Chapter 5 – Technical Documents

5.4 TECHNICAL REQUIREMENTS FOR DRAWINGS AND ELECTRONIC DOCUMENT SUBMISSIONS

A. GENERAL

1. The need to exchange information during a projects life cycle with the State, Client and Consultants necessitates answering many questions about drawing requirements electronic media, file format, etc. The goal being to allow anyone in the organization to access, interpret and disseminate information rapidly and in a uniform manner.

2. OGS requires that all drawings be created using OGS Cadd Standards to assure that OGS can plot the drawings in-house with expected results.

- **a.** This will result in considerable time savings by not having to send paper copies of all exchanges of information.
- **b.** This will automate the contract bidding process by providing electronic documents to prospective bidders for review, and to print only as needed. This will reduce plan submission and bid package delivery times, and also reduce the cost associated with printing the entire contract plans.
- **c.** Upon completion, the electronic files can be entered into our archival process.

B. FORMAT

1. Drawings are to be prepared in compliance with OGS CAD Standards. These standards are an interpretation of the National CAD Standard. The Standard incorporates the CAD Layer Guidelines published by the American Institute of Architects, the Uniform Drawing System published by the Construction Specifications Institute, and the Tri-Service Plotting Guidelines published by the Tri-Service CADD/GIS Technology Center and U.S. Coast Guard.

2. Deliver vector, raster and vector/raster hybrid digital files in a format that is directly compatible with OGS's Plotting Software:

- **a.** Autodesk's AutoCAD Release 14, 2000, or 2004 file format
- **b.** Bentley Microstation J or Version 8.X. file format
- **c.** Raster files in .tif or .jpg format.
- **d.** Portable Document Files (pdf) (reserved)

3. Drawings are to be prepared using OGS File Structure and Naming Standards.

4. Building Information Model (BIM) (reserved).

C. DELIVERY MEDIA

1. At project completion, in addition to required mylars, digital data sets should be furnished via compact disc-read only memory CD-ROM (ISO 9660 format). For exceptions, contact the OGS Team Leader.

2. All media must be compatible with the Microsoft Windows operating system. When submitting digital media, an external label should contain, at a minimum, the following information:

- **a.** Format and version of the operating system on which the media was created (e.g., Windows XP).
- **b.** Utility (command) used for writing the files to disk.
- **c.** Sequence number for multiple CD's, etc.
- **d.** A short description of contents including the OGS project number and title.
- **e.** A digital index file containing a list of files and a brief description of each file that is included on the digital media.

3. A transmittal sheet shall accompany the media containing, at a minimum, the following information:

- **a.** Information included on the external label of each CD; total number of CD's being delivered; a list of the file names and file descriptions on each CD.
- **b.** Certification that all delivery media is free of known computer viruses, including the name and version of the virus scanning software used, and the date the virus scan was performed.

4. Before placing files on the delivery digital media, perform the following:

- **a.** Remove all extraneous graphics outside the border area of each sheet, and set the active parameters to a standard setting or those in the seed/prototype file.
- **b.** Attach all reference (external reference) files without device or directory specifications.
- **c.** Remove plotting device references from each sheet.
- **d.** Remove all unused level/layers, reference/xref drawings, block/cell library, styles, and data definitions from each sheet.
- **e.** Include all graphic and non-graphic files necessary to plot each complete sheet.
- **f.** If necessary, files are only to be compressed using standard Windows compatible utilities. Include a copy of the utility on the CD.

D. MODEL FILES AND SHEET FILES

1. Two distinct types of CADD files are addressed in this standard: model files and sheet files.

- **a.** A model file contains the physical components of a building or survey (e.g., columns, walls, windows, ductwork, piping, etc.). Model files are drawn at full scale and typically represent plans, elevations, sections, etc.
- **b.** A sheet file is synonymous with a plotted CADD drawing file. A sheet file is a selected view or portion of the model file(s) within a border sheet. Whether the border is scaled up or the information is scaled down a sheet file is a "ready-to-plot" CADD file. There should be no information outside the border limits to allow for plotting by extents or fit elements.

2. The Figure below illustrates how different model files are referenced to a sheet file (notice that the border sheet is always a referenced model file). A sheet file is the

combination of referenced model files with sheet-specific text & symbols to create a final "ready-to-plot" CADD file. A useful American Institute of Architects (AIA) rule of thumb states: "Model files are always referenced by other files, while sheet files are never referenced by other files.

3. Model files represent full-size drawings of building elements, systems, or information (e.g., the mechanical HVAC system, the architectural floor plan, details, building sections). Sheet files represent final plotted sheets. Model files are used as components in creating plotted sheet files. The information contained within a model file for a discipline may be referenced by other disciplines to create the particular model files or sheet files for that discipline.

4. A model file can be considered a "work in progress." For instance, a mechanical engineer may reference the architect's floor plan model file to begin development of the HVAC ductwork layout model file. Meanwhile, the architect can continue developing the floor plan to meet new requirements. Any changes to the floor plan would be immediately accessible to the mechanical engineer. The viewing of real-time updates eliminates a great deal of frustration for other disciplines because it allows for on-the-spot rather than after-the-fact modifications.

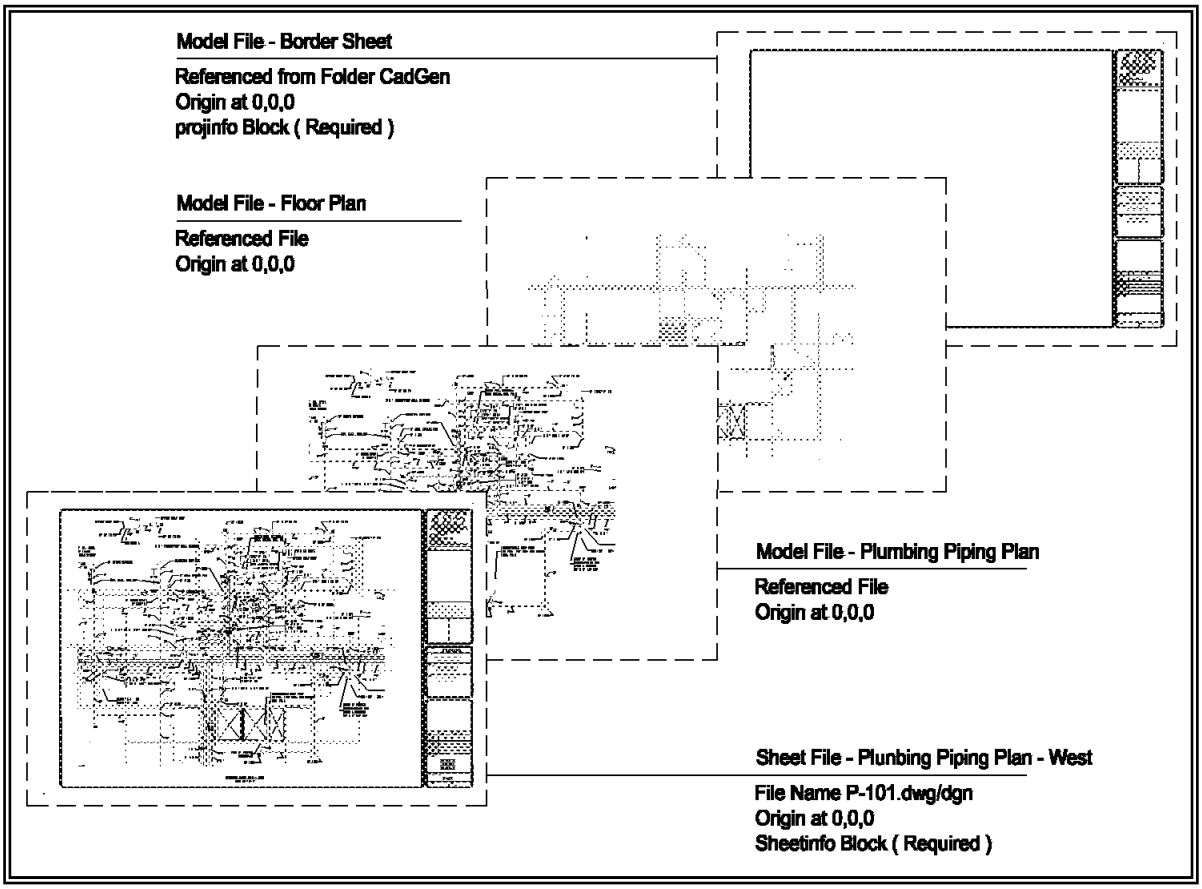

Figure 1 - Sheet P-101

E. ELECTRONIC DRAWING FILE NAMING CONVENTIONS

1. Naming conventions for electronic drawing files (both model files and sheet files) allow CADD users to determine the contents of a drawing without actually displaying the file. They also provide a convenient and clear structure for organizing drawing files within project directories.

F. MODEL FILE NAMING CONVENTION

1. The model file naming convention (Figure 2) has four fields. The first field is optional for all trades except V, B, C and L. The following three fields are mandatory. The fields must appear in the correct sequence.

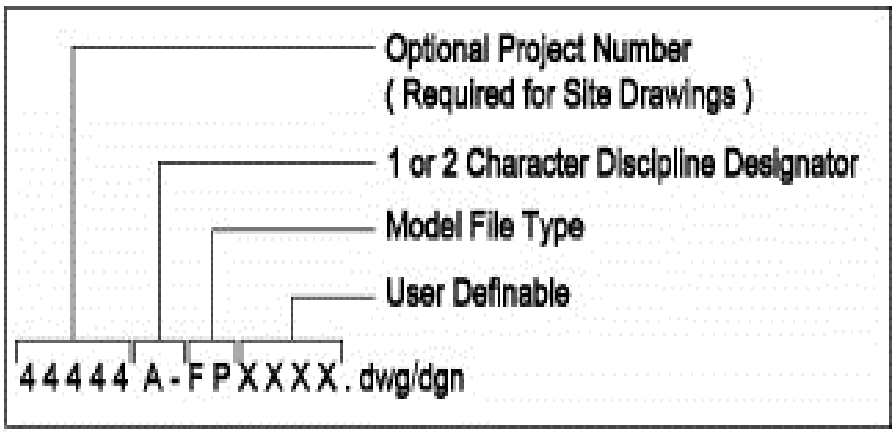

Figure 2 - Model File Naming Convention

a. The optional first field is the 5 digit OGS *Project Number.* The use of Project Numbers in file names is highly recommended, because it prevents the same file name from existing in different directories.
b. The next field is the *Discipline Designator.* Table 1 lists allowable characters. For most disciplines, this field is the discipline letter and a hyphen.
c. The next field is the *Model File Type* (see Table 2).
d. The final four-character field is user-definable.

3. Example: The model file name for an OGS project with a project number of S4444, 1st floor, Architectural Floor Plan could be S4444A-FPF1.dgn/dwg where S4444 is the Project Number, A- is the Discipline Designator, FP is the Model File Type (Floor Plan), and F1 is a user-definable set of characters for Floor 1.

4. Existing/Demolition model file naming. There are instances when a facility is being renovated and the as-built designs need to be revised to show demolition and new items.

5. A new model file type, Existing/Demolition XD (Which is not in NCS 2.0), has been added to the standard to allow users to make revisions to as-built files. This model file type is used to aid users in separating existing to remain items from items that will be demolished.

Table 1 – MODEL FILE Discipline Designators With Level 2 Designators

Discipline	*Designator*	*Description*	*Content*
General	G-	All General	All or any portion of the General Description
	GI	General Information	General Information - Title Sheet
Hazardous Materials	H-	All Hazardous	All or any portion of the Hazardous Discipline
Survey Mapping	VA	Aerial Survey	
	VF	Field Survey	
Geotechnical	B-	All Geotechnical	All or any portion of the Geotechnical Discipline
Civil	C-	All Civil	All or any portion of the Civil Discipline
	CD	Civil Demolition	Structure removal and site cleaning
	CG	Civil Grading	Excavation, grading, drainage, erosion control
		Civil Paving	Roads, driveways, parking lots
	CU	Civil Utilities	Water, sanitary sewer, storm sewer, natural gas; coordination elements for power, communications, fiber optic, telephone, cable television, and steam systems
Landscape	L-	All Landscape	All or any portion of the Landscape Discipline
Structural	S-	All Structural	All or any portion of the Structural Discipline
Architectural	A-	All Architectural	All or any portion of the Architectural Discipline
Interiors	I-	All Interiors	All or any portion of the Interiors Discipline
Equipment	Q-	All Equipment	All or any portion of the Equipment Discipline
Fire Protection	F-	All Fire Protection	All or any portion of the Fire Protection Discipline
Plumbing	P-	All Plumbing	All or any portion of the Plumbing Discipline
Process	D-	All Process	All or any portion of the Process Discipline
Mechanical	M-	All Mechanical	All or any portion of the Mechanical Discipline
Electrical	E-	All Electrical	All or any portion of the Electrical Discipline
Telecommunications	T-	All Telecommunications	All or any portion of the Telecommunications Discipline
Resource	R-	All Resource	All or any portion of the Resource Discipline

