

Project Title							ABC
Project type							Renovation
Building Typology							Labs
Area (GSF)							200
Date of submission							12/4/2017
	Definition	Quantity Definition	Quantity	UOM	Cost	Notes / Comments	
<b>A SUBSTRUCTURE</b>					<b>\$0.0</b>		
<b>B SHELL</b>					<b>\$0.0</b>		
<b>C INTERIORS</b>					<b>\$0.0</b>		
<b>D SERVICES</b>					<b>\$0.0</b>		
<b>E EQUIPMENT &amp; FURNISHINGS</b>					<b>\$0.0</b>		
<b>F SPECIAL CONSTRUCTION &amp; DEMOLITION</b>					<b>\$0.0</b>		
<b>G BUILDING SITEWORK</b>					<b>\$0.0</b>		

			<b>\$0.0</b>
		%	
Genral Conditions	10%		\$0.0
Profit & Overhead	6%		\$0.0
Contingency	3%		\$0.0
			<b>\$0.0</b>

**Exhibit I**  
**Uniformat Bid Form, Key & Code Explanation**

Cost code	Definition	UOM
<b>A SUBSTRUCTURE</b>		
A1010 STANDARD FOUNDATIONS		
A101001	WALL FOUNDATIONS	CY
A101002	COLUMN FOUNDATIONS & PILE CAPS	CY
A101003	DEWATERING	SF
A101090	OTHER STANDARD FOUNDATIONS	XX
A1020 SPECIAL FOUNDATIONS		
A102001	PILE FOUNDATIONS	SF
A102002	CAISSONS	SF
A102003	UNDERPINNING	LF
A102004	DEWATERING	SF
A102005	RAFT FOUNDATIONS	CY
A102006	PRESSURE INJECTED GROUTING	SF
A102090	OTHER SPECIAL FOUNDATIONS	XX
A1030 SLAB ON GRADE		
A103001A	STANDARD SLAB ON GRADE - 4" THK	SF
A103001B	STANDARD SLAB ON GRADE - 6" THK	SF
A103001C	STANDARD SLAB ON GRADE - 8" THK	SF
A103002A	STRUCTURAL SLAB ON GRADE - 8" THK	SF
A103002B	STRUCTURAL SLAB ON GRADE - 10" THK	SF
A103003	TRENCHES	LF
A103004	PITS AND BASES	EA
A103005	FOUNDATION DRAINAGE	LF
A103090	OTHER LOWEST FLOOR CONSTRUCTION	XX

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A2010 BASEMENT EXCAVATION		
A201001	EXCAVATION FOR BASEMENTS	CY
A201002	STRUCTURE BACKFILL & COMPACTION	CY
A201003	SHORING	SF
A201090	OTHER BASEMENT EXCAVATION	XX
A2020 BASEMENT WALLS		
A202001	BASEMENT WALL CONSTRUCTION	SF
A202002	MOISTURE PROTECTION	SF
A202003	BASEMENT WALL INSULATION	SF
A202090	OTHER BASEMENT WALLS	XX
<b>B SHELL</b>		
B1010 FLOOR CONSTRUCTION		
B101001A	STRUCTURAL FRAME - WOOD	MBF
B101001B	STRUCTURAL FRAME - CONCRETE	CY
B101001C	STRUCTURAL FRAME - STEEL	TONS
B101002	STRUCTURAL INTERIOR WALLS	SF
B101003	FLOOR DECKS AND SLABS	SF
B101004	INCLINED AND STEPPED FLOORS	SF
B101005	BALCONY CONSTRUCTION	SF
B101006	RAMPS	SF
B101007	FLOOR RACEWAY SYSTEMS	SF
B101090	OTHER FLOOR CONSTRUCTION	XX
B1020 ROOF CONSTRUCTION		
B102001A	STRUCTURAL FRAME - WOOD	MBF
B102001	STRUCTURAL FRAME - CONCRETE	CY

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B102001	STRUCTURAL FRAME - STEEL	TONS
B102002	STRUCTURAL INTERIOR WALLS	SF
B102003	ROOF DECKS AND SLABS	SF
B102004	CANOPIES	SF
B102090	OTHER ROOF CONSTRUCTION	SF
<b>B2010 EXTERIOR WALLS</b>		
B201001A	EXTERIOR CLOSURE - BRICK	SF
B201001B	EXTERIOR CLOSURE - METAL PANEL	SF
B201001C	EXTERIOR CLOSURE - WOOD PANEL	SF
B201001C	EXTERIOR CLOSURE - EFIS	SF
B201002A	EXTERIOR WALL BACKUP CONST - CMU	SF
B201002B	EXTERIOR WALL BACKUP CONST - METAL STUD	SF
B201003	INSULATION & VAPOR RETARDER	SF
B201004	PARAPETS	LF
B201005	EXTERIOR LOUVERS & SCREENS	SF
B201006	BALCONY WALLS & HANDRAILS	LF
B201007	EXTERIOR SOFFITS	SF
B201008	FLASHING	SF
B201009	EXTERIOR PAINTING AND SPECIAL COATINGS	SF
B201010	EXTERIOR JOINT SEALANT	LF
B201011	SUN CONTROL DEVICES	SF
B201012	SCREEN WALLS	LF
B201090	OTHER EXTERIOR WALLS	XX
<b>B2020 EXTERIOR WINDOWS</b>		
B202001	WINDOWS	SF

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B20200101	Aluminum windows	SF
B20200102	Aluminum impact resistant window	SF
B20200103	Steel Window	SF
B20200104	Basement utility window	SF
B20200105	Plain wood window	SF
B20200106	Metal clad wood window	SF
B20200107	Plastic clad wood window	SF
B202002	STOREFRONTS	SF
B20200201	Aluminum framed store front	SF
B20200202	Aluminum framed entrance door & frame	Opng
B20200203	Other Storefronts accessories	XX
B202003	CURTAIN WALLS	SF
B202004	EXTERIOR GLAZING	SF
B202090	OTHER EXTERIOR WINDOWS	XX
<b>B2030 EXTERIOR DOORS</b>		
B203001	SOLID DOORS	EA
B203002	GLAZED DOORS	EA
B203003	REVOLVING DOORS	EA
B203004	OVERHEAD AND ROLL-UP DOORS	SF
B203005	HANGAR DOORS	SF
B203006	BLAST RESISTANT DOORS	SF
B203007	GATES	SF
B203008	EXTERIOR DOOR HARDWARE	EA
B203090	OTHER EXTERIOR SPECIALTY DOORS	XX
B203091	OTHER EXTERIOR PERSONNEL DOORS	XX

<b>B3010 ROOF COVERINGS</b>		
B301001A	STEEP SLOPE ROOF SYSTEMS - STANDING SEAM	SF
B301001B	STEEP SLOPE ROOF SYSTEMS - SHINGLES	SF
B301001C	STEEP SLOPE ROOF SYSTEMS - OTHER	SF
B301002A	LOW SLOPE ROOF SYSTEMS - TPO	SF
B301002B	LOW SLOPE ROOF SYSTEMS - FIBREGLASS	SF
B301002C	LOW SLOPE ROOF SYSTEMS - MODIFIED BITUMEN	SF
B301002D	LOW SLOPE ROOF SYSTEMS - OTHER	SF
B301003	ROOF INSULATION & FILL	SF
B301004	FLASHINGS & TRIM	SF
B301005	GUTTERS & DOWNSPOUTS	LF
B301006	ROOF OPENINGS AND SUPPORTS	SF
B301090	OTHER ROOFING	
<b>C INTERIORS</b>		
<b>C1010 PARTITIONS</b>		
C101001	FIXED PARTITIONS	SF
C101002	DEMOUNTABLE PARTITIONS	SF
C101003	RETRACTABLE PARTITIONS	SF
C101004	INTERIOR GUARDRAILS & SCREENS	LF
C101005	INTERIOR WINDOWS	SF
C101006	GLAZED PARTITIONS & STOREFRONTS	SF
C101007	INTERIOR GLAZING	SF
C101008	INTERIOR JOINT SEALANT	LF
C101090	OTHER PARTITIONS	XX
<b>C1020 INTERIOR DOORS</b>		

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C102001	STANDARD INTERIOR DOORS	LEF
C102002	GLAZED INTERIOR DOORS	LEF
C102003	FIRE DOORS	LEF
C102004	SLIDING & FOLDING DOORS	SF
C102005	INTERIOR OVERHEAD DOORS	SF
C102006	INTERIOR GATES	SF
C102007	INTERIOR DOOR HARDWARE	EA
C10200701	Card key access control hardware	EA
C10200702	Keypad access control hardware	EA
C10200703	Biometric access control hardware	EA
C10200704	Standard door hardware with lockset	EA
C10200705	Standard door hardware without lockset	EA
C10200706	Other door hardware	XX
C102090	OTHER INTERIOR SPECIALTY DOORS	XX
C102091	OTHER INTERIOR PERSONNEL DOORS	XX
<b>C1030 SPECIALTIES</b>		
C103001	COMPARTMENTS, CUBICLES & TOILET PARTITIONS	EA
C10300101	Toilet partitions	EA
C10300102	HC toilet partitions	EA
C10300103	Urinal partition	EA
C103002	TOILET & BATH ACCESSORIES	EA
C10300201	Grab bars	EA
C10300202	Hand dryers	EA
C10300203	Mirror	EA
C10300204	Soap dispenser	EA

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C10300205	Napkin dispenser	EA
C10300206	Toilet tissue dispenser	EA
C10300207	Toilet seat cover dispenser	EA
C10300208	Towel dispenser with waste receptical	EA
C10300209	Towel dispenser touchless	EA
C10300210	Other toilet & bath accessories	XX
C103003	MARKER BOARDS & TACK BOARDS	EA
C10300301	Electronic marker boards	EA
C10300302	Porcelain finish marker boards	EA
C10300303	Magnetic control boards	EA
C10300304	Fixed tack boardss	EA
C10300305	Other visual display items	XX
C103004	IDENTIFYING DEVICES	EA
C10300401	Building directory	EA
C10300402	Dimentional letter signange	EA
C10300403	Door signs	EA
C10300404	Wayfinding signs	EA
C10300405	Post & panel signage	EA
C10300406	Traffic signs	EA
C10300407	Other identifying devices	XX
C103005	LOCKERS	EA
C10300501	Steel baked enamel lockers	EA
C10300502	ADA compliant lockers	EA
C10300503	Locker room benches	EA
C10300504	Other Lockers	XX

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C103006	SHELVING	LF
C10300601	Metal industrial shelving	LF
C10300602	Wood shelving	LF
C10300603	Wire rack shelving	LF
C10300604	Other shelving	XX
C103007	FIRE EXTINGUISHER CABINETS	EA
C10300701	Fire equipment cabinets, hose rack assembly, steel box	EA
C10300702	Fire equipment cabinets, valve cabinet, steel box	EA
C10300703	Fire equipment cabinets, portable extinguisher, steel box	EA
C10300704	Other Fire equipment cabinets	EA
C103008	COUNTERS	LF
C10300801	Stainless steel countertops	LF
C10300802	Wood Countertops	LF
C10300803	Plastic lamianted countertops	LF
C10300804	Ceramic tile countertops	LF
C10300805	Granite countertops	LF
C10300806	Epoxy resin countertops	LF
C10300807	Other countertops	LF
C103009	CABINETS	LF
C10300901	Wood base cabinets	LF
C10300902	Wood wall cabinets	LF
C10300903	Commercial kitchen cabinets	LF
C10300904	Display cabinets	LF
C10300905	Metal laboratory cabinets	LF
C10300906	Educational cabinets	LF

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C10300907	Key cabinets	LF
C10300908	Filing cabinets	LF
C10300909	Other Cabinets	XX
C103010	CASEWORK	LF
C103011	CLOSETS	LF
C103012	FIRESTOPPING PENETRATIONS	EA
C103013	SPRAYED FIRE-RESISTIVE MATERIALS	SF
C103014	ENTRANCE FLOOR GRILLES AND MATS	SF
C103015	ORNAMENTAL METALWORK	EA
C103090	OTHER INTERIOR SPECIALTIES	EA
C10309001	Coat racks	EA
C10309002	Corner guard	LF
C10309003	Protective wall covering	SF
C10309004	Door and frame protector	EA
<b>C2010 STAIR CONSTRUCTION</b>		
C201001	INTERIOR AND EXTERIOR STAIRS	FLT
C201002	FIRE ESCAPE STAIRS	FLT
C201090	STAIR HANDRAILS, GUARDRAILS AND ACCESSORIE	XX
<b>C3010 WALL FINISHES</b>		
C301001	CONCRETE WALL FINISHES	SF
C301002	PLASTER WALL FINISHES	SF
C301003	GYPSUM WALLBOARD FINISHES	SF
C301004	TILE & TERRAZZO WALL FINISHES	SF
C301005	WALL COVERINGS	SF
C301006	ACOUSTICAL PANELS ADHERED TO WALLS	SF

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C301090	OTHER WALL FINISHES	XX
C3020 FLOOR FINISHES		
C302001	TILE FLOOR FINISHES	SF
C302002	TERRAZZO FLOOR FINISHES	SF
C302003	WOOD FLOORING	SF
C302004	RESILIENT FLOOR FINISHES	SF
C302005	CARPETING	SF
C302006	MASONRY & STONE FLOORING	SF
C302007	WALL BASE FINISHES	LF
C302008	STAIR FINISHES	SF
C302009	FLOOR TOPPINGS AND TRAFFIC MEMBRANES	SF
C302010	HARDENERS AND SEALERS	SF
C302011	RAISED ACCESS FLOORING	SF
C302090	OTHER FLOORING & FLOOR FINISHES	XX
C3030 CEILING FINISHES		
C303001	ACOUSTICAL CEILING TILES & PANELS	SF
C303002	GYPSUM WALLBOARD CEILING FINISHES	SF
C303003	PLASTER CEILING FINISHES	SF
C303004	WOOD CEILINGS	SF
C303005	SUSPENSIONS SYSTEMS	SF
C303006	METAL STRIP CEILINGS	SF
C303090	OTHER CEILING & CEILING FINISHES	XX
C3040 INTERIOR COATINGS AND SPECIAL FINISHES		
C304001	GENERAL REQUIREMENTS	SF
C304002	CONCRETE FINISHES	SF

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C304003	CONCRETE MASONRY FINISHES	SF
C304004	METAL FINISHES	SF
C304005	INTERIOR WOOD FINISHES	SF
C304006	GYPSUM WALLBOARD FINISHES	SF
C304007	SPECIAL COATINGS ON WALLS	SF
<b>D SERVICES</b>		
D1010 ELEVATORS AND LIFTS		
D101002	PASSENGER ELEVATORS	STP
D101003	FREIGHT ELEVATORS	STP
D1020 WEIGHT HANDLING EQUIPMENT		EA
D1090 OTHER CONVEYING SYSTEMS		EA
D2010 PLUMBING FIXTURES		
D201001	WATERCLOSETS	EA
D201002	URINALS	EA
D201003	LAVATORIES	EA
D201004	SINKS	EA
D201005	SHOWERS	EA
D201006	TUBS	EA
D201007	DRINKING FOUNTAINS & COOLERS	EA
D201008	EMERGENCY EYE WASH	EA
D201090	EMERGENCY FIXTURES	XX
D2020 DOMESTIC WATER DISTRIBUTION		
D202001	PIPES & FITTINGS	EA
D202002	VALVES & HYDRANTS	EA
D202003	DOMESTIC WATER EQUIPMENT	EA

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D202004	INSULATION & IDENTIFICATION	EA
D202005	SPECIALTIES	EA
D202090	OTHER DOMESTIC WATER SUPPLY	XX
D2030 SANITARY WASTE		
D203001	WASTE PIPE & FITTINGS	EA
D203002	VENT PIPE & FITTINGS	EA
D203003	FLOOR DRAINS	EA
D203004	SANITARY AND VENT EQUIPMENT	EA
D203005	INSULATION & IDENTIFICATION	EA
D203090	OTHER SANITARY WASTE	XX
D2040 RAIN WATER DRAINAGE		
D204001	PIPE & FITTINGS	LF
D204002	ROOF DRAINS	EA
D204003	RAINWATER DRAINAGE EQUIPMENT	EA
D204004	INSULATION & IDENTIFICATION	LF
D204090	OTHER RAIN WATER DRAINAGE SYSTEM	XX
D2090 OTHER PLUMBING SYSTEMS		
D209001	SPECIAL PIPING SYSTEMS	EA
D209002	ACID WASTE SYSTEMS	EA
D209003	INTERCEPTORS	EA
D209005	COMPRESSED AIR SYSTEM (NON-BREATHING)	PSI
D209090	OTHER SPECIAL PLUMBING SYSTEMS	XX
D3010 ENERGY SUPPLY		
D301001	OIL SUPPLY SYSTEM	MBH
D301002	GAS SUPPLY SYSTEM	MBH

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D301003	STEAM SUPPLY SYSTEM (FROM CENTRAL PLANT)	MBH
D301004	HOT WATER SUPPLY SYSTEM (FROM CENTRAL PLANT)	MBH
D301005	SOLAR ENERGY SUPPLY SYSTEMS	MBH
D301006	WIND ENERGY SUPPLY SYSTEM	MBH
D301007	COAL SUPPLY SYSTEM	MBH
D301090	OTHER ENERGY SUPPLY	XX
<b>D3020 HEAT GENERATING SYSTEMS</b>		
D302001	BOILERS	MBH
D302004	AUXILIARY EQUIPMENT	MBH
D302005	EQUIPMENT THERMAL INSULATION	SF
D302090	OTHER HEAT GENERATING SYSTEMS	XX
<b>D3030 COOLING GENERATING SYSTEMS</b>		
D303001	CHILLED WATER SYSTEMS	TON
D303002	DIRECT EXPANSION SYSTEMS	TON
D303090	OTHER COOLING GENERATING SYSTEMS	XX
<b>D3040 DISTRIBUTION SYSTEMS</b>		
D304001	AIR DISTRIBUTION, HEATING & COOLING	MCFM
D304002	STEAM DISTRIBUTION SYSTEMS	MBH
D304003	HOT WATER DISTRIBUTION SYSTEMS	MBH
D304004	CHANGE OVER DISTRIBUTION SYSTEMS	MBH
D304005	GLYCOL DISTRIBUTION SYSTEMS	MBH
D304006	CHILLED WATER DISTRIBUTION SYSTEMS	TON
D304007	EXHAUST SYSTEMS	MCF
D304008	AIR HANDLING UNITS	MCFM
D304090	OTHER DISTRIBUTION SYSTEMS	XX

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D3050 TERMINAL & PACKAGE UNITS		
D305001	UNIT VENTILATORS	EA
D305002	UNIT HEATERS	EA
D305003	FAN COIL UNITS	EA
D305004	FIN TUBE RADIATION	EA
D305005	ELECTRIC HEATING	EA
D305006	PACKAGE UNITS	EA
D305090	OTHER TERMINAL & PACKAGE UNITS	XX
D3060 CONTROLS & INSTRUMENTATION		MBH
D3070 SYSTEMS TESTING & BALANCING		
D3090 OTHER HVAC SYSTEMS AND EQUIPMENT		EA
D4020 FIRE SUPPRESSION WATER SUPPLY AND EQUIPMENT		
D402001	FIRE PROTECTION WATER PIPING AND EQUIPMENT	LF
D402002	FIRE PUMP	EA
D4030 STANDPIPE SYSTEMS		
D403001	STANDPIPE EQUIPMENT & PIPING	EA
D4040 SPRINKLERS		
D404001	SPRINKLERS AND RELEASING DEVICES	EA
D404002	SPRINKLER WATER SUPPLY EQUIPMENT AND PIPING	EA
D4090 OTHER FIRE PROTECTION SYSTEMS		EA
D5010 ELECTRICAL SERVICE & DISTRIBUTION		
D501001	MAIN TRANSFORMERS	KVA
D501002	SERVICE ENTRANCE EQUIPMENT	AMP
D501003	INTERIOR DISTRIBUTION TRANSFORMERS	KVA
D501004	PANELBOARDS	AMP

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D501005	ENCLOSED CIRCUIT BREAKERS	AMP
D501006	MOTOR CONTROL CENTERS	AMP
D501090	OTHER SERVICE AND DISTRIBUTION	XX
D5020 LIGHTING & BRANCH WIRING		
D502001	BRANCH WIRING	SF
D502002	LIGHTING EQUIPMENT	EA
D502090	OTHER LIGHTING AND BRANCH WIRING	XX
D5030 COMMUNICATIONS & SECURITY		
D503001	TELECOMMUNICATIONS SYSTEMS	EA
D503002	PUBLIC ADDRESS SYSTEMS	SF
D503003	INTERCOMMUNICATIONS SYSTEMS	EA
D503004	TELEVISION SYSTEMS	EA
D503005	SECURITY SYSTEMS	SF
D503090	OTHER COMMUNICATIONS & ALARM SYSTEMS	XX
D5040 FIRE ALARM AND DETECTION SYSTEMS		
D504001	FIRE ALARM DISTRIBUTION	SF
D504002	FIRE ALARM DEVICES	EA
D5090 OTHER ELECTRICAL SERVICES		
D509001	GENERAL CONSTRUCTION ITEMS (ELECTRICAL)	SF
D509002	EMERGENCY LIGHTING & POWER	SF
D509003	GROUNDING SYSTEMS	SF
D509004	LIGHTNING PROTECTION	SF
D509005	ELECTRIC HEATING	SF
D509006	ENERGY MANAGEMENT CONTROL SYSTEM	SF
D509090	OTHER SPECIAL SYSTEMS AND DEVICES	XX

