SUBSTRUCTURE The system includes all work below the lower floor construction (basely dab-on-goods) and the enclosing hosting and willing demends required to form a beterment, troyshinr with the receivery more securified in the demends on the processor and the enclosing hosting and the processor and	Unf L2 III			at II / WBS 9/18/06, Revision 2	E UOM	M UOM	Quantity Definition
A10 FOUNDATIONS Foundation in Controller and varieties demand to grade be designed by the excitation processory many excessory many excessory and the excitation processory many excessory and the excitation processory many excessory and the excessory and the excessory many excessory and the excessory many excessory ex							
Fig. excitoring host-correct and vertical elements required to form a begenier, topolities with the decreasing with the excession of the post of the p	3063	INUC	TORE	This system includes all work below the lowest floor construction (usually slab-on-grade) and	SF	M2	Footprint area at grade
Franchistors encludes the following Standard Foundations: value and colorum standations:							
Foundations included the following Standard Foundations: wall and column standations: Including the price of the political or grade, the pace price contactions accordates, backful, and devasting Special Foundations and columns foundations, and standard of devasting Special Foundations and columns for grade gra	A10 F	OUND	ATIONS		SF	M2	Footprint area at grade
and conquantum, footings and bissop, permitter shallows, permitter delarations, calaborations, and according places in forticities in places in the permitter shallows and provided in the permitter shallows and permitter shall	71.0	00.12	71110110		OI .	IVIZ	r ootprint area at grade
Action STANDARD FOUNDATIONS Actions of the common state services of the common state				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			
Continuous footings, private beams, foundation walls, pile cape, and column parts. A191091 WALL FOUNDATIONS Continuous footings. Assembles include excavation, hard-shaped bottom, compared to boundations with the private of the pri	A	1010		-	SF	M2	Footprint area at grade
A191901 WALL FOUNDATIONS Outside your lens associated with CIP foundation walls, grade beams, or contraval, separate processes and record final. Foundation Walls - Include work lens associated with CIP foundation walls, grade beams, or CADV walls. Assemblies include execution, compacted bodill, permitted insulation. A191902 COLUMP FOUNDATIONS SALE conceive or CADV, and wall finals. A191902 COLUMP FOUNDATIONS SALE conceive or CADV, and wall finals. A191902 File Caps - Assemblies include execution or present foreign, and wall finals. File Caps - Assemblies include execution or present foreign, and the both are included in this assembly. Pile Caps - Assemblies include execution or present foreign, and the both are included in this assembly. Column Pers - Assemblies include formation, reinforcing saled, concrete or CAUV, finals, the columns and description or present foreign, and characteristic included in this assembly. Column Pers - Assemblies include formation, reinforcing saled, concrete or CAUV, finals, the columns and description or present foreign, and characteristic included in this assembly. Column Pers - Assemblies include formation, reinforcing saled, concrete or CAUV, finals, the columns and description or patch, and set and concrete in cluded in the assembly. A191903 Description is the removal of water from exercision. The two principles restricted of description is a by pump or by a system envolving the sinking of a series of well-propose around the area and estimating his water by succeive pump, Assemblies would include pump, or view the columns and estimating his water by succeive pump, Assemblies would include pump, and a series of well-propose around the area and estimating his water by succeive pump, Assemblies would include pump, and a series of well-propose around and estimation and estimatio				Continuous footings, spread footings, grade beams, foundation walls, pile caps, and column			r corprint area at grade
Continuous Footings - Assemblies include executation, hand-alsped bottom, compacted bottom, compacted bottom, compacted bottom, compacted bottom, compacted bottom, compacted by the provided				piers.			Length of footings and/or wal
baddill, formore, and keyway, reinforcing steel, concrete and screed finals, Forundation Wills: Include on the service security of the CPT forundation walls, gade beams, or CPU and Include from the CPT forundation on the CPT forundation in provided from the CPT forundation of the CPT forundation of the CPT forundation in provided from the CPT forundation of the CP			A101001		LF	M	foundations
CNUM YEAR Assembles include excavation, compacted baskfull, perimeter insulation, perimeter damage, formwork, reinforcing steel, and fairness. A191092 COLUMN FOUNDATIONS & PILE CAPS Spread Foodings Individual part of continuous pair footings. Assembles include in excavation, backfull and compaction, formwork, reinforcing steel, and concrete and screed insh. It extrusual steel columns are directly on special forms, and the compaction of the continuous pair footings. Assembles include in subgrades in decident in the structural steel columns are directly on special backfull, formwork, reinforcing steel, and concrete and screed finish. It structural steel columns are directly on special backfull, formwork, reinforcing steel, and concrete and screed finish. It structural steel columns set directly on special backfull, formwork, reinforcing steel, and concrete and screed finish. It structural steel columns set directly on special backfull, formwork, reinforcing steel, and concrete and screed finish. It structural steel columns set directly on special backfull, formwork, reinforcing steel, concrete or CMU, finish, Column Piers - Assembles include branch search set of the control of CMU, finish, Column Piers - Assembles include branch set of the control of CMU, finish, Column Piers - Assembles include branch set of the control of CMU, finish, Column Piers - Assembles include branch set of the control of CMU, finish, Column Piers - Assembles include branch set of the control of CMU, finish, Column Piers - Assembles include set of the control of CMU, finish, Column Piers - Assembles include set of the control of CMU, finish, Column Piers - Assembles include set of the control of CMU, finish, Column Piers - Assembles include set of the control of CMU, finish, Column Piers - Assembles include set of the control of CMU, finish, Column Piers - Assembles include set of the control of CMU, finish, column piers - CMU			<u> </u>				
A10902 COLUMN FOUNDATIONS & FILE CAPS Spread Footings Individuo or part of continuous pair footings. Assemblies include excessions, backlid and compacton, furnished in an excession or part of continuous pair footings. Assemblies include excessions, because the search of the continuous of the contin				CMU walls. Assemblies include excavation, compacted backfill, perimeter insulation,			
Spread Footings, Individual or part of continuous pier footings. Assembles include exexvition, backfell and compaction, formwork, reinforcing steal, and concrete and screed miss. It structural steel columns set directly on spread footings, anchor bobts are included in Pier Cape. Assembles include execution if reprinted formating value in traditions of the subgrade is at desired level for pile cape. Assembles include cereaution if reinforcing steel, and concrete and screed final. It structural steel columns set directly on spread footings, anchor bobts are included in this assembly. Column Piers - Assembles include formach: Interfacing steel, concrete or CRMU, firish, columns and finish and the steel and structure of the columns set directly on spread footings, and the steel and structure in the industry of the steel of well-points around the steel and structure is well to succiou pump. Assembles would include pumps or well. A101000 DEWATERING A101000 DEWATERING A101000 OTHER STANDARD FOUNDATIONS A101000 OTHER STANDARD FOUNDATIONS A101000 OTHER STANDARD FOUNDATIONS A101000 FIE COMPANIONS A101000 FIE COMPANIONS			A101002	COLUMN FOUNDATIONS & PILE CAPS	EA	EA	Number of footings, pile caps piers
finish. If structural seed columns set directly on spread foolings, anchor boths are included in this assembly. Pile Cape - Assembles include exerusion if required (incremely due to installation of piles, the Pile Cape - Assembles include exerusion if required (incremely due to installation of piles, the seemble of the piles of				Spread Footings: Individual or part of continuous pier footings. Assemblies include			
A101003 DEWATERING Dewatering a the removal of water from excavations. The two principle methods of dewatering are by pump or by a system involving the isnking 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. A101090 THER STANDARD FOUNDATIONS Standard foundations not described by the assembly categories listed above. A10200 SPECIAL FOUNDATIONS A1 unorit associated with special foundations including piles, cassons, and any other special foundation situation. A10201 FILE FOUNDATIONS A10201 FILE FOUNDATIONS A10202 CAISSONS Drilled Caissons - Assemblies include drilled caissons, steel casings if required, reinforcing steel, bell bottom excavation, concrete, and loading and hauling of excavated material. A102001 CAISSONS Drilled Caissons - Assemblies include drilled caissons, steel casings if required, reinforcing steel, bell bottom excavation, concrete, and loading and hauling of excavated material. A102001 WINDERPINNIO UNDERPINNIO Linderpinning is the provision of permanent support for existing buildings by extending their excavation, backfill, and underpinning materials. A102004 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 equipments and explanation and all sancoited dewatering materials and equipment of the extracting the water by suction pump. Assemblies would include pumps or well provided to 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 provided dewatering materials and equipment in a series of well-points around the area and extracting the water by suction				finish. If structural steel columns set directly on spread footings, anchor bolts are included in this assembly. Pilie 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,			
Devatering is the removal of water from excavations. The two principle methods of devatering are by purp or by a system involving the sinking of a series of well-prinist around the area and extracting the water by suction pump. Assemblies would include pumps or well points and all associated devatering materials and equipment. A101900 OTHER STANDARD FOUNDATIONS Standard foundations not described by the assembly categories listed above. A10200 SPECIAL FOUNDATIONS A102001 All work associated with special foundations including piles, caissons, and any other special foundations and provided the special foundations including piles, caissons, and any other special foundations of the special foundations including piles, caissons, and any other special foundations for the special foundations including piles, caissons, and any other special foundations for the special foundations including piles, caissons, and any other special foundations for the special foundations foundat			A101003		SF	M2	Dewatered area
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A1020 SPECIAL FOUNDATIONS A1020 SPECIAL FOUNDATIONS A1020 SPECIAL FOUNDATIONS A1020 SPECIAL FOUNDATIONS A10201 PILE FOUNDATIONS SF M2 Footprint area at grade concrete piles, steel pipe, steel pipe, piles, steel pipe, piles, steel pipe, piles, steel pipe, piles, steel pipe, steel pipe, steel pipe, piles, piles driving, and pile cut-offs if required. A102002 CAISSONS Drilled Caissons - Assemblies include drilled caissons, steel casings if required, reinforcing steel piles bell bottom excavation, concrete, and loading and hauling of excavated material. A102003 UNDERPINNING 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. A102004 DEWATERNO Devatering is the prompt of ye system involving the sinking of a series of vell-pipe instructure pipe in sand all associated dewatering materials and equipment. A102005 RAFT FOUNDATIONS A102005 RAFT FOUNDATIONS A102006 RESSURE INJECTED GROUTING A102009 THERS SPECIAL FOUNDATIONS A102009 THER SPECIAL FOUNDATIONS A102009 THER SPECIAL FOUNDATIONS A102000 SLAB ON GRADE A 3 bib poured on earth, whether on undisturbed of fill soil. A102001 STANDARD SLAB ON GRADE A102001 STANDARD SLAB				the area and extracting the water by suction pump. Assemblies would include pumps or well			
A1020 SPECIAL FOUNDATIONS All work associated with special foundations including piles, caissons, and any other special foundation situation. A10201 PILE FOUNDATIONS 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 out cells if required. A10202 CAISSONS Drilled Caissons - Assemblies include drilled caissons, steel casings if required, reinforcing steel, bell bottom excavation, concrete, and loading and hauling of excavated material. A10203 UNDERPINNING Underprinning is the provision of permanent support for existing buildings by extending their foundations to a new, lower level containing the desired beams stratum. Assemblies include for underprinning materials. A102004 DEWATERING Dewatering is the renoval 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 vater by suction pump. Assemblies would include pumps or well points and all associated dewatering materials. A102004 DEWATERING Dewatering is the renoval 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 vater by suction pump. Assemblies would include pumps or well points and all associated dewatering materials and explainment. A102005 RAFT FOUNDATIONS A102006 PRESSURE INSICEDED GOUTING A102007 ASsemblies provide for injecting general from foundations, and other special foundations. Assemblies provide for injecting general from the work for the special foundation. Assemblies would include all material and albor necessary to perform the work for the special foundations or ordinate. A102006 PRESSURE INSICEDED GOUTING A103001 STANDARD SLAB ON GRADE A103001 STANDARD SLAB ON GRADE A103001 STANDARD SLAB ON GRADE A103001 STANDARD SLAB ON				OTHER STANDARD FOUNDATIONS	XX	XX	
All work associated with special foundations including piles, caissons, and any other special foundation situation. A102001 PILE FOUNDATIONS CIP Concrete piles, preast 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. A102002 CAISSONS Dillad Caissons - Assemblies include drilled caissons, steel casings if required, reinforcing steel, bell bottom exacvation, concrete, and loading and hauling of excavated material. A102003 UNDERPINNING UNDERPINNING UNDERPINNING UNDERPINNING UNDERPINNING A102004 DEWATERING Dewatering 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. A102004 DEWATERING 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. A102005 RAFT FOUNDATIONS Raft foundations or spread foundations consist of a solid slab of heavily reinforced concrete covering the entire building footphira trae. A102006 PRESSURE INJECTED GROUTING Raft foundation solid for injecting coment grout for foundation stabilization. A102007 OTHER SPECIAL FOUNDATIONS These could include all material and labor necessary to perform the work for the special foundation. Assemblies would include all material and labor necessary to perform the work for the special foundation conditions of the special foundation. Assemblies would include all material and labor necessary to perform the work for the special foundation. Assemblies would include all material and labor necessary to perform the work for the special foundations of the special				Standard foundations not described by the assembly categories listed above.			
A 102001 PILE FOUNDATIONS	Α	1020	SPECIAL I		SF	M2	Footprint area at grade
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. A102002 CAISSONS Drilled Caissons - Assemblies include drilled caissons, steel casings if required, reinforcing steel, bell bottom excavation, concrete, and loading and hauling of excavated material. A102003 UNDERPINNING Unberprinning 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 exeavation, backling, and underpinning materials. A102004 DEWATERING 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 power and the area and extracting the water by suction pump. Assemblies would include pumps or well power and the area and extracting the water by suction pump. Assemblies would include pumps or well power and the area and extracting the water by suction pump. Assemblies would include pumps or well power and pump or successful pumps or well power and pumps or pumps or well power and pumps or pumps or pumps or well power and pumps or pumps or well power and pumps or pumps or pumps or pumps or well power and pumps or pump			1				
piles, and treated wood piles. Applicable assemblies would include the material for piles, pile driving, and pile cu-offs if required. A102002 CAISSONS Drilled Caissons - Assemblies include drilled caissons, steel casings if required, reinforcing steel, bell bottom excavation, concrete, and loading and hauling of excavated material. A102003 UNDERPINNING 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. A102004 DEWATERING 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. A102005 RAFT FOUNDATIONS Raft foundations or spread foundations consist of a solid slab of heavily reinforced concrete covering the entire building footprint area. A102006 RASSEMBLIES OF ASSEMBLIES OF ASSE			A102001		SF	M2	Footprint area at grade
Drilled Caissons - Assemblies include drilled caissons, steel casings if required, reinforcing steel, bell bottom excavation, concrete, and loading and hauling of excavated material. A102003 UNDERPININING 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. A102004 DEWATERING 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. A102005 Raft FOUNDATIONS Raft foundations or spread foundations consist of a solid slab of heavily reinforced concrete covering the entire building looptint area. A102006 PRESSURE INJECTED GROUTING A102006 PRESSURE INJECTED GROUTING A58emblies would include all material and labor necessary to perform the work for the special foundations. Assemblies undul include cofferdams, soil compaction foundations, and other special foundations. Assemblies would include all material and labor necessary to perform the work for the special foundations. Assemblies would include all material and labor necessary to perform the work for the special foundations. Assemblies undul include cofferdams, soil compaction foundations, and other special foundations. Assemblies include fine prade, gravel fill. The soil bearing capacity is sufficient to support the slab. Assemblies work or supported by compacted earth or gravel fill. The soil bearing capacity is sufficient to support the slab. Assemblies include fine grade, gravel fill. The soil bearing capacity is sufficient to support the slab. Assemblies are based on thickness of slab. A10300 STRUCTURAL SLAB ON GRADE A 5 Atreuctural SLAB ON GRADE A 5 Atreuctural SLAB ON GRADE A 5 Atreuctural SLAB ON GRADE A			1	piles, and treated wood piles. Applicable assemblies would include the material for piles, pile			
Drilled Caissons - Assemblies include drilled caissons, steel casings if required, reinforcing steel, bell bottom excavation, concrete, and loading and hauling of excavated material. A102003 UNDERPINNING 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 and easiered bearing stratum. Assemblies include excavation, backfill, and underpinning materials and easiered bearing stratum. Assemblies include the area and extracting the water by suction purp. Assemblies would include pumps or 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. A102005 RAFT FOUNDATIONS Raft foundations or spread foundations consist of a solid slab of heavily reinforced concrete covering the entire building footprint area. A102006 PRESSURE INJECTED GROUTING Raft foundations or spread foundations consist of a solid slab of heavily reinforced concrete covering the entire building footprint area. A102006 PRESSURE INJECTED GROUTING Raft foundations or spread foundations consist of a solid slab of heavily reinforced concrete covering the entire building footprint area. A102006 PRESSURE INJECTED GROUTING Raft foundations or spread foundations consist of a solid slab of heavily reinforced concrete covering the entire building footprint area. A102006 PRESSURE INJECTED GROUTING Raft foundations or spread foundations consist of a solid slab of heavily reinforced concrete covering the entire building loagent and stabilization. XX XX These could include colferdams, soli compaction foundations, and other special foundations. Assemblies would include all material and labor necessary to perform the work for the special foundations. Assemblies would include all material and labor necessary to perform the work for the special foundations. SF M2 Standar			A102002		SF	M2	Footprint area at grade
Steel, bell bottom excavation, concrete, and loading and hauling of excavated material.							
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. A102004 DEWATERING 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 succino pump. Assemblies would include pumps or well points and all associated dewatering materials and equipment. A102005 RAFT FOUNDATIONS Raft foundations or spread foundations consist of a solid slab of heavily reinforced concrete covering the entire building footprint area. A102006 PRESSURE INJECTED GROUTING Assemblies provide for injecting cement grout for foundation stabilization. OTHER SPECIAL FOUNDATIONS 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. A10300 SLAB ON GRADE A slab poured on earth, whether on undisturbed or fill soil. SF M2 Footprint area at grade A103001 STANDARD SLAB ON GRADE SF M2 Footprint area at grade A103002 STANDARD SLAB ON GRADE SF M2 Footprint area at grade A103003 STANDARD SLAB ON GRADE A slab poured on earth, whether on undisturbed or fill soil. SF M2 Footprint area at grade A103003 STANDARD SLAB ON GRADE SF M2 Area of slab A103004 STANDARD SLAB ON GRADE A structural 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, underslab 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. A103003 TRENCHES Cast-in-place trenches. Assemblies include excavation, hand-shaped bottoms, compacted backfil							
foundations to a new, lower level containing the desired bearing stratum. Assemblies include excavation, backfill, and underpinning materials. A102004 DEWATERING 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. A102005 RAFT FOUNDATIONS Raft foundations or spread foundations consist of a solid slab of heavily reinforced concrete covering the entire building footprint area. A102006 PRESSURE INJECTED GROUTING Assemblies provide for injecting cement grout for foundation stabilization. XX XX 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 foundations. Assemblies would include all material and labor necessary to perform the work for the special foundations. Assemblies would include all material and labor necessary to perform the work for the special foundations. Assemblies would include all material and labor necessary to perform the work for the special foundations. Assemblies would include all material and labor necessary to perform the work for the special foundations. Assemblies would include all material and labor necessary to perform the work for the special foundations. Assemblies are based on thickness of slab. A10300 SLAB ON GRADE A103001 STANDARD SLAB ON GRADE A103002 STRUCTURAL SLAB ON GRADE A structural slab-on-grade is 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, underslab insulation, edge forms, termite treatment (interior slabs only), vapo			A102003		LF	M	Length of underpinning
A102004 DEWATERING 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. A102005 RAFT FOUNDATIONS SF M2 Area of raft foundation Raft foundations or opread foundations consist of a solid slab of heavily reinforced concrete covering the entire building footprint area. A102006 PRESSURE INJECTED GROUTING Assemblies provide for injecting cement grout for foundation stabilization. A102090 OTHER SPECIAL FOUNDATIONS 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. A10300 SLAB ON GRADE A slab poured on earth, whether on undisturbed or fill soil. STANDARD SLAB ON GRADE A slab poured on earth, whether on undisturbed or fill soil. STANDARD SLAB ON GRADE A slab poured on earth, whether on undisturbed or fill soil. SF M2 Footprint area at grade A103001 STANDARD SLAB ON GRADE A 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, underslab insulation, edge forms, termite treatment (interior slabs only), vapor barrier, reinforcing, expansion joints, control joints, and finish and curing. Assemblies include fine grade, gravel fill, underslab insulation, edge forms, termite treatment, (interior slabs include fine grade, gravel fill, underslab insulation, edge forms, termite treatment, (interior slabs include fine grade, gravel fill, underslab insulation, edge forms, termite treatment, (interior slabs only), vapor barrier, reinforcing, expansion joints, control joints, and finish and curing. Assemblies include fine grade, gravel fill, underslab insulation, edge forms, termite			İ	foundations to a new, lower level containing the desired bearing stratum. Assemblies include			
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. A102005 RAFT FOUNDATIONS Raft foundations or spread foundations consist of a solid slab of heavily reinforced concrete covering the entire building footprint area. A102006 PRESURE INJECTED GROUTING Assemblies provide for injecting cement grout for foundation stabilization. A102090 OTHER SPECIAL FOUNDATIONS 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. A10300 SLAB ON GRADE A10300 SLAB ON GRADE A103001 STANDARD SLAB ON GRADE A103001 STANDARD SLAB ON GRADE A103002 STRUCTURAL SLAB ON GRADE A103002 STRUCTURAL SLAB ON GRADE A103003 STRUCTURAL SLAB ON GRADE A103003 STRUCTURAL SLAB ON GRADE A103004 STRUCTURAL SLAB ON GRADE A103005 STRUCTURAL SLAB ON GRADE A103006 STRUCTURAL SLAB ON GRADE A103006 STRUCTURAL SLAB ON GRADE A103007 STRUCTURAL SLAB ON GRADE A103007 STRUCTURAL SLAB ON GRADE A103008 STRUCTURAL SLAB ON GRADE A103009 STRUCTURAL SLAB ON GRADE A103000 STRUC				DEWATERING	SF	M2	Dewatered area
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A103003 TRENCHES Cast-in-place trenches. Assemblies include excavation, hand-shaped bottoms, compacted backfill, formwork, reinforcing steel, concrete, and concrete finish. Examples include trench	A	\1030	A102096 A102090 SLAB ON A103001	PRESSURE INJECTED GROUTING Assemblies provide for injecting cement grout for foundation stabilization. OTHER SPECIAL FOUNDATIONS 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. GRADE A slab poured on earth, whether on undisturbed or fill soil. STANDARD SLAB ON GRADE 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, underslab 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.	SF SF	M2 M2	Footprint area at grade Area of slab
backfill, formwork, reinforcing steel, concrete, and concrete finish. Examples include trench	A	11030	A102006 A102090 SLAB ON A103001 A103002	RESSÜRE INJECTED GROUTING Assemblies provide for injecting cement grout for foundation stabilization. OTHER SPECIAL FOUNDATIONS 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. GRADE A slab poured on earth, whether on undisturbed or fill soil. STANDARD SLAB ON GRADE 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, underslab 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. STRUCTURAL SLAB ON GRADE 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, underslab insulation, edge forms, termite treatment, (interior slabs only), vapor barrier, reinforcing, expansion joints, control joints, and finish and	SF SF	M2 M2	Footprint area at grade Area of slab
drains and dust trenches.	A	11030	A102006 A102090 SLAB ON A103001 A103002	IRESSÜRE INJECTED GROUTING Assemblies provide for injecting cement grout for foundation stabilization. OTHER SPECIAL FOUNDATIONS 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. GRADE A stab poured on earth, whether on undisturbed or fill soil. STANDARD SLAB ON GRADE 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, underslab 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. STRUCTURAL SLAB ON GRADE 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, underslab 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. TRENCHES	SF SF	M2 M2 M2	Footprint area at grade Area of slab Area of slab