Table 2 - Model File Types

Discipline	*Code*	*Definition*
General	BS	Border Sheet
	KP	Keyplan
Survey/Mapping	SP	Survey and Mapping Plan
Geotechnical	BL	Boring Location Plan
Civil	EC	Erosion Control Plan
	GP	Grading Plan
	KP	Layout Plan
	PL	Project Location Plan
	PR	Profiles
	SP	Site Plan
	XD	Demolition/Removals Plan
Landscape	LP	Landscape Planting Plan
Structural	3D	Isometric/3D
	CP	Column Plan
	DT	Detail
	EL	Elevation
	FP	Framing Plan
	NB	Non-Building Structures Plan
	NP	Foundation Plan
	SC	Section
	SH	Schedules
	XD	Existing/Demolition Plan
Architectural	3D	Isometric/3D
	CP	Reflected Ceiling Plan
	DT	Detail
	EL	Elevation
	FP	Floor Plan
	RP	Roof Plan
	SC	Section
	SH	Schedules
	XD	Existing/Demolition Plan

Discipline	*Code*	*Definition*
Interiors	3D	Isometric/3D
	DT	Detail
	EL	Elevation
	QP	Equipment Plan
	RP	Furniture Plan
	SC	Section
	SH	Schedule
	SP	Signage Placement Plan
	WP	System/Prewired Workstation Plan
	XD	Existing/Demolition Plan
Fire Protection	DT	Detail
	FA	Fire/Alarm/Detection Plan
	FP	Fire Suppression Plan
	LP	Life Safety Plan
	SH	Schedule
	XD	Existing/Demolition Plan
Plumbing	DT	Detail
	EL	Elevation
	PP	Piping Plan
	XD	Existing/Demolition Plan
Mechanical	3D	Isometric/3D
	DT	Detail
	EL	Elevation
	HP	HVAC Plan
	HT	HTCW Plan
	PP	Piping Plan
	SC	Section
	SH	Schedules
	XD	Existing/Demolition Plan
Electrical	DT	Detail
	LL	Lighting Plan
	PP	Power Plan
	QP	Security Equipment Plan
	SH	Schedules
	XD	Existing/Demolition Plan
Telecommunications		
	DT	Detail
	SH	Schedules

	TP	Telephone/Data Plan
	XD	Existing/Demolition Plan

G. SHEET FILE NAMING CONVENTION

1. The sheet file naming convention (Figure 3) has one optional field (not shown), followed by three mandatory fields. Similar to the format for model file naming, the fields must be used in the correct sequence.

a. The first field is the 5 digit OGS Project Number. It is optional for all trades except V, B, C and L.

b. The *Sheet Discipline Designator* listed in Table 3

c. The *Sheet Type Designator* listed in Table 4

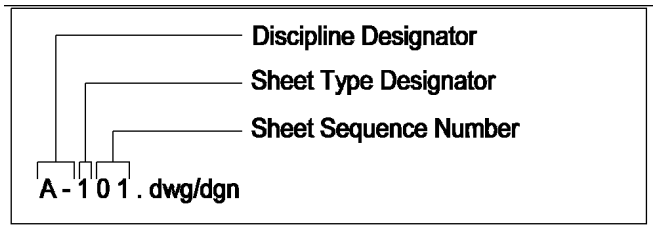

Figure 3 - Sheet File Naming Convention

d. A two character *Sheet Sequence Number* (01-99)

Table 3 - Sheet Discipline	*Designator*
General	G
Hazardous Materials	H
Survey/Mapping	V
Geotechnical	B
Civil Works	W
Civil	C
Landscape	L
Structural	S
Architectural	A
Interiors	I
Equipment	Q
Fire Protection	F
Plumbing	P
Process	D
Mechanical	M
Electrical	E
Telecommunications	T

Table 4 - Sheet Type	*Designator*
General (symbols, legend, notes, etc.)	0
Plans (horizontal views)	1
Elevations (vertical views)	2
Sections (sectional views)	3
Large Scale Views (plans, elevations, or sections that are not details)	4
Details	5
Schedules and Diagrams	6
User Defined	7
User Defined	8
3D Representations (Isometrics, perspectives, photographs)	9

Resource	R
Other Disciplines	X
Contractor/Shop Drawings	Z
Operations	O

H. COORDINATION BETWEEN SHEET FILE NAME AND SHEET IDENTIFIER

1. The sheet identifier (for use in the sheet identification block, reference bubbles, etc.) is to consist of the discipline designator, sheet file designator, and the sheet sequence number. Coordinate the sheet identifier with the name assigned to the electronic sheet file.

I. GRAPHIC CONCEPTS

1. **Presentation Graphics:** The first step in establishing an effective CADD standard is the development of a uniform approach to presentation graphics. Presentation graphics typically consist of drawing elements such as lines, arcs, shapes, text, and their attributes (line color, line width, and line style).

2. **Line Widths:** The use of varied line widths on AEC drawings substantially improves the readability of the documents. For all projects prepared for OGS there are nine (9) allowable line widths.

a. (0.13 mm) Extra Fine lines are to be used sparingly, mostly for poche/patterning.

b. (0.18 mm) Fine lines are to be used for detail on plans, Windows, 'Equipment (Not In Contract)' or to lighten backgrounds.

c. (0.25 mm) Thin lines are to be used for depicting dimension lines, dimension leader/witness lines, note leader lines, line terminators (arrowheads, dots, slashes), phantom lines, hidden lines, center lines, long break lines, schedule grid lines, and object lines seen at a distance.

d. (0.35 mm) Medium lines are to be used for depicting minor object lines, dimension text, text for notes/callouts, and schedule text.

e. (0.50 mm) Wide lines are to be used for major object lines, cut lines, section cutting plane lines, and titles.

f. (0.70 mm) Extra wide lines are to be used for minor title underlining, schedule outlines, large titles, and object lines requiring special emphasis. For very large scale details drawn at 3 in. = 1 ft-0 in. or larger, the extra wide width should be used for the object lines. Extra wide widths are also appropriate for use as an elevation grade line, building footprint, or top of grade lines on section/foundation details.

g. (1.00 mm) This line width is to be used for major title underlining and separating portions of drawings

h. (1.40 mm) This line width is to be used for border sheet outlines and cover sheet line work and as an option for the designer as required.

i. (2.00 mm) This line width is an option for the designer as required.

3. **Plotting:** To assure consistent plotting of these line widths whether done by OGS or its consultants we need to define how elements are defined in the electronic documents.
   a. Plotting by weight is the recommended approach. Plotting by Weight is determined by defining each element's line weight as one of the allowable nine widths. The actual plot widths and their Microstation equivalents are shown in the following table. Drawings prepared using the plot by weight method are to use the Pen Tables *Natlstdwt.ctb* for AutoCAD or *Natlstdwt.tbl* for Microstation.

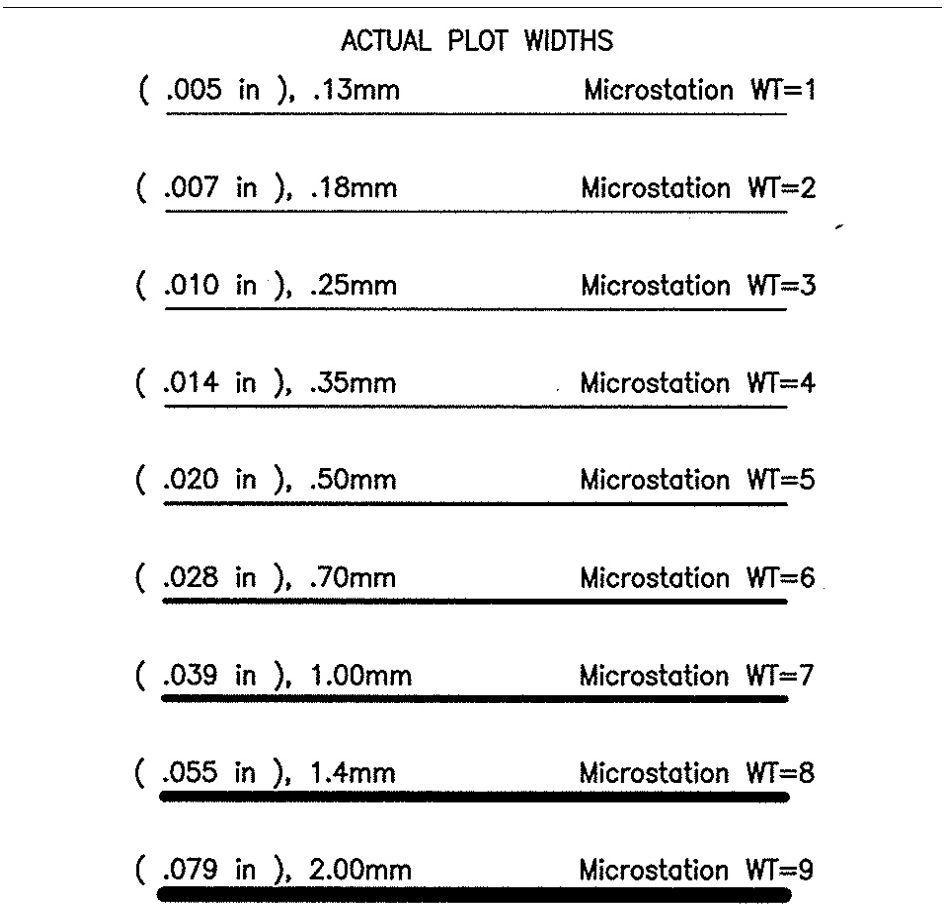

Figure 4 - Actual Plot Widths

b. Plotting by color is allowed as AutoCAD Release 14 and earlier did not allow for plotting by weight. The table below (Figure 5) defines the color to weight method. Drawings prepared using the plot by color method are to use the Pen Tables *Natlstd.ctb* for AutoCAD or *Natlstd.tbl* for Microstation.

1	.007	71	.010	131	.010	191	.010
2	.010	72	.014	132	.014	192	.014
3	.014	73	.020	133	.020	193	.020
4	.014	74	.028	134	.028	194	.028
5	.020	75	.039	135	.039	195	.039
6	.039	76	.055	136	.055	196	.055
7	.055	77	.028	137	.028	197	.028
8	.014	78	.014	138	.014	198	.014
9	.079	79	.079	139	.079	199	.079
10	.007	80	.007	140	.007	200	.007
11	.010	81	.010	141	.010	201	.010
12	.014	82	.014	142	.014	202	.014
13	.020	83	.020	143	.020	203	.020
14	.028	84	.028	144	.028	204	.028
15	.039	85	.039	145	.039	205	.039
16	.055	86	.055	146	.055	206	.055
17	.028	87	.028	147	.028	207	.028
18	.014	88	.014	148	.014	208	.014
19	.079	89	.079	149	.079	209	.079
20	.007	90	.007	150	.007	210	.007
21	.010	91	.010	151	.010	211	.010
22	.014	92	.014	152	.014	212	.014
23	.020	93	.020	153	.020	213	.020
24	.028	94	.028	154	.028	214	.028
25	.039	95	.039	155	.039	215	.039
26	.055	96	.055	156	.055	216	.055
27	.028	97	.028	157	.028	217	.028
28	.014	98	.014	158	.014	218	.014
29	.079	99	.079	159	.079	219	.079
30	.007	100	.007	160	.007	220	.007
31	.010	101	.010	161	.010	221	.010
32	.014	102	.014	162	.014	222	.014
33	.020	103	.020	163	.020	223	.020
34	.028	104	.028	164	.028	224	.028
35	.039	105	.039	165	.039	225	.039
36	.055	106	.055	166	.055	226	.055
37	.028	107	.028	167	.028	227	.028
38	.014	108	.014	168	.014	228	.014
39	.079	109	.079	169	.079	229	.079
40	.007	110	.007	170	.007	230	.007
41	.010	111	.010	171	.010	231	.010
42	.014	112	.014	172	.014	232	.014
43	.020	113	.020	173	.020	233	.020
44	.028	114	.028	174	.028	234	.028
45	.039	115	.039	175	.039	235	.039
46	.055	116	.055	176	.055	236	.055
47	.028	117	.028	177	.028	237	.028
48	.014	118	.014	178	.014	238	.014
49	.079	119	.079	179	.079	239	.079
50	.007	120	.007	180	.007	240	.007
51	.010	121	.010	181	.010	241	.010
52	.014	122	.014	182	.014	242	.014
53	.020	123	.020	183	.020	243	.020
54	.028	124	.028	184	.028	244	.028
55	.039	125	.039	185	.039	245	.039
56	.055	126	.055	186	.055	246	.055
57	.028	127	.028	187	.028	247	.028
58	.014	128	.014	188	.014	248	.014
59	.079	129	.079	189	.079	249	.079
60	.007	130	.007	190	.007	250	.010
61	.010					251	.014
62	.014					252	.005
63	.020					253	.028
64	.028					254	.039
65	.039					255	.079
66	.055						
67	.028						
68	.014						
69	.079						
70	.007						

Figure 5 - Color to Weight (inches)

4. **Line Types/Styles:** The line types used should match those shown on the Symbols and Abbreviation sheets. (A-001) Any use of user defined custom line styles must be coordinated with OGS. Surveys done in AutoCAD for OGS are to use Site.lin.

5. **Line Color:** The primary reason to use color in CADD drawings is to improve the clarity of the drawing on a computer monitor. When plotting by element weight color has no effect except for screening. If plotting by color you must follow the color to weight table (Figure 5).

J. SCREENING

1. Screened images are created through a process in which the density and pattern of black and white dots are varied to simulate different shades of gray. Varying the intensity of gray scales allows users to distinguish different aspects of a drawing when it is plotted. For example, an area on a site designated for demolition can be assigned a color that has been assigned a screening percentage. When plotted, the area will be shown at a lighter shade compared with other elements in the drawing. This will allow the contractor to immediately identify the demolition area on the drawing.

