Virtual Design and Construction |Fundamental LOD Definitions
Upated: August 2022

PORT AUTHORITY NY NJ
AIR LAND RAIL SEA

STAGE I	STAGE II	STAGE III	STAGE IV	
Conceptual Design	Preliminary Design	Basis of Design	Coordination sign-off	As-Constructed
LOD 200		LOD 300		LOD 350
Approximate geometry		Precise Geometry		Precise Geometry with Connections

The Model Element is graphically represented within the Model as a generic system, object, or assembly with approximate quantities, size, shape, location, and orientation. Non-graphic information may also be attached to the Model Element.

BIMForum interpretation: At this LOD elements are generic placeholders. They may be recognizable as the components they represent, or they may be volumes for space reservation. Any information derived from LOD 200 elements must be considered approximate

The Model Element is graphically represented within the Model as a specific system, object or assembly in terms of quantity, size, shape, location, and orientation. Non-graphic information may also be attached to the Model Element.

BIMForum interpretation: The quantity, size, shape, location, and orientation of the element as designed can be measured directly from the model without referring to non-modeled information such as notes or dimension call-outs. The project origin is defined and the element is located accurately with respect to the project origin.

The Model Element is graphically represented within the Model as a specific system, object, or assembly in terms of quantity, size, shape, location, orientation, and interfaces with other building systems. Non-graphic information may also be attached to the Model Element.

BIMForum interpretation: Parts necessary for coordination of the element with nearby or attached elements are modeled. These parts will include such items as supports and connections. The quantity, size, shape, location, and orientation of the element as designed can be measured directly from the model without referring to non-modeled information such as notes or dimension call-outs.