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inal	Com	bined	Uniform	at II / WBS 9/18/06, Revision 2			
			WBS L4	Definition	E UOM	M UOM	Quantity 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.			
			A103005	FOUNDATION DRAINAGE 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,	LF	M	Length of foundation
			A103090	Including accessories. OTHER LOWEST FLOOR CONSTRUCTION Lowest floor construction not described by the assembly categories listed above.	xx	XX	
	400	D 4 0 5 1	AENT OO	· · · · · · · · · · · · · · · · · · ·			
	A20	BASEI	MENT CO	NSTRUCTION Work Includes basement excavation, and basement walls.	CY	M3	Volume of excavation
		A2010	BASEME	NT EXCAVATION Excavation work associated with constructing a basement.	CY	M3	Volume of excavation
			A201001	EXCAVATION FOR BASEMENTS	CY	M3	Volume of excavation
				All excavation, stockpiling, and hauling associated with basement excavations are included in this assembly.			
			A201002	STRUCTURE BACKFILL & COMPACTION	CY	M3	Volume of backfill
				All backfill including hauling in of suitable soils and all necessary compaction is included in this assembly.			
			A201003	SHORING	SF	M2	Shoring contact area
			1001000	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.		NO.	
			A201090	OTHER BASEMENT EXCAVATION Basement excavation not described by the assembly categories listed above.	XX	XX	
		A2020	BASEME	NT WALLS	SF	M2	Area of wall
		A2020		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.			
			A202001	BASEMENT WALL CONSTRUCTION This includes work items associated with CIP foundation walls or CMU walls and	SF	M2	Area of wall
				penetrations. Assemblies include formwork, reinforcing steel, concrete or CMU, and wall			
-			A202002	finish and curing. MOISTURE PROTECTION	SF	M2	Area of wall moisture protection
				This assembly would be based on the type and square footage of waterproofing used on the			
-			A202003	foundation wall. BASEMENT WALL INSULATION	SF	M2	Area of wall insulation
				This assembly would be based on the type and square footage of insulation used on the			
-			A202090	foundation wall. OTHER BASEMENT WALLS	XX	XX	
				Basement walls not described by the assembly categories listed above.			
3	SHE	LL	T		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.			
	B10	SUPER	STRUCT	Work includes floor construction and roof construction.	SF	M2	Area of supported floors
		B1010	FLOOR C	ONSTRUCTION	SF	M2	Area of supported floors
		B1010	LEGORE	This construction can be wood, concrete, CMU, steel frame, etc.	01	IVIZ	rica or supported noors
			B101001	STRUCTURAL FRAME	SF	M2	Area of supported floors
				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.			
			B101002	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. STRUCTURAL INTERIOR WALLS	SF	M2	Area of wall
			B101002	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. STRUCTURAL INTERIOR WALLS 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	SF	M2	Area of wall
				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. STRUCTURAL INTERIOR WALLS 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.			
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				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. STRUCTURAL INTERIOR WALLS 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. FLOOR DECKS AND SLABS 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. INCLINED AND STEPPED FLOORS			
			B101003	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. STRUCTURAL INTERIOR WALLS 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. FLOOR DECKS AND SLABS 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. INCLINED AND STEPPED FLOORS 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	SF	M2	Area of supported floors
			B101003	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. STRUCTURAL INTERIOR WALLS 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. FLOOR DECKS AND SLABS 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. INCLINED AND STEPPED FLOORS 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 M2	Area of supported floors Area of inclined & stepped floors
			B101003	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. STRUCTURAL INTERIOR WALLS 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. FLOOR DECKS AND SLABS 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. INCLINED AND STEPPED FLOORS 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. BALCONY CONSTRUCTION	SF	M2	Area of supported floors
			B101003	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. STRUCTURAL INTERIOR WALLS 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. FLOOR DECKS AND SLABS 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. INCLINED AND STEPPED FLOORS 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. BALCONY CONSTRUCTION Balconies above grade should be broken into assemblies according to their particular type of	SF	M2 M2	Area of supported floors Area of inclined & stepped floors
			B101003	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. STRUCTURAL INTERIOR WALLS 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. FLOOR DECKS AND SLABS 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. INCLINED AND STEPPED FLOORS 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. BALCONY CONSTRUCTION	SF	M2 M2	Area of supported floors Area of inclined & stepped floors
			B101003 B101004 B101005	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. STRUCTURAL INTERIOR WALLS 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. FLOOR DECKS AND SLABS 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. INCLINED AND STEPPED FLOORS 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. BALCONY CONSTRUCTION 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 SF	M2 M2	Area of supported floors Area of inclined & stepped floors Area of supported balconies

	Unf L3	WBS L4	at II / WBS 9/18/06, Revision 2	E UOM	M UOM	Quantity Definition
		B101007	FLOOR RACEWAY SYSTEMS Under floor or in-slab conduit including conduit and all associated devices.	SF	M2	Gross floor area
		B101090	OTHER FLOOR CONSTRUCTION	XX	XX	
			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.			
	B1020	ROOF CO	DNSTRUCTION	SF	M2	Area of supported roof
	D1020	KOOI CC	This construction is similar to floor construction except that is applies to the framework	OF .	IVIZ	Area or supported roor
		B102001	supporting the roof and roof decks. (See also System B30 Roofing.) STRUCTURAL FRAME 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	SF	M2	Area of supported roof
			supported area. Decks and slabs are not included in this assembly.			
		B102002	STRUCTURAL INTERIOR WALLS Assemblies would be CIP or CMU walls or other structural interior walls. The assemblies	SF	M2	Area of walls
			would include the labor and material required to perform the construction tasks associated			
		B102003	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	SF	M2	Area of supported roof
		B102004	in each assembly. CANOPIES	SF	M2	Area of supported canopies
			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.			
		B102090	OTHER ROOF CONSTRUCTION Any type of special roof construction not included above would fall into this category. All	SF	M2	Area of supported roof
	<u> </u>		associated work items would be included in this assembly.			
B20	EXTER	IOR ENG	CLOSURE This system consists of the exterior facing of the facility, which includes all vertical and	SF	M2	Area of exterior walls
			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.			
	B2010	EXTERIO	R WALLS	SF	M2	Area of exterior walls
		B201001	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. EXTERIOR CLOSURE	SF	M2	Area of exterior walls
		B201001	Assemblies would include material contained in exterior closure wall, such as masonry with	Si	IVIZ	Area of exterior walls
			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.			
		B201002	EXTERIOR WALL BACKUP CONSTRUCTION	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.			
		B201003	INSULATION & VAPOR RETARDER Assemblies would include all types of insulation associated with the exterior wall. Rigid, batt	SF	M2	Area of insulation
		B204004	and poured insulation should be separated into different assemblies.	LF	М	Length of parapets
		B201004	PARAPETS Assemblies include materials used in association with parapets. Parapets are long walls or	LF	101	
		B201004		SF	M2	Area of louvers and screens
			Assemblies include materials used in association with parapets. Parapets are long walls or railings usually along the edge of a roof or balcony. EXTERIOR LOUVERS & SCREENS Assemblies include louvers and screens which are located in exterior walls. The unit of			Area of louvers and screens
			Assemblies include materials used in association with parapets. Parapets are long walls or railings usually along the edge of a roof or balcony. EXTERIOR LOUVERS & SCREENS Assemblies include louvers and screens which are located in exterior walls. The unit of measure at the assembly level is each. BALCONY WALLS & HANDRAILS			Area of louvers and screens Length of walls and handrails
		B201005 B201006	Assemblies include materials used in association with parapets. Parapets are long walls or railings usually along the edge of a roof or balcony. EXTERIOR LOUVERS & SCREENS Assemblies include louvers and screens which are located in exterior walls. The unit of measure at the assembly level is each. BALCONY WALLS & HANDRAILS Assemblies would include materials associated with balcony walls and handrails. These rails are usually guardrails and not associated with stairs.	SF	M2	Length of walls and handrails
		B201005	Assemblies include materials used in association with parapets. Parapets are long walls or railings usually along the edge of a roof or balcony. EXTERIOR LOUVERS & SCREENS Assemblies include louvers and screens which are located in exterior walls. The unit of measure at the assembly level is each. BALCONY WALLS & HANDRAILS Assemblies would include materials associated with balcony walls and handrails. These rails	SF	M2	
		B201005 B201006 B201007	Assemblies would include materials used in association with parapets. Parapets are long walls or railings usually along the edge of a roof or balcony. EXTERIOR LOUVERS & SCREENS Assemblies include louvers and screens which are located in exterior walls. The unit of measure at the assembly level is each. BALCONY WALLS & HANDRAILS Assemblies would include materials associated with balcony walls and handrails. These rails are usually guardrails and not associated with stairs. EXTERIOR SOFFITS 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.	SF LF SF	M2 M	Length of walls and handrails Area of soffits
		B201005 B201006	Assemblies include materials used in association with parapets. Parapets are long walls or railings usually along the edge of a roof or balcony. EXTERIOR LOUVERS & SCREENS Assemblies include louvers and screens which are located in exterior walls. The unit of measure at the assembly level is each. BALCONY WALLS & HANDRAILS Assemblies would include materials associated with balcony walls and handrails. These rails are usually guardrails and not associated with stairs. EXTERIOR SOFFITS 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. FLASHING Assemblies include all flashings associated with the exterior walls except for thru-wall	SF	M2	Length of walls and handrails
		B201005 B201006 B201007	Assemblies include materials used in association with parapets. Parapets are long walls or railings usually along the edge of a roof or balcony. EXTERIOR LOUVERS & SCREENS Assemblies include louvers and screens which are located in exterior walls. The unit of measure at the assembly level is each. BALCONY WALLS & HANDRAILS Assemblies would include materials associated with balcony walls and handrails. These rails are usually guardrails and not associated with stairs. EXTERIOR SOFFITS 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. FLASHING Assemblies include all flashings associated with the exterior walls except for thru-wall flashing. EXTERIOR PAINTING AND SPECIAL COATINGS	SF LF SF	M2 M	Length of walls and handrails Area of soffits
		B201005 B201006 B201007 B201008 B201009	Assemblies include materials used in association with parapets. Parapets are long walls or railings usually along the edge of a roof or balcony. EXTERIOR LOUVERS & SCREENS Assemblies include louvers and screens which are located in exterior walls. The unit of measure at the assembly level is each. BALCONY WALLS & HANDRAILS Assemblies would include materials associated with balcony walls and handrails. These rails are usually guardrails and not associated with stairs. EXTERIOR SOFFITS 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. FLASHING Assemblies include all flashings associated with the exterior walls except for thru-wall flashing. EXTERIOR PAINTING AND SPECIAL COATINGS Assemblies include paint, stucco, etc. The unit of measure at the assembly level is area of exterior coatings.	SF SF SF	M2 M2 M2 M2 M2	Length of walls and handrails Area of soffits Area of flashings Area of exterior coatings
		B201005 B201006 B201007	Assemblies include materials used in association with parapets. Parapets are long walls or railings usually along the edge of a roof or balcony. EXTERIOR LOUVERS & SCREENS Assemblies include louvers and screens which are located in exterior walls. The unit of measure at the assembly level is each. BALCONY WALLS & HANDRAILS Assemblies would include materials associated with balcony walls and handrails. These rails are usually guardrails and not associated with stairs. EXTERIOR SOFFITS 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. FLASHING Assemblies include all flashings associated with the exterior walls except for thru-wall flashing. EXTERIOR PAINTING AND SPECIAL COATINGS Assemblies include paint, stucco, etc. The unit of measure at the assembly level is area of exterior coatings.	SF SF	M2 M M2 M2	Length of walls and handrails Area of soffits Area of flashings
		B201005 B201006 B201007 B201008 B201009 B201010	Assemblies include materials used in association with parapets. Parapets are long walls or railings usually along the edge of a roof or balcony. EXTERIOR LOUVERS & SCREENS Assemblies include louvers and screens which are located in exterior walls. The unit of measure at the assembly level is each. BALCONY WALLS & HANDRAILS Assemblies would include materials associated with balcony walls and handrails. These rails are usually guardrails and not associated with stairs. EXTERIOR SOFFITS 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. FLASHING Assemblies include all flashings associated with the exterior walls except for thru-wall flashing. EXTERIOR PAINTING AND SPECIAL COATINGS Assemblies include paint, stucco, etc. The unit of measure at the assembly level is area of exterior coatings. EXTERIOR JOINT SEALANT Exterior application of joint sealants to seal joints and prepare for finish material installation. SUN CONTROL DEVICES 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.	SF LF SF SF SF	M2 M2 M2 M2 M2	Length of walls and handrails Area of soffits Area of flashings Area of exterior coatings
		B201005 B201006 B201007 B201008 B201009	Assemblies include materials used in association with parapets. Parapets are long walls or railings usually along the edge of a roof or balcony. EXTERIOR LOUVERS & SCREENS Assemblies include louvers and screens which are located in exterior walls. The unit of measure at the assembly level is each. BALCONY WALLS & HANDRAILS Assemblies would include materials associated with balcony walls and handrails. These rails are usually guardrails and not associated with stairs. EXTERIOR SOFFITS 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. FLASHING Assemblies include all flashings associated with the exterior walls except for thru-wall flashing. EXTERIOR PAINTING AND SPECIAL COATINGS Assemblies include paint, stucco, etc. The unit of measure at the assembly level is area of exterior coatings. EXTERIOR Joint SEALANT Exterior application of joint sealants to seal joints and prepare for finish material installation. SUN CONTROL DEVICES Assemblies include awnings, shades, and solar panels attached to the exterior of the	SF SF SF	M2 M2 M2 M2 M2 M2 M3	Length of walls and handrails Area of soffits Area of flashings Area of exterior coatings Length of sealants

Fina	I Con	nbined	Uniforma	at II / WBS 9/18/06, Revision 2			
Unf L1	Unf L2	Unf L3	WBS L4	Definition	E UOM	M UOM	Quantity Definition
		B2020	EXTERIOR	RWINDOWS	SF	M2	Area of windows
				All windows located in exterior walls or exterior skin.			
			B202001	WINDOWS	SF	M2	Area of windows
				Fixed or operable windows located in exterior walls or exterior skin. Assemblies would include frames, glazing, caulking, finishes and other associated work.			

			at II / WBS 9/18/06, Revision 2			
L1 Unf L2	Unf L3	WBS L4	Definition	E UOM	M UOM	Quantity Definition
		B202002	STOREFRONTS	SF	M2	Area of storefronts
			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.			
		B202003	CURTAIN WALLS	SF	M2	Area of curtain walls
			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			
		D000004	other associated work.	05	140	Assault Olasia
		B202004 B202090	EXTERIOR GLAZING OTHER EXTERIOR WINDOWS	SF XX	M2 XX	Area of Glazing
_		B202090	Exterior windows not described by the assembly categories listed above.	^^	^^	
	B2030	EXTERIO		EA	EA	Number of doors
		D000001	All doors located in exterior walls or exterior skin.			
		B203001	SOLID DOORS Assemblies include all exterior solid doors, hollow metal or wood with frames. Solid doors	EA	EA	Number of doors
			may include glazing lites in doors. Door hardware is located in B203008 EXTERIOR DOOR			
			HARDWARE.			
		B203002	GLAZED DOORS	EA	EA	Number of doors
			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.			
		B203003	REVOLVING DOORS	EA	EA	Number of doors
\perp		D202224	Assemblies include all revolving doors at exterior of the facility.	er.	MO	Area of deers
+		B203004	OVERHEAD AND ROLL-UP DOORS Overhead and roll-up doors installed in exterior walls or exterior skin. Assemblies include	SF	M2	Area of doors
			frames, hardware, hoisting devices, and finish and other associated work. The unit of			
			measure at the assembly level is each door.			
+		B203005	HANGAR DOORS	SF	M2	Area of doors
			Large aircraft doors used on medium and high bay hangars. Assemblies would include			
			frames, hardware, hoisting devices, and finish and other associated work.			
		B203006	BLAST RESISTANT DOORS	SF	M2	Area of doors
			Special exterior doors used for blast resistance. Assemblies would include frames, hardware, hoisting devices, and finish and other associated work.			
		B203007	GATES	SF	M2	Area of doors
_		BECCCC	Any special gate type used in the exterior wall or exterior skin of the building. Assemblies	O.	IVIZ	71102 01 00013
			would include frames, hardware, hoisting devices, and finish and other associated work. The			
			unit of measure at the assembly level is each gate.			
		B203008	EXTERIOR DOOR HARDWARE	EA	EA	Number of doors
			Exterior door hardware includes items such as closers, hinges, locksets, panic hardware, etc.			
		B203090	OTHER EXTERIOR SPECIALTY DOORS	XX	XX	
_		DECCCO	OTHER EXTERIOR OF EGIAETT BOOKS	7.7.	707	
			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.			
		B203091	OTHER EXTERIOR PERSONNEL DOORS	XX	XX	
			Exterior personnel doors not described by the assembly categories listed above.			
B30	ROOF	NG		SF	M2	Gross area of roof
			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.			
	 		areas, valouries, and the inc.	1		
	B3010	ROOF CO	VERINGS	SF	M2	Gross area of roof
			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			
		D204004	areas, balconies, and the like.	C.F.	MO	Area of real economics
+		B301001	STEEP SLOPE ROOF SYSTEMS Assemblies include roof coverings such as shingle, wood shake, structural standing seam,	SF	M2	Area of roof covering
			metal roofing, etc.			
		B301002	LOW SLOPE ROOF SYSTEMS	SF	M2	Area of topping or membrane
			Assemblies include roof coverings such as built-up, elastomeric, modified bitumen, etc Also,			
	1	B301003	walkways and work areas (used to gain access to rooftop equipment) will be included here. ROOF INSULATION & FILL	SF	M2	Area of insulation
_		D301003	Assemblies include all types of insulation associated with the roof area.	OF	IVIZ	Area of insulation
_	1	B301004	FLASHINGS & TRIM	SF	M2	Area of flashings
			Assemblies include all flashings associated with the roof, i.e., eave flashing, gable flashing,			,
			etc.			
		B301005	GUTTERS & DOWNSPOUTS	LF	M	Length of gutters and downspo
		B301005	GUTTERS & DOWNSPOUTS	LF	M	Length of gutters and downspo
			GUTTERS & DOWNSPOUTS Assemblies include all gutters, downspouts, and associated work including splash blocks.			
		B301005	GUTTERS & DOWNSPOUTS	LF SF	M M2	Length of gutters and downspo

Final	Comb	ined l	Jniforma	at II / WBS 9/18/06, Revision 2			
Unf L1	Unf L2 U		WBS L4	Definition	E UOM	M UOM	Quantity Definition
			B301090	OTHER ROOFING Roofing not described by the assembly categories listed above.	XX	XX	
С	INTER	RIORS	5		SF	M2	Gross floor area
				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.			
	C10 I	NTERI	OR CONS	STRUCTION	SF	M2	Gross floor area
				This assembly includes partitions, interior doors, and specialties.		in.	erece neer area
		1010	DARTITIO		0.5		
		1010	PARTITIO	Includes all interior partitions.	SF	M2	Area of partitions
			C101001	FIXED PARTITIONS	SF	M2	Area of fixed partition walls
			0404000	Interior fixed partitions include metal or wood studs, sheetrock, masonry, and concrete walls. DEMOUNTABLE PARTITIONS	05	MO	A
			C101002	Assemblies would include all demountable partitions and associated work including tracks	SF	M2	Area of demountable partition walls
				and anchoring systems.			
			C101003	RETRACTABLE PARTITIONS Assemblies would include all retractable or folding partitions and associated work including	SF	M2	Area of retractable partition walls
			C101004	tracks and anchoring systems. INTERIOR GUARDRAILS & SCREENS	LF	M	Length of balustrades and screens
				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.			
			C101005	INTERIOR WINDOWS Fixed or operable windows. Assemblies would include frames, glazing, caulking and other	SF	M2	Area of windows
				associated work.			
			C101006	GLAZED PARTITIONS & STOREFRONTS	SF	M2	Area of partitions and storefronts
				Fixed interior glazed partitions including interior storefronts with doors. Assemblies include frames, glazing, caulking, and other associated work.			
			C101007	INTERIOR GLAZING	SF	M2	Area of interior glazing
			C101008	INTERIOR JOINT SEALANT Interior application of sealants to seal joints and prepare for finish material installation. The	LF	М	Length of sealants
				application shall include partitions, doors and fitting.			
			C101090	OTHER PARTITIONS Interior partitions not described by the assembly categories listed above.	XX	XX	
	c	1020	INTERIOR	DOORS	LEF	LEF	Number of leaves
			C102001	All interior doors. STANDARD INTERIOR DOORS	LEF	LEF	Number of leaves
			0.102001	Assemblies include all standard interior wood or hollow metal doors with frames, finish, etc			Trainibol of loavoo
				Standard interior door may include vision lites. Interior door hardware is located in C102007 INTERIOR DOOR HARDWARE.			
			C102002	GLAZED INTERIOR DOORS	LEF	LEF	Number of leaves
				Assemblies include all glazed interior doors with glass, frames, finish, including storefront, etc Interior door hardware is located in C102007 INTERIOR DOOR HARDWARE.			
			C102003	FIRE DOORS	LEF	LEF	Number of leaves
				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.			
			C102004	SLIDING & FOLDING DOORS	SF	M2	Area of sliding or folding door
				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.			
			C102005	INTERIOR OVERHEAD DOORS	SF	M2	Area of doors
				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.			
			C102006	INTERIOR GATES	SF	M2	Area of gates
				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			
			C102007	assembly level is each gate. INTERIOR DOOR HARDWARE	EA	EA	Number of doors
			C102090	Interior door hardware includes items such as closers, hinges, locksets, panic hardware, etc. OTHER INTERIOR SPECIALTY DOORS	XX	XX	
				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			
			C102091	assembly level is each gate. OTHER INTERIOR PERSONNEL DOORS	~~	vv	
			C102091	Interior personnel doors not described by the assembly categories listed above.	XX	XX	
	c	1030	SPECIAL	TIES	SF	M2	Gross floor area
				Most commonly used specialty items.			Number of compartments, cubicles,
			C103001	COMPARTMENTS, CUBICLES & TOILET PARTITIONS	EA	EA	or toilet partitions