2. Use the following colors and percentages for screening:
   a. If you plot by color using NatlStd.ctb or NatlStd.tbl then you have 2 shades. Colors 50 through 59 will give you a 20% screen for the 9 line weights and colors 170 through 179 will give you a 50% screen for the 9 line weights.
   b. If you plot by weight using NatlStdWt.ctb then you have 5 shades available for your use.

   Color 10 is a 10% screen.
   Color 50 is a 20% screen
   Color 90 is a 30% screen
   Color 130 is a 40% screen
   Color 170 is a 50% screen

K. TEXT STYLES/FONTS

1. Contrasting text styles (or fonts) are used within a drawing to delineate types of information. For most A/E/C drawings, the five fonts shown should be sufficient.

Figure 6 - AutoCAD Text Style / Microstation Font

2. The minimum text size is 3.2 mm (1/8") for hand drafting and 2.5 mm (3/32") for CADD drawings.

L. BORDER SHEETS

1. A border sheet model file contains border sheet line work, the title block, and project-specific symbols and text. Project information is added to the border using the block ProjInfo. Typically, each discipline will reference the same border sheet for each project.

2. Sheet-specific information is added to the title block in the plot sheet using the appropriate attributed blocks (Table 5) prior to printing the final sheet file.

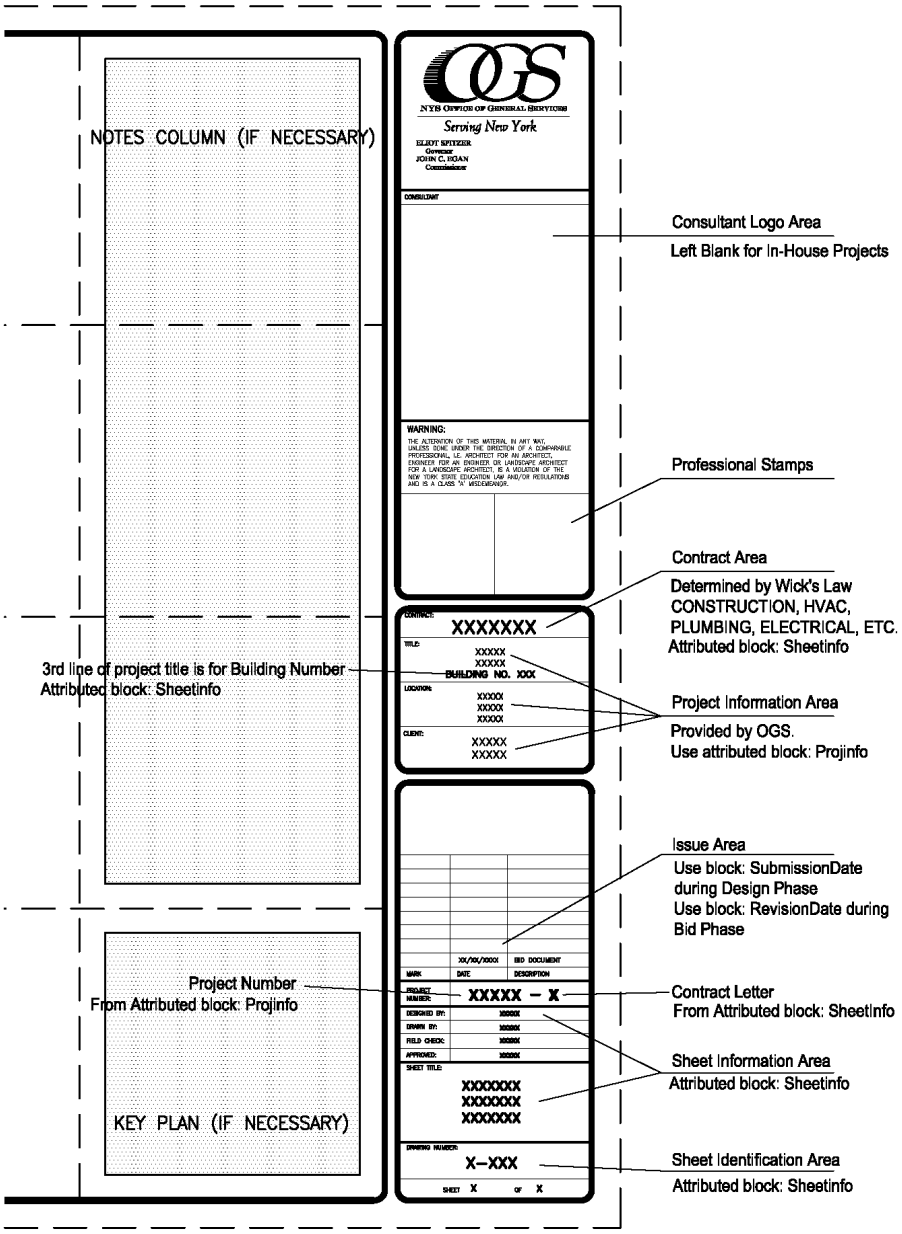

Figure 7 - Border Sheet Title Block

Table 5 - Sheet Blocks			
Drawing Size	Sheet Information	Submission Date	Revision Date
36x24	SheetInfo	SubmissionDate	RevisionDate
17x11	SheetInfoB	SubmissionDateB	RevisionDateB
8.5x11	SheetInfoA	--	RevisionDateA

3. In the lower left corner of each border sheet is a plot size label. This is **not** to be deleted. If permission is granted to use a non-standard sheet, modify the label to reflect the actual plotted sheet size.

M. LEVEL/LAYER ASSIGNMENTS

1. CADD levels or layers are analogous to overlays in manual drafting systems and serve to separate graphic elements (lines, shapes, and text) according to the design discipline they represent.

2. The types of information represented by individual levels/layers can be grouped into two primary types: model-specific information and sheet-specific information.

a. Model-specific information represents the physical form of a site, a building, or objects composing a building. This information is often shared between drawings. Examples include walls, doors, light fixtures, and room numbers. Model-specific information may be either literal (e.g., walls) or symbolic (e.g., electrical outlets).

b. Sheet-specific information may include notes, annotative symbols, and titles. This type of information is usually not shared between drawings.

3. To use and manipulate model-specific and sheet-specific information effectively, every level/layer must be defined (standardized) by its name and its use.

N. LEVEL/LAYER NAMING CONVENTION

1. The reuse, not duplication, of graphic information reduces drawing time and improves project coordination. The level/layer is the basic tool used in CADD for managing graphic information. The levels/layers defined within these standards are based on the recommendations set forth in “AIA CAD Layer Guidelines” (MA 2001).

2. Level/layer names consist of a two-character *Discipline Designator* (e.g., “A-” for Architectural, “M-” for Mechanical), followed by a four-character *Major Group* (e.g., “DOOR” for Doors, “LITE” for Lighting Fixtures), followed by four-character *Minor Group* (e.g., A-WALL-FULL-EXTR for exterior full height walls versus A-WALL-FULL-INTR for interior full height walls).

O. DEMOLITION LEVELS/LAYERS

1. Users should note that several model files have three levels/layers reserved for demolition items. These levels/ layers are as follows with ** representing a Discipline. These levels/layers should only be used when an Existing/Demolition model file is being created. For instance, the architect or engineer will sometimes have existing as-built model files, such as Site Plans and Floor Plans from a previous project. A copy of the as-built file will be made for use in the current project. This copy is renamed to be the Existing/ Demolition Plan model file for that discipline. In order to distinguish items to be demolished from existing items that will remain, those items should be moved to the Demolition levels/layers. When the Existing/Demolition Plan model file is referenced into a new file to create the New construction items, the Demolition levels/layers would be turned off.

P. REFERENCE FILES (XREFS)

1. Reference files (external references or XREFs) enable designers to share drawing information electronically, eliminating the need to exchange hard copy drawings between the design disciplines. With the use of reference files, the structural engineer need not wait for the architect to complete the architectural floor plans before beginning the structural framing plan model file. Nor does the engineer have to redraw the architect's structural walls on the structural framing plan model file.

2. Referencing electronic drawing information makes any future changes made by the architect apparent to the structural designer. This real-time access to the work of others ensures accuracy and consistency within a set of drawings and helps promote concurrent design efforts. No longer does one discipline have to wait until another discipline is nearly finished before they begin their drawings.

3. The use of reference files is a key component in the successful use of the level/layer assignments. To create either a model file or a final sheet file, multiple referenced model files may be required. The following tables should provide information on typical layer/level names as well as the relationship of the model files to each other to create individual sheet file.

Q. MODEL/SHEET FILE LAYER/LEVEL ASSIGNMENT AND DRAWING RELATIONSHIP TABLES

Discipline: General

Level #		Drawing Type		
		Cover Sheet	Index Sheet	Symbol Sheet
Sheet File Levels/Layers				
1	G-ANNO-DIMS			
2	G-ANNO-KEYN			
3	G-ANNO-LEGN			
5	G-ANNO-NOTE			
4	G-ANNO-PATT			
6	G-ANNO-SYMB			
7	G-ANNO-TEXT			
62	G-ANNO-REDL			
63	G-ANNO-REVS			
NA	G-ANNO-XREF			
Referenced Model File Levels/Layers				
General : Border Sheet				
5	G-ANNO-NOTE	R	R	R
6	G-ANNO-SYMB	R	R	R
7	G-ANNO-TEXT	R	R	R
10	G-ANNO-TTLB	R	R	R

Active Level/Layer

Reference Level/Layer R

Discipline: Architectural

Level #		Drawing Type										
		Demolition Plan	Floor Plan	Reflected Ceiling Plan	Roof Plan	Elevations	Finish Plan	Building Sections	Details	Equipment Plan	Life Safety Plan	Area Calculations/Occupancy Plan
Sheet File Levels/Layers												
1	A-ANNO-DIMS											
2	A-ANNO-KEYN											
3	A-ANNO-LEGN											
5	A-ANNO-NOTE											
4	A-ANNO-PATT											
6	A-ANNO-SYMB											
7	A-ANNO-TEXT											
62	A-ANNO-REDL											
63	A-ANNO-REVS											
NA	A-ANNO-XREF											
Referenced Model File Levels/Layers												
General : Border Sheet												
5	G-ANNO-NOTE	R	R	R	R	R	R	R	R	R	R	R
6	G-ANNO-SYMB	R	R	R	R	R	R	R	R	R	R	R
7	G-ANNO-TEXT	R	R	R	R	R	R	R	R	R	R	R
10	G-ANNO-TTLB	R	R	R	R	R	R	R	R	R	R	R
General : Keyplan												
4	G-ANNO-PATT	R	R	R	R		R					
6	G-ANNO-SYMB	R	R	R	R		R					
7	G-ANNO-TEXT	R	R	R	R		R					
11	S-GRID-HORZ	R	R	R	R		R					
12	S-GRID-IDEN	R	R	R	R		R					
13	S-GRID-VERT	R	R	R	R		R					
15	G-PLAN-OTLN	R	R	R	R		R					
20	G-SITE-OTLN	R	R	R	R		R					
Structural : Column Plan												
11	S-GRID-HORZ	R	R	R			R					
12	S-GRID-IDEN	R	R	R	R		R					
13	S-GRID-VERT	R	R	R			R					
17	S-COLS-PRIM	R	R	R			R					
18	S-COLS-SCND	R	R	R			R					
Architectural : Demolition Plan												
1	A-ANNO-DIMS	R										
2	A-ANNO-KEYN	R										
5	A-ANNO-NOTE	R										
4	A-ANNO-PATT	R										
6	A-ANNO-SYMB	R										
7	A-ANNO-TEXT	R										
60	A-DEMO-HAZW	R										
50	A-STAT-DEMO	R										

Discipline: Architectural

Level #		Drawing Type										
		Demolition Plan	Floor Plan	Reflected Ceiling Plan	Roof Plan	Elevations	Finish Plan	Building Sections	Details	Equipment Plan	Life Safety Plan	Area Calculations/Occupancy Plan
51	A-STAT-EXST	R										
53	A-STAT-MOVE	R										
55	A-STAT-NICN	R										
56	A-STAT-PHS#	R										
57	A-STAT-RELO	R										
58	A-STAT-TEMP	R										
Architectural : Floor Plan												
1	A-ANNO-DIMS		R									
2	A-ANNO-KEYN		R									
5	A-ANNO-NOTE		R									
4	A-ANNO-PATT		R									
6	A-ANNO-SYMB		R									
7	A-ANNO-TEXT		R									
11	A-FLOR-FIXT	R	R				R			R	R	R
12	A-FLOR-IDEN	R	R				R			R	R	
13	A-FLOR-LEVL	R	R				R			R	R	R
14	A-FLOR-NUMB	R	R				R			R	R	
15	A-FLOR-OTLN	R	R									
16	A-FLOR-PATT	R	R				R					
17	A-FLOR-RAIS	R	R				R			R	R	R
18	A-FLOR-RPRM	R	R									
19	A-FLOR-SIGN	R	R									
20	A-FLOR-SPCL	R	R				R			R	R	R
22	A-COLS-ENCL	R	R				R			R	R	R
23	A-WALL-CAVI	R	R				R			R	R	R
24	A-WALL-CNTR	R	R									
25	A-WALL-CWMG	R	R	R			R			R	R	R
26	A-WALL-EXTR	R	R	R			R			R	R	R
27	A-WALL-FIRE	R	R								R	
28	A-WALL-IDEN	R	R									
29	A-WALL-INTR	R	R	R			R			R	R	R
30	A-WALL-MOVE	R	R				R			R	R	R
31	A-WALL-PATT	R	R				R					
32	A-WALL-PRHT	R	R				R			R	R	R
33	A-WALL-SPCL	R	R				R			R	R	R
34	A-GLAZ-SILL	R	R				R			R	R	R
35	A-WALL-HEAD	R	R				R			R	R	R
36	A-WALL-JAMB	R	R				R			R	R	R
37	A-DOOR-FULL	R	R				R			R	R	R
38	A-DOOR-IDEN	R	R									
39	A-DOOR-PRHT	R	R				R			R	R	R

