROOF PLANS

- Drawings include any major Roof plans including but not limited to:
  - Detail plans (include additional detail to be shown at a larger scale)
- Where **01** represents the floor level in ascending/descending from the first level chosen or a counter if each level DOES NOT have a roof plan
  - The drawing description is preceded by [–] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename example:

| | |
|---|---|
| A[PID]-RP01-StreetLevel-EL326.dwg | Street Level roof plan |
| A[PID]-RP01-StreetLevel-EL326Detl01.dwg | Street level roof plan detail area or sheet 1 *[represents a detail plan]* |
| A[PID]-RP01-StreetLevelExist-EL326.dwg | Existing Street level roof plan |
| A[PID]-RP02-[*User Defined*]-EL[*user defined*].dwg | Level 2 roof plan |
| A[PID]-RP02-[*User Defined*]Exist-EL[*user defined*].dwg | Existing level 2 roof plan |

### 1.20.6.13 SECTIONS

SEC01 = CROSS SECTIONS

- ❑ Drawing include Overall building sections
- ❑ When using a section type **01** represents Cross sections
- ❑ A drawing description is *optional* preceded by [–] (*keep compact*)
  - Where [**01**] represents the number of sheets in ascending order
  - No spaces between words, use a capital letter to separate words

Filename example:

| | |
|---|---|
| A[PID]-SEC01-TermB-Cross-Col01.dwg | Cross section at Terminal B column line 1 |
| A[PID]-SEC01-TermB-Cross-Col25.dwg | Cross section at Terminal B column line 25 |

Example of a counter:

| | |
|---|---|
| A[PID]-SEC01-Cross-North01.dwg | Section looking North sheet 1 |
| A[PID]-SEC01-Cross-North02.dwg | Section looking North sheet 2 |
| A[PID]-SEC01-Cross-[*User Defined*].dwg | |

SEC02 = LONGITUDINAL SECTIONS

- ❑ Drawing include Overall building sections
- ❑ When using a section type **02** represents Longitudinal sections
- ❑ A drawing description is *optional* preceded by [–] (*keep compact*)
  - Where [**01**] represents the number of sheets in ascending order
  - No spaces between words, use a capital letter to separate words

Filename example:

| | |
|---|---|
| A[PID]-SEC02-TermB-Long-A.dwg | Longitudinal Section A at Terminal B |
| A[PID]-SEC02-TermB-Long-Airside.dwg | Longitudinal section at Terminal B airside |

Example of a counter

| | |
|---|---|
| A[PID]-SEC02-Long-East01.dwg | Section looking East sheet 1 |
| A[PID]-SEC02-Long-East02.dwg | Section looking East sheet 2 |
| A[PID]-SEC02-Long-[*User Defined*].dwg | |

SEC03 = LANDSCAPE SECTIONS

- ❑ Drawing include Overall building sections
- ❑ When using a section type **03** represents Landscape sections

- A drawing description is *optional* preceded by [–] (*keep compact*)
  - Where [**01**] represents the number of sheets in ascending order
  - No spaces between words, use a capital letter to separate words

Filename example:

| | |
|---|---|
| A[PID]-SEC03-[*User Defined*]-[01].dwg | |
| A[PID]-SEC03-[*User Defined*]-[02].dwg | |

### 1.20.7 PLOTSHEETS FOLDER FILE TYPES

The filenames in the Plotsheets folder should be consistent with the cad standard naming convention.

**Use when Drawing Series DOES NOT exceed 9**

A[*PID*]-[*Drawing Type*][*Series #*][*Drawing #*].dwg A12345678-A101

A[PID]-[Drawing Type][Series #][Drawing #].dwg A12345678-LS101 (Landscape Only)

**Used when Drawing Series exceeds 9**

A[*PID*]-[*Drawing Type*][*Series #*][*Drawing #*].dwg A12345678-A0101

A[*PID*]-[*Drawing Type*][*Series #*][*Drawing #*].dwg A12345678-LS0101 (Landscape Only)

When a series system is being used, it would be helpful to create a dummy file to use as a series separator. The following are examples of series separator. The actual series name will vary with the project

**The C&P and SSI sheet should be numbered sequentially after the unmarked sheets**

Filename example:

**TYPICAL DRAWING SET [drawing series 9 or less]**

File separators should not be copied to the *SUBMITTALS* folder for CAD reviews

| | |
|---|---|
| A[PID]-G000 ---- PS PROJECT-GENERAL.dwg | File separator. No data in this file; should be read only |
| A[PID]-G001.dwg | Title Sheet |
| A[PID]-G002.dwg | Index of Drawings |
| A[PID]-G201.dwg | Regional Map and/or Project Map |
| A[PID]-A100 ---- PS GENERAL.dwg | File separator. No data in this file; should be read only *Includes specification, general and code notes, etc.* |
| A[PID]-A101.dwg | |
| A[PID]-A200 ---- PS PLANS.dwg | File separator. No data in this file; should be read only |
| A[PID]-A201.dwg | |
| A[PID]-A300 ---- PS SECTIONS.dwg | File separator. No data in this file; should be read only |
| A[PID]-A301.dwg | |
| A[PID]-A400 ---- PS ELEVATIONS.dwg | File separator. No data in this file; should be read only |
| A[PID]-A401.dwg | |
| A[PID]-A500 ---- PS EXTERIOR DETAILS.dwg | File separator. No data in this file; should be read only *Includes wall sections, wall details, roof details* |
| A[PID]-A501.dwg | |
| A[PID]-A600 ---- PS DETAILS.dwg | File separator. No data in this file; should be read only |
| A[PID]-A601.dwg | |
| A[PID]-A700 ---- PS SCHEDULES.dwg | File separator. No data in this file; should be read only *Includes Doors, Room, Finish* |
| A[PID]-A701.dwg | |
| A[PID]-A800 ---- PS GRAPHICS.dwg | File separator. No data in this file; should be read only |
| A[PID]-A801.dwg | |
| A[PID]-A900 ---- PS [User Defined].dwg | File separator. No data in this file; should be read only |
| A[PID]-A901.dwg | |
| A[PID]-LS001 ---- PS [User Defined].dwg | File separator. No data in this file; should be read only |
| A[PID]-LS001.dwg | |
| A[PID]-LS002.dwg | |
| A[PID]-LS003.dwg | |

**TYPICAL DRAWING SET [drawing series exceeding 9]**

File separators should not be copied to the *SUBMITTALS* folder for CAD reviews

| | |
|---|---|
| A[PID]-G0000 ---- PS PROJECT-GENERAL.dwg | File separator. No data in this file; should be read only |
| A[PID]-G0001.dwg | Title Sheet |
| A[PID]-G0002.dwg | Title Sheet [*CP & SSI Sheets*] |
| A[PID]-G0101.dwg | Index of Drawings |

| | |
|---|---|
| A[PID]-G0102.dwg | Index of Drawings [*CP & SSI Sheets*] |
| A[PID]-G0201.dwg | Regional Map and/or Project Map |
| A[PID]-A0100 ---- PS GENERAL.dwg | File separator. No data in this file; should be read only *Includes specification, general and code notes, etc.* |
| A[PID]-A0101.dwg | |
| A[PID]-A0200 ---- PS PLANS.dwg | File separator. No data in this file; should be read only |
| A[PID]-A0201.dwg | |
| A[PID]-A0300 ---- PS SECTIONS.dwg | File separator. No data in this file; should be read only |
| A[PID]-A0301.dwg | |
| A[PID]-A0400 ---- PS ELEVATIONS.dwg | File separator. No data in this file; should be read only |
| A[PID]-A0401.dwg | |
| A[PID]-A0500 ---- PS EXTERIOR DETAILS.dwg | File separator. No data in this file; should be read only<br>*Includes wall sections, wall details, roof details* |
| A[PID]-A0501.dwg | |
| A[PID]-A0600 ---- PS DETAILS.dwg | File separator. No data in this file; should be read only |
| A[PID]-A0601.dwg | |
| A[PID]-A0700 ---- PS SCHEDULES.dwg | File separator. No data in this file; should be read only *Includes Doors, Room, Finish* |
| A[PID]-A0701.dwg | |
| A[PID]-A0800 ---- PS GRAPHICS.dwg | File separator. No data in this file; should be read only |
| A[PID]-A0801.dwg | |
| A[PID]-A0900 ---- PS [User Defined].dwg | File separator. No data in this file; should be read only |
| A[PID]-A0901.dwg | |
| A[PID]-A1000 ---- PS [User Defined].dwg | File separator. No data in this file; should be read only |
| A[PID]-A1001.dwg | |
| A[PID]-A1100 ---- PS [User Defined].dwg | File separator. No data in this file; should be read only |
| A[PID]-A1101.dwg | |
| A[PID]-LS0000 ---- PS [User Defined].dwg | File separator. No data in this file; should be read only |
| A[PID]-LS0001.dwg | |
| A[PID]-LS0002.dwg | |
| A[PID]-LS0003.dwg | |

**CONSTRUCTION STAGING [drawing series 9 or less]**

File separators should not be copied to the *SUBMITTALS* folder for CAD reviews

| | |
|---|---|
| A[PID]-CS100 ---- PS STAGING GENERAL.dwg | File separator. No data in this file; should be read only |
| A[PID]-CS101.dwg | |
| A[PID]-CS200 ---- PS STAGING PLANS.dwg | File separator. No data in this file; should be read only |
| A[PID]-CS201.dwg | |

| | |
|---|---|
| A[PID]-CS300 ---- PS STAGING SECTIONS.dwg | File separator. No data in this file; should be read only |
| A[PID]-CS301.dwg | |

**CONSTRUCTION STAGING [drawing series exceeding 9]**

File separators should not be copied to the *SUBMITTALS* folder for CAD reviews

| | |
|---|---|
| A[PID]-CS0100 ---- PS STAGING GENERAL.dwg | File separator. No data in this file; should be read only |
| A[PID]-CS0101.dwg | |
| A[PID]-CS0200 ---- PS STAGING PLANS.dwg | File separator. No data in this file; should be read only |
| A[PID]-CS0201.dwg | |
| A[PID]-CS0300 ---- PS STAGING SECTIONS.dwg | File separator. No data in this file; should be read only |
| A[PID]-CS0301.dwg | |

**TEMPORARY FACILITIES [drawing series 9 or less]**

File separators should not be copied to the *SUBMITTALS* folder for CAD reviews

| | |
|---|---|
| A[PID]-AT100 ---- PS TEMP FACILITIES GENERAL.dwg | File separator. No data in this file; should be read only |
| A[PID]-AT101.dwg | |
| A[PID]-AT200 ---- PS TEMP FACILITIES PLANS.dwg | File separator. No data in this file; should be read only |
| A[PID]-AT201.dwg | |
| A[PID]-AT300 ---- PS TEMP FACILITIES SECTIONS.dwg | File separator. No data in this file; should be read only |
| A[PID]-AT301.dwg | |
| A[PID]-AT400 ---- PS TEMP FACILITIES DETAILS.dwg | File separator. No data in this file; should be read only |
| A[PID]-AT401.dwg | |

**TEMPORARY FACILITIES [drawing series exceeding 9]**

File separators should not be copied to the *SUBMITTALS* folder for CAD reviews

| | |
|---|---|
| A[PID]-AT0100 ---- PS TEMP FACILITIES GENERAL.dwg | File separator. No data in this file; should be read only |
| A[PID]-AT0101.dwg | |
| A[PID]-AT0200 ---- PS TEMP FACILITIES PLANS.dwg | File separator. No data in this file; should be read only |
| A[PID]-AT0201.dwg | |
| A[PID]-AT0300 ---- PS TEMP FACILITIES SECTIONS.dwg | File separator. No data in this file; should be read only |
| A[PID]-AT0301.dwg | |
| A[PID]-AT0400 ---- PS TEMP FACILITIES DETAILS.dwg | File separator. No data in this file; should be read only |
| A[PID]-AT0401.dwg | |

## 1.20.8 PUBLISH FOLDER FILE TYPES

### 1.20.8.1 BORDER SHEETS

CB = CONTRACT BORDER SHEET

- Drawings include any drawings related to the project Contract Border
  - Original should be obtained from K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Contract_Borders
  - One Border file should be used by both PANYNJ EAD and their respective Consultants
  - Consultant information should be inserted, as a block, using the pre-defined stamps located on the server K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Contract_Borders\Stamps
  - If your project has been designated CP, insert the CP stamp as a block, as required from (see EAD CAD Standards manual for further usage) K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Contract_Borders\Stamps

Filename example:

| | |
|---|---|
| [PID]-CB.dwg | Standard contract border – 22x34 |
| [PID]-CB.dwg | Over Size contract border – 34x56 |
| [PID]-CB-Info.dwg | Standard contract border side bar information block |
| [PID]-CB-Info_OS.dwg | Over Size contract border side bar information block |

AN05 = BORDER SHEET KEY PLAN

- Drawings include any drawings related to the project Key plan used for plans
- Where **05** represents the Border Key Plan category
  - The drawing description is preceded by [–] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename example:

| | |
|---|---|
| A[PID]-AN05-KeyPlan-EL250.dwg | Key plan for EL. 250 |
| A[PID]-AN05-KeyPlan-EL264.dwg | Key plan for EL. 264 |
| A[PID]-AN05-KeyPlan-Arriv.dwg | Key plan for Arrivals Level |

AN06 = BORDER SHEET KEY SECTION

- Drawings include any drawings related to the project Key plan used for sections
- Where **06** represents the Border Key Section category
  - The drawing description is preceded by [–] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename example:

| | |
|---|---|
| A[PID]-AN06-KeySect-EL250.dwg | Key plan for EL. 250 |
| A[PID]-AN06-KeySect-EL264.dwg | Key plan for EL. 264 |
| A[PID]-AN06-KeySect-Arriv.dwg | Key plan for Arrivals Level |

AN07 = BORDER SHEET LEGEND

- Drawings include any drawings related to the project Legend used for
  - Construction Staging, Light fixture types, etc.
- Where **07** represents the Border Legend category
  - The drawing description is preceded by [–] (*keep compact*)
  - No spaces between words, use a capital letter to separate words

Filename example:

| | |
|---|---|
| A[PID]-AN07-LegendStaging.dwg | Legend used for Construction Staging Plans |
| A[PID]-AN07-LegendStagingSect.dwg | Legend used for Construction Staging Sections |
| A[PID]-AN07-LegendLights.dwg | Legend used for RCP Plans |

PB01 = PRESENTATION BORDER SHEET PORTRAIT

- Drawings include any drawings related to the project Portrait Presentation Border
  - Original should be obtained from K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Contract_Borders\Stamps
- Where **01** represents the Portrait Presentation Border category
- If Border will be used by other disciplines remove the '*Discipline Code*' in front of the PID
- Anticipated use
  - Stage 1 or Pre-Stage 1

Filename example:

| | |
|---|---|
| A[PID]-PB01-34x44P.dwg | Presentation border – 34x44 Portrait |
| A[PID]-PB01-34x44PInfo.dwg | Presentation border – 34x44 Portrait information block |

PB02 = PRESENTATION BORDER SHEET LANDSCAPE

- Drawings include any drawings related to the project Landscape Presentation Border
  - Original should be obtained from K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Contract_Borders\Stamps
  - Where **02** represents the Landscape Presentation Border category
- If Border will be used by other disciplines remove the '*Discipline Code*' in front of the PID
- Anticipated use
  - Stage 1 or Pre-Stage 1

Filename example:

| | |
|---|---|
| A[PID]-PB02-34x44L.dwg | Presentation border – 34x44 Landscape |
| A[PID]-PB02-34x44LInfo.dwg | Presentation border – 34x44 Landscape information block |

PB03 = PRESENTATION BORDER SHEET OVERSIZE

- Drawings include any drawings related to the project Oversized Presentation Border

Original should be obtained from

K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Contract_Borders\Stamps

- Where **03** represents the Oversize Presentation Border category

- ❑ If Border will be used by other disciplines remove the '*Discipline Code*' in front of the PID
- ❑ Anticipated use
  - Stage 1 or Pre-Stage 1

Filename example:

| | |
|---|---|
| A[PID]-PB03-34x67.dwg | Presentation border – 34x67 |
| A[PID]-PB03-34x67Info.dwg | Presentation border – 34x67 Landscape information block |
| A[PID]-PB03-34X??.dwg | Presentation border – 34x varied size (*will not be available on the L:/drive – custom size*) |
| A[PID]-PB03-34X??Info.dwg | Presentation border – 34x varied size information block (*will not be available on the L:/drive – custom size*) |

PB04 = PRESENTATION BORDER ANNOTATION

- ❑ Drawings include any annotation drawings related to the project Presentation Border
  - Original should be obtained from location designated by Task Leader
- ❑ Drawing should be inserted into border file as a block using a designated point, indicated in drawing, **not** 0,0
- ❑ Where **04** represents the Presentation Border Annotation category
- ❑ If Border will be used by other disciplines remove the '*Discipline Code*' in front of the PID
- ❑ Anticipated use
  - Stage 1 or Pre-Stage 1

Filename example:

| | |
|---|---|
| A[PID]-PB04-Date.dwg | Presentation border date file |
| A[PID]-PB04-Disclaimer.dwg | Presentation disclaimer file (*uses' WIPEOUT' command ) if needed* |
| A[PID]-PB04-Legend.dwg | Presentation program legend (*uses' WIPEOUT' command*) |

SK01 = SKETCH BORDER SHEET

- ❑ Drawings include any drawings related to the project Sketch Border
  - Original should be obtained from

    K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Contract_Borders\Stamps
- ❑ Where **01** represents the Sketch Border category
- ❑ Anticipated use
  - During Stage 2 or 3 when design sketches are required. These borders have the same viewport as the Standard and Oversize Contract Borders. This will allow an easy transition into the contract format once the sketch has been approved.
- ❑ These Plotsheets should not be copied to the *SUBMITTALS* folder for CAD reviews

Filename example:

| | |
|---|---|
| A[PID]-SKA01.dwg | Standard sketch border – 22x34 |
| A[PID]-SKA01.dwg | Over Size sketch border – 34x56 |
| A[PID]-SKA01-Info.dwg | Standard sketch border side bar information block |
| A[PID]-SKA01-Info_OS.dwg | Over Size sketch border side bar information block |

## 1.20.9 STAGE IV FILE TYPES

### 1.20.9.1 SKETCHES

SK = STAGE IV DRAWING

- Drawings include any drawings related to the project Stage IV
  - Original should be obtained from K:\Application\EAD\CAD_Standards\2018\All_Disciplines\Contract_Borders
  - Server location of sketches to be *M:\FACILITY\PID\Architectural\SCHEMES\Stage 4\Sketches*
  - Where [**001**] represents the number of sheets in ascending order
  - Where [**A**] represents multiple sheets in sketch drawing
  - No spaces between words, use a capital letter to separate words
- Anticipated use:
  - Responses to RFIs
  - Clarification for shop drawing submittals
  - Discipline coordination
- Drawing should be self-contained, drawing and border in one file.
  - Drawing information should be E-Transmitted, as a bound file, from the *MODEL* or *PLOTSHEETS* folder to the designated *sketch* or *RFI Response* folder.
  - Border should be inserted, as a block, into Paper Space of the sketch
- Create a PDF to be placed in the MANAGEMENTDOCS Folder for submission to Document Control along with or as your RFI response
  - *M:\FACILITY\PID\Architectural\MANAGEMENTDOCS\Stage-4\SubmittalsPDFsRFIsRFQs\Sketches*
- These Plotsheets should not be copied to the *SUBMITTALS* folder for CAD reviews

Filenames from server:

| | |
|---|---|
| Border - ANSI A - Horizontal.dwg | 8 ½" x 11" Landscape Sketch Border |
| Border - ANSI A - Vertical.dwg | 8 ½" x 11" Portrait Sketch Border |
| Border - ANSI B - Horizontal.dwg | 11" x 17" Landscape Sketch Border |
| Border - ANSI B - Vertical.dwg | 11" x 17" Portrait Sketch Border |

| | |
|---|---|
| Border – 22 x 34.dwg | 22” x 34” Sketch Border |
| Border – 34 x 56.dwg | 34” x 56” Sketch Border |

Filename Example: for [**DWG**] files

| | |
|---|---|
| A[PID]-SKA001-[*User Defined*].dwg | First drawing in Stage IV Sketch set |
| A[PID]-SKA032A-[*User Defined*].dwg | 32nd drawing in Stage IV Sketch set requiring more than one sketch |

Filename Example: for [**PDF**] files

| | |
|---|---|
| A[PID]-SKA001_TransNo00229.pdf | Clarification sketch issued with a shop drawing submittal return |
| A[PID]-SKA029_6BRFINo30.pdf | Clarification sketch issued with a RFI response |
| A[PID]-SKA032_6B-AltEntryLayoutCoord.pdf | Sketch issued for discipline coordination |

**1.20.9.2**

Filename example: for [**DWG**] FILES - SHEET vs. SERVER

The **zero** in the server file name is to sort the drawings in ascending order on the server. The zero is **not** required for the drawing number on the plot sheet.

| SERVER FILE NAME | DRAWING NUMBER ON PLOT SHEET |
|---|---|
| A[PID]-SKA001-[*User Defined*].dwg | |
| A[PID]-SKA029-[*User Defined*].dwg | |
| A[PID]-SKA032A-[*User Defined*].dwg | |
| A[PID]-SKA110-[*User Defined*].dwg | |

## 1.21 APPENDIX G – CIVIL DISCIPLINE

### 1.21.1 CONTENT PREFERENCES

This Section Is Under Construction

## 1.21.2 LAYER STRATAGEM

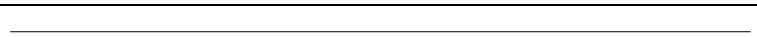
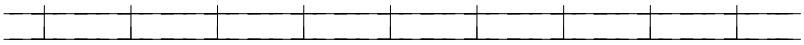
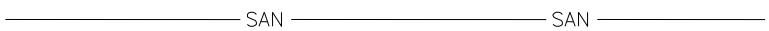
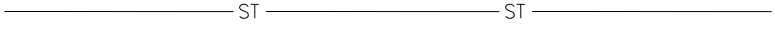
### 1.21.2.1 CIVIL WORK

| DISCIPLINE | MAJOR | MINOR | DESC | COLOR | LINETYPE | PLOTS | DESCRIPTION |
|---|---|---|---|---|---|---|---|
| C | ALGN | BRNG | | 131 | Continuous | Yes | BEARINGS |
| C | ALGN | COGO | | 100 | Continuous | Yes | COORDINATE GEOMETRY INFORMATION |
| C | ALGN | CRVE | | 131 | Continuous | Yes | CURVE NUMBERS |
| C | ALGN | DIMS | | 100 | Continuous | Yes | ALIGNMENT DIMENSIONS |
| C | ALGN | GAGE | | 131 | Continuous | Yes | GAUGE LINE, TRACK |
| C | ALGN | HOR_ | EDGE | 131 | Continuous | Yes | ROAD/TAXIWAY/RUNWAY EDGE ALIGNMENTS |
| C | ALGN | HOR_ | TEMP | 131 | Continuous | Yes | TEMPORARY CENTERLINE, HORIZONTAL ALIGNMENT |
| C | ALGN | NOTE | | 121 | Continuous | Yes | ALIGNMENT ANNOTATIONS AND NOTES |
| C | ALGN | PCPT | | 100 | Continuous | Yes | PC/PT/PCC/PRC/POC BUBBLES AND TEXT |
| C | ALGN | PROF | GRID | 251 | Continuous | Yes | PROFILE GRID |
| C | ALGN | PROP | | 100 | Phantom2 | Yes | PROPERTY LINES AND TEXT |
| C | ALGN | ROWL | | 131 | Phantom | Yes | RIGHT OF WAY LINES AND TEXT |
| C | ALGN | STAT | | 100 | Continuous | Yes | ALIGNMENT STATIONS AND TEXT |
| C | ALGN | SWCH | | 100 | Continuous | Yes | POINT OF SWITCH |
| C | ALGN | TPRD | | 131 | Continuous | Yes | TEMPORARY ROAD ALIGNMENTS |
| C | ALGN | TRAK | | 131 | RR | Yes | TRACK ALIGNMENT |
| C | ALGN | TRAK | GAGE | 131 | RR | Yes | GAUGE LINE, TRACK |
| C | ALGN | TRAK | SWCH | 131 | RR | Yes | POINT OF SWITCH |
| C | ALGN | TRAK | VERT | 131 | RR | Yes | TOP OF RAIL |
| C | ALGN | VERT | | 131 | Continuous | Yes | TOP AT RAIL |
| C | ANNO | CHNG | | 92 | Divide | Yes | IDENTIFICATION OF UPDATED WORK |
| C | ANNO | COGO | GRID | 252 | Continuous | Yes | COORDINATE GEOMETRY GRID |
| C | ANNO | CONS | | 30 | Continuous | Yes | CONSTRUCTION LINES |
| C | ANNO | DIMS | | 1 | Continuous | Yes | DIMENSIONS |
| C | ANNO | LGND | | 121 | Continuous | Yes | LEGEND ITEMS |
| C | ANNO | MTCH | | 172 | Continuous | Yes | MATCH LINE |
| C | ANNO | NARW | | 121 | Continuous | Yes | NORTH ARROW |
| C | ANNO | NOTE | | 121 | Continuous | Yes | NOTES |
| C | ANNO | REVS | | 220 | Continuous | Yes | REVISION BUBBLE AND TRIANGLE |
| C | ANNO | SCLE | | 121 | Continuous | Yes | SCALE BAR |
| C | ANNO | TABL | | 131 | Continuous | Yes | CURVE DATA TABLE, DRAINAGE TABLE, ETC |
| C | ANNO | TEXT | | 100 | Continuous | Yes | MISC. TEXT & CALLOUTS WITH ASSOC. LEADERLINES |
| C | ANNO | TITL | | 172 | Continuous | Yes | TITLES |
| C | ANNO | VPRT | | 200 | Continuous | Yes | VIEW PORT |
| C | DETL | | | 131 | Continuous | Yes | DETAIL FEATURES |
| C | DETL | DIMS | | 100 | Continuous | Yes | DETAIL DIMENSIONS |
| C | DETL | NOTE | | 121 | Continuous | Yes | DETAIL NOTES AND ANNOTATIONS |
| C | GRAD | COGO | | 121 | Continuous | Yes | GRADING COORDINATE GEOMETRY |
| C | GRAD | DIMS | | 100 | Continuous | Yes | GRADING DIMENSIONS |
| C | GRAD | INDX | | 220 | Continuous | Yes | INDEX CONTOURS |
| C | GRAD | INTR | | 92 | Continuous | Yes | INTERMEDIATE CONTOURS |
| C | GRAD | LIMT | | 13 | Continuous | Yes | LIMIT OF GRADING |
| C | GRAD | NOTE | | 121 | Continuous | Yes | GRADING NOTES AND ANNOTATION |
| C | GRAD | SPOT | | 12 | Continuous | Yes | SPOT ELEVATIONS |
| C | MARK | AIRS | | 220 | Continuous | Yes | PAVEMENT MARKINGS AIRSIDE |
| C | MARK | COGO | | 100 | Continuous | Yes | PAVEMENT MARKING COORDINATE GEOMETRY |
| C | MARK | DIMS | | 100 | Continuous | Yes | PAVEMENT MARKING DIMENSIONS |
| C | MARK | NOTE | | 121 | Continuous | Yes | PAVEMENT MARKING NOTES AND ANNOTATION |
| C | MARK | PARK | | 220 | Continuous | Yes | PAVEMENT MARKINGS PARKING |
| C | MARK | ROAD | | 220 | Continuous | Yes | PAVEMENT MARKINGS ROADS |
| C | MARK | TEXT | | 100 | Continuous | Yes | MISC. TEXT & CALLOUTS WITH ASSOC. LEADER LINES |
| C | PAVE | ASPH | | 12 | Continuous | Yes | ROAD, PARKING LOT AND AIRSIDE |
| C | PAVE | COGO | | 121 | Continuous | Yes | PAVING COORDINATE GEOMETRY DATA |
| C | PAVE | BRDR | PATT | 14 | Continuous | Yes | PAVEMENT HATCH BORDERS |
| C | PAVE | CONC | | 12 | Continuous | Yes | ROAD, PARKING LOT AND AIRSIDE |
| C | PAVE | CURB | BACK | 1 | Continuous | Yes | BACK OF CURB |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C | PAVE | CURB | FACE | 131 | Continuous | Yes | FACE OF CURB |
| C | PAVE | DIMS | | 100 | Continuous | Yes | PAVEMENT DIMENSIONS |
| C | PAVE | GRAV | | 12 | Continuous | Yes | GRAVEL |
| C | PAVE | JBAR | | 220 | Continuous | Yes | JERSEY BARRIERS |
| C | PAVE | JNTS | | 220 | Continuous | Yes | EXPANSION JOINTS |
| C | PAVE | LIMT | | 13 | Dashed | Yes | PAVING LIMITS |
| C | PAVE | NOTE | | 121 | Continuous | Yes | PAVING NOTES |
| C | PAVE | SECT | | 172 | Continuous | Yes | SECTION MARKS |
| C | PROF | | | 1 | Continuous | Yes | PROFILE FEATURES |
| C | PROF | BASE | | 1 | Continuous | Yes | PROFILE BASE |
| C | PROF | FGCL | | 131 | Continuous | Yes | PROFILE FINISHED GROUND |
| C | PROF | NOTE | | 100 | Continuous | Yes | PROFILE NOTES AND ANNOTATIONS |
| C | PROF | TEXT | | 100 | Continuous | Yes | MISC. TEXT & CALLOUTS WITH ASSOC. LEADER LINES |
| C | PROF | XING | | 131 | Continuous | Yes | PROFILE UTILITY CROSSINGS |
| C | SECT | | | 131 | Continuous | Yes | SECTION FEATURES |
| C | SECT | DIMS | | 100 | Continuous | Yes | SECTION DIMENSIONS |
| C | SECT | NOTE | | 121 | Continuous | Yes | SECTION NOTES AND ANNOTATIONS |
| C | SECT | SMPL | | 220 | Continuous | Yes | SECTION SAMPLE LINES |
| C | SECT | VIEW | | 100 | Continuous | Yes | SECTION VIEWS |
| C | SECT | VIEW | TABL | 100 | Continuous | Yes | SECTION VIEW TABLES |
| C | SITE | ABUT | | 131 | Continuous | Yes | BRIDGE ABUTMENTS |
| C | SITE | BLDG | | 131 | Continuous | Yes | BUILDINGS, SHEDS, MAJOR AND MINOR SITE FEATURES |
| C | SITE | BLDG | TEXT | 100 | Continuous | Yes | MINOR AND MAJOR SITE FEATURE TEXT |
| C | SITE | COGO | | 121 | Continuous | Yes | SITEWORK COORDINATE GEOMETRY |
| C | SITE | FNCE | | 131 | Continuous | Yes | FENCES AND BOLLARDS |
| C | SITE | FNDN | | 131 | Continuous | Yes | FOUNDATIONS |
| C | SITE | GUID | | 131 | Continuous | Yes | GUIDE RAILS |
| C | SITE | LAND | | 131 | Continuous | Yes | LANDSCAPE FEATURES |
| C | SITE | NOTE | | 100 | Continuous | Yes | SITE NOTES AND ANNOTATIONS |
| C | SITE | SIGN | | 220 | Continuous | Yes | SIGNS |
| C | SITE | SIGN | TEXT | 100 | Continuous | Yes | SIGN TEXT |
| C | SITE | TICK | | 121 | Continuous | Yes | TICK MARKS |
| C | SITE | WALL | | 131 | Continuous | Yes | WALLS |
| C | STAG | BRDR | PATT | 12 | Continuous | Yes | HATCH BORDERS |
| C | STAG | DIMS | | 100 | Continuous | Yes | CONSTRUCTION STAGE DIMENSIONS |
| C | STAG | NOTE | | 100 | Continuous | Yes | CONSTRUCTION STAGE NOTES AND ANNOTATIONS |
| C | STAG | STAGE | | 12 | Continuous | Yes | CONSTRUCTION STAGE FEATURES |
| C | STAG | STAG | TEXT | 100 | Continuous | Yes | MISC. TEXT & CALLOUTS WITH ASSOC. LEADER LINES |
| C | UTIL | CB__ | | 121 | Continuous | Yes | CATCH BASINS |
| C | UTIL | CB__ | TEXT | 100 | Continuous | Yes | CATCH BASIN TEXT |
| C | UTIL | COGO | | 121 | Continuous | Yes | UTILITY COORDINATE GEOMETRY |
| C | UTIL | DIMS | | 121 | Continuous | Yes | UTILITY DIMENSIONS |
| C | UTIL | FIRE | | 121 | HPW | Yes | FIRE ( HIGH PRESSURE WATER LINE) |
| C | UTIL | FIRE | TEXT | 100 | Continuous | Yes | FIRE ( HIGH PRESSURE WATER LINE) TEXT |
| C | UTIL | FUEL | | 121 | FOS | Yes | FUEL LINE |
| C | UTIL | FUEL | TEXT | 100 | Continuous | Yes | FUEL TEXT |
| C | UTIL | GASL | | 121 | G | Yes | GAS LINE |
| C | UTIL | GASL | TEXT | 100 | Continuous | Yes | GAS TEXT |
| C | UTIL | HYDR | | 121 | Continuous | Yes | HYDRANTS |
| C | UTIL | HYDR | TEXT | 100 | Continuous | Yes | HYDRANTS TEXT |
| C | UTIL | MH__ | | 121 | Continuous | Yes | MANHOLES OTHER THAN SANITARY OR STORM |
| C | UTIL | MH__ | TEXT | 100 | Continuous | Yes | MANHOLES TEXT |
| C | UTIL | NOTE | | 121 | Continuous | Yes | NOTES AND ANNOTATION |
| C | UTIL | SSMH | | 121 | Continuous | Yes | SANITARY SEWER MANHOLES |
| C | UTIL | SSMH | TEXT | 100 | Continuous | Yes | SANITARY SEWER MANHOLES TEXT |
| C | UTIL | SSWR | | 121 | SAN | Yes | SANITARY SEWER |
| C | UTIL | SSWR | TEXT | 100 | Continuous | Yes | SANITARY SEWER TEXT |
| C | UTIL | STEM | HPRS | 121 | HPS | Yes | HIGH PRESSURE STEAM LINE |
| C | UTIL | STEM | LPRS | 121 | LPS | Yes | LOW PRESSURE STEAM LINE |
| C | UTIL | STEM | MPRS | 121 | MPS | Yes | MEDIUM PRESSURE STEAM LINE |
| C | UTIL | STEM | TEXT | 100 | Continuous | Yes | STEAM TEXT |
| C | UTIL | STRM | | 121 | ST | Yes | STORM DRAINAGE LINE |
| C | UTIL | STRM | CB__ | 121 | Continuous | Yes | STORM DRAINAGE CATCH BASINS |
| C | UTIL | STRM | MH__ | 121 | Continuous | Yes | STORM DRAINAGE MANHOLES |
| C | UTIL | STRM | SD__ | 121 | Continuous | Yes | SUB-DRAIN |
| C | UTIL | STRM | TEXT | 100 | Continuous | Yes | STORM DRAINAGE TEXT |
| C | UTIL | WATR | COLD | 121 | CW | Yes | COLD WATER LINE |
| C | UTIL | WATR | HOTW | 121 | HWS | Yes | HOT WATER LINE |
| C | UTIL | WATR | HPRS | 121 | HPW | Yes | HIGH PRESSURE WATER LINE |
| C | UTIL | WATR | LPRS | 121 | LPS | Yes | LOW PRESSURE WATER LINE |