<b>E EQUIPMENT &amp; FURNISHINGS</b>		
E1020 INSTITUTIONAL EQUIPMENT		
E102003	LABORATORY EQUIPMENT	EA
E102005	AUDITORIUM & STAGE EQUIPMENT	EA
E102006	LIBRARY EQUIPMENT	EA
E1030 VEHICULAR EQUIPMENT		
E103001	PARKING CONTROL EQUIPMENT	EA
E103002	LOADING DOCK EQUIPMENT	EA
E103004	AUTOMOTIVE SHOP EQUIPMENT	EA
E1090 OTHER EQUIPMENT		
E2010 FIXED FURNISHINGS		
E201002	WINDOW TREATMENTS	SF
E201003	SEATING (FIXED)	EA
<b>F SPECIAL CONSTRUCTION &amp; DEMOLITION</b>		
F20 BUILDING DEMOLITION		
F2010 NON HAZARDOUS DEMOLITION		SF
F2020 HAZARDOUS COMPONENTS DEMOLITION AND ABATEMENT		SF
F2030 SELECTIVE DEMOLITION		SF
F2040 TOTAL DEMOLITION		SF
<b>G BUILDING SITEWORK</b>		
G10 SITE PREPARATIONS		
G1010 SITE CLEARING		ACR
G1020 SITE DEMOLITION & RELOCATIONS		
G102001	BUILDING MASS DEMOLITION	CF
G102002	ABOVE GROUND SITE DEMOLITION	SY

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G102003	UNDERGROUND SITE DEMOLITION	SY
G102005	UTILITY RELOCATION	LF
G102006	FENCING RELOCATION	LF
G102007	SITE CLEANUP	SY
G102090	OTHER SITE DEMOLITION & RELOCATIONS	XX
<b>G1030 SITE EARTHWORK</b>		
G103001	GRADING	SY
G103002	COMMON EXCAVATION	CY
G103003	ROCK EXCAVATION	CY
G103004	FILL & BORROW	CY
G103005	COMPACTION	CY
G103006	SOIL STABILIZATION	CY
G103007	SLOPE STABILIZATION	SY
G103008	SOIL TREATMENT	SY
G103009	SHORING	SF
G103010	TEMPORARY DEWATERING	SY
G103011	TEMPORARY EROSION & SEDIMENT CONTROL	SF
G103090	OTHER SITE EARTHWORK	XX
<b>G2010 ROADWAYS</b>		SY
<b>G2020 PARKING LOTS</b>		EA
<b>G2030 PEDESTRIAN PAVING</b>		
G203001	PAVING - TYPE A: BRICK PAVING WITH GRANITE CURB AND GUTTER	SY
G203002	PAVING - TYPE B: BRICK PAVING WITH BRICK BANDS	SY
G203003	PAVING - TYPE C: CONCRETE PAVING WITH BRICK BANDS	SY
G203004	PAVING - TYPE D: CONCRETE PAVING WITH CONCRETE BANDS	SY

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G203005	PAVING - TYPE E: UTILITY CONCRETE PAVING	SY
G203006	PAVING - TYPE F: OPEN-JOINT CONCRETE UNIT PAVING	SY
G203007	PAVING - TYPE G: UNCONSOLIDATED AGGREGATE PAVING	SY
G2040 SITE DEVELOPMENT		
G204001	FENCING & GATES	LF
G204002	RETAINING WALLS AND FREESTANDING WALLS	SY
G204003	EXTERIOR FURNISHINGS	EA
G204004	SECURITY STRUCTURES	EA
G204005	SIGNAGE	EA
G204006	FOUNTAINS & POOLS	EA
G204007	PLAYING FIELDS	EA
G204008	TERRACE AND PERIMETER WALLS	SY
G204009	FLAGPOLES	EA
G204090	OTHER SITE IMPROVEMENTS	XX
G2050 LANDSCAPING		
G205001	FINE GRADING & SOIL PREPARATION	SY
G205002	EROSION CONTROL MEASURES	SY
G205003	TOPSOIL & PLANTING BEDS	SY
G205004	SEEDING, SPRIGGING AND SODDING	SY
G205005	PLANTINGS	EA
G205006	PLANTERS	EA
G205007	IRRIGATION SYSTEMS	SY
G205090	OTHER LANDSCAPING	XX
G3010 WATER SUPPLY		
G301001	WELL SYSTEMS	EA

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G301002	POTABLE WATER DISTRIBUTION	LF
G301003	POTABLE WATER STORAGE	GAL
G301004	FIRE PROTECTION WATER DISTRIBUTION	LF
G301005	FIRE PROTECTION WATER STORAGE	GAL
G301006	NON-POTABLE WATER DISTRIBUTION	LF
G301007	PUMPING STATIONS	GPM
G301008	PACKAGED WATER TREATMENT PLANTS	GPD
G301090	OTHER WATER SUPPLY	XX
<b>G3020 SANITARY SEWER</b>		
G302001	SANITARY SEWER PIPING	LF
G302002	SANITARY SEWER MANHOLES & CLEANOUTS	EA
G302003	LIFT STATIONS AND PUMPING STATIONS	GPM
<b>G3030 STORM SEWER</b>		
G303001	STORM SEWER PIPING	LF
G303002	STORM SEWER STRUCTURES	EA
G303003	LIFT STATIONS	GPM
G303004	CULVERTS	LF
G303005	HEADWALLS	EA
<b>G3040 HEATING DISTRIBUTION</b>		
G304003	UNDERGROUND HOT WATER SYSTEMS	LF
G304004	UNDERGROUND STEAM DISTRIBUTION SYSTEMS	LF
G304005	REINFORCED CONCRETE MANHOLES & VALVE BOXES	EA
G304006	PUMPING STATIONS	EA
G304090	OTHER HEATING DISTRIBUTION	XX
<b>G3050 COOLING DISTRIBUTION</b>		

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G305001	OVERHEAD COOLING SYSTEMS	LF
G305002	UNDERGROUND COOLING SYSTEMS	LF
G305003	TRENCHBOXES	LF
G305004	WELLS FOR COOLING	EA
G305005	PUMPING STATIONS	EA
G305006	ON-SITE COOLING TOWERS	EA
G305090	OTHER COOLING DISTRIBUTION	XX
<b>G4010 ELECTRICAL DISTRIBUTION</b>		
G401001	SUBSTATIONS	KVA
G401002	TRANSFORMERS	KVA
G401003	SWITCHES, CONTROLS & DEVICES	EA
G401004	OVERHEAD ELECTRIC CONDUCTORS	LF
G401005	TOWERS, POLES, CROSSARMS & INSULATORS	EA
G401006	UNDERGROUND ELECTRIC CONDUCTORS	LF
G401007	DUCTBANKS, MANHOLES, HANDHOLES & RACEWAYS	EA
G401008	GROUNDING SYSTEMS	EA
G401009	METERING	EA
G401010	CATHODIC PROTECTION	EA
G401011	EQUIPMENT REQUIREMENTS FOR COASTAL AND HIGH HUMIDITY AREAXX	
G401090	OTHER ELECTRIC TRANSMISSION & DISTRIBUTION	XX
<b>G4020 SITE LIGHTING</b>		
G402001	EXTERIOR LIGHTING FIXTURES & CONTROLS	EA
G402002	SPECIAL SECURITY LIGHTING SYSTEMS	EA
G402003	OTHER AREA LIGHTING	EA
G402004	LIGHTING POLES	EA

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G402005	UNDERGROUND ELECTRIC CONDUCTORS	LF
G402006	DUCTBANKS, MANHOLES & HANDHOLES	EA
G402007	GROUNDING SYSTEMS	EA
G4030 SITE COMMUNICATION AND SECURITY		
G403001	TELECOMMUNICATIONS SYSTEMS	LF
G403002	CABLE TV SYSTEMS (CATV)	LF
G403003	CABLES & WIRING	LF
G403004	DUCTBANKS, MANHOLES & HANDHOLES	EA
G403005	TOWERS, POLES & STANDS	EA
G403006	TV CAMERAS & MONITORS	EA
G403007	ELECTRONIC SECURITY SYSTEMS (ESS)	EA
G403008	OTHER COMMUNICATION & ALARM	XX
G403009	GROUNDING SYSTEMS	EA
G403090	OTHER SECURITY SYSTEMS	XX
G4090 OTHER SITE ELECTRICAL UTILITIES		
G409001	SACRIFICIAL ANODE CATHODIC PROTECTION SYSTEM	EA
G409002	INDUCED CURRENT CATHODIC PROTECTION SYSTEM	LF
G409090	OTHER CATHODIC PROTECTION	XX
G90 OTHER SITE CONSTRUCTION		LS

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Final Combined Uniformat II / WBS 9/18/06, Revision 2					E UOM	M UOM	Quantity Definition	WBS Ref No
Unf L1	Unf L2	Unf L3	WBS L4	Definition				
<b>A SUBSTRUCTURE</b>					SF	M2	Footprint area at grade	01
				This system includes all work below the lowest floor construction (usually slab-on-grade) and the enclosing horizontal and vertical elements required to form a basement, together with the necessary mass excavation and backfill.				
<b>A10 FOUNDATIONS</b>					SF	M2	Footprint area at grade	
				Foundations includes the following Standard Foundations: wall and column foundations; foundation walls up to level of top of slab on grade; pile caps; foundation excavation, backfill, and compaction; footings and bases; perimeter insulation; perimeter drainage; anchor plates; and dewatering. Special Foundations include pile foundations, caissons, underpinning, dewatering, raft foundations, and pressure injected grouting. Slab on grade includes standard slab on grade, structural slab on grade, inclined slab on grade, trenches, pits and bases, and foundation drainage.				
			<b>A1010 STANDARD FOUNDATIONS</b>		SF	M2	Footprint area at grade	0101
				Continuous footings, spread footings, grade beams, foundation walls, pile caps, and column piers.				
			<b>A101001 WALL FOUNDATIONS</b>		LF	M	Length of footings and/or wall foundations	010101
				Continuous Footings - Assemblies include excavation, hand-shaped bottom, compacted backfill, formwork and keyway, reinforcing steel, concrete and screed finish.				
				Foundation Walls - Include work items associated with CIP foundation walls, grade beams, or CMU walls. Assemblies include excavation, compacted backfill, perimeter insulation, perimeter drainage, formwork, reinforcing steel, concrete or CMU, and wall finish.				
			<b>A101002 COLUMN FOUNDATIONS &amp; PILE CAPS</b>		EA	EA	Number of footings, pile caps and/or piers	010102
				Spread Footings: Individual or part of continuous pier footings. Assemblies include excavation, backfill and compaction, formwork, reinforcing steel, and concrete and screed finish. If structural steel columns set directly on spread footings, anchor bolts are included in this assembly.				
				Pile Caps - Assemblies include excavation if required (normally due to installation of piles, the subgrade is at desired level for pile cap), hand-shaped bottom, compacted backfill, formwork, reinforcing steel, and concrete and screed finish. If structural steel columns set directly on spread footings, anchor bolts are included in this assembly.				
				Column Piers - Assemblies include formwork, reinforcing steel, concrete or CMU, finish, break ties and patch, and set anchor bolts.				
			<b>A101003 DEWATERING</b>		SF	M2	Dewatered area	
				Dewatering is the removal of water from excavations. The two principle methods of dewatering are by pump or by a system involving the sinking of a series of well-points around the area and extracting the water by suction pump. Assemblies would include pumps or well points and all associated dewatering materials and equipment.				
			<b>A101090 OTHER STANDARD FOUNDATIONS</b>		XX	XX		01019X
				Standard foundations not described by the assembly categories listed above.				
			<b>A1020 SPECIAL FOUNDATIONS</b>		SF	M2	Footprint area at grade	0102
				All work associated with special foundations including piles, caissons, and any other special foundation situation.				
			<b>A102001 PILE FOUNDATIONS</b>		SF	M2	Footprint area at grade	010201
				CIP concrete piles, precast concrete piles, steel pipe piles, steel H-piles, step-tapered steel piles, and treated wood piles. Applicable assemblies would include the material for piles, pile driving, and pile cut-offs if required.				
			<b>A102002 CAISSONS</b>		SF	M2	Footprint area at grade	010202
				Drilled Caissons - Assemblies include drilled caissons, steel casings if required, reinforcing steel, bell bottom excavation, concrete, and loading and hauling of excavated material.				
			<b>A102003 UNDERPINNING</b>		LF	M	Length of underpinning	010203
				Underpinning is the provision of permanent support for existing buildings by extending their foundations to a new, lower level containing the desired bearing stratum. Assemblies include excavation, backfill, and underpinning materials.				
			<b>A102004 DEWATERING</b>		SF	M2	Dewatered area	010204
				Dewatering is the removal of water from excavations. The two principle methods of dewatering are by pump or by a system involving the sinking of a series of well-points around the area and extracting the water by suction pump. Assemblies would include pumps or well points and all associated dewatering materials and equipment.				
			<b>A102005 RAFT FOUNDATIONS</b>		SF	M2	Area of raft foundation	010205
				Raft foundations or spread foundations consist of a solid slab of heavily reinforced concrete covering the entire building footprint area.				
			<b>A102006 PRESSURE INJECTED GROUTING</b>		SF	M2	Footprint area at grade	010206
				Assemblies provide for injecting cement grout for foundation stabilization.				
			<b>A102090 OTHER SPECIAL FOUNDATIONS</b>		XX	XX		01029X
				These could include cofferdams, soil compaction foundations, and other special foundations. Assemblies would include all material and labor necessary to perform the work for the special foundation condition.				
			<b>A1030 SLAB ON GRADE</b>		SF	M2	Footprint area at grade	0103
				A slab poured on earth, whether on undisturbed or fill soil.				
			<b>A103001 STANDARD SLAB ON GRADE</b>		SF	M2	Area of slab	010301
				Standard slab-on-grade is supported by compacted earth or gravel fill. The soil bearing capacity is sufficient to support the slab. Assemblies include fine grade, gravel fill, under-slab insulation, edge forms, termite treatment (interior slabs only), vapor barrier, reinforcing, expansion joints, control joints, and finish and curing. Assemblies are based on thickness of slab.				
			<b>A103002 STRUCTURAL SLAB ON GRADE</b>		SF	M2	Area of slab	010302
				A structural slab-on-grade is not supported by compacted earth or gravel fill. The soil bearing capacity is insufficient to support the slab. A structural slab is generally a minimum of eight inches thick and will be reinforced with reinforcing bars rather than welded wire fabric. Assemblies include fine grade, gravel fill, under-slab insulation, edge forms, termite treatment, (interior slabs only), vapor barrier, reinforcing, expansion joints, control joints, and finish and curing. Assemblies are based on thickness of slab.				
			<b>A103003 TRENCHES</b>		LF	M	Length of trench	010304
				Cast-in-place trenches. Assemblies include excavation, hand-shaped bottoms, compacted backfill, formwork, reinforcing steel, concrete, and concrete finish. Examples include trench drains and dust trenches.				
			<b>A103004 PITS AND BASES</b>		EA	EA	Number of pits and bases	010305

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Unf L1	Unf L2	Unf L3	WBS L4	Definition				
				Cast-in-place pits and bases. Assemblies include excavation, hand-shaped bottoms, compacted backfill, formwork, reinforcing steel, concrete, and concrete finish. Examples include elevator pits, dock leveler pits, oil change pits, and bases for equipment.				
			<b>A103005 FOUNDATION DRAINAGE</b>	Foundation drainage directly associated with draining the foundation. This category does not include storm drainage piping for site. It would include drain pipe or drain tile at foundation or basement for specific purposes of draining foundation or basement. Assemblies would include excavation, hand-shaped bottoms, gravel, compacted backfill, and drain pipe, including accessories.	LF	M	Length of foundation	010306
			<b>A103090 OTHER LOWEST FLOOR CONSTRUCTION</b>	Lowest floor construction not described by the assembly categories listed above.	XX	XX		01039X
			<b>A20 BASEMENT CONSTRUCTION</b>		CY	M3	Volume of excavation	
				Work includes basement excavation, and basement walls.				
			<b>A2010 BASEMENT EXCAVATION</b>	Excavation work associated with constructing a basement.	CY	M3	Volume of excavation	0104
			<b>A201001 EXCAVATION FOR BASEMENTS</b>	All excavation, stockpiling, and hauling associated with basement excavations are included in this assembly.	CY	M3	Volume of excavation	010401
			<b>A201002 STRUCTURE BACKFILL &amp; COMPACTION</b>	All backfill including hauling in of suitable soils and all necessary compaction is included in this assembly.	CY	M3	Volume of backfill	010402
			<b>A201003 SHORING</b>	This type of shoring is to resist horizontal pressure and not intended to carry vertical loads. Assemblies would include sheet piling or other material and labor used to hold back earth around the perimeter of an excavation.	SF	M2	Shoring contact area	010403
			<b>A201090 OTHER BASEMENT EXCAVATION</b>	Basement excavation not described by the assembly categories listed above.	XX	XX		01049X
			<b>A2020 BASEMENT WALLS</b>		SF	M2	Area of wall	0105
				Assembly includes basement perimeter walls that are below grade and below the ground floor level of the building; this also includes elevator pits and other pits.				
			<b>A202001 BASEMENT WALL CONSTRUCTION</b>	This includes work items associated with CIP foundation walls or CMU walls and penetrations. Assemblies include formwork, reinforcing steel, concrete or CMU, and wall finish and curing.	SF	M2	Area of wall	010501
			<b>A202002 MOISTURE PROTECTION</b>	This assembly would be based on the type and square footage of waterproofing used on the foundation wall.	SF	M2	Area of wall moisture protection	010502
			<b>A202003 BASEMENT WALL INSULATION</b>	This assembly would be based on the type and square footage of insulation used on the foundation wall.	SF	M2	Area of wall insulation	010503
			<b>A202090 OTHER BASEMENT WALLS</b>	Basement walls not described by the assembly categories listed above.	XX	XX		01059X
			<b>B SHELL</b>		SF	M2	Area of supported floors	
				This system includes all structural slabs, and decks and supports within basements and above grade. Note that the structural work will include both horizontal items (slabs, decks, etc.) and vertical structural components (columns and interior structural walls). Exterior load bearing walls are not included in this system but in System B2010, Exterior Walls.				
			<b>B10 SUPERSTRUCTURE</b>		SF	M2	Area of supported floors	02
				Work includes floor construction and roof construction.				
			<b>B1010 FLOOR CONSTRUCTION</b>	This construction can be wood, concrete, CMU, steel frame, etc.	SF	M2	Area of supported floors	0201
			<b>B101001 STRUCTURAL FRAME</b>	The structural frame could consist of structural steel including columns, beams, joists, and all associated items. It could be a concrete frame utilizing concrete or masonry columns and concrete girders and beams. The structural frame could be wood columns with wood beams or wood trusses. The structural frame could be a combination of the above. For example, concrete or masonry columns with structural steel beams and joists. All associated work items should be included in each assembly. Separate assemblies would be used for different types of construction. The unit of measure at the assembly level is the square footage of the supported area. Decks and slabs are not included in this assembly.	SF	M2	Area of supported floors	020101
			<b>B101002 STRUCTURAL INTERIOR WALLS</b>	Assemblies would be CIP or CMU walls or other structural interior walls. The assemblies would include the labor and material required to perform the construction tasks associated with this type of wall.	SF	M2	Area of wall	020102
			<b>B101003 FLOOR DECKS AND SLABS</b>	Slabs above grade should be broken into assemblies according to their particular type of construction (i.e., flat slab, pan slab, precast or pre-stressed slab, four-way slab, slabs on metal or wood decking with concrete fill, etc.). All associated work items should be included in each assembly, such as expansion and contraction joints.	SF	M2	Area of supported floors	020103
			<b>B101004 INCLINED AND STEPPED FLOORS</b>	This assembly should be broken down according to their particular type of construction (i.e., flat slab, pan slab, precast or pre-stressed slab, four-way slab, slabs on metal or wood decking with concrete fill, etc.). All associated work items should be included in each assembly, such as expansion and contraction joints.	SF	M2	Area of inclined & stepped floors	
			<b>B101005 BALCONY CONSTRUCTION</b>	Balconies above grade should be broken into assemblies according to their particular type of construction. All associated items including handrails should be included in the assembly.	SF	M2	Area of supported balconies	020104
			<b>B101006 RAMPS</b>	Ramps above grade should be broken into assemblies according to their type of construction. All associated items including handrails should be included in the assembly.	SF	M2	Area of supported ramps	020105