Discipline: Architectural

Level #		Drawing Type										
		Demolition Plan	Floor Plan	Reflected Ceiling Plan	Roof Plan	Elevations	Finish Plan	Building Sections	Details	Equipment Plan	Life Safety Plan	Area Calculations/Occupancy Plan
40	A-DOOR-SYMB	R	R				R			R	R	R
41	A-GLAZ-FULL	R	R				R			R	R	R
42	A-GLAZ-IDEN	R	R									
43	A-GLAZ-PRHT	R	R				R			R	R	R
44	A-FLOR-PFIX	R	R				R			R	R	R
45	A-FLOR-TPTN	R	R				R			R	R	R
46	A-FLOR-EVTR	R	R	R			R			R	R	R
47	A-FLOR-STRS	R	R	R			R			R	R	R
48	A-FLOR-HRAL	R	R				R			R	R	R
59	A-FLOR-CASE	R	R				R			R	R	R
60	A-FLOR-WDWK	R	R				R			R	R	R
61	A-FLOR-OVHD	R	R	R			R					
50	A-STAT-DEMO		R									
51	A-STAT-EXST		R									
52	A-STAT-FUTR		R									
53	A-STAT-MOVE		R									
54	A-STAT-NEWW		R									
55	A-STAT-NICN		R									
56	A-STAT-PHS#		R									
57	A-STAT-RELO		R									
58	A-STAT-TEMP		R									
Architectural : Reflected Ceiling Plan												
1	A-ANNO-DIMS			R								
2	A-ANNO-KEYN			R								
5	A-ANNO-NOTE			R								
4	A-ANNO-PATT			R								
6	A-ANNO-SYMB			R								
7	A-ANNO-TEXT			R								
11	A-CLNG-ACCS			R								
12	A-CLNG-CONT			R								
13	A-CLNG-GRID			R								
14	A-CLNG-OPEN			R								
15	A-CLNG-PATT			R								
16	A-CLNG-TEES			R								
17	A-CLNG-SUSP			R								
21	A-LITE-CLNG			R								
22	A-LITE-EMER			R								
23	A-LITE-SURF			R								
24	A-LITE-WALL			R								
26	A-HVAC-ODFF			R								
27	A-HVAC-RDFF			R								

Discipline: Architectural

Level #		Drawing Type										
		Demolition Plan	Floor Plan	Reflected Ceiling Plan	Roof Plan	Elevations	Finish Plan	Building Sections	Details	Equipment Plan	Life Safety Plan	Area Calculations/Occupancy Plan
28	A-HVAC-SDFF			R								
50	A-STAT-DEMO			R								
51	A-STAT-EXST			R								
52	A-STAT-FUTR			R								
53	A-STAT-MOVE			R								
54	A-STAT-NEWW			R								
55	A-STAT-NICN			R								
56	A-STAT-PHS#			R								
57	A-STAT-RELO			R								
58	A-STAT-TEMP			R								
Architectural : Roof Plan												
1	A-ANNO-DIMS				R							
2	A-ANNO-KEYN				R							
5	A-ANNO-NOTE				R							
4	A-ANNO-PATT				R							
6	A-ANNO-SYMB				R							
7	A-ANNO-TEXT				R							
11	A-ROOF-CRTS				R							
12	A-ROOF-DRNS				R							
13	A-ROOF-EDGE				R							
14	A-ROOF-EXPN				R							
15	A-ROOF-HRAL				R							
16	A-ROOF-LEVL				R							
17	A-ROOF-OTLN				R							
18	A-ROOF-PATT				R							
19	A-ROOF-SPCL				R							
20	A-ROOF-STRS				R							
21	A-ROOF-WALK				R							
50	A-STAT-DEMO				R							
51	A-STAT-EXST				R							
52	A-STAT-FUTR				R							
53	A-STAT-MOVE				R							
54	A-STAT-NEWW				R							
55	A-STAT-NICN				R							
56	A-STAT-PHS#				R							
57	A-STAT-RELO				R							
58	A-STAT-TEMP				R							
Architectural : Elevations												
1	A-ANNO-DIMS					R						
2	A-ANNO-KEYN					R						
5	A-ANNO-NOTE					R						

Discipline: Architectural

Level #		Drawing Type										
		Demolition Plan	Floor Plan	Reflected Ceiling Plan	Roof Plan	Elevations	Finish Plan	Building Sections	Details	Equipment Plan	Life Safety Plan	Area Calculations/Occupancy Plan
4	A-ANNO-PATT					R						
6	A-ANNO-SYMB					R						
7	A-ANNO-TEXT					R						
37	A-ELEV-CASE					R						
38	A-ELEV-FIXT					R						
39	A-ELEV-FNSH					R						
40	A-ELEV-IDEN					R						
41	A-ELEV-OTLN					R						
42	A-ELEV-PATT					R						
43	A-ELEV-PFIX					R						
44	A-ELEV-SIGN					R						
50	A-STAT-DEMO					R						
51	A-STAT-EXST					R						
52	A-STAT-FUTR					R						
53	A-STAT-MOVE					R						
54	A-STAT-NEWW					R						
55	A-STAT-NICN					R						
56	A-STAT-PHS#					R						
57	A-STAT-RELO					R						
58	A-STAT-TEMP					R						
Architectural : Finish Plan												
1	A-ANNO-DIMS						R					
2	A-ANNO-KEYN						R					
5	A-ANNO-NOTE						R					
4	A-ANNO-PATT						R					
6	A-ANNO-SYMB						R					
7	A-ANNO-TEXT						R					
11	A-FURN-PATT						R					
50	A-STAT-DEMO						R					
51	A-STAT-EXST						R					
52	A-STAT-FUTR						R					
53	A-STAT-MOVE						R					
54	A-STAT-NEWW						R					
55	A-STAT-NICN						R					
56	A-STAT-PHS#						R					
57	A-STAT-RELO						R					
58	A-STAT-TEMP						R					
Architectural : Building Sections												
1	A-ANNO-DIMS							R				
2	A-ANNO-KEYN							R				
5	A-ANNO-NOTE							R				

Discipline: Architectural

Level #		Drawing Type										
		Demolition Plan	Floor Plan	Reflected Ceiling Plan	Roof Plan	Elevations	Finish Plan	Building Sections	Details	Equipment Plan	Life Safety Plan	Area Calculations/Occupancy Plan
4	A-ANNO-PATT							R				
6	A-ANNO-SYMB							R				
7	A-ANNO-TEXT							R				
45	A-SECT-IDEN							R				
46	A-SECT-MBND							R				
47	A-SECT-MCUT							R				
48	A-SECT-PATT							R				
50	A-STAT-DEMO							R				
51	A-STAT-EXST							R				
52	A-STAT-FUTR							R				
53	A-STAT-MOVE							R				
54	A-STAT-NEWW							R				
55	A-STAT-NICN							R				
56	A-STAT-PHS#							R				
57	A-STAT-RELO							R				
58	A-STAT-TEMP							R				
Architectural : Details												
1	A-ANNO-DIMS								R			
4	A-ANNO-PATT								R			
6	A-ANNO-SYMB								R			
7	A-ANNO-TEXT								R			
9	A-DETL-GENF								R			
12	A-DETL-BLCK								R			
15	A-DETL-CABS								R			
16	A-DETL-CALK								R			
17	A-DETL-CEIL								R			
24	A-DETL-EXTR								R			
25	A-DETL-EXWL								R			
27	A-DETL-FAST								R			
30	A-DETL-FLOR								R			
31	A-DETL-FLSH								R			
33	A-DETL-GLAZ								R			
35	A-DETL-GRLS								R			
36	A-DETL-HDWR								R			
37	A-DETL-INSL								R			
38	A-DETL-ITWL								R			
40	A-DETL-MASY								R			
44	A-DETL-PIPE								R			
46	A-DETL-ROOF								R			
49	A-DETL-STRC								R			
53	A-DETL-TRIM								R			

Discipline: Architectural

Level #		Drawing Type										
		Demolition Plan	Floor Plan	Reflected Ceiling Plan	Roof Plan	Elevations	Finish Plan	Building Sections	Details	Equipment Plan	Life Safety Plan	Area Calculations/Occupancy Plan
Architectural : Equipment Plan												
1	A-ANNO-DIMS									R		
2	A-ANNO-KEYN									R		
5	A-ANNO-NOTE									R		
4	A-ANNO-PATT									R		
6	A-ANNO-SYMB									R		
7	A-ANNO-TEXT									R		
11	A-EQPM-ACCS									R		
12	A-EQPM-CLNG									R		
13	A-EQPM-FIXD									R		
14	A-EQPM-IDEN									R		
15	A-EQPM-MOVE									R		
50	A-STAT-DEMO									R		
51	A-STAT-EXST									R		
52	A-STAT-FUTR									R		
53	A-STAT-MOVE									R		
54	A-STAT-NEWW									R		
55	A-STAT-NICN									R		
56	A-STAT-PHS#									R		
57	A-STAT-RELO									R		
58	A-STAT-TEMP									R		
Architectural : Life Safety Plan												
1	A-ANNO-DIMS										R	
2	A-ANNO-KEYN										R	
5	A-ANNO-NOTE										R	
4	A-ANNO-PATT										R	
6	A-ANNO-SYMB										R	
7	A-ANNO-TEXT										R	
11	A-LSFT-EGRE										R	
12	A-LSFT-EQPM										R	
13	A-LSFT-TRVL										R	
14	A-LSFT-WALL										R	
50	A-STAT-DEMO										R	
51	A-STAT-EXST										R	
52	A-STAT-FUTR										R	
53	A-STAT-MOVE										R	
54	A-STAT-NEWW										R	
55	A-STAT-NICN										R	
56	A-STAT-PHS#										R	
57	A-STAT-RELO										R	
58	A-STAT-TEMP										R	

Discipline: Architectural

Level #		Drawing Type										
		Demolition Plan	Floor Plan	Reflected Ceiling Plan	Roof Plan	Elevations	Finish Plan	Building Sections	Details	Equipment Plan	Life Safety Plan	Area Calculations/Occupancy Plan
Architectural : Area Calculations/Occupancy Plan												
1	A-ANNO-DIMS											R
2	A-ANNO-KEYN											R
5	A-ANNO-NOTE											R
4	A-ANNO-PATT											R
6	A-ANNO-SYMB											R
7	A-ANNO-TEXT											R
9	A-AREA-IDEN											R
10	A-AREA-LINE											R
11	A-AREA-OCCP											R
12	A-AREA-PATT											R
50	A-STAT-DEMO											R
51	A-STAT-EXST											R
52	A-STAT-FUTR											R
53	A-STAT-MOVE											R
54	A-STAT-NEWW											R
55	A-STAT-NICN											R
56	A-STAT-PHS#											R
57	A-STAT-RELO											R
58	A-STAT-TEMP											R

Active Level/Layer
Reference Level/Layer R

Discipline: Structural

Level #		Drawing Type						
		Demolition Plan	Foundation Plan	Structural Framing Plan	Column Plan	Elevations	Building Sections	Details
Sheet File Levels/Layers								
1	S-ANNO-DIMS							
2	S-ANNO-KEYN							
3	S-ANNO-LEGN							
5	S-ANNO-NOTE							
4	S-ANNO-PATT							
6	S-ANNO-SYMB							
7	S-ANNO-TEXT							
62	S-ANNO-REDL							
63	S-ANNO-REVS							
NA	S-ANNO-XREF							
Referenced Model File Levels/Layers								
General : Border Sheet								
5	G-ANNO-NOTE	R	R	R	R	R	R	R
6	G-ANNO-SYMB	R	R	R	R	R	R	R
7	G-ANNO-TEXT	R	R	R	R	R	R	R
10	G-ANNO-TTLB	R	R	R	R	R	R	R
General : Keyplan								
4	G-ANNO-PATT	R	R	R	R			
6	G-ANNO-SYMB	R	R	R	R			
7	G-ANNO-TEXT	R	R	R	R			
11	S-GRID-HORZ	R	R	R	R			
12	S-GRID-IDEN	R	R	R	R			
13	S-GRID-VERT	R	R	R	R			
15	G-PLAN-OTLN	R	R	R	R			
20	G-SITE-OTLN	R	R	R	R			
Structural : Demolition Plan								
1	S-ANNO-DIMS	R						
2	S-ANNO-KEYN	R						
5	S-ANNO-NOTE	R						
4	S-ANNO-PATT	R						
6	S-ANNO-SYMB	R						
7	S-ANNO-TEXT	R						
60	S-DEMO-HAZW	R						
50	S-STAT-DEMO	R						
51	S-STAT-EXST	R						
53	S-STAT-MOVE	R						
55	S-STAT-NICN	R						
56	S-STAT-PHS#	R						