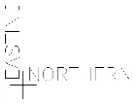
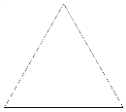
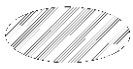
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C | UTIL | WATR | MPRS | 121 | MPS | Yes | MEDIUM PRESSURE WATER LINE |
| C | UTIL | WATR | TEXT | 100 | C | Yes | WATER TEXT |
| C | XREF | | | 121 | Continuous | Yes | EXTERNAL REFERENCE DRAWINGS |
| C | XREF | RAST | | 121 | Continuous | Yes | RASTER IMAGES |

### 1.21.3 LINETYPES

| Name | Description | Example |
|---|---|---|
| C | Communication Line (1x) |  |
| Continuous | Continuous |  |
| CW | Cold Water Line (1x) |  |
| DASHED | Dashed (1x) |  |
| DIVIDE | Divide (1x) | |
| FOS | Fuel Line (1x) |  |
| G | Gas Line (1) |  |
| HPS | High Pressure Steam Line (1x) |  |
| HPW | High Pressure Water Line (1x) |  |
| HWS | Hot Water Line (1x) |  |
| LPS | Low Pressure Water Line (1x) |  |
| MPS | Medium Pressure Water Line (1x) |  |
| PHANTOM | Phantom (1x) |  |
| PHANTOM2 | Phantom (0.5x) | |
| RR | Rail Road (1x) |  |
| SAN | Sanitary Sewer Line (1x) |  |
| ST | Storm Drainage Line (1x) |  |

## 1.21.4 SYMBOLS

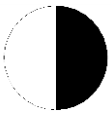
### 1.21.4.1 DRAFTING CONVENTIONS

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | civ-CALLOUT.dwg | Varies | Callout for Plans |
|  | civ-DET-SYMB.dwg | Varies | Detail Symbol for Plans |
|  | CS_CURVE.dwg | C-ALGN-CRVE | Curve Number Label |
|  | CS_FG-POINT.dwg | C-GRAD-SPOT | Finished Grade Spot Elevation |
|  | CS_GRID.dwg | C-ANNO-COGO-GRID | Cogo Grid Tick |
|  | CS_PC.dwg | C-ALGN-CRVE | Bubble |
|  | CS_PITO.dwg | C-ALGN-CRVE | Revision Triangle |
|  | CS_PS.dwg | C-ALGN-CRVE | Grid Bubble |
|  | CS_REMTIC.dwg | C-RMVL-TICK | Removal Tic |
|  | CS_SECMARK1.dwg | C-PAVE-SECT | Section Marker for Plans |
|  | CS_SECMARK2.dwg | C-PAVE-SECT | Section Marker for Plans |
|  | CS_TWEDMKR.dwg | C-MARK-AIRS | Taxiway Edge Marker |
|  | FG-POINT.dwg | C-GRAD-SPOT | Finished Grade Spot Elevation |

| | | | |
|---|---|---|---|
|  | POINT (old).DWG | C-GRAD-SPOT | Finished Grade Spot Elevation (Old) |
|  | Sec1.dwg | C-ANNO-SYMB | Section, Detail, Elev. Callout |
|  | Sec2.dwg | C-ANNO-SYMB | Section, Detail, Elev. Callout |
|  | Sec3.dwg | C-ANNO-SYMB | Section, Detail, Elev. Callout |
|  | Sec4.dwg | C-ANNO-SYMB | Section, Detail, Elev. Callout |
|  | Sec5.dwg | C-ANNO-SYMB | Section, Detail, Elev. Callout |
|  | Sec6.dwg | C-ANNO-SYMB | Section, Detail, Elev. Callout |
|  | Sec7.dwg | C-ANNO-SYMB | Section, Detail, Elev. Callout |
|  | Sec8.dwg | C-ANNO-SYMB | Section, Detail, Elev. Callout |
|  | Section Title.dwg | C-ANNO-SYMB | Section Title |

### 1.21.4.2 UTILITIES

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | CS_CB.dwg | C-UTIL-CBSN | Catch Basin |
|  | CS-CBADJ.dwg | C-UTIL-CBSN | Adjust Removal Catch Basin |
|  | CS_CB-MH.dwg | C-UTIL-MANH | Convert Removal Catch Basin to Manhole |

| | | | |
|---|---|---|---|
|  | CS_EBOX.dwg | C-UTIL-MANH | Adjusted Electrical Box/Hand Hole |
|  | CS_FLOW.dwg | (Layer is Same as it is for Utility Pipe) | Flow Arrow |
|  | CS_HYD.dwg | C-UTIL-HYDR | Utility Hydrant |
|  | CS_MH.dwg | C-UTIL-MANH | Manhole |
|  | CS_MGADJ.dwg | C-UTIL-MANH | Adjust Removal Manhole |
|  | CS_PIPEPLUG.dwg | C-UTIL-STRM | Pipe Plug |
|  | CS_VALVE.dwg | (Layer is Same as it is for Utility Pipe) | Utility Line Valve |

## 1.21.5 CIVIL 3D

This Section Is Under Construction

### 1.21.5.1 DATA SHORTCUTS (NY-NJ PORT AUTHORITY CIVIL 3D OBJECT SHARING)

Most AutoCAD users are familiar with referencing techniques for sharing drawing information, such as XREF, wblock, import and attach. Civil 3D uses intelligent objects, such as surfaces and profiles, which do not retain intelligence through typical external references*. The proper way to share intelligent civil 3D objects is through Data Shortcuts. Objects include:

- Alignments
- Surfaces
- Profiles
- Sections
- Corridors
- Pipe Networks

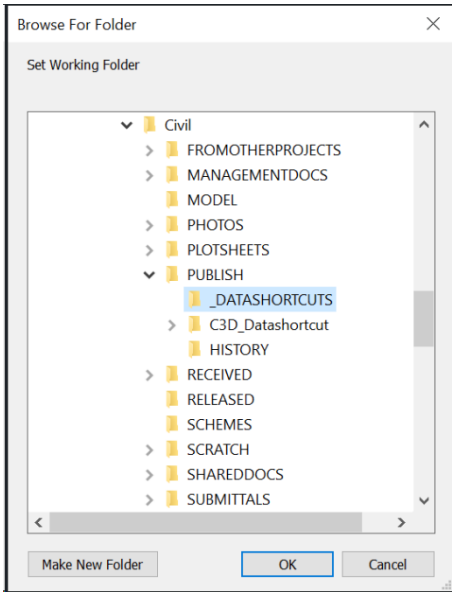
Note: *Users can add labels to civil objects through xref, but cannot design/build from data.

Data Shortcut method involves two steps, sharing (export) and referencing (import).

Note: You may only wish to do step 2- Reference Data Shortcuts. Skip to page 4.

#### *1.21.5.1.1 SHARE DATA SHORTCUTS*

Open drawing containing the civil objects to be shared. These objects must be native to the open drawing and not externally referenced (xref). Once a user has created a civil object, the drawing must be saved. This object is shared with other users through the Data Shortcuts within the prospector tab of the Toolspace.

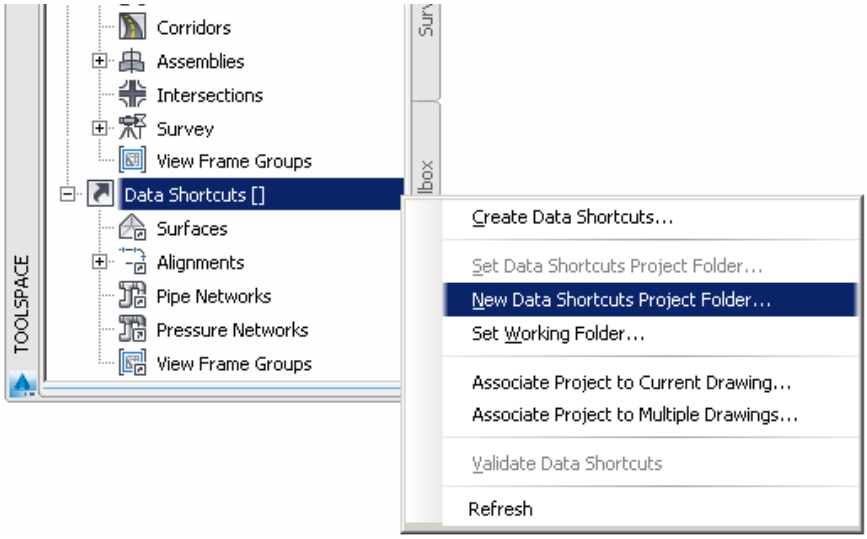



**Set the Working Folder**

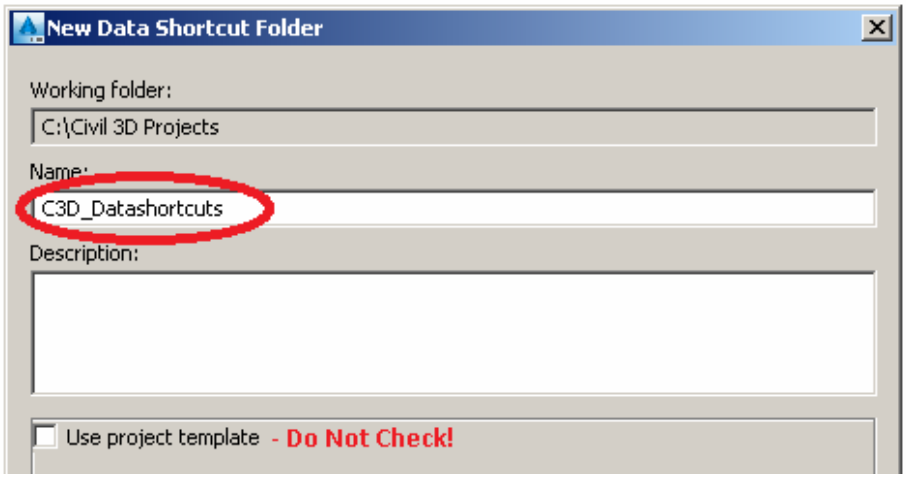
Right click on the Data Shortcut and select Set Working Folder. In the Civil folder of the PID folder, select the **_DATASHORTCUTS** inside the **PUBLISH** folder as the Working Folder. Click OK.

**Create New Data Shortcuts Folder**

Right click the Data Shortcuts again and select **New Data Shortcuts Folder…**

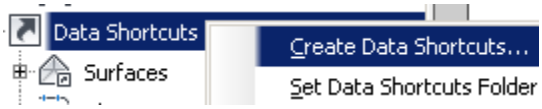



Enter the name **C3D_Datashortcuts** and click **OK**. (Do Not Check box for 'Use Project Template')

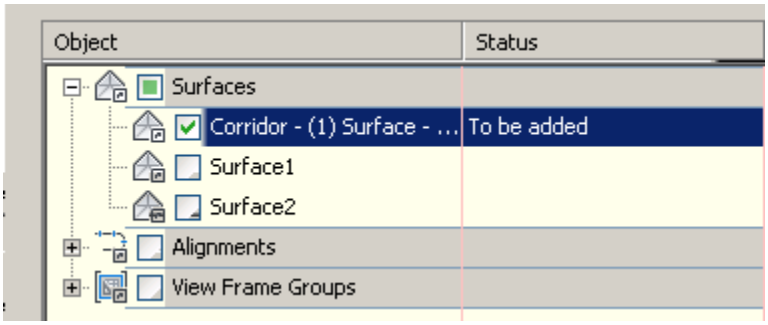



**Create Data Shortcuts**

Right Click Data Shortcuts again. Select Create Data Shortcuts.




Civil 3D will collect all intelligent civil objects within the drawing and display them in a dialog box. Users can specify which objects they wish to share by checking them off. Multiple objects, such as surfaces and alignments, can be added to the data shortcut.




Check desired objects to share and click **OK**. Data Shortcuts have been created.

Note: The data shortcut is saved to the C3D_Datashortcuts folder in xml format. Civil 3D is programmed to recognize these files to allow users to reference the intelligent data. If the object is modified in the native drawing, the xml and drawings referencing the data shortcut will automatically update.

**Note: The following page describes the process of Referencing Data Shortcuts. This may be the only step users would use if not actually creating Civil 3D objects or data shortcuts.**

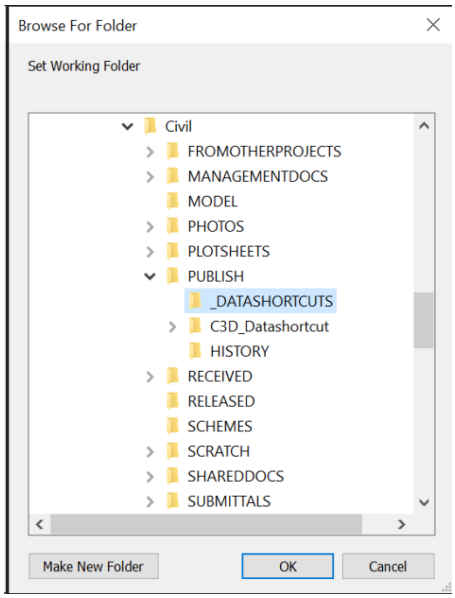
*1.21.5.1.2 Reference Data Shortcuts*

Another user may want to import these objects into their drawing. The user must open another drawing or create new in order to reference data shortcut objects.

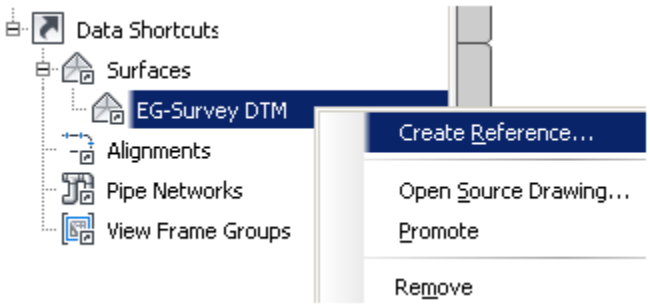
(The drawing **must be saved** prior to referencing)

**Set the Working Folder**

Right click on the Data Shortcut and select **Set Working Folder**. In the Civil folder of the PID folder, select the **_DATASHORTCUTS** folder inside the **PUBLISH** folder as the Working Folder. Click **OK**.




The Data Shortcuts will display a + symbol next to the object type available for reference. Click the + to expand the object type. Select the object and right click. Select **Create Reference…**




(If ***Create Reference…*** is disabled (grey), you must save drawing and reattempt this step.)

A dialog box will appear to allow user to set or change object style and name. Click **OK**. Object is successfully referenced and should display on screen. (Zoom extents). **Save Drawing**

**THE PORT AUTHORITY OF NY & NJ** has compiled sets of custom parts for use with Civil 3D Pipe Networks. There are several part families for both Pipes and Structures. The Pipe Network Catalog Settings should be mapped to the designated location for all Civil 3D users to access both standard parts and Port Authority custom parts:

#### 1.21.5.2 PIPE NETWORK

Set Pipe Network Catalog…

K:\Application\EAD\CAD_Standards\2018\Civil\Pipes Catalog

The Pipe settings include Pipes catalogs:

- Metric Pipe Catalog
- **Port Authority of NY and NJ Custom Pipe Catalog**
- US Imperial Pipe Catalog

The Pipe settings include Structure catalogs:

- Metric Structure Catalog
- **Port Authority of NY and NJ Custom Structure Catalog**
- US Imperial Structure Catalog

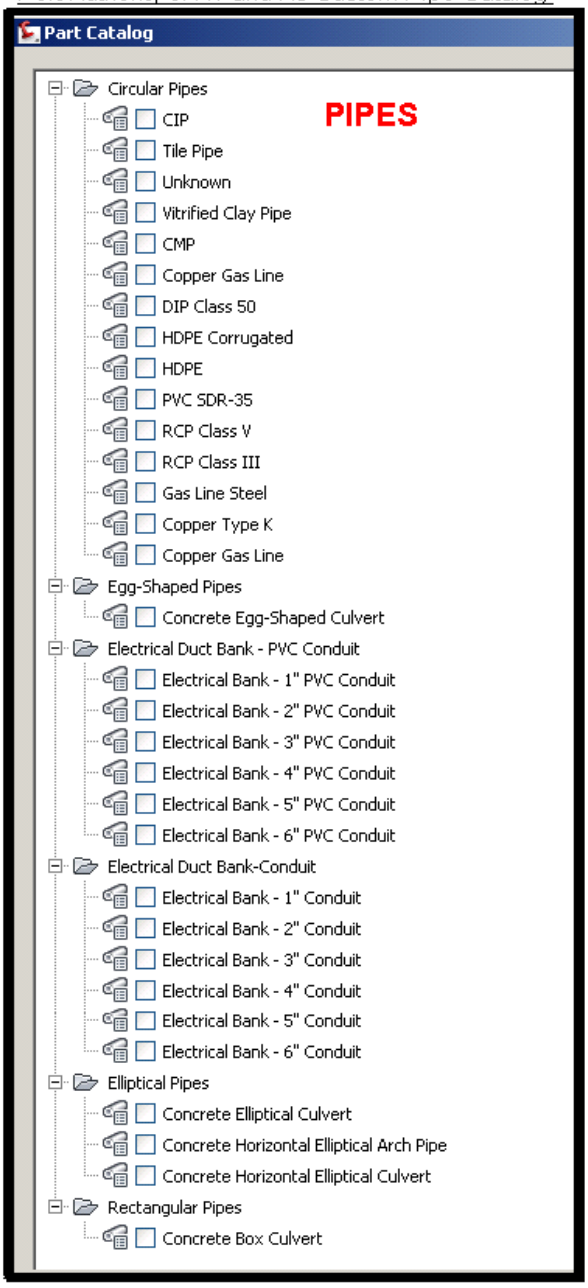
After the catalogs have been set to **Port Authority of NY and NJ Custom Catalog**, Pipe Network parts lists can be created and edited using these custom Port Authority parts.

To create or edit parts list, locate or create the part list. Add part families to pipes and structures. Add part sizes for part families as needed or add all sizes.

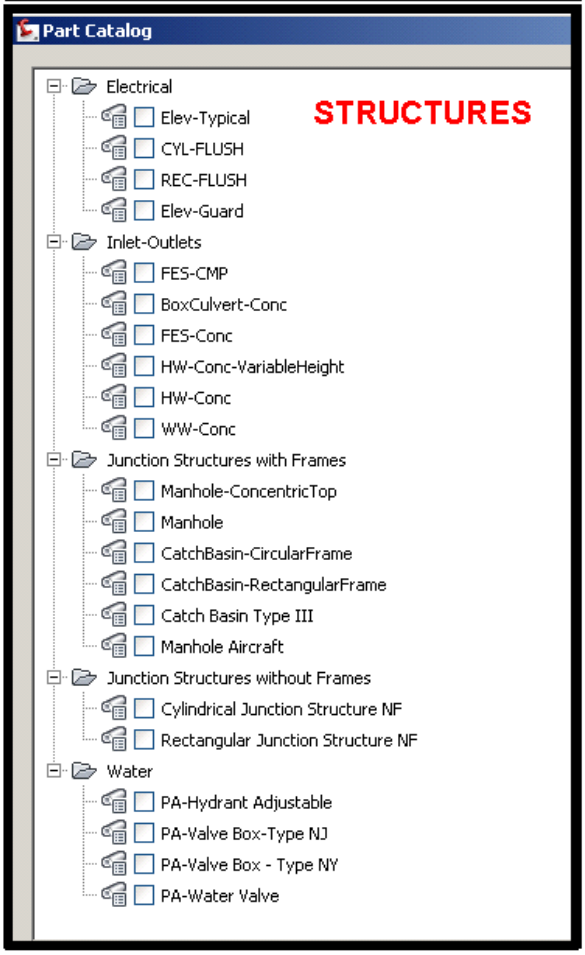
A complete list and description of pipes can be found at
K:\Application\EAD\CAD_Standards\2018\Civil\Pipes Catalog\PA-Pipes\PA-Pipes.htm

A complete list and description of structures can be found at
K:\Application\EAD\CAD_Standards\2018\Civil\Pipes Catalog\PA-Structures\PA-Structures.htm

Port Authority of NY and NJ Custom Pipe Catalog




Port Authority of NY and NJ Custom Structure Catalog



# 1.22 APPENDIX H – ELECTRICAL DISCIPLINE

## 1.22.1 CONTENT PREFERENCES

This Section Is Under Construction

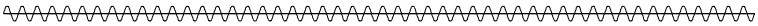
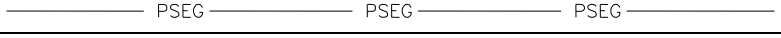
## 1.22.2 LAYER STRATAGEM

### 1.22.2.1 ELECTRICAL WORK

| DISCIPLINE | MAJOR | MINOR | DESC | COLOR | LINETYPE | PLOTS | DESCRIPTION |
|---|---|---|---|---|---|---|---|
| E | ANNO | BUBL | | 142 | Continuous | Yes | Revision Bubble |
| E | ANNO | CHNG | | 7 | Continuous | Yes | Identification of Updated Work |
| E | ANNO | DIMS | | 7 | Continuous | Yes | Dimensions |
| E | ANNO | IDEN | | 2 | Continuous | Yes | Identification Text |
| E | ANNO | MLIN | | 142 | MATCHLINE | Yes | Match Lines |
| E | ANNO | NPLT | | 170 | Continuous | No | Construction and Reference Lines |
| E | ANNO | TEXT | | 2 | Continuous | Yes | Annotations and Callouts |
| E | ANNO | TITL | | 6 | Continuous | Yes | Titles |
| E | ANNO | TTLB | | 130 | Continuous | Yes | Contract Border |
| E | ANNO | VPRT | | 130 | Continuous | No | View Port |
| E | DETL | EXTR | | 6 | Continuous | Yes | Exterior Detail Lines |
| E | DETL | HDWR | | 7 | Continuous | Yes | Hardware Detail Lines |
| E | DETL | HIDN | | 8 | HIDDEN2 | Yes | Hidden Detail Lines |
| E | DETL | INTR | | 170 | Continuous | Yes | Interior Detail Lines |
| E | DETL | MISC | | 7 | Continuous | Yes | Miscellaneous Detail Lines |
| E | DETL | PATT | | 252 | Continuous | Yes | Detail Hatches |
| E | DETL | TEXT | | 2 | Continuous | Yes | Detail Annotations |
| E | FIRE | ALDL | | 170 | Continuous | Yes | ALDL Devices - Smoke Detectors and Other Input Devices |
| E | FIRE | SPKR | | 40 | Continuous | Yes | Fire System Speaker |
| E | FIRE | STRB | | 170 | Continuous | Yes | Fire System Strobes |
| E | FIRE | CABL | | 170 | Continuous | Yes | Fire Alarm Cables |
| E | GNRL | | | 3 | Continuous | Yes | General Features |
| E | GNRL | BKGD | | 253 | Continuous | Yes | General Background Features |
| E | GNRL | DETL | | 200 | Continuous | Yes | General Details |
| E | GNRL | ENCL | | 170 | Center | Yes | Enclosures |
| E | GNRL | IDEN | | 2 | Continuous | Yes | Identification Tags |
| E | GNRL | FEN_ | | 3 | Continuous | Yes | Fence Line |
| E | CATH | | | 6 | Continuous | Yes | Corrosion Protection Features |
| E | CATH | TEXT | | 2 | Continuous | Yes | Corrosion Protection Annotations |
| E | LITE | FIXT | | 6 | Continuous | Yes | Light Fixtures |
| E | LITE | SITE | | 142 | Continuous | Yes | Site Lighting |
| E | LITE | WHIP | | 11 | Whip | Yes | Fixture Whip Connections |
| E | LITE | EXTR | | 6 | Continuous | Yes | Exterior Features |
| E | LITE | HDWR | | 7 | Continuous | Yes | Hardware Features |
| E | LITE | HIDN | | 8 | HIDDEN2 | Yes | Hidden Features |
| E | LITE | INTR | | 142 | Continuous | Yes | Interior Features |
| E | LITE | MISC | | 7 | Continuous | Yes | Miscellaneous Lines |
| E | LITE | PATT | | 252 | Continuous | Yes | Lighting Hatches |
| E | LITE | TEXT | | 2 | Continuous | Yes | Lighting Annotations |
| E | POWR | CIRC | | 3 | Continuous | Yes | Conduit and Wiring |
| E | POWR | CIRC | HEAT | 3 | HTRACE | Yes | Heat Trace |
| E | POWR | DEVC | | 170 | Continuous | Yes | Electrical Devices |
| E | POWR | DUCT | | 200 | Center | Yes | Under Floor Duct |
| E | UGND | 5KV | | 3 | 5KV | Yes | Underground 5KV Ductbank |
| E | UGND | 13KV | | 3 | 13.8KV | Yes | Underground 13KV Ductbank |
| E | UGND | 27KV | | 170 | 27KV | Yes | Underground 27KV Ductbank |
| E | UGND | OUTS | | 7 | OS | Yes | Underground Out of Service Items |
| E | UGND | COMM | | 3 | C | Yes | Underground Communication |
| E | UGND | DEVC | | 170 | Continuous | Yes | Underground Device |
| E | UGND | FIBR | | 3 | FO | Yes | Underground Fiber Optic |
| E | UGND | FIRE | | 170 | FA | Yes | Underground Fire |
| E | UGND | GRND | | 3 | GND | Yes | Underground Ground Conductor |

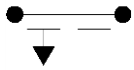
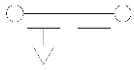
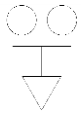
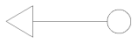
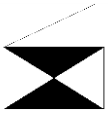
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| E | UGND | PCOM | | 140 | PC | Yes | Underground Power Communication |
| E | UGND | POWR | | 142 | P | Yes | Underground Power |
| E | UGND | PSEG | | 3 | PSEG | Yes | Underground PSE&G Ductbank |
| E | UGND | WIRE | | 20 | Continuous | Yes | Underground Wire |
| E | XREF | | | 7 | Continuous | Yes | Xref Insertion |

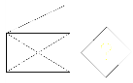
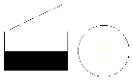
### 1.22.3 LINETYPES

| Name | Description | Example |
|---|---|---|
| 13.8KV | |   |
| 27KV | |   |
| CENTER | Centerline (1x) |  |
| Continuous | Continuous |  |
| FA | |   |
| FO | |   |
| HIDDEN2 | Hidden (0.50x) | |
| HIDDEN4 | Hidden (0.25x) |  |
| HTRACE | |  |
| MATCHLINE | |  |
| OS | |   |
| P | |   |
| PC | |   |
| PSEG | |   |
| REMOVAL | | |
| REMOVAL1 | | |
| UGC | | |
| UGE | | |
| Whip | | |

## 1.22.4 SYMBOLS

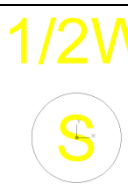
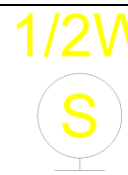
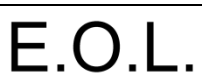
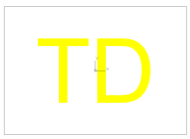
### 1.22.4.1 BLOCK DIAGRAMS

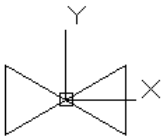
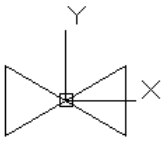
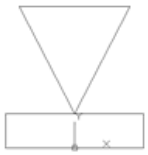
| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | TSS001.dwg | E-LITE-SITE | Overhead Sign Structure |
|  | TSS002.dwg | E-GNRL-EXST | Overhead Sign Structure – Removal to Remain |
|  | TSS04.dwg | E-LITE-SITE | Ground-Mounted Sign Structure |
|  You al | TSS05.dwg | E-GNRL-EXST | Ground-Mounted Sign Structure – Removal to Remain |
|  | TSS07.dwg | E-GNRL-DETL | Sign Structure Identification |
|  | TSS08.dwg | E-LITE-SITE | Traffic Signal Standard |
|  | TSS09.dwg | E-GNRL-EXST | Traffic Signal Standard – Removal to Remain |
|  | TSS11.dwg | E-LITE-SITE | Traffic Signal Post – Top-Mounted |
|  | TSS12.dwg | E-GNRL-EXST | Traffic Signal Post – Top-Mounted – Removal to Remain |
|  | TSS14.dwg | E-LITE-SITE | Vehicular Traffic Signal Head |
|  | TSS15.dwg | E-POWR-DEVC | Traffic Signal Control Cabinet |
|  | TSS15_1.dwg | E-POWR-DEVC | Traffic Signal Control Cabinet |
|  | TSS15_2.dwg | E-GNRL-DETL | Cabinet Identification |

| | | | |
|---|---|---|---|
|  | TSS16.dwg | E-GNRL-EXST | Traffic Signal Control Cabinet – Removal to Remain |
|  | TSS18.dwg | E-POWR-DEVC | Variable Message Sign Control Cabinet |
|  | TSS19.dwg | E-GNRL-EXST | Variable Message Sign Control Cabinet – Removal to Remain |
|   | IR007.dwg | E-GNRL-DETL | Transformer Fault Pressure Relay |
|   | IR015.dwg | E-POWR-CIRC | Breaker Control Switch |

### 1.22.4.2 FIRE

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|   | FAS001.dwg | E-FIRE-ALDL | Ceiling Mounted Smoke Detector |
|   | FAS002.dwg | E-FIRE-ALDL | Fire Alarm Heat Detector |
|   | FAS003.dwg | E-FIRE-ALDL | Duct Smoke Detector |
|   | FAS004.dwg | E-FIRE-STRB | Duct Smoke Detector (with line segment) |
|   | FAS005.dwg | E-FIRE-STRB | Wall-Mounted Fire Alarm Strobe |
|   | FAS006.dwg | E-FIRE-SPKR | Fire Alarm Dry Pipe Sprinkler Alarm System Cabinet |
|   | FAS007.dwg | E-FIRE-SPKR | Wall-Mounted Fire Alarm Speaker/Strobe |

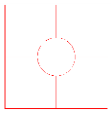
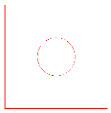
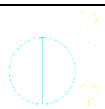
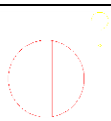
| | | | |
|---|---|---|---|
|  | FAS008.dwg | E-ANNO-TEXT | Wall-Mounted Heat Detector Speaker/Strobe |
|  | FAS009.dwg | E-FIRE-ALDL | Ceiling-Mounted Fire Alarm Speaker (1/2W) |
|  | FAS010.dwg | E-FIRE-ALDL | Wall-Mounted Fire Alarm Speaker (1/2W) |
|  | FAS011.dwg | E-FIRE-ALDL | End of Line |
|  | FAS012.dwg | E-FIRE-ALDL | Manual Fire Alarm Box |
|  | FAS013.dwg | E-FIRE-ALDL | Existing Waterflow Switch |
|  | FAS014.dwg | E-FIRE-ALDL | Existing Valve Supervisory (Tamper) Switch |
|  | FAS015.dwg | E-FIRE-ALDL | Tenant Fire Alarm Amplifier |
|  | FAS016.dwg | E-FIRE-ALDL | Terminal Strip Cabinet |
|  | FAS017.dwg | E-POWR-DEVC | Solenoid Valve |
|  | FAS018.dwg | E-FIRE-SPKR | Fire Alarm Horn |

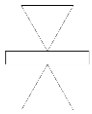
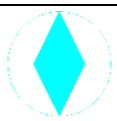
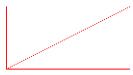
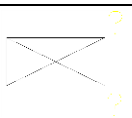
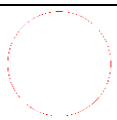
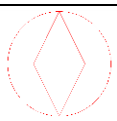
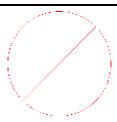
| | | | |
|---|---|---|---|
|  | FAS019.dwg | E-FIRE-ALDL | Existing File Alarm Isolation Module |
|  | FAS020.dwg | E-POWR-DEVC | Automatic Transfer Control |
|  | FAS021.dwg | E-FIRE-ALDL | Flow Switch |
|  | FAS022.dwg | E-FIRE-ALDL | SO |
|  | FAS023.dwg | E-POWR-DEVC | Transformer |
|  | FAS024.dwg | E-FIRE-ALDL | TIB |
|  | FAS025.dwg | | Shunt Trip |
|  | FAS026.dwg | | |
|  | FAS027.dwg | | Existing Waterflow Switch |
|  | FAS028.dwg | | Smoke Damper |

| | | | |
|---|---|---|---|
|  | FAS029.dwg | | 120AC/24DC Transformer |
|  | FAS030.dwg | | |
|  | FAS031.dwg | | Fire Alarm Control Module |
|  | FAS032.dwg | | Fire Alarm Monitor Module |
|  | FAS033.dwg | | Flow Switch |
|  | FAS034.dwg | | Tamper Switch |
|  | FAS035.dwg | | Fire Alarm Remote Test Station |
|  | FAS036.dwg | | Local Operation Console |
|  | FAS037.dwg | | Remote Graphic Annunciator |
|  | FAS038.dwg | | Auxiliary Power Supply |
|  | FAS039.dwg | | Firefighter Telephone |
|  | FAS040.dwg | | Generator Monitoring and Control Panel |

| | | | |
|---|---|---|---|
|  | FAS041.dwg | | Firefighters Smoke Control Panel |
|  | FAS042.dwg | | Smoke Purge Key Switch |
|  | FAS043.dwg | | Fire Alarm Control Panel |
|  | FAS044.dwg | | Universal Input/Output Module Motherboard (2 Module) |
|  | FAS045.dwg | | Universal Input/Output Module Motherboard (6 Module) |
|  | FAS046.dwg | | End of Line Resistor |
|  | FAS047.dwg | | Flow Switch |

### 1.22.4.3 AVIATION LIGHTING

| Symbol | Block name | Layer Name | Description |
|---|---|---|---|
|  | Aer010.dwg | E-LITE-SITE | Runway/Taxiway Light |
|  | Aer012.dwg | E-LITE-SITE | L-861-T Elevated Blue Taxiway Edge Light on Type “I” Marker Light Box |
|  | Aer013.dwg | E-GNRL-EXST | Removal Elevated Blue Taxiway Edge Light to be Adjusted to Finished Grade |
|  | Aer014.dwg | E-GNRL-EXST | Removal Runway/Taxiway Elevated Edge Light on Type “I” Marker Light Box |
|  | Aer015.dwg | E-LITE-SITE | L-852 Type IV Flush Taxiway Centerline Light Fed by Flexible Conduit in Removal Pavement |
|  | Aer016.dwg | E-LITE-SITE | L-852 Type IV Flush Taxiway Centerline Light Fed by Encased PVC Conduit |
|  | Aer017.dwg | E-LITE-SITE | L-852 Type IV Flush Taxiway Centerline Light Mounted on a L-868 Double Section Base Can Fed by Grout Encased PVC-H Conduit in Pavement |
|  | Aer019.dwg | E-GNRL-EXST | Removal Type IV Taxiway Centerline Lighting Fixture to be Adjusted to Finished Grade via a Variable Extension Can |
|  | Aer020.dwg | E-LITE-SITE | Omni-Directional Fixture Mounted on a L-868 Single Section Base Can in Removal or Overlay Pavement |
|  | Aer021.dwg | E-LITE-SITE | L-861-T Elevated Taxiway Edge Light Mounted on a L-867 Single Section Base Can |
|  | Aer021_1.dwg | E-LITE-SITE | Centerline Light |
|  | Aer022.dwg | E-GNRL-EXST | Removal L-861-T Elevated Taxiway Edge Light Mounted on a L-867 Single Section Base Can |
|  | Aer023.dwg | E-LITE-SITE | Adjust L-861-T Elevated Taxiway Edge Light Mounted on a L-867 Single Section Base Can to Finished Grade |

| | | | |
|---|---|---|---|
|  | Aer024.dwg | E-LITE-SITE | Internally-Illuminated Single-Face Taxiway |
|  | Aer024_1.dwg | E-LITE-SITE | The Sign Number |
|  | Aer024_2.dwg | E-GNRL-DETL | The Sign Number 2 |
|  | Aer025.dwg | E-LITE-SITE | Internally Illuminated Double Face Taxiway Guidance Sign |
|  | Aer026.dwg | E-POWR-DEVC | Elevated Retro reflective Taxiway Marker |
|  | Aer027.dwg | E-LITE-SITE | High-Intensity Hold Bar |
|  | Aer028.dwg | E-LITE-SITE | L-850C Flush Runway Edge Light Mounted on a L-868 Single-Section Base Can |
|  | Aer034.dwg | E-LITE-SITE | Runway/Taxiway Fixture |
|  | Aer035.dwg | E-GNRL-EXST | Removal Electrical Communication Manhole |
|  | Aer037.dwg | E-GNRL-EXST | Removal Flush Taxiway or Runway Centerline Fixture to Remain |
|  | Aer038.dwg | E-GNRL-EXST | Removal Flush Runway Edge Light |
|  | Aer040.dwg | E-GNRL-EXST | Removal Internally-Illuminated Single-Face Taxiway Guidance Sign |
|  | Aer041.dwg | E-GNRL-EXST | Removal Flush Taxiway Omni directional Fixture |
|  | Aer042.dwg | E-GNRL-EXST | Removal Flush Taxiway Omni directional Fixture – Removal |