Illnf I 2			at II / WBS 9/18/06, Revision 2			
OIN LZ	Unf L3	WBS L4	Definition	E UOM	M UOM	Quantity Definition
			Assemblies include individual compartments, cubicles, toilet partitions, and urinal screens.			
		C103002	TOILET & BATH ACCESSORIES	EA	EA	Number of accessories
			Toilet and bath accessories. For example, soap dispensers, toilet paper holder, towel dispensers, grab bars, bathroom mirrors, etc.			
	+	C103003	MARKER BOARDS & TACK BOARDS	EA	EA	Each Board
			Assemblies include all marker boards, tackboards, and fastening devices. The unit of			
	+	C103004	measure at the assembly level is each. IDENTIFYING DEVICES	EA	EA	Number of identifying devices
	+	3103004	Assemblies include all signs, plaques, traffic markers, etc.		-7	reamber or identifying devices
		C103005	LOCKERS	EA	EA	Number of lockers
			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.			
	+	C103006	SHELVING	LF	M	Length of shelving
			Assemblies include all types of shelving with brackets and all supporting materials and finish,			
			if required.			
		C103007	FIRE EXTINGUISHER CABINETS	EA	EA	Number of fire extinguisher cal
		0100001	This assembly would include all types and sizes of fire extinguisher cabinets. Fire		L/X	Transor or me oxangaloner oa
		0.000	extinguishers are not included in this assembly; they are included in D40.		ļ.,	
	+	C103008	COUNTERS Assemblies include all counters and countertops with all necessary brackets and supporting	LF	М	Length of counters
			materials and finish, if required.			
		C103009	CABINETS	LF	M	Length of cabinets
			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.			
1	+	C103010	CASEWORK			
	1	1	Assemblies would include built-in premanufactured cabinetry for specialized functions such			
		C103011	as labs, libraries, medical and dental facilities.		M	Longth of along to
	+	C103011	CLOSETS This assembly includes all built-in closets with all associated work and finishes. These	LF	М	Length of closets
L		<u>L</u>	closets are millwork items or prefabricated coat closets for schools and dormitories.	<u>L</u>		
		C103012	FIRESTOPPING PENETRATIONS	EA	EA	Each Penetration
	+	C103013	Assembly includes sleeve, caulking, and flashing. SPRAYED FIRE-RESISTIVE MATERIALS	SF	M2	Area of coverage
1	+	5103013	Sprayed Fire-Resistive Materials includes materials that are applied primarily to a building's	Ji	IVIZ	, asa or coverage
<u></u>			framework (columns, beams, bracing, metal decking) to prevent structural failure.			
		C103014	ENTRANCE FLOOR GRILLES AND MATS	SF	M2	Area of grilles/mats
			Assemblies include floor grilles and mats installed in a fixed arrangement at a building entrance.			
	<u> </u>	C103015	ORNAMENTAL METALWORK	EA	EA	Number of metalwork items
			Building components made from ornamental metals. Ornamental stair handrails are included			
	+	C103090	in B1010 EXTERIOR STAIRS and C20 STAIRS. OTHER INTERIOR SPECIALTIES	EA	EA	Number of specialty items
L		5.30030	Interior specialties not described by the assembly categories listed above.			
Can	STAIR	9			гт	Number of flight-
CZU	STAIR		Mark includes all stair construction	FLT	FLT	Number of flights
	+		Work includes all stair construction.			
1					1	1
	C2010	STAIR CO	ONSTRUCTION	FLT	FLT	Number of flights
	C2010	STAIR CO	All work items located within the building footprint. A flight of stairs is considered to be all the	FLT	FLI	Number of flights
	C2010		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.			
	C2010	STAIR CO	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. INTERIOR AND EXTERIOR STAIRS	FLT	FLT	Number of flights Number of flights
	C2010		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. INTERIOR AND EXTERIOR STAIRS 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			
	C2010		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. INTERIOR AND EXTERIOR STAIRS 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			
	C2010	C201001	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. INTERIOR AND EXTERIOR STAIRS 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.	FLT	FLT	Number of flights
	C2010		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. INTERIOR AND EXTERIOR STAIRS 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. FIRE ESCAPE STAIRS Assemblies include exterior stairs which are used for emergency egress. These stairs are			
	G2010	C201001	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. INTERIOR AND EXTERIOR STAIRS 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. FIRE ESCAPE STAIRS 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	FLT	FLT	Number of flights
	G2010	C201001	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. INTERIOR AND EXTERIOR STAIRS 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. FIRE ESCAPE STAIRS 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.	FLT	FLT	Number of flights
	C2010	C201001	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. INTERIOR AND EXTERIOR STAIRS 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. FIRE ESCAPE STAIRS 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	FLT	FLT	Number of flights
C22		C201001 C201002 C201090	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. INTERIOR AND EXTERIOR STAIRS 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. FIRE ESCAPE STAIRS 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. STAIR HANDRAILS, GUARDRAILS AND ACCESSORIES Stair handrails, guardrails, and cast-in-place nosings for interior and exterior stairs.	FLT XX	FLT XX	Number of flights Number of flights
C30		C201001	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. INTERIOR AND EXTERIOR STAIRS 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. FIRE ESCAPE STAIRS 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. STAIR HANDRAILS, GUARDRAILS AND ACCESSORIES Stair handrails, guardrails, and cast-in-place nosings for interior and exterior stairs.	FLT	FLT	Number of flights
C30		C201001 C201002 C201090	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. INTERIOR AND EXTERIOR STAIRS 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. FIRE ESCAPE STAIRS 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. STAIR HANDRAILS, GUARDRAILS AND ACCESSORIES Stair handrails, guardrails, and cast-in-place nosings for interior and exterior stairs.	FLT XX	FLT XX	Number of flights Number of flights
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C30	INTER	C201001 C201002 C201090 IOR FINIS	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. INTERIOR AND EXTERIOR STAIRS 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. FIRE ESCAPE STAIRS 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. STAIR HANDRAILS, GUARDRAILS AND ACCESSORIES Stair handrails, guardrails, and cast-in-place nosings for interior and exterior stairs. SHES Includes wall finishes, floor finishes, and ceiling finishes. NISHES Finishes which are applied to interior wall surfaces. For coatings, refer to C3040.	FLT XX SF	FLT FLT XX M2	Number of flights Number of flights Area of finishing Area of finished walls
C30	INTER	C201001 C201002 C201090	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. INTERIOR AND EXTERIOR STAIRS 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. FIRE ESCAPE STAIRS 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. STAIR HANDRAILS, GUARDRAILS AND ACCESSORIES Stair handrails, guardrails, and cast-in-place nosings for interior and exterior stairs. SHES Includes wall finishes, floor finishes, and ceiling finishes. NISHES Finishes which are applied to interior wall surfaces. For coatings, refer to C3040. CONCRETE WALL FINISHES	FLT XX SF	FLT XX M2	Number of flights Number of flights Area of finishing
C30	INTER	C201001 C201002 C201090 IOR FINIS	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. INTERIOR AND EXTERIOR STAIRS 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. FIRE ESCAPE STAIRS 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. STAIR HANDRAILS, GUARDRAILS AND ACCESSORIES Stair handrails, guardrails, and cast-in-place nosings for interior and exterior stairs. SHES Includes wall finishes, floor finishes, and ceiling finishes. NISHES Finishes which are applied to interior wall surfaces. For coatings, refer to C3040. CONCRETE WALL FINISHES This assembly would include a concrete finish applied directly to an interior wall surface. This	FLT XX SF	FLT FLT XX M2	Number of flights Number of flights Area of finishing Area of finished walls
C30	INTER	C201001 C201002 C201090 IOR FINIS	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. INTERIOR AND EXTERIOR STAIRS 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. FIRE ESCAPE STAIRS 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. STAIR HANDRAILS, GUARDRAILS AND ACCESSORIES Stair handrails, guardrails, and cast-in-place nosings for interior and exterior stairs. SHES Includes wall finishes, floor finishes, and ceiling finishes. NISHES Finishes which are applied to interior wall surfaces. For coatings, refer to C3040. CONCRETE WALL FINISHES	FLT XX SF	FLT FLT XX M2	Number of flights Number of flights Area of finishing Area of finished walls
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C30	INTER	C201001 C201002 C201090 IOR FINIS WALL FIN	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. INTERIOR AND EXTERIOR STAIRS 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. FIRE ESCAPE STAIRS 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. STAIR HANDRAILS, GUARDRAILS AND ACCESSORIES Stair handrails, guardrails, and cast-in-place nosings for interior and exterior stairs. SHES Includes wall finishes, floor finishes, and ceiling finishes. NISHES Finishes which are applied to interior wall surfaces. For coatings, refer to C3040. CONCRETE WALL FINISHES 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. PLASTER WALL FINISHES This assembly includes plaster or stucco applied directly to an interior wall surface. Lath and	FLT XX SF SF	FLT FLT XX M2 M2 M2	Number of flights Number of flights Area of finishing Area of finished walls Area of finished walls
C30	INTER	C201001 C201002 C201090 IOR FINIS WALL FIN	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. INTERIOR AND EXTERIOR STAIRS 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. FIRE ESCAPE STAIRS 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. STAIR HANDRAILS, GUARDRAILS AND ACCESSORIES Stair handrails, guardrails, and cast-in-place nosings for interior and exterior stairs. SHES Includes wall finishes, floor finishes, and ceiling finishes. NISHES 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. PLASTER WALL FINISHES 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	FLT XX SF SF	FLT FLT XX M2 M2 M2	Number of flights Number of flights Area of finishing Area of finished walls Area of finished walls
C30	INTER	C201001 C201002 C201090 IOR FINIS WALL FIN	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. INTERIOR AND EXTERIOR STAIRS 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. FIRE ESCAPE STAIRS 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. STAIR HANDRAILS, GUARDRAILS AND ACCESSORIES Stair handrails, guardrails, and cast-in-place nosings for interior and exterior stairs. SHES Includes wall finishes, floor finishes, and ceiling finishes. NISHES Finishes which are applied to interior wall surfaces. For coatings, refer to C3040. CONCRETE WALL FINISHES 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. PLASTER WALL FINISHES This assembly includes plaster or stucco applied directly to an interior wall surface. Lath and	FLT XX SF SF	FLT FLT XX M2 M2 M2	Number of flights Number of flights Area of finishing Area of finished walls Area of finished walls
C30	INTER	C201001 C201002 C201090 IOR FINIS WALL FIN C301001	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. INTERIOR AND EXTERIOR STAIRS 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. FIRE ESCAPE STAIRS 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. STAIR HANDRAILS, GUARDRAILS AND ACCESSORIES Stair handrails, guardrails, and cast-in-place nosings for interior and exterior stairs. SHES Includes wall finishes, floor finishes, and ceiling finishes. NISHES 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. PLASTER WALL FINISHES 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. GYPSUM WALLBOARD FINISHES This assembly includes gypsum wallboard applied directly to an interior wall surface. Furring	FLT XX SF SF SF	FLT FLT XX M2 M2 M2 M2	Number of flights Number of flights Area of finishing Area of finished walls Area of finished walls
C30	INTER	C201001 C201002 C201090 IOR FINIS WALL FIN C301001	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. INTERIOR AND EXTERIOR STAIRS 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. FIRE ESCAPE STAIRS 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. STAIR HANDRAILS, GUARDRAILS AND ACCESSORIES Stair handrails, guardrails, and cast-in-place nosings for interior and exterior stairs. SHES Includes wall finishes, floor finishes, and ceiling finishes. NISHES 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. PLASTER WALL FINISHES 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. GYPSUM WALLBOARD FINISHES	FLT XX SF SF SF	FLT FLT XX M2 M2 M2 M2	Number of flights Number of flights Area of finishing Area of finished walls Area of finished walls

				at II / WBS 9/18/06, Revision 2			
f L1 l	Unf L2	Unf L3	WBS L4	Definition	E UOM	M UOM	Quantity Definition
			C301004	TILE & TERRAZZO WALL FINISHES	SF	M2	Area of finished walls
				This assembly includes tile and terrazzo applied directly to an interior wall surface. Each type			
				of tile would be a separate assembly.			
			C301005	WALL COVERINGS	SF	M2	Area of wall coverings
				This assembly includes wall coverings and protective strips applied directly to an interior wall			
				surface.			
			C301006	ACOUSTICAL PANELS ADHERED TO WALLS	SF	M2	Area of acoustical tiles and pane
				This assembly includes acoustical tiles and panels with associated work applied directly to an			
				interior wall surface.			
			C301090	OTHER WALL FINISHES	XX	XX	
				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.			
				<u> </u>			
		C3020	FLOOR F	FINISHES	SF	M2	Area of finished floors
				All flooring and floor finishes applied to interior floors. For coatings refer to C3040.			
			C302001	TILE FLOOR FINISHES	SF	M2	Area of tile floors
				Assemblies include ceramic, quarry, and other non-resilient tile floors.			
			C302002	TERRAZZO FLOOR FINISHES	SF	M2	Area of terrazzo floors
				Assemblies include terrazzo floors.			
			C302003	WOOD FLOORING	SF	M2	Area of wood floors
			0002000	Assemblies include wood floors.			7 HOLD OF WOOD HOUSE
			C302004	RESILIENT FLOOR FINISHES	SF	M2	Area of resilient floors
			0302004	Assemblies include resilient floors.	OI .	IVIZ	Area or resilient noors
			C302005	CARPETING	SF	M2	Area of carpeting
_			C302006	MASONRY & STONE FLOORING	SF	M2	Area of masonry or stone flooring
-			C302006	Assemblies include masonry, concrete pavers, and stone flooring.	or	IVIZ	Area of masonry of stone hoofin
_			0000007		LF		1
			C302007	WALL BASE FINISHES	LF	M	Length of wall base
				Assemblies include wall base, consisting of various materials such as vinyl, ceramic tile, etc.			
			C302008	STAIR FINISHES	SF	M2	Area of coverage
				Includes field-applied finish materials (other than paint) to surfaces of stairs including treads,			
				risers and landings.			
			C302009	FLOOR TOPPINGS AND TRAFFIC MEMBRANES	SF	M2	Area of coverage
				Assemblies include floor toppings and membrane systems.			
			C302010	HARDENERS AND SEALERS	SF	M2	Area of coverage
				Assemblies include floor hardeners and sealers, typically applied on concrete floors.			
			C302011	RAISED ACCESS FLOORING	SF	M2	Area of special flooring
				Assemblies include all types of raised flooring, pedestal access floors and other types of			
				access flooring.			
			C302090	OTHER FLOORING & FLOOR FINISHES	XX	XX	
-				Assemblies include floor finishes not described by the assembly categories listed above, such	1	1	
			1	as conductive, armored, etc			
-			1	The second state of sections			
		C3030	CEILING	FINISHES	SF	M2	Area of ceilings
-				All ceilings and ceiling finishes applied to interiors. For coatings, refer to C3040.			.
-			C303001	ACOUSTICAL CEILING TILES & PANELS	SF	M2	Area of acoustical ceilings
				Assemblies include acoustical ceiling tiles and panels. The suspension system, if required, is		1	
			1	in Assembly Category C303005. This assembly does not include items that directly apply to			
			1	ceiling finishes covered elsewhere in this subsystem.			
-			C303002	GYPSUM WALLBOARD CEILING FINISHES	SF	M2	Area of gypsum ceilings
-			C303002	Assemblies include gypsum wallboard applied to interior ceilings. Furring strips or channels	OF	IVIZ	Area or gypsuin ceilings
			1	are included in this assembly if they are applied directly to the ceiling surface. If the gypsum			
			1				
			1	board is applied to a suspended ceiling system, the suspended system would be in Assembly			
			1	Category C303005. This assembly does not include items that directly apply to ceiling finishes			
				covered elsewhere in this subsystem.		1	
			C303003	PLASTER CEILING FINISHES	SF	M2	Area of plaster ceiling finish
			1	Assemblies include plaster or stucco finishes applied to interior ceilings. Lath and associated			
			1	work would apply to this assembly. This assembly does not include items that directly apply to			
			1	ceiling finishes covered elsewhere in this subsystem.	1	1	1

			at II / WBS 9/18/06, Revision 2			
L1 Ur	nf L2 Unf L3	WBS L4	Definition	E UOM	M UOM	Quantity Definition
		C303004	WOOD CEILINGS	SF	M2	Area of wood ceilings
			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	SUSPENSIONS SYSTEMS	SF	M2	Area of suspension system
			This assembly includes any suspension system which is suspended or hung from the			· · · · · · · · · · · · · · · · · · ·
			structure for the purpose of fastening a ceiling.			
		C303006	METAL STRIP CEILINGS	SF	M2	Area of metal ceiling
			Assemblies include all metal strip materials applied to ceilings.			
		C303090	OTHER CEILING & CEILING FINISHES	XX	XX	
			Special ceilings and ceiling finishes not described by the assembly categories listed above.			
	C3040	INTERIO	R COATINGS AND SPECIAL FINISHES	SF	M2	Area of interior coatings
			This assembly includes surface preparation and application of coatings to interior surfaces.			
		C304001	GENERAL REQUIREMENTS	SF	M2	Area of coatings and finishes
		C304002	CONCRETE FINISHES	SF	M2	Area of concrete finishes
		C304003	CONCRETE MASONRY FINISHES	SF	M2	Area of concrete masonry finishe
		C304004	METAL FINISHES	SF	M2	Area of metal finishes
		C304005	INTERIOR WOOD FINISHES	SF	M2	Area of wood finishes
		C304006	GYPSUM WALLBOARD FINISHES	SF	M2	Area of gypsum wallboard coatin
		C304007	SPECIAL COATINGS ON WALLS	SF	M2	Area of special wall coatings
_	ED\ ((0E)					
S	ERVICES	5		EA	EA	
			Includes all methods of conveying, plumbing, HVAC, fire protection, and electrical.			
_			indiade an indiade of conveying, planteling, 11776; indiplote acting and discussion.			
D	10 CONV	EYING		STY	STY	Number of stories
			This system includes elevators, escalators, pneumatic tube systems, conveyors, chutes, etc.			
			Foundations for these systems are included in System A, Substructure.			
	D1010	ELEVAT	ORS AND LIFTS	STP	STP	Number of stops
			Includes passenger elevators and freight elevators.			
		D101001	GENERAL CONSTRUCTION ITEMS	EA	EA	Number of items
			Includes construction work, other than conveying system work, which must be performed in			
			conjunction with this type of work to complete the system.			
		D101002	PASSENGER ELEVATORS	STP	STP	Number of stops
			The unit measure at the assembly level is each stop.			·
		D101003	FREIGHT ELEVATORS	STP	STP	Number of stops
			The unit measure at the assembly level is each stop.			·
		D101004	WHEELCHAIR LIFT	EA	EA	Number of lifts
			Premanufactured lift to gain wheelchair access.			
		D101005	DUMBWAITERS	STP	STP	Number of stops
			The unit measure of the assembly is each stop.			·
		D101090	OTHER VERTICAL TRANSPORTATION EQUIPMENT	XX	XX	
			This includes elevators not described by the assembly categories listed above, such as			
			people lifts.	<u></u>	<u> </u>	
				1		
	D1020		HANDLING EQUIPMENT	EA	EA	Number of items
		D102001	BASIC REQUIREMENTS OF CRANES AND MONORAILS	EA	EA	Number of items
		D102002	OVERHEAD CRANES	EA	EA	Number of items
		D102003	MONORAILS	EA	EA	Number of items
		=06	TODO AND MONTHS WALKS	l		
	D1030		TORS AND MOVING WALKS	LF	M	Length of stairs or walks
		D103001	ESCALATORS	LF	M	Length of stairs
		D103002	MOVING WALKS	LF	M	Length of walks
		D103090	OTHER MOVING STAIRS & WALKS	XX	XX	
			Moving stairs or walks not described by the assembly categories listed above.			
	D1090	OTHER (CONVEYING SYSTEMS	EA	EA	Number of systems
1		1	Other conveying systems includes pneumatic tube systems, conveyor belts, chutes, and			
			transportation systems.			
		D109001	PNEUMATIC TUBE SYSTEMS	EA	EA	Number of systems
				1		Number of material handling
		D109002	CONVEYORS	EA	EA	systems
				LF		Length of chute
		D109002 D109003 D109004	LINEN, TRASH, AND MAIL CHUTES TURNTABLES	LF EA	M EA	Length of chute Number of turntables

			at II / WBS 9/18/06, Revision 2			
Unf L2	Unf L3	WBS L4	Definition		M UOM	Quantity Definition
		D109006	TRANSPORTATION SYSTEMS	EA	EA	Number of systems
			This assembly includes baggage handling and aircraft loading systems.	SF	M2	Area of scaffolding
		D109090	OTHER MATERIAL HANDLING SYSTEMS	XX	XX	
			Material or handling systems not described by the assembly categories listed above.			
D20	PLUME	BING		EA	EA	Number of fixtures
			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	PLUMBIN	IG FIXTURES	EA	EA	Number of fixtures
			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	WATERCLOSETS	EA	EA	Number of fixtures
		D201002	URINALS	EA	EA	Number of fixtures
		D201003	LAVATORIES	EA	EA	Number of fixtures
		D201004	SINKS	EA	EA	Number of fixtures
		D201005	SHOWERS/TUBS	EA	EA	Number of fixtures
		D201006	DRINKING FOUNTAINS & COOLERS	EA	EA	Number of fixtures
		D201007	BIDETS	EA	EA	Number of fixtures
		D201090	EMERGENCY FIXTURES	XX	XX	
			Emergency fixtures not described by the assembly categories listed above.			
	D2020	DOMEST	IC WATER DISTRIBUTION	EA	EA	Number of fixtures
			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	PIPES & FITTINGS	EA	EA	Number of fixtures
			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	VALVES & HYDRANTS	EA	EA	Number of valves and hydrar
			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	DOMESTIC WATER EQUIPMENT	EA	EA	Number of fixtures
			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	INSULATION & IDENTIFICATION	EA	EA	Number of fixtures
			Assemblies include insulation used in association with domestic water supply. The unit of			
-		Danage	measure at the assembly level is number of fixtures.	ΕΛ.	F.A.	Disease of equipment
		D202005	SPECIALTIES	EA	EA	Pieces of equipment
			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	OTHER DOMESTIC WATER SUPPLY	XX	XX	+
		D202030	Domestic water supply not described by the assembly categories listed above.	^^	^^	
-				1		
	D2030	SANITAR	Y WASTE	EA	EA	Number of fixtures
			This system provides for human health and comfort. Fixtures include all terminal devices			
l			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			
		D203001	drains (not drain hubs) are included as a sanitary waste fixture.	ΕΛ.	F.A.	Number of fixtures
-		D203001	WASTE PIPE & FITTINGS	EA	EA	Number of fixtures
			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	VENT PIPE & FITTINGS VENT PIPE & FITTINGS	EA	EA	Number of fixtures
		D203002	Assemblies include all pipe, fittings, and associated work with regard to sanitary vent pipe	EA	EA	Number of fixtures
			and fittings. The unit of measure at the assembly level is number of fixtures.			
1		D203003	FLOOR DRAINS	EA	EA	Number of floor drains

			at II / WBS 9/18/06, Revision 2			
Unf L2	Unf L3	WBS L4	Definition	E UOM	M UOM	Quantity Definition
			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.			
		D203004	SANITARY AND VENT EQUIPMENT	EA	EA	Number of fixtures
		220000.				
			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			
		D00000F	system. The unit of measure at the assembly level is pieces of equipment.			N 1 76 1
		D203005	INSULATION & IDENTIFICATION	EA	EA	Number of fixtures
			Assemblies include insulation used in association with sanitary waste and vent system. The unit of measure at the assembly level is number of fixtures.			
		D203090	OTHER SANITARY WASTE	XX	XX	
		D200000	Sanitary waste and vent not described by the assembly categories listed above.	707	7.7.	
	D2040	RAIN WAT	FER DRAINAGE	SF	M2	Area of roof
			Roof drainage system. Gutter and downspouts are not included in this subsystem.			
		D204001	PIPE & FITTINGS	LF	M	Length of pipe
			Assemblies include pipe and fittings from the roof drains to the discharge points, including			
		D204002	supports and other associated work. ROOF DRAINS	EA	EA	Number of roof drains
		D204002		EA	EA	Number of roof drains
			Assemblies include roof drains. The unit of measure at the assembly level is number of drains.			
1		D204003	RAINWATER DRAINAGE EQUIPMENT	EA	EA	Pieces of equipment
1			This is equipment associated with the rain water drainage, including fittings and specialties			5000 or oquipmont
1			required for hook-up. Assemblies include pumps and other associated items for drainage of			
1			rain water.			
		D204004	INSULATION & IDENTIFICATION	LF	М	Length of pipe insulation
			Assemblies include insulation used in association with rain water drainage system.			
		D204090	OTHER RAIN WATER DRAINAGE SYSTEM	XX	XX	
			Rain water drainage system not described by the assembly categories listed above.			
	D2090	OTHER DI	LUMBING SYSTEMS	EA	EA	Number of special fixtures, etc
	D2030	OTHERT	This subsystem includes all special plumbing systems which are not included in D2010	EA	LA	rumber of special fixtures, etc
			through D2040.			
			anough DEO 10.			Number of special fixtures,
		D209001	SPECIAL PIPING SYSTEMS	EA	EA	interceptors, etc.
			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.			
						Number of special fixtures,
		D209002	ACID WASTE SYSTEMS Assemblies include all pipe, fittings, special acid waste equipment, and other associated work	EA	EA	interceptors, etc.
			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.			
		D209003	INTERCEPTORS	EA	EA	Number of interceptors
1			Assemblies include all interceptors. The unit of measure at the assembly level is number of			
			interceptors.			
		D209004	POOL PIPING AND EQUIPMENT	GPM	M3/S	Gallons per minute
			Assemblies include pumps and associated equipment with pools, including specialties			·
			required for hook-up. The unit of measure at the assembly level is each.			
		D209005	COMPRESSED AIR SYSTEM (NON-BREATHING)	PSI	KGM2	Pounds per square inch
		D209090	OTHER SPECIAL PLUMBING SYSTEMS	XX	XX	
			This system includes special plumbing systems not described by the assembly categories			
_			listed above, such as fountain piping systems and devices.			
D30	HVAC			мвн	KW	Total MBH capacity
230			This system includes all equipment, distribution systems, controls, and energy supply	ווטווי		. Star Wibi i Sapacity
			systems required by the heating, ventilating, and air conditioning system.			
	D3010	ENERGY	SUPPLY	MBH	KW	Total power of heating system
			The energy input to the facility (other than electrical) in the form of fuels or hot and cold water			
1			distributed from a central base facility. Energy received from wind or solar power is included			
			in this subsystem.			
		D301001	OIL SUPPLY SYSTEM	MBH	KW	Calories per gallon
1			Assemblies include storage equipment, transfer equipment, and distribution piping. The unit			
		D301002	of measure at the assembly level is each system. GAS SUPPLY SYSTEM	MBH	KW	MDLI
-		D301002	This category includes both natural gas and LPG. Assemblies include metering and	IVIDI	L/AA	MBH
1			regulation equipment, storage equipment, transfer equipment, and distribution piping. The			
1			unit of measure at the assembly level is each system.			
1		D301003	STEAM SUPPLY SYSTEM (FROM CENTRAL PLANT)	MBH	KW	Power
1			Assemblies include meters, valves, heat exchangers, fittings, and specialties required for			
	1	1	hook-up and distribution piping, including supports, sleeves, and insulation. The unit of	1		