Discipline: Structural

Level #		Drawing Type						
		Demolition Plan	Foundation Plan	Structural Framing Plan	Column Plan	Elevations	Building Sections	Details
57	S-STAT-RELO	R						
58	S-STAT-TEMP	R						
Structural : Foundation Plan								
1	S-ANNO-DIMS		R					
2	S-ANNO-KEYN		R					
5	S-ANNO-NOTE		R					
4	S-ANNO-PATT		R					
6	S-ANNO-SYMB		R					
7	S-ANNO-TEXT		R					
10	S-GRID-DIMS	R	R	R				
11	S-GRID-HORZ	R	R	R				
12	S-GRID-IDEN	R	R	R				
13	S-GRID-VERT	R	R	R				
16	S-FNDN-FTNG	R	R					
17	S-FNDN-GRBM	R	R					
18	S-FNDN-IDEN	R	R					
19	S-FNDN-PILE	R	R					
20	S-FNDN-RBAR	R	R					
23	S-GRAD-ELEV	R	R					
24	S-GRAD-FLOR	R	R					
26	S-SLAB-EDGE	R	R		R			
27	S-SLAB-JOIN	R	R					
28	S-SLAB-RBAR	R	R					
30	S-GRAT-ELEV	R	R					
31	S-GRAT-FLOR	R	R					
33	S-JOIN-CNST	R	R					
34	S-JOIN-CTRL	R	R					
35	S-SPPT-MISC	R	R					
38	S-STRS-JOIN	R	R		R			
39	S-STRS-LADD	R	R					
40	S-STRS-RBAR	R	R					
43	S-WALL-CONC	R	R		R			
44	S-WALL-LOAD	R	R		R			
45	S-WALL-NONL	R	R		R			
46	S-WALL-PCST	R	R		R			
47	S-WALL-STUD	R	R		R			
50	S-STAT-DEMO		R					
51	S-STAT-EXST		R					
52	S-STAT-FUTR		R					

Discipline: Structural

Level #		Drawing Type						
		Demolition Plan	Foundation Plan	Structural Framing Plan	Column Plan	Elevations	Building Sections	Details
53	S-STAT-MOVE		R					
54	S-STAT-NEWW		R					
55	S-STAT-NICN		R					
56	S-STAT-PHS#		R					
57	S-STAT-RELO		R					
58	S-STAT-TEMP		R					
Structural : Structural Framing Plan								
1	S-ANNO-DIMS			R				
2	S-ANNO-KEYN			R				
5	S-ANNO-NOTE			R				
4	S-ANNO-PATT			R				
6	S-ANNO-SYMB			R				
7	S-ANNO-TEXT			R				
11	S-BEAM-CNTR			R				
12	S-BEAM-PRIM			R				
13	S-BEAM-SCND			R				
16	S-BRAC-LATL			R				
17	S-BRAC-SHEA			R				
18	S-BRAC-VERT			R				
20	S-DECK-FLOR			R				
21	S-DECK-OPEN			R				
22	S-DECK-ROOF			R				
25	S-EVTR-FRAM			R				
28	S-METL-MISC			R				
30	S-SPPT-MISC			R				
36	S-JOIS-BRDG			R				
37	S-JOIS-PRIM			R				
38	S-JOIS-SCND			R				
41	S-TRUS-UNIT			R				
48	S-WELD-SYMB			R				
50	S-STAT-DEMO			R				
51	S-STAT-EXST			R				
52	S-STAT-FUTR			R				
53	S-STAT-MOVE			R				
54	S-STAT-NEWW			R				
55	S-STAT-NICN			R				
56	S-STAT-PHS#			R				
57	S-STAT-RELO			R				
58	S-STAT-TEMP			R				

Discipline: Structural

Level #		Drawing Type						
		Demolition Plan	Foundation Plan	Structural Framing Plan	Column Plan	Elevations	Building Sections	Details
Structural : Column Plan								
1	S-ANNO-DIMS				R			
2	S-ANNO-KEYN				R			
5	S-ANNO-NOTE				R			
4	S-ANNO-PATT				R			
6	S-ANNO-SYMB				R			
7	S-ANNO-TEXT				R			
10	S-GRID-DIMS				R			
11	S-GRID-HORZ				R			
12	S-GRID-IDEN				R			
13	S-GRID-VERT				R			
16	S-COLS-CNTR				R			
17	S-COLS-PRIM	R	R	R	R			
18	S-COLS-SCND	R	R	R	R			
48	S-WELD-SYMB				R			
50	S-STAT-DEMO				R			
51	S-STAT-EXST				R			
52	S-STAT-FUTR				R			
53	S-STAT-MOVE				R			
54	S-STAT-NEWW				R			
55	S-STAT-NICN				R			
56	S-STAT-PHS#				R			
57	S-STAT-RELO				R			
58	S-STAT-TEMP				R			
Structural : Elevations								
1	S-ANNO-DIMS					R		
2	S-ANNO-KEYN					R		
5	S-ANNO-NOTE					R		
4	S-ANNO-PATT					R		
6	S-ANNO-SYMB					R		
7	S-ANNO-TEXT					R		
40	S-ELEV-IDEN					R		
41	S-ELEV-OTLN					R		
42	S-ELEV-PATT					R		
44	S-ELEV-SIGN					R		
50	S-STAT-DEMO					R		
51	S-STAT-EXST					R		
52	S-STAT-FUTR					R		
53	S-STAT-MOVE					R		

Discipline: Structural

Level #		Drawing Type						
		Demolition Plan	Foundation Plan	Structural Framing Plan	Column Plan	Elevations	Building Sections	Details
54	S-STAT-NEWW					R		
55	S-STAT-NICN					R		
56	S-STAT-PHS#					R		
57	S-STAT-RELO					R		
58	S-STAT-TEMP					R		
Structural : Building Sections								
1	S-ANNO-DIMS						R	
2	S-ANNO-KEYN						R	
5	S-ANNO-NOTE						R	
4	S-ANNO-PATT						R	
6	S-ANNO-SYMB						R	
7	S-ANNO-TEXT						R	
45	S-SECT-IDEN						R	
46	S-SECT-MBND						R	
47	S-SECT-MCUT						R	
48	S-SECT-PATT						R	
50	S-STAT-DEMO						R	
51	S-STAT-EXST						R	
52	S-STAT-FUTR						R	
53	S-STAT-MOVE						R	
54	S-STAT-NEWW						R	
55	S-STAT-NICN						R	
56	S-STAT-PHS#						R	
57	S-STAT-RELO						R	
58	S-STAT-TEMP						R	
Structural : Details								
1	S-ANNO-DIMS							R
4	S-ANNO-PATT							R
6	S-ANNO-SYMB							R
7	S-ANNO-TEXT							R
9	S-DETL-GENF							R
10	S-DETL-CMUW							R
15	S-DETL-CONC							R
20	S-DETL-FNGR							R
25	S-DETL-MISC							R
30	S-DETL-REIN							R
35	S-DETL-STLS							R
40	S-DETL-WELD							R
45	S-DETL-WOOD							R

Discipline: Electrical

Level #		Drawing Type							
		Demolition Plan	Lighting Plan	Power Plan	Auxiliary Power Plan	Grounding System	One-Line Diagrams	Riser Diagrams	Details
Sheet File Levels/Layers									
1	E-ANNO-DIMS								
2	E-ANNO-KEYN								
3	E-ANNO-LEGN								
5	E-ANNO-NOTE								
4	E-ANNO-PATT								
6	E-ANNO-SYMB								
7	E-ANNO-TEXT								
62	E-ANNO-REDL								
63	E-ANNO-REVS								
NA	E-ANNO-XREF								
Referenced Model File Levels/Layers									
General : Border Sheet									
5	G-ANNO-NOTE	R	R	R	R	R	R	R	R
6	G-ANNO-SYMB	R	R	R	R	R	R	R	R
7	G-ANNO-TEXT	R	R	R	R	R	R	R	R
10	G-ANNO-TTLB	R	R	R	R	R	R	R	R
General : Keyplan									
4	G-ANNO-PATT	R	R	R	R				
6	G-ANNO-SYMB	R	R	R	R				
7	G-ANNO-TEXT	R	R	R	R				
11	S-GRID-HORZ	R	R	R	R				
12	S-GRID-IDEN	R	R	R	R				
13	S-GRID-VERT	R	R	R	R				
15	G-PLAN-OTLN	R	R	R	R				
20	G-SITE-OTLN	R	R	R	R				
Structural : Column Plan									
11	S-GRID-HORZ	R	R	R	R				
12	S-GRID-IDEN	R	R	R	R				
13	S-GRID-VERT	R	R	R	R				
17	S-COLS-PRIM	R	R	R	R				
18	S-COLS-SCND	R	R	R	R				
Architectural : Floor Plan									
13	A-FLOR-LEVL	R	R	R	R				
14	A-FLOR-NUMB	R	R	R	R				
17	A-FLOR-RAIS	R	R	R	R				
25	A-WALL-CWMG	R	R	R	R				
26	A-WALL-EXTR	R	R	R	R				
29	A-WALL-INTR	R	R	R	R				

Discipline: Electrical

Level #		Drawing Type							
		Demolition Plan	Lighting Plan	Power Plan	Auxiliary Power Plan	Grounding System	One-Line Diagrams	Riser Diagrams	Details
32	A-WALL-PRHT	R	R	R	R				
37	A-DOOR-FULL	R	R	R	R				
39	A-DOOR-PRHT	R	R	R	R				
40	A-DOOR-SYMB	R	R	R	R				
41	A-GLAZ-FULL	R	R	R	R				
43	A-GLAZ-PRHT	R	R	R	R				
44	A-FLOR-PFIX	R	R	R	R				
45	A-FLOR-TPTN	R	R	R	R				
46	A-FLOR-EVTR	R	R	R	R				
47	A-FLOR-STRS	R	R	R	R				
Electrical : Demolition Plan									
1	E-ANNO-DIMS	R							
2	E-ANNO-KEYN	R							
5	E-ANNO-NOTE	R							
4	E-ANNO-PATT	R							
6	E-ANNO-SYMB	R							
7	E-ANNO-TEXT	R							
60	E-DEMO-HAZW	R							
50	E-STAT-DEMO	R							
51	E-STAT-EXST	R							
53	E-STAT-MOVE	R							
55	E-STAT-NICN	R							
56	E-STAT-PHS#	R							
57	E-STAT-RELO	R							
58	E-STAT-TEMP	R							
Electrical : Lighting Plan									
1	E-ANNO-DIMS		R						
2	E-ANNO-KEYN		R						
5	E-ANNO-NOTE		R						
4	E-ANNO-PATT		R						
6	E-ANNO-SYMB		R						
7	E-ANNO-TEXT		R						
12	E-LITE-EQPM		R						
14	E-LITE-JBOX		R						
16	E-LITE-SWCH		R						
18	E-LITE-CLNG		R						
19	E-LITE-EMER		R						
20	E-LITE-EXIT		R						
21	E-LITE-FLOR		R						

Discipline: Electrical

Level #		Drawing Type							
		Demolition Plan	Lighting Plan	Power Plan	Auxiliary Power Plan	Grounding System	One-Line Diagrams	Riser Diagrams	Details
22	E-LITE-IDEN		R						
23	E-LITE-OTLN		R						
24	E-LITE-ROOF		R						
25	E-LITE-SITE		R						
26	E-LITE-SPCL		R						
27	E-LITE-WALL		R						
41	E-LITE-CIRC		R						
42	E-LITE-CTCF		R						
43	E-LITE-CTCW		R						
44	E-LITE-CTID		R						
45	E-LITE-CTXW		R						
46	E-LITE-HASH		R						
47	E-LITE-HOME		R						
48	E-LITE-NUMB		R						
50	E-STAT-DEMO		R						
51	E-STAT-EXST		R						
52	E-STAT-FUTR		R						
53	E-STAT-MOVE		R						
54	E-STAT-NEWW		R						
55	E-STAT-NICN		R						
56	E-STAT-PHS#		R						
57	E-STAT-RELO		R						
58	E-STAT-TEMP		R						
Electrical : Power Plan									
1	E-ANNO-DIMS			R					
2	E-ANNO-KEYN			R					
5	E-ANNO-NOTE			R					
4	E-ANNO-PATT			R					
6	E-ANNO-SYMB			R					
7	E-ANNO-TEXT			R					
10	E-POWR-EQPM			R					
11	E-POWR-OTLN			R					
12	E-POWR-PANL			R					
14	E-POWR-JBOX			R					
15	E-POWR-SWBD			R					
16	E-POWR-SWCH			R					
18	E-POWR-BUSW			R					
19	E-POWR-CABL			R					
20	E-POWR-CLNG			R					

Discipline: Electrical

Level #		Drawing Type							
		Demolition Plan	Lighting Plan	Power Plan	Auxiliary Power Plan	Grounding System	One-Line Diagrams	Riser Diagrams	Details
21	E-POWR-FEED			R					
22	E-POWR-ROOF			R					
23	E-POWR-SITE			R					
24	E-POWR-URAC			R					
25	E-POWR-WALL			R					
27	E-POWR-MOTR			R					
28	E-POWR-GENR			R					
41	E-POWR-CIRC			R					
42	E-POWR-CTCF			R					
43	E-POWR-CTCW			R					
44	E-POWR-CTID			R					
45	E-POWR-CTXW			R					
46	E-POWR-HASH			R					
47	E-POWR-HOME			R					
48	E-POWR-NUMB			R					
49	E-POWR-UCPT			R					
50	E-STAT-DEMO			R					
51	E-STAT-EXST			R					
52	E-STAT-FUTR			R					
53	E-STAT-MOVE			R					
54	E-STAT-NEWW			R					
55	E-STAT-NICN			R					
56	E-STAT-PHS#			R					
57	E-STAT-RELO			R					
58	E-STAT-TEMP			R					
Electrical : Auxiliary Power Plan									
1	E-ANNO-DIMS				R				
2	E-ANNO-KEYN				R				
5	E-ANNO-NOTE				R				
4	E-ANNO-PATT				R				
6	E-ANNO-SYMB				R				
7	E-ANNO-TEXT				R				
10	E-AUXL-EQPM				R				
11	E-AUXL-OTLN				R				
12	E-AUXL-PANL				R				
14	E-AUXL-JBOX				R				
15	E-AUXL-SWBD				R				
16	E-AUXL-SWCH				R				
18	E-AUXL-BUSW				R				