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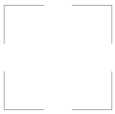
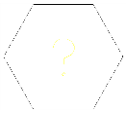
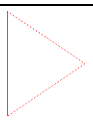
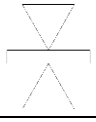
|---|---|---|---|
|  | Aer043.dwg | E-GNRL-RMVL | Removal Type “I” Marker Light Box, Including Fixture, Transformers, and Base Plates – Removals |
|  | Aer044.dwg | E-GNRL-RMVL | Removal Taxiway Centerline Fixture – Removal |
|  | Aer050.dwg | E-GNRL-DETL | Number Designation for Cross-References with Wiring Diagram |
|  | Aer051.dwg | E-UGND-DEVC | Splice Box for Sensor Cable |
|  | Aer053.dwg | E-UGND-DEVC | Removal Runway Surface Sensor to be Replaced |
|  | Aer055.dwg | E-GNRL-EXST | Removal Double-Obstruction Light |
|  | Aer056.dwg | E-GNRL-EXST | Removal Single-Obstruction Light |
|  | Aer057.dwg | E-LITE-SITE | L-810 Double-Obstruction Light |
|  | Aer058.dwg | E-LITE-SITE | L-810 Single-Obstruction Light |
|  | Aer059.dwg | E-POWR-DEVC | Wind Cone |
|  | Aer060.dwg | E-LITE-SITE | Flush Approach Light Bar by the FAA |
|  | Aer061.dwg | E-LITE-SITE | Runway Touchdown Zone Light Bar |
|  | Aer064.dwg | E-LITE-SITE | Adjust the Removal Internally-Illuminated Single-Face Taxiway Guidance Sign and Foundation to Finished Grade |
|  | Aer067.dwg | E-GNRL-EXST | Removal Internally-Illuminated Double-Face Taxiway Guidance Sign |

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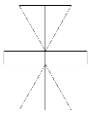
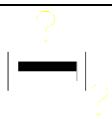
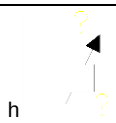
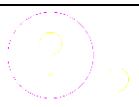
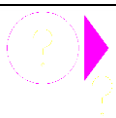
|---|---|---|---|
|  | Aer068.dwg | E-LITE-SITE | Adjust the Removal Internally-Illuminated Double-Face Taxiway Guidance Sign and Foundation to Finished Grade |

### 1.22.4.4 LIGHTING FIXTURES

| Symbol | Block name | Layer Name | Description |
|---|---|---|---|
|  | Ltg001.dwg | E-LITE-FIXT | Ceiling-Mounted 1'x4' Fluorescent Lighting Fixture |
|  | Ltg002.dwg | E-LITE-FIXT | Ceiling-Mounted 1'x4' Emergency Fluorescent Lighting Fixture |
|  | Ltg003.dwg | E-LITE-FIXT | Ceiling-Mounted 1'x4' Fluorescent Fixture with Internal Emergency Battery |
|  | Ltg004.dwg | E-LITE-FIXT | Wall-Mounted 1'x4' Fluorescent Fixture |
|  | Ltg005.dwg | E-LITE-FIXT | Wall-Mounted 1'x4' Fluorescent Fixture |
|  | Ltg006.dwg | E-LITE-FIXT | Wall-Mounted 1'x4'Fluorescent Fixture with Internal Emergency Battery |
|  | Ltg007.dwg | E-LITE-FIXT | Ceiling-Mounted 1'x8' Fluorescent Fixture |
|  | Ltg008.dwg | E-LITE-FIXT | Ceiling-Mounted Emergency Fluorescent Fixture |
|  | Ltg009.dwg | E-LITE-FIXT | Ceiling-Mounted Fluorescent Fixture with Internal Emergency Battery |
|  | Ltg010.dwg | E-LITE-FIXT | Ceiling-Mounted Continuous Fluorescent Fixture |
|  | Ltg011.dwg | E-LITE-FIXT | Ceiling-Mounted Continuous Fluorescent Slot Washer |
|  | Ltg012.dwg | E-LITE-FIXT | Ceiling-Mounted 2'x4' Fluorescent Fixture |

| | | | |
|---|---|---|---|
|  | Ltg013.dwg | E-LITE-FIXT | Ceiling-Mounted 2'x4' Emergency Fluorescent Fixture |
|  | Ltg014.dwg | E-LITE-FIXT | Ceiling-Mounted Fluorescent Fixture with Internal Emergency Battery |
|  | Ltg015.dwg | E-LITE-FIXT | Ceiling-Mounted 2'x2' Fluorescent Fixture |
|  | Ltg016.dwg | E-LITE-FIXT | Ceiling-Mounted 2'x2' Emergency Fluorescent Fixture |
|  | Ltg017.dwg | E-LITE-FIXT | Ceiling-Mounted 2'x2' Fluorescent Fixture with Internal Emergency Battery |
|  | Ltg018.dwg | E-LITE-FIXT | Ceiling-Mounted 1'x2' Fluorescent Fixture |
|  | Ltg019.dwg | E-LITE-FIXT | Ceiling-Mounted 1'x2' Fluorescent Wall Washer |
|  | Ltg020.dwg | E-LITE-FIXT | Ceiling-Mounted Fluorescent Fixture |
|  | Ltg021.dwg | E-LITE-FIXT | Ceiling-Mounted 1'x1' Compact Fluorescent Down light |
|  | Ltg022.dwg | E-LITE-FIXT | Ceiling-Mounted 1'x1' Compact Fluorescent |
|  h | Ltg023.dwg | E-LITE-FIXT | Ceiling-Mounted 1'x1' Compact Fluorescent Down light with Internal Emergency Battery |
|  | Ltg024.dwg | E-LITE-FIXT | Lighting Fixture |
|  | Ltg025.dwg | E-LITE-FIXT | Recessed Lighting Fixture, Partial Exposure |
|  | Ltg026.dwg | E-LITE-FIXT | Lighting Fixture |

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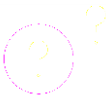
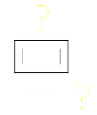
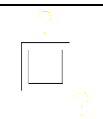
|---|---|---|---|
|  | Ltg027.dwg | E-LITE-FIXT | Recessed Lighting Fixture, Large |
|  | Ltg028.dwg | E-LITE-FIXT | Recessed Lighting Fixture, Small |
|  | Ltg029.dwg | E-LITE-FIXT | Recessed Lighting Fixture |
|  | Ltg030.dwg | E-LITE-FIXT | Lighting Fixture |
|  | Ltg031.dwg | E-LITE-FIXT | Lighting Fixture |
|  | Ltg032.dwg | E-LITE-FIXT | Wall-Mounted Lighting Fixture |
|  | Ltg033.dwg | E-LITE-FIXT | Surface-Mounted Hid Fixture |
|  | Ltg034.dwg | E-LITE-FIXT | Surface-Mounted Hid Fixture 2 |
|  | Ltg035.dwg | E-LITE-FIXT | Fluorescent Strip |
|  | Ltg036.dwg | E-LITE-FIXT | Track-Mounted Adjustable Fixtures |
|  | Ltg037.dwg | E-LITE-FIXT | Emergency Batter Pack Lights |
|  | Ltg038.dwg | E-LITE-FIXT | Ceiling-Mounted Exit Signs with Directional Arrow |
|  | Ltg039.dwg | E-LITE-FIXT | Ceiling-Mounted Exit Signs with Directional Arrow 2 |
|  | Ltg040.dwg | E-LITE-FIXT | Ceiling-Mounted Exit Signs with Directional Arrow 3 |

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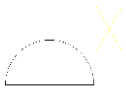
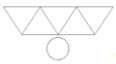
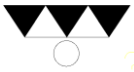
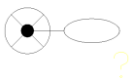
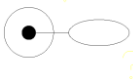
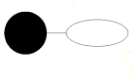
|---|---|---|---|
|  | Ltg041.dwg | E-LITE-FIXT | Ceiling-Mounted Exit Signs with Directional Arrow 4 |
|  | Ltg042.dwg | E-LITE-FIXT | Wall-Mounted Outdoor Fixture |
|  | Ltg043.dwg | E-LITE-FIXT | Wall-Mounted Outdoor Fixture 2 |
|  | Ltg044.dwg | E-LITE-FIXT | Wall-Mounted Outdoor Fixture 3 |
|  | Ltg045.dwg | E-LITE-FIXT | Wall-Mounted Outdoor Fixture 4 |
|  | Ltg046.dwg | E-LITE-FIXT | High-Mast Lighting Assembly Type |
|  | Ltg047.dwg | E-LITE-FIXT | High-Mast Lighting Assembly Type 2 |
|  | Ltg048.dwg | E-LITE-FIXT | High-Mast Lighting Assembly Type 3 |
|  | Ltg049.dwg | E-LITE-FIXT | Floodlight Pole Lighting Assembly |
|  | Ltg050.dwg | E-LITE-FIXT | Floodlight Pole Lighting Assembly |
|  | Ltg051.dwg | E-LITE-FIXT | Single-Arm Roadway Lighting Standard |
|  | Ltg052.dwg | E-LITE-FIXT | Remove Single-Arm Roadway Standard |
|  | Ltg053.dwg | E-LITE-FIXT | Relocated Single-Arm Roadway Lighting Standard Removal Location |
|  | Ltg054.dwg | E-LITE-FIXT | Relocated Single-Arm Roadway Lighting Standard New Location |

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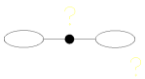
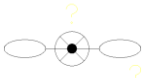
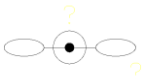
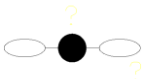
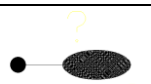
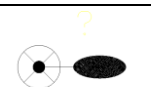
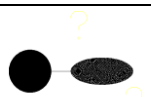
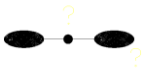
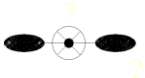
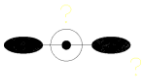
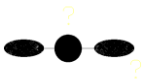
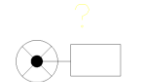
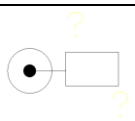
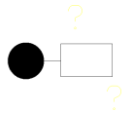
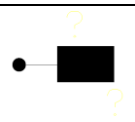
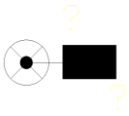
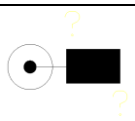
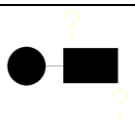
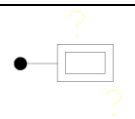
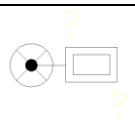
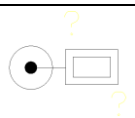
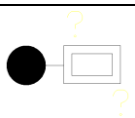
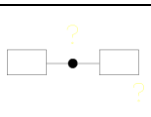
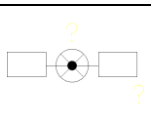
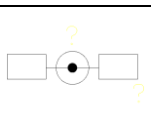
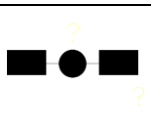
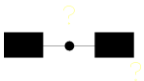
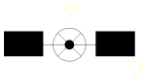
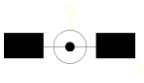
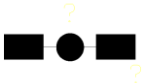
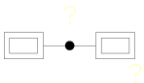
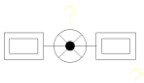
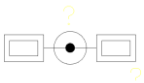
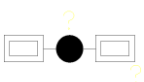
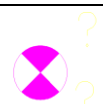
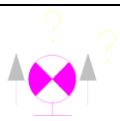
|---|---|---|---|
|  | Ltg055.dwg | E-LITE-FIXT | Double-Arm Roadway Lighting Standard |
|  | Ltg056.dwg | E-LITE-FIXT | Remove Double-Arm Roadway Lighting Standard |
|  | Ltg057.dwg | E-LITE-FIXT | Relocate Double-Arm Roadway Lighting Standard Removal Location |
|  | Ltg058.dwg | E-LITE-FIXT | Relocated Double-Arm Roadway Lighting Standard New location |
|  | Ltg059.dwg | E-LITE-FIXT | Single-Arm Roadway Lighting Standard |
|  | Ltg060.dwg | E-LITE-FIXT | Remove Single-Arm Roadway Lighting Standard |
|  | Ltg061.dwg | E-LITE-FIXT | Relocate Single-Arm Roadway Lighting Standard Removal Location |
|  | Ltg062.dwg | E-LITE-FIXT | Relocated Single-Arm Roadway Lighting Standard New Location |
|  | Ltg063.dwg | E-LITE-FIXT | Double-Arm Roadway Lighting Standard |
|  | Ltg064.dwg | E-LITE-FIXT | Remove Double-Arm Roadway Lighting Standard |
|  | Ltg065.dwg | E-LITE-FIXT | Relocate Double-Arm Roadway Lighting Standard Removal Location |
|  | Ltg066.dwg | E-LITE-FIXT | Relocated Double-Arm Roadway Lighting Standard New Location |
|  | Ltg067.dwg | E-LITE-FIXT | Single-Arm Pole-Mounted Sharp Cut-Off Luminaire |
|  | Ltg068.dwg | E-LITE-FIXT | Remove Single-Arm Pole-Mounted Sharp Cut-Off Luminaire |

| | | | |
|---|---|---|---|
|  | Ltg069.dwg | E-LITE-FIXT | Relocate Single-Arm Pole-Mounted Sharp Cut-Off Luminaire (Removal Location) |
|  | Ltg070.dwg | E-LITE-FIXT | Relocated Single-Arm Pole-Mounted Sharp Cut-Off Luminaire (New Location) |
|  | Ltg071.dwg | E-LITE-FIXT | Single-Arm Pole-Mounted Sharp Cut-Off Luminaire |
|  | Ltg072.dwg | E-LITE-FIXT | Remove Single-Arm Pole-Mounted Sharp Cut-Off Luminaire |
|  | Ltg073.dwg | E-LITE-FIXT | Relocate Single-Arm Pole Mounted Sharp Cut-Off Luminaire (Removal Location) |
|  | Ltg074.dwg | E-LITE-FIXT | Relocated Single-Arm Pole-Mounted Sharp Cut-Off Luminaire |
|  | Ltg075.dwg | E-LITE-FIXT | Sinle0Arm Pole-Mounted Sharp Cut-Off Luminaire |
|  | Ltg076.dwg | E-LITE-FIXT | Remove Single-Arm Pole-Mounted Sharp Cut-Off Luminaire |
|  | Ltg077.dwg | E-LITE-FIXT | Relocate Single-Arm Pole-Mounted Sharp Cut-Off Luminaire (Removal Location) |
|  | Ltg078.dwg | E-LITE-FIXT | Relocated Single-Arm Pole-Mounted Sharp Cut-Off Luminaire (New Location) |
|  | Ltg079.dwg | E-LITE-FIXT | Double-Arm Pole-Mounted Sharp Cut-Off Luminaire |
|  | Ltg080.dwg | E-LITE-FIXT | Remove Double-Arm Pole-Mounted Sharp Cut-Off Luminaire |
|  | Ltg081.dwg | E-LITE-FIXT | Relocate Double-Arm Pole-Mounted Sharp Cut-Off Luminaire (Removal Location) |
|  | Ltg082.dwg | E-LITE-FIXT | Relocated Double-Arm Pole-Mounted Sharp Cut-Off Luminaire (New Location) |

| | | | |
|---|---|---|---|
|  | Ltg083.dwg | E-LITE-FIXT | Double-Arm Pole-Mounted Sharp Cut-Off Luminaire |
|  | Ltg084.dwg | E-LITE-FIXT | Remove Double-Arm Pole-Mounted Sharp Cut-Off Luminaire |
|  | Ltg085.dwg | E-LITE-FIXT | Relocate Double-Arm Pole-Mounted Sharp Cut-Off Luminaire (Removal Location) |
|  | Ltg086.dwg | E-LITE-FIXT | Relocated Double-Arm Pole-Mounted Sharp Cut-Off Luminaire (New Location) |
|  | Ltg087.dwg | E-LITE-FIXT | Double-Arm Pole-Mounted Sharp Cut-Off Luminaire |
|  | Ltg088.dwg | E-LITE-FIXT | Remove Double-Arm Pole Mounted Sharp Cut-Off Luminaire |
|  | Ltg089.dwg | E-LITE-FIXT | Relocate Double_Arm Pole Mounted Sharp Cut-Off Luminaire (Removal Location) |
|  | Ltg090.dwg | E-LITE-FIXT | Relocated Double-Arm Pole-Mounted Sharp Cut-Off Luminaire (New Location) |
|  | Ltg091.dwg | E-LITE-FIXT | Yoke-Mounted HID Floodlight |
|  | Ltg092.dwg | E-LITE-FIXT | Yoke-Mounted HID Floodlight 2 |
|  | Ltg093.dwg | E-LITE-FIXT | Yoke-Mounted HID Floodlight 3 |
|  | Ltg101.dwg | E-LITE-FIXT | Exit Sign – Single Face |
|  | Ltg102.dwg | E-LITE-FIXT | Exit Sign – Single Face, Exit to West |
|  | Ltg103.dwg | E-LITE-FIXT | Exit Sign – Single Face, Exit to East |

| | | | |
|---|---|---|---|
|  | Ltg104.dwg | E-LITE-FIXT | Exit Sign – Double-Faced |
|  | Ltg105.dwg | E-LITE-FIXT | Exit Sign – Double-Faced, Exit to East |
|  | Ltg106.dwg | E-LITE-FIXT | Wall-Mounted Exit Sign, Single Face |
|  | Ltg107.dwg | E-LITE-FIXT | Wall-Mounted Exit Sign, Single Face, Exit to West |
|  | Ltg108.dwg | E-LITE-FIXT | Wall-Mounted Exit Sign, Single Face, Exit to East |
|  | Ltg109.dwg | E-LITE-FIXT | Wall-Mounted Exit Sign, Single Face, Double-Faced |

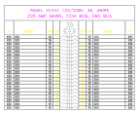
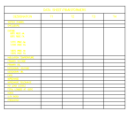
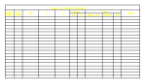
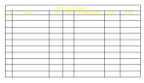
### 1.22.4.5 SWITCHES

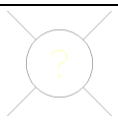
| Symbol | Block name | Layer Name | Description |
|---|---|---|---|
|  | Swt001.dwg | E-POWR-DEVC | Switch |
|  | Swt002.dwg | E-POWR-DEVC | 3-Way Switch |
|  | Swt003.dwg | E-POWR-DEVC | 4-Way Switch |
|  | Swt004.dwg | E-POWR-DEVC | Dimmer Switch |
|  | Swt005.dwg | E-POWR-DEVC | Switch |
|  | Swt006.dwg | E-POWR-DEVC | Switch |
|  | Swt007.dwg | E-POWR-DEVC | 3-Way Dimmer Switch |

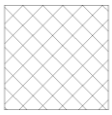
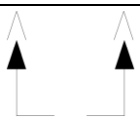
| | | | |
|---|---|---|---|
| | Swt008.dwg | E-POWR-DEVC | Manual Motor Starting Switch with Thermal Overload Protection and Pilot Light |
| | Swt009.DWG | E-POWR-DEVC | Manual Motor Starting Switch with Thermal Overload Protection |
| | Swt009A.DWG | E-POWR-DEVC | Switch |
| | Swt009B.DWG | E-POWR-DEVC | Switch |
| | Swt009C.DWG | E-POWR-DEVC | Switch |
| | Swt009D.DWG | E-POWR-DEVC | Switch |
| | Swt009E.DWG | E-POWR-DEVC | Switch |

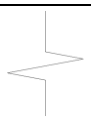
### 1.22.4.6 MISCELLANEOUS

| Symbol | Block name | Layer Name | Description |
|---|---|---|---|
| | Bubble2.dwg | E-ANNO-DIMS | Leader Bubble |
| | BUBBLE3.dwg | E-ANNO-DIMS | Elongated Leader Bubble |
| | Mis011.dwg | E-RVSN-SYMB | Revision Tag |
| | Revision.dwg | E-ANNO-DIMS | Revision Table |
| | Sign-p.dwg | E-ANNO-TTLB | Signature Stamp |
| | Mis041.dwg | 0 | Circuit Breaker Panel |

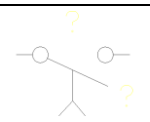
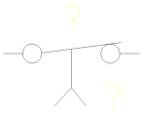
| | | | |
|---|---|---|---|
|  | Mis042.dwg | 0 | Power Panel |
|  | Mis043.dwg | 0 | Circuit Breaker Panel R/C Controlled |
|  | Mis044.dwg | 0 | Distribution Panel |
|  | Mis045.dwg | 0 | Motor Control Panel |
|  | Mis057.dwg | 0 | Transformer Schedule |
|  | Mis058.dwg | 0 | Metal-Clad Switch Gear Schedule |
|  | Mis059.dwg | 0 | Medium-Voltage Interrupter Schedule |
|  | Mis060.dwg | 0 | Cable and Conduit Schedule |
|  | Mis061.dwg | 0 | Lighting Fixture Schedule |
|  | Ele-DET-SYMB.dwg | (Varies) | Detail Symbol |
|  | Ir001.dwg | E-POWR-CIRC | Regulating Device |
|  | Ir002.dwg | E-POWR-CIRC | Kilowatt-Hour Meter |
|  | Ir003.dwg | E-POWR-CIRC | Instrument Switch, Test Block or Transducer |
|  | Ir004.dwg | E-POWR-CIRC | Instrument Switch, Test Block or Transducer 2 |

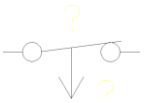
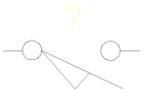
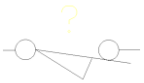
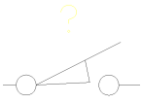
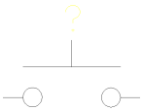
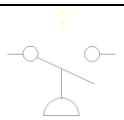
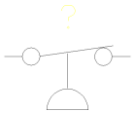
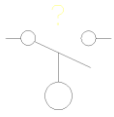
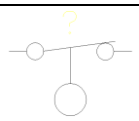
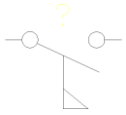
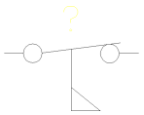
| | | | |
|---|---|---|---|
|  | Ir005.dwg | E-POWR-CIRC | Time Overcurrent Relay with Instantaneous Trip Attachment |
|  | Ir006.dwg | E-POWR-CIRC | Time Overcurrent Ground Relay for All 50, 51, and 50/51 Relays. |
|  | Ir007.dwg | E-POWR-CIRC | Transformer Fault Pressure Relay |
|  | Ir008.dwg | E-POWR-CIRC | Transformer Sudden Pressure Relay |
|  | Ir010.dwg | E-POWR-CIRC | Control Switch Trip |
|  | Ir012.dwg | E-POWR-CIRC | Control Switch Remote – Local |
|  | Ir013.dwg | E-POWR-CIRC | Indicator Light |
|  | Ir014.dwg | E-POWR-CIRC | Lamp Test Relay |
|  | Ir016.dwg | E-POWR-CIRC | Scada System Indication Function |
|  | Ir017.dwg | E-POWR-CIRC | Scada System Control Function |
|  | Ir018.dwg | E-POWR-CIRC | Solid-State Metering |
|  | Ir019.dwg | E-POWR-CIRC | Annunciator |
|  | Ir020.dwg | E-POWR-CIRC | Instrument |
|  | Ir021.dwg | E-POWR-CIRC | Instrument |

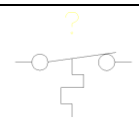
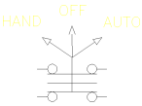
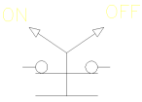
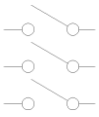
| | | | |
|---|---|---|---|
|  | Mis001.dwg | E-GNRL-DETL | Equipment Designation |
|  | Mis004.dwg | E-POWR-DEVC | Pull Box |
|  | Mis005.dwg | E-POWR-DEVC | Push Button |
|  | Mis006.dwg | E-POWR-DEVC | Closed-Circuit TV Camera |
|  | Mis007.dwg | E-POWR-DEVC | Closed-Circuit TV Camera 2 |
|  | Mis008.dwg | E-POWR-DEVC | Special System Device |
|  | Mis010.dwg | E-POWR-DEVC | Aqua Stat |
|  | Mis012.dwg | E-GNRL-DETL | Circle or Column Tag |
|  | Mis013.dwg | E-GNRL-DETL | Section Arrows |
|  | Mis023.dwg | E-POWR-DEVC | Break Glass Station |
|  | Mis024.dwg | E-POWR-DEVC | Electromagnetic Door Holder |
|  | Mis035.dwg | E-ANNO-DIMS | Arrowhead |
|  | Mis036.dwg | E-POWR-CIRC | Conduit/Line Break |
|  | Mis037.dwg | E-ANNO-DIMS | Bracket |

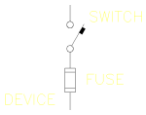
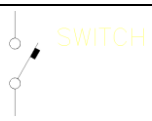
| | | | |
|---|---|---|---|
|  | Mis049.dwg | E-GNRL-DETL | Section |
|  | Mis050.dwg | E-ANNO-TTLB | Preliminary Stamp |
|  | Mis051.dwg | E-ANNO-TTLB | Submission Stamp |
|  | Mis052.dwg | E-ANNO-TTLB | As-Built Stamp |
|  | Mis053.dwg | E-GNRL-CIRC | Conduit Break |
|  | Mis056.dwg | E-GNRL-DETL | Section Title |
|  | Mis070.dwg | E-POWR-DEVC | TVSS |
|  | Mis071.dwg | E-POWR-DEVC | Reflector |
|  | WALLBREAK.dwg | E-GNRL-DETL | Wall Break |

### 1.22.4.7 ONE LINE

| Symbol | Block name | Layer Name | Description |
|---|---|---|---|
|  | Cds001.dwg | E-POWR-CIRC | Instantaneous Contact, NO |
|  | Cds002.dwg | E-POWR-CIRC | Instantaneous Contact, NC |
|  | Cds003.dwg | E-POWR-CIRC | “On Delay” Timer Contact, NO Time Open |
|  | Cds004.dwg | E-POWR-CIRC | “On Delay” Timer Contact, NC Time Open |

| | | | |
|---|---|---|---|
|  | Cds005.dwg | E-POWR-CIRC | “Off Delay” Timer Contact, NO Time Open |
|  | Cds006.dwg | E-POWR-CIRC | “Off Delay” Timer Contact, NC Time Closed |
|  | Cds007.dwg | E-POWR-CIRC | Limit Switch Contact, NO |
|  | Cds008.dwg | E-POWR-CIRC | Limit Switch Contact, NC |
|  | Cds009.dwg | E-POWR-CIRC | Limit Switch Contact NO Held Closed |
|  | Cds010.dwg | E-POWR-CIRC | Limit Switch Contact NC Held Open |
|  | Cds011.dwg | E-POWR-CIRC | Momentary Contact Push Button, NO |
|  | Cds012.dwg | E-POWR-CIRC | Momentary Contact Push Button, NC |
|  | Cds013.dwg | E-POWR-CIRC | Pressure Switch Contact, NO |
|  | Cds014.dwg | E-POWR-CIRC | Pressure Switch Contact, NC |
|  | Cds015.dwg | E-POWR-CIRC | Level Switch Contact, NO |
|  | Cds016.dwg | E-POWR-CIRC | Level Switch Contact, NC |
|  | Cds017.dwg | E-POWR-CIRC | Flow Switch Contact, NO |
|  | Cds018.dwg | E-POWR-CIRC | Flow Switch Contact, NC |

| | | | |
|---|---|---|---|
|  | Cds019.dwg | E-POWR-CIRC | Temperature Switch, NO |
|  | Cds020.dwg | E-POWR-CIRC | Temperature Switch, NC |
|  | Cds021.dwg | E-POWR-CIRC | Solenoid |
|  | Cds022.dwg | E-POWR-CIRC | Operating Coil |
|   | Cds023.dwg | E-POWR-CIRC | 3-Position Selector Switch |
|   | Cds024.dwg | E-POWR-CIRC | 2-Position Selector Switch |
|  | Cds025.dwg | E-POWR-CIRC | Fuse |
|  | Cds027.dwg | E-POWR-CIRC | Thermal Overload Relay |
|  | Cds028.dwg | E-POWR-CIRC | Transformer |
|  | Cds029.dwg | E-POWR-CIRC | Circuit Breaker |
|  | Cds030.dwg | E-POWR-CIRC | Disconnect Switch |
|  | Cds031.dwg | E-POWR-CIRC | Diode |
|  | Cds032.dwg | E-POWR-CIRC | Pilot Light |
|  | Cds033.dwg | E-POWR-CIRC | Terminal Block |

| | | | |
|---|---|---|---|
|  | Sld001.dwg | E-POWR-CIRC | Pothead-Type Cable Termination – Medium Voltage |
|  | Sld002.dwg | E-POWR-CIRC | Cable Termination – Low Voltage |
|  | Sld003.dwg | E-POWR-CIRC | Stress Cone –Type Cable Termination – Medium Voltage |
|   | Sld005.dwg | E-POWR-CIRC | Ground and Test Device |
|  | Sld006.dwg | E-POWR-CIRC | Ground Terminal Connection |
|  | Sld007.dwg | E-POWR-CIRC | Bus Disconnecting Link |
|   | Sld010.dwg | E-POWR-CIRC | Power Transformer |
|   | Sld010_1.dwg | E-POWR-CIRC | Power Transformer |
|  | Sld011.dwg | E-POWR-CIRC | Power Transformer Automatic Tap Changer |
|   | Sld012.dwg | E-POWR-CIRC | Low Voltage 3-Pole AC Circuit Breaker |
|   | Sld013.dwg | E-POWR-CIRC | Medium Voltage Fused Load Interrupter Switch Manually Operated |
|   | Sld014.dwg | E-POWR-CIRC | Ground Connection |
|  | Sld015.dwg | E-POWR-CIRC | Ground Connection |
|   | Sld016.dwg | E-POWR-CIRC | Low Voltage, Fused Switch, 3-Pole U.O.N. |

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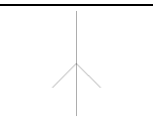
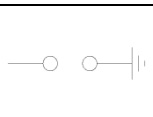
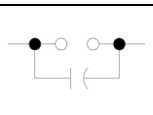
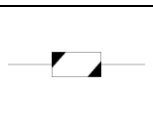
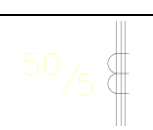
|---|---|---|---|
|  | Sld017.dwg | E-POWR-CIRC | Low Voltage, Non-fused Switch, 3-Pole U.O.N. |
|  | Sld018.dwg | E-POWR-CIRC | Low Voltage, Molded Cased Circuit Breaker, 3-Pole U.O.N. |
|  | Sld019.dwg | E-POWR-CIRC | Fuse |
|  | Sld020.dwg | E-POWR-CIRC | Draw Out Device |
|  | Sld021.dwg | E-POWR-CIRC | Plug-in Device |
|  | Sld022.dwg | E-POWR-CIRC | Lightning Arrestor |
|  | Sld023.dwg | E-POWR-CIRC | Circuit Device |
|  | Sld024.dwg | E-POWR-CIRC | Neon Indicating Light |
|  | Sld025.dwg | E-POWR-CIRC | Normally-Open Contact |
|  | Sld025_1.dwg | E-POWR-CIRC | Normally-Closed Contact |
|  | Sld025a.dwg | E-POWR-CIRC | Normally-Closed Contact |
|  | Sld026.dwg | E-POWR-CIRC | Current Transformer |
|  | Sld027.dwg | E-POWR-CIRC | Zero-Sequence Current Transformer |
|  | Sld028.dwg | E-POWR-CIRC | Potential Transformer |

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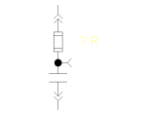
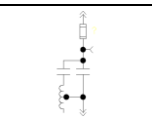
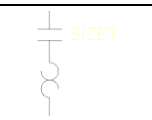
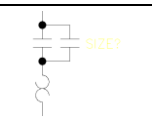
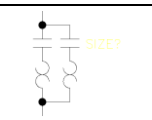
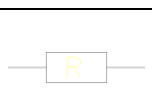
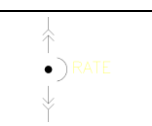
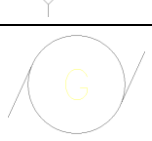
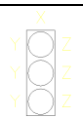
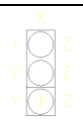
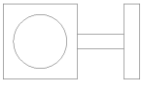
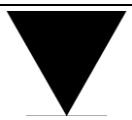
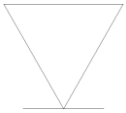
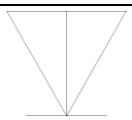
|---|---|---|---|
|  | Sld029.dwg | E-POWR-CIRC | Control Power Transformer |
|  | Sld030.dwg | E-POWR-CIRC | Automatic Transfer Switch, 3-Pole U.O.N. |
|  | Sld031.dwg | E-POWR-CIRC | Manual Transfer Switch, 3-Pole U.O.N. |
|  | Sld032.dwg | E-POWR-CIRC | Medium Voltage Motor Controller, Reduced Voltage, Non-Reversing |
|  | Sld033.dwg | E-POWR-CIRC | Medium Voltage Motor Controller, Reduced Voltage, Non-Reversing |
|  | Sld034.dwg | E-POWR-CIRC | Low Voltage Motor Controller, Full Voltage, Non-Reversing (FVNR), 3-Pole |
|  | Sld035.dwg | E-POWR-CIRC | Low Voltage Motor Controller, Full Voltage, Reversing (FVR), 3-Pole |
|  | Sld036.dwg | E-POWR-CIRC | Low Voltage Motor Controller, Full Voltage, Two Speed, Non-Reversing (FV-25-NR), 3-Pole |
|  | Sld037.dwg | E-POWR-CIRC | Induction Motor |
|  | Sld038.dwg | E-POWR-CIRC | Power Circuit Breaker |
|  | Sld039.dwg | E-POWR-CIRC | Battery |
|  | Sld040.dwg | E-POWR-CIRC | Resistor |
|  | Sld041.dwg | E-POWR-CIRC | Low Voltage Network Protector |
|  | Sld042.dwg | E-POWR-CIRC | Emergency Generator |