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			<b>B101007</b>	<b>FLOOR RACEWAY SYSTEMS</b>	SF	M2	Gross floor area	020106
				Under floor or in-slab conduit including conduit and all associated devices.				
			<b>B101090</b>	<b>OTHER FLOOR CONSTRUCTION</b>	XX	XX		02019X
				Any type of special floor construction not included above would fall in this category, such as catwalks, space frames, etc. All associated work items would be included in the assembly.				
			<b>B1020</b>	<b>ROOF CONSTRUCTION</b>	SF	M2	Area of supported roof	0202
				This construction is similar to floor construction except that it applies to the framework supporting the roof and roof decks. (See also System B30 Roofing.)				
			<b>B102001</b>	<b>STRUCTURAL FRAME</b>	SF	M2	Area of supported roof	020201
				The structural frame could consist of structural steel including columns, beams, joists, and all associated items. It could be a concrete frame utilizing concrete or masonry columns and concrete girders and beams. The structural frame could be wood columns with wood beams or wood trusses. The structural frame could be a combination of the above. For example, concrete or masonry columns with structural steel beams and joists. All associated work items should be included in each assembly. Separate assemblies would be used for different types of construction. The unit of measure at the assembly level is the square footage of the supported area. Decks and slabs are not included in this assembly.				
			<b>B102002</b>	<b>STRUCTURAL INTERIOR WALLS</b>	SF	M2	Area of walls	020202
				Assemblies would be CIP or CMU walls or other structural interior walls. The assemblies would include the labor and material required to perform the construction tasks associated with this type of wall.				
			<b>B102003</b>	<b>ROOF DECKS AND SLABS</b>	SF	M2	Area of supported roof	020203
				Roof decks and slabs should be broken into assemblies according to their particular type of construction (i.e., flat slab, pan slab, precast or pre-stressed slab, four-way slab, slabs on metal or wood decking with concrete fill, etc.). All associated work items should be included in each assembly.				
			<b>B102004</b>	<b>CANOPIES</b>	SF	M2	Area of supported canopies	020204
				Canopies should be broken into assemblies according to their particular type of construction (i.e., flat slab, pan slab, precast or pre-stressed slab, four-way slab, slabs on metal or wood decking with concrete fill, etc.). All associated work items should be included in each assembly.				
			<b>B102090</b>	<b>OTHER ROOF CONSTRUCTION</b>	SF	M2	Area of supported roof	02029X
				Any type of special roof construction not included above would fall into this category. All associated work items would be included in this assembly.				
			<b>B20</b>	<b>EXTERIOR ENCLOSURE</b>	SF	M2	Area of exterior walls	03
				This system consists of the exterior facing of the facility, which includes all vertical and horizontal exterior closure such as exterior walls, exterior windows, and exterior doors. This system excludes roofing (See System B30, Roof). Load bearing exterior walls will be included here, and not in System B10, Superstructure. Structural frame elements at exterior such as columns, beams, spandrels, etc., would be included in Superstructure with only the applied exterior finishes (i.e., paint, stucco, etc.) being included here. Finishes to the inside face of walls which are not an integral part of the wall construction will be included in System C30, Interior Finishes.				
			<b>B2010</b>	<b>EXTERIOR WALLS</b>	SF	M2	Area of exterior walls	0301
				All materials associated with the following construction: exterior load-bearing walls, insulation and vapor barrier, parapets, exterior louvers and screens, sun control devices (exterior), balcony walls and handrails, exterior soffits, screen walls, and exterior coatings.				
			<b>B201001</b>	<b>EXTERIOR CLOSURE</b>	SF	M2	Area of exterior walls	030101
				Assemblies would include material contained in exterior closure wall, such as masonry with brick veneer. Materials used for interior finishes on exterior walls are not included in this assembly. For example, if the interior side of this masonry wall is sheetrock applied on metal furring strips, the masonry wall is included in this assembly, but the furring strips and sheetrock are categorized as C3010 WALL FINISHES.				
			<b>B201002</b>	<b>EXTERIOR WALL BACKUP CONSTRUCTION</b>	SF	M2	Area of backup walls	
				Assemblies used to support structure for the exterior skin and/or provide load-bearing walls for the facility. Materials used for interior finishes on exterior walls are not included in this assembly. For example, if the interior side of this masonry wall is sheetrock applied on metal furring strips, the masonry wall is included in this assembly, but the furring strips and sheetrock are categorized as C3010 WALL FINISHES.				
			<b>B201003</b>	<b>INSULATION &amp; VAPOR RETARDER</b>	SF	M2	Area of insulation	030102
				Assemblies would include all types of insulation associated with the exterior wall. Rigid, batt and poured insulation should be separated into different assemblies.				
			<b>B201004</b>	<b>PARAPETS</b>	LF	M	Length of parapets	030105
				Assemblies include materials used in association with parapets. Parapets are long walls or railings usually along the edge of a roof or balcony.				
			<b>B201005</b>	<b>EXTERIOR LOUVERS &amp; SCREENS</b>	SF	M2	Area of louvers and screens	030106
				Assemblies include louvers and screens which are located in exterior walls. The unit of measure at the assembly level is each.				
			<b>B201006</b>	<b>BALCONY WALLS &amp; HANDRAILS</b>	LF	M	Length of walls and handrails	030108
				Assemblies would include materials associated with balcony walls and handrails. These rails are usually guardrails and not associated with stairs.				
			<b>B201007</b>	<b>EXTERIOR SOFFITS</b>	SF	M2	Area of soffits	030108
				Assemblies would include all associated materials which make up the soffit and supports for the soffit. Typical materials would include wood, aluminum, exterior grade gypboard, stucco, etc.				
			<b>B201008</b>	<b>FLASHING</b>	SF	M2	Area of flashings	
				Assemblies include all flashings associated with the exterior walls except for thru-wall flashing.				
			<b>B201009</b>	<b>EXTERIOR PAINTING AND SPECIAL COATINGS</b>	SF	M2	Area of exterior coatings	
				Assemblies include paint, stucco, etc. The unit of measure at the assembly level is area of exterior coatings.				
			<b>B201010</b>	<b>EXTERIOR JOINT SEALANT</b>	LF	M	Length of sealants	
				Exterior application of joint sealants to seal joints and prepare for finish material installation.				
			<b>B201011</b>	<b>SUN CONTROL DEVICES</b>	SF	M2	Area of sun control devices	0
				Assemblies include awnings, shades, and solar panels attached to the exterior of the building. A separate assembly should be used for each type of sun control device.				
			<b>B201012</b>	<b>SCREEN WALLS</b>	LF	M	Length of screen wall	
				Exterior screen walls used for security purposes immediately adjacent to the building such as screen walls at a loading dock. Assemblies would include materials associated with all types of walls. This can also include visual barriers on the roof to screen equipment. Note that perimeter fencing that is typically more than five feet from the building's exterior is included in sitework rather than in this system.				
			<b>B201090</b>	<b>OTHER EXTERIOR WALLS</b>	XX	XX		03019X
				Exterior walls not described by the assembly categories listed above.				

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Unf L1	Unf L2	Unf L3	WBS L4	Definition	E UOM	M UOM	Quantity Definition	WBS Ref No
			<b>B2020</b>	<b>EXTERIOR WINDOWS</b>	SF	M2	Area of windows	0302
				All windows located in exterior walls or exterior skin.				
			<b>B202001</b>	<b>WINDOWS</b>	SF	M2	Area of windows	030201
				Fixed or operable windows located in exterior walls or exterior skin. Assemblies would include frames, glazing, caulking, finishes and other associated work.				

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Unf L1	Unf L2	Unf L3	WBS L4	Definition	E UOM	M UOM	Quantity Definition	WBS Ref No
			<b>B202002</b>	<b>STOREFRONTS</b> Fixed storefronts including associated doors in exterior walls or exterior skin. Assemblies would include integral storefront doors, frames, glazing, caulking, finishes, and other associated work.	SF	M2	Area of storefronts	030202
			<b>B202003</b>	<b>CURTAIN WALLS</b> This applies to glass curtain walls and spandrel glass in exterior walls or exterior skin. Assemblies would include integral curtainwall doors, frames, glazing, caulking, finishes, and other associated work.	SF	M2	Area of curtain walls	030203
			<b>B202004</b>	<b>EXTERIOR GLAZING</b>	SF	M2	Area of Glazing	
			<b>B202090</b>	<b>OTHER EXTERIOR WINDOWS</b> Exterior windows not described by the assembly categories listed above.	XX	XX		03029X
		<b>B2030</b>	<b>EXTERIOR DOORS</b> All doors located in exterior walls or exterior skin.		EA	EA	Number of doors	0303
			<b>B203001</b>	<b>SOLID DOORS</b> Assemblies include all exterior solid doors, hollow metal or wood with frames. Solid doors may include glazing lites in doors. Door hardware is located in B203008 EXTERIOR DOOR HARDWARE.	EA	EA	Number of doors	030302
			<b>B203002</b>	<b>GLAZED DOORS</b> and curtainwalls. These doors can be made of storefront materials but are not part of a curtainwall or storefront. Door hardware is located in B203008 EXTERIOR DOOR HARDWARE.	EA	EA	Number of doors	030301
			<b>B203003</b>	<b>REVOLVING DOORS</b> Assemblies include all revolving doors at exterior of the facility.	EA	EA	Number of doors	030303
			<b>B203004</b>	<b>OVERHEAD AND ROLL-UP DOORS</b> Overhead and roll-up doors installed in exterior walls or exterior skin. Assemblies include frames, hardware, hoisting devices, and finish and other associated work. The unit of measure at the assembly level is each door.	SF	M2	Area of doors	030401
			<b>B203005</b>	<b>HANGAR DOORS</b> Large aircraft doors used on medium and high bay hangars. Assemblies would include frames, hardware, hoisting devices, and finish and other associated work.	SF	M2	Area of doors	030402
			<b>B203006</b>	<b>BLAST RESISTANT DOORS</b> Special exterior doors used for blast resistance. Assemblies would include frames, hardware, hoisting devices, and finish and other associated work.	SF	M2	Area of doors	030403
			<b>B203007</b>	<b>GATES</b> Any special gate type used in the exterior wall or exterior skin of the building. Assemblies would include frames, hardware, hoisting devices, and finish and other associated work. The unit of measure at the assembly level is each gate.	SF	M2	Area of doors	030404
			<b>B203008</b>	<b>EXTERIOR DOOR HARDWARE</b> Exterior door hardware includes items such as closers, hinges, locksets, panic hardware, etc.	EA	EA	Number of doors	
			<b>B203090</b>	<b>OTHER EXTERIOR SPECIALTY DOORS</b> Any special type door used in the exterior wall or exterior skin of the building. Assemblies would include frames, hardware, hoisting devices, and finish and other associated work. The unit measure at the assembly level is each door, or area of special doors, i.e., hangar doors.	XX	XX		03049X
			<b>B203091</b>	<b>OTHER EXTERIOR PERSONNEL DOORS</b> Exterior personnel doors not described by the assembly categories listed above.	XX	XX		03039X
		<b>B30</b>	<b>ROOFING</b> This System includes all waterproof roof coverings and insulation, expansion joints, together with skylights, hatches, ventilators, and all required trim. In addition to roof coverings, the system includes all waterproof membranes and traffic toppings over below grade enclosed areas, balconies, and the like.		SF	M2	Gross area of roof	04
		<b>B3010</b>	<b>ROOF COVERINGS</b> This System includes all waterproof roof coverings and insulation, expansion joints, together with skylights, hatches, ventilators, and all required trim. In addition to roof coverings, the system includes all waterproof membranes and traffic toppings over below grade enclosed areas, balconies, and the like.		SF	M2	Gross area of roof	0401
			<b>B301001</b>	<b>STEEP SLOPE ROOF SYSTEMS</b> Assemblies include roof coverings such as shingle, wood shake, structural standing seam, metal roofing, etc.	SF	M2	Area of roof covering	040101
			<b>B301002</b>	<b>LOW SLOPE ROOF SYSTEMS</b> Assemblies include roof coverings such as built-up, elastomeric, modified bitumen, etc.. Also, walkways and work areas (used to gain access to rooftop equipment) will be included here.	SF	M2	Area of topping or membrane	
			<b>B301003</b>	<b>ROOF INSULATION &amp; FILL</b> Assemblies include all types of insulation associated with the roof area.	SF	M2	Area of insulation	040103
			<b>B301004</b>	<b>FLASHINGS &amp; TRIM</b> Assemblies include all flashings associated with the roof, i.e., eave flashing, gable flashing, etc.	SF	M2	Area of flashings	040104
			<b>B301005</b>	<b>GUTTERS &amp; DOWNSPOUTS</b> Assemblies include all gutters, downspouts, and associated work including splash blocks.	LF	M	Length of gutters and downspouts	040106
			<b>B301006</b>	<b>ROOF OPENINGS AND SUPPORTS</b> All roof penetrations including roof hatches, sky lights, area glazing, gravity roof ventilators, smoke vents, etc.	SF	M2	Area of openings	040105
								04019X

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Unf L1	Unf L2	Unf L3	WBS L4	Definition				
			<b>B301090</b>	<b>OTHER ROOFING</b> Roofing not described by the assembly categories listed above.	XX	XX		
<b>C INTERIORS</b>					SF	M2	Gross floor area	05
				Construction which takes place inside the exterior wall or exterior closure. The system does not include interior structural walls, which are included in B1010 FLOOR CONSTRUCTION and B1020 ROOF CONSTRUCTION.				
			<b>C10 INTERIOR CONSTRUCTION</b>	This assembly includes partitions, interior doors, and specialties.	SF	M2	Gross floor area	
			<b>C1010 PARTITIONS</b>	Includes all interior partitions.	SF	M2	Area of partitions	0501
			<b>C101001 FIXED PARTITIONS</b>	Interior fixed partitions include metal or wood studs, sheetrock, masonry, and concrete walls.	SF	M2	Area of fixed partition walls	050101
			<b>C101002 DEMOUNTABLE PARTITIONS</b>	Assemblies would include all demountable partitions and associated work including tracks and anchoring systems.	SF	M2	Area of demountable partition walls	050102
			<b>C101003 RETRACTABLE PARTITIONS</b>	Assemblies would include all retractable or folding partitions and associated work including tracks and anchoring systems.	SF	M2	Area of retractable partition walls	050103
			<b>C101004 INTERIOR GUARDRAILS &amp; SCREENS</b>	Assemblies include balustrades (balcony handrails and the row screen of posts that support them) and screens and associated work including tracks and anchoring systems. These balustrades/guardrails are related to interior balconies and are not associated with stairs.	LF	M	Length of balustrades and screens	050104
			<b>C101005 INTERIOR WINDOWS</b>	Fixed or operable windows. Assemblies would include frames, glazing, caulking and other associated work.	SF	M2	Area of windows	050105
			<b>C101006 GLAZED PARTITIONS &amp; STOREFRONTS</b>	Fixed interior glazed partitions including interior storefronts with doors. Assemblies include frames, glazing, caulking, and other associated work.	SF	M2	Area of partitions and storefronts	050106
			<b>C101007 INTERIOR GLAZING</b>		SF	M2	Area of interior glazing	
			<b>C101008 INTERIOR JOINT SEALANT</b>	Interior application of sealants to seal joints and prepare for finish material installation. The application shall include partitions, doors and fitting.	LF	M	Length of sealants	
			<b>C101090 OTHER PARTITIONS</b>	Interior partitions not described by the assembly categories listed above.	XX	XX		05019X
			<b>C1020 INTERIOR DOORS</b>	All interior doors.	LEF	LEF	Number of leaves	0502
			<b>C102001 STANDARD INTERIOR DOORS</b>	Assemblies include all standard interior wood or hollow metal doors with frames, finish, etc.. Standard interior door may include vision lites. Interior door hardware is located in C102007 INTERIOR DOOR HARDWARE.	LEF	LEF	Number of leaves	050201
			<b>C102002 GLAZED INTERIOR DOORS</b>	Assemblies include all glazed interior doors with glass, frames, finish, including storefront, etc.. Interior door hardware is located in C102007 INTERIOR DOOR HARDWARE.	LEF	LEF	Number of leaves	050202
			<b>C102003 FIRE DOORS</b>	Assemblies include all interior fire doors, including all necessary frames, and sensing devices integral with the door. Interior door hardware is located in C102007 INTERIOR DOOR HARDWARE.	LEF	LEF	Number of leaves	050203
			<b>C102004 SLIDING &amp; FOLDING DOORS</b>	Assemblies include all sliding and folding doors with frames, hardware, locking devices, tracks, and supporting systems. The unit of measure at the assembly level is each.	SF	M2	Area of sliding or folding door	050204
			<b>C102005 INTERIOR OVERHEAD DOORS</b>	Overhead doors installed in the interior of a facility. Assemblies include frames, hardware, hoisting devices, and finish and other associated work. The unit of measure at the assembly level is each door.	SF	M2	Area of doors	050301
			<b>C102006 INTERIOR GATES</b>	Any special type gate installed in the interior of a facility. Assemblies include frames, hardware, hoisting devices, and finish and other associated work. The unit measure at the assembly level is each gate.	SF	M2	Area of gates	050302
			<b>C102007 INTERIOR DOOR HARDWARE</b>	Interior door hardware includes items such as closers, hinges, locksets, panic hardware, etc.	EA	EA	Number of doors	
			<b>C102090 OTHER INTERIOR SPECIALTY DOORS</b>	Any special type door installed in the interior of a facility. Assemblies include frames, hardware, hoisting devices, and finish and other associated work. The unit measure at the assembly level is each gate.	XX	XX		05039X
			<b>C102091 OTHER INTERIOR PERSONNEL DOORS</b>	Interior personnel doors not described by the assembly categories listed above.	XX	XX		05029X
			<b>C1030 SPECIALTIES</b>	Most commonly used specialty items.	SF	M2	Gross floor area	0504
			<b>C103001 COMPARTMENTS, CUBICLES &amp; TOILET PARTITIONS</b>		EA	EA	Number of compartments, cubicles, or toilet partitions	050401

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				Assemblies include individual compartments, cubicles, toilet partitions, and urinal screens.				
			<b>C103002</b>	<b>TOILET &amp; BATH ACCESSORIES</b>	EA	EA	Number of accessories	050402
				Toilet and bath accessories. For example, soap dispensers, toilet paper holder, towel dispensers, grab bars, bathroom mirrors, etc.				
			<b>C103003</b>	<b>MARKER BOARDS &amp; TACK BOARDS</b>	EA	EA	Each Board	050403
				Assemblies include all marker boards, tackboards, and fastening devices. The unit of measure at the assembly level is each.				
			<b>C103004</b>	<b>IDENTIFYING DEVICES</b>	EA	EA	Number of identifying devices	050404
				Assemblies include all signs, plaques, traffic markers, etc.				
			<b>C103005</b>	<b>LOCKERS</b>	EA	EA	Number of lockers	050405
				Assemblies include all types of lockers, either wood or metal, single or double tier. Special bases used for lockers would be included in this assembly.				
			<b>C103006</b>	<b>SHELVING</b>	LF	M	Length of shelving	050406
				Assemblies include all types of shelving with brackets and all supporting materials and finish, if required.				
			<b>C103007</b>	<b>FIRE EXTINGUISHER CABINETS</b>	EA	EA	Number of fire extinguisher cabinets	050407
				This assembly would include all types and sizes of fire extinguisher cabinets. Fire extinguishers are not included in this assembly; they are included in D40.				
			<b>C103008</b>	<b>COUNTERS</b>	LF	M	Length of counters	050501
				Assemblies include all counters and countertops with all necessary brackets and supporting materials and finish, if required.				
			<b>C103009</b>	<b>CABINETS</b>	LF	M	Length of cabinets	050502
				This assembly includes all cabinetry and millwork items with associated accessories and anchoring devices. Cabinet finishes are included in this assembly. Metal cabinets and special use cabinetry (medical, dental, libraries, etc.) are included in C103010 CASEWORK.				
			<b>C103010</b>	<b>CASEWORK</b>				
				Assemblies would include built-in premanufactured cabinetry for specialized functions such as labs, libraries, medical and dental facilities.				
			<b>C103011</b>	<b>CLOSETS</b>	LF	M	Length of closets	050503
				This assembly includes all built-in closets with all associated work and finishes. These closets are millwork items or prefabricated coat closets for schools and dormitories.				
			<b>C103012</b>	<b>FIRESTOPPING PENETRATIONS</b>	EA	EA	Each Penetration	
				Assembly includes sleeve, caulking, and flashing.				
			<b>C103013</b>	<b>SPRAYED FIRE-RESISTIVE MATERIALS</b>	SF	M2	Area of coverage	
				Sprayed Fire-Resistive Materials includes materials that are applied primarily to a building's framework (columns, beams, bracing, metal decking) to prevent structural failure.				
			<b>C103014</b>	<b>ENTRANCE FLOOR GRILLES AND MATS</b>	SF	M2	Area of grilles/mats	
				Assemblies include floor grilles and mats installed in a fixed arrangement at a building entrance.				
			<b>C103015</b>	<b>ORNAMENTAL METALWORK</b>	EA	EA	Number of metalwork items	
				Building components made from ornamental metals. Ornamental stair handrails are included in B1010 EXTERIOR STAIRS and C20 STAIRS.				
			<b>C103090</b>	<b>OTHER INTERIOR SPECIALTIES</b>	EA	EA	Number of specialty items	05049X
				Interior specialties not described by the assembly categories listed above.				
			<b>C20 STAIRS</b>		FLT	FLT	Number of flights	
				Work includes all stair construction.				
			<b>C2010</b>	<b>STAIR CONSTRUCTION</b>	FLT	FLT	Number of flights	0203
				All work items located within the building footprint. A flight of stairs is considered to be all the treads and risers with landings required to travel from one floor to the next.				
			<b>C201001</b>	<b>INTERIOR AND EXTERIOR STAIRS</b>	FLT	FLT	Number of flights	020301
				All stair work items associated with non-fire escape stairs. The stairs can be either interior stairs or stairs exposed to the weather. Exterior stairs are exposed to the outside and do not typically require HVAC. A flight of stairs is considered to be all the treads and risers with landings required to travel from one floor to the next.				
			<b>C201002</b>	<b>FIRE ESCAPE STAIRS</b>	FLT	FLT	Number of flights	
				Assemblies include exterior stairs which are used for emergency egress. These stairs are exposed to the weather. Handrails, finishes and associated work items are included in this assembly.				
			<b>C201090</b>	<b>STAIR HANDRAILS, GUARDRAILS AND ACCESSORIES</b>	XX	XX		02039X
				Stair handrails, guardrails, and cast-in-place nosings for interior and exterior stairs.				
			<b>C30 INTERIOR FINISHES</b>		SF	M2	Area of finishing	06
				Includes wall finishes, floor finishes, and ceiling finishes.				
			<b>C3010</b>	<b>WALL FINISHES</b>	SF	M2	Area of finished walls	0601
				Finishes which are applied to interior wall surfaces. For coatings, refer to C3040.				
			<b>C301001</b>	<b>CONCRETE WALL FINISHES</b>	SF	M2	Area of finished walls	060101
				This assembly would include a concrete finish applied directly to an interior wall surface. This assembly does not include items that directly apply to wall finishes covered elsewhere in this subsystem.				
			<b>C301002</b>	<b>PLASTER WALL FINISHES</b>	SF	M2	Area of finished walls	060102
				This assembly includes plaster or stucco applied directly to an interior wall surface. Lath and associated work would be included in this assembly. This assembly does not include items that directly apply to wall finishes covered elsewhere in this subsystem.				
			<b>C301003</b>	<b>GYPSUM WALLBOARD FINISHES</b>	SF	M2	Area of finished walls	060103
				This assembly includes gypsum wallboard applied directly to an interior wall surface. Furring strips or channels are included in this assembly. This assembly also includes taping, sanding, finishing, and sheetrock accessories. This assembly does not include items that directly apply to wall finishes covered elsewhere in this subsystem.				