Discipline: Electrical

Level #		Drawing Type							
		Demolition Plan	Lighting Plan	Power Plan	Auxiliary Power Plan	Grounding System	One-Line Diagrams	Riser Diagrams	Details
19	E-AUXL-CABL				R				
20	E-AUXL-CLNG				R				
21	E-AUXL-FEED				R				
22	E-AUXL-ROOF				R				
23	E-AUXL-SITE				R				
24	E-AUXL-URAC				R				
25	E-AUXL-WALL				R				
27	E-AUXL-MOTR				R				
28	E-AUXL-GENR				R				
41	E-AUXL-CIRC				R				
42	E-AUXL-CTCF				R				
43	E-AUXL-CTCW				R				
44	E-AUXL-CTID				R				
45	E-AUXL-CTXW				R				
46	E-AUXL-HASH				R				
47	E-AUXL-HOME				R				
48	E-AUXL-NUMB				R				
49	E-AUXL-UCPT				R				
50	E-STAT-DEMO				R				
51	E-STAT-EXST				R				
52	E-STAT-FUTR				R				
53	E-STAT-MOVE				R				
54	E-STAT-NEWW				R				
55	E-STAT-NICN				R				
56	E-STAT-PHS#				R				
57	E-STAT-RELO				R				
58	E-STAT-TEMP				R				
Electrical : Grounding System									
1	E-ANNO-DIMS					R			
2	E-ANNO-KEYN					R			
5	E-ANNO-NOTE					R			
4	E-ANNO-PATT					R			
6	E-ANNO-SYMB					R			
7	E-ANNO-TEXT					R			
33	E-GRND-CIRC					R			
34	E-GRND-DIAG					R			
35	E-GRND-EQUI					R			
36	E-GRND-REFR					R			
37	E-GRND-GBUS					R			

Discipline: Electrical

Level #		Drawing Type							
		Demolition Plan	Lighting Plan	Power Plan	Auxiliary Power Plan	Grounding System	One-Line Diagrams	Riser Diagrams	Details
50	E-STAT-DEMO					R			
51	E-STAT-EXST					R			
52	E-STAT-FUTR					R			
53	E-STAT-MOVE					R			
54	E-STAT-NEWW					R			
55	E-STAT-NICN					R			
56	E-STAT-PHS#					R			
57	E-STAT-RELO					R			
58	E-STAT-TEMP					R			
Electrical : One-Line Diagrams									
1	E-ANNO-DIMS						R		
2	E-ANNO-KEYN						R		
5	E-ANNO-NOTE						R		
4	E-ANNO-PATT						R		
6	E-ANNO-SYMB						R		
7	E-ANNO-TEXT						R		
11	E-CNTL-ANTA						R		
12	E-CNTL-AVLV						R		
13	E-CNTL-BATR						R		
14	E-CNTL-CAPT						R		
15	E-CNTL-CKTB						R		
16	E-CNTL-CONT						R		
17	E-CNTL-FUSE						R		
18	E-CNTL-GENR						R		
19	E-CNTL-GRND						R		
20	E-CNTL-METR						R		
21	E-CNTL-MOTR						R		
22	E-CNTL-OVLD						R		
23	E-CNTL-RACT						R		
24	E-CNTL-RELA						R		
25	E-CNTL-RSTR						R		
26	E-CNTL-SWCH						R		
27	E-CNTL-XFMR						R		
41	E-1LIN-LW18						R		
42	E-1LIN-LW25						R		
43	E-1LIN-LW35						R		
44	E-1LIN-LW50						R		
45	E-1LIN-LW70						R		
50	E-STAT-DEMO						R		

Discipline: Electrical

Level #		Drawing Type							
		Demolition Plan	Lighting Plan	Power Plan	Auxiliary Power Plan	Grounding System	One-Line Diagrams	Riser Diagrams	Details
51	E-STAT-EXST						R		
52	E-STAT-FUTR						R		
53	E-STAT-MOVE						R		
54	E-STAT-NEWW						R		
55	E-STAT-NICN						R		
56	E-STAT-PHS#						R		
57	E-STAT-RELO						R		
58	E-STAT-TEMP						R		
Electrical : Riser Diagrams									
1	E-ANNO-DIMS							R	
2	E-ANNO-KEYN							R	
5	E-ANNO-NOTE							R	
4	E-ANNO-PATT							R	
6	E-ANNO-SYMB							R	
7	E-ANNO-TEXT							R	
41	E-RISR-LW18							R	
42	E-RISR-LW25							R	
43	E-RISR-LW35							R	
44	E-RISR-LW50							R	
45	E-RISR-LW70							R	
50	E-STAT-DEMO							R	
51	E-STAT-EXST							R	
52	E-STAT-FUTR							R	
53	E-STAT-MOVE							R	
54	E-STAT-NEWW							R	
55	E-STAT-NICN							R	
56	E-STAT-PHS#							R	
57	E-STAT-RELO							R	
58	E-STAT-TEMP							R	
Electrical : Details									
1	E-ANNO-DIMS								R
4	E-ANNO-PATT								R
6	E-ANNO-SYMB								R
7	E-ANNO-TEXT								R
9	E-DETL-GENF								R
11	E-DETL-ARCH								R
14	E-DETL-BUSS								R
15	E-DETL-CABS								R
37	E-DETL-INSL								R

Discipline: Electrical

Level #		Drawing Type							
		Demolition Plan	Lighting Plan	Power Plan	Auxiliary Power Plan	Grounding System	One-Line Diagrams	Riser Diagrams	Details
39	E-DETL-LTFX								R
42	E-DETL-MOTR								R
44	E-DETL-PIPE								R
49	E-DETL-STRC								R
52	E-DETL-TRAY								R
57	E-DETL-WIRE								R
58	E-DETL-XFRM								R

Active Level/Layer

Reference Level/Layer R

Discipline: Mechanical

Level #		Drawing Type									
		Demolition Plan	HVAC Plan	Piping Plan	Specialty Piping and Equipment	Machine Design	Materials Handling Plan	Controls Plan	Elevations	Sections	Details
Sheet File Levels/Layers											
1	M-ANNO-DIMS										
2	M-ANNO-KEYN										
3	M-ANNO-LEGN										
5	M-ANNO-NOTE										
4	M-ANNO-PATT										
6	M-ANNO-SYMB										
7	M-ANNO-TEXT										
62	M-ANNO-REDL										
63	M-ANNO-REVS										
NA	M-ANNO-XREF										
Referenced Model File Levels/Layers											
General : Border Sheet											
5	G-ANNO-NOTE	R	R	R	R	R	R	R	R	R	R
6	G-ANNO-SYMB	R	R	R	R	R	R	R	R	R	R
7	G-ANNO-TEXT	R	R	R	R	R	R	R	R	R	R
10	G-ANNO-TTLB	R	R	R	R	R	R	R	R	R	R
General : Keyplan											
4	G-ANNO-PATT	R	R	R	R		R				
6	G-ANNO-SYMB	R	R	R	R		R				
7	G-ANNO-TEXT	R	R	R	R		R				
11	S-GRID-HORZ	R	R	R	R		R				
12	S-GRID-IDEN	R	R	R	R		R				
13	S-GRID-VERT	R	R	R	R		R				
15	G-PLAN-OTLN	R	R	R	R		R				
20	G-SITE-OTLN	R	R	R	R		R				
Structural : Column Plan											
11	S-GRID-HORZ	R	R	R	R		R				
12	S-GRID-IDEN	R	R	R	R		R				
13	S-GRID-VERT	R	R	R	R		R				
17	S-COLS-PRIM	R	R	R	R		R				
18	S-COLS-SCND	R	R	R	R		R				
Architectural : Floor Plan											
13	A-FLOR-LEVL	R	R	R	R		R				
14	A-FLOR-NUMB	R	R	R	R		R				

Discipline: Mechanical

Level #		Drawing Type									
		Demolition Plan	HVAC Plan	Piping Plan	Specialty Piping and Equipment	Machine Design	Materials Handling Plan	Controls Plan	Elevations	Sections	Details
17	A-FLOR-RAIS	R	R	R	R		R				
25	A-WALL-CWMG	R	R	R	R		R				
26	A-WALL-EXTR	R	R	R	R		R				
29	A-WALL-INTR	R	R	R	R		R				
32	A-WALL-PRHT	R	R	R	R		R				
37	A-DOOR-FULL	R	R	R	R		R				
39	A-DOOR-PRHT	R	R	R	R		R				
40	A-DOOR-SYMB	R	R	R	R		R				
41	A-GLAZ-FULL	R	R	R	R		R				
43	A-GLAZ-PRHT	R	R	R	R		R				
44	A-FLOR-PFIX	R	R	R	R		R				
45	A-FLOR-TPTN	R	R	R	R		R				
46	A-FLOR-EVTR	R	R	R	R		R				
47	A-FLOR-STRS	R	R	R	R		R				
Mechanical : Demolition Plan											
1	M-ANNO-DIMS	R									
2	M-ANNO-KEYN	R									
5	M-ANNO-NOTE	R									
4	M-ANNO-PATT	R									
6	M-ANNO-SYMB	R									
7	M-ANNO-TEXT	R									
60	M-DEMO-HAZW	R									
50	M-STAT-DEMO	R									
51	M-STAT-EXST	R									
53	M-STAT-MOVE	R									
55	M-STAT-NICN	R									
56	M-STAT-PHS#	R									
57	M-STAT-RELO	R									
58	M-STAT-TEMP	R									
Mechanical : HVAC Plan											
1	M-ANNO-DIMS		R								
2	M-ANNO-KEYN		R								
5	M-ANNO-NOTE		R								
4	M-ANNO-PATT		R								
6	M-ANNO-SYMB		R								

Discipline: Mechanical

Level #		Drawing Type									
		Demolition Plan	HVAC Plan	Piping Plan	Specialty Piping and Equipment	Machine Design	Materials Handling Plan	Controls Plan	Elevations	Sections	Details
7	M-ANNO-TEXT		R								
11	M-HVAC-DOOR	R	R								
12	M-HVAC-EQPM	R	R								
13	M-HVAC-OTHR	R	R								
14	M-HVAC-RETN	R	R								
15	M-HVAC-SUPP	R	R								
17	M-HVAC-CDFF	R	R								
18	M-HVAC-IDEN	R	R								
19	M-HVAC-ODFF	R	R								
20	M-HVAC-RDFF	R	R								
21	M-HVAC-SDFF	R	R								
23	M-EXHS-CDFF	R	R								
24	M-EXHS-DUCT	R	R								
25	M-EXHS-EQPM	R	R								
28	M-MKUP-CDFF	R	R								
29	M-MKUP-DUCT	R	R								
30	M-MKUP-EQPM	R	R								
33	M-INEX-CDFF	R	R								
34	M-INEX-DUCT	R	R								
35	M-INEX-EQPM	R	R								
38	M-CONT-INST	R	R								
39	M-CONT-THER	R	R								
40	M-CONT-WIRE	R	R								
50	M-STAT-DEMO		R								
51	M-STAT-EXST		R								
52	M-STAT-FUTR		R								
53	M-STAT-MOVE		R								
54	M-STAT-NEWW		R								
55	M-STAT-NICN		R								
56	M-STAT-PHS#		R								
57	M-STAT-RELO		R								
58	M-STAT-TEMP		R								
Mechanical : Piping Plan											
1	M-ANNO-DIMS			R							
2	M-ANNO-KEYN			R							

Discipline: Mechanical

Level #		Drawing Type									
		Demolition Plan	HVAC Plan	Piping Plan	Specialty Piping and Equipment	Machine Design	Materials Handling Plan	Controls Plan	Elevations	Sections	Details
5	M-ANNO-NOTE			R							
4	M-ANNO-PATT			R							
6	M-ANNO-SYMB			R							
7	M-ANNO-TEXT			R							
11	M-CWTR-EQPM	R		R							
12	M-CWTR-PIPE	R		R							
15	M-HWTR-EQPM	R		R							
16	M-HWTR-PIPE	R		R							
18	M-DUAL-EQPM	R		R							
19	M-DUAL-PIPE	R		R							
21	M-STEM-CONP	R		R							
22	M-STEM-EQPM	R		R							
23	M-STEM-HPIP	R		R							
24	M-STEM-LPIP	R		R							
25	M-STEM-MPIP	R		R							
27	M-REFG-EQPM	R		R							
28	M-REFG-PIPE	R		R							
30	M-RCOV-EQPM	R		R							
31	M-RCOV-PIPE	R		R							
33	M-FUEL-EQPM	R		R							
34	M-FUEL-GGEP	R		R							
35	M-FUEL-GPRP	R		R							
36	M-FUEL-OGEP	R		R							
37	M-FUEL-OPRP	R		R							
38	M-CONT-INST	R		R							
39	M-CONT-THER	R		R							
40	M-CONT-WIRE	R		R							
50	M-STAT-DEMO			R							
51	M-STAT-EXST			R							
52	M-STAT-FUTR			R							
53	M-STAT-MOVE			R							
54	M-STAT-NEWW			R							
55	M-STAT-NICN			R							
56	M-STAT-PHS#			R							
57	M-STAT-RELO			R							