nai C	Combined	Uniform	at II / WBS 9/18/06, Revision 2			
f L1 Ur	nf L2 Unf L3	WBS L4	Definition	E UOM	M UOM	Quantity Definition
		D301004	HOT WATER SUPPLY SYSTEM (FROM CENTRAL PLANT)	MBH	KW	Power
			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.			
_		D301005	SOLAR ENERGY SUPPLY SYSTEMS	MBH	KW	Power
_		2001000	Assemblies include collector panels, heat exchangers, storage tanks, pumps, etc., including	IVIDITI	1000	i ower
			pipe and fittings required for hook-up. The unit of measure at the assembly level is each			
			system.			
		D301006	WIND ENERGY SUPPLY SYSTEM	MBH	KW	Power
			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.			
		D301007	COAL SUPPLY SYSTEM	MBH	KW	Power
_		D301007	This category includes storage equipment, transfer equipment, processing equipment, and	IVIDITI	IXVV	i owei
			distribution piping. The unit of measure at the assembly level is each system.			
		D301090	OTHER ENERGY SUPPLY	XX	XX	
			Energy supply not described by the assembly categories listed above.			
	D2020	LIEATOE	NED ATING CYCTEMS		1011	T. 1 (1)
	D3020	HEAT GE	NERATING SYSTEMS	MBH	KW	Total power of heating system
			This subsystem includes steam, hot water, furnace, and unit heater systems. Fuels include coal, oil, gas and electric unless otherwise noted.			
+		D302001	BOILERS	MBH	KW	Power
-+	+	2002001	Assemblies include steam or hot water boilers, expansion tanks, chemical feeders, air	ווטווי		. 5001
			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.			
\perp		D302002	FURNACES	MBH	KW	Power
			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.			
		D302003	FUEL-FIRED UNIT HEATERS	MBH	KW	Power
_		D302003	Assemblies would include unit heaters and the energy supply system hook-up (other than	IVIDITI	IXVV	i owei
			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.			
		D302004	AUXILIARY EQUIPMENT	MBH	KW	Power
			Assemblies would include any other equipment associated with heat generating systems. The			
-		Daggage	unit of measure at the assembly level is each.	0.5	140	A
		D302005	EQUIPMENT THERMAL INSULATION Assemblies would include insulation of any component in this subsystem. The unit of	SF	M2	Area of insulation
			measure at the assembly level is each.			
_		D302090	OTHER HEAT GENERATING SYSTEMS	XX	XX	
			Heat generating systems not described in the assembly categories listed above.			
	D3030	COOLING	GENERATING SYSTEMS	TON	KW	Total power of cooling capacity
			Cooling generating equipment of the absorption, centrifugal, reciprocating, and direct			
		D000004	expansion types.	TON	IOM	D
+		D303001	CHILLED WATER SYSTEMS Assemblies include condensers, compressors, chillers, pumps, cooling towers, etc., including	TON	KW	Power
			fittings and specialties required for hook-up. The unit of measure at the assembly level is			
		1	each.			
-+						- i
		D303002	DIRECT EXPANSION SYSTEMS	TON	KW	Power
-		D303002	DIRECT EXPANSION SYSTEMS Assemblies include condensers, compressors, heat pumps, and refrigerant piping. The unit of	TON	KW	Power
			DIRECT EXPANSION SYSTEMS Assemblies include condensers, compressors, heat pumps, and refrigerant piping. The unit of measure at the assembly level is each.			Power
		D303002	DIRECT EXPANSION SYSTEMS Assemblies include condensers, compressors, heat pumps, and refrigerant piping. The unit of measure at the assembly level is each. OTHER COOLING GENERATING SYSTEMS	TON	KW	Power
			DIRECT EXPANSION SYSTEMS Assemblies include condensers, compressors, heat pumps, and refrigerant piping. The unit of measure at the assembly level is each.			Power
	D3040	D303090	DIRECT EXPANSION SYSTEMS Assemblies include condensers, compressors, heat pumps, and refrigerant piping. The unit of measure at the assembly level is each. OTHER COOLING GENERATING SYSTEMS			Power
	D3040	D303090	DIRECT EXPANSION SYSTEMS Assemblies include condensers, compressors, heat pumps, and refrigerant piping. The unit of measure at the assembly level is each. OTHER COOLING GENERATING SYSTEMS Cooling generating systems not described by the assembly categories listed above.	XX	XX	
	D3040	D303090 DISTRIBU	DIRECT EXPANSION SYSTEMS Assemblies include condensers, compressors, heat pumps, and refrigerant piping. The unit of measure at the assembly level is each. OTHER COOLING GENERATING SYSTEMS Cooling generating systems not described by the assembly categories listed above. JTION SYSTEMS This includes systems that distribute heated and cooled air, ventilating and exhaust air, hot and chilled water, steam, and glycol heating.	XX MBH	xx	
	D3040	D303090	DIRECT EXPANSION SYSTEMS Assemblies include condensers, compressors, heat pumps, and refrigerant piping. The unit of measure at the assembly level is each. OTHER COOLING GENERATING SYSTEMS Cooling generating systems not described by the assembly categories listed above. JTION SYSTEMS This includes systems that distribute heated and cooled air, ventilating and exhaust air, hot and chilled water, steam, and glycol heating. AIR DISTRIBUTION, HEATING & COOLING	XX	XX	
	D3040	D303090 DISTRIBU	DIRECT EXPANSION SYSTEMS Assemblies include condensers, compressors, heat pumps, and refrigerant piping. The unit of measure at the assembly level is each. OTHER COOLING GENERATING SYSTEMS Cooling generating systems not described by the assembly categories listed above. JITION SYSTEMS This includes systems that distribute heated and cooled air, ventilating and exhaust air, hot and chilled water, steam, and glycol heating. AIR DISTRIBUTION, HEATING & COOLING Assemblies include heating coils, cooling coils, and fittings and specialties required for water	XX MBH	xx	Power
	D3040	D303090 DISTRIBU	DIRECT EXPANSION SYSTEMS Assemblies include condensers, compressors, heat pumps, and refrigerant piping. The unit of measure at the assembly level is each. OTHER COOLING GENERATING SYSTEMS Cooling generating systems not described by the assembly categories listed above. JTION SYSTEMS This includes systems that distribute heated and cooled air, ventilating and exhaust air, hot and chilled water, steam, and glycol heating. AIR DISTRIBUTION, HEATING & COOLING 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	XX MBH	xx	Power
	D3040	D303090 DISTRIBU	DIRECT EXPANSION SYSTEMS Assemblies include condensers, compressors, heat pumps, and refrigerant piping. The unit of measure at the assembly level is each. OTHER COOLING GENERATING SYSTEMS Cooling generating systems not described by the assembly categories listed above. JTION SYSTEMS This includes systems that distribute heated and cooled air, ventilating and exhaust air, hot and chilled water, steam, and glycol heating. AIR DISTRIBUTION, HEATING & COOLING 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	XX MBH	xx	Power
	D3040	D303090 DISTRIBU	DIRECT EXPANSION SYSTEMS Assemblies include condensers, compressors, heat pumps, and refrigerant piping. The unit of measure at the assembly level is each. OTHER COOLING GENERATING SYSTEMS Cooling generating systems not described by the assembly categories listed above. JION SYSTEMS This includes systems that distribute heated and cooled air, ventilating and exhaust air, hot and chilled water, steam, and glycol heating. AIR DISTRIBUTION, HEATING & COOLING 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	XX MBH	xx	Power
	D3040	D303090 DISTRIBU D304001	DIRECT EXPANSION SYSTEMS Assemblies include condensers, compressors, heat pumps, and refrigerant piping. The unit of measure at the assembly level is each. OTHER COOLING GENERATING SYSTEMS Cooling generating systems not described by the assembly categories listed above. JTION SYSTEMS This includes systems that distribute heated and cooled air, ventilating and exhaust air, hot and chilled water, steam, and glycol heating. AIR DISTRIBUTION, HEATING & COOLING 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.	MBH MCFM	xx kw	Power Volume of air flow
	D3040	D303090 DISTRIBU	DIRECT EXPANSION SYSTEMS Assemblies include condensers, compressors, heat pumps, and refrigerant piping. The unit of measure at the assembly level is each. OTHER COOLING GENERATING SYSTEMS Cooling generating systems not described by the assembly categories listed above. JION SYSTEMS This includes systems that distribute heated and cooled air, ventilating and exhaust air, hot and chilled water, steam, and glycol heating. AIR DISTRIBUTION, HEATING & COOLING 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	XX MBH	xx	Power
	D3040	D303090 DISTRIBU D304001	DIRECT EXPANSION SYSTEMS Assemblies include condensers, compressors, heat pumps, and refrigerant piping. The unit of measure at the assembly level is each. OTHER COOLING GENERATING SYSTEMS Cooling generating systems not described by the assembly categories listed above. JTION SYSTEMS This includes systems that distribute heated and cooled air, ventilating and exhaust air, hot and chilled water, steam, and glycol heating. AIR DISTRIBUTION, HEATING & COOLING 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. STEAM DISTRIBUTION SYSTEMS	MBH MCFM	xx kw	Power Volume of air flow
	D3040	D303090 DISTRIBU D304001	DIRECT EXPANSION SYSTEMS Assemblies include condensers, compressors, heat pumps, and refrigerant piping. The unit of measure at the assembly level is each. OTHER COOLING GENERATING SYSTEMS Cooling generating systems not described by the assembly categories listed above. JTION SYSTEMS This includes systems that distribute heated and cooled air, ventilating and exhaust air, hot and chilled water, steam, and glycol heating. AIR DISTRIBUTION, HEATING & COOLING 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. STEAM DISTRIBUTION SYSTEMS Assemblies include pipe and fittings, supports, wall and floor sleeves, and pipe insulation. The unit of measure at the assembly level is MBH. HOT WATER DISTRIBUTION SYSTEMS	MBH MCFM	xx kw	Power Volume of air flow
	D3040	D303090 DISTRIBU D304001	DIRECT EXPANSION SYSTEMS Assemblies include condensers, compressors, heat pumps, and refrigerant piping. The unit of measure at the assembly level is each. OTHER COOLING GENERATING SYSTEMS Cooling generating systems not described by the assembly categories listed above. JTION SYSTEMS This includes systems that distribute heated and cooled air, ventilating and exhaust air, hot and chilled water, steam, and glycol heating. AIR DISTRIBUTION, HEATING & COOLING 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. STEAM DISTRIBUTION SYSTEMS Assemblies include pipe and fittings, supports, wall and floor sleeves, and pipe insulation. The unit of measure at the assembly level is MBH. HOT WATER DISTRIBUTION SYSTEMS	MBH MCFM	KW L/S	Power Volume of air flow Power
	D3040	D303090 DISTRIBU D304001 D304002	DIRECT EXPANSION SYSTEMS Assemblies include condensers, compressors, heat pumps, and refrigerant piping. The unit of measure at the assembly level is each. OTHER COOLING GENERATING SYSTEMS Cooling generating systems not described by the assembly categories listed above. JTION SYSTEMS This includes systems that distribute heated and cooled air, ventilating and exhaust air, hot and chilled water, steam, and glycol heating. AIR DISTRIBUTION, HEATING & COOLING 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. STEAM DISTRIBUTION SYSTEMS Assemblies include pipe and fittings, supports, wall and floor sleeves, and pipe insulation. The unit of measure at the assembly level is MBH. HOT WATER DISTRIBUTION SYSTEMS Assemblies include pipe and fittings, supports, wall and floor sleeves, and pipe insulation. The unit of measure at the assembly level is MBH.	MBH MBH	KW L/S KW	Power Volume of air flow Power Power
	D3040	D303090 DISTRIBU D304001 D304002 D304003 D304004	DIRECT EXPANSION SYSTEMS Assemblies include condensers, compressors, heat pumps, and refrigerant piping. The unit of measure at the assembly level is each. OTHER COOLING GENERATING SYSTEMS Cooling generating systems not described by the assembly categories listed above. JION SYSTEMS This includes systems that distribute heated and cooled air, ventilating and exhaust air, hot and chilled water, steam, and glycol heating. AIR DISTRIBUTION, HEATING & COOLING 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. STEAM DISTRIBUTION SYSTEMS Assemblies include pipe and fittings, supports, wall and floor sleeves, and pipe insulation. The unit of measure at the assembly level is MBH. HOT WATER DISTRIBUTION SYSTEMS Assemblies include pipe and fittings, supports, wall and floor sleeves, and pipe insulation. The unit of measure at the assembly level is MBH. CHANGE OVER DISTRIBUTION SYSTEMS	MBH MBH MBH	KW KW	Power Volume of air flow Power Power
	D3040	D303090 DISTRIBU D304001 D304002	DIRECT EXPANSION SYSTEMS Assemblies include condensers, compressors, heat pumps, and refrigerant piping. The unit of measure at the assembly level is each. OTHER COOLING GENERATING SYSTEMS Cooling generating systems not described by the assembly categories listed above. JTION SYSTEMS This includes systems that distribute heated and cooled air, ventilating and exhaust air, hot and chilled water, steam, and glycol heating. AIR DISTRIBUTION, HEATING & COOLING 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. STEAM DISTRIBUTION SYSTEMS Assemblies include pipe and fittings, supports, wall and floor sleeves, and pipe insulation. The unit of measure at the assembly level is MBH. HOT WATER DISTRIBUTION SYSTEMS Assemblies include pipe and fittings, supports, wall and floor sleeves, and pipe insulation. The unit of measure at the assembly level is MBH.	MBH MBH	KW L/S KW	Power Volume of air flow Power Power

			at II / WBS 9/18/06, Revision 2			
L1 Unf L2	2 Unf L3	WBS L4	Definition	E UOM	M UOM	Quantity Definition
		D304006	CHILLED WATER DISTRIBUTION SYSTEMS	TON	KW	Power
			Assemblies include pipe and fittings, supports, wall and floor sleeves, and pipe insulation.			
			The unit of measure at the assembly level is tons.			
		D304007	EXHAUST SYSTEMS	MCF	L/S	Volume of air flow
			Assemblies include ductwork grilles, registers, diffusers, fans, and all associated work. The			
			unit of measure at the assembly level is each system.			
		D304008	AIR HANDLING UNITS	MCFM	L/S	Volume of air flow
		D304090	OTHER DISTRIBUTION SYSTEMS	XX	XX	
			Distribution systems not described by the assembly categories listed above.			
	D3050	TERMINA	L & PACKAGE UNITS	MBH	KW	Power
	D3030	I LIXIVIII V	This category includes self-contained heating and cooling units.	IVIDITI	IXVV	i owei
		D305001	UNIT VENTILATORS	EA	EA	Number of units
		D000001	Assemblies include the complete terminal unit and wall sleeve with all controls.	L/\	L/1	Trumber of diffic
		D305002	UNIT HEATERS	EA	EA	Number of units
_		2000002	Assemblies include the complete terminal unit and wall sleeve with all controls.			Transpor or armo
		D305003	FAN COIL UNITS	EA	EA	Number of units
_		D000000	Assemblies include the complete terminal unit and wall sleeve with all controls.	L/\		14dmber of drifts
_		D305004	FIN TUBE RADIATION	EA	EA	Number of units
+		_ 50000 /	Assemblies include the complete terminal unit and wall sleeve with all controls.	1		
_		D305005	ELECTRIC HEATING	EA	EA	Number of units
_			Assemblies include the complete terminal unit and wall sleeve with all controls.			
-		D305006	PACKAGE UNITS	EA	EA	Number of units
-		,,,,,,,		1	1	
			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.			
_		D305090	OTHER TERMINAL & PACKAGE UNITS	XX	XX	
			Terminal and package units not described by the assembly categories listed above.			
			, , ,			
	D3060	CONTRO	LS & INSTRUMENTATION	MBH	KW	Power
			Includes devices such as thermostats, timers, sensors, control valves, etc., necessary to			
			operate the system as designed.			
		D306001	HVAC CONTROLS	EA	EA	Power
			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.			
		D306002	ELECTRONIC CONTROLS	EA	EA	Number of devices
		D306003	PNEUMATIC CONTROLS	EA	EA	Number of devices
			Assemblies includes ball and butterfly valves, actuators, high pressure chokes, valve			
			positioners, sensors, regulators, etc.			
		D306004	INSTRUMENT AIR COMPRESSORS	EA	EA	Number of compressors
			Assemblies include air compressors, dryers, and distribution tubing, (only used with			
_		Daggers	pneumatic control systems). The unit of measure at the assembly level is each.	F.4		Number of activities
_		D306005	GAS PURGING SYSTEMS	EA	EA	Number of systems
			Assemblies include the removal of contaminated or unwanted gases from a structure or pipe.			
_		D306090	OTHER CONTROLS INSTRUMENTATION	XX	XX	
_		D300030	Controls and instrumentation not described by the assembly categories listed above.	^^	^^	
+-	-	1	Controls and instrumentation not described by the assembly categories listed above.	1	1	
	D3070	SYSTEMS	S TESTING & BALANCING	MBH	KW	Power
+-			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,		1	
			and supply and return, and exhaust registers.		1	
-	1	D307001	WATER SIDE TESTING & BALANCING - HEATING & COOLING	EA	EA	Number of devices
+		230,001	Includes operating and testing of pumps, setting of all control valves, and determining system	1		
			capacity. The unit of measure at the assembly level is each device, i.e., boiler, chiller, fan		1	
			coil, and unit heater.		1	
_		D307002	AIR SIDE TESTING & BALANCING - HEATING, COOLING & EXHAUST	EA	EA	Number of devices
-		230,002	Includes operating and testing of all air handling devices, adjusting of all fans to set rate of air	1		
			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			
		D307003	device.	LS	LS	Lump sum
		D307003	device. HVAC COMMISSIONING	LS	LS	Lump sum
		D307003	device.	LS	LS	Lump sum

			at II / WBS 9/18/06, Revision 2			
Unf L2	Unf L3	WBS L4	Definition	E UOM	M UOM	Quantity Definition Number of special mechanical
	D3090	OTHER H	VAC SYSTEMS AND EQUIPMENT	EA	EA	systems
			This subsystem includes special mechanical systems that are not normally included as part of			
		D309001	standard HVAC systems. GENERAL CONSTRUCTION ITEMS	SF	M2	Area of special system
		D309001	Includes construction work other than mechanical which must be performed in conjunction	SF	IVIZ	Area or special system
			with the special mechanical system to make the system complete.			
		D309002	REFRIGERATION SYSTEMS	TON	KW	Power
			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.			
		D309090	OTHER SPECIAL MECHANICAL SYSTEMS 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.	XX	XX	
D40	FIRE P	ROTECT		SF	M2	Gross floor area
			This system includes standard and special fire protection systems. Fire alarm systems are included in D503001.			
	D4010	FIRF AI A	RM AND DETECTION SYSTEMS	SF	M2	Gross floor area
	D-1010	I IIXE ALA	Assemblies include wire, conduit, conduit support or fastening systems, fire alarm devices,	OI .	IVIZ	Gross noor area
			fire detection devices, safety switches, mass notification, all electrical connections and other			
		D401001	associated items. FIRE ALARM DISTRIBUTION	SF	M2	Gross floor area
			Wire, conduit, conduit support or fastening systems, switches and connections.	0.		Groot noor area
		D401002	FIRE ALARM DEVICES	EA	EA	Number of devices
	D4020	FIRE SUID	Fire alarm and fire detection devices PRESSION WATER SUPPLY AND EQUIPMENT	LF	M	Length of system
	27020	. IKE GOF	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		141	Longin or system
			distribution system begins 5'-0" outside the building.			
		D402001	FIRE PROTECTION WATER PIPING AND EQUIPMENT	LF	М	Length of system
		D402002	Piping FIRE PUMP	EA	EA	Number of pumps
	D4000					
	D4030	STANDPI	PE SYSTEMS This subsystem includes the complete standpipe system.	EA	EA	Number of sprinkler heads
		D403001	STANDPIPE EQUIPMENT & PIPING	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,			
	D4040	SPRINKLI	tanks, etc., with all required fittings and specialties for hook-up are included in this assembly.	EA	EA	Number of sprinkler heads
	D4040	OF KINKLI	This subsystem includes the water supply equipment and related piping from the equipment	EA	LA	Number of sprinker rieaus
			to the sprinkler head.			
		D404001	SPRINKLERS AND RELEASING DEVICES The fixture, device, or sprinkler head that releases the water to suppress the fire. The unit of	EA	EA	Number of sprinkler heads
			measure at the assembly level is each sprinkler head.			
		D404002	SPRINKLER WATER SUPPLY EQUIPMENT AND PIPING	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 in this assembly. The unit of measure at the assembly level is each sprinkler head.			
	D4050	FIRE PRO	TECTION SPECIALTIES	EA	EA	Number of extinguishers
		D. ADECT :	This subsystem includes fire extinguishing devices.			Niverban of aut
		D405001	PORTABLE EXTINGUISHERS Assemblies include all types of fire extinguishers, i.e., water, dry chemical, carbon dioxide,	EA	EA	Number of extinguishers
	D 1000	.==. =.	soda acid, etc. The brackets, sleeves, and supporting devices are included in this assembly.			
	D4090	OTHER FI	RE PROTECTION SYSTEMS Requirements for all other suppression systems. Water based systems (e.g., foam systems)	EA	EA	Each system
			specified from water supply onwards, complete specification for gas systems, incidental			
		D400001	systems such as kitchen hood systems.	FA	FA	Number of
		D409001 D409002	CARBON DIOXIDE SYSTEMS FOAM GENERATING EQUIPMENT	EA EA	EA EA	Number of systems Pieces of equipment
		D409003	CLEAN AGENT SYSTEMS	EA	EA	Number of systems
		D409004	HOOD & DUCT FIRE PROTECTION OTHER SPECIAL FIRE PROTECTION SYSTEMS	EA	EA	Pieces of equipment
		D409090	OTHER SPECIAL FIRE PROTECTION SYSTEMS Assemblies includes other fire protection systems such as halon systems, exhaust hood	EA	EA	Each system
			systems, and special chemical suppression systems.			
D50	ELECT	RICAL	This system is defined by the electric current used or regarded as a source of power.	AMP	AMP	Gross floor area
	D5010	ELECTRIC	CAL SERVICE & DISTRIBUTION	AMP	AMP	Gross floor area
	23010	LLLGIKI	This subsystem provides for all electrical devices that are required to deliver the main source	AMP	AMP	Gross floor area
			of power to the facility and to distribute this power to subpanels.			
		D501001	MAIN TRANSFORMERS Transformers used for primary electrical service and located within the building footprint. Assemblies include transformers, raised pad, trenching, and backfill. This assembly will not	AMP	AMP	Number of transformers
1		DEGLESS	likely be used when an exterior transformer is required in G4010 ELECTRICAL DISTRIBUTION.	1115		
	1	D501002	SERVICE ENTRANCE EQUIPMENT This includes the protection equipment and metering devices for main distribution.	AMP	AMP	Gross floor area
		D501003	INTERIOR DISTRIBUTION TRANSFORMERS Transformers fed downstream of the service entrance equipment. Assemblies include	AMP	AMP	Gross floor area

			at II / WBS 9/18/06, Revision 2	=	*****	0 0 0 0
1 Unf	L2 Unf L3	WBS L4	Definition	E UOM	M UOM	Quantity Definition
		D501004	PANELBOARDS	AMP	AMP	Gross floor area
			Described in the control of the cont			
		DE01005	Branch circuit panelboards. Assemblies include panelboards, breakers ,conduit, and wire.	****	1110	0 "
		D501005	ENCLOSED CIRCUIT BREAKERS	AMP	AMP	Gross floor area
			Over-current protection device enclosed in its own housing. Assemblies include enclosed			
		DE04000	circuit breaker, conduit, and wire.	AMP	AMP	0
		D501006	MOTOR CONTROL CENTERS This is a cabinet in which motor starters and operation devices are contained. Assemblies	AIVIP	AIVIP	Gross floor area
			include the motor control center cabinet, motor starters, contacts, switches, conduit, wire,			
			and all associated items.			
		D501090	OTHER SERVICE AND DISTRIBUTION	XX	XX	
		D301090	Service and distribution not described by the assembly categories listed above.	^^	^^	
			Service and distribution not described by the assembly categories listed above.			
	D5020	LIGHTIN	G & BRANCH WIRING	SF	M2	Floor area
	D3020	LICITIN	Lighting systems including light fixtures and devices, i.e., switches, receptacles, and	OI .	IVIZ	i looi area
			equipment connections.			
		D502001	BRANCH WIRING	SF	M2	Floor area
		D302001	BICARCII WIKING	OI .	IVIZ	i looi area
			This assembly includes switches, receptacles, equipment connections, conduit, and wire.			
		D502002	LIGHTING EQUIPMENT	SF	M2	Floor area
+		2002002	This assembly includes fixtures, conduit, wire, and switching devices.	-		cc. area
+		D502090	OTHER LIGHTING AND BRANCH WIRING	XX	XX	
+		5302030	Lighting and branch wiring not described by the assembly categories listed above.	^^	^^	
+		+	Lagraing and branch willing not described by the assembly categories listed above.	1		
	D5030	COMMU	NICATIONS & SECURITY	SF	M2	Floor area
			This subsystem includes provisions for communication devices and alarm protection	,		11001 0100
			systems.			
		D503001	TELECOMMUNICATIONS SYSTEMS	EA	EA	Number of outlets
		D000001	This system would include central switchboards, telephone sets, underground ducts, and			14diliber of oddeds
			manholes. Assemblies include wire, conduit, backboards, cabinets, outlets, and power supply			
			connections.			
		D503002	PUBLIC ADDRESS SYSTEMS	SF	M2	Floor area
		2000002	Assemblies include wire, conduit, speakers, monitoring devices, amplifiers, switches, power	0.		i iooi aroa
			system tie-in devices, and detection devices.			
		D503003	INTERCOMMUNICATIONS SYSTEMS	EA	EA	Number of stations
			Assemblies include wire, conduit, speakers, monitoring devices, amplifiers, switches, power			1101110110110110
			system tie-in devices, and detection devices.			
		D503004	TELEVISION SYSTEMS	EA	EA	Number of outlets
			Assemblies include wire, conduit, grounding amplifiers, receivers, video equipment, and			
			outlets grouped according to use.			
		D503005	SECURITY SYSTEMS	EA	EA	Number of system control pane
			Assemblies include wire, conduit, conduit support or fastening systems, security alarm	T	1	, and a system service part
		1	devices, all electrical connections, and other associated items. Intrusion Detection Systems	1	1	
		1	(IDS) are included in this category.			
1		D503006	NURSE CALL SYSTEMS	EA	EA	Number of outlets
			Assemblies include wire, conduit, speakers, monitoring devices, amplifiers, switches, power	1		
		1	system tie-in devices, and detection devices.	1	1	
		D503007	CLOCK & PROGRAM SYSTEMS	EA	EA	Number of clocks
+			Assemblies include wire, conduit, power systems tie-in, safety switches, control panels,	T		
		1	battery back-up devices, clocks and outlets.			
+		D503090	OTHER COMMUNICATIONS & ALARM SYSTEMS	XX	XX	
		1	Communication and alarm systems not described by the assembly categories listed above.	1	1	
				1		
	D5090	OTHER E	ELECTRICAL SERVICES	SF	M2	Gross Floor area
			Systems not described in System D5030.	1		
1		D509001	GENERAL CONSTRUCTION ITEMS (ELECTRICAL)	SF	M2	Gross Floor area
+	_		Includes construction other than electrical which must be performed in conjunction with the	1		
		1	special electrical system to make the system complete.			
+		D509002	EMERGENCY LIGHTING & POWER	SF	M2	Gross Floor area
+		2000002	Assemblies include fixtures, motors used for power generation, connection and testing,	-		0.000 1 1001 4104
		1	transfer switches, conduit, wire, battery chargers, batteries, and solar panels.	1	1	
-		D509003	GROUNDING SYSTEMS	SF	M2	Gross Floor area
	1	P303003	This assembly includes grounding protection systems.	J.	IVIZ	טוטסט ו וטטו מולמ