Uniformat					Omniclass Level					Elements	Existing Conditions		Existing Conditions		Design (only) Attribute Table	Stage I		Stage II		Stage III		Construction Attribute Table	Stage IV			
											Captured		Represented			Conceptual Design		Preliminary Design		Basis of design			Coordination Sign-off		As-Constructed	
1	2	3	4	5	1	2	3	4	5		LOA1	MEA	LOA2	MEA		LOD	MEA	LOD	MEA	LOD	MEA		LOD	MEA	LOD	MEA
A					21-	01	00	00		SUBSTRUCTURE																
B					21-	02	00	00		SHELL																
B	10				21-	02	10			Superstructure																
B	10	10			21-	02	10	10		Floor Construction																
B	10	10	.10		21-	02	10	10	10	Floor Structural Frame	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
B	10	10	.10	.10	21-	02	10	10	10	Floor Structural Frame (Concrete)	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
B	10	10	.10	.11	21-	02	10	10	11	Precast Structural Inverted T Beam (Concrete)	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
B	10	10	.10	.12	21-	02	10	10	12	Precast Structural Column (Concrete)	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
B	10	10	.10	.20	21-	02	10	10	20	Floor Structural Frame (Masonry)	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
B	10	10	.10	.40	21-	02	10	10	40	Floor Structural Frame (Steel Framing Beams)	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
B	10	10	.10	.50	21-	02	10	10	50	Floor Structural Frame (Steel Framing Bracing Rods)	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
B	10	10	.10	.60	21-	02	10	10	60	Floor Structural Frame (Steel Joists)	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
B	10	10	.10	.70	21-	02	10	10	70	Floor Structural Framing (Cold Formed Metal Framing)	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
B	10	10	.10		21-	02	10	10	10	Floor Structural Frame (Masonry Framing)	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
B	10	10	.10	.80	21-	02	10	10	80	Floor Structural Frame (Wood Floor Trusses)	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
B	10	10	.20		21-	02	10	10	20	Floor Decks, Slabs, and Toppings	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
B	10	10	.20	.10	21-	02	10	10	20	Floor Decks, Slabs, and Toppings (Wood Floor Deck)	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
B	10	10	.20	.20	21-	02	10	10	20	Floor Decks, Slabs, and Toppings (Metal Floor Deck)	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
B	10	10	.20	.30	21-	02	10	10	20	Floor Decks, Slabs, and Toppings (Composite Floor Deck)	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
B	10	10	.20	.40	21-	02	10	10	20	Floor Decks, Slabs, and Toppings (Concrete)	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
B	10	10	.20	.41	21-	02	10	10	20	Precast Structural Double Tee (Concrete)	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
B	10	10	.30		21-	02	10	10	30	Balcony Floor Construction	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
B	10	10	.40		21-	02	10	10	40	Mezzanine Floor Construction	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
B	10	10	.50		21-	02	10	10	50	Ramps	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	10	10	.90		21-	02	10	10	90	Floor Construction Supplementary Components	30	EXTERNAL	30	EXTERNAL	Common Parameters	N/A	PANYNJ	N/A	PANYNJ	N/A	EXTERNAL	Common Parameters	N/A	EXTERNAL	N/A	EXTERNAL
B	10	20			21-	02	10	20		Roof Construction																
B	10	20	.10		21-	02	10	20	10	Roof Structural Frame	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
B	10	20	.20		21-	02	10	20	20	Roof Decks, Slabs, and Sheathing	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
B	10	20	.30		21-	02	10	20	30	Canopy Construction	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
B	10	20	.90		21-	02	10	20	90	Roof Construction Supplementary Components	30	EXTERNAL	30	EXTERNAL	Common Parameters	N/A	PANYNJ	N/A	PANYNJ	N/A	EXTERNAL	Common Parameters	N/A	EXTERNAL	N/A	EXTERNAL
B	10	80			21-	02	10	80		Stairs																
B	10	80	.10		21-	02	10	80	10	Stair Construction	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	10	80	.30		21-	02	10	80	30	Stair Soffits	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	10	80	.50		21-	02	10	80	50	Stair Railings	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	10	80	.60		21-	02	10	80	60	Fire Escapes	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	10	80	.70		21-	02	10	80	70	Metal Walkways	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	10	80	.80		21-	02	10	80	80	Ladders	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	20				21-	02	20			Exterior Vertical Enclosures																
B	20	10			21-	02	20	10		Exterior Walls																
B	20	10	.10		21-	02	20	10	10	Exterior Wall Veneer	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	20	10	.20		21-	02	20	10	20	Exterior Wall Construction	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	20	10	.30		21-	02	20	10	30	Exterior Wall Interior Skin	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	20	10	.40		21-	02	20	10	40	Fabricated Exterior Wall Assemblies	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	20	10	.50		21-	02	20	10	50	Parapets	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	20	10	.60		21-	02	20	10	60	Equipment Screens	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Detailed Parameters	300	EXTERNAL	300	EXTERNAL
