



Master Bid Item List

INSTRUCTIONS:

For pay items not contained in the listing, the consultant should assign an item number where the integer portion corresponds to the governing specification section as found in the MAG Uniform Standard Specifications for Public Works Construction or the MCDOT Supplement to the MAG Uniform Standard Specifications. The five digits following the decimal point should be chosen to not duplicate a pre-assigned item number. The item description is to distinctively identify the intended work.

Item No.	Description	Unit
104.04000	Partnering	Allowance
105.06200	UPRR Flagman Allowance	Allowance
107.01501	Community Relations Support	Allowance
107.02000	AZPDES	Lump Sum
107.02010	Compliance with Maricopa County MS4 Stormwater Regulation	Lump Sum
107.02100	Environmental Mitigation Compliance	Lump Sum
107.02200	404 Permit Compliance	Lump Sum
109.09000	Mobilization/Demobilization	Lump Sum
111.01000	Type I Engineer's Field Office	Lump Sum
111.02000	Type II Engineer's Field Office	Lump Sum
112.10000	Trainees, Approved Training Program	Allowance
201.01012	Remove Tree, Diameter > 12"	Each
202.00200	Removal of Expansion Joints	Lump Sum
202.41000	Bridge Removal	Lump Sum
205.01150	Roadway Excavation	CY
206.01000	Structural Excavation	CY
206.02000	Structural Backfill	CY
211.01000	Fill Construction	CY
212.01000	Roadway Obliteration	SY
213.01100	Dewatering	Allowance
215.01100	Channel Excavation	CY
215.01510	Earthwork for Retention Basins	CY
220.10075	Riprap, D50=3"	CY
220.10100	Riprap, D50=4"	CY
220.10150	Riprap, D50=6"	CY
220.10200	Riprap, D50=8"	CY
220.10225	Riprap, D50=9"	CY
220.10300	Riprap, D50=12"	CY
220.10450	Riprap, D50=18"	CY
220.10535	Riprap, D50=21"	CY
220.10600	Riprap, D50=24"	CY
220.20000	Grouted Riprap	CY
220.20300	Grouted Riprap, D50 = 12"	CY
220.20380	Grouted Riprap, D50 = 15"	CY

Item No.	Description	Unit
221.10000	Gabion	CY
221.20000	Gabion Mattress	CY
222.01000	Cement Stabilized Alluvium (CSA) Bank Protection	CY
222.02000	Soil Cement Bank Protection	CY
222.02100	Soil Cement (f'c = 1000 psi in 7 days)	CY
230.01000	Acrylic Copolymer Topical Dust Palliative	Ton
230.02000	Acrylic Copolymer Surface Course Dust Palliative	SY
301.01000	Subgrade Preparation	SY
308.01000	Lime Slurry with Fly Ash Stabilization, (INDICATE DEPTH)	SY
308.01004	Lime Slurry with Fly Ash Stabilization, 4" Depth	SY
308.01009	Lime Slurry with Fly Ash Stabilization, 9" Depth	SY
308.02000	Fly Ash (AASHTO M-295, Class C)	Ton
309.01004	Lime Slurry Stabilization, 4" Depth	SY
309.01006	Lime Slurry Stabilization, 6" Depth	SY
309.02000	Lime (CaO and MgO)	Ton
310.03000	Aggregate Base Course	Ton
310.03002	Aggregate Base Course (Contingent Item)	Ton
310.03100	Aggregate Base Course, 4" Thick	Ton
310.03125	Aggregate Base Course, 5" Thick	Ton
310.03150	Aggregate Base Course, 6" Thick	Ton
310.03175	Aggregate Base Course, 7" Thick	Ton
310.03200	Aggregate Base Course, 8" Thick	Ton
310.03255	Aggregate Base Course, 10" Thick	Ton
310.03275	Aggregate Base Course, 11" Thick	Ton
310.04000	Untreated Base (Select Material, Type B)	Ton
310.04255	Untreated Base (Select Material, Type B), 10" Thick	Ton
310.10000	Filter Blanket (Type I)	Ton
310.20000	Filter Blanket (Type II)	Ton
311.00000	Soil Cement Treated Subgrade, (INDICATE DEPTH)	SY
311.00060	Soil Cement Treated Subgrade, Depth = 6"	SY
311.00061	Soil Cement Treated Subgrade, Depth = 6" (Contingency)	SY
312.10060	Cement Treated Base, Depth = 6"	SY
312.10062	Cement Treated Base, Depth = 6" (Contingent Item)	SY
315.01010	Bituminous Prime Coat (MC-250)	Ton
315.01020	Bituminous Prime Coat (MC-800)	Ton
317.01000	Asphalt Milling	SY
317.02000	Profile Milling	SY
321.00200	Asphalt Concrete Pavement (Marshall 1/2" Mix)	Ton
321.00300	Asphalt Concrete Pavement (Marshall 3/4" Mix)	Ton
321.01001	Asphalt Concrete Pavement (Superpave 3/8" Mix, Low Traffic)	Ton
321.01002	Asphalt Concrete Pavement (Superpave 3/8" Mix, High Traffic)	Ton
321.01201	Asphalt Concrete Pavement (Superpave 1/2" Mix, Low Traffic)	Ton
321.01202	Asphalt Concrete Pavement (Superpave 1/2" Mix, High Traffic)	Ton