Discipline: Mechanical

Level #		Drawing Type									
		Demolition Plan	HVAC Plan	Piping Plan	Specialty Piping and Equipment	Machine Design	Materials Handling Plan	Controls Plan	Elevations	Sections	Details
58	M-STAT-TEMP			R							
Mechanical : Specialty Piping and Equipment											
1	M-ANNO-DIMS				R						
2	M-ANNO-KEYN				R						
5	M-ANNO-NOTE				R						
4	M-ANNO-PATT				R						
6	M-ANNO-SYMB				R						
7	M-ANNO-TEXT				R						
11	M-BRIN-EQPM	R			R						
12	M-BRIN-PIPE	R			R						
13	M-DENT-EQPM	R			R						
14	M-DENT-PIPE	R			R						
15	M-FUEL-EQPM	R			R						
16	M-FUEL-RPIP	R			R						
17	M-FUEL-SPIP	R			R						
18	M-CMPH-EQPM	R			R						
19	M-CMPH-PIPE	R			R						
20	M-CMPL-EQPM	R			R						
21	M-CMPL-PIPE	R			R						
22	M-HYDR-EQPM	R			R						
23	M-HYDR-RPIP	R			R						
24	M-HYDR-SPIP	R			R						
25	M-ACID-EQPM	R			R						
26	M-ACID-PIPE	R			R						
27	M-ACID-VENT	R			R						
28	M-INSL-EQPM	R			R						
29	M-INSL-RPIP	R			R						
30	M-INSL-SPIP	R			R						
31	M-LGAS-EQPM	R			R						
32	M-LGAS-PIPE	R			R						
33	M-LUBE-EQPM	R			R						
34	M-LUBE-RPIP	R			R						
35	M-LUBE-SPIP	R			R						
36	M-MDGS-EQPM	R			R						
37	M-MDGS-PIPE	R			R						

Discipline: Mechanical

Level #		Drawing Type									
		Demolition Plan	HVAC Plan	Piping Plan	Specialty Piping and Equipment	Machine Design	Materials Handling Plan	Controls Plan	Elevations	Sections	Details
38	M-NGAS-EQPM	R			R						
39	M-NGAS-PIPE	R			R						
40	M-PROC-EQPM	R			R						
41	M-PROC-PIPE	R			R						
42	M-PROC-RPIP	R			R						
43	M-PROC-SPIP	R			R						
44	M-RWTR-EQPM	R			R						
45	M-RWTR-PIPE	R			R						
46	M-STDN-EQPM	R			R						
47	M-STDN-PIPE	R			R						
50	M-STAT-DEMO				R						
51	M-STAT-EXST				R						
52	M-STAT-FUTR				R						
53	M-STAT-MOVE				R						
54	M-STAT-NEWW				R						
55	M-STAT-NICN				R						
56	M-STAT-PHS#				R						
57	M-STAT-RELO				R						
58	M-STAT-TEMP				R						
Mechanical : Machine Design											
1	M-ANNO-DIMS					R					
2	M-ANNO-KEYN					R					
5	M-ANNO-NOTE					R					
4	M-ANNO-PATT					R					
6	M-ANNO-SYMB					R					
7	M-ANNO-TEXT					R					
11	M-MACH-BASE	R				R					
12	M-MACH-COMP	R				R					
13	M-MACH-EXST	R				R					
14	M-MACH-FAST	R				R					
15	M-MACH-LROT	R				R					
16	M-MACH-MOTR	R				R					
50	M-STAT-DEMO					R					
51	M-STAT-EXST					R					
52	M-STAT-FUTR					R					

Discipline: Mechanical

Level #		Drawing Type									
		Demolition Plan	HVAC Plan	Piping Plan	Specialty Piping and Equipment	Machine Design	Materials Handling Plan	Controls Plan	Elevations	Sections	Details
39	M-CONT-THER							R			
40	M-CONT-WIRE							R			
50	M-STAT-DEMO							R			
51	M-STAT-EXST							R			
52	M-STAT-FUTR							R			
53	M-STAT-MOVE							R			
54	M-STAT-NEWW							R			
55	M-STAT-NICN							R			
56	M-STAT-PHS#							R			
57	M-STAT-RELO							R			
58	M-STAT-TEMP							R			
Mechanical : Elevations											
1	M-ANNO-DIMS								R		
2	M-ANNO-KEYN								R		
5	M-ANNO-NOTE								R		
4	M-ANNO-PATT								R		
6	M-ANNO-SYMB								R		
7	M-ANNO-TEXT								R		
38	M-ELEV-FIXT								R		
40	M-ELEV-IDEN								R		
41	M-ELEV-OTLN								R		
42	M-ELEV-PATT								R		
43	M-ELEV-PFIX								R		
50	M-STAT-DEMO								R		
51	M-STAT-EXST								R		
52	M-STAT-FUTR								R		
53	M-STAT-MOVE								R		
54	M-STAT-NEWW								R		
55	M-STAT-NICN								R		
56	M-STAT-PHS#								R		
57	M-STAT-RELO								R		
58	M-STAT-TEMP								R		
Mechanical : Sections											
1	M-ANNO-DIMS									R	
2	M-ANNO-KEYN									R	

Discipline: Mechanical

Level #		Drawing Type									
		Demolition Plan	HVAC Plan	Piping Plan	Specialty Piping and Equipment	Machine Design	Materials Handling Plan	Controls Plan	Elevations	Sections	Details
5	M-ANNO-NOTE									R	
4	M-ANNO-PATT									R	
6	M-ANNO-SYMB									R	
7	M-ANNO-TEXT									R	
45	M-SECT-IDEN									R	
46	M-SECT-MBND									R	
47	M-SECT-MCUT									R	
48	M-SECT-PATT									R	
50	M-STAT-DEMO									R	
51	M-STAT-EXST									R	
52	M-STAT-FUTR									R	
53	M-STAT-MOVE									R	
54	M-STAT-NEWW									R	
55	M-STAT-NICN									R	
56	M-STAT-PHS#									R	
57	M-STAT-RELO									R	
58	M-STAT-TEMP									R	
Mechanical : Details											
1	M-ANNO-DIMS										R
4	M-ANNO-PATT										R
6	M-ANNO-SYMB										R
7	M-ANNO-TEXT										R
9	M-DETL-GENF										R
10	M-DETL-ACCS										R
13	M-DETL-BOIL										R
15	M-DETL-CABS										R
18	M-DETL-COIL										R
21	M-DETL-DUCT										R
22	M-DETL-EQPT										R
26	M-DETL-FANS										R
35	M-DETL-GRLS										R
37	M-DETL-INSL										R
42	M-DETL-MOTR										R
44	M-DETL-PIPE										R
45	M-DETL-PUMP										R

Discipline: Mechanical

Level #		Drawing Type									
		Demolition Plan	HVAC Plan	Piping Plan	Specialty Piping and Equipment	Machine Design	Materials Handling Plan	Controls Plan	Elevations	Sections	Details
49	M-DETL-STRC										R
50	M-DETL-TANK										R
51	M-DETL-TRAP										R
55	M-DETL-VENT										R
56	M-DETL-VLVE										R
57	M-DETL-WIRE										R

Active Level/Layer
Reference Level/Layer R

Discipline: Plumbing

Level #		Drawing Type		
		Demolition Plan	Piping Plan	Riser Diagrams
Sheet File Levels/Layers				
1	P-ANNO-DIMS			
2	P-ANNO-KEYN			
3	P-ANNO-LEGN			
5	P-ANNO-NOTE			
4	P-ANNO-PATT			
6	P-ANNO-SYMB			
7	P-ANNO-TEXT			
62	P-ANNO-REDL			
63	P-ANNO-REVS			
NA	P-ANNO-XREF			
Referenced Model File Levels/Layers				
General : Border Sheet				
5	G-ANNO-NOTE	R	R	R
6	G-ANNO-SYMB	R	R	R
7	G-ANNO-TEXT	R	R	R
10	G-ANNO-TTLB	R	R	R
General : Keyplan				
4	G-ANNO-PATT	R	R	
6	G-ANNO-SYMB	R	R	
7	G-ANNO-TEXT	R	R	
11	S-GRID-HORZ	R	R	
12	S-GRID-IDEN	R	R	
13	S-GRID-VERT	R	R	
15	G-PLAN-OTLN	R	R	
20	G-SITE-OTLN	R	R	
Structural : Column Plan				
11	S-GRID-HORZ	R	R	
12	S-GRID-IDEN	R	R	
13	S-GRID-VERT	R	R	
17	S-COLS-PRIM	R	R	
18	S-COLS-SCND	R	R	
Architectural : Floor Plan				
13	A-FLOR-LEVL	R	R	
14	A-FLOR-NUMB	R	R	
17	A-FLOR-RAIS	R	R	
25	A-WALL-CWMG	R	R	
26	A-WALL-EXTR	R	R	
29	A-WALL-INTR	R	R	
32	A-WALL-PRHT	R	R	
37	A-DOOR-FULL	R	R	

Discipline: Plumbing

Level #		Drawing Type		
		Demolition Plan	Piping Plan	Riser Diagrams
39	A-DOOR-PRHT	R	R	
40	A-DOOR-SYMB	R	R	
41	A-GLAZ-FULL	R	R	
43	A-GLAZ-PRHT	R	R	
44	A-FLOR-PFIX	R	R	
45	A-FLOR-TPTN	R	R	
46	A-FLOR-EVTR	R	R	
47	A-FLOR-STRS	R	R	
Plumbing : Demolition Plan				
1	P-ANNO-DIMS	R		
2	P-ANNO-KEYN	R		
5	P-ANNO-NOTE	R		
4	P-ANNO-PATT	R		
6	P-ANNO-SYMB	R		
7	P-ANNO-TEXT	R		
60	P-DEMO-HAZW	R		
50	P-STAT-DEMO	R		
51	P-STAT-EXST	R		
53	P-STAT-MOVE	R		
55	P-STAT-NICN	R		
56	P-STAT-PHS#	R		
57	P-STAT-RELO	R		
58	P-STAT-TEMP	R		
Plumbing : Piping Plan				
1	P-ANNO-DIMS		R	
2	P-ANNO-KEYN		R	
5	P-ANNO-NOTE		R	
4	P-ANNO-PATT		R	
6	P-ANNO-SYMB		R	
7	P-ANNO-TEXT		R	
11	P-DOMW-CPIP	R	R	
12	P-DOMW-EQPM	R	R	
13	P-DOMW-FPIP	R	R	
14	P-DOMW-HPIP	R	R	
15	P-DOMW-RISR	R	R	
16	P-DOMW-RPIP	R	R	
21	P-SANR-FIXT	R	R	
22	P-SANR-EQPM	R	R	
23	P-SANR-FLDR	R	R	
24	P-SANR-PIPE	R	R	
25	P-SANR-RISR	R	R	

Discipline: Plumbing

Level #		Drawing Type		
		Demolition Plan	Piping Plan	Riser Diagrams
26	P-SANR-VENT	R	R	
31	P-STRM-PIPE	R	R	
32	P-STRM-RFDR	R	R	
33	P-STRM-RISR	R	R	
34	P-STRM-RPIP	R	R	
50	P-STAT-DEMO		R	
51	P-STAT-EXST		R	
52	P-STAT-FUTR		R	
53	P-STAT-MOVE		R	
54	P-STAT-NEWW		R	
55	P-STAT-NICN		R	
56	P-STAT-PHS#		R	
57	P-STAT-RELO		R	
58	P-STAT-TEMP		R	
Plumbing : Riser Diagrams				
1	P-ANNO-DIMS			R
2	P-ANNO-KEYN			R
5	P-ANNO-NOTE			R
4	P-ANNO-PATT			R
6	P-ANNO-SYMB			R
7	P-ANNO-TEXT			R
11	P-DOMW-CPIP			R
12	P-DOMW-EQPM			R
13	P-DOMW-FPIP			R
14	P-DOMW-HPIP			R
15	P-DOMW-RISR			R
16	P-DOMW-RPIP			R
21	P-SANR-FIXT			R
22	P-SANR-EQPM			R
23	P-SANR-FLDR			R
24	P-SANR-PIPE			R
25	P-SANR-RISR			R
26	P-SANR-VENT			R
31	P-STRM-PIPE			R
32	P-STRM-RFDR			R
33	P-STRM-RISR			R
34	P-STRM-RPIP			R
50	P-STAT-DEMO			R
51	P-STAT-EXST			R
52	P-STAT-FUTR			R
53	P-STAT-MOVE			R

Discipline: Plumbing

Level #		Drawing Type		
		Demolition Plan	Piping Plan	Riser Diagrams
54	P-STAT-NEWW			R
55	P-STAT-NICN			R
56	P-STAT-PHS#			R
57	P-STAT-RELO			R
58	P-STAT-TEMP			R