B	20	10	.80		21-	02	20	10	80	Exterior Wall Supplementary Compomnents	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	20	10	.90		21-	02	20	10	90	Exterior Wall Opening Supplementary Compomnents	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	20	20			21-	02	20	20		Exterior Windows																
B	20	20	.10		21-	02	20	20	10	Exterior Operating Windows	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Detailed Parameters	300	EXTERNAL	300	EXTERNAL
B	20	20	.20		21-	02	20	20	20	Exterior Fixed Windows	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	20	20	.30		21-	02	20	20	30	Exterior Window Wall	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	20	20	.50		21-	02	20	20	50	Exterior Special Function Windows	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	20	50			21-	02	20	50		Exterior Doors and Grilles																
B	20	50	.10		21-	02	20	50	10	Exterior Entrance Doors	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Detailed Parameters	300	EXTERNAL	300	EXTERNAL
B	20	50	.20		21-	02	20	50	20	Exterior Utility Doors	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Detailed Parameters	300	EXTERNAL	300	EXTERNAL
B	20	50	.30		21-	02	20	50	30	Exterior Oversize Doors	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Detailed Parameters	300	EXTERNAL	300	EXTERNAL
B	20	50	.40		21-	02	20	50	40	Exterior Special Function Doors	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Detailed Parameters	300	EXTERNAL	300	EXTERNAL
B	20	50	.60		21-	02	20	50	60	Exterior Grilles	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	20	50	.70		21-	02	20	50	70	Exterior Gates	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Detailed Parameters	300	EXTERNAL	300	EXTERNAL
B	20	50	.90		21-	02	20	50	90	Exterior Door Supplementary Components	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	20	70			21-	02	20	70		Exterior Louvers and Vents																
B	20	70	.10		21-	02	20	70	10	Exterior Louvers	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Detailed Parameters	300	EXTERNAL	300	EXTERNAL
B	20	70	.50		21-	02	20	70	50	Exterior Vents	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	20	80			21-	02	20	80		Exterior Wall Appurtenances																
B	20	80	.10		21-	02	20	80	10	Exterior Fixed Grilles and Screens	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	20	80	.30		21-	02	20	80	30	Exterior Opening Protection Devices	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Detailed Parameters	300	EXTERNAL	300	EXTERNAL
B	20	80	.50		21-	02	20	80	50	Exterior Balcony Walls and Railings	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	20	80	.70		21-	02	20	80	70	Exterior Fabrications	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	20	80	.80		21-	02	20	80	80	Bird Control Devices	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Detailed Parameters	300	EXTERNAL	300	EXTERNAL
B	20	90			21-	02	20	90		Exterior Wall Specialties	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL		300	EXTERNAL	300	EXTERNAL
B	30				21-	02	30			Exterior Horizontal Enclosures																
B	30	10			21-	02	30	10		Roofing																
B	30	10	.10		21-	02	30	10	10	Step Slope Roofing	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	30	10	.50		21-	02	30	10	50	Low-Slope Roofing	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	30	10	.70		21-	02	30	10	70	Canopy Roofing	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	30	10	.90		21-	02	30	10	90	Roofing Supplementary Components	30	EXTERNAL	30	EXTERNAL	Common Parameters	N/A	PANYNJ	N/A	PANYNJ	N/A	EXTERNAL	Common Parameters	N/A	EXTERNAL	N/A	EXTERNAL
B	30	20			21-	02	30	20		Roof Appurtenances																
B	30	20	.10		21-	02	30	20	10	Roof Accessories	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	30	20	.30		21-	02	30	20	30	Roof Specialties	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	30	20	.70		21-	02	30	20	70	Rainwater Management	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	30	40			21-	02	30	40		Traffic Bearing Horizontal Enclosures																
B	30	40	.10		21-	02	30	40	10	Traffic Bearing Coatings	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	30	40	.30		21-	02	30	40	30	Horizontal Waterproofing Membrane	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	30	40	.50		21-	02	30	40	50	Wear Surfaces	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	30	40	.90		21-	02	30	40	90	Horizontal Enclosure Supplementary Components	30	EXTERNAL	30	EXTERNAL	Common Parameters	N/A	PANYNJ	N/A	PANYNJ	N/A	EXTERNAL	Common Parameters	N/A	EXTERNAL	N/A	EXTERNAL
B	30	60			21-	02	30	60		Horizontal Openings																
B	30	60	.10		21-	02	30	60	10	Roof Windows and Skylights	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL

Uniformat					Omniclass Level					Elements	Existing Conditions		Existing Conditions		Design (only) Attribute Table	Stage I		Stage II		Stage III		Construction Attribute Table	Stage IV			
											Captured		Represented			Conceptual Design		Preliminary Design		Basis of design			Coordination Sign-off		As-Constructed	
1	2	3	4	5	1	2	3	4	5		LOA1	MEA	LOA2	MEA		LOD	MEA	LOD	MEA	LOD	MEA		LOD	MEA	LOD	MEA
B	30	60	.50		21-	02	30	60	50	Vents and Hatches	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	30	60	.90		21-	02	30	60	90	Horizontal Opening Supplementary Components	30	EXTERNAL	30	EXTERNAL	Common Parameters	N/A	PANYNJ	N/A	PANYNJ	N/A	EXTERNAL	Common Parameters	N/A	EXTERNAL	N/A	EXTERNAL
B	**30**	**80**			**21-**	**02**	**30**	**80**		**Overhead Exterior Enclosures**																
B	30	80	.10		21-	02	30	80	10	Exterior Ceilings	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	30	80	.20		21-	02	30	80	20	Exterior Soffits	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
B	30	80	.30		21-	02	30	80	30	Exterior Bulkheads	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
C					**21-**	**03**	**00**	**00**		**INTERIORS**																
D					**21-**	**04**	**00**	**00**		**SERVICES**																
D	10				21-	04	10			**Conveying**																
D	20				21-	04	20			**Plumbing**																
D	**20**	**10**			**21-**	**04**	**20**	**10**		**Domestic Water Distribution**																
D	20	10	.10		21-	04	20	10	10	Facility Potable-Water Storage Tanks	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Detailed Parameters	350	EXTERNAL	350	EXTERNAL
D	20	10	.20		21-	04	20	10	20	Domestic Water Equipment	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Detailed Parameters	350	EXTERNAL	350	EXTERNAL
D	20	10	.40		21-	04	20	10	40	Domestic Water Piping	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
D	20	10	.60		21-	04	20	10	60	Plumbing Fixtures	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Detailed Parameters	350	EXTERNAL	350	EXTERNAL
D	20	10	.90		21-	04	20	10	90	Domestic Water Distribution Supplementary Components	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
D	**20**	**20**			**21-**	**04**	**20**	**20**		**Sanitary Drainage**																
D	20	20	.10		21-	04	20	20	10	Sanitary Sewerage Equipment	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Detailed Parameters	350	EXTERNAL	350	EXTERNAL
D	20	20	.30		21-	04	20	20	30	Sanitary Sewerage Piping	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
D	20	20	.90		21-	04	20	20	90	Sanitary Drainage Supplementary Components	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
D	**20**	**30**			**21-**	**04**	**20**	**30**		**Building Support Plumbing Systems**																
D	20	30	.10		21-	04	20	30	10	Stormwater Drainage Equipment	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Detailed Parameters	350	EXTERNAL	350	EXTERNAL
D	20	30	.20		21-	04	20	30	20	Stormwater Drainage Piping	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
D	20	30	.30		21-	04	20	30	30	Facility Stormwater Drains	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
D	20	30	.60		21-	04	20	30	60	Gray Water Systems	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
D	20	30	.90		21-	04	20	30	90	Building Support Plumbing System Supplementary Components	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
D	**20**	**50**			**21-**	**04**	**20**	**50**		**General Service Compressed-Air**	**30**	**EXTERNAL**	**30**	**EXTERNAL**	Common Parameters	**200**	**PANYNJ**	**200**	**PANYNJ**	**300**	**EXTERNAL**	Common Parameters	**350**	**EXTERNAL**	**350**	**EXTERNAL**
D	**20**	**60**			**21-**	**04**	**20**	**60**		**Process Support Plumbing Systems**																
D	20	60	.10		21-	04	20	60	10	Compressed-Air Systems	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Detailed Parameters	350	EXTERNAL	350	EXTERNAL
D	20	60	.20		21-	04	20	60	20	Vacuum Systems	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
D	20	60	.30		21-	04	20	60	30	Gas Systems	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
D	20	60	.40		21-	04	20	60	40	Chemical-Waste Systems	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
D	20	60	.50		21-	04	20	60	50	Processed Water Systems	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
D	20	60	.90		21-	04	20	60	90	Process Support Plumbing System Supplementary Components	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	350	EXTERNAL	350	EXTERNAL
D	30				21-	04	30			**HVAC**																
D	40				21-	04	40			**Fire Protection**																
D	50				21-	04	50			**Electrical**																
D	60				21-	04	60			**Communications**																
D	70				21-	04	70			**Electronic Safety and Security**		EXTERNAL		EXTERNAL						EXTERNAL			EXTERNAL		EXTERNAL
D	80				21-	04	80			**Integrated Automation**																
E					21-	05	00	00		**EQUIPMENT & FURNISHINGS**																
F					21-	06	00	00		**SPECIAL CONSTRUCTION & DEMOLITION**																