Item No.	Description	Unit
321.01301	Asphalt Concrete Pavement (Superpave 3/4" Mix, Low Traffic)	Ton
321.01302	Asphalt Concrete Pavement (Superpave 3/4" Mix, High Traffic)	Ton
321.02000	Rideability	Allowance
321.04000	Safety Edge Preparation	LF
321.21200	Residential Speed Hump, Det 2010-1	LF
321.21300	Residential Speed Hump, Det 2010-2	LF
321.22000	Speed Hump Extension, Det 2010-3	LF
321.23000	Residential Speed Cushion, Det 2011	LF
324.01090	Portland Cement Concrete Pavement (PCCP) 9" Thick	SY
324.01130	Portland Cement Concrete Pavement (PCCP) 13" Thick	SY
324.05000	Equipment Crossing (Class AA Concrete), MAG Det 204	SF
325.10375	ARAC Pavement (High Traffic)	Ton
325.10385	ARAC Pavement (Low Traffic)	Ton
325.20000	Application of Lime Water	SY
327.01000	Hot In-Place Recycling	SY
327.02000	Asphalt Recycling Agent	Gal
329.01000	Bituminous Tack Coat SS-1h, Diluted	Ton
329.01002	Bituminous Tack Coat SS-1h, Diluted (Contingent Item)	Ton
330.01100	Stone Chips, Low Volume (uncoated)	Ton
330.01110	Stone Chips, Low Volume - Modified Gradation (uncoated)	Ton
330.01130	Stone Chips, Low Volume - Modified Gradation (pre-coated)	Ton
330.01200	Stone Chips, High Volume (uncoated)	Ton
330.01210	Stone Chips, High Volume - Modified Gradation (uncoated)	Ton
330.01310	Asphalt Emulsion CRS-2h	Ton
330.01400	Asphalt Binder AC-15-5TR	Ton
330.01410	Rubber Asphalt Binder (RAB)	Ton
330.01420	Rubber Asphalt Binder (RAB) - Field or Terminal Blend	Ton
330.01500	Liquid Asphalt (MC-250 or MC-800)	Ton
330.01520	Liquid Asphalt MC-250	Ton
330.01530	Liquid Asphalt MC-800	Ton
331.01100	Microsurfacing Aggregate, Type I	Ton
331.01200	Microsurfacing Aggregate, Type II	Ton
331.01300	Microsurfacing Aggregate, Type III	Ton
331.02000	Polymer Modified Asphalt Emulsion	Ton
331.03100	Microsurfacing (Type I Aggregate)	SY
331.03200	Microsurfacing (Type II Aggregate)	SY
331.03300	Microsurfacing (Type III Aggregate)	SY
332.01111	Polymer Modified Emulsified Asphalt for Slurry (PMQS_h)	Ton
332.01210	Aggregate for Slurry - Type II	Ton
333.01000	Fog Seal	Ton
333.01002	Fog Seal (Contingent Item)	Ton
333.01100	Fog Seal, SS-1h	Ton
333.02000	Sand Blotter	Allowance