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			<b>C301004</b>	<b>TILE &amp; TERRAZZO WALL FINISHES</b> This assembly includes tile and terrazzo applied directly to an interior wall surface. Each type of tile would be a separate assembly.	SF	M2	Area of finished walls	060104
			<b>C301005</b>	<b>WALL COVERINGS</b> This assembly includes wall coverings and protective strips applied directly to an interior wall surface.	SF	M2	Area of wall coverings	060106
			<b>C301006</b>	<b>ACOUSTICAL PANELS ADHERED TO WALLS</b> This assembly includes acoustical tiles and panels with associated work applied directly to an interior wall surface.	SF	M2	Area of acoustical tiles and panels	060107
			<b>C301090</b>	<b>OTHER WALL FINISHES</b> Assemblies include finishes to wall types not included above. These include, but are not limited to, different types of shielding and the work and materials associated with each.	XX	XX		06019X
		<b>C3020</b>	<b>FLOOR FINISHES</b> All flooring and floor finishes applied to interior floors. For coatings refer to C3040.	SF	M2	Area of finished floors	0602	
			<b>C302001</b>	<b>TILE FLOOR FINISHES</b> Assemblies include ceramic, quarry, and other non-resilient tile floors.	SF	M2	Area of tile floors	060201
			<b>C302002</b>	<b>TERRAZZO FLOOR FINISHES</b> Assemblies include terrazzo floors.	SF	M2	Area of terrazzo floors	060202
			<b>C302003</b>	<b>WOOD FLOORING</b> Assemblies include wood floors.	SF	M2	Area of wood floors	060203
			<b>C302004</b>	<b>RESILIENT FLOOR FINISHES</b> Assemblies include resilient floors.	SF	M2	Area of resilient floors	060204
			<b>C302005</b>	<b>CARPETING</b>	SF	M2	Area of carpeting	060205
			<b>C302006</b>	<b>MASONRY &amp; STONE FLOORING</b> Assemblies include masonry, concrete pavers, and stone flooring.	SF	M2	Area of masonry or stone flooring	060206
			<b>C302007</b>	<b>WALL BASE FINISHES</b> Assemblies include wall base, consisting of various materials such as vinyl, ceramic tile, etc.	LF	M	Length of wall base	
			<b>C302008</b>	<b>STAIR FINISHES</b> Includes field-applied finish materials (other than paint) to surfaces of stairs including treads, risers and landings.	SF	M2	Area of coverage	060207
			<b>C302009</b>	<b>FLOOR TOPPING AND TRAFFIC MEMBRANES</b> Assemblies include floor toppings and membrane systems.	SF	M2	Area of coverage	060207
			<b>C302010</b>	<b>HARDENERS AND SEALERS</b> Assemblies include floor hardeners and sealers, typically applied on concrete floors.	SF	M2	Area of coverage	
			<b>C302011</b>	<b>RAISED ACCESS FLOORING</b> Assemblies include all types of raised flooring, pedestal access floors and other types of access flooring.	SF	M2	Area of special flooring	
			<b>C302090</b>	<b>OTHER FLOORING &amp; FLOOR FINISHES</b> Assemblies include floor finishes not described by the assembly categories listed above, such as conductive, armored, etc..	XX	XX		06029X
		<b>C3030</b>	<b>CEILING FINISHES</b> All ceilings and ceiling finishes applied to interiors. For coatings, refer to C3040.	SF	M2	Area of ceilings	0603	
			<b>C303001</b>	<b>ACOUSTICAL CEILING TILES &amp; PANELS</b> Assemblies include acoustical ceiling tiles and panels. The suspension system, if required, is in Assembly Category C303005. This assembly does not include items that directly apply to ceiling finishes covered elsewhere in this subsystem.	SF	M2	Area of acoustical ceilings	060304
			<b>C303002</b>	<b>GYPSUM WALLBOARD CEILING FINISHES</b> Assemblies include gypsum wallboard applied to interior ceilings. Furring strips or channels are included in this assembly if they are applied directly to the ceiling surface. If the gypsum board is applied to a suspended ceiling system, the suspended system would be in Assembly Category C303005. This assembly does not include items that directly apply to ceiling finishes covered elsewhere in this subsystem.	SF	M2	Area of gypsum ceilings	060304
			<b>C303003</b>	<b>PLASTER CEILING FINISHES</b> Assemblies include plaster or stucco finishes applied to interior ceilings. Lath and associated work would apply to this assembly. This assembly does not include items that directly apply to ceiling finishes covered elsewhere in this subsystem.	SF	M2	Area of plaster ceiling finish	060302

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			C303004	<b>WOOD CEILINGS</b>	SF	M2	Area of wood ceilings	060305
				Assemblies include wood ceilings. Different types of wood ceilings should be separated into different assemblies. If the wood ceiling is applied to a suspended ceiling system, the suspended system would be in Assembly Category C303005. This assembly does not include items that directly apply to ceiling finishes covered elsewhere in this subsystem.				
			C303005	<b>SUSPENSIONS SYSTEMS</b>	SF	M2	Area of suspension system	060307
				This assembly includes any suspension system which is suspended or hung from the structure for the purpose of fastening a ceiling.				
			C303006	<b>METAL STRIP CEILINGS</b>	SF	M2	Area of metal ceiling	060308
				Assemblies include all metal strip materials applied to ceilings.				
			C303090	<b>OTHER CEILING &amp; CEILING FINISHES</b>	XX	XX		06039X
				Special ceilings and ceiling finishes not described by the assembly categories listed above.				
			C3040	<b>INTERIOR COATINGS AND SPECIAL FINISHES</b>	SF	M2	Area of interior coatings	
				This assembly includes surface preparation and application of coatings to interior surfaces.				
			C304001	<b>GENERAL REQUIREMENTS</b>	SF	M2	Area of coatings and finishes	0
			C304002	<b>CONCRETE FINISHES</b>	SF	M2	Area of concrete finishes	0
			C304003	<b>CONCRETE MASONRY FINISHES</b>	SF	M2	Area of concrete masonry finishes	0
			C304004	<b>METAL FINISHES</b>	SF	M2	Area of metal finishes	0
			C304005	<b>INTERIOR WOOD FINISHES</b>	SF	M2	Area of wood finishes	0
			C304006	<b>GYPSUM WALLBOARD FINISHES</b>	SF	M2	Area of gypsum wallboard coatings	0
			C304007	<b>SPECIAL COATINGS ON WALLS</b>	SF	M2	Area of special wall coatings	0
			<b>D SERVICES</b>		EA	EA		
				Includes all methods of conveying, plumbing, HVAC, fire protection, and electrical.				
			<b>D10 CONVEYING</b>		STY	STY	Number of stories	07
				This system includes elevators, escalators, pneumatic tube systems, conveyors, chutes, etc. Foundations for these systems are included in System A, Substructure.				
			<b>D1010 ELEVATORS AND LIFTS</b>		STP	STP	Number of stops	0701
				Includes passenger elevators and freight elevators.				
			<b>D101001 GENERAL CONSTRUCTION ITEMS</b>		EA	EA	Number of items	070101
				Includes construction work, other than conveying system work, which must be performed in conjunction with this type of work to complete the system.				
			<b>D101002 PASSENGER ELEVATORS</b>		STP	STP	Number of stops	070102
				The unit measure at the assembly level is each stop.				
			<b>D101003 FREIGHT ELEVATORS</b>		STP	STP	Number of stops	070103
				The unit measure at the assembly level is each stop.				
			<b>D101004 WHEELCHAIR LIFT</b>		EA	EA	Number of lifts	
				Premanufactured lift to gain wheelchair access.				
			<b>D101005 DUMBWAITERS</b>		STP	STP	Number of stops	0702
				The unit measure of the assembly is each stop.				
			<b>D101090 OTHER VERTICAL TRANSPORTATION EQUIPMENT</b>		XX	XX		07019X
				This includes elevators not described by the assembly categories listed above, such as people lifts.				
			<b>D1020 WEIGHT HANDLING EQUIPMENT</b>		EA	EA	Number of items	0
			<b>D102001 BASIC REQUIREMENTS OF CRANES AND MONORAILS</b>		EA	EA	Number of items	0
			<b>D102002 OVERHEAD CRANES</b>		EA	EA	Number of items	0
			<b>D102003 MONORAILS</b>		EA	EA	Number of items	0
			<b>D1030 ESCALATORS AND MOVING WALKS</b>		LF	M	Length of stairs or walks	0702
			<b>D103001 ESCALATORS</b>		LF	M	Length of stairs	070201
			<b>D103002 MOVING WALKS</b>		LF	M	Length of walks	070202
			<b>D103090 OTHER MOVING STAIRS &amp; WALKS</b>		XX	XX		07029X
				Moving stairs or walks not described by the assembly categories listed above.				
			<b>D1090 OTHER CONVEYING SYSTEMS</b>		EA	EA	Number of systems	
				Other conveying systems includes pneumatic tube systems, conveyor belts, chutes, and transportation systems.				
			<b>D109001 PNEUMATIC TUBE SYSTEMS</b>		EA	EA	Number of systems	070306
				Number of material handling systems				
			<b>D109002 CONVEYORS</b>		EA	EA	Number of material handling systems	0
			<b>D109003 LINEN, TRASH, AND MAIL CHUTES</b>		LF	M	Length of chute	0
			<b>D109004 TURNTABLES</b>		EA	EA	Number of turntables	0
			<b>D109005 OPERABLE SCAFFOLDING</b>		SF	M2	Area of scaffolding	0

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			D109006	<b>TRANSPORTATION SYSTEMS</b>	EA	EA	Number of systems	
				This assembly includes baggage handling and aircraft loading systems.	SF	M2	Area of scaffolding	
			D109090	<b>OTHER MATERIAL HANDLING SYSTEMS</b>	XX	XX		07039X
				Material or handling systems not described by the assembly categories listed above.				
			<b>D20 PLUMBING</b>		EA	EA	Number of fixtures	08
				The plumbing system's primary function is the transfer of liquids and gases. This system includes all water supply and waste items within the building.				
			D2010	<b>PLUMBING FIXTURES</b>	EA	EA	Number of fixtures	0801
				All terminal devices on the domestic plumbing system which have water supplied to the fixture. Hot water heaters, hose bibbs, and special equipment are not counted as a fixture.				
			D201001	<b>WATERCLOSETS</b>	EA	EA	Number of fixtures	080101
			D201002	<b>URINALS</b>	EA	EA	Number of fixtures	080102
			D201003	<b>LAVATORIES</b>	EA	EA	Number of fixtures	080103
			D201004	<b>SINKS</b>	EA	EA	Number of fixtures	080104
			D201005	<b>SHOWERS/TUBS</b>	EA	EA	Number of fixtures	080105
			D201006	<b>DRINKING FOUNTAINS &amp; COOLERS</b>	EA	EA	Number of fixtures	080106
			D201007	<b>BIDETS</b>	EA	EA	Number of fixtures	
			D201090	<b>EMERGENCY FIXTURES</b>	XX	XX		
				Emergency fixtures not described by the assembly categories listed above.				
			D2020	<b>DOMESTIC WATER DISTRIBUTION</b>	EA	EA	Number of fixtures	0802
				This system provides for human health and comfort. The water supply needed is determined by the number of fixtures attached. Hot water heaters, hose bibbs, and special equipment are not counted as a fixture.				
			D202001	<b>PIPES &amp; FITTINGS</b>	EA	EA	Number of fixtures	080201
				Assemblies include all pipe, fittings, and associated work with regard to domestic water supply. The unit of measure at the assembly level is number of fixtures.				
			D202002	<b>VALVES &amp; HYDRANTS</b>	EA	EA	Number of valves and hydrants	080202
				Assemblies include all valves and hydrants. Hose bibbs are included in this assembly. The unit of measure at the assembly level is number of valves and hydrants.				
			D202003	<b>DOMESTIC WATER EQUIPMENT</b>	EA	EA	Number of fixtures	080501
				This assembly includes equipment associated with the domestic water supply, including fittings, and specialties required for hook-up. Assemblies include hot water heaters, water treatment plant, i.e., water softeners, filters, distillers, etc.; pumps directly associated with domestic water supply; and tanks for the potable hot or cold water system. The unit of measure at the assembly level is pieces of equipment.				
			D202004	<b>INSULATION &amp; IDENTIFICATION</b>	EA	EA	Number of fixtures	080204
				Assemblies include insulation used in association with domestic water supply. The unit of measure at the assembly level is number of fixtures.				
			D202005	<b>SPECIALTIES</b>	EA	EA	Pieces of equipment	080205
				Any other special items associated with domestic water supply. All associated work items, including pipes, fittings, valves, insulation, and hook-up should be included in this assembly. The unit of measure at the assembly level is pieces of special equipment.				
			D202090	<b>OTHER DOMESTIC WATER SUPPLY</b>	XX	XX		08029X
				Domestic water supply not described by the assembly categories listed above.				
			D2030	<b>SANITARY WASTE</b>	EA	EA	Number of fixtures	0803
				This system provides for human health and comfort. Fixtures include all terminal devices which have a water supply (except water supply equipment and specialties), and also devices that transfer fluids into the sanitary waste system that do not have a water supply. Floor drains (not drain hubs) are included as a sanitary waste fixture.				
			D203001	<b>WASTE PIPE &amp; FITTINGS</b>	EA	EA	Number of fixtures	080302
				Assemblies include all pipe, fittings, and associated work with regard to sanitary waste pipe and fittings. The unit of measure at the assembly level is number of fixtures.				
			D203002	<b>VENT PIPE &amp; FITTINGS</b>	EA	EA	Number of fixtures	080302
				Assemblies include all pipe, fittings, and associated work with regard to sanitary vent pipe and fittings. The unit of measure at the assembly level is number of fixtures.				
			D203003	<b>FLOOR DRAINS</b>	EA	EA	Number of floor drains	080303

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				Assemblies include all floor drains. Hub drains are considered to be pipe and are not included in this category. The unit of measure at the assembly level is number of drains.			
			<b>D203004</b>	<b>SANITARY AND VENT EQUIPMENT</b>	EA	EA	Number of fixtures 080502
				This is equipment associated with the sanitary waste system, including fittings and specialties required for hook-up. Assemblies include waste treatment equipment, i.e., sluice gates, incinerators, etc.; pumps for sewage injection; and holding tanks for the domestic water system. The unit of measure at the assembly level is pieces of equipment.			
			<b>D203005</b>	<b>INSULATION &amp; IDENTIFICATION</b>	EA	EA	Number of fixtures 080304
				Assemblies include insulation used in association with sanitary waste and vent system. The unit of measure at the assembly level is number of fixtures.			
			<b>D203090</b>	<b>OTHER SANITARY WASTE</b>	XX	XX	 08039X
				Sanitary waste and vent not described by the assembly categories listed above.			
			<b>D2040</b>	<b>RAIN WATER DRAINAGE</b>	SF	M2	Area of roof 0804
				Roof drainage system. Gutter and downspouts are not included in this subsystem.			
			<b>D204001</b>	<b>PIPE &amp; FITTINGS</b>	LF	M	Length of pipe 080401
				Assemblies include pipe and fittings from the roof drains to the discharge points, including supports and other associated work.			
			<b>D204002</b>	<b>ROOF DRAINS</b>	EA	EA	Number of roof drains 080402
				Assemblies include roof drains. The unit of measure at the assembly level is number of drains.			
			<b>D204003</b>	<b>RAINWATER DRAINAGE EQUIPMENT</b>	EA	EA	Pieces of equipment 080503
				This is equipment associated with the rain water drainage, including fittings and specialties required for hook-up. Assemblies include pumps and other associated items for drainage of rain water.			
			<b>D204004</b>	<b>INSULATION &amp; IDENTIFICATION</b>	LF	M	Length of pipe insulation 080403
				Assemblies include insulation used in association with rain water drainage system.			
			<b>D204090</b>	<b>OTHER RAIN WATER DRAINAGE SYSTEM</b>	XX	XX	 08049X
				Rain water drainage system not described by the assembly categories listed above.			
			<b>D2090</b>	<b>OTHER PLUMBING SYSTEMS</b>	EA	EA	Number of special fixtures, etc. 0806
				This subsystem includes all special plumbing systems which are not included in D2010 through D2040.			
			<b>D209001</b>	<b>SPECIAL PIPING SYSTEMS</b>	EA	EA	Number of special fixtures, interceptors, etc. 080601
				Assemblies include all special pipe and fittings, excluding acid waste pipe and work with regard to special pipe. Medical gas and vacuum fittings, and associated systems piping are included in this category. The unit of measure at the assembly level is the number of special fixtures, interceptors, outlets, or systems.			
			<b>D209002</b>	<b>ACID WASTE SYSTEMS</b>	EA	EA	Number of special fixtures, interceptors, etc. 080602
				Assemblies include all pipe, fittings, special acid waste equipment, and other associated work items with regard to acid waste systems. The unit of measure at the assembly level is the number of special fixtures, interceptors, outlets, or systems.			
			<b>D209003</b>	<b>INTERCEPTORS</b>	EA	EA	Number of interceptors 080603
				Assemblies include all interceptors. The unit of measure at the assembly level is number of interceptors.			
			<b>D209004</b>	<b>POOL PIPING AND EQUIPMENT</b>	GPM	M3/S	Gallons per minute 080604
				Assemblies include pumps and associated equipment with pools, including specialties required for hook-up. The unit of measure at the assembly level is each.			
			<b>D209005</b>	<b>COMPRESSED AIR SYSTEM (NON-BREATHING)</b>	PSI	KGM2	Pounds per square inch
			<b>D209090</b>	<b>OTHER SPECIAL PLUMBING SYSTEMS</b>	XX	XX	 08069X
				This system includes special plumbing systems not described by the assembly categories listed above, such as fountain piping systems and devices.			
			<b>D30</b>	<b>HVAC</b>	MBH	KW	Total MBH capacity 09
				This system includes all equipment, distribution systems, controls, and energy supply systems required by the heating, ventilating, and air conditioning system.			
			<b>D3010</b>	<b>ENERGY SUPPLY</b>	MBH	KW	Total power of heating system 0901
				The energy input to the facility (other than electrical) in the form of fuels or hot and cold water distributed from a central base facility. Energy received from wind or solar power is included in this subsystem.			
			<b>D301001</b>	<b>OIL SUPPLY SYSTEM</b>	MBH	KW	Calories per gallon 090101
				Assemblies include storage equipment, transfer equipment, and distribution piping. The unit of measure at the assembly level is each system.			
			<b>D301002</b>	<b>GAS SUPPLY SYSTEM</b>	MBH	KW	MBH 090102
				This category includes both natural gas and LPG. Assemblies include metering and regulation equipment, storage equipment, transfer equipment, and distribution piping. The unit of measure at the assembly level is each system.			
			<b>D301003</b>	<b>STEAM SUPPLY SYSTEM (FROM CENTRAL PLANT)</b>	MBH	KW	Power 090104
				Assemblies include meters, valves, heat exchangers, fittings, and specialties required for hook-up and distribution piping, including supports, sleeves, and insulation. The unit of measure at the assembly level is each system.			