Uniformat					Omniclass Level					Elements	Existing Conditions		Existing Conditions		Design (only) Attribute Table	Stage I		Stage II		Stage III		Construction Attribute Table	Stage IV			
											Captured		Represented			Conceptual Design		Preliminary Design		Basis of design			Coordination Sign-off		As-Constructed	
1	2	3	4	5	1	2	3	4	5		LOA1	MEA	LOA2	MEA		LOD	MEA	LOD	MEA	LOD	MEA		LOD	MEA	LOD	MEA
G					21-	07	00	00		SITEWORK															

Uniformat					Omniclass Level					Elements	Existing Conditions		Existing Conditions		Design (only) Attribute Table	Stage I		Stage II		Stage III		Construction Attribute Table	Stage IV			
											Captured		Represented			Conceptual Design		Preliminary Design		Basis of design			Coordination Sign-off		As-Constructed	
1	2	3	4	5	1	2	3	4	5		LOA1	MEA	LOA2	MEA		LOD	MEA	LOD	MEA	LOD	MEA		LOD	MEA	LOD	MEA
					22-	31	23	16	13	Trenches	30	EXTERNAL	30	EXTERNAL	Common Parameters	200	PANYNJ	200	PANYNJ	300	EXTERNAL	Common Parameters	300	EXTERNAL	300	EXTERNAL
					23-	13				STRUCTURAL AND EXTERIOR ENCLOSURE PRODUCTS																
										PHYSICAL TOOLS																
										CIVIL																

Type	Dataset	Stage	Field Definition	Parameter Name	Parameter Group	Data Type	Allowed Value	Long Description	Example	Source
Project	Project Information	1,2,3,4	Contract Number	PA-CONTRACTNUMBER	General	String	Any	Contract Number assigned	PAT-784.217	Assign By User
Project	Project Information	1,2,3,4	Facility	PA-FACILITY	General	String	Per pick list	Facility	PATH	Assign By User
Project	Project Information	1,2,3,4	Line Department	PA-LINEDEPARTMENT	General	String	Per pick list	Line Department	AVIATION	Assign By User
Project	Project Information	1,2,3,4	PID	PA-PID	General	String	Any	PID Number assigned	16010000	Assign By User
Project	Project Information	1,2,3,4	Project Address	Project Address	General	String	Any	Project Address	Harrison, NJ 07029	Assign By User
Project	Project Information	1,2,3,4	Project Name	Project Name	General	String	Any	Project Name	HARRISON STATION - SOUTHWEST STATION HOUSE, PLATFORM, AND PLAZA REPLACEMENT	Assign By User
Project	Project Information	1,2,3,4	CP Number	PA-CPNUMBER	Views and Sheets	String	Any	Confidential Priviledge Number	Number assigned to identify projects that contain sensitive information	Assign By User
Project	Project Information	1,2,3,4	Work Order	PA-WORKORDER	Views and Sheets	String	Any	Work Order Number	#03	Assign By User
Project	Project Information	1,2,3	BIM Standard Realease Date	PA-BIMSTANDARDRELEASEDATE	General	String	MM/DD/YYYY	BIM Standard Realease Date	MM/DD/YYYY	Assign By User
Project	Project Information	1,2,3	Current Sheet	PA-CURRENTSHEET	Views and Sheets	String	Any	Current Sheet Number	253	Assign By User
Project	Project Information	1,2,3	Discipline	PA-DISCIPLINE	Views and Sheets	String	Per pick list	Discipline of the Model	Mechanical	Assign By User
Project	Project Information	1,2,3	Discipline Chief	PA-DISCIPLINESCHIEF	Views and Sheets	String	Any	Name of the Discipline Chief in charge	Name	Assign By User
Project	Project Information	1,2,3	Program Director	PA-PROGRAMDIRECTOR	Views and Sheets	String	Any	Program Director assigned	Name	Assign By User
Project	Project Information	1,2,3	Signee Name	PA-SIGNEESNAME	Views and Sheets	String	Any	Original Signed By	Name	Assign By User
Project	Project Information	1,2,3	SubDiscipline	PA-SUBDISCIPLINE	Views and Sheets	String	Per pick list	Subdiscipline of the Model	Plumbing	Assign By User
Project	Project Information	1,2,3	Total Sheet	PA-TOTALSHEET	Views and Sheets	String	Any	Total Sheet Number	305	Assign By User