1			at II / WBS 9/18/06, Revision 2			
· UIII L2	Unf L3	WBS L4 D509004	Definition LIGHTNING PROTECTION	E UOM SF	M UOM M2	Quantity Definition Gross Floor area
+		D509004	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.	IVIZ	GIOSS FIOOI AIRA
+		D509005	ELECTRIC HEATING Ittems could include baseboard heaters and wall and ceiling heaters. Assemblies include safety switches, control devices, heaters, conduit, and wire.	SF	M2	Gross Floor area
		D509006	ENERGY MANAGEMENT CONTROL SYSTEM Assemblies include wire, conduit, conduit support or fastening systems, sensor devices, and all electrical connections.	SF	M2	Gross Floor area
1		D509090	OTHER SPECIAL SYSTEMS AND DEVICES	XX	XX	
			Special systems and devices not described by the assembly categories listed above.			
EQU	JIPME	NI & FU	RNISHINGS The types of equipment included in this assembly consist of the following: commercial,	SF	M2	Gross Floor area
			institutional, and vehicular. The types of furnishings found here include artwork, window treatments, seating, furniture, rugs etc.			
E10	EQUIP	MENT		SF	M2	Gross Floor area
+			This system refers to equipment not found in System C1030 (Fittings).			
	E1010		CIAL EQUIPMENT 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
		E101001	CHECKROOM EQUIPMENT All associated work items including keys, tags, and storage cabinets would be included in this assembly.	EA	EA	Number of coat hanging devices
+		E101002 E101003	REGISTRATION EQUIPMENT VENDING EQUIPMENT	EA EA	EA EA	Pieces of equipment Pieces of equipment
1		E101004	LAUNDRY EQUIPMENT	EA	EA	Pieces of equipment
		E101005	SECURITY & VAULT EQUIPMENT	EA	EA	Pieces of equipment
+		E101006 E101007	TELLER AND SERVICE EQUIPMENT MERCANTILE EQUIPMENT	EA EA	EA EA	Pieces of equipment Pieces of equipment
		E101008	OFFICE EQUIPMENT	EA	EA	Pieces of equipment
-	E1020	INSTITUT	IONAL EQUIPMENT Institutional equipment includes items that are normally found in hospitals, laboratories,	SF	M2	Floor area
+		E102001	auditoriums, and libraries. MISCELLANEOUS COMMON FIXED & MOVEABLE EQUIPMENT	EA	EA	Pieces of equipment
		E102002	MEDICAL EQUIPMENT	EA	EA	Pieces of equipment
+		E102003 E102004	LABORATORY EQUIPMENT MORTUARY EQUIPMENT	EA EA	EA EA	Pieces of equipment Pieces of equipment
+		E102004	AUDITORIUM & STAGE EQUIPMENT	EA	EA	Pieces of equipment
		E102006	LIBRARY EQUIPMENT	EA	EA	Pieces of equipment
		E102007 E102008	ECCLESIASTICAL EQUIPMENT INSTRUMENTAL EQUIPMENT	EA EA	EA EA	Pieces of equipment Pieces of equipment
+		E102009	AUDIO-VISUAL EQUIPMENT	EA	EA	Pieces of equipment
		E102010	DETENTION EQUIPMENT	EA	EA	Pieces of equipment
_	E1030	VEHICUL	AR EQUIPMENT Vehicular equipment includes for parking, loading docks, and warehouses.	EA	EA	Pieces of equipment
		E103001	PARKING CONTROL EQUIPMENT	EA	EA	Pieces of equipment
		E103002	LOADING DOCK EQUIPMENT	EA	EA EA	Number of docks
+		E103003 E103004	WAREHOUSE EQUIPMENT AUTOMOTIVE SHOP EQUIPMENT	EA EA	EA	Pieces of equipment Pieces of equipment
	E1040	GOVERNI	MENT FURNISHED EQUIPMENT New and existing equipment provided to the Contractor by the Government.	EA	EA	Pieces of equipment
+						
	E1090	OTHER E	QUIPMENT			
	E1090	OTHER E				
	E1090	OTHER E	QUIPMENT The type of equipment found in his category include items for maintenance, food service, and waste handling. BUILT-IN MAINTENANCE EQUIPMENT	SF	M2	Floor area
	E1090		QUIPMENT The type of equipment found in his category include items for maintenance, food service, and waste handling. BUILT-IN MAINTENANCE EQUIPMENT The unit of measure at the assembly level is each. FOOD SERVICE EQUIPMENT The unit of measure at the assembly level is the total set of equipment needed in the	SF EA	M2 EA	Floor area Seating capacity
	E1090	E109001 E109002 E109003	QUIPMENT The type of equipment found in his category include items for maintenance, food service, and waste handling. BUILT-IN MAINTENANCE EQUIPMENT The unit of measure at the assembly level is each. FOOD SERVICE EQUIPMENT The unit of measure at the assembly level is the total set of equipment needed in the particular functional space area. WASTE HANDLING EQUIPMENT	EA EA	EA EA	Seating capacity Pieces of equipment
	E1090	E109001 E109002 E109003 E109004	QUIPMENT The type of equipment found in his category include items for maintenance, food service, and waste handling. BUILT-IN MAINTENANCE EQUIPMENT The unit of measure at the assembly level is each. FOOD SERVICE EQUIPMENT The unit of measure at the assembly level is the total set of equipment needed in the particular functional space area. WASTE HANDLING EQUIPMENT RESIDENTIAL EQUIPMENT	EA EA	EA EA EA	Seating capacity Pieces of equipment Pieces of equipment
	E1090	E109001 E109002 E109003	QUIPMENT The type of equipment found in his category include items for maintenance, food service, and waste handling. BUILT-IN MAINTENANCE EQUIPMENT The unit of measure at the assembly level is each. FOOD SERVICE EQUIPMENT The unit of measure at the assembly level is the total set of equipment needed in the particular functional space area. WASTE HANDLING EQUIPMENT RESIDENTIAL EQUIPMENT UNIT KITCHENS DARKROOM EQUIPMENT	EA EA	EA EA	Seating capacity Pieces of equipment Pieces of equipment Pieces of equipment Pieces of equipment
	E1090	E109001 E109002 E109003 E109004 E109005 E109006 E109007	QUIPMENT The type of equipment found in his category include items for maintenance, food service, and waste handling. BUILT-IN MAINTENANCE EQUIPMENT The unit of measure at the assembly level is each. FOOD SERVICE EQUIPMENT The unit of measure at the assembly level is the total set of equipment needed in the particular functional space area. WASTE HANDLING EQUIPMENT RESIDENTIAL EQUIPMENT UNIT KITCHENS DARKROOM EQUIPMENT ATHLETIC, RECREATIONAL, & THERAPEUTIC EQUIPMENT	EA EA EA EA EA	EA EA EA EA EA	Seating capacity Pieces of equipment
	E1090	E109001 E109002 E109003 E109004 E109005 E109006 E109007 E109008	QUIPMENT The type of equipment found in his category include items for maintenance, food service, and waste handling. BUILT-IN MAINTENANCE EQUIPMENT The unit of measure at the assembly level is each. FOOD SERVICE EQUIPMENT The unit of measure at the assembly level is the total set of equipment needed in the particular functional space area. WASTE HANDLING EQUIPMENT RESIDENTIAL EQUIPMENT UNIT KITCHENS DARKROOM EQUIPMENT ATHLETIC, RECREATIONAL, & THERAPEUTIC EQUIPMENT PLANETARIUM EQUIPMENT	EA EA EA EA EA EA	EA EA EA EA EA EA	Seating capacity Pieces of equipment
	E1090	E109001 E109002 E109003 E109004 E109005 E109006 E109007 E109008 E109009 E109010	QUIPMENT The type of equipment found in his category include items for maintenance, food service, and waste handling. BUILT-IN MAINTENANCE EQUIPMENT The unit of measure at the assembly level is each. FOOD SERVICE EQUIPMENT The unit of measure at the assembly level is the total set of equipment needed in the particular functional space area. WASTE HANDLING EQUIPMENT RESIDENTIAL EQUIPMENT UNIT KITCHENS DARKROOM EQUIPMENT ATHLETIC, RECREATIONAL, & THERAPEUTIC EQUIPMENT PLANETARIUM EQUIPMENT OBSERVATORY EQUIPMENT OBSERVATORY EQUIPMENT AGRICULTURAL EQUIPMENT	EA EA EA EA EA EA EA	EA	Seating capacity Pieces of equipment
	E1090	E109001 E109002 E109003 E109004 E109005 E109006 E109007 E109008 E109009	QUIPMENT The type of equipment found in his category include items for maintenance, food service, and waste handling. BUILT-IN MAINTENANCE EQUIPMENT The unit of measure at the assembly level is each. FOOD SERVICE EQUIPMENT The unit of measure at the assembly level is the total set of equipment needed in the particular functional space area. WASTE HANDLING EQUIPMENT RESIDENTIAL EQUIPMENT UNIT KITCHENS DARKROOM EQUIPMENT ATHLETIC, RECREATIONAL, & THERAPEUTIC EQUIPMENT PLANETARIUM EQUIPMENT OBSERVATORY EQUIPMENT OBSERVATORY EQUIPMENT AGRICULTURAL EQUIPMENT OGSERVATORY EQUIPMENT OGSERVATORY EQUIPMENT OGSERVATORY EQUIPMENT	EA EA EA EA EA EA EA	EA EA EA EA EA EA EA	Seating capacity Pieces of equipment
	E1090	E109001 E109002 E109003 E109004 E109005 E109006 E109007 E109008 E109009 E109010	QUIPMENT The type of equipment found in his category include items for maintenance, food service, and waste handling. BUILT-IN MAINTENANCE EQUIPMENT The unit of measure at the assembly level is each. FOOD SERVICE EQUIPMENT The unit of measure at the assembly level is the total set of equipment needed in the particular functional space area. WASTE HANDLING EQUIPMENT RESIDENTIAL EQUIPMENT UNIT KITCHENS DARKROOM EQUIPMENT ATHLETIC, RECREATIONAL, & THERAPEUTIC EQUIPMENT PLANETARIUM EQUIPMENT OBSERVATORY EQUIPMENT OBSERVATORY EQUIPMENT AGRICULTURAL EQUIPMENT	EA EA EA EA EA EA EA	EA	Seating capacity Pieces of equipment
E20		E109001 E109002 E109003 E109004 E109005 E109006 E109007 E109008 E109009 E109010	QUIPMENT The type of equipment found in his category include items for maintenance, food service, and waste handling. BUILT-IN MAINTENANCE EQUIPMENT The unit of measure at the assembly level is each. FOOD SERVICE EQUIPMENT The unit of measure at the assembly level is the total set of equipment needed in the particular functional space area. WASTE HANDLING EQUIPMENT RESIDENTIAL EQUIPMENT RESIDENTIAL EQUIPMENT UNIT KITCHENS DARKROOM EQUIPMENT ATHLETIC, RECREATIONAL, & THERAPEUTIC EQUIPMENT PLANETARIUM EQUIPMENT OBSERVATORY EQUIPMENT AGRICULTURAL EQUIPMENT ORSERVATORY EQUIPMENT OTHER SPECIALIZED FIXED AND MOVEABLE EQUIPMENT Specialized fixed and moveable equipment not described by the assembly categories listed above.	EA EA EA EA EA EA EA	EA	Seating capacity Pieces of equipment
E20		E109001 E109002 E109003 E109004 E109005 E109006 E109007 E109009 E109009 E109009	QUIPMENT The type of equipment found in his category include items for maintenance, food service, and waste handling. BUILT-IN MAINTENANCE EQUIPMENT The unit of measure at the assembly level is each. FOOD SERVICE EQUIPMENT The unit of measure at the assembly level is the total set of equipment needed in the particular functional space area. WASTE HANDLING EQUIPMENT RESIDENTIAL EQUIPMENT UNIT KITCHENS DARKROOM EQUIPMENT ATHLETIC, RECREATIONAL, & THERAPEUTIC EQUIPMENT PLANETARIUM EQUIPMENT OBSERVATORY EQUIPMENT OBSERVATORY EQUIPMENT OFFICE AND MOVEABLE EQUIPMENT SPECIALIZED FIXED AND MOVEABLE EQUIPMENT Specialized fixed and moveable equipment not described by the assembly categories listed	EA E	EA XX	Seating capacity Pieces of equipment
E20		E109001 E109002 E109003 E109004 E109005 E109006 E109007 E109008 E109009 E109010 E109090 SHINGS	QUIPMENT The type of equipment found in his category include items for maintenance, food service, and waste handling. BUILT-IN MAINTENANCE EQUIPMENT The unit of measure at the assembly level is each. FOOD SERVICE EQUIPMENT The unit of measure at the assembly level is the total set of equipment needed in the particular functional space area. WASTE HANDLING EQUIPMENT RESIDENTIAL EQUIPMENT UNIT KITCHENS DARKROOM EQUIPMENT ATHLETIC, RECREATIONAL, & THERAPEUTIC EQUIPMENT PLANETARIUM EQUIPMENT OBSERVATORY EQUIPMENT OBSERVATORY EQUIPMENT OBSERVATORY EQUIPMENT OFFICE ACTIONAL SERVATORY EXPENDING SERVATORY EQUIPMENT Specialized fixed and moveable equipment not described by the assembly categories listed above. The types of furnishings found here include artwork, window treatments, seating, furniture, rugs, etc. RNISHINGS The types of furnishings found here include artwork, window treatments, and seating.	EA EA EA EA EA EA EA EA EA ST SF	EA E	Seating capacity Pieces of equipment
E20	FURNIS	E109001 E109002 E109003 E109004 E109005 E109006 E109007 E109008 E109009 E109010 E109090 SHINGS	QUIPMENT The type of equipment found in his category include items for maintenance, food service, and waste handling. BUILT-IN MAINTENANCE EQUIPMENT The unit of measure at the assembly level is each. FOOD SERVICE EQUIPMENT The unit of measure at the assembly level is the total set of equipment needed in the particular functional space area. WASTE HANDLING EQUIPMENT RESIDENTIAL EQUIPMENT RESIDENTIAL EQUIPMENT UNIT KITCHENS DARKROOM EQUIPMENT ATHLETIC, RECREATIONAL, & THERAPEUTIC EQUIPMENT PLANETARIUM EQUIPMENT OBSERVATORY EQUIPMENT OBSERVATORY EQUIPMENT OTHER SPECIALIZED FIXED AND MOVEABLE EQUIPMENT Specialized fixed and moveable equipment not described by the assembly categories listed above. The types of furnishings found here include artwork, window treatments, seating, furniture, rugs, etc. RNISHINGS The types of furnishings found here include artwork, window treatments, and seating. FIXED ARTWORK	EA EA EA EA EA EA EA EA SA EA EA SA EA	EA E	Seating capacity Pieces of equipment
E20	FURNIS	E109001 E109002 E109003 E109004 E109005 E109006 E109007 E109008 E109009 E109010 E109090 SHINGS	QUIPMENT The type of equipment found in his category include items for maintenance, food service, and waste handling. BUILT-IN MAINTENANCE EQUIPMENT The unit of measure at the assembly level is each. FOOD SERVICE EQUIPMENT The unit of measure at the assembly level is the total set of equipment needed in the particular functional space area. WASTE HANDLING EQUIPMENT RESIDENTIAL EQUIPMENT UNIT KITCHENS DARKROOM EQUIPMENT ATHLETIC, RECREATIONAL, & THERAPEUTIC EQUIPMENT PLANETARIUM EQUIPMENT OBSERVATORY EQUIPMENT OBSERVATORY EQUIPMENT OBSERVATORY EQUIPMENT OFFICE ACTIONAL SERVATORY EXPENDING SERVATORY EQUIPMENT Specialized fixed and moveable equipment not described by the assembly categories listed above. The types of furnishings found here include artwork, window treatments, seating, furniture, rugs, etc. RNISHINGS The types of furnishings found here include artwork, window treatments, and seating.	EA EA EA EA EA EA EA EA EA ST SF	EA E	Seating capacity Pieces of equipment
E20	FURNIS	E109001 E109002 E109003 E109004 E109005 E109006 E109007 E109008 E109009 E109010 E109090 SHINGS FIXED FU E201001 E201002 E201003 E201003	QUIPMENT The type of equipment found in his category include items for maintenance, food service, and waste handling. BUILT-IN MAINTENANCE EQUIPMENT The unit of measure at the assembly level is each. FOOD SERVICE EQUIPMENT The unit of measure at the assembly level is the total set of equipment needed in the particular functional space area. WASTE HANDLING EQUIPMENT RESIDENTIAL EQUIPMENT RESIDENTIAL EQUIPMENT UNIT KITCHENS DARKROOM EQUIPMENT ATHLETIC, RECREATIONAL, & THERAPEUTIC EQUIPMENT PLANETARIUM EQUIPMENT OBSERVATORY EQUIPMENT OBSERVATORY EQUIPMENT OTHER SPECIALIZED FIXED AND MOVEABLE EQUIPMENT Specialized fixed and moveable equipment not described by the assembly categories listed above. The types of furnishings found here include artwork, window treatments, seating, furniture, rugs, etc. RNISHINGS The types of furnishings found here include artwork, window treatments, and seating. FIXED ARTWORK WINDOW TREATMENTS SEATING (FIXED) FIXED ARDSCAPING	EA SF EA SF EA	EA	Seating capacity Pieces of equipment Pieces of artupment Pieces of artupment Pieces of equipment
E20	FURNI:	E109001 E109002 E109003 E109004 E109005 E109006 E109007 E109008 E109009 E109009 E109009 E109010 E201001 E201001 E201002 E201003 E201004 E201090	QUIPMENT The type of equipment found in his category include items for maintenance, food service, and waste handling. BUILT-IN MAINTENANCE EQUIPMENT The unit of measure at the assembly level is each. FOOD SERVICE EQUIPMENT The unit of measure at the assembly level is the total set of equipment needed in the particular functional space area. WASTE HANDLING EQUIPMENT RESIDENTIAL EQUIPMENT RESIDENTIAL EQUIPMENT UNIT KITCHENS DARKROOM EQUIPMENT ATHLETIC, RECREATIONAL, & THERAPEUTIC EQUIPMENT PLANETARIUM EQUIPMENT OBSERVATORY EQUIPMENT AGRICULTURAL EQUIPMENT OTHER SPECIALIZED FIXED AND MOVEABLE EQUIPMENT Specialized fixed and moveable equipment not described by the assembly categories listed above. The types of furnishings found here include artwork, window treatments, seating, furniture, rugs, etc. RNISHINGS The types of furnishings found here include artwork, window treatments, and seating. FIXED ARTWORK WINDOW TREATMENTS SEATING (FIXED) FIXED INTERIOR LANDSCAPING OTHER FIXED INTERIOR FURNISHINGS	EA E	EA	Seating capacity Pieces of equipment Pieces of art work Area of window treatment Number of seats
E20	FURNIS	E109001 E109002 E109003 E109004 E109005 E109006 E109007 E109008 E109009 E109009 E109009 E109010 E201001 E201001 E201002 E201003 E201004 E201090	QUIPMENT The type of equipment found in his category include items for maintenance, food service, and waste handling. BUILT-IN MAINTENANCE EQUIPMENT The unit of measure at the assembly level is each. FOOD SERVICE EQUIPMENT The unit of measure at the assembly level is the total set of equipment needed in the particular functional space area. WASTE HANDLING EQUIPMENT RESIDENTIAL EQUIPMENT RESIDENTIAL EQUIPMENT UNIT KITCHENS DARKROOM EQUIPMENT ATHLETIC, RECREATIONAL, & THERAPEUTIC EQUIPMENT PLANETARIUM EQUIPMENT OBSERVATORY EQUIPMENT OBSERVATORY EQUIPMENT OTHER SPECIALIZED FIXED AND MOVEABLE EQUIPMENT Specialized fixed and moveable equipment not described by the assembly categories listed above. The types of furnishings found here include artwork, window treatments, seating, furniture, rugs, etc. RNISHINGS The types of furnishings found here include artwork, window treatments, and seating. FIXED ARTWORK WINDOW TREATMENTS SEATING (FIXED) FIXED ARTWORK WINDOW TREATMENTS SEATING (FIXED) FIXED INTERIOR LANDSCAPING OTHER FIXED INTERIOR FURNISHINGS LE FURNISHINGS	EA SF EA SF EA	EA	Seating capacity Pieces of equipment Pieces of art work Area of window treatment Number of seats Number of items
E20	FURNI:	E109001 E109002 E109003 E109004 E109005 E109006 E109007 E109009 E109009 E109010 E109009 E109010 E201001 E201001 E201002 E201003 E201004 E201090 MOVEABI	QUIPMENT The type of equipment found in his category include items for maintenance, food service, and waste handling. BUILT-IN MAINTENANCE EQUIPMENT The unit of measure at the assembly level is each. FOOD SERVICE EQUIPMENT The unit of measure at the assembly level is the total set of equipment needed in the particular functional space area. WASTE HANDLING EQUIPMENT RESIDENTIAL EQUIPMENT UNIT KITCHENS DARKROME EQUIPMENT ATHLETIC, RECREATIONAL, & THERAPEUTIC EQUIPMENT PLANETARIUM EQUIPMENT OBSERVATORY EQUIPMENT OBSERVATORY EQUIPMENT OTHER SPECIALIZED FIXED AND MOVEABLE EQUIPMENT Specialized fixed and moveable equipment not described by the assembly categories listed above. The types of furnishings found here include artwork, window treatments, seating, furniture, rugs, etc. RNISHINGS The types of furnishings found here include artwork, window treatments, and seating. FIXED ARTWORK WINDOW TREATMENTS SEATING (FIXED) FIXED INTERIOR LANDSCAPING OTHER FIXED INTERIOR FURNISHINGS LE FURNISHINGS The types of furnishings found here include moveable artwork, furniture, rugs, etc. MOVEABLE ART WORK	EA E	EA	Seating capacity Pieces of equipment Pieces of adjument Pieces of equipment Floor area Floor area Pieces of art work Area of window treatment Number of seats Number of items Number of furnishings
E20	FURNI:	E109001 E109002 E109003 E109004 E109005 E109005 E109007 E109008 E109009 E109010 E109010 E201001 E201002 E201003 E201004 E201009 MOVEABI	QUIPMENT The type of equipment found in his category include items for maintenance, food service, and waste handling. BUILT-IN MAINTENANCE EQUIPMENT The unit of measure at the assembly level is each. FOOD SERVICE EQUIPMENT The unit of measure at the assembly level is the total set of equipment needed in the particular functional space area. WASTE HANDLING EQUIPMENT RESIDENTIAL EQUIPMENT RESIDENTIAL EQUIPMENT UNIT KITCHENS DARKROOM EQUIPMENT ATHLETIC, RECREATIONAL, & THERAPEUTIC EQUIPMENT PLANETARIUM EQUIPMENT OBSERVATORY EQUIPMENT OBSERVATORY EQUIPMENT OTHER SPECIALIZED FIXED AND MOVEABLE EQUIPMENT Specialized fixed and moveable equipment not described by the assembly categories listed above. The types of furnishings found here include artwork, window treatments, seating, furniture, rugs, etc. RNISHINGS The types of furnishings found here include artwork, window treatments, and seating. FIXED ARTWORK WINDOW TREATMENTS SEATING (FIXED) FIXED ARTWORK WINDOW TREATMENTS SEATING (FIXED) FIXED INTERIOR LANDSCAPING OTHER FIXED INTERIOR FURNISHINGS LE FURNISHINGS The types of furnishings found here include moveable artwork, furniture, rugs, etc. MOVEABLE ART WORK MODULAR PREFABRICATED FURNITURE	EA E	EA	Seating capacity Pieces of equipment Pieces of adjument Pieces of equipment Pieces of adjument Pieces of equipment Pieces of equipment Pieces of equipment Pieces of art work Area of window treatment Number of seats Number of items Number of items Number of furnishings Pieces of art work Pieces of prefabricated furniture
E20	FURNI:	E109001 E109002 E109003 E109004 E109005 E109006 E109007 E109008 E109009 E109010 E109090 SHINGS FIXED FU E201001 E201002 E201003 E201004 E201009 MOVEABI E202001 E202002 E202002 E202003	QUIPMENT The type of equipment found in his category include items for maintenance, food service, and waste handling. BUILT-IN MAINTENANCE EQUIPMENT The unit of measure at the assembly level is each. FOOD SERVICE EQUIPMENT The unit of measure at the assembly level is the total set of equipment needed in the particular functional space area. WASTE HANDLING EQUIPMENT RESIDENTIAL EQUIPMENT UNIT KITCHENS DARKROOM EQUIPMENT ATHLETIC, RECREATIONAL, & THERAPEUTIC EQUIPMENT PLANETARIUM EQUIPMENT OBSERVATORY EQUIPMENT OBSERVATORY EQUIPMENT OTHER SPECIALIZED FIXED AND MOVEABLE EQUIPMENT Specialized fixed and moveable equipment not described by the assembly categories listed above. The types of furnishings found here include artwork, window treatments, seating, furniture, rugs, etc. RNISHINGS The types of furnishings found here include artwork, window treatments, and seating. FIXED ARTWORK WINDOW TREATMENTS SEATING (FIXED) FIXED INTERIOR LANDSCAPING OTHER FIXED INTERIOR FURNISHINGS The types of furnishings found here include moveable artwork, furniture, rugs, etc. MOVEABLE ART WORK MODULAR PREFABRICATED FURNITURE FREESTANDING FURNITURE	EA E	EA	Seating capacity Pieces of equipment Pieces of actipment Pieces of equipment Floor area Floor area Pieces of art work Area of window treatment Number of seats Number of furnishings Pieces of art work Pieces of prefabricated furniture Pieces of prefabricated furniture Pieces of furniture
E20	FURNI:	E109001 E109002 E109003 E109004 E109005 E109005 E109007 E109008 E109009 E109010 E109010 E201001 E201002 E201003 E201004 E201009 MOVEABI	QUIPMENT The type of equipment found in his category include items for maintenance, food service, and waste handling. BUILT-IN MAINTENANCE EQUIPMENT The unit of measure at the assembly level is each. FOOD SERVICE EQUIPMENT The unit of measure at the assembly level is the total set of equipment needed in the particular functional space area. WASTE HANDLING EQUIPMENT RESIDENTIAL EQUIPMENT RESIDENTIAL EQUIPMENT UNIT KITCHENS DARKROOM EQUIPMENT ATHLETIC, RECREATIONAL, & THERAPEUTIC EQUIPMENT PLANETARIUM EQUIPMENT OBSERVATORY EQUIPMENT OBSERVATORY EQUIPMENT OTHER SPECIALIZED FIXED AND MOVEABLE EQUIPMENT Specialized fixed and moveable equipment not described by the assembly categories listed above. The types of furnishings found here include artwork, window treatments, seating, furniture, rugs, etc. RNISHINGS The types of furnishings found here include artwork, window treatments, and seating. FIXED ARTWORK WINDOW TREATMENTS SEATING (FIXED) FIXED ARTWORK WINDOW TREATMENTS SEATING (FIXED) FIXED INTERIOR LANDSCAPING OTHER FIXED INTERIOR FURNISHINGS LE FURNISHINGS The types of furnishings found here include moveable artwork, furniture, rugs, etc. MOVEABLE ART WORK MODULAR PREFABRICATED FURNITURE	EA E	EA	Seating capacity Pieces of equipment Pieces of adjument Pieces of equipment Pieces of art work Area of window treatment Number of seats Number of items Number of items Number of furnishings Pieces of art work Pieces of prefabricated furniture