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			<b>D301004</b>	<b>HOT WATER SUPPLY SYSTEM (FROM CENTRAL PLANT)</b> Assemblies include meters, valves, heat exchangers, fittings, and specialties required for hook-up and distribution piping, including supports, sleeves, and insulation. The unit of measure at the assembly level is each system.	MBH	KW	Power	090105
			<b>D301005</b>	<b>SOLAR ENERGY SUPPLY SYSTEMS</b> Assemblies include collector panels, heat exchangers, storage tanks, pumps, etc., including pipe and fittings required for hook-up. The unit of measure at the assembly level is each system.	MBH	KW	Power	090104
			<b>D301006</b>	<b>WIND ENERGY SUPPLY SYSTEM</b> Wind is used to turn a generator which generates electricity. This energy is either stored in a battery or used to generate hot water in an electric boiler. Assemblies would include the required devices to make this a total electromechanical system. The unit of measure at the assembly level is each system.	MBH	KW	Power	090105
			<b>D301007</b>	<b>COAL SUPPLY SYSTEM</b> This category includes storage equipment, transfer equipment, processing equipment, and distribution piping. The unit of measure at the assembly level is each system.	MBH	KW	Power	0
			<b>D301090</b>	<b>OTHER ENERGY SUPPLY</b> Energy supply not described by the assembly categories listed above.	XX	XX		09019X
		<b>D3020</b>	<b>HEAT GENERATING SYSTEMS</b>		MBH	KW	Total power of heating system	0902
				This subsystem includes steam, hot water, furnace, and unit heater systems. Fuels include coal, oil, gas and electric unless otherwise noted.				
			<b>D302001</b>	<b>BOILERS</b> Assemblies include steam or hot water boilers, expansion tanks, chemical feeders, air separators, pumps, heat exchangers, boiler feed units, etc. This assembly would also include fittings and specialties and the flue stack. The unit of measure at the assembly level is each system.	MBH	KW	Power	090202
			<b>D302002</b>	<b>FURNACES</b> This is a system that heats air. Assemblies would include furnace and necessary fittings and specialties required for hook-up, including flue and stack. The unit of measure at the assembly level is each.	MBH	KW	Power	090203
			<b>D302003</b>	<b>FUEL-FIRED UNIT HEATERS</b> Assemblies would include unit heaters and the energy supply system hook-up (other than electrical), including all necessary pipe, fittings, and specialties required for hook-up. Flue and stack, if required, are included in this assembly. The unit of measure at the assembly level is each.	MBH	KW	Power	090204
			<b>D302004</b>	<b>AUXILIARY EQUIPMENT</b> Assemblies would include any other equipment associated with heat generating systems. The unit of measure at the assembly level is each.	MBH	KW	Power	090205
			<b>D302005</b>	<b>EQUIPMENT THERMAL INSULATION</b> Assemblies would include insulation of any component in this subsystem. The unit of measure at the assembly level is each.	SF	M2	Area of insulation	090206
			<b>D302090</b>	<b>OTHER HEAT GENERATING SYSTEMS</b> Heat generating systems not described in the assembly categories listed above.	XX	XX		09029X
		<b>D3030</b>	<b>COOLING GENERATING SYSTEMS</b>		TON	KW	Total power of cooling capacity	0903
				Cooling generating equipment of the absorption, centrifugal, reciprocating, and direct expansion types.				
			<b>D303001</b>	<b>CHILLED WATER SYSTEMS</b> Assemblies include condensers, compressors, chillers, pumps, cooling towers, etc., including fittings and specialties required for hook-up. The unit of measure at the assembly level is each.	TON	KW	Power	090301
			<b>D303002</b>	<b>DIRECT EXPANSION SYSTEMS</b> Assemblies include condensers, compressors, heat pumps, and refrigerant piping. The unit of measure at the assembly level is each.	TON	KW	Power	090302
			<b>D303090</b>	<b>OTHER COOLING GENERATING SYSTEMS</b> Cooling generating systems not described by the assembly categories listed above.	XX	XX		09039X
		<b>D3040</b>	<b>DISTRIBUTION SYSTEMS</b>		MBH	KW	Power	0904
				This includes systems that distribute heated and cooled air, ventilating and exhaust air, hot and chilled water, steam, and glycol heating.				
			<b>D304001</b>	<b>AIR DISTRIBUTION, HEATING &amp; COOLING</b> Assemblies include heating coils, cooling coils, and fittings and specialties required for water hook-up. This assembly also includes duct heaters, filters, humidifiers, supply and return ductwork, dampers, fire dampers, supply and return grilles, registers and diffusers, turning vanes, sound traps, and all associated insulation. The unit of measure at the assembly level is MCFM.	MCFM	L/S	Volume of air flow	090401
			<b>D304002</b>	<b>STEAM DISTRIBUTION SYSTEMS</b> Assemblies include pipe and fittings, supports, wall and floor sleeves, and pipe insulation. The unit of measure at the assembly level is MBH.	MBH	KW	Power	090402
			<b>D304003</b>	<b>HOT WATER DISTRIBUTION SYSTEMS</b> Assemblies include pipe and fittings, supports, wall and floor sleeves, and pipe insulation. The unit of measure at the assembly level is MBH.	MBH	KW	Power	090403
			<b>D304004</b>	<b>CHANGE OVER DISTRIBUTION SYSTEMS</b>	MBH	KW	Power	090404
			<b>D304005</b>	<b>GLYCOL DISTRIBUTION SYSTEMS</b> Assemblies include pipe and fittings, supports, wall and floor sleeves, and pipe insulation. The unit of measure at the assembly level is MBH.	MBH	KW	Power	090405

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			<b>D304006</b>	<b>CHILLED WATER DISTRIBUTION SYSTEMS</b> Assemblies include pipe and fittings, supports, wall and floor sleeves, and pipe insulation. The unit of measure at the assembly level is tons.	TON	KW	Power	090406
			<b>D304007</b>	<b>EXHAUST SYSTEMS</b> Assemblies include ductwork grilles, registers, diffusers, fans, and all associated work. The unit of measure at the assembly level is each system.	MCF	L/S	Volume of air flow	090407
			<b>D304008</b>	<b>AIR HANDLING UNITS</b>	MCFM	L/S	Volume of air flow	
			<b>D304090</b>	<b>OTHER DISTRIBUTION SYSTEMS</b> Distribution systems not described by the assembly categories listed above.	XX	XX		09049X
			<b>D3050</b>	<b>TERMINAL &amp; PACKAGE UNITS</b> This category includes self-contained heating and cooling units.	MBH	KW	Power	0905
			<b>D305001</b>	<b>UNIT VENTILATORS</b> Assemblies include the complete terminal unit and wall sleeve with all controls.	EA	EA	Number of units	090501
			<b>D305002</b>	<b>UNIT HEATERS</b> Assemblies include the complete terminal unit and wall sleeve with all controls.	EA	EA	Number of units	090502
			<b>D305003</b>	<b>FAN COIL UNITS</b> Assemblies include the complete terminal unit and wall sleeve with all controls.	EA	EA	Number of units	090503
			<b>D305004</b>	<b>FIN TUBE RADIATION</b> Assemblies include the complete terminal unit and wall sleeve with all controls.	EA	EA	Number of units	090504
			<b>D305005</b>	<b>ELECTRIC HEATING</b> Assemblies include the complete terminal unit and wall sleeve with all controls.	EA	EA	Number of units	090505
			<b>D305006</b>	<b>PACKAGE UNITS</b> Assemblies include complete package units, with integral roof top curbs and all associated devices. A heating system can be selected from hot water, steam coil, or gas furnace and can be a single or multi-zone system. The unit of measure at the assembly level is each.	EA	EA	Number of units	090505
			<b>D305090</b>	<b>OTHER TERMINAL &amp; PACKAGE UNITS</b> Terminal and package units not described by the assembly categories listed above.	XX	XX		09059X
			<b>D3060</b>	<b>CONTROLS &amp; INSTRUMENTATION</b> Includes devices such as thermostats, timers, sensors, control valves, etc., necessary to operate the system as designed.	MBH	KW	Power	0906
			<b>D306001</b>	<b>HVAC CONTROLS</b> Includes devices such as thermostats, timers, sensors, control valves, etc., necessary to operate the total system. The unit of measure at the assembly level is each system.	EA	EA	Power	090601
			<b>D306002</b>	<b>ELECTRONIC CONTROLS</b>	EA	EA	Number of devices	
			<b>D306003</b>	<b>PNEUMATIC CONTROLS</b> Assemblies includes ball and butterfly valves, actuators, high pressure chokes, valve positioners, sensors, regulators, etc.	EA	EA	Number of devices	
			<b>D306004</b>	<b>INSTRUMENT AIR COMPRESSORS</b> Assemblies include air compressors, dryers, and distribution tubing, (only used with pneumatic control systems). The unit of measure at the assembly level is each.	EA	EA	Number of compressors	090603
			<b>D306005</b>	<b>GAS PURGING SYSTEMS</b> Assemblies include the removal of contaminated or unwanted gases from a structure or pipe.	EA	EA	Number of systems	090604
			<b>D306090</b>	<b>OTHER CONTROLS INSTRUMENTATION</b> Controls and instrumentation not described by the assembly categories listed above.	XX	XX		09069X
			<b>D3070</b>	<b>SYSTEMS TESTING &amp; BALANCING</b> This includes operation of all systems to determine capacity and adjustment of water flow in chilled water and hot water systems, air flow of air handling units, supply and exhaust fans, and supply and return, and exhaust registers.	MBH	KW	Power	0907
			<b>D307001</b>	<b>WATER SIDE TESTING &amp; BALANCING - HEATING &amp; COOLING</b> Includes operating and testing of pumps, setting of all control valves, and determining system capacity. The unit of measure at the assembly level is each device, i.e., boiler, chiller, fan coil, and unit heater.	EA	EA	Number of devices	090701
			<b>D307002</b>	<b>AIR SIDE TESTING &amp; BALANCING - HEATING, COOLING &amp; EXHAUST</b> Includes operating and testing of all air handling devices, adjusting of all fans to set rate of air flow, setting all fan motors at desired operation, setting of air flow at all registers, grilles, diffusers, and louvers to deliver design CFM, and testing and calibrating of thermostats to achieve desired space temperature. The unit of measure at the assembly level is each device.	EA	EA	Number of devices	090702
			<b>D307003</b>	<b>HVAC COMMISSIONING</b> Final testing of operational system.	LS	LS	Lump sum	090703
			<b>D307090</b>	<b>OTHER SYSTEMS TESTING &amp; BALANCING</b> Systems testing and balancing not described by the assembly categories listed above.	XX	XX		09079X

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			<b>D3090</b>	<b>OTHER HVAC SYSTEMS AND EQUIPMENT</b>	EA	EA	Number of special mechanical systems	0908
				This subsystem includes special mechanical systems that are not normally included as part of standard HVAC systems.				
			<b>D309001</b>	<b>GENERAL CONSTRUCTION ITEMS</b>	SF	M2	Area of special system	090801
				Includes construction work other than mechanical which must be performed in conjunction with the special mechanical system to make the system complete.				
			<b>D309002</b>	<b>REFRIGERATION SYSTEMS</b>	TON	KW	Power	090802
				Includes equipment for refrigeration in a cold storage facility. Both low and medium temperature equipment are included. Assemblies include: condensing and compressor units, evaporator blowers, refrigerant piping, and specialties, heat recovery systems (liquid or gas), heat recovery distribution systems (liquid or gas), and system testing and balancing.				
			<b>D309090</b>	<b>OTHER SPECIAL MECHANICAL SYSTEMS</b>	XX	XX		09089X
				Any other mechanical system not defined in other categories. Assemblies would include special systems and special devices. The unit of measure at the assembly level is each system or device.				
			<b>D40</b>	<b>FIRE PROTECTION</b>	SF	M2	Gross floor area	10
				This system includes standard and special fire protection systems. Fire alarm systems are included in D503001.				
			<b>D4010</b>	<b>FIRE ALARM AND DETECTION SYSTEMS</b>	SF	M2	Gross floor area	
				Assemblies include wire, conduit, conduit support or fastening systems, fire alarm devices, fire detection devices, safety switches, mass notification, all electrical connections and other associated items.				
			<b>D401001</b>	<b>FIRE ALARM DISTRIBUTION</b>	SF	M2	Gross floor area	
				Wire, conduit, conduit support or fastening systems, switches and connections.				
			<b>D401002</b>	<b>FIRE ALARM DEVICES</b>	EA	EA	Number of devices	
				Fire alarm and fire detection devices				
			<b>D4020</b>	<b>FIRE SUPPRESSION WATER SUPPLY AND EQUIPMENT</b>	LF	M	Length of system	190104
				Requirements for water supply design criteria and any items located upstream of the suppression systems such as PIV's, backflow preventers, strainers, etc.. The water supply distribution system begins 5'-0" outside the building.				
			<b>D402001</b>	<b>FIRE PROTECTION WATER PIPING AND EQUIPMENT</b>	LF	M	Length of system	190104
				Piping				
			<b>D402002</b>	<b>FIRE PUMP</b>	EA	EA	Number of pumps	
			<b>D4030</b>	<b>STANDPIPE SYSTEMS</b>	EA	EA	Number of sprinkler heads	
				This subsystem includes the complete standpipe system.				
			<b>D403001</b>	<b>STANDPIPE EQUIPMENT &amp; PIPING</b>	EA	EA	Number of sprinkler heads	
				Assemblies include standpipe risers and all other piping, fittings, and supports associated with this category. Siamese connections, roof manifolds, cabinets, hoses, racks, and other fire department connections are included in this assembly. All equipment including pumps, tanks, etc., with all required fittings and specialties for hook-up are included in this assembly.				
			<b>D4040</b>	<b>SPRINKLERS</b>	EA	EA	Number of sprinkler heads	
				This subsystem includes the water supply equipment and related piping from the equipment to the sprinkler head.				
			<b>D404001</b>	<b>SPRINKLERS AND RELEASING DEVICES</b>	EA	EA	Number of sprinkler heads	
				The fixture, device, or sprinkler head that releases the water to suppress the fire. The unit of measure at the assembly level is each sprinkler head.				
			<b>D404002</b>	<b>SPRINKLER WATER SUPPLY EQUIPMENT AND PIPING</b>	EA	EA	Number of sprinkler heads	
				Assemblies include alarm valves, flow control valves, pipe and fittings from equipment to sprinkler heads, including all supports and wall or floor sleeves. All equipment including tanks, pumps, and other associated equipment, fittings and specialties required for hook-up are included in this assembly. The unit of measure at the assembly level is each sprinkler head.				
			<b>D4050</b>	<b>FIRE PROTECTION SPECIALTIES</b>	EA	EA	Number of extinguishers	1004
				This subsystem includes fire extinguishing devices.				
			<b>D405001</b>	<b>PORTABLE EXTINGUISHERS</b>	EA	EA	Number of extinguishers	100401
				Assemblies include all types of fire extinguishers, i.e., water, dry chemical, carbon dioxide, soda acid, etc. The brackets, sleeves, and supporting devices are included in this assembly.				
			<b>D4090</b>	<b>OTHER FIRE PROTECTION SYSTEMS</b>	EA	EA	Each system	1005
				Requirements for all other suppression systems. Water based systems (e.g., foam systems) specified from water supply onwards, complete specification for gas systems, incidental systems such as kitchen hood systems.				
			<b>D409001</b>	<b>CARBON DIOXIDE SYSTEMS</b>	EA	EA	Number of systems	
			<b>D409002</b>	<b>FOAM GENERATING EQUIPMENT</b>	EA	EA	Pieces of equipment	
			<b>D409003</b>	<b>CLEAN AGENT SYSTEMS</b>	EA	EA	Number of systems	
			<b>D409004</b>	<b>HOOD &amp; DUCT FIRE PROTECTION</b>	EA	EA	Pieces of equipment	
			<b>D409090</b>	<b>OTHER SPECIAL FIRE PROTECTION SYSTEMS</b>	EA	EA	Each system	100501
				Assemblies include other fire protection systems such as halon systems, exhaust hood systems, and special chemical suppression systems.				
			<b>D50</b>	<b>ELECTRICAL</b>	AMP	AMP	Gross floor area	11
				This system is defined by the electric current used or regarded as a source of power.				
			<b>D5010</b>	<b>ELECTRICAL SERVICE &amp; DISTRIBUTION</b>	AMP	AMP	Gross floor area	1101
				This subsystem provides for all electrical devices that are required to deliver the main source of power to the facility and to distribute this power to subpanels.				
			<b>D501001</b>	<b>MAIN TRANSFORMERS</b>	AMP	AMP	Number of transformers	110101
				Transformers used for primary electrical service and located within the building footprint. Assemblies include transformers, raised pad, trenching, and backfill. This assembly will not likely be used when an exterior transformer is required in G4010 ELECTRICAL DISTRIBUTION.				
			<b>D501002</b>	<b>SERVICE ENTRANCE EQUIPMENT</b>	AMP	AMP	Gross floor area	110103
				This includes the protection equipment and metering devices for main distribution. Assemblies include main distribution panel, breaker, fuses, and meters.				
			<b>D501003</b>	<b>INTERIOR DISTRIBUTION TRANSFORMERS</b>	AMP	AMP	Gross floor area	110104
				Transformers fed downstream of the service entrance equipment. Assemblies include transformers, conduit, conduit support, and wire.				

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Unf L1	Unf L2	Unf L3	WBS L4	Definition	E UOM	M UOM	Quantity Definition	WBS Ref No
			D501004	<b>PANELBOARDS</b>	AMP	AMP	Gross floor area	110105
				Branch circuit panelboards. Assemblies include panelboards, breakers, conduit, and wire.				
			D501005	<b>ENCLOSED CIRCUIT BREAKERS</b>	AMP	AMP	Gross floor area	110106
				Over-current protection device enclosed in its own housing. Assemblies include enclosed circuit breaker, conduit, and wire.				
			D501006	<b>MOTOR CONTROL CENTERS</b>	AMP	AMP	Gross floor area	110107
				This is a cabinet in which motor starters and operation devices are contained. Assemblies include the motor control center cabinet, motor starters, contacts, switches, conduit, wire, and all associated items.				
			D501090	<b>OTHER SERVICE AND DISTRIBUTION</b>	XX	XX		11019X
				Service and distribution not described by the assembly categories listed above.				
		D5020	<b>LIGHTING &amp; BRANCH WIRING</b>		SF	M2	Floor area	1102
				Lighting systems including light fixtures and devices, i.e., switches, receptacles, and equipment connections.				
			D502001	<b>BRANCH WIRING</b>	SF	M2	Floor area	110201
				This assembly includes switches, receptacles, equipment connections, conduit, and wire.				
			D502002	<b>LIGHTING EQUIPMENT</b>	SF	M2	Floor area	110202
				This assembly includes fixtures, conduit, wire, and switching devices.				
			D502090	<b>OTHER LIGHTING AND BRANCH WIRING</b>	XX	XX		11029X
				Lighting and branch wiring not described by the assembly categories listed above.				
		D5030	<b>COMMUNICATIONS &amp; SECURITY</b>		SF	M2	Floor area	1201
				This subsystem includes provisions for communication devices and alarm protection systems.				
			D503001	<b>TELECOMMUNICATIONS SYSTEMS</b>	EA	EA	Number of outlets	120103
				This system would include central switchboards, telephone sets, underground ducts, and manholes. Assemblies include wire, conduit, backboards, cabinets, outlets, and power supply connections.				
			D503002	<b>PUBLIC ADDRESS SYSTEMS</b>	SF	M2	Floor area	120104
				Assemblies include wire, conduit, speakers, monitoring devices, amplifiers, switches, power system tie-in devices, and detection devices.				
			D503003	<b>INTERCOMMUNICATIONS SYSTEMS</b>	EA	EA	Number of stations	120105
				Assemblies include wire, conduit, speakers, monitoring devices, amplifiers, switches, power system tie-in devices, and detection devices.				
			D503004	<b>TELEVISION SYSTEMS</b>	EA	EA	Number of outlets	120107
				Assemblies include wire, conduit, grounding amplifiers, receivers, video equipment, and outlets grouped according to use.				
			D503005	<b>SECURITY SYSTEMS</b>	EA	EA	Number of system control panels	120108
				Assemblies include wire, conduit, conduit support or fastening systems, security alarm devices, all electrical connections, and other associated items. Intrusion Detection Systems (IDS) are included in this category.				
			D503006	<b>NURSE CALL SYSTEMS</b>	EA	EA	Number of outlets	120102
				Assemblies include wire, conduit, speakers, monitoring devices, amplifiers, switches, power system tie-in devices, and detection devices.				
			D503007	<b>CLOCK &amp; PROGRAM SYSTEMS</b>	EA	EA	Number of clocks	120106
				Assemblies include wire, conduit, power systems tie-in, safety switches, control panels, battery back-up devices, clocks and outlets.				
			D503090	<b>OTHER COMMUNICATIONS &amp; ALARM SYSTEMS</b>	XX	XX		12019X
				Communication and alarm systems not described by the assembly categories listed above.				
		D5090	<b>OTHER ELECTRICAL SERVICES</b>		SF	M2	Gross Floor area	1202
				Systems not described in System D5030.				
			D509001	<b>GENERAL CONSTRUCTION ITEMS (ELECTRICAL)</b>	SF	M2	Gross Floor area	120201
				Includes construction other than electrical which must be performed in conjunction with the special electrical system to make the system complete.				
			D509002	<b>EMERGENCY LIGHTING &amp; POWER</b>	SF	M2	Gross Floor area	120202
				Assemblies include fixtures, motors used for power generation, connection and testing, transfer switches, conduit, wire, battery chargers, batteries, and solar panels.				
			D509003	<b>GROUNDING SYSTEMS</b>	SF	M2	Gross Floor area	120203
				This assembly includes grounding protection systems.				