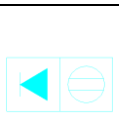
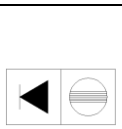
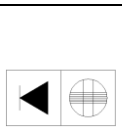
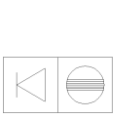
| | | | |
|---|---|---|---|
|  | Sld043.dwg | E-POWR-CIRC | Low Voltage, 3-Pole, Manually-Operated, AC Circuit Breaker |
|  | Ki001.dwg | E-POWR-CIRC | Interlock with Key Held |
|  | Ki002.dwg | E-POWR-CIRC | Interlock with Key Removed |
|  | Ki003.dwg | E-POWR-CIRC | Multi-Lock Interlock with Keys Removed |
|  | Ki004.dwg | E-POWR-CIRC | Transfer Interlock |
|  | Ki005.dwg | E-POWR-CIRC | Shows Key Attached to Device with Insulated Chain or Stainless Steel Cable |
|  | Ki006.dwg | E-POWR-CIRC | Detachable Latch or Door Interlocks |
|  | Ki007.dwg | E-POWR-CIRC | Electrical Key Interlock |
| !!! | Ki008.dwg | E-POWR-CIRC | Electrical Key Interlock |
|  | Ki009.dwg | E-POWR-CIRC | Mechanical Key Interlock |

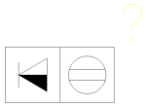
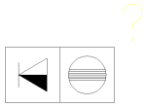
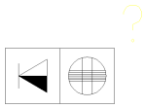
### 1.22.4.8 POWER

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | Pwr001.dwg | E-POWR-DEVC | 480/277V, 3P, 4W Panelboard |
|  | Pwr001A.dwg | E-POWR-DEVC | 480/277V, 3P, 4W Panelboard |
|  | Pwr002.dwg | E-POWR-DEVC | Distribution Panelboard or Switchboard |
|  | Pwr003.dwg | E-POWR-DEVC | 120/208V, 3P, 4W Panelboard |

| | | | |
|---|---|---|---|
|  | PWR005.DWG | E-POWR-DEVC | Motor Control Center |
|  | PWR006.DWG | E-POWR-DEVC | Fused Disconnect Switch |
|  | PWR007.DWG | E-POWR-DEVC | Unfused Disconnect Switch |
|  | Pwr008.dwg | E-POWR-DEVC | Combination Motor Starter and Fused Switch |
|  | Pwr009.dwg | E-POWR-DEVC | Combination Motor Starter and Circuit Breaker |
|  | Pwr010.dwg | E-POWR-DEVC | Motor Starter |
|  | Pwr011.dwg | E-POWR-DEVC | Motor |
|  | Pwr012.dwg | E-POWR-DEVC | Motorized Damper |
|  | Pwr013.dwg | E-POWR-DEVC | Automatic Transfer Switch |
|  | Pwr014.dwg | E-POWR-DEVC | Contactor |
|  | Pwr015.dwg | E-POWR-DEVC | Transformer |
|  | Pwr016.dwg | E-POWR-DEVC | Removal 480/277V, 3P, 4W Panelboard |
|  | Pwr016A.dwg | E-POWR-DEVC | Generic Panel |
|  | Pwr017.dwg | E-POWR-DEVC | Existing 120/208V, 3P, 4W Panelboard |

| | | | |
|---|---|---|---|
|  | Pwr018.dwg | E-POWR-DEVC | VAV |
|  | CAMERA.dwg | E-POWR-DEVC | Camera |
|  | Out001.dwg | E-POWR-DEVC | Wall-Mounted Telephone |
|  | Out002.dwg | E-POWR-DEVC | Wall-Mounted Data Outlet |
|  | Out002A.dwg | E-POWR-DEVC | Wall-Mounted Combination Telephone/Data Outlet |
|  | Out003.dwg | E-POWR-DEVC | Wall-Mounted TV Outlet |
|  | Out004.dwg | E-POWR-DEVC | Wall-Mounted Single Receptacle 20A, 125V, 3W Grounding Type |
|  | Out005.dwg | E-POWR-DEVC | Wall-Mounted Duplex Convenience Receptacle 15a, 125V, 3W Grounding Type |
|  | Out005_1.dwg | E-POWR-DEVC | Wall-Mounted Multiplex Receptacle |
|  | Out006.dwg | E-POWR-DEVC | Wall-Mounted Quadruplex Receptacle 15a, 125V, 3W Grounding Type |
|  | Out007.dwg | E-POWR-DEVC | Wall-Mounted Single Special-Purpose Receptacle |
|  | Out008.dwg | E-POWR-DEVC | Wall-Mounted Duplex Special-Purpose Receptacle |
|  | Out009.dwg | E-POWR-DEVC | Wall-Mounted Clock Receptacle |
|  | Out010.dwg | E-POWR-DEVC | Floor Telephone Outlet |

| | | | |
|---|---|---|---|
|  | Out011.dwg | E-POWR-DEVC | Floor Data Outlet |
|  | Out011A.dwg | E-POWR-DEVC | Floor Combination Telephone/Data Outlet |
|  | OUT012.DWG | E-POWR-DEVC | Floor Single Receptacle 20A, 125V, 3W |
|  | OUT013.DWG | E-POWR-DEVC | Floor Duplex Convenience Receptacle 15A, 125V, 3W Grounding Type Unless Otherwise Noted |
|  | Out013A.dwg | E-POWR-DEVC | Floor Duplex Convenience Receptacle 15A, 125V, 3W Grounding Type Unless Otherwise Noted |
|  | Out13B.dwg | E-POWR-DEVC | Floor Duplex Convenience Receptacle 15A, 125V, 3W Grounding Type Unless Otherwise Noted |
|  | OUT014.DWG | E-POWR-DEVC | Floor Single Special-Purpose Receptacle |
|  | OUT015.DWG | E-POWR-DEVC | Two Gang Floor Duplex Receptacle 15A, 125V, 3W Grounding-Type Telephone Outlet |
|  | Out016.dwg | E-POWR-DEVC | Two Gang Floor Duplex Receptacle 15A, 125V, 3W Grounding-Type Telephone Outlet Unless Otherwise Noted |
|  | Out017.dwg | E-POWR-DEVC | Two Gang Floor Duplex Receptacle 15A, 125V, 3W Grounding-Type Telephone Outlet Unless Otherwise Noted |
|  | Out018.dwg | E-POWR-DEVC | Two Gang Floor Duplex Receptacle 15A, 125V, 3W Grounding-Type Telephone Outlet Unless Otherwise Noted |
|  | Out019.dwg | E-POWR-DEVC | Two Gang Floor Duplex Receptacle 15A, 125V, 3W Grounding-Type Telephone Outlet Unless Otherwise Noted |
|  | Out020.dwg | E-POWR-DEVC | Two Gang Floor Duplex Receptacle 15A, 125V, 3W Grounding-Type Telephone Outlet Unless Otherwise Noted |

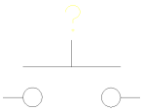
| | | | |
|---|---|---|---|
|  | Out021.dwg | E-POWR-DEVC | Two Gang Floor Duplex Receptacle 15A, 125V, 3W Grounding-Type Telephone Outlet Unless Otherwise Noted |
|  | Out022.dwg | E-POWR-DEVC | Two Gang Floor Duplex Receptacle 15A, 125V, 3W Grounding-Type Telephone Outlet Unless Otherwise Noted |
|  | Out023.dwg | E-POWR-DEVC | Two Gang Floor Duplex Receptacle 15A, 125V, 3W Grounding-Type Telephone Outlet Unless Otherwise Noted |
|  | OUT041.dwg | E-POWR-DEVC | 120V-20A Duplex Receptacle |
|  | Out0051.dwg | E-POWR-DEVC | Ground Fault Receptacle |
|  | Out051.dwg | E-POWR-DEVC | Ground Fault Receptacle |
|  | Out0061.dwg | E-POWR-DEVC | Ground Fault Receptacle |
|  | Pb-desk.dwg | E-POWR-DEVC | Desk-Mounted Push Button |

### 1.22.4.9 UNDERGROUND

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | Ues100.dwg | E-GNRL-DETL | Duct Bank Flag |
|  | Ues101_1.dwg | E-GNRL-DETL | Duct Bank Flag 1 Conduit Modify to Suit |
|  | Ues101_2.dwg | E-GNRL-DETL | Duct Bank Flag 2 Conduit Modify to Suit |
|  | Ues101_4.dwg | E-GNRL-DETL | Duct Bank Flag 4 Conduit Modify to Suit |

| | | | |
|---|---|---|---|
|  | Ues101_6.dwg | E-GNRL-DETL | Duct Bank Flag 6 Conduit Modify to Suit |
|  | Ues013.dwg | E-UGND-EXST | Power Manhole |
|  | Ues014.dwg | E-UGND-EXST | Removal Power Manhole |
|  | Ues015.dwg | E-UGND-COMM | Communication Manhole |
|  | Ues016.dwg | E-UGND-EXST | Removal Communication Manhole |
|  | Ues017.dwg | E-UGND-POWR | Power Manhole |
|  | Ues018.dwg | E-UGND-EXST | Removal Power Handhole |
|  | Ues019.dwg | E-UGND-COMM | Communication Handhole |

### 1.22.4.10 WIRING

| Symbol | Block name | Layer Name | Description |
|---|---|---|---|
|  | Cc0010.dwg | E-POWR-CIRC | Conduit Turn Up |
|  | Cc0011.dwg | E-POWR-CIRC | Conduit Turn Down |
|  | Cc00202.dwg | E-POWR-CIRC | 2 #12 |
|  | Cc00203.dwg | E-POWR-CIRC | 3 #12 |
|  | Cc00204.dwg | E-POWR-CIRC | 4 #12 |

| | | | |
|---|---|---|---|
|  | Cc00205.dwg | E-POWR-CIRC | 5 #12 |
|  | Cc00206l.dwg | E-POWR-CIRC | Single Home Run |
|  | Cc00206r.dwg | E-POWR-CIRC | Single Home Run |
|  | Cc00207l.dwg | E-POWR-CIRC | Two Circuit Home Run |
|  | Cc00207r.dwg | E-POWR-CIRC | Two Circuit Home Run |
|  | Cc00208l.dwg | E-POWR-CIRC | Three Circuit Home Run |
|  | Cc00208r.dwg | E-POWR-CIRC | Three Circuit Home Run |

# 1.23 APPENDIX I – ENVIRONMENTAL DISCIPLINE

## 1.23.1 CONTENT PREFERENCES

This Section Is Under Construction

## 1.23.2 LAYER STRATAGEM

### 1.23.2.1 ENVIRONMENTAL WORK

| DISCIPLINE | MAJOR | MINOR | DESC | COLOR | LINETYPE | PLOTS | DESCRIPTION |
|---|---|---|---|---|---|---|---|
| N | ANNO | CHNG | | 1 | Continuous | Yes | IDENTIFICATION OF UPDATED WORK |
| N | ANNO | DIMS | | 1 | Continuous | Yes | WITNESS/EXT. LINES DIM. ARROWHEADS/DOTS/SLASHES, DIM. TEXT |
| N | ANNO | KEYN | | 212 | Continuous | Yes | KEYNOTES WITH ASSOCIATED LEADERLINES AND ARROWHEADS |
| N | ANNO | KEYP | | 254 | Continuous | Yes | KEY PLAN |
| N | ANNO | MLIN | | 4 | Matchline | Yes | MATCH LINE |
| N | ANNO | NOTE | | 212 | Continuous | Yes | GENERAL NOTES AND GENERAL REMARKS |
| N | ANNO | NPLT | | 7 | Continuous | No | NON-PLOTTING GRAPHICS |
| N | ANNO | SYMB | | 3 | Continuous | Yes | MISC. SYMBOLS |
| N | ANNO | TEXT | | 212 | Continuous | Yes | MISC.TEXT AND CALLOUTS WITH ASSOC. LEADERLINES AND ARROWHEADS |
| N | ANNO | TTLB | | 51 | Continuous | Yes | BORDER AND TITLE BLOCK LINE WORK |
| N | ANNO | VPRT | | 200 | Continuous | No | VIEW PORT |
| N | ASB_ | ACM1 | | 254 | Continuous | Yes | ACM TYPE #1 |
| N | ASB_ | ACM2 | | 253 | Continuous | Yes | ACM TYPE #2 |
| N | ASB_ | ACM3 | | 252 | Continuous | Yes | ACM TYPE #3 |
| N | ASB_ | ACM4 | | 251 | Continuous | Yes | ACM TYPE #4 |
| N | ASB_ | ACM5 | | 250 | Continuous | Yes | ACM TYPE #5 |
| N | ASB_ | ACM6 | | 7 | Continuous | Yes | ACM TYPE #6 |
| N | ASB_ | AIRL | | 4 | Continuous | Yes | AIRLOCK |
| N | ASB_ | BARR | | 212 | Continuous | Yes | ISOLATION BARRIER |
| N | ASB_ | CNAD | | 8 | Continuous | Yes | CONSTRUCTION AIDS (LADDERS, SCAFFOLDING, EC.) |
| N | ASB_ | CONT | | 3 | DashDot2 | Yes | CONTAINMENT LIMITS |
| N | ASB_ | CRIT | | 212 | Continuous | Yes | CRITICAL BARRIER |
| N | ASB_ | DECN | | 212 | Continuous | Yes | DECONTAMINATION UNIT |
| N | ASB_ | DIMS | | 1 | Continuous | Yes | DIMENSIONS |
| N | ASB_ | EQPM | | 1 | Continuous | Yes | EQUIPMENT, (NUA'S, LIGHTS, F. EXT.) |
| N | ASB_ | FLTB | | 5 | Continuous | Yes | FLEX TUBE EXHAUST |
| N | ASB_ | IDEN | | 212 | Continuous | Yes | TEXT |
| N | ASB_ | PLAT | | 1 | Continuous | Yes | WORK AREA PLATFORM |
| N | ASB_ | SYMB | | 3 | Continuous | Yes | SYMBOLS |
| N | ASB_ | WARA | | 51 | Border2 | Yes | WORK AREA LIMITS |
| N | ASB_ | WIRE | | 51 | Continuous | Yes | WIRE |
| N | ASB_ | WSRT | | 51 | Continuous | Yes | WASTE ROUTE |
| N | DETL | ACM1 | | 8 | Continuous | Yes | ACM TYPE #1 |
| N | DETL | ACM2 | | 8 | Continuous | Yes | ACM TYPE #2 |
| N | DETL | ACM3 | | 8 | Continuous | Yes | ACM TYPE #3 |
| N | DETL | BARR | | 212 | Continuous | Yes | ISOLATION BARRIER |
| N | DETL | CNAD | | 8 | Continuous | Yes | CONSTRUCTION AIDS (LADDERS, SCAFFOLDING, EC.) |
| N | DETL | CONT | | 3 | DashDot2 | Yes | CONTAINMENT LIMITS |
| N | DETL | DECN | | 212 | Continuous | Yes | DECONTAMINATION UNIT |
| N | DETL | DIMS | | 1 | Continuous | Yes | DIMENSIONS |
| N | DETL | EQPM | | 1 | Continuous | Yes | EQUIPMENT, (NUA'S, LIGHTS, F. EXT.) |
| N | DETL | FILL | | 1 | Continuous | Yes | FILL/COVER MATERIAL |
| N | DETL | FLTB | | 5 | Continuous | Yes | FLEX TUBE EXHAUST |
| N | DETL | IDEN | | 212 | Continuous | Yes | TEXT |
| N | DETL | MEMB | | 4 | Continuous | Yes | MEMBRANE/NETTING |
| N | DETL | PIPE | | 1 | Continuous | Yes | PIPE AND CONDUIT |
| N | DETL | PLAT | | 1 | Continuous | Yes | WORK AREA PLATFORM |
| N | DETL | PUMP | | 212 | Continuous | Yes | PUMPS |
| N | DETL | STRC | | 4 | Continuous | Yes | STRUCTURAL FEATURES |
| N | DETL | TANK | | 3 | Continuous | Yes | TANKS |

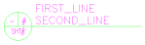
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| N | DETL | VLVE | | 1 | Continuous | Yes | VALVES AND FITTINGS |
| N | DETL | WARA | | 51 | Border2 | Yes | WORK AREA LIMITS |
| N | DETL | WIRE | | 51 | Continuous | Yes | WIRING |
| N | GENE | BORE | | 4 | Continuous | Yes | SOIL BORE SAMPLING LOCATION |
| N | GENE | EXWL | | 212 | Continuous | Yes | EXTRACTION WELL LOCATION |
| N | GENE | GEOP | | 3 | Continuous | Yes | GEO-PROBE LOCATION |
| N | GENE | GWAT | | 7 | Continuous | Yes | GROUND WATER GRADIENT |
| N | GENE | HORW | | 212 | Continuous | Yes | HORIZONTAL WELL LOCATION |
| N | GENE | IDEN | | 1 | Continuous | Yes | TEXT |
| N | GENE | MONW | | 3 | Continuous | Yes | MONITORING WELL LOCATION |
| N | GENE | PLUM | | 254 | Continuous | Yes | PLUME CONTAMINATION LOCATION |
| N | GENE | REWL | | 212 | Continuous | Yes | RECOVERY WELL LOCATION |
| N | GENE | TRCH | | 3 | Continuous | Yes | TRENCH LOCATION |
| N | LEAD | BARR | | 212 | Continuous | Yes | ISOLATION BARRIER |
| N | LEAD | CNAD | | 8 | Continuous | Yes | CONSTRUCTION AIDS (LADDERS, SCAFFOLDING, EC.) |
| N | LEAD | CONT | | 3 | DashDot2 | Yes | CONTAINMENT LIMITS |
| N | LEAD | DECN | | 212 | Continuous | Yes | DECONTAMINATION UNIT |
| N | LEAD | DIMS | | 1 | Continuous | Yes | DIMENSIONS |
| N | LEAD | FABT | | 8 | Continuous | Yes | LCM FULL ABATEMENT |
| N | LEAD | IDEN | | 212 | Continuous | Yes | TEXT |
| N | LEAD | PLAT | | 1 | Continuous | Yes | WORK AREA PLATFORM |
| N | LEAD | SABT | | 7 | Continuous | Yes | LCM SPOT ABATEMENT |
| N | LEAD | WARA | | 51 | Border2 | Yes | WORK AREA LIMITS |
| N | PERM | ERCT | | 5 | Continuous | Yes | EROSION CONTROL |
| N | PERM | IDEN | | 7 | Continuous | Yes | TEXT |
| N | PERM | LMLN | | 3 | Phantom2 | Yes | LIMIT LINE |
| N | PERM | REUS | | 5 | Continuous | Yes | ADDITION TO PERMIT APPICTION SCOPE |
| N | PERM | SILT | | 5 | Continuous | Yes | SILT FENCE |
| N | PERM | ENTR | | 1 | Continuous | Yes | CONSTRUCTION ENTRANCE |
| N | PERM | CB__ | | 212 | Continuous | Yes | CATCH BASIN PROTECTION |
| N | PERM | WETL | | 1 | Continuous | Yes | WETLAND AREA |
| N | REVS | BUBL | | 3 | Continuous | Yes | REVISIONS BUBBLE |
| N | REVS | SYMB | | 3 | Continuous | Yes | REVISIONS TEXT |
| N | SECT | ACM1 | | 8 | Continuous | Yes | ACM TYPE #1 |
| N | SECT | ACM2 | | 8 | Continuous | Yes | ACM TYPE #2 |
| N | SECT | ACM3 | | 8 | Continuous | Yes | ACM TYPE #3 |
| N | SECT | BARR | | 212 | Continuous | Yes | ISOLATION BARRIER |
| N | SECT | CNAD | | 8 | Continuous | Yes | CONSTRUCTION AIDS (LADDERS, SCAFFOLDING, EC.) |
| N | SECT | CONT | | 3 | DashDot2 | Yes | CONTAINMENT LIMITS |
| N | SECT | DECN | | 212 | Continuous | Yes | DECONTAMINATION UNIT |
| N | SECT | DIMS | | 1 | Continuous | Yes | DIMENSIONS |
| N | SECT | EQPM | | 1 | Continuous | Yes | EQUIPMENT, (NUA'S, LIGHTS, F. EXT.) |
| N | SECT | FLTB | | 5 | Exhaust | Yes | FLEX TUBE EXHAUST |
| N | SECT | IDEN | | 212 | Continuous | Yes | TEXT |
| N | SECT | MBND | | 8 | Continuous | Yes | MATERIAL BEYOND SECTION CUT |
| N | SECT | MCUT | | 1 | Continuous | Yes | MATERIAL CUT BY SECTION |
| N | SECT | PATT | | 8 | Continuous | Yes | TEXTURES |
| N | SECT | PLAT | | 1 | Continuous | Yes | WORK AREA PLATFORM |
| N | SECT | WARA | | 51 | Border2 | Yes | WORK AREA LIMITS |
| N | XREF | | | 254 | Continuous | Yes | EXTERNAL REFERENCE DRAWINGS |
| N | XREF | RAST | | 254 | Continuous | Yes | RASTER IMAGES |

### 1.23.3 LINETYPES

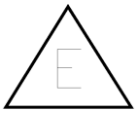
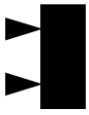
| Name | Description | Example |
|---|---|---|
| Border2 | | |
| Continuous | Continuous | |
| DASHED | Dashed (1x) | |
| DashDot2 | | |
| MATCHLINE | | |
| PHANTOM2 | | |

## 1.23.4 SYMBOLS

### 1.23.4.1 DRAFTING CONVENTIONS

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | Env-callout.dwg | (Varies) | Callout Symbol |
|  | Env-det-symb.dwg | (Varies) | Detail Symbol |
|  | Env-sec-mark.dwg | (Varies) | Section Mark Symbol |
|  | Nts.dwg | (Varies) | Not-to-Scale |

### 1.23.4.2 MISCELLANEOUS

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | ACM.dwg | (Varies) | Asbestos-Containing Material |
|  | ContainmentLimits.dwg | (Varies) | Containment Limits |
|  | Criticalbarrier.dwg | (Varies) | Critical Barrier |
|  | Eexit.dwg | (Varies) | Emergency Exit |
|  | Electricsource.dwg | (Varies) | Electrical Power Source |
|  | Emergencylite.dwg | (Varies) | Emergency Light |
|  | Removalroofpoint.dwg | (Varies) | Removal Roof Footprint |
|  | Isolationbarrier.dwg | (Varies) | Isolation Barrier |

| | | | |
|---|---|---|---|
|  | Nau.dwg | (Varies) | Negative Air Unit |
|  | Nauexhaustroute.dwg | (Varies) | NAU Flex Exhaust Route |
|  | Vif.dwg | (Varies) | Verify in Field |
|  | Water&drain.dwg | (Varies) | Water/Drain Source Locations |
|  | Workarea1way.dwg | (Varies) | Work Area (One Way) Access/Egress |
|  | Workarea2way.dwg | (Varies) | Work Area (Two Way) Access/Egress |
|  | Workarealimits.dwg | (Varies) | Work Area Limits |

## 1.24 APPENDIX J – GEOTECHNICAL DISCIPLINE

### 1.24.1 CONTENT PREFERENCES

This Section Is Under Construction

### 1.24.2 LAYER STRATAGEM

#### 1.24.2.1 GEOTECHNICAL WORK

| DISCIPLINE | MAJOR | MINOR | DESC | COLOR | LINETYPE | PLOTS | DESCRIPTION |
|---|---|---|---|---|---|---|---|
| G | ANNO | CHNG | | 2 | Continuous | Yes | Identification of Updated Work |
| G | ANNO | DIMS | | 2 | Continuous | Yes | Witness/Extension Lines, Dimension Lines, Arrowheads and Dimension Text |
| G | ANNO | KEYN | | 2 | Continuous | Yes | Keynotes with Associated Leaderlines and Arrowheads |
| G | ANNO | MLIN | | 6 | Continuous | Yes | Matchlines |
| G | ANNO | NOTE | | 2 | Continuous | Yes | General Notes and Remarks |
| G | ANNO | NPLT | | 6 | Continuous | No | Construction Lines/Reference Targets and Review Comments |
| G | ANNO | SYMB | | 2 | Continuous | Yes | Miscellaneous Symbols |
| G | ANNO | TEXT | | 2 | Continuous | Yes | Miscellaneous Text with Associated Leaderlines and Arrowheads |
| G | ANNO | TTLB | | 210 | Continuous | Yes | Border and Titleblock Linework |
| G | ANNO | TABL | | 210 | Continuous | Yes | Table and Schedule Linework |
| G | ANNO | VPRT | | 5 | Continuous | No | Viewports |
| G | DETL | LINE | | 140 | Continuous | Yes | Medium Weight Detail Linework |
| G | DETL | LINE | FINE | 143 | Continuous | Yes | Light Detail Linework |
| G | DETL | LINE | HEVY | 141 | Continuous | Yes | Bold Detail Linework |
| G | DETL | BORE | | 3 | Continuous | Yes | Borings/Perk Holes |
| G | DETL | CONC | | 8 | Continuous | Yes | Concrete |
| G | DETL | ERTH | | 3 | Continuous | Yes | Earth/Soil |
| G | DETL | FILL | | 3 | Continuous | Yes | Fill/Cover Material |
| G | DETL | FLDN | | 3 | Continuous | Yes | Field Information |
| G | DETL | GNWD | | 3 | Continuous | Yes | Ground Water |
| G | DETL | GNRL | | 3 | Continuous | Yes | General Features |
| G | DETL | TEXT | | 3 | Continuous | Yes | Text |
| G | DETL | LABI | | 3 | Continuous | Yes | Laboratory Information |
| G | DETL | PAVE | | 3 | Continuous | Yes | Pavement |
| G | DETL | SPCF | | 4 | Continuous | Yes | Special Features |
| G | DETL | STEL | | 3 | Continuous | Yes | Steel |
| G | DETL | STRM | | 3 | Continuous | Yes | Storm Water |
| G | DETL | SUBS | | 3 | Continuous | Yes | Subsurface Areas |
| G | DETL | INST | | 3 | Continuous | Yes | Instrumentation Details |
| G | DETL | SURF | | 3 | Continuous | Yes | Surface Areas |
| G | SITE | BORE | | 1 | Continuous | Yes | Soil Boring Sample Locations |
| G | SITE | GNRL | | 3 | Continuous | Yes | General |
| G | SITE | GRID | | 132 | Continuous | Yes | Grid Lines |
| G | SITE | MONW | | 1 | Continuous | Yes | Monitoring Well Locations |
| G | SITE | SUBS | | 3 | Continuous | Yes | Subsurface |
| G | SITE | SURF | | 8 | Continuous | Yes | Surface |
| G | SITE | TEXT | | 3 | Continuous | Yes | Text |
| G | XREF | | | 210 | Continuous | Yes | Externally Referenced Drawings |
| G | XREF | RAST | | 210 | Continuous | Yes | Raster Images |

### 1.24.3 LINETYPES

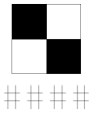
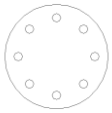
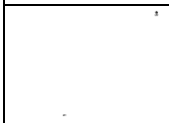
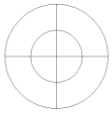
| Name | Description | Example |
|---|---|---|
| Continuous | Continuous | ——— |

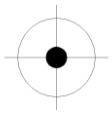
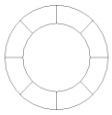
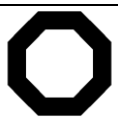
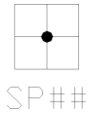
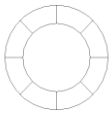
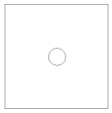
### 1.24.4 SYMBOLS

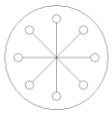
#### 1.24.4.1 DRAFTING CONVENTIONS

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | geo-CALLOUT.dwg | (Varies) | Callout Symbol |
|  | geo-DET-SYMB.dwg | (Varies) | Detail Symbol |
|  | geo-SEC-MARK.dwg | (Varies) | Section Mark Symbol |

#### 1.24.4.2 MISCELLANEOUS

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | Borehole.dwg | (Varies) | Bore Hole |
|  | Caisson.dwg | (Varies) | Caisson |
|  | ConePenetometer.dwg | (Varies) | Cone Penetometer Sounding |
|  | HML.dwg | (Varies) | HML |
|  | H-Piles.dwg | (Varies) | H Piles |
|  | MonotubePiles.dwg | (Varies) | Monotube Piles |
|  | ObervationWell.dwg | (Varies) | Observation Well |

| | | | |
|---|---|---|---|
|  | Piezometer.dwg | (Varies) | Piezometer |
|  | PipePiles.dwg | (Varies) | Pipe Piles |
|  | PrecastConcretePile.dwg | (Varies) | Precast Concrete |
|  | SecantPilesPerm.dwg | (Varies) | Secant Piles |
|  | SecantPilesTemp.dwg | (Varies) | Temporary Secant Piles |
|   | Seismograph.dwg | (Varies) | Seismograph |
|   | SettlementPlate.dwg | (Varies) | Settlement Plate |
|  | SlopeInclinometer.dwg | (Varies) | Slope Inclinometer |
|  | SteelSheetPiles.dwg | (Varies) | Steel Sheet Piles |
|   | StrainGauge.dwg | (Varies) | Strain Gauge |
|  | SurfaceMonitoringPoint.dwg | (Varies) | Surface Monitoring Point |
|   | TapeExtensometerSpan.dwg | (Varies) | Tape Extensometer Span |
|  | Tapertubepiles.dwg | (Varies) | Taper Tube Piles |
|  | Tieback.dwg | (Varies) | Tie Back |