			Uniforma	at II / WBS 9/18/06, Revision 2			
Unf L1	Unf L2	Unf L3		Definition	E UOM	M UOM	Quantity Definition
			E202090	OTHER MOVEABLE FURNISHINGS	EA	EA	Number of furnishings
F	SPE	CIAL (CONSTR	RUCTION & DEMOLITION	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.			
	F40	CDECL	NI CONO	TRUCTION			
	F10	SPECIA	AL CONS	TRUCTION	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.			
		F1010	SPECIAL	STRUCTURES	SF	M2	Floor area
				Special structures includes air-supported structures, and pre-engineered structures.			
			F101001	METAL BUILDING SYSTEMS	SF	M2	Floor area
			F101002	EXTERIOR UTILITY BUILDINGS	SF	M2	Floor area of exterior building
		-	F101003	AIR-SUPPORTED STRUCTURES	SF	M2	Floor area of exterior building
			F101090	OTHER SPECIAL CONSTRUCTION	XX	XX	
		F1020	INTEGRA	TED CONSTRUCTION	SF	M2	Floor area
			0	Integrated construction includes integrated assemblies and special purpose rooms.	-		
			F102001	SPECIAL PURPOSE ROOMS	SF	M2	Area of room
			F102002	INTEGRATED ASSEMBLIES	SF	M2	Area of room
			F102090	OTHER INTEGRATED CONSTRUCTION	SF	M2	Area of room
		F1030	SPECIAL	CONSTRUCTION SYSTEMS	SF	M2	Area of room
			OI LOIAL	Special construction systems includes sound, vibration, and seismic construction; radiation	O.	IVIZ	7 tied of footi
				protection; special security systems; and built-in place vaults.			
			F103001	VAULTS	SF	M2	Area of vault
				This is a built-in-place vault. Prefabricated safes are not included in this assembly. The unit of			
			F103002	measure at the assembly level is each. SOUND, VIBRATION, AND SEISMIC CONSTRUCTION	SF	M2	Area of room
			F103002	RADIATION PROTECTION	SF	M2	Area of room
			F103090	OTHER SPECIAL CONSTRUCTION SYSTEMS	SF	M2	Area of room
		F1040	CDECIAL	FACILITIES	05		A
		F 1040	SPECIAL	Special facilities includes aquatic facilities; ice rinks, site constructed incinerators; kennels	SF	M2	Area of room
				and animal shelters; and liquid and gas storage tanks.			
			F104001	INTERIOR SWIMMING POOLS	SF	M2	Area of pool
			F104002	LIQUID AND GAS STORAGE TANKS	EA	EA	Number of storage tanks
			F104003	KENNELS AND ANIMAL SHELTERS	SF	M2	Area of kennel or animal shelter
			F104004 F104005	SITE CONSTRUCTED INCINERATORS ICE RINKS	EA SF	EA M2	Number of incinerators Area of ice rink
			F104003	OTHER SPECIAL FACILITIES	EA	EA	Number of special facilities
		F1050	SPECIAL	CONTROLS AND INSTRUMENTATION	XX	XX	
				Special controls and instrumentation includes recording instrumentation and building automation systems.			
			F105001	RECORDING INSTRUMENTATION	EA	EA	Number of instruments
			F105001	BUILDING AUTOMATION SYSTEMS	EA	EA	Number of systems
			F105002	OTHER SPECIAL CONTROLS AND INSTRUMENTATION	EA	EA	Number of systems Number of controls and instruments
							Trainber of controls and instruments
	F20	SELEC	TIVE BUI	LDING DEMOLITION	LS	LS	
				Selective building demolition includes demolition of existing buildings, site demolition, and hazardous components abatement.			
		F2010	BUILDING	ELEMENTS DEMOLITION	LS	LS	
Ţ				Selective building demolition includes demolition of existing buildings, and site demolition.			
			F201001	SUBSTRUCTURE & SUPERSTRUCTURE	LS	LS	
			F201001	EXTERIOR CLOSURE	LS	LS	
			F201003	ROOFING	LS	LS	
			F201004	INTERIOR CONSTRUCTION & FINISHES	LS	LS	
			F201005 F201006	CONVEYING SYSTEMS MECHANICAL SYSTEMS	LS	LS	
			F201006 F201007	ELECTRICAL SYSTEMS	LS LS	LS LS	
			F201008	EQUIPMENT & FURNISHINGS	LS	LS	
							•

Unf L2 U		WBS L4	at II / WBS 9/18/06, Revision 2	E UOM	M UOM	Quantity Definition
O 22 O	20	F201090	OTHER NON-HAZARDOUS SELECTIVE BUILDING DEMOLITION	XX	XX	quantity Dominion
			Non-hazardous selective building demolition not described by the assembly categories listed			
			above.			
F.	2020	HAZARD	OUS COMPONENTS ABATEMENT	LS	LS	
			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	SUBSTRUCTURE & SUPERSTRUCTURE	LS	LS	
		F202002	EXTERIOR CLOSURE	LS	LS	
		F202003 F202004	ROOFING INTERIOR CONSTRUCTION & FINISHES	LS LS	LS LS	
		F202004	CONVEYING SYSTEMS	LS	LS	
		F202006	MECHANICAL SYSTEMS	LS	LS	
		F202007	ELECTRICAL SYSTEMS	LS	LS	
		F202008 F202090	EQUIPMENT & FURNISHINGS OTHER HAZARDOUS SELECTIVE BUILDING DEMOLITION	LS XX	LS XX	
		F202090	Hazardous selective building demolition not described by the assembly categories listed	^^	***	
			above.			
RUILI	DING	SITEW	ORK .	ACR	Hectare	Total area of site
DOIL	DII10	OIILII	Building sitework includes site preparations, site improvements, site civil/mechanical utilities,	ACK	пескаге	Total alea of Site
			site electrical utilities, service and pedestrian tunnels, and other site construction, such as			
			bridges, and railroad spurs.			
G10 S	SITE D	REPARA	TIONS	400	Heaten	T-4-1 4 -:4-
G10 3	DIIEF	KEPAKA	HUNS	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	1	1	
$oxed{oxed}$			requirements. Hazardous cleanup is not included but is the subject of another WBS.			
G	31010	SITE CLE	ARING	ACR	Hectare	Area to be cleared
	,,,,,,	OIIL OLL	This covers the different assemblies and options available for clearing of a site, tree and	ACIC	ricciare	Area to be cleared
			stump removal, burning, grubbing, chipping, and load and haul assemblies for removal of the		1	
		046:	cleared material.	105		
\vdash		G101001	CLEARING This is the removal of above ground vegetation including stumps. For a wet site, Low Ground	ACR	Hectare	Area to be cleared
			Pressure (LGP) equipment is used.		1	
		G101002	TREE REMOVAL	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			
		G101003	trees to be removed. STUMP REMOVAL	ΕΛ.	ΕΛ.	Number of stumps to be remove
		G101003	This is the selective removal of stumps on the site. Various options exist for different sizes of	EA	EA	Number of stumps to be remov
			stumps to be removed.			
		G101004	GRUBBING	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.			
		G101005	SELECTIVE THINNING	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.			
		G101006	DEBRIS DISPOSAL	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.			
		G101090	OTHER SITE CLEARING	XX	XX	
			Site clearing not described by the assembly categories listed above.			
G	1020	SITE DEN	IOLITION & RELOCATIONS	SY	M2	Area to be demolished
		OTTE DEN	This includes the demolition and/or relocation of structures, pavements, fencing, and	0.	IVIZ	Area to be demonstred
			underground utilities. Disposal of debris or demolished material, including loading and			
			hauling, is also included.			
		G102001	BUILDING MASS DEMOLITION This is the complete demolition of buildings or structures. Options include steel, concrete,	CF	M3	Interior volume of building
			masonry, and wood structures.			
		G102002	ABOVE GROUND SITE DEMOLITION	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.		1	
		G102003	UNDERGROUND SITE DEMOLITION	SY	M2	Area to be demolished
	-		This is the demolition of underground utilities such as piping, manholes, and other non-			<u></u>
			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.		1	
		G102004	BUILDING RELOCATION	SF	M2	Area of building to be relocated
	-		This is the process of dismantling a structure, and reassembling it on a different site.	_		
		G102005	UTILITY RELOCATION To remove and reset. This is the removal and relocation of underground utilities such as steel	LF	М	Length of pipe run
			and concrete pipe.			
		G102006	FENCING RELOCATION	LF	M	Length of fencing
	•					1.
		G102007	SITE CLEANUP	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.	1	1	
		G102090	OTHER SITE DEMOLITION & RELOCATIONS	XX	XX	
			Site demolition and relocation not described by the assembly categories listed above.			
	21020	SITE		CV	Ma	Volume of material
G	1030	SIIE EAR	THWORK Included are assemblies and options for site work such as grading, excavation, filling,	CY	M3	Volume of material
			compaction, stabilization, etc.	1	1	
		G103001	GRADING	SY	M2	Area to be graded
			Grading is leveling or flattening of the site in preparation for landscaping or other site			<u></u>
1 1		G103002	construction. Includes unlined stormwater collection ponds. COMMON EXCAVATION	CY	M3	Volume of material to be excav
		3103002	This is excavation for roads, sidewalks, curbs, and trenching for underground utilities.	O I	IVIO	volume of material to be excav
			Excavation may be carried out by a variety of equipment sizes and types. Disposal of the	1	1	
			excavated material is also included.			
		G103003	excavated material is also included. ROCK EXCAVATION This is excavation of rock by explosives. Different equipment selections and load and haul	CY	M3	Volume of rock to be excavated

1 Unf L2			tt II / WBS 9/18/06, Revision 2	E UOM	M UOM	Quantity Definition
I OIII LZ	OIII E3		FILL & BORROW	CY	M3	Volume of material to place
			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.			
		G103005	COMPACTION	CY	M3	Volume of material to compact
			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.			
		G103006	SOIL STABILIZATION	CY	M3	Volume of soil to stabilize
		G103007	This is stabilization of the soil-in-place by the addition of lime or cement. SLOPE STABILIZATION	SY	M2	Area of slope
		G 103001	This is stabilization of the soil-in-place through the use of rip rap, gabions, slope paving, or	31	IVIZ	Area or slope
			other forms of soil armoring.			
		G103008	SOIL TREATMENT Treatment of soil prior to final construction for insect protection or other purposes.	SY	M2	Area of soil to treat
		G103009	SHORING	SF	M2	Area requiring shoring
		G103010	Shoring is the temporary support for existing structures or excavation during construction. TEMPORARY DEWATERING	SY	M2	Area to dewater
		0.000.0	This is the dewatering of the site by wellpoints to lower the groundwater table. This will			7 ii da to domator
		0400044	facilitate excavation in areas with high water tables.	05	140	A t- b t- d
		G103011	TEMPORARY EROSION & SEDIMENT CONTROL Interim measures to minimize erosion during construction.	SF	M2	Area to be protected
		G103090	OTHER SITE EARTHWORK	XX	XX	
			Site earthwork not described by the assembly categories listed above.			
	G1040	HAZARDO	OUS WASTE REMEDIATION	LS	LS	
			Hazardous waste remediation, removal, disaposal and restoration of contaminated soil and/or			
\perp			groundwater.			
_			REMOVAL OF CONTAMINATED SOIL	CY	M3	Volume of contaminated soil
+		G104002 G104090	SOIL RESTORATION AND TREATMENT OTHER HAZARDOUS WASTE REMEDIATION	CY	M3 XX	Volume of soil
		C107030	Hazardous waste remediation not described by the assembly categories listed above.	,,,,	^^	
Gan	SITE I	IDDOVEN		1.0	1.0	
G20	311E III	IPROVEN	This includes improvements such as parking lots, sidewalks, roadways, fencing, retaining	LS	LS	
			walls, and landscaping.		<u>L</u>	<u> </u>
	C2040	BO A DIMAN	ve	0)/	М	A
	G2010	ROADWA	This subsystem includes options for access, arterial, or interstate roadways. A variety of	SY	M2	Area of roadway
			pavement types and thickness are available.			
		G201001	BASES & SUBBASES	SY	M2	Area of roadway
			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.			
		G201002	CURBS & GUTTERS	LF	М	Length of drainage pipe
			This is the drainage system for the selected roadway type. Options include curb and gutter drains or area drains with grates.			
		G201003	PAVED SURFACES	SY	M2	Area of roadway
		0004004	This is material that is placed atop the base layer to provide the driving surface.	01/	MO	A of olivery
		G201004	MARKING & SIGNAGE	SY	M2	Area of roadway
			This includes roadway signage and pavement painting. Assemblies are included for traffic			
		C20400E	signs and posts and intersection, crosswalk, or other pavement painting or striping. GUARDRAILS & BARRIERS	LF	M	Longth of guardrail or harrier
		G201005	GUARDRAILS & BARRIERS	LF	M	Length of guardrail or barrier
			This is any associated guardrails or barriers that are required for the selected roadway type.			
		G201006	RESURFACING This is the placement of an exploit wearing source aver the evicting payament surface.	SY	M2	Area of roadway
			This is the placement of an asphalt wearing course over the existing pavement surface. Assemblies exist for resurfacing of gravel, concrete, and asphalt roadways.			
			OTHER ROADWAYS	XX	XX	
			Roadways not described by the assembly categories listed above.			
	G2020	PARKING	LOTS	EA	EA	Number of spaces
			These are the areas required of vehicles parking and include different surfaces and drainage			
		G202004	options.	ev	M2	Area of parking let
		G202001	BASES & SUBBASES These are the compacted and prepared gravel or soil layers that are placed prior to the	SY	M2	Area of parking lot
			installation of the final surface. The subbase is placed and compacted before the base layer			
			is applied.	LF	М	Length of curbs & gutters
		G202002	CURBS & GUTTERS This is the curb and gutter drains or area drains with grates.	ㄴㄷ	M	Lengin or curbs & gutters
		G202003	PAVED SURFACES	SY	M2	Area of parking lot
		020000	This is material that is placed atop the base layer to provide the driving surface.	F 4	F.A.	Number of
		G202004	MARKING & SIGNAGE This includes painting of the parking stalls, signage, etc.	EA	EA	Number of spaces
		G202005	GUARDRAILS & BARRIERS	LF	М	Length of guardrail or barrier
		0200000	Guardrails, barriers, parking stops and other similar devices.	CV	MO	Area of no-line let
		G202006	RESURFACING This is the placement of an asphalt wearing course over the existing parking surface.	SY	M2	Area of parking lot
		G202007	MISCELLANEOUS STRUCTURES AND EQUIPMENT	EA	EA	Number of structures or equipn
		G202090	OTHER PARKING LOTS Parking areas not described by the assembly enterprise listed above	XX	XX	
			Parking areas not described by the assembly categories listed above.			
	G2030	PEDESTR	IAN PAVING	SY	M2	Area of pavement
		G202004	This subsystem includes options for sidewalks and other small paved areas.	SY	M2	Area of novement
		G203001	BASES & SUBBASES These are the compacted and prepared gravel or soil layers that are placed prior to the	ा	M2	Area of pavement
			installation of the final surface. The subbase is placed and compacted before the base layer			
			is applied.			
+		G203002	CURBS & GUTTERS This is the curb and gutter drains or area drains with grates.	LF	M	Length of curbs & gutters
+		G203003	PAVED SURFACES	SY	M2	Area of pavement
1 1		020222	This is material that is placed atop the base layer to provide the walking or driving surface.			Langth of constant
_	l .	G203004	GUARDRAILS & BARRIERS This is any associated guardrails or barriers that are required.	LF	M	Length of guardrail or barrier
		G203005	RESURFACING	SY	M2	Area of pavement
				SY	M2 XX	Area of pavement

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	Unf L3		Definition	E UOM	M UOM	Quantity Definition
	G2040	SITE DEV	ELOPMENT	EA	EA	Each Structure
			Included are assemblies for on-site construction of fences, retaining walls, playing fields,			
			fountains, and other site improvements.			
		G204001	FENCING & GATES	LF	M	Length of fence
			This includes installation or construction of security, boundary, or barbed wire fencing and all required gates.			
		G204002	RETAINING WALLS AND FREESTANDING WALLS	SY	M2	Area of wall
			These are structures used to prevent the flow or lateral movement of soil. Assemblies exist			
			for cast-in-place concrete retaining walls.			
		G204003	EXTERIOR FURNISHINGS	EA	EA	Number of furnishings
			This includes the addition of such exterior furnishings as benches, planters, etc.			
		G204004	SECURITY STRUCTURES	EA	EA	Number of security structures
			This includes the construction or addition of security structures such as guard houses.			
		G204005	SIGNAGE	EA	EA	Number of signs
			Signs displayed to convey direction or information such as building function or tenant except			
			for signs included in G201004 and G202004.			
		G204006	FOUNTAINS & POOLS	EA	EA	Number of fountains or pools
			This includes assemblies for swimming pools and decorative fountains.			
		G204007	PLAYING FIELDS	EA	EA	Number of playing fields
			Playing fields such as baseball or tennis courts as well as back stops, bleachers, and other playing field requirements are included.			
		G204008	TERRACE AND PERIMETER WALLS	SY	M2	Area of wall
		G204009	FLAGPOLES	EA	EA	Number of flagpoles
		G204090	OTHER SITE IMPROVEMENTS	XX	XX	- ramacr or magpares
			This includes any other miscellaneous structures, such as a car wash, banking system, and			
			theatre equipment located on the site.			
	G2050	LANDSC	APING	SY	M2	Area to be landscaped
			Assemblies are included that improve the appearance of the site by planting, seeding, and			
			sodding.			
		G205001	FINE GRADING & SOIL PREPARATION	SY	M2	Area of site
			Fine grading of the site by hand or machine is required to prepare the soil for planting,			
			seeding, or sodding.			
		G205002	EROSION CONTROL MEASURES	SY	M2	Area of erosion
			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.			
		G205003	TOPSOIL & PLANTING BEDS	SY	M2	Area of planting bed
			Topsoil is placed to provide the nutritious soil bed which is required for plants or grass to			
		G205004	grow. SEEDING. SPRIGGING AND SODDING	SY	M2	A i - i -
		G205004		51	IVIZ	Area of site
			This includes the seeding, sodding, fertilizing, watering, and mowing for the grass required on site.			
+ +		G205005	PLANTINGS	EA	EA	Number of plants
+ +		3203003	This includes the planting of trees, shrubs, and other vegetation for site beautification or			ramber of platts
			improvement.			
+		G205006	PLANTERS	EA	EA	Number of planters
+ +		320000	Planters are exterior decorative containers that contain plants or trees.			Tallibor of planters
		G205007	IRRIGATION SYSTEMS	SY	M2	Area of site to be watered
			This includes the installation of underground irrigation systems required for watering of trees,		_	
			shrubs, and grass or other vegetation.			
		G205090	OTHER LANDSCAPING	XX	XX	
			Landscaping not described by the assembly categories listed above.			
	G2060	AIRFIELD	PAVING	SY	M2	Area of paving
+	<u> </u>	AIN ILLL	Aircraft parking apron and runway paving.	01	IVIZ	, tica of paving
_		G206001	AIRFIELD PAVING CONSTRUCTION	SY	M2	Area of paving
_		G206001	OTHER PAVING	SY	M2	Area of paving Area of paving
		G206002	JOINTS AND ANCHORAGE	SY	M2	Area of paving
						, oa oi paviiig
		G206004	NAVIGATION AIDS	LS	LS	

	Unf L3		tt II / WBS 9/18/06, Revision 2 Definition	E UOM	M UOM	Quantity Definition
G30	SITE C	IVIL/MEC	HANICAL UTILITIES	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.			
	G3010	WATER S	LIPPLY	LF	М	Length of system
	00010		This includes installation or construction of water distribution systems and facilities.			
		G301001	WELL SYSTEMS This includes all the components necessary to install a well, including drilling, installing	EA	EA	Each system
		0001000	casings, pumps, valves, etc.			
		G301002	POTABLE WATER DISTRIBUTION This includes construction and installation of underground piping, valve boxes, and valves.	LF	М	Length of system
		G301003	POTABLE WATER STORAGE This includes construction and installation of tanks, both at grade and elevated.	GAL	GAL	Amount stored
		G301004	FIRE PROTECTION WATER DISTRIBUTION	LF	M	Length of system
			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.			
		G301005	FIRE PROTECTION WATER STORAGE This includes tanks on grade and elevated for storage of water for fire protection only.	GAL	GAL	Amount stored
		G301006	NON-POTABLE WATER DISTRIBUTION	LF	М	Length of system
			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			
		G301007	facilities. PUMPING STATIONS	GPM	1./0	Operating expensity
		G301007	This includes construction and installation of pumps, valves, and piping.	GPIM	L/S	Operating capacity
		G301008	PACKAGED WATER TREATMENT PLANTS This includes installation of completely assembled water treatment plants.	GPD	GPD	Operating capacity
		G301090	OTHER WATER SUPPLY	XX	XX	
			Water supply not described by the assembly categories listed above.			
	G3020	SANITARY		LF	М	Length of system
		G302001	This includes all assemblies necessary for sewage collection systems. SANITARY SEWER PIPING	LF	M	Length of piping
			This includes installation of piping for collection of sewage.			
	1	G302002	SANITARY SEWER MANHOLES & CLEANOUTS This includes construction and installation of manholes and cleanouts in sewage collection	EA	EA	Each manhole or cleanout
		G302003	systems. LIFT STATIONS AND PUMPING STATIONS	GPM	L/S	Operating assessing
			This includes construction and installation of piping and equipment in lift stations.			Operating capacity
		G302004	PACKAGED SANITARY SEWER TREATMENT PLANTS This includes installation of pre-assembled sewage treatment plants.	GPD	L/S	Operating capacity
		G302005	SEPTIC TANKS	GAL	L	Volume of tank
			This includes installation of prefabricated septic tanks or the construction of septic tanks.			
		G302006	DRAIN FIELDS	LF	М	Length of field
		G302090	This includes installation of drain fields for disposal of effluent from septic tanks. OTHER SANITARY SEWER	XX	XX	
			Sanitary sewers not described by the assembly categories listed above.			
	G3030	STORM SI	EWER	LF	М	Length of system
		G303001	This includes construction of storm water collection systems. STORM SEWER PIPING	LF	M	Length of piping
			This includes installation of piping for collection of storm water.			
		G303002	STORM SEWER STRUCTURES	EA	EA	Each manhole or cleanout
			This includes construction and installation of manholes for storm water collection systems.			
		G303003	LIFT STATIONS This includes construction of lift stations including piping, pumps, and controls.	GPM	L/S	Operating capacity
		G303004	CULVERTS This includes construction and installation of culverts for storm water systems.	LF	М	Length of culvert
		G303005	HEADWALLS	EA	EA	Each structure
			This includes construction of headwalls and installation of catch basins for storm water systems.			
		G303006	EROSION & SEDIMENT CONTROL MEASURES	SY	M2	Area to control
		G303007	This includes construction to control erosion due to runoff. STORMWATER MANAGEMENT	GAL	GAL	Volume of collection area
		G303090	OTHER STORM SEWER	XX	XX	5.25 Securosion and
	G3040		Storm sewers not described by the assembly categories listed above. DISTRIBUTION	LF	M	Length of system
	20070		This includes overhead and underground hot water, steam, and condensate piping.			
		G304001	OVERHEAD HOT WATER SYSTEMS This includes installation of overhead hot water supply and return piping.	LF	М	Length of system
		G304002	OVERHEAD STEAM SYSTEMS	LF	М	Length of system
	-	G304003	This includes installation of overhead steam supply and condensate return piping. UNDERGROUND HOT WATER SYSTEMS	LF	M	Length of system
			This includes installation of underground hot water supply and return piping. UNDERGROUND STEAM DISTRIBUTION SYSTEMS			
		G304004	This includes installation of underground steam supply and condensate return piping.	LF	M	Length of system
		G304005	REINFORCED CONCRETE MANHOLES & VALVE BOXES This includes installation of prefabricated trench boxes for shoring during installation of	EA	EA	Each structure
	<u> </u>		piping.		<u> </u>	
	<u> </u>	G304006 G304090	PUMPING STATIONS OTHER HEATING DISTRIBUTION	EA XX	EA XX	Each pumping station
			Heating distribution not described by the assembly categories listed above.	^^	^^	
	G3050	COOLING	DISTRIBUTION	LF	М	Length of system
	1		This includes construction and installation of chilled water distribution systems.	_		
		G305001	OVERHEAD COOLING SYSTEMS This includes installation of overhead chilled water supply and return piping.	LF	М	Length of system
		G305002	UNDERGROUND COOLING SYSTEMS	LF	М	Length of system
		G305003	This includes installation of underground chilled water supply and return piping. TRENCHBOXES	LF	M	Length of trench
		-	This includes installation of prefabricated trench boxes for shoring during installation of			1
	<u> </u>	G305004	piping. WELLS FOR COOLING	EA	EA	Each well
	1	G305005	PUMPING STATIONS	EA	EA	Each pumping station
		G305006	ON-SITE COOLING TOWERS	EA	EA	Each cooling tower