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Unf L1	Unf L2	Unf L3	WBS L4	Definition				
			D509004	<b>LIGHTNING PROTECTION</b> Assemblies include lightning protection devices (air terminals, mounting devices), clamps, ground rods, cadwells, conductors, trenching, backfill, and any other items used to ground metal structural frames with conduit and wire.	SF	M2	Gross Floor area	120204
			D509005	<b>ELECTRIC HEATING</b> Items could include baseboard heaters and wall and ceiling heaters. Assemblies include safety switches, control devices, heaters, conduit, and wire.	SF	M2	Gross Floor area	120205
			D509006	<b>ENERGY MANAGEMENT CONTROL SYSTEM</b> Assemblies include wire, conduit, conduit support or fastening systems, sensor devices, and all electrical connections.	SF	M2	Gross Floor area	120206
			D509090	<b>OTHER SPECIAL SYSTEMS AND DEVICES</b> Special systems and devices not described by the assembly categories listed above.	XX	XX		12029X
<b>E EQUIPMENT &amp; FURNISHINGS</b>					SF	M2	Gross Floor area	
The types of equipment included in this assembly consist of the following: commercial, institutional, and vehicular. The types of furnishings found here include artwork, window treatments, seating, furniture, rugs etc.								
<b>E10 EQUIPMENT</b>					SF	M2	Gross Floor area	13
This system refers to equipment not found in System C1030 (Fittings).								
			<b>E1010 COMMERCIAL EQUIPMENT</b>	This equipment is not likely to be used in every building type. Subsystem C1030 includes those items likely to be found in every building type.	SF	M2	Floor area	1301
			<b>E101001 CHECKROOM EQUIPMENT</b>	All associated work items including keys, tags, and storage cabinets would be included in this assembly.	EA	EA	Number of coat hanging devices	130102
			<b>E101002 REGISTRATION EQUIPMENT</b>		EA	EA	Pieces of equipment	130114
			<b>E101003 VENDING EQUIPMENT</b>		EA	EA	Pieces of equipment	130104
			<b>E101004 LAUNDRY EQUIPMENT</b>		EA	EA	Pieces of equipment	130116
			<b>E101005 SECURITY &amp; VAULT EQUIPMENT</b>		EA	EA	Pieces of equipment	130117
			<b>E101006 TELLER AND SERVICE EQUIPMENT</b>		EA	EA	Pieces of equipment	
			<b>E101007 MERCANTILE EQUIPMENT</b>		EA	EA	Pieces of equipment	
			<b>E101008 OFFICE EQUIPMENT</b>		EA	EA	Pieces of equipment	
			<b>E1020 INSTITUTIONAL EQUIPMENT</b>	Institutional equipment includes items that are normally found in hospitals, laboratories, auditoriums, and libraries.	SF	M2	Floor area	
			<b>E102001 MISCELLANEOUS COMMON FIXED &amp; MOVEABLE EQUIPMENT</b>		EA	EA	Pieces of equipment	130108
			<b>E102002 MEDICAL EQUIPMENT</b>		EA	EA	Pieces of equipment	130110
			<b>E102003 LABORATORY EQUIPMENT</b>		EA	EA	Pieces of equipment	130111
			<b>E102004 MORTUARY EQUIPMENT</b>		EA	EA	Pieces of equipment	130112
			<b>E102005 AUDITORIUM &amp; STAGE EQUIPMENT</b>		EA	EA	Pieces of equipment	130113
			<b>E102006 LIBRARY EQUIPMENT</b>		EA	EA	Pieces of equipment	130115
			<b>E102007 ECCLESIASTICAL EQUIPMENT</b>		EA	EA	Pieces of equipment	
			<b>E102008 INSTRUMENTAL EQUIPMENT</b>		EA	EA	Pieces of equipment	
			<b>E102009 AUDIO-VISUAL EQUIPMENT</b>		EA	EA	Pieces of equipment	
			<b>E102010 DETENTION EQUIPMENT</b>		EA	EA	Pieces of equipment	
			<b>E1030 VEHICULAR EQUIPMENT</b>	Vehicular equipment includes for parking, loading docks, and warehouses.	EA	EA	Pieces of equipment	
			<b>E103001 PARKING CONTROL EQUIPMENT</b>		EA	EA	Pieces of equipment	130107
			<b>E103002 LOADING DOCK EQUIPMENT</b>		EA	EA	Number of docks	130106
			<b>E103003 WAREHOUSE EQUIPMENT</b>		EA	EA	Pieces of equipment	130109
			<b>E103004 AUTOMOTIVE SHOP EQUIPMENT</b>		EA	EA	Pieces of equipment	0
			<b>E1040 GOVERNMENT FURNISHED EQUIPMENT</b>	New and existing equipment provided to the Contractor by the Government.	EA	EA	Pieces of equipment	
			<b>E1090 OTHER EQUIPMENT</b>	The type of equipment found in his category include items for maintenance, food service, and waste handling.				
			<b>E109001 BUILT-IN MAINTENANCE EQUIPMENT</b>	The unit of measure at the assembly level is each.	SF	M2	Floor area	130101
			<b>E109002 FOOD SERVICE EQUIPMENT</b>	The unit of measure at the assembly level is the total set of equipment needed in the particular functional space area.	EA	EA	Seating capacity	130103
			<b>E109003 WASTE HANDLING EQUIPMENT</b>		EA	EA	Pieces of equipment	130105
			<b>E109004 RESIDENTIAL EQUIPMENT</b>		EA	EA	Pieces of equipment	
			<b>E109005 UNIT KITCHENS</b>		EA	EA	Pieces of equipment	
			<b>E109006 DARKROOM EQUIPMENT</b>		EA	EA	Pieces of equipment	
			<b>E109007 ATHLETIC, RECREATIONAL, &amp; THERAPEUTIC EQUIPMENT</b>		EA	EA	Pieces of equipment	
			<b>E109008 PLANETARIUM EQUIPMENT</b>		EA	EA	Pieces of equipment	
			<b>E109009 OBSERVATORY EQUIPMENT</b>		EA	EA	Pieces of equipment	
			<b>E109010 AGRICULTURAL EQUIPMENT</b>		EA	EA	Pieces of equipment	
			<b>E109090 OTHER SPECIALIZED FIXED AND MOVEABLE EQUIPMENT</b>	Specialized fixed and moveable equipment not described by the assembly categories listed above.	XX	XX		13019X
<b>E20 FURNISHINGS</b>					SF	M2	Floor area	14
The types of furnishings found here include artwork, window treatments, seating, furniture, rugs, etc.								
			<b>E2010 FIXED FURNISHINGS</b>	The types of furnishings found here include artwork, window treatments, and seating.	SF	M2	Floor area	1401
			<b>E201001 FIXED ARTWORK</b>		EA	EA	Pieces of art work	140102
			<b>E201002 WINDOW TREATMENTS</b>		SF	M2	Area of window treatment	140103
			<b>E201003 SEATING (FIXED)</b>		EA	EA	Number of seats	140104
			<b>E201004 FIXED INTERIOR LANDSCAPING</b>		EA	EA	Number of items	
			<b>E201090 OTHER FIXED INTERIOR FURNISHINGS</b>		EA	EA	Number of furnishings	14019X
			<b>E2020 MOVEABLE FURNISHINGS</b>	The types of furnishings found here include moveable artwork, furniture, rugs, etc.				
			<b>E202001 MOVEABLE ART WORK</b>		EA	EA	Pieces of art work	
			<b>E202002 MODULAR PREFABRICATED FURNITURE</b>		SF	M2	Pieces of prefabricated furniture	
			<b>E202003 FREESTANDING FURNITURE</b>		EA	EA	Pieces of furniture	
			<b>E202004 RUGS &amp; ACCESSORIES</b>	Assemblies include rugs and accessories.	EA	EA	Number of items	
			<b>E202005 MOVEABLE MULTIPLE SEATING</b>		EA	EA	Number of items	
			<b>E202006 MOVEABLE INTERIOR LANDSCAPING</b>		EA	EA	Number of items	

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Unf L1	Unf L2	Unf L3	WBS L4	Definition				
			E202090	OTHER MOVEABLE FURNISHINGS	EA	EA	Number of furnishings	
<b>F</b>	<b>SPECIAL CONSTRUCTION &amp; DEMOLITION</b>				SF	M2	Floor area	
				Special construction includes air-supported structures; pre-engineered structures; special purpose rooms; sound, vibration, and seismic construction; radiation protection; special security systems; aquatic facilities; ice rinks, site constructed incinerators; kennels and animal shelters; liquid and gas storage tanks; recording instrumentation; and building automation systems. Selective building demolition includes demolition of existing buildings, and site demolition.				
	<b>F10</b>	<b>SPECIAL CONSTRUCTION</b>			SF	M2	Floor area	
				Special construction includes air-supported structures; pre-engineered structures; special purpose rooms; sound, vibration, and seismic construction; radiation protection; special security systems; aquatic facilities; ice rinks, site constructed incinerators; kennels and animal shelters; liquid and gas storage tanks; recording instrumentation; and building automation systems.				15
		<b>F1010</b>	<b>SPECIAL STRUCTURES</b>		SF	M2	Floor area	
				Special structures includes air-supported structures, and pre-engineered structures.				
			<b>F101001</b>	<b>METAL BUILDING SYSTEMS</b>	SF	M2	Floor area	
			<b>F101002</b>	<b>EXTERIOR UTILITY BUILDINGS</b>	SF	M2	Floor area of exterior building	
			<b>F101003</b>	<b>AIR-SUPPORTED STRUCTURES</b>	SF	M2	Floor area of exterior building	
			<b>F101090</b>	<b>OTHER SPECIAL CONSTRUCTION</b>	XX	XX		
		<b>F1020</b>	<b>INTEGRATED CONSTRUCTION</b>		SF	M2	Floor area	
				Integrated construction includes integrated assemblies and special purpose rooms.				
			<b>F102001</b>	<b>SPECIAL PURPOSE ROOMS</b>	SF	M2	Area of room	
			<b>F102002</b>	<b>INTEGRATED ASSEMBLIES</b>	SF	M2	Area of room	
			<b>F102090</b>	<b>OTHER INTEGRATED CONSTRUCTION</b>	SF	M2	Area of room	
		<b>F1030</b>	<b>SPECIAL CONSTRUCTION SYSTEMS</b>		SF	M2	Area of room	
				Special construction systems includes sound, vibration, and seismic construction; radiation protection; special security systems; and built-in place vaults.				
			<b>F103001</b>	<b>VAULTS</b>	SF	M2	Area of vault	
				This is a built-in-place vault. Prefabricated safes are not included in this assembly. The unit of measure at the assembly level is each.				1501
			<b>F103002</b>	<b>SOUND, VIBRATION, AND SEISMIC CONSTRUCTION</b>	SF	M2	Area of room	
			<b>F103003</b>	<b>RADIATION PROTECTION</b>	SF	M2	Area of room	
			<b>F103090</b>	<b>OTHER SPECIAL CONSTRUCTION SYSTEMS</b>	SF	M2	Area of room	
		<b>F1040</b>	<b>SPECIAL FACILITIES</b>		SF	M2	Area of room	
				Special facilities includes aquatic facilities; ice rinks, site constructed incinerators; kennels and animal shelters; and liquid and gas storage tanks.				
			<b>F104001</b>	<b>INTERIOR SWIMMING POOLS</b>	SF	M2	Area of pool	1502
			<b>F104002</b>	<b>LIQUID AND GAS STORAGE TANKS</b>	EA	EA	Number of storage tanks	
			<b>F104003</b>	<b>KENNELS AND ANIMAL SHELTERS</b>	SF	M2	Area of kennel or animal shelter	
			<b>F104004</b>	<b>SITE CONSTRUCTED INCINERATORS</b>	EA	EA	Number of incinerators	
			<b>F104005</b>	<b>ICE RINKS</b>	SF	M2	Area of ice rink	
			<b>F104090</b>	<b>OTHER SPECIAL FACILITIES</b>	EA	EA	Number of special facilities	
		<b>F1050</b>	<b>SPECIAL CONTROLS AND INSTRUMENTATION</b>		XX	XX		
				Special controls and instrumentation includes recording instrumentation and building automation systems.				
			<b>F105001</b>	<b>RECORDING INSTRUMENTATION</b>	EA	EA	Number of instruments	
			<b>F105002</b>	<b>BUILDING AUTOMATION SYSTEMS</b>	EA	EA	Number of systems	
			<b>F105090</b>	<b>OTHER SPECIAL CONTROLS AND INSTRUMENTATION</b>	EA	EA	Number of controls and instruments	
	<b>F20</b>	<b>SELECTIVE BUILDING DEMOLITION</b>			LS	LS		
				Selective building demolition includes demolition of existing buildings, site demolition, and hazardous components abatement.				16
		<b>F2010</b>	<b>BUILDING ELEMENTS DEMOLITION</b>		LS	LS		1601
				Selective building demolition includes demolition of existing buildings, and site demolition.				
			<b>F201001</b>	<b>SUBSTRUCTURE &amp; SUPERSTRUCTURE</b>	LS	LS		160101
			<b>F201002</b>	<b>EXTERIOR CLOSURE</b>	LS	LS		160102
			<b>F201003</b>	<b>ROOFING</b>	LS	LS		160103
			<b>F201004</b>	<b>INTERIOR CONSTRUCTION &amp; FINISHES</b>	LS	LS		160104
			<b>F201005</b>	<b>CONVEYING SYSTEMS</b>	LS	LS		160105
			<b>F201006</b>	<b>MECHANICAL SYSTEMS</b>	LS	LS		160106
			<b>F201007</b>	<b>ELECTRICAL SYSTEMS</b>	LS	LS		160107
			<b>F201008</b>	<b>EQUIPMENT &amp; FURNISHINGS</b>	LS	LS		160108

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Unf L1	Unf L2	Unf L3	WBS L4	Definition					
			F201090	<b>OTHER NON-HAZARDOUS SELECTIVE BUILDING DEMOLITION</b> Non-hazardous selective building demolition not described by the assembly categories listed above.	XX	XX			16019X
		F2020	<b>HAZARDOUS COMPONENTS ABATEMENT</b>		LS	LS			1602
				Hazardous components abatement includes the removal or encapsulation of hazardous building materials and components. Hazardous components include asbestos, lead based paint, paint containing cadmium, chromium and lead, mercury and low level radioactive components, PCBs, ozone depleting substances, animal droppings and molds and spores.					
			F202001	<b>SUBSTRUCTURE &amp; SUPERSTRUCTURE</b>	LS	LS			160201
			F202002	<b>EXTERIOR CLOSURE</b>	LS	LS			160202
			F202003	<b>ROOFING</b>	LS	LS			160203
			F202004	<b>INTERIOR CONSTRUCTION &amp; FINISHES</b>	LS	LS			160204
			F202005	<b>CONVEYING SYSTEMS</b>	LS	LS			160205
			F202006	<b>MECHANICAL SYSTEMS</b>	LS	LS			160206
			F202007	<b>ELECTRICAL SYSTEMS</b>	LS	LS			160207
			F202008	<b>EQUIPMENT &amp; FURNISHINGS</b>	LS	LS			160208
			F202090	<b>OTHER HAZARDOUS SELECTIVE BUILDING DEMOLITION</b> Hazardous selective building demolition not described by the assembly categories listed above.	XX	XX			16029X
<b>G</b>			<b>BUILDING SITWORK</b>		ACR	Hectare	Total area of site		
				Building sitework includes site preparations, site improvements, site civil/mechanical utilities, site electrical utilities, service and pedestrian tunnels, and other site construction, such as bridges, and railroad spurs.					
		<b>G10</b>	<b>SITE PREPARATIONS</b>		ACR	Hectare	Total area of site		
				This system includes assemblies for miscellaneous sitework such as clearing and grubbing, demolition and relocation, various earthwork tasks, and other site preparation and cleanup requirements. Hazardous cleanup is not included but is the subject of another WBS.					17
		<b>G1010</b>	<b>SITE CLEARING</b>		ACR	Hectare	Area to be cleared		
				This covers the different assemblies and options available for clearing of a site, tree and stump removal, burning, grubbing, chipping, and load and haul assemblies for removal of the cleared material.					1701
			<b>G101001</b>	<b>CLEARING</b>	ACR	Hectare	Area to be cleared		
				This is the removal of above ground vegetation including stumps. For a wet site, Low Ground Pressure (LGP) equipment is used.					170101
			<b>G101002</b>	<b>TREE REMOVAL</b>	EA	EA	Number of trees to be removed		
				This is the selective removal of trees on the site. Various options exist for different sizes of trees to be removed.					170102
			<b>G101003</b>	<b>STUMP REMOVAL</b>	EA	EA	Number of stumps to be removed		
				This is the selective removal of stumps on the site. Various options exist for different sizes of stumps to be removed.					170103
			<b>G101004</b>	<b>GRUBBING</b>	ACR	Hectare	Area to be grubbed		
				Grubbing is the removal of sod and other topsoil that contains unsuitable organic material. Various equipment types and size choices are available. Wet grubbing utilizes Low Ground Pressure (LGP) equipment. Haul-off of grubbed material is also included.					170105
			<b>G101005</b>	<b>SELECTIVE THINNING</b>	ACR	Hectare	Area to be thinned		
				This is the selective removal of trees and underbrush without requiring extensive clearing and/or grubbing of the site.					170106
			<b>G101006</b>	<b>DEBRIS DISPOSAL</b>	CY	M3	Volume of material		
				This is the disposal of the material that has been cleared and grubbed. Loading, hauling, and dump charges are included.					170107
			<b>G101090</b>	<b>OTHER SITE CLEARING</b> Site clearing not described by the assembly categories listed above.	XX	XX			17019X
		<b>G1020</b>	<b>SITE DEMOLITION &amp; RELOCATIONS</b>		SY	M2	Area to be demolished		
				This includes the demolition and/or relocation of structures, pavements, fencing, and underground utilities. Disposal of debris or demolished material, including loading and hauling, is also included.					1702
			<b>G102001</b>	<b>BUILDING MASS DEMOLITION</b>	CF	M3	Interior volume of building		
				This is the complete demolition of buildings or structures. Options include steel, concrete, masonry, and wood structures.					170201
			<b>G102002</b>	<b>ABOVE GROUND SITE DEMOLITION</b>	SY	M2	Area to be demolished		
				This is the demolition of pavements, fencing, and other non-building structures on a site. Pavement include roads, sidewalks, driveways, and curbs. Fencing types include chain link, barbed wire, and wood. This can also include removal and disposal of above ground storage tanks, including tank contents, associated piping, etc.					170202
			<b>G102003</b>	<b>UNDERGROUND SITE DEMOLITION</b>	SY	M2	Area to be demolished		
				This is the demolition of underground utilities such as piping, manholes, and other non-building underground structures. The unit of measure at the assembly level for piping is LF and for manholes is CY. This can also include removal and disposal of under ground storage tanks, including tank contents, associated piping, etc.					170203
			<b>G102004</b>	<b>BUILDING RELOCATION</b>	SF	M2	Area of building to be relocated		
				This is the process of dismantling a structure, and reassembling it on a different site.					170205
			<b>G102005</b>	<b>UTILITY RELOCATION</b>	LF	M	Length of pipe run		
				To remove and reset. This is the removal and relocation of underground utilities such as steel and concrete pipe.					170206
			<b>G102006</b>	<b>FENCING RELOCATION</b>	LF	M	Length of fencing		
									170207
			<b>G102007</b>	<b>SITE CLEANUP</b>	SY	M2	Area of site to clean		
				Covered in this assembly category are items for site and area cleanup and pavement sweeping. Disposal of the debris is also included.					170401
			<b>G102090</b>	<b>OTHER SITE DEMOLITION &amp; RELOCATIONS</b> Site demolition and relocation not described by the assembly categories listed above.	XX	XX			17029X
		<b>G1030</b>	<b>SITE EARTHWORK</b>		CY	M3	Volume of material		
				Included are assemblies and options for site work such as grading, excavation, filling, compaction, stabilization, etc.					1703
			<b>G103001</b>	<b>GRADING</b>	SY	M2	Area to be graded		
				Grading is leveling or flattening of the site in preparation for landscaping or other site construction. Includes unlined stormwater collection ponds.					170301
			<b>G103002</b>	<b>COMMON EXCAVATION</b>	CY	M3	Volume of material to be excavated		
				This is excavation for roads, sidewalks, curbs, and trenching for underground utilities. Excavation may be carried out by a variety of equipment sizes and types. Disposal of the excavated material is also included.					170302
			<b>G103003</b>	<b>ROCK EXCAVATION</b>	CY	M3	Volume of rock to be excavated		
				This is excavation of rock by explosives. Different equipment selections and load and haul are included.					170303