| | | | |
|---|---|---|---|
|  | Timberpiles.dwg | (Varies) | Timber Piles |

# 1.25 APPENDIX K – MECHANICAL DISCIPLINE

## 1.25.1 CONTENT PREFERENCES

This Section Is Under Construction

## 1.25.2 LAYER STRATAGEM

### 1.25.2.1 HVAC WORK

| DISCIPLINE | MAJOR | MINOR | DESC | PHASE | COLOR | LINETYPE | PLOTS | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|
| M | ANNO | CHNG | | | 2 | Continuous | Yes | Identification of Updated Work |
| M | ANNO | COLN | | | 250 | Center | Yes | Column Line |
| M | ANNO | DIMS | | | 8 | Continuous | Yes | Dimensions |
| M | ANNO | KEYN | | | 2 | Continuous | Yes | Keynotes |
| M | ANNO | MLIN | | | 6 | Divide | Yes | Match Lines |
| M | ANNO | NOTE | | | 2 | Continuous | Yes | General Notes and Remarks |
| M | ANNO | NPLT | | | 8 | Continuous | Yes | Construction and Reference Lines |
| M | ANNO | SYMB | | | 2 | Continuous | Yes | Miscellaneous Symbols |
| M | ANNO | TEXT | | | 2 | Continuous | Yes | Annotations |
| M | ANNO | TTLB | | | 2 | Continuous | Yes | Borders |
| M | ANNO | VPRT | | | 7 | Continuous | Yes | View Ports |
| M | AVFL | ABVE | | | 6 | AFS | Yes | Jet Fuel Above Ground |
| M | AVFL | BELW | | | 6 | AFSU | Yes | Jet Fuel Below Ground |
| M | AVFL | EQPT | | | 60 | Continuous | Yes | Jet Fuel Equipment |
| M | AVFL | OUTS | | | 6 | AFS | Yes | Jet Fuel Out Of Service |
| M | AVFL | TANK | | | 60 | Continuous | Yes | Jet Fuel Tanks |
| M | AVFL | VALV | | | 60 | Continuous | Yes | Jet Fuel Valves |
| M | BKGD | | | | 253 | Continuous | Yes | Background Features |
| M | BKGD | TEXT | | | 140 | Continuous | Yes | Background Feature Annotations |
| M | CDWR | RETN | | | 150 | CWR | Yes | Condenser Water Piping Return (Schematic) |
| M | CDWR | RETN | DBLN | | 150 | Continuous | Yes | Condenser Water Piping Return |
| M | CDWR | SUPP | | | 150 | CWS | Yes | Condenser Water Piping Supply (Schematic) |
| M | CDWR | SUPP | DBLN | | 150 | Continuous | Yes | Condenser Water Piping Supply |
| M | COND | HPIP | | | 140 | HPC | Yes | High Pressure Condensate Piping (Schematic) |
| M | COND | HPIP | DBLN | | 140 | Continuous | Yes | High Pressure Condensate Piping |
| M | COND | TEXT | | | 2 | Continuous | Yes | High Pressure Condesate Text |
| M | COND | LPIP | | | 140 | LPC | Yes | Low Pressure Condensate Piping (Schematic) |
| M | COND | LPIP | DBLN | | 140 | Continuous | Yes | Low Pressure Condensate Piping |
| M | COND | MPIP | | | 140 | MPC | Yes | Medium Pressure Condensate Piping (Schematic) |
| M | COND | MPIP | DBLN | | 140 | Continuous | Yes | Medium Pressure Condensate Piping |
| M | CHWR | RETN | | | 90 | CHWR | Yes | Chilled Water Piping Return (Schematic) |
| M | CHWR | RETN | DBLN | | 90 | Continuous | Yes | Chilled Water Piping Return |
| M | CHWR | SUPP | | | 90 | CHWS | Yes | Chilled Water Piping Supply (Schematic) |
| M | CHWR | SUPP | DBLN | | 90 | Continuous | Yes | Chilled Water Piping Supply |
| M | CTRL | DEVI | | | 140 | Continuous | Yes | Control Devices |
| M | CTRL | LINK | | | 170 | Dashed | Yes | Control / Communication Link |
| M | CTRL | TEXT | | | 2 | Continuous | Yes | Control Text |
| M | DETL | CABS | | | 7 | Continuous | Yes | Cabinets |
| M | DETL | DUCT | | | 140 | Continuous | Yes | Ducts |
| M | DETL | EQPT | | | 90 | Continuous | Yes | Equipment and Fixtures |
| M | DETL | GENF | | | 243 | Continuous | Yes | General Features |
| M | DETL | LVLE | | | 60 | Continuous | Yes | Valves and Fittings |
| M | DETL | PATT | | | 8 | Continuous | Yes | Hatch Patterns |
| M | DETL | PIPE | | | 6 | Continuous | Yes | Piping |
| M | DETL | STRC | | | 170 | Continuous | Yes | Structural Support Features |
| M | DETL | WIRE | | | 83 | Continuous | Yes | Electrical Wiring |
| M | DUCT | DAMP | | | 140 | Continuous | Yes | Fire Damper or Fire / Smoke Damper |
| M | DUCT | DETR | | | 140 | Continuous | Yes | Smoke or Heat Detector |
| M | DUCT | EXHT | | | 6 | Continuous | Yes | Exhaust Duct Work |
| M | DUCT | RETN | | | 231 | Continuous | Yes | Return Duct Work |
| M | DUCT | SUPL | | | 140 | Continuous | Yes | Supply Duct Work |
| M | ELEV | FIXT | | | 241 | Continuous | Yes | Miscellaneous Features |
| M | ELEV | IDEN | | | 9 | Continuous | Yes | Component Identification Numbers |
| M | ELEV | OTLN | | | 7 | Continuous | Yes | Building Outlines |
| M | ELEV | PATT | | | 7 | Continuous | Yes | Textures and Hatch Patterns |
| M | ELEV | PFIX | | | 2 | Continuous | Yes | Plumbing Fixtures |
| M | FUEL | FORA | | | 140 | FOR | Yes | Fuel Oil Return Above |
| M | FUEL | FORU | | | 140 | FORU | Yes | Fuel Oil Return Below |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| M | FUEL | FOSA | | | 140 | FOS | Yes | Fuel Oil Suction Above |
| M | FUEL | FOSU | | | 140 | FOSU | Yes | Fuel Oil Suction Below |
| M | FUEL | FOVA | | | 140 | FOV | Yes | Fuel Oil Tank Vent Above |
| M | FUEL | FOVU | | | 140 | FOVU | Yes | Fuel Oil Tank Vent Below |
| M | FUEL | TANK | | | 90 | Continuous | Yes | Fuel Oil Tank |
| M | DTWS | RETN | | | 90 | DTWR | Yes | Dual Temperature Water Piping Return (Schematic) |
| M | DTWS | RETN | DBLN | | 90 | Continuous | Yes | Dual Temperature Water Piping Return |
| M | DTWS | SUPP | | | 90 | DTWS | Yes | Dual Temperature Water Piping Supply (Schematic) |
| M | DTWS | SUPP | DBLN | | 90 | Continuous | Yes | Dual Temperature Water Piping Supply |
| M | HTWR | RETN | | | 231 | HWR | Yes | Hot Water Piping Return (Schematic) |
| M | HTWR | RETN | DBLN | | 231 | Continuous | Yes | Hot Water Piping Return |
| M | HTWR | SUPP | | | 231 | HWS | Yes | Hot Water Piping Supply (Schematic) |
| M | HTWR | SUPP | DBLN | | 231 | Continuous | Yes | Hot Water Piping Supply |
| M | HVAC | EQPM | | | 90 | Continuous | Yes | HVAC Equipment |
| M | HVAC | PATT | | | 8 | Continuous | Yes | HVAC Hatch Patterns |
| M | HVAC | TEXT | | | 2 | Continuous | Yes | HVAC Annotations |
| M | HTOL | COIL | | | 140 | Continuous | Yes | Hot Oil Snow Melting Coil (Schematic) |
| M | HTOL | COIL | DBLN | | 140 | Continuous | Yes | Hot Oil Snow Melting Coil |
| M | HTOL | RETN | | | 90 | HOSMR | Yes | Hot Oil Snow Melting Return Pipe (Schematic) |
| M | HTOL | RETN | DBLN | | 90 | Continuous | Yes | Hot Oil Snow Melting Return Pipe |
| M | HTOL | SUPP | | | 231 | HOSMS | Yes | Hot Oil Snow Melting Supply Pipe (Schematic) |
| M | HTOL | SUPP | DBLN | | 231 | Continuous | Yes | Hot Oil Snow Melting Supply Pipe |
| M | HTOL | VLBX | | | 2 | Continuous | Yes | Hot Oil Snow Melting Valve Box |
| M | HTHW | RETN | | | 43 | HTHWR | Yes | High Temperature Hot Water Return (Schematic) |
| M | HTHW | RETN | DBLN | | 43 | Continuous | Yes | High Temperature Hot Water Return |
| M | HTHW | SUPP | | | 43 | HTHWS | Yes | High Temperature Hot Water Supply (Schematic) |
| M | HTHW | SUPP | DBLN | | 43 | Continuous | Yes | High Temperature Hot Water Supply |
| M | MTHW | RETN | | | 231 | MTHWR | Yes | Medium Temperature Hot Water Return (Schematic) |
| M | MTHW | RETN | DBLN | | 231 | Continuous | Yes | Medium Temperature Hot Water Return |
| M | MTHW | SUPP | | | 231 | MTHWS | Yes | Medium Temperature Hot Water Supply (Schematic) |
| M | MTHW | SUPP | DBLN | | 231 | Continuous | Yes | Medium Temperature Hot Water Supply |
| M | MISC | BBDN | | | 231 | BBD | Yes | Boiler Blow Down |
| M | MISC | BKGD | | | 7 | Continuous | Yes | Background Piping |
| M | MISC | CAIR | | | 140 | A | Yes | Compressed Air |
| M | MISC | DRAN | | | 231 | D | Yes | Drain Piping |
| M | MISC | MWTR | | | 231 | MU | Yes | Makeup Water |
| M | PRES | DBLU | | | 180 | Continuous | Yes | Dark Blue |
| M | PRES | DGRN | | | 96 | Continuous | Yes | Dark Green |
| M | PRES | DPNK | | | 240 | Continuous | Yes | Dark Pink |
| M | PRES | LBLU | | | 120 | Continuous | Yes | Light Blue |
| M | PRES | LGRN | | | 61 | Continuous | Yes | Light Green |
| M | PRES | LPNK | | | 221 | Continuous | Yes | Light Pink |
| M | PRES | ORNG | | | 41 | Continuous | Yes | Orange |
| M | PRES | PRPL | | | 202 | Continuous | Yes | Purple |
| M | PRES | RED | | | 20 | Continuous | Yes | Red |
| M | REFG | DISG | | | 231 | RD | Yes | Refrigerant Discharge (Schematic) |
| M | REFG | LIQD | | | 231 | RL | Yes | Refrigerant Liquid (Schematic) |
| M | REFG | SCTN | | | 231 | RS | Yes | Refrigerant Suction (Schematic) |
| M | RIVW | BKGD | | | 6 | Continuous | Yes | River Water Background Features |
| M | RIVW | RETN | | | 90 | Continuous | Yes | River Water Return |
| M | RIVW | SUPP | | | 6 | Continuous | Yes | River Water Supply |
| M | RIVW | TUNL | | | 6 | Continuous | Yes | River Water Tunnel |
| M | SECT | TEXT | | | 2 | Continuous | Yes | Component Identification Numbers |
| M | SECT | MBND | | | 7 | Continuous | Yes | Materials Beyond Section Cut |
| M | SECT | MCUT | | | 7 | Continuous | Yes | Materials Cut By Section |
| M | SECT | PATT | | | 7 | Continuous | Yes | Textures and Hatch Patterns |
| M | STEM | HPIP | | | 35 | HPS | Yes | High Pressure Steam Piping (Schematic) |
| M | STEM | HPIP | DBLN | | 35 | Continuous | Yes | High Pressure Steam Piping |
| M | STEM | LPIP | | | 35 | LPS | Yes | Low Pressure Steam Piping (Schematic) |
| M | STEM | LPIP | DBLN | | 35 | Continuous | Yes | Low Pressure Steam Piping |
| M | STEM | MPIP | | | 35 | MPS | Yes | Medium Pressure Steam Piping (Schematic) |
| M | STEM | MPIP | DBLN | | 35 | Continuous | Yes | Medium Pressure Steam Piping |
| M | XREF | | | | 7 | Continuous | Yes | External Reference Drawings |
| M | XREF | RAST | | | 7 | Continuous | Yes | Raster Images |

### 1.25.2.2 FIRE PROTECTION WORK

| DISCIPLINE | MAJOR | MINOR | DESC | PHASE | COLOR | LINETYPE | PLOTS | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|
| F | ANNO | CHNG | | | 2 | Continuous | Yes | Identification of Updated Work |
| F | ANNO | DIMS | | | 8 | Continuous | Yes | Dimensions |
| F | ANNO | KEYN | | | 2 | Continuous | Yes | Keynotes |
| F | ANNO | MLIN | | | 6 | Continuous | Yes | Match Lines |
| F | ANNO | NOTE | | | 2 | Continuous | Yes | General Notes and Remarks |
| F | ANNO | NPLT | | | 8 | Continuous | Yes | Construction and Reference Lines |
| F | ANNO | SYMB | | | 2 | Continuous | Yes | Miscellaneous Symbols |
| F | ANNO | TEXT | | | 2 | Continuous | Yes | Miscellaneous Annotations |
| F | ANNO | TTLB | | | 2 | Continuous | Yes | Borders |
| F | ANNO | VPRT | | | 7 | Continuous | Yes | View Ports |
| F | DETL | CABS | | | 7 | Continuous | Yes | Hose Cabinets |
| F | DETL | DUCT | | | 140 | Continuous | Yes | Ducts |
| F | DETL | EQPT | | | 90 | Continuous | Yes | Equipment and Fixtures |
| F | DETL | FANS | | | 90 | Continuous | Yes | Fans |
| F | DETL | GENF | | | 243 | Continuous | Yes | General Features |
| F | DETL | GRLS | | | 140 | Continuous | Yes | Grilles and Louvers |
| F | DETL | LVLE | | | 60 | Continuous | Yes | Valves and Fittings |
| F | DETL | PUMP | | | 60 | Continuous | Yes | Pumps and Compressors |
| F | DETL | STRC | | | 170 | Continuous | Yes | Structural Support Features |
| F | DETL | VENT | | | 35 | Dashed | Yes | Vents |
| F | DETL | WIRE | | | 83 | Continuous | Yes | Electrical Wiring |
| F | ELEV | FIXT | | | 241 | Continuous | Yes | Miscellaneous Fixtures |
| F | ELEV | IDEN | | | 9 | Continuous | Yes | Component Identifcation Numbers |
| F | ELEV | OTLN | | | 7 | Continuous | Yes | Building Outlines |
| F | ELEV | PATT | | | 7 | Continuous | Yes | Textures and Patterns |
| F | ELEV | PFIX | | | 2 | Continuous | Yes | Plumbing Fixtures |
| F | CO2_ | | | | 231 | Continuous | Yes | CO2 System |
| F | CO2_ | EQPM | | | 231 | Continuous | Yes | CO2 Equipment |
| F | CO2_ | HEAD | | | 231 | Continuous | Yes | CO2 Head |
| F | CO2_ | PIPE | | | 131 | CO2 | Yes | CO2 Sprinkler Piping |
| F | FM2_ | | | | 231 | Continuous | Yes | FM 200 System |
| F | FM2_ | EQPM | | | 231 | Continuous | Yes | FM 200 Equipment |
| F | FM2_ | HEAD | | | 231 | Continuous | Yes | FM 200 Head |
| F | FM2_ | PIPE | | | 131 | FM_200 | Yes | FM 200 Sprinkler Piping |
| F | INGN | | | | 231 | Continuous | Yes | Inergen System |
| F | INGN | EQPM | | | 231 | Continuous | Yes | Inergen Equipment |
| F | INGN | HEAD | | | 231 | Continuous | Yes | Inergen Head |
| F | INGN | PIPE | | | 131 | INERGEN | Yes | Inergen Piping |
| F | SECT | IDEN | | | 2 | Continuous | Yes | Component Identifcation Numbers |
| F | SECT | MBND | | | 7 | Continuous | Yes | Materials Beyond Section Cut |
| F | SECT | MCUT | | | 7 | Continuous | Yes | Materials Cut By Section |
| F | SECT | PATT | | | 7 | Continuous | Yes | Textures and Patterns |
| F | WET_ | EQUP | | | 231 | Continuous | Yes | Wet Sprinkler Equipment |
| F | WET_ | HEAD | | | 131 | Continuous | Yes | Wet Sprinkler Heads |
| F | WET_ | HEAD | PNDT | | 131 | Continuous | Yes | Wet Sprinkler Pendant Heads |
| F | WET_ | HEAD | CONC | | 131 | Continuous | Yes | Wet Sprinkler Concealed Heads |
| F | WET_ | HEAD | RECD | | 131 | Continuous | Yes | Wet Sprinkler Recessed Heads |
| F | WET_ | HEAD | SIDE | | 131 | Continuous | Yes | Wet SprinklerSidewall Heads |
| F | WET_ | HEAD | UPRT | | 131 | Continuous | Yes | Wet Sprinkler Upright Heads |
| F | WET_ | PIPE | | | 131 | SP | Yes | Wet Sprinkler Piping |
| F | DELU | EQUP | | | 231 | Continuous | Yes | Deluge Sprinkler Equipment |
| F | DELU | HEAD | | | 131 | Continuous | Yes | Deluge Sprinkler Heads |
| F | DELU | HEAD | PNDT | | 131 | Continuous | Yes | Deluge Sprinkler Pendant Heads |
| F | DELU | HEAD | CONC | | 131 | Continuous | Yes | Deluge Sprinkler Concealed Heads |
| F | DELU | HEAD | RECD | | 131 | Continuous | Yes | Deluge Sprinkler Recessed Heads |
| F | DELU | HEAD | SIDE | | 131 | Continuous | Yes | Deluge Sprinkler Sidewall Heads |
| F | DELU | HEAD | UPRT | | 131 | Continuous | Yes | Deluge Sprinkler Upright Heads |
| F | DELU | PIPE | | | 131 | DEL | Yes | Deluge Sprinkler Piping |
| F | DRYC | EQUP | | | 231 | Continuous | Yes | Dry Chemical Sprinkler Equipment |
| F | DRYC | HEAD | | | 131 | Continuous | Yes | Dry Chemical Sprinkler Heads |
| F | DRYC | HEAD | PNDT | | 131 | Continuous | Yes | Dry Chemical Sprinkler Pendant Heads |
| F | DRYC | HEAD | CONC | | 131 | Continuous | Yes | Dry Chemical Sprinkler Concealed Heads |
| F | DRYC | HEAD | RECD | | 131 | Continuous | Yes | Dry Chemical Sprinkler Recessed Heads |
| F | DRYC | HEAD | SIDE | | 131 | Continuous | Yes | Dry Chemical Sprinkler Sidewall Heads |
| F | DRYC | HEAD | UPRT | | 131 | Continuous | Yes | Dry Chemical Sprinkler Upright Heads |
| F | DRYC | PIPE | | | 131 | DRY_CHEM | Yes | Dry Chemical Sprinkler Piping |
| F | DRY_ | EQUP | | | 231 | Continuous | Yes | Dry Sprinkler Equipment |
| F | DRY_ | HEAD | | | 131 | Continuous | Yes | Dry Sprinkler Heads |
| F | DRY_ | HEAD | PNDT | | 131 | Continuous | Yes | Dry Sprinkler Pendant Heads |
| F | DRY_ | HEAD | CONC | | 131 | Continuous | Yes | Dry Sprinkler Concealed Heads |

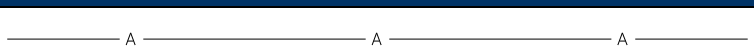
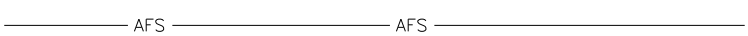
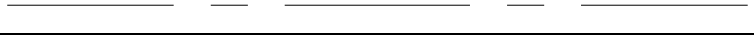
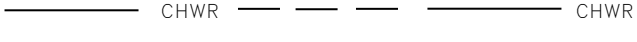
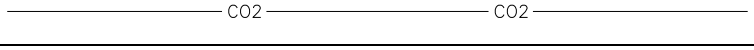
| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| F | DRY_ | HEAD | RECD | | 131 | Continuous | Yes | Dry Sprinkler Recessed Heads |
| F | DRY_ | HEAD | SIDE | | 131 | Continuous | Yes | Dry Sprinkler Sidewall Heads |
| F | DRY_ | HEAD | UPRT | | 131 | Continuous | Yes | Dry Sprinkler Upright Heads |
| F | DRY_ | PIPE | | | 131 | DRY | Yes | Dry Sprinkler Piping |
| F | FOAM | EQUP | | | 231 | Continuous | Yes | Foam Sprinkler Equipment |
| F | FOAM | HEAD | | | 131 | Continuous | Yes | Foam Sprinkler Heads |
| F | FOAM | HEAD | PNDT | | 131 | Continuous | Yes | Foam Sprinkler Pendant Heads |
| F | FOAM | HEAD | CONC | | 131 | Continuous | Yes | Foam Sprinkler Concealed Heads |
| F | FOAM | HEAD | RECD | | 131 | Continuous | Yes | Foam Sprinkler Recessed Heads |
| F | FOAM | HEAD | SIDE | | 131 | Continuous | Yes | Foam Sprinkler Sidewall Heads |
| F | FOAM | HEAD | UPRT | | 131 | Continuous | Yes | Foam Sprinkler Upright Heads |
| F | FOAM | PIPE | | | 131 | FOAM | Yes | Foam Sprinkler Piping |
| F | PREA | EQUP | | | 231 | Continuous | Yes | Pre-Action Sprinkler Equipment |
| F | PREA | HEAD | | | 131 | Continuous | Yes | Pre-Action Sprinkler Heads |
| F | PREA | HEAD | PNDT | | 131 | Continuous | Yes | Pre-Action Sprinkler Pendant Heads |
| F | PREA | HEAD | CONC | | 131 | Continuous | Yes | Pre-Action Sprinkler Concealed Heads |
| F | PREA | HEAD | RECD | | 131 | Continuous | Yes | Pre-Action Sprinkler Recessed Heads |
| F | PREA | HEAD | SIDE | | 131 | Continuous | Yes | Pre-Action Sprinkler Sidewall Heads |
| F | PREA | HEAD | UPRT | | 131 | Continuous | Yes | Pre-Action Sprinkler Upright Heads |
| F | PREA | PIPE | | | 131 | Continuous | Yes | Pre-Action Sprinkler Piping |
| F | SPKL | TEXT | | | 2 | Continuous | Yes | Fire Protection Annotations |
| F | XREF | | | | 7 | Continuous | Yes | Externally Referenced Drawings |
| F | XREF | RAST | | | 7 | Continuous | Yes | Raster Images |

### 1.25.2.3 PLUMBING WORK

| DISCIPLINE | MAJOR | MINOR | DESC | PHASE | COLOR | LINETYPE | PLOTS | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|
| P | ACID | EQPM | | | 131 | Continuous | Yes | Acid, Alkaline and Oil Waste Equipment |
| P | ACID | PIPE | | | 131 | Acid | Yes | Acid, Alkaline and Oil Waste Piping |
| P | ANNO | CHNG | | | 2 | Divide | Yes | Identification of Updated Work |
| P | ANNO | DIMS | | | 8 | Continuous | Yes | Dimensions |
| P | ANNO | KEYN | | | 2 | Continuous | Yes | Keynotes |
| P | ANNO | MLIN | | | 6 | Continuous | Yes | Match Lines |
| P | ANNO | NOTE | | | 2 | Continuous | Yes | General Notes and Remarks |
| P | ANNO | NPLT | | | 8 | Continuous | Yes | Construction and Reference Lines |
| P | ANNO | SUBT | | | 131 | Continuous | Yes | Subtitles |
| P | ANNO | SYMB | | | 2 | Continuous | Yes | Miscellaneous Symbols |
| P | ANNO | TEXT | | | 2 | Continuous | Yes | Miscellaneous Annotations |
| P | ANNO | TITL | | | 6 | Continuous | Yes | Titles |
| P | ANNO | TTLB | | | 2 | Continuous | Yes | Borders |
| P | ANNO | VPRT | | | 7 | Continuous | Yes | View Ports |
| P | CAIR | | | | 30 | A | Yes | Compressed Air Features |
| P | CAIR | EQPM | | | 1 | Continuous | Yes | Compressed Air Equipment |
| P | DETL | EQPM | | | 3 | Continuous | Yes | Equipment and Fixtures |
| P | DOMW | | | | 170 | Continuous | Yes | Domestic Hot and Cold Water Systems |
| P | DOMW | COLD | | | 170 | DCW | Yes | Domestic Cold Water Piping |
| P | DOMW | EQPM | | | 1 | Continuous | Yes | Domestic Hot and Cold Water Equipment |
| P | DOMW | HOT_ | | | 170 | DHW | Yes | Domestic Hot Water Piping |
| P | DOMW | PIPE | | | 170 | Continuous | Yes | Domestic Water Piping (Schematic) |
| P | DOMW | PIPE | DBLN | | 170 | Continuous | Yes | Domestic Water Piping |
| P | DOMW | RETN | | | 170 | DHWR | Yes | Domestic Hot Water Return Piping |
| P | DOMW | TEMP | | | 170 | T | Yes | Domestic Water Tempered Water |
| P | ELEV | IDEN | | | 2 | Continuous | Yes | Component Identification Numbers |
| P | ELEV | OTLN | | | 7 | Continuous | Yes | Building Outlines |
| P | ELEV | PATT | | | 7 | Continuous | Yes | Textures and Patterns |
| P | ELEV | PFIX | | | 51 | Continuous | Yes | Plumbing Fixtures |
| P | FSP_ | PIPE | | | 170 | FSP | Yes | Fire Standpipe Piping |
| P | GAS | EQPM | | | 1 | Continuous | Yes | Gas Equipment |
| P | GAS | PIPE | | | 40 | G | Yes | Gas Piping |
| P | IRRG | COVR | | | 42 | Continuous | Yes | Irrigation Coverage and Spray Distribution Patterns |
| P | IRRG | EQPM | | | 60 | Continuous | Yes | Irrigation Equipment |
| P | IRRG | PIPE | MAIN | | 121 | Continuous | Yes | Main Irrigation Pipe Line |
| P | IRRG | PIPE | SLEV | | 121 | Continuous | Yes | Irrigation Piping Sleeve |
| P | IRRG | PIPE | ZONE | | 121 | Continuous | Yes | Irrigation Piping Zone |
| P | IRRG | SPKL | FIX_ | | 42 | Continuous | Yes | Sprinklers - Fixed Spray |
| P | IRRG | SPKL | SIDE | | 42 | Continuous | Yes | Sprinklers - Side Walk |
| P | IRRG | TEXT | | | 2 | Continuous | Yes | Irrigation Annotation |
| P | MISC | SKID | | | 30 | Hidden2 | Yes | Skid Pad |
| P | MISC | BKGD | | | 7 | Continuous | Yes | Background Features |
| P | MISC | HTRC | | | 26 | HTRACE | Yes | Heat Tacing (Draw Over Linework) |

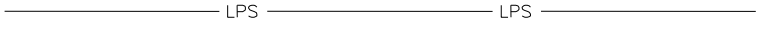
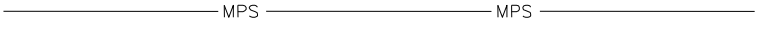
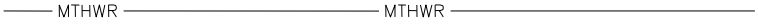
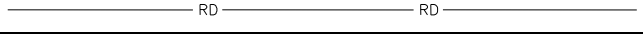
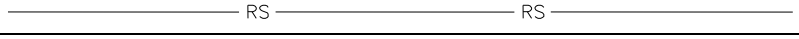
| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| P | OIL_ | EQPM | | | 1 | Continuous | Yes | Oil Equipment |
| P | OIL_ | PIPE | | | 32 | OW | Yes | Oil Piping |
| P | SSWR | | | | 141 | SAN | Yes | Sanitary Sewer Systems |
| P | SSWR | BELW | | | 141 | SANU | Yes | Sanitary Sewer Underground |
| P | SSWR | EQPM | | | 10 | Continuous | Yes | Sanitary Sewer Equipment (Schematic) |
| P | SSWR | EQPM | DBLN | | 10 | Continuous | Yes | Sanitary Sewer Equipment |
| P | SSWR | FIXT | | | 51 | Continuous | Yes | Sanitary Sewer Plumbing Fixtures |
| P | SSWR | FLDR | | | 1 | Continuous | Yes | Sanitary Sewer Floor Drains |
| P | SSWR | PIPE | | | 141 | SAN | Yes | Sanitary Sewer Piping (Schematic) |
| P | SSWR | PIPE | SML_ | | 50 | Continuous | Yes | Sanitary Sewer Piping 4 Inch or Under Diameter |
| P | SSWR | PIPE | LRG_ | | 51 | Continuous | Yes | Sanitary Sewer Piping Over 4 Inch Diameter |
| P | SSWR | RISR | | | 51 | Continuous | Yes | Sanitary Sewer Risers |
| P | SECT | IDEN | | | 2 | Continuous | Yes | Component Identification Numbers |
| P | SECT | MBND | | | 7 | Continuous | Yes | Materials Beyond Section Cut |
| P | SECT | MCUT | | | 7 | Continuous | Yes | Materials Cut By Section |
| P | SECT | PATT | | | 7 | Continuous | Yes | Textures and Patterns |
| P | DRAN | | | | 141 | ST | Yes | Storm Drainage System |
| P | DRAN | BELW | | | 141 | STU | Yes | Storm Drainage System Underground |
| P | DRAN | EQPM | | | 10 | Continuous | Yes | Storm Drainage Equipment (Schematic) |
| P | DRAN | EQPM | DBLN | | 10 | Continuous | Yes | Storm Drainage Equipment |
| P | DRAN | PIPE | | | 141 | ST | Yes | Storm Drainage Piping (Schematic) |
| P | DRAN | PIPE | SML_ | | 50 | Continuous | Yes | Storm Drainage Piping 4 Inch or Under Diameter |
| P | DRAN | PIPE | LRG_ | | 51 | Continuous | Yes | Storm Drainage Piping Over 4 Inch Diameter |
| P | DRAN | RISR | | | 51 | Continuous | Yes | Storm Drainage Risers |
| P | DRAN | ROOF | | | 1 | Continuous | Yes | Storm Drainage Roof Drains |
| P | VENT | PIPE | | | 32 | VENT | Yes | Vent System Piping |
| P | VENT | RISR | | | 51 | Continuous | Yes | Vent Riser |
| P | XREF | | | | 7 | Continuous | Yes | External Reference Drawings |
| P | XREF | RAST | | | 7 | Continuous | Yes | Raster Images |

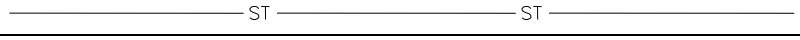
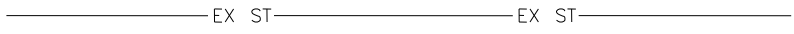
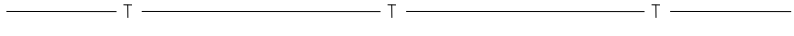
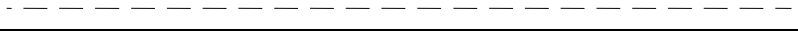
### 1.25.3 LINETYPES

| Name | Description | Example |
|---|---|---|
| A | Compressed Air Line |  |
| ACID | Acid Alkaline Oil Waste Piping |  |
| ACID_EX | Existing Acid Alkaline Oil Waste Piping |  |
| AFS | Aviation Fuel |  |
| AFSU | Aviation Fuel Underground |  |
| BBD | Boiler Blow Down |  |
| Center | |  |
| CHWS | Chilled Water Piping Schematic Supply |  |
| CHWR | Chilled Water Piping Schematic Return |  |
| CO2 | Co2 Sprinkler System |  |
| Continuous | |  |

| Name | Description | Example |
|---|---|---|
| CWR | Condenser Water Piping Schematic Return | CWR CWR |
| CWS | Condenser Water Piping Schematic Supply | CWS CWS |
| D | Drain Piping | D D D |
| Dashed | | |
| DCW | Domestic Cold Water | |
| DCW_EX | Existing Domestic Cold Water | EX EX EX |
| DEL | Deluge Sprinkler Heads | DEL DEL |
| DHW | Domestic Hot Water | |
| DHW_EX | Existing Domestic Hot Water | EX EX EX |
| DHWR | Domestic Hot Water Return Circulation | |
| DHWR_EX | Existing Domestic Hot Water Return Circulation | EX EX EX |
| Divide | | |
| DRY | Dry Sprinkler Piping | |
| DRY_CHEM | Dry Chemical Piping | |
| DTWR | Dual Temperature Water Return | |
| DTWS | Dual Temperature Water Supply | |
| FM_200 | FM 200 Piping | FM 200 FM 200 |
| FOAM | Foam Sprinkler Piping | FOAM FOAM |
| FOR | Fuel Oil Return | FOR FOR |
| FORU | Fuel Oil Return Underground | FOR FOR |

| Name | Description | Example |
|---|---|---|
| FOS | Fuel Oil Supply |   |
| FOSU | Fuel Oil Supply Underground |   |
| FOV | Fuel Oil Vent |   |
| FOVU | Fuel Oil Vent Underground |   |
| FSP | Fire Standpipe Piping |   |
| FSP_EX | Existing Fire Standpipe Piping |   |
| G | Gas Piping |   |
| G_EX | Existing Gas Piping |   |
| Hidden2 | |  |
| HOSMR | Hot Oil Snow Melting Return Piping Schematic |   |
| HOSMS | Hot Oil Snow Melting Supply Piping Schematic |   |
| HPC | High Pressure Condensate Piping Schematic |   |
| HPS | High Pressure Steam Piping Schematic |   |
| HTHWR | High Temp. Hot Water Return Schematic |   |
| HTHWS | High Temp. Hot Water Supply Schematic |   |
| HTRACE | Heat Tracing |  |

| Name | Description | Example |
|---|---|---|
| HWR | Hot Water Piping Schematic Return |  |
| HWS | Hot Water Piping Schematic Supply |  |
| INERGEN | Inergen Fire Suppressent Piping |  |
| LPC | Low Pressure Condensate Piping Schematic |  |
| LPS | Low Pressure Steam Piping Schematic |  |
| MPC | Medium Pressure Condensate Piping Schematic |  |
| MPS | Medium Pressure Steam Piping Schematic |  |
| MTHWR | Medium Temp. Hot Water Return |  |
| MTHWS | Medium Temp. Hot Water Supply |  |
| MU | Makeup Water |  |
| OW | Oil Water Piping |  |
| RD | Refrigerant Discharge |  |
| RL | Refrigerant Liquid |  |
| RS | Refrigerant Suction |  |
| SAN | Sanitary Piping |  |
| SAN_EX | Existing Sanitary Piping | |
| SANU | Sanitary Piping Underground |  |

| Name | Description | Example |
|---|---|---|
| SANU_EX | Existing Sanitary Piping Underground Existing |   |
| SP | Sprinkler | |
| SP_EX | Existing Sprinkler | |
| ST | Storm Piping |   |
| ST_EX | Existing Storm Piping |   |
| STU | Storm Piping Underground |   |
| STU_EX | Existing Storm Piping Underground |   |
| T | Domestic Tempered Water |   |
| T_EX | Existing Domestic Tempered Water |   |
| VENT | Vent Line |  |

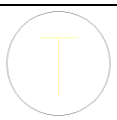
## 1.25.4 SYMBOLS

### 1.25.4.1 HVAC AIR TERMINALS

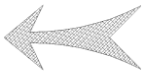
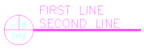
| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | M-Diffuser-1_WAY.dwg | (Varies) | Three-Way Blanked Off Supply Diffuser |
|  | M-Diffuser-2_WAY.dwg | (Varies) | Two-Way Blanked-Off Supply Air Diffuser |
|  | M-Diffuser-2_WAY_CORNER.dwg | (Varies) | Two-Way Supply Diffuser with Blanked-Off Corner |
|  | M-Diffuser-3_WAY.dwg | (Varies) | One-Way Blanked-Off Supply Air Diffuser |
|  | M-Diffuser-4_WAY.dwg | (Varies) | Supply Air Diffuser |
|  | M-Diffuser-R-1x1.dwg | (Varies) | Return Air Register |

### 1.25.4.2 HVAC CONTROL DEVICES

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | DUCT SMOKE DETECTOR.dwg | (Varies) | Duct Smoke Detector |
|  | FIRESTAT.dwg | (Varies) | Firestat |
|  | FLOW SWITCH.dwg | (Varies) | Flow Switch |
|  | FREEZESTAT.dwg | (Varies) | Freezstat |
|  | HEAT DETECTOR.dwg | (Varies) | Heat Detector |
|  | HUMIDISTAT.dwg | (Varies) | Humidistat |

| | | | |
|---|---|---|---|
|  | M-FLOW_METER.dwg | (Varies) | Flow Meter |
|  | M-FLOW_TRNSMTR.dwg | (Varies) | Flow Transmitter |
|  | M-LEAK_DETECTOR.dwg | (Varies) | Leak Detector Symbol |
|  | M-MOTOR.dwg | (Varies) | Motor |
|  | M-SMOKE_DETECTOR.dwg | (Varies) | Smoke Detector (Duct) |
|  | M-STEAM_TRAP.dwg | (Varies) | Steam Trap |
|  | M-TEMP_SNSR.dwg | (Varies) | Temperature Sensor |
|  | M-TEMPERATURE_SENSOR.dwg | (Varies) | Temperature Sensor |
|  | M-THERMOSTAT.dwg | (Varies) | Thermostat |
|  | M-THERMST_HUMIDIST_SWITCH.dwg | (Varies) | Thermostat/Humidistat Switch |
|  | SPACE TEMPERATURE SENSOR.dwg | (Varies) | Space Temperature Sensor |
|  | TEMPERATURE SENSOR.dwg | (Varies) | Temperature Sensor |
|  | THERMOSTAT, ELECTRIC.dwg | (Varies) | Electric Thermostat |
|  | THERMOSTAT, PNEUMATIC.dwg | (Varies) | Pneumatic Thermostat |

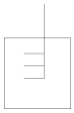
### 1.25.4.3 HVAC Drafting Conventions

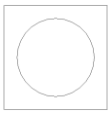
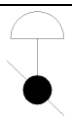
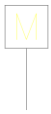
| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | M-ARROW.dwg | (Varies) | Airflow Directional Arrow |
|  | M-ARROW_LEADER.dwg | (Varies) | Leader to be Used with Thermostat Symbol |
|  | M-BREAK.dwg | (Varies) | Duct Break |
|  | M-BREAK_LINE1.dwg | (Varies) | Break Line |
|  | M-BREAK_LINE2.dwg | (Varies) | Break Symbol for Single Line Ducts and Pipes |
|   | M-CALLOUT.dwg | (Varies) | Callout for Plans |
|   | M-CALLOUT-SYM.DWG | (Varies) | Detail, Section, & Elevation Symbol for Plans |
|  | M-CENTERLINE_SYM.DWG | (Varies) | Centerline Symbol |
|   | M-CUT2.dwg | (Varies) | Detail Symbol for Plans |
|  | M-CUT3.dwg | (Varies) | Section Head |
|  | M-CUT4.dwg | (Varies) | Section Line |
|   | mec-CALLOUT.dwg | (Varies) | Callout |
|  | M-REMOVAL.dwg | (Varies) | Removal Marker |

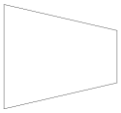
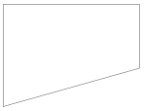
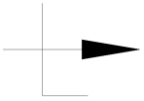
| | | | |
|---|---|---|---|
|  | M-REVISION_TRIANGLE.dwg | (Varies) | Revision Triangle |
|  | M-SEC-DN-LEFT.dwg | (Varies) | Section, Detail, Elev. Callout |
|  | M-SEC-DN-RIGHT.dwg | (Varies) | Section, Detail, Elev. Callout |
|  | M-SEC-LEFT-BTM.dwg | (Varies) | Section, Detail, Elev. Callout |
|  | M-SEC-LEFT-TOP.dwg | (Varies) | Section, Detail, Elev. Callout |
|  | M-SEC-RIGHT-BTM.dwg | (Varies) | Section, Detail, Elev. Callout |
|  | M-SEC-RIGHT-TOP.dwg | (Varies) | Section, Detail, Elev. Callout |
|  | M-SECTION-MARK.dwg | (Varies) | Section |
|  | M-SEC-UP-LEFT.dwg | (Varies) | Section, Detail, Elev. Callout |
|  | M-SEC-UP-RIGHT.dwg | (Varies) | Section, Detail, Elev. Callout |

### 1.25.4.4 HVAC Ductwork

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | ACCESS DOOR IN DUCT.dwg | (Varies) | Access Door in Duct |
|  | AIR VENT – AUTOMATIC.dwg | (Varies) | Automatic Air Vent |
|  | AIR VENT – MANUAL.dwg | (Varies) | Manual Air Vent |