Unf L2 Unf			E UOM	M UOM	Quantity Definition
G30	060 FUEL DIS	TRIBUTION This includes installation of piping and storage tanks for building and aviation fuels.	GAL	L	Volume of storage tank
	G306001	LIQUID FUEL DISTRIBUTION PIPING SYSTEM	LF	M	Length of piping
		This includes installation of piping for fuel and oil distribution. This includes equipment related to piping, system leak detection and tightness testing.			
	G306002	AVIATION FUEL DISTRIBUTION PIPING SYSTEM This includes installation of piping for aviation fuel distribution and equipment related to the	LF	M	Length of piping
		piping. This also includes system leak detection and tightness testing.			
	G306003	LIQUID FUEL STORAGE TANKS This includes installation of buried or above ground fuel tanks relating to liquid fuel or aviation	GAL	L	Volume of storage tank
	0000004	systems. LIQUID FUEL DISPENSING EQUIPMENT	F.	E 4	Foot wises of a wises and
	G306004	This includes equipment relating to liquid fuel and aviation systems.	EA	EA	Each piece of equipment
	G306005	LIQUID FUEL SYSTEM TRENCHBOXES This includes installation of prefabricated trench boxes for shoring during installation of	LF	М	Length of trench
	000000	piping.			Lagarth of sining
	G306006	GAS DISTRIBUTION PIPING (NATURAL AND PROPANE) This includes piping for distribution of natural or propane gas.	LF	М	Length of piping
	G306007	GAS STORAGE TANKS This includes installation of tanks for natural or propane gas.	GAL	L	Volume of storage tank
	G306008	GAS SYSTEM TRENCHBOXES	LF	М	Length of trench
		This includes installation of prefabricated trench boxes for shoring during installation of piping.			
	G306009	OTHER GAS DISTRIBUTION Gas distribution not described by the assembly categories listed above.	XX	XX	
	G306090	OTHER FUEL DISTRIBUTION	XX	XX	
		Fuel not described by the assembly categories listed above.			
G30	090 OTHER SI	TE MECHANICAL UTILITIES	LF	М	Length of system
		This includes all systems for collection of contaminated waste requiring special treatment.			
	G309001	INDUSTRIAL WASTE PIPE This includes construction and installation of all piping for collection of industrial waste.	LF	М	Length of piping
	G309002	INDUSTRIAL WASTE MANHOLES & CLEANOUTS This includes construction of manholes and cleanouts for industrial waste.	EA	EA	Each manhole or cleanout
	G309003	Inis includes construction of mannoles and cleanouts for industrial waste. INDUSTRIAL WASTE LIFT STATIONS	GPM	L/S	Operating capacity
		This includes construction and installation of industrial waste lift stations and equipment.			
	G309004	INDUSTRIAL WASTE HOLDING TANKS & SEPARATORS	EA	EA	Number of tanks
		This includes construction or installation of special tanks such as silver recovery tanks or separators such as oil water separators.			
	G309005	INDUSTRIAL WASTE TRENCHBOXES This includes installation of prefabricated trench boxes for shoring during installation of	LF	M	Length of trench
		piping.			
	G309090	OTHER INDUSTRIAL WASTE Industrial waste not described by the assembly categories listed above, such as petroleum oil	XX	XX	
		and lubricant distribution systems.			
G40 SIT	E ELECTRIC	AL UTILITIES	EA	EA	Systems total
		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.			
G40	010 ELECTRIC	CAL DISTRIBUTION	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.			
	G401001	SUBSTATIONS	KVA	KVA	Total rated capacity
		This system includes substation equipment and materials required from the primary power source.			
	G401002	TRANSFORMERS	KVA	KVA	Total rated capacity
		Electrical power transformers used in conjunction with electrical substations. May include pole/tower or pad-mounted transformers located outside the building.			
	G401003	SWITCHES, CONTROLS & DEVICES Includes all components of switchgear, voltage regulators and busbars used with electrical	EA	EA	Number of separate compon
	0404004	substations.	10	M	Longth of sandust
	G401004	OVERHEAD ELECTRIC CONDUCTORS Includes conductors used in conjunction with substations.	LF	М	Length of conductor
	G401005	TOWERS, POLES, CROSSARMS & INSULATORS Towers, poles, crossarms, and insulators used in conjunction with substations.	EA	EA	Number of towers and poles
		UNDERGROUND ELECTRIC CONDUCTORS	LF	М	Length of conductor
	G401006		1		Number of ductbanks and ac
		Includes conductors used in conjunction with substations.			
	G401006 G401007	DUCTBANKS, MANHOLES, HANDHOLES & RACEWAYS	EA	EA	points
		DUCTBANKS, MANHOLES, HANDHOLES & RACEWAYS Components used in conjunction with electrical substations. GROUNDING SYSTEMS	EA EA	EA EA	points Number of systems
	G401007	DUCTBANKS, MANHOLES, HANDHOLES & RACEWAYS Components used in conjunction with electrical substations.			
	G401007 G401008	DUCTBANKS, MANHOLES, HANDHOLES & RACEWAYS Components used in conjunction with electrical substations. GROUNDING SYSTEMS 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.	EA	EA	Number of systems
	G401007 G401008 G401009	DUCTBANKS, MANHOLES, HANDHOLES & RACEWAYS Components used in conjunction with electrical substations. GROUNDING SYSTEMS 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. METERING Includes components used in conjunction with exterior electrical distribution.	EA EA	EA EA	Number of systems Number of meters
	G401007 G401008	DUCTBANKS, MANHOLES, HANDHOLES & RACEWAYS Components used in conjunction with electrical substations. GROUNDING SYSTEMS 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. METERING	EA	EA	Number of systems
	G401007 G401008 G401009 G401010	DUCTBANKS, MANHOLES, HANDHOLES & RACEWAYS Components used in conjunction with electrical substations. GROUNDING SYSTEMS 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. METERING Includes components used in conjunction with exterior electrical distribution. CATHODIC PROTECTION Includes a system used in conjunction with exterior electrical distribution for corrosion control.	EA EA	EA EA	Number of systems Number of meters
	G401007 G401008 G401009	DUCTBANKS, MANHOLES, HANDHOLES & RACEWAYS Components used in conjunction with electrical substations. GROUNDING SYSTEMS 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. METERING Includes components used in conjunction with exterior electrical distribution. CATHODIC PROTECTION Includes a system used in conjunction with exterior electrical distribution for corrosion control. EQUIPMENT REQUIREMENTS FOR COASTAL AND HIGH HUMIDITY AREAS OTHER ELECTRIC TRANSMISSION & DISTRIBUTION	EA EA	EA EA	Number of systems Number of meters
	G401007 G401008 G401009 G401010	DUCTBANKS, MANHOLES, HANDHOLES & RACEWAYS Components used in conjunction with electrical substations. GROUNDING SYSTEMS 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. METERING Includes components used in conjunction with exterior electrical distribution. CATHODIC PROTECTION Includes a system used in conjunction with exterior electrical distribution for corrosion control. EQUIPMENT REQUIREMENTS FOR COASTAL AND HIGH HUMIDITY AREAS	EA EA	EA EA	Number of systems Number of meters
G4(G401007 G401008 G401009 G401010 G401011 G401090	DUCTBANKS, MANHOLES, HANDHOLES & RACEWAYS Components used in conjunction with electrical substations. GROUNDING SYSTEMS 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. METERING Includes components used in conjunction with exterior electrical distribution. CATHODIC PROTECTION Includes a system used in conjunction with exterior electrical distribution for corrosion control. EQUIPMENT REQUIREMENTS FOR COASTAL AND HIGH HUMIDITY AREAS OTHER ELECTRIC TRANSMISSION & DISTRIBUTION Substations not described by the assembly categories listed above.	EA EA	EA EA	Number of systems Number of meters
G4(G401007 G401008 G401009 G401010 G401011 G401090	DUCTBANKS, MANHOLES, HANDHOLES & RACEWAYS Components used in conjunction with electrical substations. GROUNDING SYSTEMS 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. METERING Includes components used in conjunction with exterior electrical distribution. CATHODIC PROTECTION Includes a system used in conjunction with exterior electrical distribution for corrosion control. EQUIPMENT REQUIREMENTS FOR COASTAL AND HIGH HUMIDITY AREAS OTHER ELECTRIC TRANSMISSION & DISTRIBUTION Substations not described by the assembly categories listed above.	EA EA XX XX	EA EA XX XX	Number of systems Number of meters Each system
G40	G401007 G401008 G401009 G401010 G401011 G401090 D20 SITE LIGH	DUCTBANKS, MANHOLES, HANDHOLES & RACEWAYS Components used in conjunction with electrical substations. GROUNDING SYSTEMS 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. METERING Includes components used in conjunction with exterior electrical distribution. CATHODIC PROTECTION Includes a system used in conjunction with exterior electrical distribution for corrosion control. EQUIPMENT REQUIREMENTS FOR COASTAL AND HIGH HUMIDITY AREAS OTHER ELECTRIC TRANSMISSION & DISTRIBUTION Substations not described by the assembly categories listed above. ITING 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.	EA EA XX XX	EA EA XX XX	Number of systems Number of meters Each system Length of distribution
G4(G401007 G401008 G401009 G401010 G401011 G401090 D20 SITE LIGH	DUCTBANKS, MANHOLES, HANDHOLES & RACEWAYS Components used in conjunction with electrical substations. GROUNDING SYSTEMS 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. METERING Includes components used in conjunction with exterior electrical distribution. CATHODIC PROTECTION Includes a system used in conjunction with exterior electrical distribution for corrosion control. EQUIPMENT REQUIREMENTS FOR COASTAL AND HIGH HUMIDITY AREAS OTHER ELECTRIC TRANSMISSION & DISTRIBUTION Substations not described by the assembly categories listed above. ITING 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. EXTERIOR LIGHTING FIXTURES & CONTROLS Includes fixtures, controls, and all components used in conjunction with exterior lighting.	EA EA XX XX LF	EA EA XX XX M	Number of systems Number of meters Each system Length of distribution Number of fixtures
G4(G401007 G401008 G401009 G401010 G401011 G401090 D20 SITE LIGH	DUCTBANKS, MANHOLES, HANDHOLES & RACEWAYS Components used in conjunction with electrical substations. GROUNDING SYSTEMS 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. METERING Includes components used in conjunction with exterior electrical distribution. CATHODIC PROTECTION Includes a system used in conjunction with exterior electrical distribution for corrosion control. EQUIPMENT REQUIREMENTS FOR COASTAL AND HIGH HUMIDITY AREAS OTHER ELECTRIC TRANSMISSION & DISTRIBUTION Substations not described by the assembly categories listed above. ITING 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. EXTERIOR LIGHTING FIXTURES & CONTROLS	EA EA XX XX	EA EA XX XX	Number of systems Number of meters Each system Length of distribution

	Unf L3	WBS L4	Definition	E UOM	M UOM	Quantity Definition
	J 20	G402004	LIGHTING POLES	EA	EA	Number of towers and poles
+		G402005	Poles used to support lighting fixtures and support equipment. UNDERGROUND ELECTRIC CONDUCTORS	LF	M	Length of conductor
			Includes conductors for underground electrical distribution to lighting systems.			
-		G402006	DUCTBANKS, MANHOLES & HANDHOLES Includes all components used in conjunction with exterior lighting.	EA	EA	points
		G402007	GROUNDING SYSTEMS	EA	EA	Number of systems
1			Grounding systems used in conjunction with exterior lighting.			
	G4030	SITE CON	IMUNICATION AND SECURITY	LF	M	Length of distribution
			This system includes cables, ductbanks, manholes, and all other equipment required to support exterior communication and alarm systems.			
		G403001	TELECOMMUNICATIONS SYSTEMS Includes all components, cables, and equipment used in conjunction with exterior telephone	LF	M	Length of distribution
			systems.			
		G403002	CABLE TV SYSTEMS (CATV) Includes all components, cables, and equipment used in conjunction with exterior cable TV	LF	М	Length of distribution
			systems.			
		G403003	CABLES & WIRING Includes cables, wiring, and equipment used in conjunction with exterior security systems.	LF	М	Length of conductor
						Number of ductbanks and acces
		G403004	DUCTBANKS, MANHOLES & HANDHOLES Includes ductbank, manholes, and handholes used in conjunction with exterior security	EA	EA	points
			·			
_		G403005	TOWERS, POLES & STANDS Includes towers, poles, stands, and equipment used in conjunction with exterior security	EA	EA	Number of towers, poles and sta
		0.400000	systems.	E4	E4	Number of comments and consider
+		G403006	TV CAMERAS & MONITORS Includes cameras, monitors, and components used in conjunction with exterior security	EA	EA	Number of cameras and monitor
		G403007	systems.	ΕΛ	ΕΛ	Number of evetems
			ELECTRONIC SECURITY SYSTEMS (ESS) Includes components and systems used in conjunction with exterior security systems.	EA	EA	Number of systems
		G403008	OTHER COMMUNICATION & ALARM Includes all components, cables, and equipment used in conjunction with other special	XX	XX	
			communication and alarm systems not defined above.			
+		G403009	GROUNDING SYSTEMS Includes grounding systems used in conjunction with exterior security systems.	EA	EA	Number of systems
$\perp \perp \perp$		G403090	OTHER SECURITY SYSTEMS	XX	XX	
			Includes all components and equipment used in conjunction with special security systems not defined above.			
	G4090	OTHER 6	ITE EL ECTRICAL LITILITIES	LF	М	Langth of conductor
+	G4090	OTHER 3	ITE ELECTRICAL UTILITIES	LF	М	Length of conductor
			This system includes alternate energy sources. This system also includes sacrificial anodes,			
_		G409001	induced current conductors, and components used in conjunction with cathodic protection. SACRIFICIAL ANODE CATHODIC PROTECTION SYSTEM	EA	EA	Number of anodes
		G409002	Includes all components required in conjunction with sacrificial anode system. INDUCED CURRENT CATHODIC PROTECTION SYSTEM	LF	M	Length of conductor
			Includes conductors and termination required for cathodic protection.			
		G409003 G409090	EMERGENCY POWER GENERATION OTHER CATHODIC PROTECTION	KVA XX	KVA XX	Total rated capacity
			Includes components and equipment used in conjunction with other cathodic protection			
			Includes components and equipment used in conjunction with other cathodic protection systems not defined above.			
G90	OTHER			LS	LS	
G90	OTHER		systems not defined above. DNSTRUCTION Other site construction includes service and pedestrian tunnels, bridges, railroad spurs, and		LS	
		R SITE CO	systems not defined above. INSTRUCTION Other site construction includes service and pedestrian tunnels, bridges, railroad spurs, and snow melting systems.	LS		
	OTHEF G9010	R SITE CO	systems not defined above. DNSTRUCTION Other site construction includes service and pedestrian tunnels, bridges, railroad spurs, and snow melting systems. AND PEDESTRIAN TUNNELS		LS	
		SERVICE	systems not defined above. INSTRUCTION Other site construction includes service and pedestrian tunnels, bridges, railroad spurs, and snow melting systems.	LS	xx	Lenath of tunnel
		R SITE CO	systems not defined above. DNSTRUCTION Other site construction includes service and pedestrian tunnels, bridges, railroad spurs, and snow melting systems. AND PEDESTRIAN TUNNELS This assembly includes service and pedestrian tunnels.	LS XX		Length of tunnel
		SERVICE	systems not defined above. INSTRUCTION Other site construction includes service and pedestrian tunnels, bridges, railroad spurs, and snow melting systems. AND PEDESTRIAN TUNNELS This assembly includes service and pedestrian tunnels. CONSTRUCTION OF SERVICE AND PEDESTRIAN TUNNELS This assembly includes construction of service and pedestrian tunnels. PREFABRICATED SERVICE AND PEDESTRIAN TUNNELS	LS XX	xx	Length of tunnel Length of tunnel
		SERVICE	Systems not defined above. DNSTRUCTION Other site construction includes service and pedestrian tunnels, bridges, railroad spurs, and snow melting systems. AND PEDESTRIAN TUNNELS This assembly includes service and pedestrian tunnels. CONSTRUCTION OF SERVICE AND PEDESTRIAN TUNNELS This assembly includes construction of service and pedestrian tunnels.	LS XX LF	XX M	
		SERVICE G901001 G901002	systems not defined above. INSTRUCTION Other site construction includes service and pedestrian tunnels, bridges, railroad spurs, and snow melting systems. AND PEDESTRIAN TUNNELS This assembly includes service and pedestrian tunnels. CONSTRUCTION OF SERVICE AND PEDESTRIAN TUNNELS This assembly includes construction of service and pedestrian tunnels. PREFABRICATED SERVICE AND PEDESTRIAN TUNNELS This assembly includes prefabricated service and pedestrian tunnels. ITE CONSTRUCTION	LS XX LF	XX M	
	G9010	SERVICE G901001 G901002 OTHER S	systems not defined above. DNSTRUCTION Other site construction includes service and pedestrian tunnels, bridges, railroad spurs, and snow melting systems. AND PEDESTRIAN TUNNELS This assembly includes service and pedestrian tunnels. CONSTRUCTION OF SERVICE AND PEDESTRIAN TUNNELS This assembly includes construction of service and pedestrian tunnels. PREFABRICATED SERVICE AND PEDESTRIAN TUNNELS This assembly includes prefabricated service and pedestrian tunnels. ITE CONSTRUCTION Other site construction includes bridges, railroad spurs and snow melting systems.	LS XX LF LF XX	XX M M	Length of tunnel
	G9010	SERVICE G901001 G901002	Systems not defined above. INSTRUCTION Other site construction includes service and pedestrian tunnels, bridges, railroad spurs, and snow melting systems. AND PEDESTRIAN TUNNELS This assembly includes service and pedestrian tunnels. CONSTRUCTION OF SERVICE AND PEDESTRIAN TUNNELS This assembly includes construction of service and pedestrian tunnels. PREFABRICATED SERVICE AND PEDESTRIAN TUNNELS This assembly includes prefabricated service and pedestrian tunnels. ITE CONSTRUCTION Other site construction includes bridges, railroad spurs and snow melting systems. BRIDGES BRIDGES Bridges included here are typically small spans or overpasses that are not meant to be used	LS XX LF LF	XX M	
	G9010	SERVICE G901001 G901002 OTHER S	systems not defined above. DNSTRUCTION Other site construction includes service and pedestrian tunnels, bridges, railroad spurs, and snow melting systems. AND PEDESTRIAN TUNNELS This assembly includes service and pedestrian tunnels. CONSTRUCTION OF SERVICE AND PEDESTRIAN TUNNELS This assembly includes construction of service and pedestrian tunnels. PREFABRICATED SERVICE AND PEDESTRIAN TUNNELS This assembly includes prefabricated service and pedestrian tunnels. This assembly includes prefabricated service and pedestrian tunnels. TE CONSTRUCTION Other site construction includes bridges, railroad spurs and snow melting systems. BRIDGES	LS XX LF LF XX	XX M M	Length of tunnel
	G9010	SERVICE G901001 G901002 OTHER S G909001	Systems not defined above. DNSTRUCTION	LS XX LF LF XX SY	XX M M M XX M2	Length of tunnel Area of structure
	G9010	SERVICE G901001 G901002 OTHER S	Systems not defined above. DNSTRUCTION Other site construction includes service and pedestrian tunnels, bridges, railroad spurs, and snow melting systems. AND PEDESTRIAN TUNNELS This assembly includes service and pedestrian tunnels. CONSTRUCTION OF SERVICE AND PEDESTRIAN TUNNELS This assembly includes construction of service and pedestrian tunnels. PREFABRICATED SERVICE AND PEDESTRIAN TUNNELS This assembly includes prefabricated service and pedestrian tunnels. ITE CONSTRUCTION Other site construction includes bridges, railroad spurs and snow melting systems. BRIDGES 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 box, concrete and steel composite, laminated timber deck	LS XX LF LF XX	XX M M	Length of tunnel
	G9010	SERVICE G901001 G901002 OTHER S G909001	Systems not defined above. DNSTRUCTION Other site construction includes service and pedestrian tunnels, bridges, railroad spurs, and snow melting systems. AND PEDESTRIAN TUNNELS This assembly includes service and pedestrian tunnels. CONSTRUCTION OF SERVICE AND PEDESTRIAN TUNNELS This assembly includes construction of service and pedestrian tunnels. PREFABRICATED SERVICE AND PEDESTRIAN TUNNELS This assembly includes prefabricated service and pedestrian tunnels. ITE CONSTRUCTION Other site construction includes bridges, railroad spurs and snow melting systems. BRIDGES 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. RAILROAD SPURS Railroad assemblies exist for 110, 115, and 132 lb. tracks and ties. Turnouts, roadway crossings, derailleurs, stops, and bumpers are also included.	LS XX LF LF XX SY	M M XX M2	Length of tunnel Area of structure Length of track
	G9010	SERVICE G901001 G901002 OTHER S G909001	DNSTRUCTION Other site construction includes service and pedestrian tunnels, bridges, railroad spurs, and snow melting systems. AND PEDESTRIAN TUNNELS This assembly includes service and pedestrian tunnels. CONSTRUCTION OF SERVICE AND PEDESTRIAN TUNNELS This assembly includes construction of service and pedestrian tunnels. PREFABRICATED SERVICE AND PEDESTRIAN TUNNELS This assembly includes prefabricated service and pedestrian tunnels. PREFABRICATED SERVICE AND PEDESTRIAN TUNNELS This assembly includes prefabricated service and pedestrian tunnels. ITE CONSTRUCTION Other site construction includes bridges, railroad spurs and snow melting systems. BRIDGES 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 box, concrete and steel composite, laminated timber deck bridge structures. Railroad SPURS Railroad assemblies exist for 110, 115, and 132 lb. tracks and ties. Turnouts, roadway	LS XX LF LF XX SY	XX M M M XX M2	Length of tunnel Area of structure
	G9010	SERVICE G901001 G901002 OTHER S G909001 G909002 G909003 G909009	Systems not defined above. DNSTRUCTION	LS XX LF LF XX SY LF EA XX	M M XX M2 M EA XX	Length of tunnel Area of structure Length of track
	G9010	SERVICE G901001 G901002 OTHER S G909001 G909002 G909003 G909009	Systems not defined above. DNSTRUCTION Other site construction includes service and pedestrian tunnels, bridges, railroad spurs, and snow melting systems. AND PEDESTRIAN TUNNELS This assembly includes service and pedestrian tunnels. CONSTRUCTION OF SERVICE AND PEDESTRIAN TUNNELS This assembly includes construction of service and pedestrian tunnels. PREFABRICATED SERVICE AND PEDESTRIAN TUNNELS This assembly includes prefabricated service and pedestrian tunnels. ITE CONSTRUCTION Other site construction includes bridges, railroad spurs and snow melting systems. BRIDGES 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. RAILROAD SPURS Railroad assemblies exist for 110, 115, and 132 lb. tracks and ties. Turnouts, roadway crossings, derailleurs, stops, and bumpers are also included. SNOW MELTING SYSTEMS OTHER SPECIAL CONSTRUCTION Any special construction not covered in the above categories. STRUCTURES	LS XX LF LF XX SY	XX M M XX M2 M EA	Length of tunnel Area of structure Length of track
	G9010	SERVICE G901001 G901002 OTHER S G909001 G909002 G909003 G909009	Systems not defined above. DINSTRUCTION	LS XX LF LF XX SY LF EA XX	M M XX M2 M EA XX	Length of tunnel Area of structure Length of track
H10	G9010	SERVICE G901001 G901002 OTHER S G909001 G909002 G909003 G909009	DNSTRUCTION Other site construction includes service and pedestrian tunnels, bridges, railroad spurs, and snow melting systems. AND PEDESTRIAN TUNNELS This assembly includes service and pedestrian tunnels. CONSTRUCTION OF SERVICE AND PEDESTRIAN TUNNELS This assembly includes construction of service and pedestrian tunnels. PREFABRICATED SERVICE AND PEDESTRIAN TUNNELS This assembly includes construction of service and pedestrian tunnels. PREFABRICATED SERVICE AND PEDESTRIAN TUNNELS This assembly includes prefabricated service and pedestrian tunnels. ITE CONSTRUCTION Other site construction includes bridges, railroad spurs and snow melting systems. BRIDGES 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. RAILROAD SPURS Railroad assemblies exist for 110, 115, and 132 lb. tracks and ties. Turnouts, roadway crossings, derailleurs, stops, and bumpers are also included. SNOW MELTING SYSTEMS OTHER SPECIAL CONSTRUCTION Any special construction not covered in the above categories. STRUCTURES Waterfront Structures including wharves, piers, dolphins, trestles, and other structures and	LS XX LF LF XX SY LF EA XX	M M XX M2 M EA XX	Length of tunnel Area of structure Length of track
H10	G9010	SERVICE G901001 G901002 OTHER S G909001 G909002 G909003 G909009	DNSTRUCTION Other site construction includes service and pedestrian tunnels, bridges, railroad spurs, and snow melting systems. AND PEDESTRIAN TUNNELS This assembly includes service and pedestrian tunnels. CONSTRUCTION OF SERVICE AND PEDESTRIAN TUNNELS This assembly includes construction of service and pedestrian tunnels. PREFABRICATED SERVICE AND PEDESTRIAN TUNNELS This assembly includes prefabricated service and pedestrian tunnels. PREFABRICATED SERVICE AND PEDESTRIAN TUNNELS This assembly includes prefabricated service and pedestrian tunnels. ITE CONSTRUCTION Other site construction includes bridges, railroad spurs and snow melting systems. BRIDGES 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. RAILROAD SPURS Railroad assemblies exist for 110, 115, and 132 lb. tracks and ties. Turnouts, roadway crossings, derailleurs, stops, and bumpers are also included. SNOW MELTING SYSTEMS OTHER SPECIAL CONSTRUCTION Any special construction not covered in the above categories. STRUCTURES 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 XX LF LF XX SY LF EA XX	M M XX M2 M EA XX	Length of tunnel Area of structure Length of track
H10	G9010	SERVICE G901001 G901002 OTHER S G909001 G909002 G909003 G909003 GFRONT	Systems not defined above. NSTRUCTION	LS XX LF LF XX SY LF EA XX LS	M M XX M2 M EA XX LS	Length of tunnel Area of structure Length of track
H10	G9010	SERVICE G901001 G901002 OTHER S G909001 G909002 G909003 G909090 RFRONT	DNSTRUCTION Other site construction includes service and pedestrian tunnels, bridges, railroad spurs, and snow melting systems. AND PEDESTRIAN TUNNELS This assembly includes service and pedestrian tunnels. CONSTRUCTION OF SERVICE AND PEDESTRIAN TUNNELS This assembly includes construction of service and pedestrian tunnels. PREFABRICATED SERVICE AND PEDESTRIAN TUNNELS This assembly includes prefabricated service and pedestrian tunnels. PREFABRICATED SERVICE AND PEDESTRIAN TUNNELS This assembly includes prefabricated service and pedestrian tunnels. ITE CONSTRUCTION Other site construction includes bridges, railroad spurs and snow melting systems. BRIDGES 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. RAILROAD SPURS Railroad assemblies exist for 110, 115, and 132 lb. tracks and ties. Turnouts, roadway crossings, derailleurs, stops, and bumpers are also included. SNOW MELTING SYSTEMS OTHER SPECIAL CONSTRUCTION Any special construction not covered in the above categories. STRUCTURES Waterfront Structures including wharves, piers, dolphins, trestles, and other structures and appurtenances necessary for the safe mooring of vessels and to support waterfront operations. CCURE 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.	LS XX LF LF XX SY LF EA XX LS	M M XX M2 M2 EA XX LS	Length of tunnel Area of structure Length of track Number of systems
H10	G9010	SERVICE G901001 G901002 OTHER S G909001 G909002 G909003 G909090 RFRONT	DNSTRUCTION Other site construction includes service and pedestrian tunnels, bridges, railroad spurs, and snow melting systems. AND PEDESTRIAN TUNNELS This assembly includes service and pedestrian tunnels. CONSTRUCTION OF SERVICE AND PEDESTRIAN TUNNELS This assembly includes construction of service and pedestrian tunnels. PREFABRICATED SERVICE AND PEDESTRIAN TUNNELS This assembly includes prefabricated service and pedestrian tunnels. PREFABRICATED SERVICE AND PEDESTRIAN TUNNELS This assembly includes prefabricated service and pedestrian tunnels. ITE CONSTRUCTION Other site construction includes bridges, railroad spurs and snow melting systems. BRIDGES 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. RAILROAD SPURS Railroad assemblies exist for 110, 115, and 132 lb. tracks and ties. Turnouts, roadway crossings, derailleurs, stops, and bumpers are also included. SNOW MELTING SYSTEMS OTHER SPECIAL CONSTRUCTION Any special construction not covered in the above categories. STRUCTURES Waterfront Structures including wharves, piers, dolphins, trestles, and other structures and appurtenances necessary for the safe mooring of vessels and to support waterfront operations. DCTURE 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. PILE FOUNDATIONS	LS XX LF LF XX SY LF EA XX LS	M M M M M M M M M M M M M M M M M M M	Length of tunnel Area of structure Length of track
H10	G9010	SERVICE G901001 G901002 OTHER S G909001 G909002 G909003 G909090 RFRONT SUBSTRU H101001 H101002 H101002 H101003	Systems not defined above. DNSTRUCTION Other site construction includes service and pedestrian tunnels, bridges, railroad spurs, and snow melting systems. AND PEDESTRIAN TUNNELS This assembly includes service and pedestrian tunnels. CONSTRUCTION OF SERVICE AND PEDESTRIAN TUNNELS This assembly includes construction of service and pedestrian tunnels. PREFABRICATED SERVICE AND PEDESTRIAN TUNNELS This assembly includes prefabricated service and pedestrian tunnels. PREFABRICATED SERVICE AND PEDESTRIAN TUNNELS This assembly includes prefabricated service and pedestrian tunnels. ITE CONSTRUCTION Other site construction includes bridges, railroad spurs and snow melting systems. BRIDGES 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. RAILROAD SPURS Railroad assemblise exist for 110, 115, and 132 lb. tracks and ties. Turnouts, roadway crossings, derailleurs, stops, and bumpers are also included. SNOW MELTING SYSTEMS OTHER SPECIAL CONSTRUCTION Any special construction not covered in the above categories. STRUCTURES Waterfront Structures including wharves, piers, dolphins, trestles, and other structures and appurtenances necessary for the safe mooring of vessels and to support waterfront operations. ICTURE 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. PILE CAPS QUAYS	LS XX LF LF XX SY LF EA XX LS XX VLF XX XX	M M XX M2 M2 M M XX LS XX XX XX XX XX	Length of tunnel Area of structure Length of track Number of systems
H10	G9010	SERVICE G901001 G901002 OTHER S G909001 G909002 G909003 G909090 RFRONT SUBSTRU H101001 H101002 H101003 H101003 H101004	Systems not defined above. DINSTRUCTION	LS XX LF LF XX SY LF EA XX LS VLF XX XX XX XX XX XX	M M XX M2 EA XX	Length of tunnel Area of structure Length of track Number of systems
H10	G9010	SERVICE G901001 G901002 OTHER S G909001 G909003 G909090 RFRONT SUBSTRU H101001 H101002 H101003 H101004 H101005 H101005	Systems not defined above. DINSTRUCTION	LS XX LF LF XX SY LF EA XX LS VLF XX XX XX XX XX XX XX XX XX	M M XX M2 M M M M M M M M M M M M M M M	Length of tunnel Area of structure Length of track Number of systems
H10	G9010	SERVICE G901001 G901002 OTHER S G909001 G909002 G909003 G909090 RFRONT SUBSTRU H101001 H101002 H101003 H101004 H101003 H101004	Systems not defined above. DINSTRUCTION	LS XX LF LF XX SY LF EA XX VLF XX XX XX XX XX XX XX XX XX	M M XX M2 M M M M M M M M M M M M M M M	Length of tunnel Area of structure Length of track Number of systems
H10	G9010	G909002 G909002 G909002 G909003 G909009 RFRONT H101001 H101002 H101003 H101004 H101005 H101006 H101007	Systems not defined above. DINSTRUCTION	LS XX LF LF XX SY LF EA XX LS VLF XX XX XX XX XX XX XX XX XX	M M XX M2 M M M M M M M M M M M M M M M	Length of tunnel Area of structure Length of track Number of systems