Type	Dataset	Stage	Field Definition	Parameter Name	Parameter Group	Data Type	Allowed Values	Long Description	Example	Source
Space	Locational	1,2,3,4	Room Name	Room Name	Space	String	Must be unique per nomenclature	The name of the room within the facility	Pump Room	Assign By User
Space	Locational	1,2,3,4	Room Number	Room Number	Space	String	Must be unique per nomenclature	The number of the room within the facility	5	Assign By User
Object	3D	1,2,3,4	Width	Width	Construction	Floating Point	>0	The width of the asset in inches or feet	8 (ft)	Revit Built in Parameter
Object	3D	1,2,3,4	Depth	Depth	Construction	Floating Point	>0	The depth of the asset in inches or feet	8 (in)	Revit Built in Parameter
Object	3D	1,2,3,4	Height	Height	Construction	Floating Point	>0	The height of the asset in inches or feet	4 (ft)	Revit Built in Parameter
Object	3D	1,2,3,4	Volume	Volume	Construction	Floating Point	>0	The volume of the asset in cubic inches or feet	20 (cut)	Revit Built in Parameter
Object	3D	1,2,3,4	Material	PA-MATERIAL	Materials and Finishes	String	Any	Brief description of the principal material of the asset	Concrete	Assign By User
Space	3D	3,4	Is heated	PA-ISHEATED	Space	Boolean	Y or N	Is the space mechanically heated	N	Assign By User
Space	3D	3,4	Is ventilated	PA-ISVENTILATED	Space	Boolean	Y or N	Is the space mechanically ventilated	Y	Assign By User
Object	4D	4	Activity ID	PA-ACTIVITYID	Construction	String	Must be unique per nomenclature	Schedule activity ID in accordance with schedule nomenclature	PROJ4-12345	Assign By User
Object	4D	4	Construction Status	PA-CONSTRUCTIONSTATUS	Construction	String	Basis of Design, As Per Shop Drawing, As Constructed	Defines the current status of the element per PANYNJ Workstage	As-Constructed	Assign By User
Object	4D	4	Stage	PA-CONSTRUCTIONSTAGE	Construction	String	Per Schedule and Contract Drawings	Stage in which the project activity occurs in	S3	Assign By User
Object	5D	3,4	Trade	PA-TRADE	Construction	String	Per pick list	Masterformat specifications-writing standard	22 (Division 22 - Plumbing)	Predefined list
Object	5D	3,4	Uniformat Level 4 Code	Assembly Code	Design & Construction	String	Per pick list (see Uniformat Level 4 Code)	Division of work classification per Uniformat 2010 standard	D3050.10	Predefined list
Object	5D	3,4	Uniformat Level 4 Description	Assembly Description	Design & Construction	String	Per pick list (see Uniformat Level 4 Description)	Division of work classification per Uniformat 2010 standard	Facility Hydronic Distribution	Predefined list