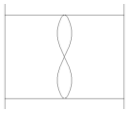
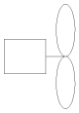
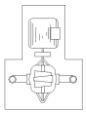
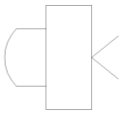
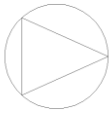
| | | | |
|---|---|---|---|
|  | CONTROL.dwg | (Varies) | Control |
|  | DUCT FLEXIBLE CONNECTION.dwg | (Varies) | Flexible Duct Connection |
|  | FILTER.dwg | (Varies) | Filter |
|  | M-ACCESS_DOOR.dwg | (Varies) | Access Door Symbol for Ductwork & Equipment |
|  | M-AIR_VENT.dwg | (Varies) | Air Vent |
|  | M-COIL_COOLING.dwg | (Varies) | Cooling Coil |
|  | M-COIL_HEATING.dwg | (Varies) | Heating Coil |
|  | M-COIL_PRE_HT.dwg | (Varies) | Pre-Heating Coil |
|  | M-DUCT_FLEX_CONNECT2.dwg | (Varies) | Flex Duct Connection |
|  | M-EXPN_JNT.dwg | (Varies) | Pipe Expansion Joint Symbol |
|  | M-FD.dwg | (Varies) | Fire Damper |
|  | M-FSD.dwg | (Varies) | Fire Smoke Damper |
|  | M-FSD_FD.dwg | (Varies) | Fire Smoke Damper |
|  | M-MEASUR_STATION.dwg | (Varies) | Measurement Station |

| | | | |
|---|---|---|---|
|  | M-SENS_RELAY.dwg | (Varies) | Current Sensing Relay |
|  | M-SIGHT_GLASS.dwg | (Varies) | Sight Glass |
|  | M-THERMOMETER.dwg | (Varies) | Thermometer |
|  | M-VFD.dwg | (Varies) | Variable-Frequency Drive |
|  | SIDE CONNECTED SUPPLY, RETURN OR EXHAUST DEVICE.dwg | (Varies) | Side-Connected Supply |
|  | COMBINATION FIRE AND SMOKE DAMPER WITH DUCT ACCESS DOOR.dwg | (Varies) | Fire and Smoke Damper Combination with Duct Access Door |
|  | FUSIBLE LINK FIRE DAMPER WITH DUCT ACCESS DOOR.dwg | (Varies) | Fusible Link Fire Damper with Duct Access Door |
|  | M-M_B_CONTR_DAMP1.dwg | (Varies) | Multi-Blade Control Damper with Spring Opposed, Diaphragm Actuator w/o Positioner |
|  | M-M_B_CONTR_DAMP.dwg | (Varies) | Multi-Blade Control Damper with Spring Diaphragm Actuator and Positioner |
|  | M-MOTORIZED_DAMPER.dwg | (Varies) | Motorized Damper |
|  | MOTORIZED DAMPER.dwg | (Varies) | Motorized Damper |
|  | SMOKE DAMPER WITH DUCT ACCESS DOOR.dwg | (Varies) | Smoke Damper with Duct Access Door |
|  | SPLITTER DAMPER.dwg | (Varies) | Splitter Damper |
|  | VOLUME DAMPER.dwg | (Varies) | Volume Damper |

| | | | |
|---|---|---|---|
|  | ACCOUSTICAL LINED DUCT.dwg | (Varies) | Acoustical Lined Duct |
|  | DUCT SECTION CARRYING RETURN AIR.dwg | (Varies) | Duct Section Carrying Return Air |
|  | DUCT SECTION CARRYING SUPPLY AIR.dwg | (Varies) | Duct Section Carrying Supply Air |
|  | CONCENTRIC REDUCER.dwg | (Varies) | Concentric Reducer |
|  | ECCENTRIC REDUCER.dwg | (Varies) | Eccentric Reducer |
|  | ELBOW WITH TURNNG VANES – CIR.dwg | (Varies) | Elbow with Circular Turning Vanes |
|  | ELBOW WITH TURNING VANES – RECT.dwg | (Varies) | Elbow with Rectangular Turning Vanes |
|  | M-DOOR_LOUVERED.DWG | (Varies) | Louvered Door |
|  | M-DOOR_UNDERCUT.DWG | (Varies) | Undercut Door |
|  | M-DUCT_DN1.dwg | (Varies) | Duct Sloping Down Symbol |
|  | M-DUCT_DN.dwg | (Varies) | Duct Sloping Down Symbol |
|  | M-DUCT_FLEX_CONNECT1.dwg | (Varies) | Flexible Connection |
|  | M-DUCT_UP1.dwg | (Varies) | Raise Duct Up Symbol |
|  | M-DUCT_UP.dwg | (Varies) | Raise Duct Up Symbol |

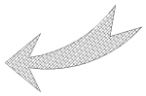
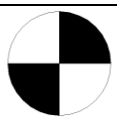
| | | | |
|---|---|---|---|
|  | SLOPING DROP IN DUCT IN DIRECTION OF ARROW.dwg | (Varies) | Sloping Drop in Duct (Direction of Arrow) |
|  | SLOPING RISE IN DUCT IN DIRECTION OF ARROW.dwg | (Varies) | Sloping Rise in Duct (Direction of Arrow) |

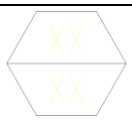
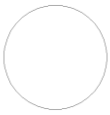
### 1.25.4.5 HVAC Mechanical Equipment

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | AXIAL FAN.dwg | (Varies) | Axial Fan |
|  | M-FAN.dwg | (Varies) | Centrifugal Fan or Pump Symbol for Diagrams |
|  | M-FAN_PROP.dwg | (Varies) | Propeller Fan Symbol |
|  | M-PUMP.dwg | (Varies) | Pump Symbol |
|  | M-PUMP_END_SUCT.dwg | (Varies) | End Suction Pump Symbol |
|  | M-PUMPHORIZ_SPLIT.dwg | (Varies) | Horizontal Equal Split Pump Symbol |
|  | M-UNIT_HEATER.dwg | (Varies) | Unit Heater |
|  | PUMP.dwg | (Varies) | Pump |
|  | WALL HYDRANT.dwg | (Varies) | Wall-Mounted Hydrant |

### 1.25.4.6 HVAC Miscellaneous

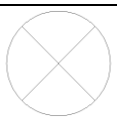
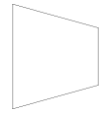
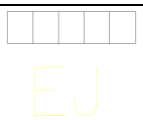
| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | ARROW INDICATES DIRECTION OF FLOW.dwg | (Varies) | Direction of Flow |

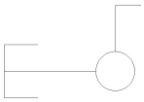
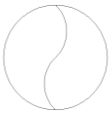
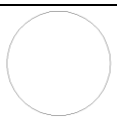
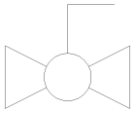
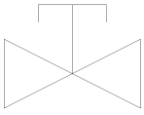
| | | | |
|---|---|---|---|
|  | BALL JOINTS.dwg | (Varies) | Ball Joints |
|  | CONCEALED SPRINKLER HEAD.dwg | (Varies) | Concealed Sprinkler Head |
|   | DUCT SIZE – FIRST SIZE INDICATES PLAN SIZE.dwg | (Varies) | Duct Size |
|  | REMOVAL SPRINKLER HEAD TO BE REMOVED.dwg | (Varies) | Removal Sprinkler Head to be Removed |
|  | M-AIRFLOW_RTN.DWG | (Varies) | Air Flow Directional Arrow (Negative Pressure) |
|  | M-AIRFLOW_SUP.dwg | (Varies) | Air Flow Direction Arrow (Positive Pressure) |
|  | M-ARROW_1.dwg | (Varies) | Air Flow Directional Arrow |
|  | M-ARROW_FLOW.dwg | (Varies) | Fluid Flow Arrow Symbol |
|  | M-CONNECT.dwg | (Varies) | Point of Connection |
|   | M-DDC_AI.dwg | (Varies) | DDC Analog Input Signal |
|   | M-DDC_AO.dwg | (Varies) | DDC Analog Output Signal |
|   | M-DDC_DI.dwg | (Varies) | DDC Digital Input Signal |
|   | M-DDC_DO.dwg | (Varies) | DDC Digital Output Signal |
|  | M-DDC_SIGNAL_SELECT.dwg | (Varies) | DDC Signal Selector |

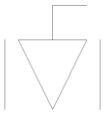
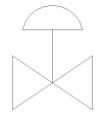
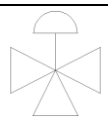
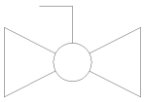
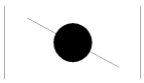
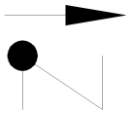
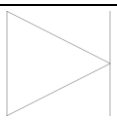
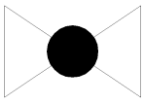
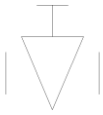
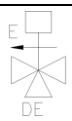
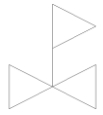
| | | | |
|---|---|---|---|
|  | M-DIFF_PRS_SWTCH.dwg | (Varies) | Pressure Differential Switch |
|  | M-DISCONNECT.dwg | (Varies) | Point of Disconnection |
|  | M-PIPE_BREAK.dwg | (Varies) | Pipe Break |
|  | M-PIPE_RISERBOX.dwg | (Varies) | Riser Box |
|  | M-PIPE_SECTION.dwg | (Varies) | Pipe Riser Symbol |
|  | M-POINT_OF_CONNTECTION.dwg | (Varies) | Connection Between Removal and New |
|  | M-POINT_OF_DISCONNECTION.dwg | (Varies) | Disconnection of Removal |
|  | M-PRS_TRNSMTR.dwg | (Varies) | Pressure Transmitter |
|  | M-TAG_EQUIP.dwg | (Varies) | Equipment Tag |
|  | SIDEWALL SPRINKLER HEAD.dwg | (Varies) | Sidewall Sprinkler Head |
|  | UPRIGHT SPRINKLER HEAD.dwg | (Varies) | Upright Sprinkler Head |

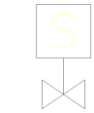
### 1.25.4.7 HVAC Piping

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | CAPPED PIPE.dwg | (Varies) | Capped Pipe |
|  | DIRT POCKET.dwg | (Varies) | Dirty Pocket |

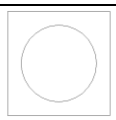
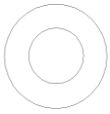
| | | | |
|---|---|---|---|
|  | DRIP ASSEMBLY.dwg | (Varies) | Drip Assembly |
|  | FLOAT & THERMOSTATIC STEAM TRAP WITH BLOWDOWN VALVE.dwg | (Varies) | Float & Thermostatic Steam Trap with Blowdown Valve |
|  | M-PIPE_ANCHOR.dwg | (Varies) | Pipe Anchor Symbol |
|  | M-PIPE_STRAINER.dwg | (Varies) | Strainer with Blow-Off Valve |
|  | M-PIPE_UNION.dwg | (Varies) | Pipe Union |
|  | M-PRESSURE_GAUGE.dwg | (Varies) | Pressure Gauge with Cock |
|  | M-REDUCER.dwg | (Varies) | Reducer |
|  | PIPE ANCHOR.dwg | (Varies) | Pipe Anchor |
|  | PIPE EXPANSION JOINT.dwg | (Varies) | Pipe Expansion Joint |
|  | PIPE FLEXIBLE CONNECTION.dwg | (Varies) | Pipe Flexible Connection |
|  | PIPE GUIDE.dwg | (Varies) | Pipe Guide |
|  | PLUG FOR PRESSURE GAUGE AND THERMOMETER CONNECTION.dwg | (Varies) | Plug for Pressure Gauge and Thermometer Connection |
|  | PLUMBING FIXTURE STOP.dwg | (Varies) | Plumbing Fixtures Stop |
|  | STRAINER BASKET TYPE.dwg | (Varies) | Strainer Basket Type |

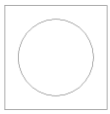
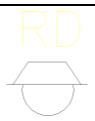
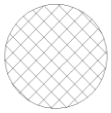
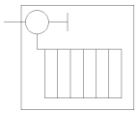
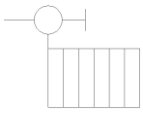
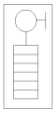
| | | | |
|---|---|---|---|
|  | STRAINER 'Y' TYPE WITH BLOWDOWN VALVE.dwg | (Varies) | Strainer 'Y' Type with Blowdown Valve |
|  | UNION.dwg | (Varies) | Union |
|  | VACUUM BREAKER.dwg | (Varies) | Vacuum Breaker |
|  | VALVED CAPPED OUTLET – BALL.dwg | (Varies) | Valved, Capped Outlet – Ball |
|  | VALVED CAPPED OUTLET – GATE.dwg | (Varies) | Valved, Capped Outlet – Gate |
|  | VALVED CAPPED OUTLET – PLUG.dwg | (Varies) | Valved, Capped Outlet – Plug |
|  | VENTURI FLOW METER.dwg | (Varies) | Venturi Flow Meter |
|  | M-PIPE_DN.dwg | (Varies) | Pipe Turns Down Symbol |
|  | M-PIPE_TAP.dwg | (Varies) | Bottom Tap Pipe Connection |
|  | M-PIPE_UP.dwg | (Varies) | Pipe Turns Up Symbol |
|  | PIPE DOWN.dwg | (Varies) | Pipe Down |
|  | PIPE UP.dwg | (Varies) | Pipe Up |
|  | BALL VALVE.dwg | (Varies) | Ball Valve |
|  | LOCK-SHIELD VALVE.dwg | (Varies) | Lock-Shield Valve |

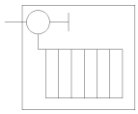
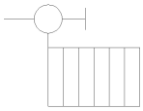
| | | | |
|---|---|---|---|
|  | LUBRICATED PLUG VALVE.dwg | (Varies) | Lubricated Plug Valve |
|  | M-VALVE_AUTO.dwg | (Varies) | Automatic Valve |
|  | M-VALVE_AUTO_3WAY.dwg | (Varies) | Three-Way Modulating Automatic Control Valve |
|  | M-VALVE_BALL.dwg | (Varies) | Balancing Valve |
|  | M-VALVE_BUTTERFLY.dwg | (Varies) | Butterfly Valve |
|  | M-VALVE_CHECK1.dwg | (Varies) | Check Valve – Swing |
|  | M-VALVE_CHECK.dwg | (Varies) | Check Valve – Lift |
|  | M-VALVE_DIAPHRAGM.dwg | (Varies) | Diaphragm Operated Control Valve Spring Opposed with Positioner |
|  | M-VALVE_GATE.dwg | (Varies) | Gate Valve |
|  | M-VALVE_GLOBE.dwg | (Varies) | Globe Valve |
|  | M-VALVE_LUBRICATION.dwg | (Varies) | Plug Valve |
|  | M-VALVE_MISC.dwg | (Varies) | EP Control Valve |
|  | M-VALVE_MOTORIZED.dwg | (Varies) | Motor-Operated Valve |
|  | M-VALVE_PRESSURE_RED.dwg | (Varies) | Pressure-Reducing Valve |

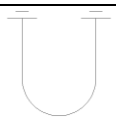
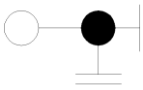
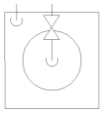
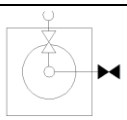
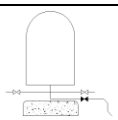
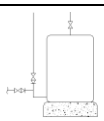
| | | | |
|---|---|---|---|
|  | M-VALVE_SOLONOID.dwg | (Varies) | Solenoid Valve |
|  | PRESSURE REDUCING VALVE.dwg | (Varies) | Pressure-Reducing Valve |
|  | RELIEF VALVE.dwg | (Varies) | Relief Valve |

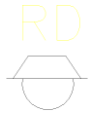
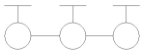
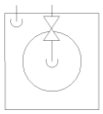
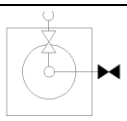
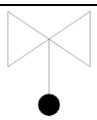
### 1.25.4.8 PLUMBING & FIRE PROTECTION ACCESSORIES

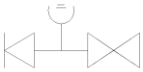
| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | P-ALARM_BELL.dwg | (Varies) | Bell/Strobe |
|  | P-ALARMHOR_N.dwg | (Varies) | Horn |
|  | P-AREA_DRAIN.dwg | (Varies) | Area Drain |
|  | P-BELL_STROBE.dwg | (Varies) | Bell Strobe |
|  | P-BWV.dwg | (Varies) | Back Water Valve |
|  | P-CLEANOUT.dwg | (Varies) | Cleanout |
|  | P-CLEANOUT_DECK_PLATE.dwg | (Varies) | Cleanout Deck Plate |
|  | P-CLEANOUT_ELEV.dwg | (Varies) | Cleanout (Elevation View) |
|  | P-CONNECTION TEE.dwg | (Varies) | Tee Connection |
|  | P-DOMCONT.dwg | (Varies) | Domestic Cont. |

| | | | |
|---|---|---|---|
|  | P-DRAIN_FLOOR.dwg | (Varies) | Floor Drain |
|  | P-DRAIN_FLOOR_RISER.dwg | (Varies) | Floor Drain Riser |
|  | P-DRAIN_FUNNEL.dwg | (Varies) | Funnel Drain |
|  | P-DRAIN_PTRAP_PRIMER.dwg | (Varies) | PTrap Drain Primer |
|  | P-DRAIN_ROOF_RISER.dwg | (Varies) | Drain Riser |
|  | P-DRAIN_STANDPIPE.dwg | (Varies) | Drain Standpipe |
|  | P-FA_INLET.dwg | (Varies) | Fresh Air Inlet |
|  | P-FA_INTAKE.dwg | (Varies) | Fresh Air Intake |
|  | P-FD.dwg | (Varies) | Floor Drain |
|  | P-FHC.dwg | (Varies) | Fire Hose Connection |
|  | P-FHC_PLAN.dwg | (Varies) | Fire Hose Connection (Plan) |
|  | P-FHR.dwg | (Varies) | Fire Hose Rack |
|  | P-FHR_PLAN.dwg | (Varies) | Fire Hose Rack (Plan) |
|  | P-FIRE_HOSE_CABINET_PLAN.dwg | (Varies) | Fire Hose & Cabinet |

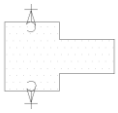
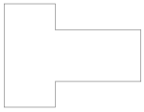
| | | | |
|---|---|---|---|
|  | P-FIRE_HOSE_CABINET_ELEV.dwg | (Varies) | Fire Hose & Cabinet (Elevation) |
|  | P-FIRE_HOSE_RACK_ELEV.dwg | (Varies) | Fire Hose Rack (Elevation) |
|  | P-FIRE_HOSE_RACK_PLAN.dwg | (Varies) | Fire Hose Rack (Plan) |
|  | P-FLOOR_DRAIN.dwg | (Varies) | Drain Floor Pipe |
|  | P-FLOW_METER.dwg | (Varies) | Flow Meter |
|  | P-FLOW_SWITCH.dwg | (Varies) | Flow Switch |
|  | P-FLUSH_WALL_MOUNTED_SIAME.dwg | (Varies) | Wall-Mounted Siamese Connection |
|  | P-FREE_STANDING_SIAME.dwg | (Varies) | Free-Standing Siamese Connection |
|  | P-FRESH_AIR_INTAKE.dwg | (Varies) | Fresh Air Intake |
|  | P-FRESH_AIR_INTAKE_PLATE.dwg | (Varies) | Fresh Air Intake Plate |
|  | P-FUNDRAIN.dwg | (Varies) | Drain |
|  | P-GASBOOSTER.dwg | (Varies) | Gas Booster |
|  | P-GAUGE_PRESSURE.dwg | (Varies) | Pressure Gauge |
|  | P-GAUGE_THERMOMETER.dwg | (Varies) | Gauge Thermometer |

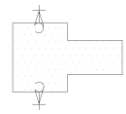
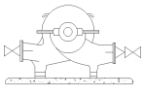
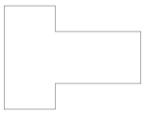
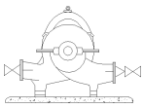
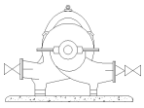
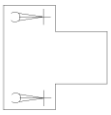
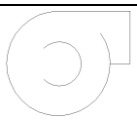
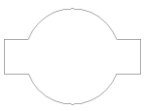
| | | | |
|---|---|---|---|
|  | P-GREASE_INTERCEPTOR.dwg | (Varies) | Grease Interceptor |
|  | P-GREASEINTCPT.dwg | (Varies) | Grease Interceptor |
|  | P-HB.dwg | (Varies) | Hose Bibb |
|  | P-HORN.dwg | (Varies) | Horn |
|  | P-HOSE_BIB.dwg | (Varies) | Hose Bibb |
|  | P-HTRAP.dwg | (Varies) | House Trap (Riser) |
|  | P-HVC.dwg | (Varies) | Hose Bibb Valve Connection |
|  | P-HWATERHEAT.dwg | (Varies) | Hot Water Heater (Riser) |
|  | P-MISCPMPRISE.dwg | (Varies) | Pump Riser (Miscellaneous) |
|  | P-PIPE_CAP.dwg | (Varies) | Pipe Cap |
|  | P-PIPE_TEE.dwg | (Varies) | Pipe Tee |
|  | P-PNEUTANK.dwg | (Varies) | Pneumatic Tank |
|  | P-PNEUTANKRISER.dwg | (Varies) | Pneumatic Tank (Riser) |
|  | P-PREHEATRISER.dwg | (Varies) | Pre-Heater (Riser) |

| | | | |
|---|---|---|---|
|  | P-RD.dwg | (Varies) | Roof Drain |
|  | P-ROOF_MANIFOLD.dwg | (Varies) | Roof Manifold |
|  | P-RPZ.dwg | (Varies) | RPZ (Riser) |
|  | P-SHOWER.dwg | (Varies) | Shower |
|  | P-SIAMESE_FREE_STANDING.dwg | (Varies) | Free-Standing Siamese |
|  | P-SIAMESE_WALL_MOUNTED.dwg | (Varies) | Flush Wall-Mounted Siamese |
|  | P-SINK.dwg | (Varies) | Sink |
|  | P-SLAV.dwg | (Varies) | Lavatory (Riser) |
|  | P-STANDDRAIN.dwg | (Varies) | Standpipe Drain |
|  | P-TANK_HOTWATER.dwg | (Varies) | Hot Water Storage Tank |
|  | P-TANK_PNEUMATIC.dwg | (Varies) | Pneumatic Tank |
|  | P-TANKFLOAT.dwg | (Varies) | Tank Float |
|  | P-THERMOMETER.dwg | (Varies) | Thermometer |
|  | P-THERMOSTAT.dwg | (Varies) | Thermostat |

| | | | |
|---|---|---|---|
|  | P-TR.dwg | (Varies) | Fixture P-Trap (Riser) |
|  | P-TRPPRM_DRN.dwg | (Varies) | Floor Drain Primer with P-Trap Connection |
|  | P-VACUUM_BREAKER.dwg | (Varies) | Vacuum Breaker |
|  | P-VACUUM_BREAKER_ASSEMBLY.dwg | (Varies) | Vacuum Breaker Assembly |
|  | P-VENTURBINPUMP.dwg | (Varies) | Turbine Pump |
|  | P-VFD.dwg | (Varies) | Variable Frequency Drive |
|  | P-VOR.dwg | (Varies) | Variable |
|  | P-VRV.dwg | (Varies) | Variable Valve |

### 1.25.4.9 PLUMBING & FIRE PROTECTION MECHANICAL EQUIPMENT

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | FP-AUTOFIREPUMP.dwg | (Varies) | Automatic Fire Pump |
|  | FP-AUTOFPMPCTRL.dwg | (Varies) | Automatic Fire Pump Control |
|  | FP-FIRE_PUMP_CONTROL_PANEL.dwg | (Varies) | Automatic Fire Pump Control Panel |
|  | FP-FIRE_PUMP_JOCKEY.dwg | (Varies) | Jockey Pump Control Panel |
|  | FP-FIRE_PUMP_MAIN_PAD.dwg | (Varies) | Fire Pump Main Pad |

| | | | |
|---|---|---|---|
|  | FP-FIRE_PUMP_PANEL.dwg | (Varies) | Fire Pump Panel |
|  | FP-HORIZSPLTCASEPMP.dwg | (Varies) | Horizontal Split Case Pump |
|  | FP-JOCKEYPMP.dwg | (Varies) | Jockey Pump |
|  | FP-JOCKEYPMPCTRL-PA.dwg | (Varies) | Manual Fire Pump Control |
|  | FP-MANFIREPMP.dwg | (Varies) | Manual Fire Pump |
|  | FP-MANFIREPMPCONTROL.dwg | (Varies) | Manual Fire Pump Control |
|  | FP-MANUALFRPMP.dwg | (Varies) | Manual Fire Pump |
|  | FP-PUMP_FIRE.dwg | (Varies) | Fire Pump |
|  | FP-PUMPHORIZONTAL.dwg | (Varies) | Horizontal Pump |
|  | FP-PUMP_JOCKEY.dwg | (Varies) | Jockey Pump (Plan) |
|  | P-DOMPUMP.dwg | (Varies) | Domestic Water Pump |
|  | P-FIRE_PUMP.dwg | (Varies) | Fire Pump |
|  | P-FIRE_PUMP_VERT.dwg | (Varies) | Fire Pump (Riser) |
|  | P-HWCIRCPMP.dwg | (Varies) | Hot Water Circulation Pump |

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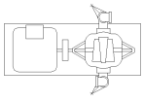
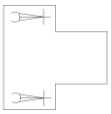
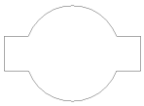
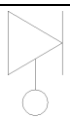
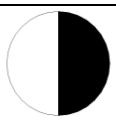
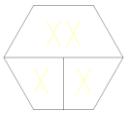
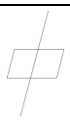
|---|---|---|---|
|  | P-PUMP.dwg | (Varies) | Pump (Plan) |
|  | P-PUMP_DOMESTIC.dwg | (Varies) | Domestic Pump |
|  | P-DUPLEX_EJECTOR_SUMP.dwg | (Varies) | Duplex Ejector/Sump Pump Discharge |
|  | P-PUMP_GAS_BOOSTER.dwg | (Varies) | Gas Booster Pump |
|  | P-PUMP_HW_CIRC.dwg | (Varies) | HW Circulation Pump (Riser) |
|  | P-PUMP_VERT_TURBINE.dwg | (Varies) | Vertical Turbine Pump (Riser) |

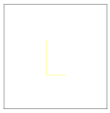
### 1.25.4.10 PLUMBING & FIRE PROTECTION MISCELLANEOUS

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | FP-HDETECT.dwg | (Varies) | Heat Detector |
|  | MEC-CALLOUT.dwg | (Varies) | Callout for Plans |
|  | Mec-SEC-MARK.dwg | (Varies) | Section Mark |
|  | PA-BRK-PA.dwg | (Varies) | Break |
|  | P-ALARM_VALVE.dwg | (Varies) | Alarm Valve |
|  | P-B-671.dwg | (Varies) | Group Line Tag |
|  | P-BKFLWPREVENT.dwg | (Varies) | Backflow Preventer |

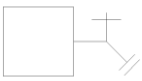
| | | | |
|---|---|---|---|
|  | P-BREAK_DUCT.dwg | (Varies) | Break Line |
|  | P-BREAK_DUCT_DOUBLE.dwg | (Varies) | Double Break Lines |
|  | P-BREAK_EQUIP.dwg | (Varies) | Break Line |
|  | P-BREAK_EQUIP_DOUBLE.dwg | (Varies) | Double Break Lines |
|  | P-BREAK_LINE2.dwg | (Varies) | Break Line Symbol for Double Linework |
|  | P-CEN.dwg | (Varies) | Point of Connection |
|  | P-CENLSYMB.dwg | (Varies) | Center Line Symbol |
|  | P-CENTER_LINE.dwg | (Varies) | Center Line Symbol |
|  | P-CUT2.dwg | (Varies) | Detail Symbol for Plans |
|  | P-CUT3.dwg | (Varies) | Section Head |
|  | P-CUT4.dwg | (Varies) | Section Line |
|  | P-CWBD.dwg | (Varies) | Cold Water |
|  | P-DELUGE_VALVE.dwg | (Varies) | Deluge Valve |
|  | P-DEN.dwg | (Varies) | Point of Disconnect |

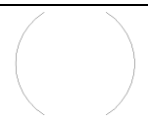
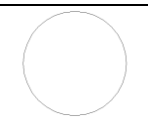
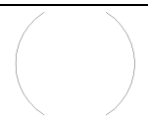
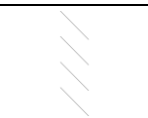
| | | | |
|---|---|---|---|
|  | P-DRY_VALVE.dwg | (Varies) | Dry Valve |
|  | P-DUCT_BREAK.dwg | (Varies) | Duct Break |
|  | P-METER.dwg | (Varies) | Meter |
|  | P-MOTOR_OPERATED_VALVE.dwg | (Varies) | Motor-Operated Valve |
|  | P-NCV.dwg | (Varies) | Check Valve |
|  | P-NTAG.dwg | (Varies) | Tag |
|  | P-POINT_OF_CONNECTION.dwg | (Varies) | Connection Between Removal and New |
|  | P-POINT_OF_REMOVAL.dwg | (Varies) | Disconnection of Removal |
|  | P-PRE_ACTION_VALVE.dwg | (Varies) | Pre-Action Valve |
|  | P-PRESSURE_GAUGE.dwg | (Varies) | Pressure Gauge |
|  | P-PTAG.dwg | (Varies) | Plumbing Tag |
|  | P-PUMP_DISCHARGE.dwg | (Varies) | Pump Discharge |
|  | P-REM.dwg | (Varies) | Removal Marker |
|  | P-REMOVAL.dwg | (Varies) | Removal Marker |

| | | | |
|---|---|---|---|
|  | P-REV.dwg | (Varies) | Revision Tag |
|  | P-RISERBOX.dwg | (Varies) | Riser Box |
|  | P-SMOKE_DETECTOR_(DUCT).dwg | (Varies) | Duct Smoke Detector |
|  | P-SOLENOID_VALVE.dwg | (Varies) | Solenoid Valve |
|  | P-SPACE_THERMOSTAT_SENSOR.dwg | (Varies) | Space Thermostat Sensor |
|  | P-SPUMP.dwg | (Varies) | Supply Pump |
|  | P-SQF.dwg | (Varies) | Area Tag |
|  | P-SQUARE_FEET.dwg | (Varies) | Square Feet |
|  | P-SY.dwg | (Varies) | Plumbing Tag |
|  | P-SYM42.dwg | (Varies) | Tag |
|  | P-SYM43.dwg | (Varies) | Tag |
|  | P-SYM45.dwg | (Varies) | Tag |
|  | P-TAG.dwg | (Varies) | Plumbing Tag |
|  | P-TAG_CIRC1.dwg | (Varies) | Circle Tag |

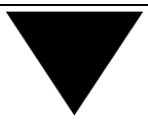
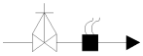
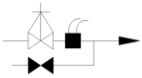
| | | | |
|---|---|---|---|
|  | P-TAG_CIRC_2.dwg | (Varies) | Riser Tag |
|  | P-TAG_HEX.dwg | (Varies) | Hexagonal Tag |
|  | P-TAG_SQU.dwg | (Varies) | Square Tag |
|  | P-TAG_EQUIP.dwg | (Varies) | Equipment Tag |
|  | P-VR.dwg | (Varies) | Pressure-Reducing Valve |
|  | P-XTAG.dwg | (Varies) | Number Tag |

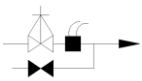
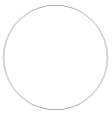
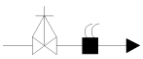
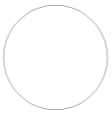
### 1.25.4.11 PLUMBING & FIRE PROTECTION PIPING

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | FP-WALLHYP.dwg | (Varies) | Wall-Mounted Connection |
|  | P-2A.dwg | (Varies) | Double Cleanout |
|  | P-14A.dwg | (Varies) | Cleanout |
|  | P-CLEANOUT_RISER.dwg | (Varies) | Riser Cleanout |
|  | P-CLEANOUT_RISER_CONNECTION.dwg | (Varies) | Riser Cleanout Connection |
|  | P-LAVTRP.dwg | (Varies) | P-Trap |
|  | P-PIPE.dwg | (Varies) | Pipe Riser Symbol |

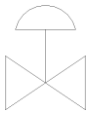
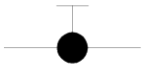
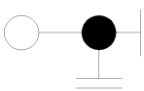
| | | | |
|---|---|---|---|
|  | P-PIPE_BREAK.dwg | (Varies) | Pipe Break Symbol |
|  | P-PIPE_BRK.dwg | (Varies) | Pipe Break Symbol |
|  | P-PIPE_CONN.dwg | (Varies) | Pipe Connection |
|  | P-PIPE_CONNECTION.dwg | (Varies) | New Pipe Connection |
|  | P-PIPE_DN.dwg | (Varies) | Elbow Down |
|  | P-PIPE_TEE_DN.dwg | (Varies) | Tee Down |
|  | P-PIPE_UP.dwg | (Varies) | Pipe Up |
|  | P-TEE_DN.dwg | (Varies) | Tee Down |
|  | P-UNDER.dwg | (Varies) | Sub-Surface Piping |

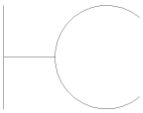
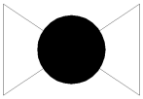
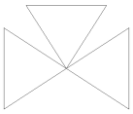
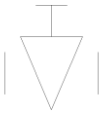
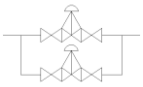
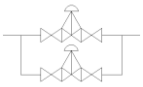
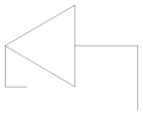
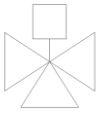
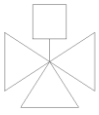
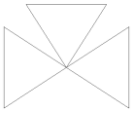
### 1.25.4.12 PLUMBING & FIRE PROTECTION SPRINKLERS

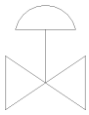
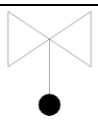
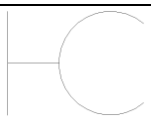
| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | P-PENDANT_SPRINKLER_ON_DROP_NIPPLE.dwg | (Varies) | Pendant Sprinkler on Drop Nipple |
|  | P-SIDEWALL_SPRINKLER.dwg | (Varies) | Sidewall Sprinkler |
|  | P-SPKARR.dwg | (Varies) | Sprinkler |
|  | P-SPKR.dwg | (Varies) | Sprinkler |

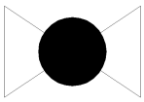
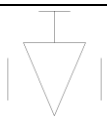
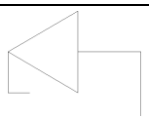
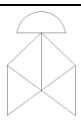
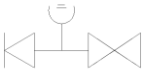
| | | | |
|---|---|---|---|
|  | P-SPRINKLER_SIDEWALL.dwg | (Varies) | Sidewall Sprinkler |
|  | P-SPRINKLER_PENDANT.dwg | (Varies) | Pendant Sprinkler |
|  | P-SPRINKLER_RIG_ASSEMBLY.dwg | (Varies) | Sprinkler Rig Assembly |
|  | P-SPRINKLER_UPRIGHT.dwg | (Varies) | Upright Sprinkler |
|  | P-SPRINKLER_VALVE_FLOW.dwg | (Varies) | Sprinkler Control Valve with Flow Switch |
|  | P-UPRIGHT_SPRINKLER.dwg | (Varies) | Upright Sprinkler |