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Unf L1	Unf L2	Unf L3	WBS L4	Definition	E UOM	M UOM	Quantity Definition	WBS Ref No
			<b>G103004</b>	<b>FILL &amp; BORROW</b> This is filling or replacing the material that was removed during excavation. Either the excavated material may be used or soil and sand may be hauled in from off-site. Filling to basements and foundations is not included in the subsystem.	CY	M3	Volume of material to place	170304
			<b>G103005</b>	<b>COMPACTION</b> Compaction is the process of packing the fill material once it is in place. This may be done by machine or hand. Assemblies exist for both hand and machine compaction of soil, sand, and the excavated material.	CY	M3	Volume of material to compact	170305
			<b>G103006</b>	<b>SOIL STABILIZATION</b> This is stabilization of the soil-in-place by the addition of lime or cement.	CY	M3	Volume of soil to stabilize	170306
			<b>G103007</b>	<b>SLOPE STABILIZATION</b> This is stabilization of the soil-in-place through the use of rip rap, gabions, slope paving, or other forms of soil armoring.	SY	M2	Area of slope	170307
			<b>G103008</b>	<b>SOIL TREATMENT</b> Treatment of soil prior to final construction for insect protection or other purposes.	SY	M2	Area of soil to treat	170308
			<b>G103009</b>	<b>SHORING</b> Shoring is the temporary support for existing structures or excavation during construction.	SF	M2	Area requiring shoring	170309
			<b>G103010</b>	<b>TEMPORARY DEWATERING</b> This is the dewatering of the site by wellpoints to lower the groundwater table. This will facilitate excavation in areas with high water tables.	SY	M2	Area to dewater	170310
			<b>G103011</b>	<b>TEMPORARY EROSION &amp; SEDIMENT CONTROL</b> Interim measures to minimize erosion during construction.	SF	M2	Area to be protected	170311
			<b>G103090</b>	<b>OTHER SITE EARTHWORK</b> Site earthwork not described by the assembly categories listed above.	XX	XX		17039X
			<b>G1040</b>	<b>HAZARDOUS WASTE REMEDIATION</b> Hazardous waste remediation, removal, disposal and restoration of contaminated soil and/or groundwater.	LS	LS		
			<b>G104001</b>	<b>REMOVAL OF CONTAMINATED SOIL</b>	CY	M3	Volume of contaminated soil	
			<b>G104002</b>	<b>SOIL RESTORATION AND TREATMENT</b>	CY	M3	Volume of soil	
			<b>G104090</b>	<b>OTHER HAZARDOUS WASTE REMEDIATION</b> Hazardous waste remediation not described by the assembly categories listed above.	XX	XX		
			<b>G20</b>	<b>SITE IMPROVEMENTS</b>	LS	LS		18
				This includes improvements such as parking lots, sidewalks, roadways, fencing, retaining walls, and landscaping.				
			<b>G2010</b>	<b>ROADWAYS</b>	SY	M2	Area of roadway	1801
				This subsystem includes options for access, arterial, or interstate roadways. A variety of pavement types and thickness are available.				
			<b>G201001</b>	<b>BASES &amp; SUBBASES</b> These are the compacted and prepared gravel or soil layers that are placed prior to the installation of the final surface. The subbase is placed and compacted before the base layer is applied.	SY	M2	Area of roadway	180101
			<b>G201002</b>	<b>CURBS &amp; GUTTERS</b> This is the drainage system for the selected roadway type. Options include curb and gutter drains or area drains with grates.	LF	M	Length of drainage pipe	
			<b>G201003</b>	<b>PAVED SURFACES</b> This is material that is placed atop the base layer to provide the driving surface.	SY	M2	Area of roadway	180103
			<b>G201004</b>	<b>MARKING &amp; SIGNAGE</b> This includes roadway signage and pavement painting. Assemblies are included for traffic signs and posts and intersection, crosswalk, or other pavement painting or striping.	SY	M2	Area of roadway	180104
			<b>G201005</b>	<b>GUARDRAILS &amp; BARRIERS</b> This is any associated guardrails or barriers that are required for the selected roadway type.	LF	M	Length of guardrail or barrier	180105
			<b>G201006</b>	<b>RESURFACING</b> This is the placement of an asphalt wearing course over the existing pavement surface. Assemblies exist for resurfacing of gravel, concrete, and asphalt roadways.	SY	M2	Area of roadway	180106
			<b>G201090</b>	<b>OTHER ROADWAYS</b> Roadways not described by the assembly categories listed above.	XX	XX		18019X
			<b>G2020</b>	<b>PARKING LOTS</b>	EA	EA	Number of spaces	1802
				These are the areas required of vehicles parking and include different surfaces and drainage options.				
			<b>G202001</b>	<b>BASES &amp; SUBBASES</b> These are the compacted and prepared gravel or soil layers that are placed prior to the installation of the final surface. The subbase is placed and compacted before the base layer is applied.	SY	M2	Area of parking lot	180201
			<b>G202002</b>	<b>CURBS &amp; GUTTERS</b> This is the curb and gutter drains or area drains with grates.	LF	M	Length of curbs & gutters	
			<b>G202003</b>	<b>PAVED SURFACES</b> This is material that is placed atop the base layer to provide the driving surface.	SY	M2	Area of parking lot	180203
			<b>G202004</b>	<b>MARKING &amp; SIGNAGE</b> This includes painting of the parking stalls, signage, etc.	EA	EA	Number of spaces	180205
			<b>G202005</b>	<b>GUARDRAILS &amp; BARRIERS</b> Guardrails, barriers, parking stops and other similar devices.	LF	M	Length of guardrail or barrier	180205
			<b>G202006</b>	<b>RESURFACING</b> This is the placement of an asphalt wearing course over the existing parking surface.	SY	M2	Area of parking lot	180206
			<b>G202007</b>	<b>MISCELLANEOUS STRUCTURES AND EQUIPMENT</b>	EA	EA	Number of structures or equipment	
			<b>G202090</b>	<b>OTHER PARKING LOTS</b> Parking areas not described by the assembly categories listed above.	XX	XX		18029X
			<b>G2030</b>	<b>PEDESTRIAN PAVING</b>	SY	M2	Area of pavement	1803
				This subsystem includes options for sidewalks and other small paved areas.				
			<b>G203001</b>	<b>BASES &amp; SUBBASES</b> These are the compacted and prepared gravel or soil layers that are placed prior to the installation of the final surface. The subbase is placed and compacted before the base layer is applied.	SY	M2	Area of pavement	180301
			<b>G203002</b>	<b>CURBS &amp; GUTTERS</b> This is the curb and gutter drains or area drains with grates.	LF	M	Length of curbs & gutters	
			<b>G203003</b>	<b>PAVED SURFACES</b> This is material that is placed atop the base layer to provide the walking or driving surface.	SY	M2	Area of pavement	180303
			<b>G203004</b>	<b>GUARDRAILS &amp; BARRIERS</b> This is any associated guardrails or barriers that are required.	LF	M	Length of guardrail or barrier	180304
			<b>G203005</b>	<b>RESURFACING</b> This is the placement of an asphalt wearing course over the existing pavement surface.	SY	M2	Area of pavement	180305
			<b>G203090</b>	<b>OTHER WALKS, STEPS &amp; TERRACES</b> Walks, steps, ramps, terraces not described by the assembly categories listed above.	XX	XX		18039X

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Unf L1	Unf L2	Unf L3	WBS L4	Definition	E UOM	M UOM	Quantity Definition	WBS Ref No
			<b>G2040</b>	<b>SITE DEVELOPMENT</b>	EA	EA	Each Structure	1804
				Included are assemblies for on-site construction of fences, retaining walls, playing fields, fountains, and other site improvements.				
			<b>G204001</b>	<b>FENCING &amp; GATES</b>	LF	M	Length of fence	180401
				This includes installation or construction of security, boundary, or barbed wire fencing and all required gates.				
			<b>G204002</b>	<b>RETAINING WALLS AND FREESTANDING WALLS</b>	SY	M2	Area of wall	180402
				These are structures used to prevent the flow or lateral movement of soil. Assemblies exist for cast-in-place concrete retaining walls.				
			<b>G204003</b>	<b>EXTERIOR FURNISHINGS</b>	EA	EA	Number of furnishings	180403
				This includes the addition of such exterior furnishings as benches, planters, etc.				
			<b>G204004</b>	<b>SECURITY STRUCTURES</b>	EA	EA	Number of security structures	180404
				This includes the construction or addition of security structures such as guard houses.				
			<b>G204005</b>	<b>SIGNAGE</b>	EA	EA	Number of signs	180405
				Signs displayed to convey direction or information such as building function or tenant except for signs included in G201004 and G202004.				
			<b>G204006</b>	<b>FOUNTAINS &amp; POOLS</b>	EA	EA	Number of fountains or pools	180406
				This includes assemblies for swimming pools and decorative fountains.				
			<b>G204007</b>	<b>PLAYING FIELDS</b>	EA	EA	Number of playing fields	180407
				Playing fields such as baseball or tennis courts as well as back stops, bleachers, and other playing field requirements are included.				
			<b>G204008</b>	<b>TERRACE AND PERIMETER WALLS</b>	SY	M2	Area of wall	
			<b>G204009</b>	<b>FLAGPOLES</b>	EA	EA	Number of flagpoles	
			<b>G204090</b>	<b>OTHER SITE IMPROVEMENTS</b>	XX	XX		1804
				This includes any other miscellaneous structures, such as a car wash, banking system, and theatre equipment located on the site.				
			<b>G2050</b>	<b>LANDSCAPING</b>	SY	M2	Area to be landscaped	1805
				Assemblies are included that improve the appearance of the site by planting, seeding, and sodding.				
			<b>G205001</b>	<b>FINE GRADING &amp; SOIL PREPARATION</b>	SY	M2	Area of site	180501
				Fine grading of the site by hand or machine is required to prepare the soil for planting, seeding, or sodding.				
			<b>G205002</b>	<b>EROSION CONTROL MEASURES</b>	SY	M2	Area of erosion	180502
				Soil erosion or deterioration due to wind, rain or other factors can be controlled or remedied in different ways. This includes slope protection by planting or vegetation or grass and/or placement of manmade geotextiles.				
			<b>G205003</b>	<b>TOPSOIL &amp; PLANTING BEDS</b>	SY	M2	Area of planting bed	180503
				Topsoil is placed to provide the nutritious soil bed which is required for plants or grass to grow.				
			<b>G205004</b>	<b>SEEDING, SPRIGGING AND SODDING</b>	SY	M2	Area of site	180504
				This includes the seeding, sodding, fertilizing, watering, and mowing for the grass required on site.				
			<b>G205005</b>	<b>PLANTINGS</b>	EA	EA	Number of plants	180505
				This includes the planting of trees, shrubs, and other vegetation for site beautification or improvement.				
			<b>G205006</b>	<b>PLANTERS</b>	EA	EA	Number of planters	180506
				Planters are exterior decorative containers that contain plants or trees.				
			<b>G205007</b>	<b>IRRIGATION SYSTEMS</b>	SY	M2	Area of site to be watered	180507
				This includes the installation of underground irrigation systems required for watering of trees, shrubs, and grass or other vegetation.				
			<b>G205090</b>	<b>OTHER LANDSCAPING</b>	XX	XX		18059X
				Landscaping not described by the assembly categories listed above.				
			<b>G2060</b>	<b>AIRFIELD PAVING</b>	SY	M2	Area of paving	
				Aircraft parking apron and runway paving.				
			<b>G206001</b>	<b>AIRFIELD PAVING CONSTRUCTION</b>	SY	M2	Area of paving	
			<b>G206002</b>	<b>OTHER PAVING</b>	SY	M2	Area of paving	
			<b>G206003</b>	<b>JOINTS AND ANCHORAGE</b>	SY	M2	Area of paving	
			<b>G206004</b>	<b>NAVIGATION AIDS</b>	LS	LS		
			<b>G206005</b>	<b>AIRFIELD MARKINGS</b>	LS	LS		

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Unf L1	Unf L2	Unf L3	WBS L4	Definition				
	<b>G30</b>		<b>SITE CIVIL/MECHANICAL UTILITIES</b>		EA	EA	Each utility	
				Site mechanical utilities includes water supply, sanitary sewer, storm sewer, heating distribution, cooling distribution, fuel distribution, and other site mechanical utilities, such as industrial waste systems.				
		<b>G3010</b>	<b>WATER SUPPLY</b>		LF	M	Length of system	1901
				This includes installation or construction of water distribution systems and facilities.				
		<b>G301001</b>	<b>WELL SYSTEMS</b>		EA	EA	Each system	190101
				This includes all the components necessary to install a well, including drilling, installing casings, pumps, valves, etc.				
		<b>G301002</b>	<b>POTABLE WATER DISTRIBUTION</b>		LF	M	Length of system	190102
				This includes construction and installation of underground piping, valve boxes, and valves.				
		<b>G301003</b>	<b>POTABLE WATER STORAGE</b>		GAL	GAL	Amount stored	190103
				This includes construction and installation of tanks, both at grade and elevated.				
		<b>G301004</b>	<b>FIRE PROTECTION WATER DISTRIBUTION</b>		LF	M	Length of system	190104
				This includes construction and installation of dedicated water piping for fire protection system only. This does not include potable water distribution systems that are used as a water source for fire protection systems.				
		<b>G301005</b>	<b>FIRE PROTECTION WATER STORAGE</b>		GAL	GAL	Amount stored	190105
				This includes tanks on grade and elevated for storage of water for fire protection only.				
		<b>G301006</b>	<b>NON-POTABLE WATER DISTRIBUTION</b>		LF	M	Length of system	190106
				This includes construction and installation of water distribution system not for consumption, such as irrigation or hydro-electric power generation and from reservoirs to treatment facilities.				
		<b>G301007</b>	<b>PUMPING STATIONS</b>		GPM	L/S	Operating capacity	190107
				This includes construction and installation of pumps, valves, and piping.				
		<b>G301008</b>	<b>PACKAGED WATER TREATMENT PLANTS</b>		GPD	GPD	Operating capacity	190108
				This includes installation of completely assembled water treatment plants.				
		<b>G301090</b>	<b>OTHER WATER SUPPLY</b>		XX	XX		19019X
				Water supply not described by the assembly categories listed above.				
		<b>G3020</b>	<b>SANITARY SEWER</b>		LF	M	Length of system	1902
				This includes all assemblies necessary for sewage collection systems.				
		<b>G302001</b>	<b>SANITARY SEWER PIPING</b>		LF	M	Length of piping	190201
				This includes installation of piping for collection of sewage.				
		<b>G302002</b>	<b>SANITARY SEWER MANHOLES &amp; CLEANOUTS</b>		EA	EA	Each manhole or cleanout	190202
				This includes construction and installation of manholes and cleanouts in sewage collection systems.				
		<b>G302003</b>	<b>LIFT STATIONS AND PUMPING STATIONS</b>		GPM	L/S	Operating capacity	190203
				This includes construction and installation of piping and equipment in lift stations.				
		<b>G302004</b>	<b>PACKAGED SANITARY SEWER TREATMENT PLANTS</b>		GPD	L/S	Operating capacity	190204
				This includes installation of pre-assembled sewage treatment plants.				
		<b>G302005</b>	<b>SEPTIC TANKS</b>		GAL	L	Volume of tank	190205
				This includes installation of prefabricated septic tanks or the construction of septic tanks.				
		<b>G302006</b>	<b>DRAIN FIELDS</b>		LF	M	Length of field	190206
				This includes installation of drain fields for disposal of effluent from septic tanks.				
		<b>G302090</b>	<b>OTHER SANITARY SEWER</b>		XX	XX		19029X
				Sanitary sewers not described by the assembly categories listed above.				
		<b>G3030</b>	<b>STORM SEWER</b>		LF	M	Length of system	1903
				This includes construction of storm water collection systems.				
		<b>G303001</b>	<b>STORM SEWER PIPING</b>		LF	M	Length of piping	190301
				This includes installation of piping for collection of storm water.				
		<b>G303002</b>	<b>STORM SEWER STRUCTURES</b>		EA	EA	Each manhole or cleanout	
				This includes construction and installation of manholes for storm water collection systems.				
		<b>G303003</b>	<b>LIFT STATIONS</b>		GPM	L/S	Operating capacity	190303
				This includes construction of lift stations including piping, pumps, and controls.				
		<b>G303004</b>	<b>CULVERTS</b>		LF	M	Length of culvert	190305
				This includes construction and installation of culverts for storm water systems.				
		<b>G303005</b>	<b>HEADWALLS</b>		EA	EA	Each structure	190305
				This includes construction of headwalls and installation of catch basins for storm water systems.				
		<b>G303006</b>	<b>EROSION &amp; SEDIMENT CONTROL MEASURES</b>		SY	M2	Area to control	190306
				This includes construction to control erosion due to runoff.				
		<b>G303007</b>	<b>STORMWATER MANAGEMENT</b>		GAL	GAL	Volume of collection area	
		<b>G303090</b>	<b>OTHER STORM SEWER</b>		XX	XX		19039X
				Storm sewers not described by the assembly categories listed above.				
		<b>G3040</b>	<b>HEATING DISTRIBUTION</b>		LF	M	Length of system	1905
				This includes overhead and underground hot water, steam, and condensate piping.				
		<b>G304001</b>	<b>OVERHEAD HOT WATER SYSTEMS</b>		LF	M	Length of system	190501
				This includes installation of overhead hot water supply and return piping.				
		<b>G304002</b>	<b>OVERHEAD STEAM SYSTEMS</b>		LF	M	Length of system	190502
				This includes installation of overhead steam supply and condensate return piping.				
		<b>G304003</b>	<b>UNDERGROUND HOT WATER SYSTEMS</b>		LF	M	Length of system	190503
				This includes installation of underground hot water supply and return piping.				
		<b>G304004</b>	<b>UNDERGROUND STEAM DISTRIBUTION SYSTEMS</b>		LF	M	Length of system	190504
				This includes installation of underground steam supply and condensate return piping.				
		<b>G304005</b>	<b>REINFORCED CONCRETE MANHOLES &amp; VALVE BOXES</b>		EA	EA	Each structure	
				This includes installation of prefabricated trench boxes for shoring during installation of piping.				
		<b>G304006</b>	<b>PUMPING STATIONS</b>		EA	EA	Each pumping station	
		<b>G304090</b>	<b>OTHER HEATING DISTRIBUTION</b>		XX	XX		19059X
				Heating distribution not described by the assembly categories listed above.				
		<b>G3050</b>	<b>COOLING DISTRIBUTION</b>		LF	M	Length of system	1906
				This includes construction and installation of chilled water distribution systems.				
		<b>G305001</b>	<b>OVERHEAD COOLING SYSTEMS</b>		LF	M	Length of system	190601
				This includes installation of overhead chilled water supply and return piping.				
		<b>G305002</b>	<b>UNDERGROUND COOLING SYSTEMS</b>		LF	M	Length of system	190602
				This includes installation of underground chilled water supply and return piping.				
		<b>G305003</b>	<b>TRENCHBOXES</b>		LF	M	Length of trench	190603
				This includes installation of prefabricated trench boxes for shoring during installation of piping.				
		<b>G305004</b>	<b>WELLS FOR COOLING</b>		EA	EA	Each well	
		<b>G305005</b>	<b>PUMPING STATIONS</b>		EA	EA	Each pumping station	
		<b>G305006</b>	<b>ON-SITE COOLING TOWERS</b>		EA	EA	Each cooling tower	
		<b>G305090</b>	<b>OTHER COOLING DISTRIBUTION</b>		XX	XX		19069X
				Cooling distribution not described by the assembly categories listed above.				