Type	Dataset	Stage	Field Definition	Parameter Name	Parameter Group	Data Type	Allowed Values	Long Description	Example	Source
Space	Locational	1,2,3,4	Room Name	Room Name	Space	String	Must be unique per nomenclature	The name of the room within the facility	Pump Room	Assign By User
Space	Locational	1,2,3,4	Room Number	Room Number	Space	String	Must be unique per nomenclature	The number of the room within the facility	5	Assign By User
Object	3D	1,2,3,4	Width	Width	Construction	Floating Point	>0	The width of the asset in inches or feet	8 (ft)	Built in Parameter
Object	3D	1,2,3,4	Depth	Depth	Construction	Floating Point	>0	The depth of the asset in inches or feet	8 (in)	Built in Parameter
Object	3D	1,2,3,4	Height	Height	Construction	Floating Point	>0	The height of the asset in inches or feet	4 (ft)	Built in Parameter
Object	3D	1,2,3,4	Volume	Volume	Construction	Floating Point	>0	The volume of the asset in cubic inches or feet	20 (cut)	Built in Parameter
Object	3D	1,2,3,4	Material	PA-MATERIAL	Materials and Finishes	String	Any	Brief description of the principal material of the asset	Concrete	Assign By User
Space	3D	3,4	Is heated	PA-ISHEATED	Space	Boolean	Y or N	Is the space mechanically heated	N	Assign By User
Space	3D	3,4	Is ventilated	PA-ISVENTILATED	Space	Boolean	Y or N	Is the space mechanically ventilated	Y	Assign By User
Object	4D	4	Activity ID	PA-ACTIVITYID	Construction	String	Must be unique per nomenclature	Schedule activity ID in accordance with schedule nomenclature	PROJ4-12345	Assign By User
Object	4D	4	Construction Status	PA-CONSTRUCTIONSTATUS	Construction	String	Basis of Design, As Per Shop Drawing, As Constructed	Defines the current status of the element per PANYNJ Workstage	As-Constructed	Assign By User
Object	4D	4	Stage	PA-CONSTRUCTIONSTAGE	Construction	String	Per Schedule and Contract Drawings	Stage in project activity occurs in	S3	Assign By User
Object	5D	3,4	Trade	PA-TRADE	Construction	String	Per pick list	Masterformat specifications-writing standard	22	Assign By User
Object	5D	3,4	Uniformat Level 4 Code	Assembly Code	Design & Construction	String	Per pick list (see Uniformat Level 4 Code)	Division of work classification per Uniformat 2010 standard	D3050.10	Assign By User
Object	5D	3,4	Uniformat Level 4 Description	Assembly Description	Design & Construction	String	Per pick list (see Uniformat Level 4 Description)	Division of work classification per Uniformat 2010 standard	Facility Hydronic Distribution	Assign By User
Object	7D	4	Asset Tag	PA-ASSETTAG	Asset Management	String	16-digit string	The contractor will define a 16-digit string for each asset (such number will be connected to the rest of the information related to this same asset). Once the asset is actually placed on site, the physical "asset tag" will be attached to it.	2459820192836580	Asset-specific Revit Category
Object	7D	4	Asset Acronym	PA-ASSETACRONYM	Asset Management	Per pick list (ADS Structure Sheet)	Codes	Combination of Hierarchy CodeSub System Code-Asset Code-Child Asset Code	FUNCT01A-PSBB-TUNN	Asset-specific Revit Category
Object	7D	4	Horizontal Location	PA-HORIZONTALLOCATION	Construction	String	Per BEP	Standardized location of activity in x, y-plane	GN	TBD by Project
Object	7D	4	Vertical Location	PA-VERTICALLOCATION	Construction	String	Per BEP	Standardized location of activity in z-plane	CP	TBD by Project

Revit Category	Revit 2020	Revit 2022
Air System	✓	✓
Air Terminals	✓	✓
Audio Visual Devices		✓
Communication Devices	✓	✓
Data Devices	✓	✓
Doors	✓	✓
Electrical Equipment	✓	✓
Electrical Fixtures	✓	✓
Fire Alarm Devices	✓	✓
Fire Protection		✓
Lighting Devices	✓	✓
Lighting Fixtures	✓	✓
Mechanical Equipment	✓	✓
Mechanical Equipment Sets	✓	✓
Medical Equipment		✓
Nurse Call Devices	✓	✓
Plumbing Fixtures	✓	✓
Security Devices	✓	✓
Signage		✓
Specialty Equipment	✓	✓
Switch System	✓	✓
Telephone Devices	✓	✓
Virtical Circulation		✓
Zone Equipement	✓	✓