### 1.25.4.13 PLUMBING & FIRE PROTECTION VALVES

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | P-AUTOMATIC_VALVE.dwg | (Varies) | Automatic Valve |
|  | P-BALL_VALVE.dwg | (Varies) | Ball Valve Symbol |
|  | P-BUTTERFLY_VALVE.dwg | (Varies) | Butterfly Valve |
|  | P-CHECK_VALVE.dwg | (Varies) | Check Valve |
|  | P-DOUBLECV.dwg | (Varies) | Double Check Valve |
|  | P-FIRE_HOSE_VALVE.dwg | (Varies) | Fire Hose Valve |
|  | P-GASVALVE.dwg | (Varies) | Gas Valve |

| | | | |
|---|---|---|---|
|  | P-GATE_VALVE.dwg | (Varies) | Gate Valve |
|  | P-GATE_VALVE_VERT.dwg | (Varies) | Gate Valve (Vertical) |
|  | P-GLOBE_VALVE.dwg | (Varies) | Globe Valve |
|  | P-HOLBYVALVE.dwg | (Varies) | Holby Valve |
|  | P-LUBRICATION_VALVE.dwg | (Varies) | Lubrication Valve |
|  | P-OSY.dwg | (Varies) | OS&Y Valve |
|  | P-PRV.dwg | (Varies) | PRV |
|  | P-PRV_RISER.dwg | (Varies) | PRV (Riser) |
|  | P-PRVSERIES_PARR.dwg | (Varies) | PRV Series |
|  | P-P-VALVE_OSY_VERTICAL.dwg | (Varies) | OS&Y Valve |
|  | P-RV.dwg | (Varies) | PRV |
|  | P-THREE_WAY_AUTO_VALVE.dwg | (Varies) | Three-Way Automatic Valve |
|  | P-VALVE_3_WAY_AUTO.dwg | (Varies) | 3-Way Automatic Valve |
|  | P-VALVE_MIXING.dwg | (Varies) | Mixing Valve |

| | | | |
|---|---|---|---|
|  | P-VALVE_ALARM.dwg | (Varies) | Alarm Valve |
|  | P-VALVE_AUTOMATIC.dwg | (Varies) | Automatic Valve |
|  | P-VALVE_BACK_WATER.dwg | (Varies) | Back Water Valve |
|  | P-VALVE_BALL_DRIP.dwg | (Varies) | Check Valve with Automatic Ball Drip |
|  | P-VALVE_BUTTERFLY.dwg | (Varies) | Butterfly Valve |
|  | P-VALVE_CHECK.dwg | (Varies) | Check Valve |
|  | P-VALVE_DELUGE.dwg | (Varies) | Deluge Valve |
|  | P-VALVE_DOUBLE_GATE_CHECK.dwg | (Varies) | Double Gate & Check Valve Assembly |
|  | P-VALVE_DOUBLE_GATE_DOUBLE_CHECK.dwg | (Varies) | Double Gate Valve with Double Check Valve Assembly |
|  | P-VALVE_DRY.dwg | (Varies) | Dry Valve |
|  | P-VALVE_FLOAT.dwg | (Varies) | Float Valve |
|  | P-VALVE_GAS_CONTROL.dwg | (Varies) | Gas Control Valve |
|  | P-VALVE_GATE_VERT.dwg | (Varies) | Gate Valve (Vertical) |
|  | P-VALVE_GATE.dwg | (Varies) | Gate Valve |

| | | | |
|---|---|---|---|
|  | P-VALVE_GATE_CHECK.dwg | (Varies) | Single Gate & Check Valve Assembly |
|  | P-VALVE_GLOBE.dwg | (Varies) | Globe Valve |
|  | P-VALVE_LUBRICATION.dwg | (Varies) | Lubrication Valve |
|  | P-VALVE_MOTORIZED.dwg | (Varies) | Motor-Operated Valve |
|  | P-VALVE_NORMALLY_CLOSED.dwg | (Varies) | Normally-Closed Valve |
|  | P-VALVE_OSY.dwg | (Varies) | OS & Y Valve |
|  | P-VALVE_PRE-ACTION.dwg | (Varies) | Pre-Action Valve |
|  | P-VALVE_PRESSURE_RELEASE.dwg | (Varies) | Pressure-Release Valve |
|  | P-VALVE_PRV.dwg | (Varies) | Pressure-Regulating Valve |
|  | P-VALVE_SOLENOID.dwg | (Varies) | Solenoid Valve |
|  | P-VALVE_VACUUM.dwg | (Varies) | Vacuum Breaker Assembly |

# 1.26 APPENDIX L – STRUCTURAL DISCIPLINE

## 1.26.1 CONTENT PREFERENCES

This Section Is Currently Under Construction

## 1.26.2 LAYER STRATAGEM

### 1.26.2.1 STRUCTURAL WORK

| DISCIPLINE | MAJOR | MINOR | DESC | COLOR | LINETYPE | PLOTS | DESCRIPTION |
|---|---|---|---|---|---|---|---|
| S | ANNO | BUBL | | 212 | Continuous | Yes | Column Bubble |
| S | ANNO | DIMS | | 2 | Continuous | Yes | Structural Dimensions |
| S | ANNO | GRID | | 223 | CENTER2 | Yes | Grid Line |
| S | ANNO | KEYN | | 2 | Continuous | Yes | Keynote / leader Insertion Layer |
| S | ANNO | KPLN | | 2 | Continuous | Yes | Key Plan Graphic Drafting/ Insertion Layer |
| S | ANNO | TEXT | | 3 | Continuous | Yes | Structural Annotation (with Leaders) |
| S | ANNO | NOTE | | 3 | Continuous | Yes | Structural Block Notes, General Notes, Legends etc.. |
| S | ANNO | NPLT | | 7 | Continuous | Yes | Non-Plotting Layer |
| S | ANNO | RVSN | CLD_ | 121 | Continuous | Yes | Revision Clouds |
| S | ANNO | RVSN | TRNG | 4 | Continuous | Yes | Revision Triangle |
| S | ANNO | SYMB | | 71 | Continuous | Yes | Block Insertion Layer |
| S | ANNO | SCHD | | 2 | Continuous | Yes | Schedules, Tables Line work and AutoCAD Table Insertion Layer |
| S | ANNO | SUBT | | 140 | Continuous | Yes | Subtitle |
| S | ANNO | TITL | | 211 | Continuous | Yes | Drawing Titles (Block) |
| S | ANNO | TTBL | | 7 | Continuous | Yes | Project Contract Border Insertion Layer |
| S | ANNO | VPRT | | 8 | Continuous | No | Viewport (Mview) Creation Layer/ XCLIP Boundaries |
| S | ANNO | MLIN | | 2 | PHANTOM2 | Yes | Matchline Graphics |
| S | ANNO | WELD | | 2 | Continuous | Yes | Structural Welding Symbology |
| S | AREA | CLIM | | 220 | Continuous | Yes | Contract Limit Line |
| S | AREA | | | 2 | BORDER2 | Yes | Boundary Area Line |
| S | BEAM | HIDN | | 212 | HIDDEN2 | Yes | Structural Beam Obscured by Foreground Objects |
| S | BEAM | TEXT | | 3 | Continuous | No | Text Relating to Beams (Sizes) |
| S | BEAM | STL_ | | 212 | Continuous | Yes | Structural Steel Beams |
| S | BEAM | STL_ | HIDN | 220 | Continuous | Yes | Structural Steel Beams Hidden |
| S | BEAM | STL_ | STFN | 223 | Continuous | Yes | Structural Beam Stiffener |
| S | BEAM | CONC | | 4 | Continuous | Yes | Structural Concrete Beams, Including Precast |
| S | BEAM | TMBR | | 2 | Continuous | Yes | Structural Timber Beams |
| S | BEAM | | | 2 | Continuous | Yes | Structural Beams |
| S | BRCE | HIDN | | 2 | HIDDEN2 | Yes | Structural Bracing Element Obscured by Foreground Element |
| S | BRCE | STL_ | | 212 | Continuous | Yes | Structural Steel Bracing |
| S | BRCE | MISC | | 2 | Continuous | Yes | Miscellaneous Structural Bracing |
| S | BRCE | | | 2 | Continuous | Yes | Structural Bracing |
| S | COLS | HIDN | | 212 | HIDDEN2 | Yes | Structural Columns Obscured By Foreground Objects |
| S | COLS | TEXT | | 3 | Continuous | No | Text Relating to Column (Sizes) |
| S | COLS | STL_ | | 210 | Continuous | Yes | Structural Steel Column or Post |
| S | COLS | STL_ | BSPL | 212 | Continuous | Yes | Baseplate for Structural Steel Column |
| S | COLS | TMBR | | 2 | Continuous | Yes | Timber Column |
| S | COLS | MSRY | | 230 | Continuous | Yes | Masonry Column/Pier |
| S | COLS | CONC | | 2 | Continuous | Yes | Concrete Column |
| S | COLS | | | 2 | Continuous | Yes | Structural Column |
| S | DETL | | | 2 | Continuous | Yes | Structural Detail Line (Medium Lineweight) |
| S | DETL | HEVY | | 2 | Continuous | Yes | Structural Detail Line (Thick Lineweight) |
| S | DETL | FINE | | 4 | Continuous | Yes | Structural Detail Line (Thin Lineweight) |
| S | DETL | XFIN | | 1 | Continuous | Yes | Structural Detail Line (Very Thin Lineweight) |
| S | DETL | TEXT | | 3 | Continuous | Yes | Text Related to Structural Details |
| S | DETL | ABLT | | 2 | Continuous | Yes | Anchor Bolts, Clips and Fasteners |
| S | DETL | FRAM | | 3 | Continuous | Yes | Framing Members in Details |
| S | DETL | STL_ | | 2 | Continuous | Yes | Miscellaneous Steel Detail Linework (Medium Lineweight) |
| S | DETL | STL_ | MISC | 2 | Continuous | Yes | Miscellaneous Steel Detail Linework (Thin Lineweight) |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| S | DETL | CONC | | 2 | Continuous | Yes | Miscellaneous Concrete Detail Linework |
| S | DETL | TMBR | | 2 | Continuous | Yes | Miscellaneous Timber Detail Linework |
| S | DETL | MSRY | | 230 | Continuous | Yes | Miscellaneous Masonry Detail Linework, Clips, Anchors, Etc.. |
| S | EQPM | TEXT | | 3 | Continuous | Yes | Text Associated with Equipmetnt Appearing on Structural Plans, Details, Etc… |
| S | EQPM | | | 2 | Continuous | Yes | Equipment Appearing on Structural Plans, Details, Etc.… |
| S | FLOR | | | 3 | Continuous | Yes | Floor/ Slab Edge, Openings and Depressions |
| S | FLOR | ABVE | | 1 | DASHED2 | Yes | Floor/ Slab Above |
| S | FLOR | DECK | | 2 | Continuous | Yes | Metal Decking |
| S | FLOR | MCUT | | 2 | Continuous | Yes | Floor Materials Cut Outline |
| S | FLOR | | | 3 | Continuous | Yes | Floor/ Slab Edge, Openings and Depressions |
| S | FLOR | ABVE | | 1 | DASHED2 | Yes | Floor/ Slab Above |
| S | FLOR | DECK | | 2 | Continuous | Yes | Metal Decking |
| S | FLOR | MCUT | | 2 | Continuous | Yes | Floor Materials Cut Outline |
| S | FTNG | | | 2 | Continuous | Yes | Structural Foundation Footings (Medium Detail) |
| S | FTNG | BLOW | | 2 | Continuous | Yes | Structural Footings Below |
| S | FTNG | HIDN | | 1 | HIDDEN2 | Yes | Footing Elements Obscured by Foreground Objects |
| S | PATT | STL_ | | 223 | Continuous | Yes | Steel Hatch Patterns |
| S | PATT | CONC | | 223 | Continuous | Yes | Concrete/Mortar Fill Hatch Patterns |
| S | PATT | TMBR | | 223 | Continuous | Yes | Wood Grain Patterns |
| S | PATT | MSRY | | 223 | Continuous | Yes | Masonry Hatch Patterns |
| S | PATT | SCLN | | 2 | Continuous | Yes | Scorelines, Cut Lines, Expansion Joints, Etc.. |
| S | PATT | FILL | | 252 | Continuous | Yes | Earth Fill Hatch Patterns |
| S | PATT | GRVL | | 252 | Continuous | Yes | Gravel Fill Hatch Patterns |
| S | GNRL | EQPM | | 10 | Continuous | Yes | General Equipment |
| S | GNRL | EQPM | HIDN | 10 | HIDDEN2 | Yes | General Equipment Hidden |
| S | GNRL | EQPM | PHAN | 10 | PHANTOM2 | Yes | General Equipment Phantom |
| S | GRID | | | 223 | CENTER | Yes | Structural Grid |
| S | GRID | MINR | | 8 | CENTER2 | Yes | Structural Grid - Minor or Partial Grids |
| S | GRID | SYMB | | 212 | Continuous | Yes | Column Identification Bubbles |
| S | GNRL | EQPM | | 10 | Continuous | Yes | General Equipment |
| | | | | | | | |
| S | GNRL | EQPM | HIDN | 10 | HIDDEN2 | Yes | General Equipment Hidden |
| S | GNRL | EQPM | PHAN | 10 | PHANTOM2 | Yes | General Equipment Phantom |
| S | GRID | | | 223 | CENTER | Yes | Structural Grid |
| S | GRID | MINR | | 8 | CENTER2 | Yes | Structural Grid - Minor or Partial Grids |
| S | GRID | SYMB | | 212 | Continuous | Yes | Column Identification Bubbles |
| S | JOIS | | | 2 | Continuous | Yes | Structural Joists |
| S | JOIS | ABVE | | 2 | DASHED2 | Yes | Structural Joists Above |
| S | PILE | HIDN | | 212 | HIDDEN2 | Yes | Piles Obscured by Foreground Objects |
| S | PILE | STL_ | | 210 | Continuous | Yes | Structural Steel Piles |
| S | PILE | TMBR | | 2 | Continuous | Yes | Timber Piles |
| S | PILE | | | 2 | Continuous | Yes | Structural Piles |
| S | RBAR | | | 201 | Continuous | Yes | Structural Steel Reinforcing Bar |
| S | RBAR | TIES | | 2 | Continuous | Yes | Structural Steel Reinforcing Ties, Bridging, Stirrups, Etc.. |
| S | RENF | HIDN | | 201 | HIDDEN2 | Yes | Miscellaneous Reinforcing Elements |
| S | RENF | WMSH | | 212 | WWF | Yes | Welded Wire Fabric Mesh |
| S | REFN | | | 6 | Continuous | Yes | Reinforcing Elements |
| S | ROOF | DECK | | 2 | Continuous | Yes | Metal Roof Decking |
| S | ROOF | OTLN | | 2 | Continuous | Yes | Outline of Roof, Openings and Changes in Elevation |
| S | ROOF | PATT | | 223 | Continuous | Yes | Hatch Patterns On Roofing Plans and Details |
| S | ROOF | ABVE | | 1 | DASHED2 | Yes | Roof Elements Above |
| S | ROOF | BLOW | | 1 | Continuous | Yes | Roof Elements Below |
| S | ROOF | | | 3 | Continuous | Yes | Structural Roof Elements |
| S | TRUS | | | 212 | Continuous | Yes | Trusses and Space Frames |
| S | TRUS | ABVE | | 2 | DASHED2 | Yes | Trusses and Space Frames Above |
| S | WALL | HIDN | | 4 | HIDDEN2 | Yes | Wall Element Obscured by Foreground Element |
| S | WALL | SHEA | | 4 | Continuous | Yes | Structural Shear Walls |
| S | WALL | RETN | | 2 | Continuous | Yes | Retaining Walls |
| S | WALL | PATT | | 8 | Continuous | Yes | Hatch Patterns in Wall Elements |
| S | WALL | MSRY | | 2 | Continuous | Yes | Masonry Wall Linework, Brick/Block Coursing, ETC… |
| S | WALL | CONC | | 4 | Continuous | Yes | Structural Concrete Walls |
| S | WALL | | | 2 | Continuous | Yes | Structural Walls |
| S | XREF | | | 7 | Continuous | Yes | External Reference Attachment Layer |
| S | XREF | RAST | | 7 | Continuous | Yes | Image Reference Attachment Layer |

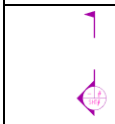
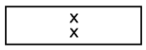
### 1.26.3 LINETYPES

| Name | Description | Example |
|---|---|---|
| BORDER2 | BORDER2 | |
| CENTER | CENTER | |
| CENTER2 | CENTER2 | |
| Continuous | Continuous | |
| DASHED2 | DASHED2 | |
| HIDDEN | HIDDEN | |
| HIDDEN2 | HIDDEN2 | |
| PHANTOM2 | PHANTOM2 | |
| WWF | WWF | |

## 1.26.4 SYMBOLS

### 1.26.4.1 MISCELLANEOUS

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | CALLOUT.dwg | (Varies) | Callout Symbol |
|  | CLine.dwg | S-ANNO-SYMB | Center Line |
|  | Col-Bubble1.dwg | S-GNRL-BUBL | Column Bubble |
|  | Col-Bubble2.dwg | S-GNRL-BUBL | Column Bubble |
|  | DET-SYMB.dwg | S-ANNO-SYMB | Detail Callout |
|  | Legend1.dwg | S-ANNO-SYMB | Legend |
|  | N_Arrow.dwg | S-ANNO-SYMB | North Arrow |
|  | Plate.dwg | S-ANNO-SYMB | Plate |
|  | Rev-Tr.dwg | (Varies) | Revision Tag |
|  | Sec1.dwg | S-ANNO-SYMB | Section, Detail, Elevation Callout, View to North |
|  | Sec2.dwg | S-ANNO-SYMB | Section, Detail, Elevation Callout, View to North |
|  | Sec3.dwg | S-ANNO-SYMB | Section, Detail, Elevation Callout, View to South |
|  | Sec4.dwg | S-ANNO-SYMB | Section, Detail, Elevation Callout, View to South |

| | | | |
|---|---|---|---|
|  | Sec5.dwg | S-ANNO-SYMB | Section, Detail, Elevation Callout, View to West |
|  | Sec6.dwg | S-ANNO-SYMB | Section, Detail, Elevation Callout, View to East |
|  | Sec7.dwg | S-ANNO-SYMB | Section, Detail, Elevation Callout, View to West |
|  | Sec8.dwg | S-ANNO-SYMB | Section, Detail, Elevation Callout, View to East |
|  | Sect-Mk_Detail.dwg | S-ANNO-SYMB | Section Mark Symbol |
|  | Stamp1.dwg | S-ANNO-SYMB | Percent Complete/Date Stamp |
|  | Sub-Title.dwg | S-ANNO-SUBT | Sub-Title |
|  | Title.dwg | S-ANNO-TITL | Title |
|  | WF.dwg | S-ANNO-SYMB | Wide Flange (Depth WF Weight) |

# 1.27 APPENDIX M – TRAFFIC DISCIPLINE

## 1.27.1 CONTENT PREFERENCES

This Section Currently Under Construction

## 1.27.2 LAYER STRATAGEM

### 1.27.2.1 TRAFFIC WORK

| DISCIPLINE | MAJOR | MINOR | DESC | COLOR | LINETYPE | PLOTS | DESCRIPTION |
|---|---|---|---|---|---|---|---|
| T | ANNO | | | 212 | Continuous | Yes | Generic Annotation Features |
| T | ANNO | DIMS | | 37 | Continuous | Yes | Dimensions |
| T | ANNO | MLIN | | 13 | Continuous | Yes | Match Lines |
| T | ANNO | NPLT | | 7 | Continuous | No | Non Plot Features |
| T | ANNO | SYMB | | 110 | Continuous | Yes | Generic Symbols |
| T | ANNO | TEXT | | 212 | Continuous | Yes | Miscellaneous Annotations and Callouts |
| T | ANNO | TTLB | | 110 | Continuous | Yes | Title Block and Contract Border Information |
| T | ANNO | REVS | 0001 | 80 | Continuous | Yes | Revision Cloud - PACC |
| T | ANNO | REVS | TEXT | 212 | Continuous | Yes | Revision Delta and Text in Drawing & Contract Border |
| T | ANNO | VPRT | | 7 | Continuous | No | Viewport |
| T | DVCS | | | 110 | Continuous | Yes | Generic Device Features |
| T | DVCS | ATTN | | 110 | Continuous | Yes | Impact Attenuator |
| T | DVCS | BARR | WFB_ | 110 | Continuous | Yes | WaterFilled Barriers |
| T | DVCS | BARR | CONC | 110 | Continuous | Yes | Concrete Barriers |
| T | DVCS | BARR | TMBR | 110 | Continuous | Yes | Timber Barriers |
| T | DVCS | DIMS | | 37 | Continuous | Yes | Device Dimensions |
| T | DVCS | DLIN | | 110 | Continuous | Yes | Delineator |
| T | DVCS | FENC | | 110 | Continuous | Yes | Fencing |
| T | DVCS | GDRL | BOX_ | 110 | Continuous | Yes | Box Beam Guide Rail |
| T | DVCS | GDRL | WBM_ | 110 | Continuous | Yes | W Beam Guide Rail |
| T | DVCS | GDRL | THRI | 110 | Continuous | Yes | Thrie Beam Guide Rail |
| T | DVCS | TEXT | | 212 | Continuous | Yes | Device Annotations |
| T | MARK | | | 220 | Continuous | Yes | Generic Pavement Markings |
| T | MARK | HIDN | | 220 | Hidden | Yes | Pavment Markings Obscured by Other Objects |
| T | MARK | BLL_ | | 220 | BrokenLane | Yes | Broken Lane Line - 15-25 |
| T | MARK | DOT_ | | 220 | NJDOT | Yes | NJ DOT - 10-30 |
| T | MARK | NJTP | | 220 | NJTPK | Yes | NJ Turnpike Lane Line - 30-10 |
| T | MARK | DLLL | | 220 | DottedLane4 | Yes | Dotted Lane Line - 2-4 |
| T | MARK | DLLS | | 220 | DottedLane2 | Yes | Dotted Lane Line - 2-2 |
| T | MARK | DIMS | | 37 | Continuous | Yes | Pavment Marking Dimensions |
| T | MARK | SYMB | | 220 | Continuous | Yes | Marking Symbols - Directional Arrows |
| T | MARK | TEXT | | 212 | Continuous | Yes | Marking Annotations and Leaders |
| T | MARK | WORD | | 220 | Continuous | Yes | Marking Words - Stop/MPH/etc. |
| T | SGNL | | | 110 | Continuous | Yes | Generic Signal Features |
| T | SGNL | ABVE | | 110 | Continuous | Yes | Above Ground Signal Equipment |
| T | SGNL | COND | | 110 | Dashed | Yes | Signal Conduit |
| T | SGNL | DIMS | POLE | 37 | Continuous | Yes | Signal Pole Location Dimensions |
| T | SGNL | DIMS | HEAD | 37 | Continuous | Yes | Signal Head Dimensions |
| T | SGNL | JBOX | | 110 | Continuous | Yes | Signal Junction Box |
| T | SGNL | LOOP | | 110 | Dashed | Yes | Signal Loop or Video Zone |
| T | SGNL | TEXT | | 212 | Continuous | Yes | Signal Annotations |
| T | SGNL | TEXT | HEAD | 212 | Continuous | Yes | Signal Head Annotations |
| T | SIGN | | | 110 | Continuous | Yes | Sign Panels |
| T | SIGN | DIMS | | 37 | Continuous | Yes | Sign Dimensions and Leaders |
| T | SIGN | SYMB | | 110 | Continuous | Yes | Sign Symbols |
| T | SIGN | TEXT | | 212 | Continuous | Yes | Sign Annotations and Callouts |
| T | PAVE | | | 80 | Continuous | Yes | Paving Features |
| T | PAVE | ASPH | | 12 | Continuous | Yes | Asphault Pavement |
| T | PAVE | BRDR | PATT | 14 | Continuous | Yes | Pavement Hatch Borders |
| T | PAVE | CONC | | 12 | Continuous | Yes | Concrete Pavement |
| T | PAVE | CURB | BACK | 1 | Continuous | Yes | Back of Curb |
| T | PAVE | CURB | FACE | 131 | Continuous | Yes | Face of Curb |
| T | PAVE | DIMS | | 37 | Continuous | Yes | Pavement Dimensions |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| T | PAVE | GRAV | | 12 | Continuous | Yes | Gravel Pavement |
| T | PAVE | JBAR | | 220 | Continuous | Yes | Jersey Barriers |
| T | PAVE | JNTS | | 220 | Continuous | Yes | Expansion Joints |
| T | PAVE | LIMT | | 13 | Dashed | Yes | Paving Limits |
| T | SITE | | | 80 | Continuous | Yes | Site Features |
| T | SITE | ABUT | | 131 | Continuous | Yes | Bridge Abutments |
| T | SITE | ABVE | | 250 | Continuous | Yes | Site Elements Overhead |
| T | SITE | BLDG | TEXT | 212 | Continuous | Yes | Building and Shed Annotations |
| T | SITE | BLDG | | 131 | Continuous | Yes | Building and Shed Features |
| T | SITE | COLS | | 191 | Continuous | Yes | Columns, Piers and Posts |
| T | SITE | FNCE | | 131 | FENCE | Yes | Fence Lines |
| T | SITE | FNDN | | 131 | Continuous | Yes | Foundations |
| T | SITE | LAND | | 131 | Continuous | Yes | Landscape Features |
| T | SITE | SWLK | | 80 | Continuous | Yes | Sidewalk |
| T | SITE | TEXT | | 212 | Continuous | Yes | Sitework Text |
| T | SITE | WALL | | 131 | Continuous | Yes | Walls |
| T | XREF | | | 7 | Continuous | Yes | External Reference Drawings |
| T | XREF | RAST | | 7 | Continuous | Yes | Raster Images |

### 1.27.2.2 MAINTENANCE OF TRAFFIC WORK

| DISCIPLINE | MAJOR | MINOR | DESC | PHASE | COLOR | LINETYPE | PLOTS | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|
| T | ANNO | DIMS | | _MPT | 37 | Continuous | Yes | Maintainance Of Traffic Patterns Dimensions |
| T | ANNO | TEXT | | _MPT | 212 | Continuous | Yes | Maintainance Of Traffic Patterns Miscellaneous Annotations And Callouts |
| T | DVCS | | | _MPT | 110 | Continuous | Yes | Maintainance Of Traffic Patterns Generic Device Features |
| T | DVCS | ATTN | | _MPT | 110 | Continuous | Yes | Maintainance Of Traffic Patterns Impact Attenuator |
| T | DVCS | BARR | WFB_ | _MPT | 110 | Continuous | Yes | Maintainance Of Traffic Patterns Waterfilled Barriers |
| T | DVCS | BARR | CONC | _MPT | 110 | Continuous | Yes | Maintainance Of Traffic Patterns Concrete Barriers |
| T | DVCS | BARR | TMBR | _MPT | 110 | Continuous | Yes | Maintainance Of Traffic Patterns Timber Barriers |
| T | DVCS | DIMS | | _MPT | 37 | Continuous | Yes | Maintainance Of Traffic Patterns Device Dimensions |
| T | DVCS | DLIN | | _MPT | 110 | Continuous | Yes | Maintainance Of Traffic Patterns Delineator |
| T | DVCS | FENC | | _MPT | 110 | Continuous | Yes | Maintainance Of Traffic Patterns Fencing |
| T | DVCS | GDRL | BOX_ | _MPT | 110 | Continuous | Yes | Maintainance Of Traffic Patterns Box Beam Guide Rail |
| T | DVCS | GDRL | WBM_ | _MPT | 110 | Continuous | Yes | Maintainance Of Traffic Patterns W Beam Guide Rail |
| T | DVCS | GDRL | THRI | _MPT | 110 | Continuous | Yes | Maintainance Of Traffic Patterns Thrie Beam Guide Rail |
| T | DVCS | TEXT | | _MPT | 212 | Continuous | Yes | Maintainance Of Traffic Patterns Device Annotations |
| T | MARK | | | _MPT | 220 | Continuous | Yes | Maintainance Of Traffic Patterns Generic Pavement Markings |
| T | MARK | HIDN | | _MPT | 220 | Hidden | Yes | Maintainance Of Traffic Patterns Pavment Markings Obscured By Other Objects |
| T | MARK | BLL_ | | _MPT | 220 | BrokenLane | Yes | Maintainance Of Traffic Patterns Broken Lane Line - 15-25 |
| T | MARK | DOT_ | | _MPT | 220 | NJDOT | Yes | Maintainance Of Traffic Patterns Nj Dot - 10-30 |
| T | MARK | NJTP | | _MPT | 220 | NJTPK | Yes | Maintainance Of Traffic Patterns Nj Turnpike Lane Line - 30-10 |
| T | MARK | DLLL | | _MPT | 220 | DottedLane4 | Yes | Maintainance Of Traffic Patterns Dotted Lane Line - 2-4 |
| T | MARK | DLLS | | _MPT | 220 | DottedLane2 | Yes | Maintainance Of Traffic Patterns Dotted Lane Line - 2-2 |
| T | MARK | DIMS | | _MPT | 37 | Continuous | Yes | Maintainance Of Traffic Patterns Pavment Marking Dimensions |
| T | MARK | SYMB | | _MPT | 220 | Continuous | Yes | Maintainance Of Traffic Patterns Marking Symbols - Directional Arrows |
| T | MARK | TEXT | | _MPT | 212 | Continuous | Yes | Maintainance Of Traffic Patterns Marking Annotations And Leaders |
| T | MARK | WORD | | _MPT | 220 | Continuous | Yes | Maintainance Of Traffic Patterns Marking Words - Stop/Mph/Etc. |
| T | SGNL | | | _MPT | 110 | Continuous | Yes | Maintainance Of Traffic Patterns Generic Signal Features |
| T | SGNL | ABVE | | _MPT | 110 | Continuous | Yes | Maintainance Of Traffic Patterns Above Ground Signal Equipment |
| T | SGNL | COND | | _MPT | 110 | Dashed | Yes | Maintainance Of Traffic Patterns Signal Conduit |
| T | SGNL | DIMS | POLE | _MPT | 37 | Continuous | Yes | Maintainance Of Traffic Patterns Signal Pole Location Dimensions |
| T | SGNL | DIMS | HEAD | _MPT | 37 | Continuous | Yes | Maintainance Of Traffic Patterns Signal Head Dimensions |
| T | SGNL | JBOX | | _MPT | 110 | Continuous | Yes | Maintainance Of Traffic Patterns Signal Junction Box |
| T | SGNL | LOOP | | _MPT | 110 | Dashed | Yes | Maintainance Of Traffic Patterns Signal Loop Or Video Zone |
| T | SGNL | TEXT | | _MPT | 212 | Continuous | Yes | Maintainance Of Traffic Patterns Signal Annotations |
| T | SGNL | TEXT | HEAD | _MPT | 212 | Continuous | Yes | Maintainance Of Traffic Patterns Signal Head Annotations |
| T | SIGN | | | _MPT | 110 | Continuous | Yes | Maintainance Of Traffic Patterns Sign Panels |
| T | SIGN | DIMS | | _MPT | 37 | Continuous | Yes | Maintainance Of Traffic Patterns Sign Dimensions And Leaders |
| T | SIGN | SYMB | | _MPT | 110 | Continuous | Yes | Maintainance Of Traffic Patterns Sign Symbols |
| T | SIGN | TEXT | | _MPT | 212 | Continuous | Yes | Maintainance Of Traffic Patterns Sign Annotations And Callouts |
| T | PAVE | | | _MPT | 80 | Continuous | Yes | Maintainance Of Traffic Patterns Paving Features |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| T | PAVE | ASPH | | _MPT | 12 | Continuous | Yes | Maintainance Of Traffic Patterns Asphault Pavement |
| T | PAVE | BRDR | PATT | _MPT | 14 | Continuous | Yes | Maintainance Of Traffic Patterns Pavement Hatch Borders |
| T | PAVE | CONC | | _MPT | 12 | Continuous | Yes | Maintainance Of Traffic Patterns Concrete Pavement |
| T | PAVE | CURB | BACK | _MPT | 1 | Continuous | Yes | Maintainance Of Traffic Patterns Back Of Curb |
| T | PAVE | CURB | FACE | _MPT | 131 | Continuous | Yes | Maintainance Of Traffic Patterns Face Of Curb |
| T | PAVE | DIMS | | _MPT | 37 | Continuous | Yes | Maintainance Of Traffic Patterns Pavement Dimensions |
| T | PAVE | GRAV | | _MPT | 12 | Continuous | Yes | Maintainance Of Traffic Patterns Gravel Pavement |
| T | PAVE | JBAR | | _MPT | 220 | Continuous | Yes | Maintainance Of Traffic Patterns Jersey Barriers |
| T | PAVE | JNTS | | _MPT | 220 | Continuous | Yes | Maintainance Of Traffic Patterns Expansion Joints |
| T | PAVE | LIMT | | _MPT | 13 | Dashed | Yes | Maintainance Of Traffic Patterns Paving Limits |
| T | SITE | | | _MPT | 80 | Continuous | Yes | Maintainance Of Traffic Patterns Site Features |
| T | SITE | ABUT | | _MPT | 131 | Continuous | Yes | Maintainance Of Traffic Patterns Bridge Abutments |
| T | SITE | ABVE | | _MPT | 250 | Continuous | Yes | Maintainance Of Traffic Patterns Site Elements Overhead |
| T | SITE | BLDG | TEXT | _MPT | 212 | Continuous | Yes | Maintainance Of Traffic Patterns Building And Shed Annotations |
| T | SITE | BLDG | | _MPT | 131 | Continuous | Yes | Maintainance Of Traffic Patterns Building And Shed Features |
| T | SITE | COLS | | _MPT | 191 | Continuous | Yes | Maintainance Of Traffic Patterns Columns, Piers And Posts |
| T | SITE | FNCE | | _MPT | 131 | FENCE | Yes | Maintainance Of Traffic Patterns Fence Lines |
| T | SITE | FNDN | | _MPT | 131 | Continuous | Yes | Maintainance Of Traffic Patterns Foundations |
| T | SITE | LAND | | _MPT | 131 | Continuous | Yes | Maintainance Of Traffic Patterns Landscape Features |
| T | SITE | SWLK | | _MPT | 80 | Continuous | Yes | Maintainance Of Traffic Patterns Sidewalk |
| T | SITE | TEXT | | _MPT | 212 | Continuous | Yes | Maintainance Of Traffic Patterns Sitework Text |
| T | SITE | WALL | | _MPT | 131 | Continuous | Yes | Maintainance Of Traffic Patterns Walls |

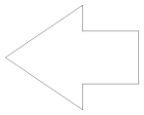
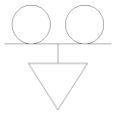
### 1.27.3 LINETYPES

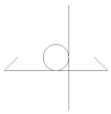
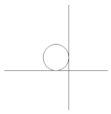
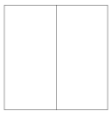
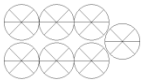
| Name | Description | Example |
|---|---|---|
| BROKENLANE | |  |
| Continuous | Continuous |  |
| DASHED | Dashed (1x) |  |
| DOTTEDLANE2 | |  |
| DOTTEDLANE4 | |  |
| FENCE | |  |
| GUIDEB | | |
| GUIDET | | |
| GUIDEW | | |
| HIDDEN | |  |
| HIDDEN2 | |  |
| NJDOT | |  |
| NJTPK | |  |