- 2	Unf L3	WBS L4	at II / WBS 9/18/06, Revision 2	E UOM	M UOM	Quantity Definition
1	Jill LJ		This assembly includes superstructure components for waterfront structures, such as beams	_ 00111	00141	Saunary Definition
			and girders, columns, utility enclosures, and other features that support the operation deck			
		H102001	area. BEAMS AND GIRDERS	XX	XX	
		H102001	COLUMNS	XX	XX	
		H102003	UTILITY ENCLOSURES	XX	XX	
	<u> </u>	H102004	OTHER SUPERSTRUCTURE ELEMENTS	XX	XX	
	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 H103005	CURBS AND BULLRAILS MOORING FOUNDATIONS	XX	XX	
		H103005	HIGH MAST LIGHTING FOUNDATIONS	XX	XX	
		H103007	UTILITY MOUNDS	XX	XX	
		H103008	EXPANSION JOINTS	XX	XX	
		H103009 H103010	GUARD POSTS AND RAILING PAINT STRIPING	XX	XX	
		H103010	OTHER DECK COMPONENTS	XX	XX	
	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	
		H104001	SECONDARY FENDER SYSTEM	XX	XX	
		H104003	CORNER FENDER SYSTEM	XX	XX	
		H104004	DOLPHINS MOORING HARDWARE	XX	XX	
		H104005 H104006	MOORING HARDWARE OTHER MOORING AND BERTHING COMPONENTS	XX	XX	
	 			, , , , , , , , , , , , , , , , , , ,	7.71	
	H1050	REPAIR A	AND REHABILITATION	XX	XX	
	H1060	ДРРІ ІРТ І	ENANCES	LS	LS	
	.11000	AFFURIE	This assembly includes the appurtenances such as handrails, brows, cable booms, floats,	LO	LO	
			safety ladders, life rings, oil containment booms, and other similar features.			
H20	GRAVI	NG DRYI	DOCKS	LS	LS	
			TECTION	LS	LS	
00	33,43		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 PR	OTECTION	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 P	ROTECTION	XX	XX	
			This assembly includes required slope protection features, such as revetment or			
1			embankment dikes. ROCK REVETMENTS	XX	XX	
	1	H303004		100		
		H302001 H302002	GRANULAR FILL REVETMENTS	XX	XX	
			GRANULAR FILL REVETMENTS COMBINED ROCK AND GRANULAR FILL REVETMENTS		XX	
H40	NAVIG	H302002 H302003		XX		
H40	NAVIG	H302002 H302003	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION Navigation Dredging and Reclamation System consists of all dredging of navigation channels,	XX XX	XX	
H40	NAVIG	H302002 H302003	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION Navigation Dredging and Reclamation System consists of all dredging of navigation channels, approaches, turning basins, and berthing areas near piers, wharves, dolphins, and	XX XX	XX	
H40	NAVIG	H302002 H302003	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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	XX XX	XX	
H40		H302002 H302003 ATION D	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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.	XX XX	XX	
H40		H302002 H302003	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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.	XX XX	XX	
H40	H4010	H302002 H302003 ATION D	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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.	XX XX LS	LS XX	
H40		H302002 H302003 ATION D DREDGIN	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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.	XX XX LS XX	XX LS XX	
H40	H4010	H302002 H302003 ATION D	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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.	XX XX LS	LS XX	
H40	H4010	H302002 H302003 ATION D DREDGIN DREDGIN H402001	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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. IG IG DISPOSAL OCEAN DISPOSAL	XX XX LS XX XX	XX LS XX XX	
H40	H4010 H4020	DREDGIN H402001 H402003 H402001 H402002 H402003	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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. IG IG DISPOSAL OCEAN DISPOSAL OCEAN DISPOSAL NEW CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES	XX XX LS XX XX XX XX XX XX XX XX	XX LS XX XX XX XX XX	
	H4010 H4020 H4030	DREDGIN H402002 H402003 ATION D DREDGIN H402001 H402003 RECLAM	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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. IG IG DISPOSAL OCEAN DISPOSAL NEW CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES ATION	XX XX LS XX XX XX XX XX XX XX	XX LS XX XX XX XX XX XX	
	H4010 H4020 H4030	DREDGIN H402002 H402003 ATION D DREDGIN H402001 H402003 RECLAM	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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. IG IG DISPOSAL OCEAN DISPOSAL NEW CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES ATION UTILITIES	XX XX LS XX XX XX XX XX XX XX XX	XX LS XX XX XX XX XX	
	H4010 H4020 H4030	DREDGIN H402002 H402003 ATION D DREDGIN H402001 H402003 RECLAM	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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. IG IG DISPOSAL OCEAN DISPOSAL NEW CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES ATION	XX XX LS XX XX XX XX XX XX XX	XX LS XX XX XX XX XX XX	
	H4010 H4020 H4030 WATE	H302002 H302003 ATION D DREDGIN DREDGIN H402001 H402003 RECLAM.	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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. IG IG DISPOSAL OCEAN DISPOSAL NEW CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES ATION UTILITIES The Waterfront Utility System consists of civil/mechanical utilities, electrical utilities, and fire protection to be installed on waterfront structures	XX XX LS XX XX XX XX XX XX XX XX XX XX XX	XX LS XX XX XX XX XX XX XX XX XX XX XX	
	H4010 H4020 H4030	H302002 H302003 ATION D DREDGIN H402001 H402002 H402003 RECLAM. RFRONT	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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. IG IG DISPOSAL OCEAN DISPOSAL NEW CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES ATION UTILITIES The Waterfront Utility System consists of civil/mechanical utilities, electrical utilities, and fire protection to be installed on waterfront structures CHANICAL UTILITIES	XX XX LS XX XX XX XX XX XX XX XX XX XX XX	XX LS XX XX XX XX XX XX XX XX XX	
	H4010 H4020 H4030 WATE	H302002 H302003 ATION D DREDGIN DREDGIN H402001 H402003 RECLAM. RFRONT	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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. IG IG DISPOSAL OCEAN DISPOSAL NEW CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES ATION UTILITIES The Waterfront Utility System consists of civil/mechanical utilities, electrical utilities, and fire protection to be installed on waterfront structures CHANICAL UTILITIES POTABLE WATER	XX XX LS XX XX XX XX XX XX XX XX XX XX XX XX XX	XX LS XX XX XX XX XX XX XX XX XX XX	
	H4010 H4020 H4030 WATE	H302002 H302003 ATION D DREDGIN H402001 H402003 RECLAM. RFRONT	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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. IG IG DISPOSAL OCEAN DISPOSAL NEW CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES ATION UTILITIES The Waterfront Utility System consists of civil/mechanical utilities, electrical utilities, and fire protection to be installed on waterfront structures CHANICAL UTILITIES POTABLE WATER SALTWATER	XX XX LS XX XX XX XX XX XX XX XX XX XX XX XX XX	XX LS XX X	
	H4010 H4020 H4030 WATE	H302002 H302003 ATION D DREDGIN DREDGIN H402001 H402003 RECLAM. RFRONT	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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. IG IG DISPOSAL OCEAN DISPOSAL NEW CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES ATION UTILITIES The Waterfront Utility System consists of civil/mechanical utilities, electrical utilities, and fire protection to be installed on waterfront structures CHANICAL UTILITIES POTABLE WATER SANTARY SEWER BILGE AND OILY WASTE	XX XX LS XX XX XX XX XX XX XX XX XX XX XX XX XX	XX LS XX XX XX XX XX XX XX XX XX XX	
	H4010 H4020 H4030 WATE	H302002 H302003 ATION D DREDGIN H402001 H402002 H402003 RECLAM. RFRONT CIVIL/ME H501002 H501003 H501004 H501004 H501004	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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. IG IG DISPOSAL OCEAN DISPOSAL NEW CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES ATION UTILITIES The Waterfront Utility System consists of civil/mechanical utilities, electrical utilities, and fire protection to be installed on waterfront structures CHANICAL UTILITIES POTABLE WATER SANITARY SEWER BILGE AND OILY WASTE COMPRESSED AIR	XX XX LS XX X	XX LS XX X	
	H4010 H4020 H4030 WATE	H302002 H302003 ATION D DREDGIN H402001 H402001 H402003 RECLAM. RFRONT CIVIL/ME H501001 H501003 H501004 H501005 H501005	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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. IG IG DISPOSAL OCEAN DISPOSAL NEW CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES ATION UTILITIES The Waterfront Utility System consists of civil/mechanical utilities, electrical utilities, and fire protection to be installed on waterfront structures CHANICAL UTILITIES POTABLE WATER SALTWATER SANITARY SEWER BILGE AND OILY WASTE COMPRESSED AIR STEAM	XX XX LS XX X	XX LS XX X	
	H4010 H4020 H4030 WATE	H302002 H302003 ATION D DREDGIN DREDGIN H402001 H402003 RECLAM. RFRONT CIVIL/ME H501002 H501003 H501003 H501004 H501005 H501006 H501006	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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. IG IG DISPOSAL OCEAN DISPOSAL NEW CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES ATION UTILITIES The Waterfront Utility System consists of civil/mechanical utilities, electrical utilities, and fire protection to be installed on waterfront structures CHANICAL UTILITIES POTABLE WATER SALTWATER SALTWATER SANTARY SEWER BILGE AND OILY WASTE COMPRESSED AIR STEAM OTHER CIVIL/MECHANICAL UTILITIES	XX XX LS XX X	XX LS XX X	
	H4010 H4020 H4030 WATEI	H302002 H302003 ATION D DREDGIN H402001 H402001 H402003 RECLAM. RFRONT CIVIL/ME H501001 H501003 H501004 H501005 H501005	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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. IG IG DISPOSAL OCEAN DISPOSAL NEW CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES ATION UTILITIES The Waterfront Utility System consists of civil/mechanical utilities, electrical utilities, and fire protection to be installed on waterfront structures CHANICAL UTILITIES POTABLE WATER SALTWATER SANITARY SEWER BILGE AND OILY WASTE COMPRESSED AIR STEAM	XX XX LS XX X	XX LS XX X	
	H4010 H4020 H4030 WATE	DREDGIN DREDGIN H402001 H402001 H402001 H402001 H501001 H501002 H5010001 H5010001 H5010005 H5010005 H5010006 H5010008 ELECTRII	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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. IG IG DISPOSAL OCEAN DISPOSAL NEW CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES ATION UTILITIES The Waterfront Utility System consists of civil/mechanical utilities, electrical utilities, and fire protection to be installed on waterfront structures CHANICAL UTILITIES POTABLE WATER SANTARY SEWER BILGE AND OILY WASTE COMPRESSED AIR STEAM OTHER CIVIL/MECHANICAL UTILITIES PIPE GUARDRAILS CAL UTILITIES	XX XX LS XX X	XX LS XX X	
	H4010 H4020 H4030 WATEI	H302002 H302003 ATION D DREDGIN H402001 H402002 H402003 RECLAM. RFRONT CIVIL/ME H501002 H501003 H501004 H501005 H501007 H501007 H501007 H501007 H501007 H501007 H501007 H501007 H501007 H501007 H501007 H501007 H501007 H501007	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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. IG IG DISPOSAL OCEAN DISPOSAL NEW CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES ATION UTILITIES The Waterfront Utility System consists of civil/mechanical utilities, electrical utilities, and fire protection to be installed on waterfront structures CHANICAL UTILITIES POTABLE WATER SANITARY SEWER BILGE AND OILY WASTE COMPRESSED AIR STEAM OTHER CIVIL/MECHANICAL UTILITIES PIPE GUARDRAILS CAL UTILITIES CAL UTILITIES POWER DISTRIBUTION SYSTEM	XX XX LS XX X	XX LS XX X	
	H4010 H4020 H4030 WATEI	H302002 H302003 ATION D DREDGIN DREDGIN H402001 H402001 H402003 RECLAM RFRONT CIVIL/ME H501001 H501003 H501005 H501005 H501007 H501007 H501007 H501008 ELECTRI H502001 H502001	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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. IG IG DISPOSAL OCEAN DISPOSAL NEW CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES The Waterfront Utility System consists of civil/mechanical utilities, electrical utilities, and fire protection to be installed on waterfront structures CHANICAL UTILITIES POTABLE WATER SANITARY SEWER BILGE AND OILY WASTE COMPRESSED AIR STEAM OTHER CIVIL/MECHANICAL UTILITIES POWER DISTRIBUTION SYSTEM TELECOMMUNICATION SYSTEM	XX XX LS XX X	XX LS XX X	
	H4010 H4020 H4030 WATEI	H302002 H302003 ATION D DREDGIN DREDGIN H402001 H402003 RECLAM. 3FRONT CIVIL/ME H501001 H501002 H501005 H501006 H501006 H501008 H501008 H501008 H501008 H501008 H501008 H501008 H501008 H501008 H501008 H501008 H501008 H501008	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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. IG IG DISPOSAL OCEAN DISPOSAL NEW CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES ATION UTILITIES The Waterfront Utility System consists of civil/mechanical utilities, electrical utilities, and fire protection to be installed on waterfront structures CHANICAL UTILITIES POTABLE WATER SANTARY SEWER BILGE AND OILY WASTE COMPRESSED AIR STEAM OTHER CIVIL/MECHANICAL UTILITIES PIPE GUARDRAILS CAL UTILITIES POWER DISTRIBUTION SYSTEM TELECOMMUNICATION SYSTEM TELECOMMUNICATION SYSTEM TELECOMMUNICATION SYSTEM TELECOMMUNICATION SYSTEM	XX XX LS XX X	XX LS XX X	
	H4010 H4020 H4030 WATEI	H302002 H302003 ATION D DREDGIN DREDGIN H402001 H402001 H402003 RECLAM RFRONT CIVIL/ME H501003 H501003 H501005 H501005 H501007 H501008 ELECTRI H502001 H502003 H502003 H502003 H502003 H502003 H502003 H502003 H502003 H502003	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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. IG IG IG IG IG ISPOSAL OCEAN DISPOSAL NEW CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES ATION UTILITIES The Waterfront Utility System consists of civil/mechanical utilities, electrical utilities, and fire protection to be installed on waterfront structures CHANICAL UTILITIES POTABLE WATER SALTWATER SALTWATER SANITARY SEWER BILGE AND OILY WASTE COMPRESSED AIR STEAM OTHER CIVIL/MECHANICAL UTILITIES PIPE GUARDRAILS CAL UTILITIES POWER DISTRIBUTION SYSTEM TELECOMMUNICATION SYSTEM LIGHTINING PROTECTION SYSTEM LIGHTINING PROTECTION SYSTEM POWER BOOMS	XX XX LS XX X	XX LS XX X	
	H4010 H4020 H4030 WATEI	H302002 H302003 ATION D DREDGIN H402001 H402002 H402003 RECLAM. CIVIL/ME H501002 H501003 H501004 H501005 H501007 H5010	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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. IG IG DISPOSAL OCEAN DISPOSAL NEW CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES ATION UTILITIES The Waterfront Utility System consists of civil/mechanical utilities, electrical utilities, and fire protection to be installed on waterfront structures CHANICAL UTILITIES POTABLE WATER SANITARY SEWER BILGE AND OILY WASTE COMPRESSED AIR STEAM OTHER CIVIL/MECHANICAL UTILITIES POWER DISTRIBUTION SYSTEM TELECOMMUNICATION SYSTEM TELECOMMUNICATION SYSTEM LIGHTING PROTECTION SYSTEM	XX XX LS XX X	XX LS XX X	
	H4010 H4020 H4030 WATEI H5010	H302002 H302003 ATION D DREDGIN H402001 H402001 H402003 RECLAM. RFRONT CIVIL/ME H501001 H501003 H501005 H501006 H501007 H501008 ELECTRI H502001 H502003 H502003 H5020003 H5020005 H5020006	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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. IG IG DISPOSAL OCEAN DISPOSAL NEW CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES The Waterfront Utility System consists of civil/mechanical utilities, electrical utilities, and fire protection to be installed on waterfront structures CHANICAL UTILITIES POTABLE WATER SANITARY SEWER BILGE AND OILY WASTE COMPRESSED AIR STEAM OTHER CIVIL/MECHANICAL UTILITIES PIPE GUARDRAILS CAL UTILITIES POWER DISTRIBUTION SYSTEM TELECOMMUNICATION SYSTEM TELECOMMUNICATION SYSTEM LIGHTNING PROTECTION SYSTEM POWER BOOMS OTHER ELECTRICAL UTILITIES	XX XX LS XX X	XX LS XX X	
	H4010 H4020 H4030 WATEI	H302002 H302003 ATION D DREDGIN DREDGIN H402001 H402001 H402003 RECLAM RFRONT CIVIL/ME H501001 H501002 H501005 H501007 H501008 ELECTRI H502001 H502001 H502001 H502003 H502004 H502006 FIRE PRO	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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. IG IG DISPOSAL OCEAN DISPOSAL NEW CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES ATION UTILITIES The Waterfront Utility System consists of civil/mechanical utilities, electrical utilities, and fire protection to be installed on waterfront structures CHANICAL UTILITIES POTABLE WATER SALTWATER SALTWATER SANTARY SEWER BILGE AND OILY WASTE COMPRESSED AIR STEAM OTHER CIVIL/MECHANICAL UTILITIES PIPE GUARDRAILS CAL UTILITIES POWER DISTRIBUTION SYSTEM LIGHTING SYSTEMS LIGHTING PROTECTION SYSTEM LIGHTING PROTECTION SYSTEM LIGHTING PROTECTION SYSTEM POWER BOOMS OTHER ELECTRICAL UTILITIES DIECTION AND SUPPRESSION	XX XX XX LS XX X	XX LS XX X	
	H4010 H4020 H4030 WATEI H5010	H302002 H302003 ATION D DREDGIN H402001 H402001 H402003 RECLAM. RFRONT CIVIL/ME H501001 H501003 H501005 H501006 H501007 H501008 ELECTRI H502001 H502003 H502003 H5020003 H5020005 H5020006	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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. IG IG DISPOSAL OCEAN DISPOSAL NEW CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES The Waterfront Utility System consists of civil/mechanical utilities, electrical utilities, and fire protection to be installed on waterfront structures CHANICAL UTILITIES POTABLE WATER SANITARY SEWER BILGE AND OILY WASTE COMPRESSED AIR STEAM OTHER CIVIL/MECHANICAL UTILITIES PIPE GUARDRAILS CAL UTILITIES POWER DISTRIBUTION SYSTEM TELECOMMUNICATION SYSTEM TELECOMMUNICATION SYSTEM LIGHTNING PROTECTION SYSTEM POWER BOOMS OTHER ELECTRICAL UTILITIES	XX XX LS XX X	XX LS XX X	
H50	H4010 H4020 H4030 WATEI H5010	H302002 H302003 ATION D DREDGIN H402001 H402001 H402003 RECLAM. RFRONT CIVIL/ME H501002 H501003 H501004 H501005 H501006 H501007 H502002 H502003 H502004 H502005 H502006 FIRE PRC	COMBINED ROCK AND GRANULAR FILL REVETMENTS REDGING AND RECLAMATION 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. IG IG DISPOSAL OCEAN DISPOSAL NEW CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES EXISTING CONFINED DISPOSAL FACILITIES ATION UTILITIES The Waterfront Utility System consists of civil/mechanical utilities, electrical utilities, and fire protection to be installed on waterfront structures CHANICAL UTILITIES POTABLE WATER SANITARY SEWER BILGE AND OILY WASTE COMPRESSED AIR STEAM OTHER CIVIL/MECHANICAL UTILITIES PIPE GUARDRAILS CAL UTILITIES POWER DISTRIBUTION SYSTEM TELECOMMUNICATION SYSTEM TELECOMMUNICATION SYSTEM TELECOMMUNICATION SYSTEM LIGHTING PROTECTION SYSTEM DOWER BOOMS OTHER ELECTRICAL UTILITIES DIFECTION AND SUPPRESSION FIRE PROTECTION WATER DISTRIBUTION SYSTEM FIRE PROTECTION WATER DISTRIBUTION SYSTEM	XX XX LS XX X	XX LS XX X	

Final Combined Uniformat II / WBS 9/18/06, Revision 2						
Unf L1 Unf L2 Unf L3		Unf L3	WBS L4 Definition	E UOM	M UOM	Quantity Definition
		H6020	NON IN OR OVER-WATER DEMOLITION	XX	XX	
		H6030	HAZARDOUS COMPONENTS ABATEMENT	XX	xx	
	H70	70 WATERFRONT ATFP		LS	LS	
		H7010	WATERSIDE ATFP	XX	XX	
		H7020	LANDSIDE ATFP	XX	XX	
	Z10	GENER	AL	LS	LS	
			The common or general requirements from the Performance Technical Specification Sections.			