Item No.	Description	Unit
333.02002	Sand Blotter (Contingent Item)	Ton
334.00010	MTR Pavement Sealer	SY
334.03000	Preservative Seal, Type C (TRMSS)	Gal
334.05000	Preservative Seal, Type E (PMRE)	Gal
336.01100	Asphalt Pavement Replacement	SY
336.03210	Asphalt Pavement Repair	SY
337.01000	Asphalt Pavement - Category 1 Crack Sealing	SY
337.02000	Asphalt Pavement - Category 2 Crack Filling	LB
337.02002	Asphalt Pavement - Category 2 Crack Filling (Contingent Item)	LB
337.03000	Asphalt Pavement - Category 3 Crack Filling	LB
338.01000	Price Adjustment for Bituminous Materials	Allowance
340.01110	Vertical Curb & Gutter, MAG Det 220, Type A, H=6"	LF
340.01114	Vertical Curb & Gutter, MAG Det 220, Type A, H=4"	LF
340.01116	Concrete Curb & Gutter, ADOT C-05.10, Type D, H=7"	LF
340.01120	Concrete Ribbon Curb, MAG Det 220, Type B	LF
340.01130	Roll Curb & Gutter, MAG Det 220, Type C	LF
340.01140	Roll Curb, MAG Det 220, Type D	LF
340.01150	Single Curb, MAG Det 222, Type A	LF
340.01160	Single Curb, MAG Det 222, Type B	LF
340.01170	Mountable Curb & Gutter, MAG Det 220, Type E	LF
340.01180	Mountable Curb & Gutter, MAG Det 220, Type F	LF
340.01182	Concrete Curb & Gutter, ADOT C-05.10, Type B, H=6"	LF
340.01210	Concrete Sidewalk, MAG Det 230	SF
340.01215	Concrete Median Paving, 4" Thick	SF
340.01216	Concrete Median Nose Transition, MAG Det 223 (4" Thick)	SF
340.01320	Retrofit 20' Return 4" Curb w/Dual Combination Curb Ramps, Det 2022	Each
340.01321	Retrofit 20' Return 6" Curb w/ 2-Combination Curb Ramps, Det 2022	Each
340.01330	35' Return 1-Radial Ramp, Det 2031	Each
340.01331	35' Return 2-Radial Ramps, Det 2031	Each
340.01332	35' Return 2-Radial Ramps w/ 1-Type A Transition, Det 2031	Each
340.01333	35' Return 2-Radial Ramps w/ 1-Type B Transition, Det 2031	Each
340.01335	30' Return 1-Radial Ramp, Det 2031	Each
340.01336	30' Return 2-Radial Ramps, Det 2031	Each
340.01337	30' Return 2-Radial Ramps w/ 1-Type A Transition, Det 2031	Each
340.01338	30' Return 2-Radial Ramps w/ 1-Type B Transition, Det 2031	Each
340.01340	25' Return 6" Curb 1-Radial Ramp, Det 2032	Each
340.01341	25' Return 6" Curb 2-Radial Ramps, Det 2032	Each
340.01342	25' Return 4" Curb 1-Radial Ramp, Det 2032	Each
340.01343	25' Return 4" Curb 2-Radial Ramps, Det 2032	Each
340.01345	20' Return 4" Curb 1-Radial Ramp, Det 2032	Each
340.01346	20' Return 4" Curb 2-Radial Ramps, Det 2032	Each
340.01350	1-Radial Curb Ramp (B=5') - 4" Curb, Det 2033	Each
340.01352	1-Radial Curb Ramp (B=5') - 6" Curb, Det 2033	Each