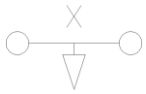
### 1.27.4 SYMBOLS

#### 1.27.4.1 REMOVAL

| Symbol | Block name | Layer Name | Description |
|---|---|---|---|

| | | | |
|---|---|---|---|
|  | Cantilever sign structure with changeable message panel-removal.dwg | (Varies) | Cantilever Sign Structure with Changeable Message Panel |
|  | Cantilever sign structure with fixed message-removal.dwg | (Varies) | Cantilever Sign Structure with Fixed Message |
|  | Crash cushion attenuator-removal.dwg | (Varies) | Crash Cushion Attenuator |
|  | Curbed traffic guide system posts with base plate (without c)-removal.dwg | (Varies) | Curbed Traffic Guide System Posts with Base Plate (Without C) |
|  | Direction of traffic (permanent conditions)-removal.dwg | (Varies) | Direction of Traffic (Permanent Conditions) |
|  | Double post mounted sign with changeable message panel-removal.dwg | (Varies) | Double Post-Mounted Sign with Changeable Message Panel |
|  | Removal sign panel to be modified-removal.dwg | (Varies) | Removal Sign Panel to be Modified |
|  | Fence mounted sign with fixed message panel-removal.dwg | (Varies) | Fence-Mounted Sign With Fixed Message Panel |
|  | Gantry sign structure with changeable message panels-removal.dwg | (Varies) | Gantry Sign Structure with Changeable Message Panels |
|  | Gantry sign structure with fixed message panels-removal.dwg | (Varies) | Gantry Sign Structure with Fixed Message Panels |
|  | Pavement marking arrow symbol (type a-e)-removal.dwg | (Varies) | Pavement Marking Arrow Symbol (Type A-E) |
|  | Pavement marking line-removal.dwg | (Varies) | Pavement Marking Line |
|  | Pedestrian push button standard with Identification-removal.dwg | (Varies) | Pedestrian Push-Button Standard with Identification |
|  | Pole mounted back to back signs with fixed message panels-removal.dwg | (Varies) | Pole-Mounted Back-to-Back Signs with Fixed Message Panels |

| | | | |
|---|---|---|---|
|  | Pole mounted right angle signs with fixed message panels-removal.dwg | (Varies) | Pole-Mounted Right Angle Signs with Fixed Message Panels |
|  | Pole mounted sign with fixed message panel-removal.dwg | (Varies) | Pole-Mounted Sign with Fixed Message Panel |
|  | Post mounted back to back signs with fixed message panels-removal.dwg | (Varies) | Post-Mounted Back-to-Back Signs with Fixed Message Panels |
|  | Post mounted right angle signs with fixed message panels-removal.dwg | (Varies) | Post-Mounted Right-Angle Signs with Fixed Message Panels |
|  | Post mounted sign with fixed message panel-removal.dwg | (Varies) | Post-Mounted Sign with Fixed Message Panel |
|  | Reflectorized pavement marker-removal.dwg | (Varies) | Reflectorized Pavement Marker |
|   | Roadway surveillance sensor with Identification-removal.dwg | (Varies) | Roadway Surveillance Sensor with Identification |
|  | Sand barrel array-removal.dwg | (Varies) | Sand-Barrel Array |
|   | Sign panel Identification-removal.dwg | (Varies) | Sign Panel Identification |
|   | Sign structure location Identification-removal.dwg | (Varies) | Sign Structure Location Identification |
|  | Signal controller and cabinet ground mounted-removal.dwg | (Varies) | Signal Controller and Cabinet, Pole-Mounted |
|  | Signal controller and cabinet pole mounted-removal.dwg | (Varies) | Signal Controller and Cabinet, Pole-Mounted |
|  | Traffic guide posts-removal.dwg | (Varies) | Traffic Guide Posts |
|  | Traffic post top side of pole mounted signal-removal.dwg | (Varies) | Traffic Post Top Side of Pole-Mounted Signal |

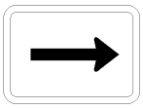
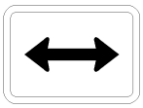
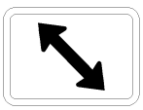
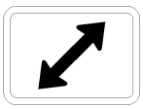
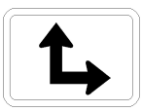
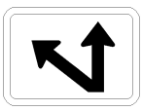
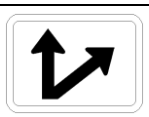
| | | | |
|---|---|---|---|
|  | Traffic signal span wire installation with span length-removal.dwg | (Varies) | Traffic Signal Span Wire Installation with Span Length |
|  | Traffic signal standard with Identification-removal.dwg | (Varies) | Traffic Signal Standard with Identification |
|  | Traffic signal standard with mast arm length-removal.dwg | (Varies) | Traffic Signal Standard with Mast Arm Length |
|  | Vehicular signal head with Identification-removal.dwg | (Varies) | Vehicular Signal Head with Identification |

### 1.27.4.2 GUIDE

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | D9-5.dwg | (Varies) | Reserved Handicapped Parking |
|   | E5-1.dwg | (Varies) | Exit to Right in Distance |
|   | E5-1L.dwg | (Varies) | Exit to Left – Immediate |
|   | E5-1Lx.dwg | (Varies) | Exit to Left in Distance |
|   | E5-1R.dwg | (Varies) | Exit to Right – Immediate |
|   | E5-1Rx.dwg | (Varies) | Exit to Right in Distance |
|   | G20-1f.dwg | (Varies) | “Road Work Ahead” Sign |
|   | G20-2.DWG | (Varies) | “End Road Work” Sign |
|   | M1-1.DWG | (Varies) | Interstate Route Number Sign |

| | | | |
|---|---|---|---|
|  | M1-4-3..DWG | (Varies) | Interstate Route Number Sign – 3 Digits |
|  | M1-4.DWG | (Varies) | Roadway Route Number Sign – 2 Digits |
|  | M1-5.DWG | (Varies) | Roadway Route Number Sign – 2 Digits |
|  | M2-1.DWG | (Varies) | Juncture Sign |
|  | M3-1.DWG | (Varies) | “North” Sign |
|  | M3-2.DWG | (Varies) | “East” Sign |
|  | M3-3.DWG | (Varies) | “South” Sign |
|  | M3-4.DWG | (Varies) | “West” Sign |
|  | M4-1.DWG | (Varies) | “Alternate” Sign |
|  | M4-1a.dwg | (Varies) | “ALT” Sign |
|  | M4-2.DWG | (Varies) | “By-Pass” Sign |
|  | M4-3.dwg | (Varies) | “Business” Sign |
|  | M4-4.dwg | (Varies) | “Truck” Sign |
|  | M4-5.dwg | (Varies) | “To” Sign |

| | | | |
|---|---|---|---|
|  | M4-6.dwg | (Varies) | “End” Sign |
|  | M4-7.dwg | (Varies) | “Temporary” Sign |
|  | M4-8.dwg | (Varies) | “Detour” Sign |
|  | M4-8a.dwg | (Varies) | “End Detour” Sign |
|  | M4-9l.dwg | (Varies) | Detour Left |
|  | M4-9lx.dwg | (Varies) | Detour Left, In Distance |
|  | M4-9r.dwg | (Varies) | Detour Right |
|  | M4-9rx.dwg | (Varies) | Detour Right, In Distance |
|  | M4-9x.dwg | (Varies) | Detour Ahead |
|  | M4-10l.dwg | (Varies) | Detour – Turn Left |
|  | M4-10r.dwg | (Varies) | Detour – Turn Right |
|  | M5-1L.dwg | (Varies) | Left Turn Ahead |
|  | M5-1R.dwg | (Varies) | Right Turn Ahead |
|  | M5-2L.dwg | (Varies) | Approaching Left Turn |

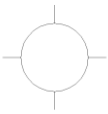
| | | | |
|---|---|---|---|
|  | M5-2R.dwg | (Varies) | Approaching Right Turn |
|  | M6-1l.dwg | (Varies) | Turn Left |
|  | M6-1r.dwg | (Varies) | Turn Right |
|  | M6-2l.dwg | (Varies) | Merge Left |
|  | M6-2r.dwg | (Varies) | Merge Right |
|  | M6-3.dwg | (Varies) | Continue Straight |
|  | M6-4.dwg | (Varies) | Must Turn Left or Right |
|  | M6-5l.dwg | (Varies) | Must Bear Left or Turn Right |
|  | M6-5r.dwg | (Varies) | Must Bear Right or Turn Left |
|  | M6-6L.dwg | (Varies) | Lane Must Proceed Straight or Turn Left |
|  | M6-6R.dwg | (Varies) | Lane Must Proceed Straight or Turn Right |
|  | M6-7L.dwg | (Varies) | Lane Must Proceed Straight or Bear Left |
|  | M6-7R.dwg | (Varies) | Lane Must Proceed Straight or Bear Right |

#### 1.27.4.3 MARKER

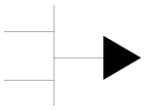
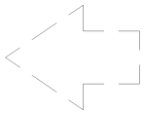
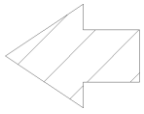
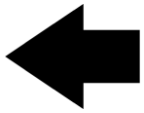
| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|

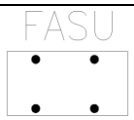
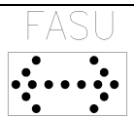
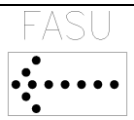
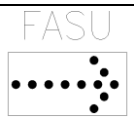
| | | | |
|---|---|---|---|
|  | ERM-1818YY.dwg | (Varies) | Diamond Reflector Sign – Bright Color |
|  | OM-3L.DWG | (Varies) | Rectangular Reflector Sign – Diagonals, Up to Left |
|  | OM-3R.DWG | (Varies) | Rectangular Reflective Sign – Diagonals, Up to Right |
|  | OM-612-3.DWG | (Varies) | Rectangular Reflective Sign – Blank |
|  | OM-612.DWG | (Varies) | Rectangular Reflective Sign – Circular Reflectors |
|  | OM-1818Y.DWG | (Varies) | Diamond Reflective Sign |
|  | OM-1818YB.dwg | (Varies) | Diamond Reflector Sign – Dark Color |

### 1.27.4.4 MISCELLANEOUS

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | LIGHT.DWG | (Varies) | Single Light Symbol |
|  | LIGHTS.DWG | (Varies) | Two Lights Symbol |
|  | S-3.DWG | (Varies) | “Bridge Will be Closed” Sign |
|  | S-4.DWG | (Varies) | “Plan Alt. Route” Sign |

### 1.27.4.5 PROPOSED

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | Back-up vehicle with flashing lights only-proposed.dwg | (Varies) | Back-Up Vehicle with Flashing Lights Only |
|  | Back-up vehicle with impact attenuator and fasu-proposed.dwg | (Varies) | Back-Up Vehicle with Impact Attenuator and FASU |
|  | Back-up vehicle with impact attenuator without fasu-proposed.dwg | (Varies) | Back-Up Vehicle with Impact Attenuator without FASU |
|  | Breakaway barricades (type iii) with attached sign-proposed.dwg | (Varies) | Breakaway Barricades (Type III), with Attached Sign |
|  | Breakaway barricades (type iii)-proposed.dwg | (Varies) | Breakaway Barricades (Type III) |
|  | Cantilever sign structure with changeable message panel-proposed.dwg | (Varies) | Cantilever Sign Structure with Changeable Message Panel |
|  | Cantilever sign structure with fixed message-proposed.dwg | (Varies) | Cantilever Sign Structure with Fixed Message |
|  | Contractor's vehicle-proposed.dwg | (Varies) | Contractor's Vehicle |
|  | Crash cushion attenuator-proposed.dwg | (Varies) | Crash Cushion Attenuator |
|  | Curbed traffic guide system posts with base plate (without c)-proposed.dwg | (Varies) | Curbed Traffic Guide System Posts with Base Plate (Without C) |
|  | Direction of detour (temporary traffic flow)-proposed.dwg | (Varies) | Direction of Detour (Temporary Traffic Flow) |
|  | Direction of haul route-proposed.dwg | (Varies) | Direction of Haul Route |
|  | Direction of traffic (permanent conditions)-proposed.dwg | (Varies) | Direction of Traffic (Permanent Conditions) |

| | | | |
|---|---|---|---|
|  | Double post mounted sign with changeable message panel-proposed.dwg | (Varies) | Double Post-Mounted Sign with Changeable Message Panel |
|  | Fence mounted sign with fixed message panel-proposed.dwg | (Varies) | Fence-Mounted Sign with Fixed Message Panel |
|  | Flagger location-proposed.dwg | (Varies) | Flagger Location |
|   | Flashing arrow sign unit (fasu) caution mode indication-proposed.dwg | (Varies) | Flashing Arrow Sign Unit (FASU) Caution Mode Indication |
|   | Flashing arrow sign unit (fasu) double arrow indication-proposed.dwg | (Varies) | Flashing Arrow Sign Unit (FASU) Double-Arrow Indication |
|   | Flashing arrow sign unit (fasu) left arrow indication-proposed.dwg | (Varies) | Flashing Arrow Sign Unit (FASU) Left Arrow Indication |
|   | Flashing arrow sign unit (fasu) right arrow indication-proposed.dwg | (Varies) | Flashing Arrow Sign Unit (FASU) Right Arrow Indication |
|  | Gantry sign structure with changeable message panels-proposed.dwg | (Varies) | Gantry Sign Structure with Changeable Message Panels |
|  | Gantry sign structure with fixed message panels-proposed.dwg | (Varies) | Gantry Sign Structure with Fixed Message Panels |
|  | Pavement marking arrow symbol (type a-e)-proposed.dwg | (Varies) | Pavement Marking Arrow Symbol (Type A-E) |
|  | Pavement marking line-proposed.dwg | (Varies) | Pavement Marking Line |
|  | Pedestrian push button standard with Identification-proposed.dwg | (Varies) | Pedestrian Push-Button Standard with Identification |
|  | Pedestrian signal head with Identification-proposed.dwg | (Varies) | Pedestrian Signal Head with Identification |
|  | Plastic delineator drums with attached warning lights-proposed.dwg | (Varies) | Plastic Delineator Drums with Attached Warning Lights |

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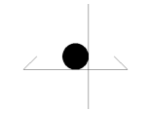
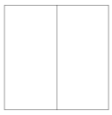
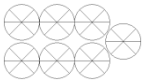
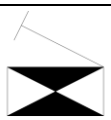
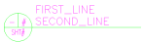
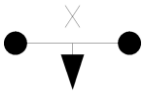
|---|---|---|---|
|  | Plastic delineator drums-proposed.dwg | (Varies) | Plastic Delineator Drums |
|  | Pole mounted back to back signs with fixed message panels-proposed.dwg | (Varies) | Pole-Mounted Back-to-Back Signs with Fixed Message Panels |
|  | Pole mounted right angle signs with fixed message panels-proposed.dwg | (Varies) | Pole Mounted Right-Angle Signs with Fixed Message Panels |
|  | Pole mounted sign with fixed message panel-proposed.dwg | (Varies) | Pole-Mounted Sign with Fixed Message Panel |
|  | Reflectorized pavement marker-proposed.dwg | (Varies) | Reflectorized Pavement Marker |
|  | Roadway surveillance sensor with Identification-proposed.dwg | (Varies) | Roadway Surveillance Sensor with Identification |
|  | Sand barrel array-proposed.dwg | (Varies) | Sand-Barrel Array |
|  | Sand filled barriers-proposed.dwg | (Varies) | Sand-Filled Barriers |
|  | Sign on temporary sign stand-proposed.dwg | (Varies) | Sign on Temporary Sign Stand |
|   | Sign panel Identification-proposed.dwg | (Varies) | Sign Panel Identification |
|   | Sign structure location Identification-proposed.dwg | (Varies) | Sign Structure Location Identification |
|  | Signal controller and cabinet ground mounted-proposed.dwg | (Varies) | Signal Controller and Cabinet, Ground-Mounted |
|  | Signal controller and cabinet pole mounted-proposed.dwg | (Varies) | Signal Controller and Cabinet, Pole-Mounted |
|  | Temporary impact attenuator-proposed.dwg | (Varies) | Temporary Impact Attenuator |

| | | | |
|---|---|---|---|
|  | Temporary reflectorized pavement marker-proposed.dwg | (Varies) | Temporary Reflectorized Pavement Marker |
|  | Tra-callout.dwg | (Varies) | Callout Symbol |
|  | Tra-det-symb.dwg | (Varies) | Detail Symbol |
|  | Traffic cone-proposed.dwg | (Varies) | Traffic Cone |
|  | Traffic cones-proposed.dwg | (Varies) | Traffic Cones |
|  | Traffic guide posts-proposed.dwg | (Varies) | Traffic Guide Posts |
|  | Traffic lane or other area closed to traffic-proposed.dwg | (Varies) | Traffic Lane or Other Area Closed to Traffic |
|  | Traffic post top side of pole mounted signal-proposed.dwg | (Varies) | Traffic Post Top Side of Pole-Mounted Signal |
|  | Traffic signal span wire installation with span length-proposed.dwg | (Varies) | Traffic Signal Span Wire Installation with Span Length |
|  | Traffic signal standard with Identification-proposed.dwg | (Varies) | Traffic Signal Standard with Identification |
|  | Traffic signal standard with mast arm length-proposed.dwg | (Varies) | Traffic Signal Standard with Mast Arm Length |
|  | Trailer mounted flashing arrow sign unit (fasu)-proposed.dwg | (Varies) | Trailer-Mounted Flashing Arrow Sign Unit (FASU) |
|  | Trailer mounted variable message sign unit (vmsu)-proposed.dwg | (Varies) | Trailer-Mounted Flashing Variable Message Sign Unit (VMSU) |
|  | Tra-sec-mark.dwg | (Varies) | Section Mark |

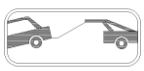
| | | | |
|---|---|---|---|
|  | Vehicle detector with Identification-proposed.dwg | (Varies) | Vehicle Detector with Identification |
|  | Vehicular signal head with Identification-proposed.dwg | (Varies) | Vehicular Signal Head with Identification |
|  | Warning lights (two)(type a b or c)-proposed.dwg | (Varies) | Warning Lights (Two)(Type A, B, or C) |
|  | Warning lights (type a b or c)-proposed.dwg | (Varies) | Warning Lights (Type A, B, or C) |
|  | Work area-proposed.dwg | (Varies) | Work Area |

### 1.27.4.6 REGULATORY

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | E11-1.DWG | (Varies) | “Exit Only” Sign |
|  | KR7-1016a.dwg | (Varies) | “No Parking” Sing |
|  | R1-1.DWG | (Varies) | Stop Sign |
|  | R1-2.DWG | (Varies) | Yield Sign |
|  | R2-1.DWG | (Varies) | Speed Limit Sign |
|  | R2-5a.dwg | (Varies) | “Reduced Speed Ahead” Sign |
|  | R2-5b.dwg | (Varies) | Reduced Speed Sign with Posted Speed |
|  | R2-5c.dwg | (Varies) | “Speed Zone Ahead” Sign |

| | | | |
|---|---|---|---|
|  | R3-1.DWG | (Varies) | Right Turn Prohibited |
|  | R3-2.DWG | (Varies) | Left Turn Prohibited |
|  | R3-3.DWG | (Varies) | “No Turns” Sign |
|  | R3-4.DWG | (Varies) | U-Turn Prohibited Sign |
|  | R3-5.DWG | (Varies) | Left Turn Only Ahead |
|  | R3-6.DWG | (Varies) | Exit on Left Ahead |
|  | R3-7.DWG | (Varies) | “Left Lane Must Turn Left” Sign |
|  | R3-8.DWG | (Varies) | Two-Lane Sign for Left Turns and Proceeding Straight |
|  | R3-21.DWG | (Varies) | U-Turn Sign |
|  | R3-23.DWG | (Varies) | Proceed Straight Only |
|  | R3-24.DWG | (Varies) | Right Turn Only Ahead |
|  | R3-26.DWG | (Varies) | Exit on Right Ahead |
|  | R3-27.DWG | (Varies) | Left or Right Turn Only Ahead |
|  | R3-28.DWG | (Varies) | Left or Right Turn, or Proceed Straight, Ahead |

| | | | |
|---|---|---|---|
|  | R3-32.DWG | (Varies) | “Right Lane Must Turn Left” Sign |
|  | R3-33.DWG | (Varies) | “Thru Traffic Use Left Lane” Sign |
|  | R3-34.DWG | (Varies) | “Thru Traffic Use Center Lane” Sign |
|  | R3-35.DWG | (Varies) | “Thru Traffic Use Right Lane” Sign |
|  | R4-1.DWG | (Varies) | “Do Not Pass” Sign |
|  | R4-2.DWG | (Varies) | “Pass with Care” Sign |
|  | R4-5.DWG | (Varies) | “Trucks Use Right Lane” Sign |
|  | R4-7.DWG | (Varies) | Keep to Right of Divider |
|  | R4-8.DWG | (Varies) | Keep to Left of Divider |
|  | R4-9.DWG | (Varies) | “Stay in Lane” |
|  | R5-1.DWG | (Varies) | “Do Not Enter” Sign |
|  | R5-1a.dwg | (Varies) | “Wrong Way” Sign |
|  | R5-2.DWG | (Varies) | Trucks Prohibited |
|  | R5-6.DWG | (Varies) | Bicycles Prohibited |

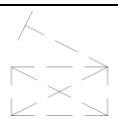
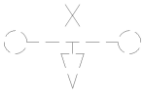
| | | | |
|---|---|---|---|
|  | R5-7.DWG | (Varies) | Pedestrian Crosswalk Sign |
|  | R5-8.DWG | (Varies) | “Sidewalk Closed” Sign |
|  | R5-9.DWG | (Varies) | Sidewalk Closed – Alternative Crossing Location (Either Left or Right) |
|  | R5-9a.dwg | (Varies) | Sidewalk Closed – Alternative Crossing Location (Left) |
|  | R5-9b.dwg | (Varies) | Sidewalk Closed – Alternative Crossing Location (Right) |
|  | R6-1L.DWG | (Varies) | Horizontal One Way to Left Sign |
|  | R6-1R.DWG | (Varies) | Horizontal One Way to Right Sign |
|  | R6-2L.DWG | (Varies) | Vertical One Way to Left Sign |
|  | R6-2R.DWG | (Varies) | Vertical One Way to Right Sign |
|  | R7-4.dwg | (Varies) | Standing Prohibited Sign (General Vicinity) |
|  | R7-4L.dwg | (Varies) | Standing Prohibited Sign (To Left) |
|  | R7-4R.dwg | (Varies) | Standing Prohibited Sign (To Right) |
|  | R7-201a.dwg | (Varies) | Tow Away Zone Sign |
|  | R8-3a.dwg | (Varies) | Parking Prohibited Sign |

| | | | |
|---|---|---|---|
|  | R8-8.dwg | (Varies) | “Do Not Stop on Tracks” Sign |
|  | R9-3a.dwg | (Varies) | Crossing Prohibited Sign |
|  | R11-2.DWG | (Varies) | “Road Closed” Sign |
|  | R11-3.DWG | (Varies) | “Road Closed Ahead - Local Traffic Only” Sign |
|  | R11-4.DWG | (Varies) | “Road Closed to Thru Traffic” Sign |
|  | R12-2.DWG | (Varies) | “Weight Limit 10 Tons” Sign |
|  | R15-1.DWG | (Varies) | Railroad Crossing |
|  | Yield to pedestrian.dwg | (Varies) | Yield to Pedestrian Sign |

### 1.27.4.7 REMOVAL

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | Cantilever sign structure with changeable message panel-removal.dwg | (Varies) | Cantilever Sign Structure with Changeable Message Panel |
|  | Cantilever sign structure with fixed message-removal.dwg | (Varies) | Cantilever Sign Structure with Fixed Message |
|  | Crash cushion attenuator-removal.dwg | (Varies) | Crash Cushion Attenuator |
|  | Curbed traffic guide system posts with base plate (without c)-removal.dwg | (Varies) | Curbed Traffic Guide System Posts with Base Plate (Without C) |
|  | Double post mounted sign with changeable message panel-proposed.dwg | (Varies) | Double Post-Mounted Sign with Changeable Message Panel |

| | | | |
|---|---|---|---|
|  | Removal sign panel to be relocated-removal.dwg | (Varies) | Fence-Mounted Sign with Fixed Message Panel |
|  | Fence mounted sign with fixed message panel-removal.dwg | (Varies) | Flagger Location |
|  | Gantry sign structure with changeable message panels-removal.dwg | (Varies) | Gantry Sign Structure with Changeable Message Panels |
|  | Gantry sign structure with fixed message panels-removal.dwg | (Varies) | Gantry Sign Structure with Fixed Message Panels |
|  | Pavement marking arrow symbol (type a-e)-removal.dwg | (Varies) | Pavement Marking Arrow Symbol (Type A-E) |
|  | Pavement marking line-removal.dwg | (Varies) | Pavement Marking Line |
|  | Pedestrian push button standard with Identification-removal.dwg | (Varies) | Pedestrian Push-Button Standard with Identification |
|  | Pedestrian signal head with Identification-removal.dwg | (Varies) | Pedestrian Signal Head with Identification |
|  | Pole mounted back to back signs with fixed message panels-removal.dwg | (Varies) | Pole-Mounted Back-to-Back Signs with Fixed Message Panels |
|  | Pole mounted right angle signs with fixed message panels-removal.dwg | (Varies) | Pole Mounted Right-Angle Signs with Fixed Message Panels |
|  | Pole mounted sign with fixed message panel-removal.dwg | (Varies) | Pole-Mounted Sign with Fixed Message Panel |
|  | Reflectorized pavement marker-removal.dwg | (Varies) | Reflectorized Pavement Marker |
|  | Roadway surveillance sensor with Identification-removal.dwg | (Varies) | Roadway Surveillance Sensor with Identification |
|  | Sand barrel array-removal.dwg | (Varies) | Sand-Barrel Array |

| | | | |
|---|---|---|---|
|  | Sign panel Identification-removal.dwg | (Varies) | Sign Panel Identification |
|  | Sign structure location Identification-removal.dwg | (Varies) | Sign Structure Location Identification |
|  | Signal controller and cabinet ground mounted-removal.dwg | (Varies) | Signal Controller and Cabinet, Ground-Mounted |
|  | Signal controller and cabinet pole mounted-removal.dwg | (Varies) | Signal Controller and Cabinet, Pole-Mounted |
|  | Traffic guide posts-removal.dwg | (Varies) | Traffic Guide Posts |
|  | Traffic post top side of pole mounted signal-removal.dwg | (Varies) | Traffic Post Top Side of Pole-Mounted Signal |
|  | Traffic signal span wire installation with span length-removal.dwg | (Varies) | Traffic Signal Span Wire Installation with Span Length |
|  | Traffic signal standard with Identification-removal.dwg | (Varies) | Traffic Signal Standard with Identification |
|  | Traffic signal standard with mast arm length-removal.dwg | (Varies) | Traffic Signal Standard with Mast Arm Length |
|  | Vehicle detector with Identification-removal.dwg | (Varies) | Vehicle Detector with Identification |
|  | Vehicular signal head with Identification-removal.dwg | (Varies) | Vehicular Signal Head with Identification |

### 1.27.4.8 WARNING

| Symbol | Block Name | Layer Name | Description |
|---|---|---|---|
|  | KW21-4.DWG | (Varies) | “Work Area” Sign with Input Field |
|  | SupPlate.dwg | (Varies) | “XXX FEET” Sign |

| | | | |
|---|---|---|---|
|  | W1-1L.DWG | (Varies) | Left Turn Ahead |
|  | W1-1R.DWG | (Varies) | Right Turn Ahead |
|  | W1-2L.DWG | (Varies) | Left Bend Ahead |
|  | W1-2R.DWG | (Varies) | Right Bend Ahead |
|  | W1-3L.DWG | (Varies) | Lane Shift to Left Ahead |
|  | W1-3R.DWG | (Varies) | Lane Shift to Right Ahead |
|  | W1-4aL.dwg | (Varies) | Bear Left Ahead |
|  | W1-4aR.dwg | (Varies) | Bear Right Ahead |
|  | W1-4bL.dwg | (Varies) | Bear Left Ahead (Two Lanes) |
|  | W1-4bR.dwg | (Varies) | Bear Right Ahead (Two Lanes) |
|  | W1-4cL.dwg | (Varies) | Bear Left Ahead (Three Lanes) |
|  | W1-4cR.dwg | (Varies) | Bear Right Ahead (Three Lanes) |
|  | W1-5L.DWG | (Varies) | Lane Swerves Left |
|  | W1-5R.DWG | (Varies) | Lane Swerves Right |

| | | | |
|---|---|---|---|
|  | W1-6L.DWG | (Varies) | Must Turn Left |
|  | W1-6R.DWG | (Varies) | Must Turn Right |
|  | W1-7.DWG | (Varies) | Must Turn Either Left or Right |
|  | W1-8L.DWG | (Varies) | Left Bend Arrow Sign |
|  | W1-8R.DWG | (Varies) | Right Bend Arrow Sign |
|  | W2-1.DWG | (Varies) | Four-Way Intersection Sign |
|  | W2-2L.DWG | (Varies) | Side Street Intersection on Left Ahead |
|  | W2-2R.DWG | (Varies) | Side Street Intersection on Right Ahead |
|  | W2-3L.DWG | (Varies) | Diverging Street Ahead – Left |
|  | W2-3R.DWG | (Varies) | Diverging Street Ahead – Right |
|  | W2-4.DWG | (Varies) | Three-Way Intersection |
|  | W2-5.DWG | (Varies) | Three-Way Intersection (Diverging) |
|  | W2-7-NY.DWG | (Varies) | Converging Street Ahead – Left |
|  | W2-8-NY.DWG | (Varies) | Converging Street Ahead – Left |

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|---|---|---|---|
|  | W2-10-NY.DWG | (Varies) | Alternating Intersections Ahead |
|  | W2-11-NY.DWG | (Varies) | Alternating Intersections Ahead |
|  | W2-14-NY.DWG | (Varies) | Traffic Circle |
|   | W3-1.DWG | (Varies) | “Stop Ahead” Sign |
|  | W3-1a.dwg | (Varies) | Stop Ahead |
|   | W3-2.DWG | (Varies) | “Yield Ahead” Sign |
|  | W3-2a.dwg | (Varies) | Yield Ahead |
|  | W3-3.DWG | (Varies) | Traffic Light Ahead |
|  | W3-4-NY.DWG | (Varies) | Road Splits Ahead |
|  | W3-11-NY.DWG | (Varies) | Road Narrows |
|   | W3-14-NY.DWG | (Varies) | “Single Lane” Sign |
|  | W4-1L.DWG | (Varies) | Lane Merges from Left Ahead |
|  | W4-1R.DWG | (Varies) | Lane Merges from Right Ahead |
|  | W4-2L.DWG | (Varies) | Lanes Merge from Left |

| | | | |
|---|---|---|---|
|  | W4-2R.DWG | (Varies) | Lanes Merge from Right |
|  | W4-3L.DWG | (Varies) | Merging from Left |
|  | W4-3R.DWG | (Varies) | Merging from Right |
|  | W5-1.DWG | (Varies) | “Road Narrows” Sign |
|  | W5-2.DWG | (Varies) | “Narrow Bridge” Sign |
|  | W5-3.DWG | (Varies) | “One Lane Bridge” Sign |
|  | W5-4.DWG | (Varies) | “Ramp Narrows” Sign |
|  | W6-1.DWG | (Varies) | Divergence of Lanes |
|  | W6-2.DWG | (Varies) | Convergence of Lanes |
|  | W6-3.DWG | (Varies) | Two-Way Traffic |
|  | W7-1.DWG | (Varies) | Decline |
|  | W7-1b.dwg | (Varies) | Decline with Percent Gradation |
|  | W8-1.DWG | (Varies) | “Bump” Sign |
|  | W8-2.DWG | (Varies) | “Dip” Sign |

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|---|---|---|---|
|  | W8-3.DWG | (Varies) | “Pavement Ends” Sign |
|  | W8-4.DWG | (Varies) | “Soft Shoulder” Sign |
|  | W8-5.dwg | (Varies) | Car Swerve Area |
|  | W8-6.DWG | (Varies) | “Truck Crossing” Sign |
|  | W8-7.DWG | (Varies) | “Loose Gravel” Sign |
|  | W8-9.DWG | (Varies) | “Low Shoulder” Sign |
|  | W8-9a.dwg | (Varies) | Uneven Pavement |
|  | W9-1L.DWG | (Varies) | “Left Lane Ends” Sign |
|  | W9-1R.DWG | (Varies) | “Right Lane Ends” Sign |
|  | W9-2L.DWG | (Varies) | “Lane Ends Merge Left” Sign |
|  | W9-2R.DWG | (Varies) | “Lane Ends Merge Right” Sign |
|  | W9-3.DWG | (Varies) | “Center Lane Closed” Sign with Input Field |
|  | W10-1.DWG | (Varies) | Railroad Crossing |
|  | W10-2.DWG | (Varies) | Railroad Crossing & Adjacent 4-Way Intersection |

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|---|---|---|---|
|  | W10-3.DWG | (Varies) | Railroad Crossing & Adjacent 3-Way Intersection |
|  | W10-4.DWG | (Varies) | Railroad Crossing & Side Street Intersection |
|  | W11-1.DWG | (Varies) | Bicycle Area |
|  | W11-2.DWG | (Varies) | Pedestrian Crossing |
|  | W11-3.DWG | (Varies) | Deer Area |
|  | W11-7.DWG | (Varies) | Horseback Riding Area |
|  | W11-9.DWG | (Varies) | Handicapped Zone |
|  | W11A-2.DWG | (Varies) | Pedestrian Crossing (Crosswalk) |
|  | W12-1.DWG | (Varies) | Road Divides |
|  | W12-2.DWG | (Varies) | Vertical Clearance Sign |
|  | W13-1.DWG | (Varies) | Speed Limit Sign |
|  | W13-2.DWG | (Varies) | Speed Limit at Exit |
|  | W13-3.DWG | (Varies) | Speed Limit on Ramp |
|  | W14-1.DWG | (Varies) | “Dead End” Sign |

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|---|---|---|---|
|  | W14-2.DWG | (Varies) | “No Outlet” Sign |
|  | W14-3.DWG | (Varies) | “No Passing Zone” Sign |
|  | W20-1.DWG | (Varies) | “Road Work” Sign with Input Field |
|  | W20-2.DWG | (Varies) | “Detour” Sign with Input Field |
|  | W20-3.DWG | (Varies) | “Road Closed” Sign with Input Field |
|  | W20-4.DWG | (Varies) | “One Lane Road” Sign with Input Field |
|  | W20-5aL.dwg | (Varies) | “Left Two Lanes Closed” Sign with Input Field |
|  | W20-5aR.dwg | (Varies) | “Right Two Lanes Closed” Sign with Input Field |
|  | W20-5L.DWG | (Varies) | “Left Lane Closed” Sign with Input Field |
|  | W20-5R.DWG | (Varies) | “Right Lane Closed” Sign with Input Field |
|  | W20-7a.dwg | (Varies) | Flagger Ahead |
|  | W21-1.DWG | (Varies) | “Workers” Sign |
|  | W21-1a.dwg | (Varies) | Workers Ahead |
|  | W21-4.DWG | (Varies) | “Road Work” Sign |

| | | | |
|---|---|---|---|
|  | W21-5.DWG | (Varies) | “Shoulder Work” Sign |
|  | W21-5a.dwg | (Varies) | “Right Shoulder Closed” Sign |
|  | W21-5b.dwg | (Varies) | “Right Shoulder Closed” Sign with Input Field |