Active Level/Layer

Reference Level/Layer R

Discipline: Fire Protection/Suppression

Level #		Drawing Type		
		Demolition Plan	Sprinkler Plan	Riser Diagram
Sheet File Levels/Layers				
1	F-ANNO-DIMS			
2	F-ANNO-KEYN			
3	F-ANNO-LEGN			
5	F-ANNO-NOTE			
4	F-ANNO-PATT			
6	F-ANNO-SYMB			
7	F-ANNO-TEXT			
62	F-ANNO-REDL			
63	F-ANNO-REVS			
NA	F-ANNO-XREF			
Referenced Model File Levels/Layers				
General : Border Sheet				
5	G-ANNO-NOTE	R	R	R
6	G-ANNO-SYMB	R	R	R
7	G-ANNO-TEXT	R	R	R
10	G-ANNO-TTLB	R	R	R
General : Keyplan				
4	G-ANNO-PATT	R	R	
6	G-ANNO-SYMB	R	R	
7	G-ANNO-TEXT	R	R	
11	S-GRID-HORZ	R	R	
12	S-GRID-IDEN	R	R	
13	S-GRID-VERT	R	R	
15	G-PLAN-OTLN	R	R	
20	G-SITE-OTLN	R	R	
Structural: Column Plan				
11	S-GRID-HORZ	R	R	
12	S-GRID-IDEN	R	R	
13	S-GRID-VERT	R	R	
17	S-COLS-PRIM	R	R	
18	S-COLS-SCND	R	R	
Architectural: Floor Plan				
12	A-FLOR-IDEN	R	R	
13	A-FLOR-LEVL	R	R	
14	A-FLOR-NUMB	R	R	
17	A-FLOR-RAIS	R	R	
25	A-WALL-CWMG	R	R	
26	A-WALL-EXTR	R	R	
27	A-WALL-FIRE	R	R	
29	A-WALL-INTR	R	R	

Discipline: Fire Protection/Suppression

Level #		Drawing Type		
		Demolition Plan	Sprinkler Plan	Riser Diagram
32	A-WALL-PRHT	R	R	
37	A-DOOR-FULL	R	R	
39	A-DOOR-PRHT	R	R	
40	A-DOOR-SYMB	R	R	
41	A-GLAZ-FULL	R	R	
43	A-GLAZ-PRHT	R	R	
44	A-FLOR-PFIX	R	R	
45	A-FLOR-TPTN	R	R	
46	A-FLOR-EVTR	R	R	
47	A-FLOR-STRS	R	R	
Fire Protection/Suppression: Demolition Plan				
1	F-ANNO-DIMS	R		
2	F-ANNO-KEYN	R		
5	F-ANNO-NOTE	R		
4	F-ANNO-PATT	R		
6	F-ANNO-SYMB	R		
7	F-ANNO-TEXT	R		
60	F-DEMO-HAZW	R		
50	F-STAT-DEMO	R		
51	F-STAT-EXST	R		
53	F-STAT-MOVE	R		
55	F-STAT-NICN	R		
56	F-STAT-PHS#	R		
57	F-STAT-RELO	R		
58	F-STAT-TEMP	R		
Fire Protection/Suppression: Sprinkler Plan				
1	F-ANNO-DIMS		R	
2	F-ANNO-KEYN		R	
5	F-ANNO-NOTE		R	
4	F-ANNO-PATT		R	
6	F-ANNO-SYMB		R	
7	F-ANNO-TEXT		R	
11	F-CO2S-EQPM	R	R	
12	F-CO2S-PIPE	R	R	
14	F-AFFF-EQPM	R	R	
15	F-AFFF-PIPE	R	R	
17	F-HALN-EQPM	R	R	
18	F-HALN-PIPE	R	R	
20	F-IGAS-EQPM	R	R	
21	F-IGAS-PIPE	R	R	
23	F-SPRN-COMB	R	R	

Discipline: Fire Protection/Suppression

Level #		Drawing Type		
		Demolition Plan	Sprinkler Plan	Riser Diagram
24	F-SPRN-OTHR	R	R	
27	F-SPRN-PEND	R	R	
25	F-SPRN-PIPE	R	R	
28	F-SPRN-UPRT	R	R	
30	F-PROT-EXTN	R	R	
31	F-PROT-HOSE	R	R	
33	F-ALRM-DTCT	R	R	
50	F-STAT-DEMO		R	
51	F-STAT-EXST		R	
52	F-STAT-FUTR		R	
53	F-STAT-MOVE		R	
54	F-STAT-NEWW		R	
55	F-STAT-NICN		R	
56	F-STAT-PHS#		R	
57	F-STAT-RELO		R	
58	F-STAT-TEMP		R	
Fire Protection/Suppression: Riser Diagram				
1	F-ANNO-DIMS			R
2	F-ANNO-KEYN			R
5	F-ANNO-NOTE			R
4	F-ANNO-PATT			R
6	F-ANNO-SYMB			R
7	F-ANNO-TEXT			R
11	F-CO2S-EQPM			R
12	F-CO2S-PIPE			R
14	F-AFFF-EQPM			R
15	F-AFFF-PIPE			R
17	F-HALN-EQPM			R
18	F-HALN-PIPE			R
20	F-IGAS-EQPM			R
21	F-IGAS-PIPE			R
23	F-SPRN-COMB			R
24	F-SPRN-OTHR			R
27	F-SPRN-PEND			R
25	F-SPRN-PIPE			R
28	F-SPRN-UPRT			R
30	F-PROT-EXTN			R
31	F-PROT-HOSE			R
33	F-ALRM-DTCT			R
50	F-STAT-DEMO			R
51	F-STAT-EXST			R

Discipline: Fire Protection/Suppression

Level #		Drawing Type		
		Demolition Plan	Sprinkler Plan	Riser Diagram
52	F-STAT-FUTR			R
53	F-STAT-MOVE			R
54	F-STAT-NEWW			R
55	F-STAT-NICN			R
56	F-STAT-PHS#			R
57	F-STAT-RELO			R
58	F-STAT-TEMP			R

Active Level/Layer

Reference Level/Layer R

Discipline: Equipment - Security Systems

Level #		Drawing Type			
		Demolition Plan	Security Plan	Elevations	Riser Diagrams
Sheet File Levels/Layers					
1	QYANNO-DIMS				
2	QYANNO-KEYN				
3	QYANNO-LEGN				
5	QYANNO-NOTE				
4	QYANNO-PATT				
6	QYANNO-SYMB				
7	QYANNO-TEXT				
62	QYANNO-REDL				
63	QYANNO-REVS				
NA	QYANNO-XREF				
Referenced Model File Levels/Layers					
General : Border Sheet					
5	G-ANNO-NOTE	R	R	R	R
6	G-ANNO-SYMB	R	R	R	R
7	G-ANNO-TEXT	R	R	R	R
10	G-ANNO-TTLB	R	R	R	R
General : Keyplan					
4	G-ANNO-PATT	R	R		
6	G-ANNO-SYMB	R	R		
7	G-ANNO-TEXT	R	R		
11	S-GRID-HORZ	R	R		
12	S-GRID-IDEN	R	R		
13	S-GRID-VERT	R	R		
15	G-PLAN-OTLN	R	R		
20	G-SITE-OTLN	R	R		
Civil/Site : Site Plan					
14	C-SITE-FENC	R	R		
18	C-SITE-RAMP	R	R		
20	C-SITE-STRS	R	R		
21	C-SITE-WALK	R	R		
Civil/Site : Transportation Site Plan					
16	C-ROAD-OTLN	R	R		
27	C-PKNG-ISLD	R	R		
28	C-PKNG-OTLN	R	R		
29	C-PKNG-PVMK	R	R		
30	C-PKNG-STRP	R	R		
36	C-RAIL-OTLN	R	R		
Utilities : Electrical Utilities Plan					
26	U-LITE-IDEN		R		
27	U-LITE-FLOD		R		

Discipline: Equipment - Security Systems

Level #		Drawing Type			
		Demolition Plan	Security Plan	Elevations	Riser Diagrams
28	U-LITE-POLE		R		
29	U-LITE-STRT		R		
30	U-LITE-WALK		R		
Architectural : Floor Plan					
12	A-FLOR-IDEN	R	R		
13	A-FLOR-LEVL	R	R		
14	A-FLOR-NUMB	R	R		
17	A-FLOR-RAIS	R	R		
22	A-COLS-ENCL	R	R		
25	A-WALL-CWMG	R	R		
26	A-WALL-EXTR	R	R		
29	A-WALL-INTR	R	R		
30	A-WALL-MOVE	R	R		
32	A-WALL-PRHT	R	R		
37	A-DOOR-FULL	R	R		
39	A-DOOR-PRHT	R	R		
40	A-DOOR-SYMB	R	R		
41	A-GLAZ-FULL	R	R		
43	A-GLAZ-PRHT	R	R		
46	A-FLOR-EVTR	R	R		
47	A-FLOR-STRS	R	R		
61	A-FLOR-OVHD	R	R		
Equipment - Security : Demolition Plan					
1	QYANNO-DIMS	R			
2	QYANNO-KEYN	R			
5	QYANNO-NOTE	R			
4	QYANNO-PATT	R			
6	QYANNO-SYMB	R			
7	QYANNO-TEXT	R			
60	QYDEMO-HAZW	R			
50	QYSTAT-DEMO	R			
51	QYSTAT-EXST	R			
53	QYSTAT-MOVE	R			
55	QYSTAT-NICN	R			
56	QYSTAT-PHS#	R			
57	QYSTAT-RELO	R			
58	QYSTAT-TEMP	R			
Equipment - Security : Security Plan					
1	QYANNO-DIMS		R		
2	QYANNO-KEYN		R		
5	QYANNO-NOTE		R		

Discipline: Equipment - Security Systems

Level #		Drawing Type			
		Demolition Plan	Security Plan	Elevations	Riser Diagrams
4	QYANNO-PATT		R		
6	QYANNO-SYMB		R		
7	QYANNO-TEXT		R		
11	QYACCC-EXTR		R		
12	QYACCC-PANL		R		
13	QYACCC-WALL		R		
14	QYANCN-PANL		R		
15	QYANCN-RESN		R		
17	QYBARR-FENC		R		
18	QYBARR-SENS		R		
19	QYBARR-WALL		R		
21	QYCOMM-CLNG		R		
22	QYCOMM-INTC		R		
23	QYCOMM-PANL		R		
24	QYCOMM-WALL		R		
26	QYSWCH-FLSH		R		
27	QYSWCH-SURF		R		
30	QYSENS-BURD		R		
31	QYSENS-CLNG		R		
32	QYSENS-FLOR		R		
33	QYSENS-GLAS		R		
34	QYSENS-PANL		R		
35	QYSENS-WALL		R		
37	QYCCTV-CLNG		R		
38	QYCCTV-WALL		R		
40	QYLITE-CLNG		R		
41	QYLITE-POLE		R		
42	QYLITE-WALL		R		
44	QYLOCK-ELEC		R		
45	QYLOCK-MANL		R		
47	QYWIRE-SYST		R		
50	QYSTAT-DEMO		R		
51	QYSTAT-EXST		R		
52	QYSTAT-FUTR		R		
53	QYSTAT-MOVE		R		
54	QYSTAT-NEWW		R		
55	QYSTAT-NICN		R		
56	QYSTAT-PHS#		R		
57	QYSTAT-RELO		R		
58	QYSTAT-TEMP		R		
Equipment - Security : Elevations					

Discipline: Equipment - Security Systems

Level #		Drawing Type			
		Demolition Plan	Security Plan	Elevations	Riser Diagrams
1	QYANNO-DIMS			R	
2	QYANNO-KEYN			R	
5	QYANNO-NOTE			R	
4	QYANNO-PATT			R	
6	QYANNO-SYMB			R	
7	QYANNO-TEXT			R	
38	QYELEV-FIXT			R	
40	QYELEV-IDEN			R	
41	QYELEV-OTLN			R	
42	QYELEV-PATT			R	
44	QYELEV-SIGN			R	
50	QYSTAT-DEMO			R	
51	QYSTAT-EXST			R	
52	QYSTAT-FUTR			R	
53	QYSTAT-MOVE			R	
54	QYSTAT-NEWW			R	
55	QYSTAT-NICN			R	
56	QYSTAT-PHS#			R	
57	QYSTAT-RELO			R	
58	QYSTAT-TEMP			R	
Equipment - Security : Riser Diagrams					
1	QYANNO-DIMS				R
2	QYANNO-KEYN				R
5	QYANNO-NOTE				R
4	QYANNO-PATT				R
6	QYANNO-SYMB				R
7	QYANNO-TEXT				R
11	QYACCC-EXTR				R
12	QYACCC-PANL				R
14	QYANCN-PANL				R
15	QYANCN-RESN				R
18	QYBARR-SENS				R
22	QYCOMM-INTC				R
23	QYCOMM-PANL				R
34	QYSENS-PANL				R
40	QYLITE-CLNG				R
41	QYLITE-POLE				R
42	QYLITE-WALL				R
44	QYLOCK-ELEC				R
47	QYWIRE-SYST				R
50	QYSTAT-DEMO				R

Discipline: Equipment - Security Systems

Level #		Drawing Type			
		Demolition Plan	Security Plan	Elevations	Riser Diagrams
51	QYSTAT-EXST				R
52	QYSTAT-FUTR				R
53	QYSTAT-MOVE				R
54	QYSTAT-NEWW				R
55	QYSTAT-NICN				R
56	QYSTAT-PHS#				R
57	QYSTAT-RELO				R
58	QYSTAT-TEMP				R
Telecommunications : Communication System Plan					
22	T-ALRM-IDEN		R		
23	T-ALRM-SYST		R		
42	T-SERT-IDEN		R		
43	T-SERT-SYST		R		

Active Level/Layer

Reference Level/Layer R

End of Technical Requirements for Drawings and Electronic Document Submission