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		<b>G3060</b>	<b>FUEL DISTRIBUTION</b>		GAL	L	Volume of storage tank	1908
				This includes installation of piping and storage tanks for building and aviation fuels.				
		<b>G306001</b>	<b>LIQUID FUEL DISTRIBUTION PIPING SYSTEM</b>		LF	M	Length of piping	190801
				This includes installation of piping for fuel and oil distribution. This includes equipment related to piping, system leak detection and tightness testing.				
		<b>G306002</b>	<b>AVIATION FUEL DISTRIBUTION PIPING SYSTEM</b>		LF	M	Length of piping	190801
				This includes installation of piping for aviation fuel distribution and equipment related to the piping. This also includes system leak detection and tightness testing.				
		<b>G306003</b>	<b>LIQUID FUEL STORAGE TANKS</b>		GAL	L	Volume of storage tank	190801
				This includes installation of buried or above ground fuel tanks relating to liquid fuel or aviation systems.				
		<b>G306004</b>	<b>LIQUID FUEL DISPENSING EQUIPMENT</b>		EA	EA	Each piece of equipment	190803
				This includes equipment relating to liquid fuel and aviation systems.				
		<b>G306005</b>	<b>LIQUID FUEL SYSTEM TRENCHBOXES</b>		LF	M	Length of trench	190802
				This includes installation of prefabricated trench boxes for shoring during installation of piping.				
		<b>G306006</b>	<b>GAS DISTRIBUTION PIPING (NATURAL AND PROPANE)</b>		LF	M	Length of piping	
				This includes piping for distribution of natural or propane gas.				
		<b>G306007</b>	<b>GAS STORAGE TANKS</b>		GAL	L	Volume of storage tank	
				This includes installation of tanks for natural or propane gas.				
		<b>G306008</b>	<b>GAS SYSTEM TRENCHBOXES</b>		LF	M	Length of trench	
				This includes installation of prefabricated trench boxes for shoring during installation of piping.				
		<b>G306009</b>	<b>OTHER GAS DISTRIBUTION</b>		XX	XX		
				Gas distribution not described by the assembly categories listed above.				
		<b>G306090</b>	<b>OTHER FUEL DISTRIBUTION</b>		XX	XX		19089X
				Fuel not described by the assembly categories listed above.				
		<b>G3090</b>	<b>OTHER SITE MECHANICAL UTILITIES</b>		LF	M	Length of system	1904
				This includes all systems for collection of contaminated waste requiring special treatment.				
		<b>G309001</b>	<b>INDUSTRIAL WASTE PIPE</b>		LF	M	Length of piping	190401
				This includes construction and installation of all piping for collection of industrial waste.				
		<b>G309002</b>	<b>INDUSTRIAL WASTE MANHOLES &amp; CLEANOUTS</b>		EA	EA	Each manhole or cleanout	190402
				This includes construction of manholes and cleanouts for industrial waste.				
		<b>G309003</b>	<b>INDUSTRIAL WASTE LIFT STATIONS</b>		GPM	L/S	Operating capacity	190403
				This includes construction and installation of industrial waste lift stations and equipment.				
		<b>G309004</b>	<b>INDUSTRIAL WASTE HOLDING TANKS &amp; SEPARATORS</b>		EA	EA	Number of tanks	190404
				This includes construction or installation of special tanks such as silver recovery tanks or separators such as oil water separators.				
		<b>G309005</b>	<b>INDUSTRIAL WASTE TRENCHBOXES</b>		LF	M	Length of trench	190405
				This includes installation of prefabricated trench boxes for shoring during installation of piping.				
		<b>G309090</b>	<b>OTHER INDUSTRIAL WASTE</b>		XX	XX		19049X
				Industrial waste not described by the assembly categories listed above, such as petroleum oil and lubricant distribution systems.				
		<b>G40</b>	<b>SITE ELECTRICAL UTILITIES</b>		EA	EA	Systems total	20
				This system includes exterior electrical systems and equipment including substations, overhead and underground distribution systems, metering systems and equipment, exterior lighting, lightning protection systems, communication and alarm systems, and cathodic protection.				
		<b>G4010</b>	<b>ELECTRICAL DISTRIBUTION</b>		KVA	KVA	Total rated capacity	
				Electrical distribution includes the following: substations; transformers; switches, controls and devices; overhead electric conductors; towers, poles, crossarms and insulators; underground electric conductors; ductbanks, manholes, handholes and raceways; grounding systems; and metering.				
		<b>G401001</b>	<b>SUBSTATIONS</b>		KVA	KVA	Total rated capacity	2001
				This system includes substation equipment and materials required from the primary power source.				
		<b>G401002</b>	<b>TRANSFORMERS</b>		KVA	KVA	Total rated capacity	200101
				Electrical power transformers used in conjunction with electrical substations. May include pole/tower or pad-mounted transformers located outside the building.				
		<b>G401003</b>	<b>SWITCHES, CONTROLS &amp; DEVICES</b>		EA	EA	Number of separate components	200102
				Includes all components of switchgear, voltage regulators and busbars used with electrical substations.				
		<b>G401004</b>	<b>OVERHEAD ELECTRIC CONDUCTORS</b>		LF	M	Length of conductor	200103
				Includes conductors used in conjunction with substations.				
		<b>G401005</b>	<b>TOWERS, POLES, CROSSARMS &amp; INSULATORS</b>		EA	EA	Number of towers and poles	200104
				Towers, poles, crossarms, and insulators used in conjunction with substations.				
		<b>G401006</b>	<b>UNDERGROUND ELECTRIC CONDUCTORS</b>		LF	M	Length of conductor	200105
				Includes conductors used in conjunction with substations.				
		<b>G401007</b>	<b>DUCTBANKS, MANHOLES, HANDHOLES &amp; RACEWAYS</b>		EA	EA	Number of ductbanks and access points	200106
				Components used in conjunction with electrical substations.				
		<b>G401008</b>	<b>GROUNDING SYSTEMS</b>		EA	EA	Number of systems	200108
				Grounding systems used in conjunction with substations. Grounding systems for buildings, power distribution, and other electrical systems and subsystems are included with those other systems.				
		<b>G401009</b>	<b>METERING</b>		EA	EA	Number of meters	200208
				Includes components used in conjunction with exterior electrical distribution.				
		<b>G401010</b>	<b>CATHODIC PROTECTION</b>		EA	EA	Each system	
				Includes a system used in conjunction with exterior electrical distribution for corrosion control.				
		<b>G401011</b>	<b>EQUIPMENT REQUIREMENTS FOR COASTAL AND HIGH HUMIDITY AREAS</b>		XX	XX		0
		<b>G401090</b>	<b>OTHER ELECTRIC TRANSMISSION &amp; DISTRIBUTION</b>		XX	XX		20019X
				Substations not described by the assembly categories listed above.				
		<b>G4020</b>	<b>SITE LIGHTING</b>		LF	M	Length of distribution	2003
				Exterior electrical lighting systems including conductors, switches, controls and other devices, supporting structures, grounding systems, and all other equipment required to support a lighting system.				
		<b>G402001</b>	<b>EXTERIOR LIGHTING FIXTURES &amp; CONTROLS</b>		EA	EA	Number of fixtures	200301
				Includes fixtures, controls, and all components used in conjunction with exterior lighting.				
		<b>G402002</b>	<b>SPECIAL SECURITY LIGHTING SYSTEMS</b>		EA	EA	Number of systems	200302
				Includes all components used for special security lighting.				
		<b>G402003</b>	<b>OTHER AREA LIGHTING</b>		EA	EA	Number of fixtures	200303
				Includes components and equipment used for area lighting.				

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Final Combined Uniformat II / WBS 9/18/06, Revision 2					E UOM	M UOM	Quantity Definition	WBS Ref No
Unf L1	Unf L2	Unf L3	WBS L4	Definition				
			<b>G402004</b>	<b>LIGHTING POLES</b> Poles used to support lighting fixtures and support equipment.	EA	EA	Number of towers and poles	200304
			<b>G402005</b>	<b>UNDERGROUND ELECTRIC CONDUCTORS</b> Includes conductors for underground electrical distribution to lighting systems.	LF	M	Length of conductor	200305
			<b>G402006</b>	<b>DUCTBANKS, MANHOLES &amp; HANDHOLES</b> Includes all components used in conjunction with exterior lighting.	EA	EA	points	200306
			<b>G402007</b>	<b>GROUNDING SYSTEMS</b> Grounding systems used in conjunction with exterior lighting.	EA	EA	Number of systems	200307
		<b>G4030</b>	<b>SITE COMMUNICATION AND SECURITY</b> This system includes cables, ductbanks, manholes, and all other equipment required to support exterior communication and alarm systems.		LF	M	Length of distribution	2004
			<b>G403001</b>	<b>TELECOMMUNICATIONS SYSTEMS</b> Includes all components, cables, and equipment used in conjunction with exterior telephone systems.	LF	M	Length of distribution	200401
			<b>G403002</b>	<b>CABLE TV SYSTEMS (CATV)</b> Includes all components, cables, and equipment used in conjunction with exterior cable TV systems.	LF	M	Length of distribution	200502
			<b>G403003</b>	<b>CABLES &amp; WIRING</b> Includes cables, wiring, and equipment used in conjunction with exterior security systems.	LF	M	Length of conductor	200503
			<b>G403004</b>	<b>DUCTBANKS, MANHOLES &amp; HANDHOLES</b> Includes ductbank, manholes, and handholes used in conjunction with exterior security	EA	EA	Number of ductbanks and access points	200504
			<b>G403005</b>	<b>TOWERS, POLES &amp; STANDS</b> Includes towers, poles, stands, and equipment used in conjunction with exterior security systems.	EA	EA	Number of towers, poles and stands	200505
			<b>G403006</b>	<b>TV CAMERAS &amp; MONITORS</b> Includes cameras, monitors, and components used in conjunction with exterior security systems.	EA	EA	Number of cameras and monitors	180601
			<b>G403007</b>	<b>ELECTRONIC SECURITY SYSTEMS (ESS)</b> Includes components and systems used in conjunction with exterior security systems.	EA	EA	Number of systems	200505
			<b>G403008</b>	<b>OTHER COMMUNICATION &amp; ALARM</b> Includes all components, cables, and equipment used in conjunction with other special communication and alarm systems not defined above.	XX	XX		20049X
			<b>G403009</b>	<b>GROUNDING SYSTEMS</b> Includes grounding systems used in conjunction with exterior security systems.	EA	EA	Number of systems	200404
			<b>G403090</b>	<b>OTHER SECURITY SYSTEMS</b> Includes all components and equipment used in conjunction with special security systems not defined above.	XX	XX		20059X
		<b>G4090</b>	<b>OTHER SITE ELECTRICAL UTILITIES</b> This system includes alternate energy sources. This system also includes sacrificial anodes, induced current conductors, and components used in conjunction with cathodic protection.		LF	M	Length of conductor	
			<b>G409001</b>	<b>SACRIFICIAL ANODE CATHODIC PROTECTION SYSTEM</b> Includes all components required in conjunction with sacrificial anode system.	EA	EA	Number of anodes	20601
			<b>G409002</b>	<b>INDUCED CURRENT CATHODIC PROTECTION SYSTEM</b> Includes conductors and termination required for cathodic protection.	LF	M	Length of conductor	20602
			<b>G409003</b>	<b>EMERGENCY POWER GENERATION</b>	KVA	KVA	Total rated capacity	
			<b>G409090</b>	<b>OTHER CATHODIC PROTECTION</b> Includes components and equipment used in conjunction with other cathodic protection systems not defined above.	XX	XX		2069X
		<b>G90</b>	<b>OTHER SITE CONSTRUCTION</b> Other site construction includes service and pedestrian tunnels, bridges, railroad spurs, and snow melting systems.		LS	LS		
			<b>G9010</b>	<b>SERVICE AND PEDESTRIAN TUNNELS</b> This assembly includes service and pedestrian tunnels.	XX	XX		
			<b>G901001</b>	<b>CONSTRUCTION OF SERVICE AND PEDESTRIAN TUNNELS</b> This assembly includes construction of service and pedestrian tunnels.	LF	M	Length of tunnel	
			<b>G901002</b>	<b>PREFABRICATED SERVICE AND PEDESTRIAN TUNNELS</b> This assembly includes prefabricated service and pedestrian tunnels.	LF	M	Length of tunnel	
		<b>G9090</b>	<b>OTHER SITE CONSTRUCTION</b> Other site construction includes bridges, railroad spurs and snow melting systems.		XX	XX		
			<b>G909001</b>	<b>BRIDGES</b> Bridges included here are typically small spans or overpasses that are not meant to be used to estimate spans over large bodies of water. Options exist for cast-in-place concrete T-beam, precast I-beam, precast box, concrete and steel composite, laminated timber deck bridge structures.	SY	M2	Area of structure	180601
			<b>G909002</b>	<b>RAILROAD SPURS</b> Railroad assemblies exist for 110, 115, and 132 lb. tracks and ties. Turnouts, roadway crossings, derailleurs, stops, and bumpers are also included.	LF	M	Length of track	180602
			<b>G909003</b>	<b>SNOW MELTING SYSTEMS</b>	EA	EA	Number of systems	
			<b>G909090</b>	<b>OTHER SPECIAL CONSTRUCTION</b> Any special construction not covered in the above categories.	XX	XX		18069X
		<b>H10</b>	<b>WATERFRONT STRUCTURES</b> Waterfront Structures including wharves, piers, dolphins, trestles, and other structures and appurtenances necessary for the safe mooring of vessels and to support waterfront operations.		LS	LS		
			<b>H1010</b>	<b>SUBSTRUCTURE</b> This assembly includes substructure components for waterfront structures, such as pile foundations, pile caps, quays, relieving platforms, revetments, seawalls, boat ramps, cut-off walls, firewalls, and hanging panels.	XX	XX		
			<b>H101001</b>	<b>PILE FOUNDATIONS</b>	VLF	VM	Length of piles	
			<b>H101002</b>	<b>PILE CAPS</b>	XX	XX		
			<b>H101003</b>	<b>QUAYS</b>	XX	XX		
			<b>H101004</b>	<b>RELIEVING PLATFORMS</b>	XX	XX		0
			<b>H101005</b>	<b>REVETMENTS</b>	XX	XX		
			<b>H101006</b>	<b>SEAWALLS</b>	XX	XX		
			<b>H101007</b>	<b>BOAT RAMPS</b>	XX	XX		
			<b>H101008</b>	<b>CUT-OFF WALLS</b>	XX	XX		0
			<b>H101009</b>	<b>GUARD POSTS AND RAILING</b>	XX	XX		
			<b>H101010</b>	<b>OTHER SUBSTRUCTURE COMPONENTS</b>	XX	XX		0
		<b>H1020</b>	<b>SUPERSTRUCTURE</b>		XX	XX		

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				This assembly includes superstructure components for waterfront structures, such as beams and girders, columns, utility enclosures, and other features that support the operation deck area.				
			H102001	BEAMS AND GIRDERS	XX	XX		
			H102002	COLUMNS	XX	XX		
			H102003	UTILITY ENCLOSURES	XX	XX		
			H102004	OTHER SUPERSTRUCTURE ELEMENTS	XX	XX		0
		H1030	DECK		XX	XX		
				This assembly includes the components for the deck, including elevated deck, on-grade deck, deck overlays, curbs and bullrails, mooring hardware foundation, high mast lighting foundations, utility mounds, expansion joints, guard post and railings, paint striping and other related features.				
			H103001	DECK	XX	XX		
			H103002	ON-GRADE SLAB	XX	XX		
			H103003	DECK OVERLAY	XX	XX		
			H103004	CURBS AND BULLRAILS	XX	XX		0
			H103005	MOORING FOUNDATIONS	XX	XX		
			H103006	HIGH MAST LIGHTING FOUNDATIONS	XX	XX		
			H103007	UTILITY MOUNDS	XX	XX		
			H103008	EXPANSION JOINTS	XX	XX		0
			H103009	GUARD POSTS AND RAILING	XX	XX		
			H103010	PAINT STRIPING	XX	XX		0
			H103011	OTHER DECK COMPONENTS	XX	XX		#REF!
		H1040	MOORING AND BERTHING SYSTEM		XX	XX		
				This assembly includes the components for the mooring hardware and fendering systems, including foundations, anchor bolts, and support systems.				
			H104001	PRIMARY FENDER SYSTEM	XX	XX		
			H104002	SECONDARY FENDER SYSTEM	XX	XX		
			H104003	CORNER FENDER SYSTEM	XX	XX		
			H104004	DOLPHINS	XX	XX		0
			H104005	MOORING HARDWARE	XX	XX		
			H104006	OTHER MOORING AND BERTHING COMPONENTS	XX	XX		
		H1050	REPAIR AND REHABILITATION		XX	XX		
		H1060	APPURTENANCES		LS	LS		
				This assembly includes the appurtenances such as handrails, brows, cable booms, floats, safety ladders, life rings, oil containment booms, and other similar features.				
		<b>H20 GRAVING DRYDOCKS</b>			LS	LS		
		<b>H30 COASTAL PROTECTION</b>			LS	LS		
				Coastal Protection System consists of all waterfront breakwaters, wave protection armor, slope protection, revetments, and other features necessary and required for the protection of waterfront facilities from damage by wave, tide and current.				
		H3010	WAVE PROTECTION		XX	XX		
				This assembly includes required wave protection features, such as breakwaters, wave protection armor for slope protection, revetment and scour protection.				
			H301001	WAVE PROTECTION ARMORS	XX	XX		
			H301002	BREAKWATERS	XX	XX		
		H3020	SLOPE PROTECTION		XX	XX		
				This assembly includes required slope protection features, such as revetment or embankment dikes.				
			H302001	ROCK REVETMENTS	XX	XX		
			H302002	GRANULAR FILL REVETMENTS	XX	XX		
			H302003	COMBINED ROCK AND GRANULAR FILL REVETMENTS	XX	XX		
		<b>H40 NAVIGATION DREDGING AND RECLAMATION</b>			LS	LS		
				Navigation Dredging and Reclamation System consists of all dredging of navigation channels, approaches, turning basins, and berthing areas near piers, wharves, dolphins, and reclamation as necessary to navigate the vessels to the berths and produce reclaimed land to support construction of the waterfront facilities.				
		H4010	DREDGING		XX	XX		
		H4020	DREDGING DISPOSAL		XX	XX		
			H402001	OCEAN DISPOSAL	XX	XX		
			H402002	NEW CONFINED DISPOSAL FACILITIES	XX	XX		
			H402003	EXISTING CONFINED DISPOSAL FACILITIES	XX	XX		
		H4030	RECLAMATION		XX	XX		
		<b>H50 WATERFRONT UTILITIES</b>			LS	LS		
				The Waterfront Utility System consists of civil/mechanical utilities, electrical utilities, and fire protection to be installed on waterfront structures				
		H5010	CIVIL/MECHANICAL UTILITIES		XX	XX		
			H501001	POTABLE WATER	XX	XX		
			H501002	SALTWATER	XX	XX		
			H501003	SANITARY SEWER	XX	XX		
			H501004	BILGE AND OILY WASTE	XX	XX		0
			H501005	COMPRESSED AIR	XX	XX		
			H501006	STEAM	XX	XX		
			H501007	OTHER CIVIL/MECHANICAL UTILITIES	XX	XX		
			H501008	PIPE GUARDRAILS	XX	XX		0
		H5020	ELECTRICAL UTILITIES		XX	XX		
			H502001	POWER DISTRIBUTION SYSTEM	XX	XX		
			H502002	TELECOMMUNICATION SYSTEM	XX	XX		
			H502003	LIGHTING SYSTEMS	XX	XX		
			H502004	LIGHTNING PROTECTION SYSTEM	XX	XX		
			H502005	POWER BOOMS	XX	XX		
			H502006	OTHER ELECTRICAL UTILITIES	XX	XX		
		H5030	FIRE PROTECTION AND SUPPRESSION		XX	XX		
			H503001	FIRE PROTECTION WATER DISTRIBUTION SYSTEM	XX	XX		
			H503002	FIRE ALARM	XX	XX		
		<b>H60 WATERFRONT DEMOLITION</b>			LS	LS		
		H6010	IN OR OVER-WATER DEMOLITION		XX	XX		

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Unf L1	Unf L2	Unf L3	WBS L4	Definition	E UOM	M UOM	Quantity Definition	WBS Ref No
		H6020	NON IN OR OVER-WATER DEMOLITION		XX	XX		
		H6030	HAZARDOUS COMPONENTS ABATEMENT		XX	XX		
		<b>H70</b>	<b>WATERFRONT ATFP</b>		LS	LS		
		H7010	WATERSIDE ATFP		XX	XX		
		H7020	LANDSIDE ATFP		XX	XX		
		<b>Z10</b>	<b>GENERAL</b>		LS	LS		
				The common or general requirements from the Performance Technical Specification Sections.				