Trade		Vertical & Horizontal example list					
Divisions		**Vertical Reference**	**Vertical Reference Description**	**Horizontal Reference**	**Horizontal Reference Description**	**Location Name**	**Location Name Description**
PROCUREMENT AND CONTRACTING REQUIREMENTS GROUP		GN	General	GN	General	GN	General
00	Division 00 — Procurement and Contracting Requirements	FN	Foundation	GN	General	GN	General
SPECIFICATIONS GROUP		L1	Level 1	GN	General	GN	General
General Requirements Subgroup		L1	Level 1	TF	Transformer	T1	Transformer 1
GN	Admin, General, Milestones, etc.	L1	Level 1	TF	Transformer	T2	Transformer 2
01	Division 1 - General Requirements	L1	Level 1	TF	Transformer	T3	Transformer 3
Facility Construction Subgroup		L1	Level 1	TF	Transformer	T4	Transformer 4
02	Division 2 - Existing Conditions	L1	Level 1	CD	Corridor	CD	Corridor
03	Division 3 - Concrete	L1	Level 1	HV	HV Switchgear Room	H1	HV Switchgear Room 1
04	Division 4 - Masonry	L1	Level 1	HV	HV Switchgear Room	H2	HV Switchgear Room 2
05	Division 5 - Metals	L1	Level 1	MV	MV Switchgear Room	M1	MV Switchgear Room 1
06	Division 6 - Wood, Plastics & Composites	L1	Level 1	MV	MV Switchgear Room	M2	MV Switchgear Room 2
07	Division 7 - Thermal and Moisture Protection	L1	Level 1	BT	Battery Room	B1	Battery Room 1
08	Division 8 - Openings	L1	Level 1	BT	Battery Room	B2	Battery Room 2
09	Division 9 - Finishes	L1	Level 1	WM	Water Meter	WM	Water Meter
10	Division 10 - Specialties	L1	Level 1	OP	OPS Room	OP	OPS Room
11	Division 11 - Equipment	L1	Level 1	PF	Power Factor Room	PF	Power Factor Room
12	Division 12 - Furnishings	L1	Level 1	TL	Toilet	TL	Toilet
13	Division 13 - Special Construction	L1	Level 1	JC	Janitor's Closet	JC	Janitor's Closet
14	Division 14 - Conveying Equipment	L1	Level 1	ST	Stair	ST	Stair
Facility Services Subgroup		RF	Roof	GN	General	GN	General
21	Division 21 - Fire Suppression	PP	Parapet	GN	General	GN	General
22	Division 22 - Plumbing	BH	Bulkhead	GN	General	GN	General
23	Division 23 - Heating, Ventilating, & Air Conditioning	SR	Stair Enclosure Roof	GN	General	GN	General
25	Division 25 - Integrated Automation						
26	Division 26 - Electrical						
27	Division 27 - Communications						
28	Division 28 - Electronic Safety & Security						
Site and Infrastructure Subgroup							
31	Division 31 - Earthwork						
32	Division 32 - Exterior Improvements						
33	Division 33 - Utilities						
34	Division 34 - Transportation						
35	Division 35 - Waterway and Marine Construction						
Process Equipment Subgroup							
40	Division 40 - Process Interconnections						
41	Division 41 - Material Processing and Handling Equipment						
42	Division 42 - Process Heating, Cooling, and Drying Equipment						
43	Division 43 - Process Gas and Liquid Handling, Purification, and Storage						
44	Division 44 - Pollution and Waste Control Equipment						
45	Division 45 - Industry-Specific Manufacturing Equipment						
46	Division 46 - Water and Wastewater Equipment						
48	Division 48 - Electrical Power Generation						