Item No.	Description	Unit
340.01353	1-Radial Curb Ramp (B=8') - 6" Curb, Det 2033	Each
340.01390	Radial Curb Ramp, Dual, MAG Det 236-1	Each
340.01391	Radial Combination Curb Ramp, Dual, MAG Det 236-4	Each
340.01392	Parallel Curb Ramp, MAG Det 238-3	Each
340.01396	Radial Curb Ramp, Dual, MAG Det 236-3	Each
340.01400	Driveway Entrance, MAG Det 250-1 (Residential)	SF
340.01405	Driveway Entrance, MAG Det 250-1 (Commercial/Industrial)	SF
340.01410	Driveway Entrance, MAG Det 250-1 - Ramp Only no S/W (Residential)	SF
340.01411	Driveway Entrance, MAG Det 250-1 - Ramp Only no S/W (Commercial/Industrial)	SF
340.01420	Driveway Entrance, MAG Det 250-2 (Residential)	SF
340.01425	Driveway Entrance, MAG Det 250-2 (Commercial/Industrial)	SF
340.01437	Return Type Driveway, Det 2036 (Commercial/Industrial)	SF
340.01455	Driveway 5" Thick Class B Concrete	SF
340.01456	Driveway 6" Thick Class A Concrete	SF
340.01459	Driveway 9" Thick Class A Concrete	SF
340.01500	Alley Entrance, MAG Det 260	SF
340.01600	Concrete Apron and Valley Gutter, MAG Det 240	SF
340.02106	Concrete Spillway Paving, 6" Thick w/ Reinforced & Turndown Edges	SY
340.02551	Embankment Spillway, Inlet (MAG Det 550)	Each
340.02552	Embankment Spillway, Spillway (MAG Det 550)	LF
340.02553	Embankment Spillway, Outlet (MAG Det 550)	Each
340.03030	Concrete Slope Paving, 3" Thick	SY
340.20000	Concrete Bus Bay Pvmt, 9" Thick (MAG Det 252)	SF
340.20500	Bus Bay (City of Phoenix Det P 1256-1, Type 1)	Each
342.01100	Concrete Paving Stone	SF
345.01000	Adjust Frame & Cover to Grade, MAG Det 270	Each
345.01100	Adjust Manhole Frame & Cover, MAG Det 422	Each
345.01101	Rebuild Exist. MH w/ Offset Manhole, MAG Det 421	Each
345.01102	Adjust Manhole Height, MAG Det 420	Each
345.01200	Adjust Valve Box & Cover, MAG Det 391-1-A	Each
345.01300	Adjust Valve Box & Cover, MAG Det 391-1-B	Each
345.01400	Adjust Valve Box & Cover, MAG Det 391-1-C	Each
345.01401	Change Type A Valve Box & Cover to Type C and Adjust, MAG Det 391-1-C	Each
345.01500	Adjust Water Meter Box & Cover to Grade	Each
350.00900	Well Abandonment	Each
350.01100	Remove Pipe, Backfill & Compact, D less than 30"	LF
350.01106	Remove Pipe, Backfill & Compact, D=6"	LF
350.01115	Remove Pipe, Backfill & Compact, D=15"	LF
350.01118	Remove Pipe, Backfill & Compact, D=18"	LF
350.01121	Remove Pipe, Backfill & Compact, D=21"	LF
350.01124	Remove Pipe, Backfill & Compact, D=24"	LF
350.01200	Remove Pipe, Backfill & Compact, D=30" or greater	LF
350.01236	Remove Pipe, Backfill & Compact, D=36"	LF

Item No.	Description	Unit
350.01242	Remove Pipe, Backfill & Compact, D=42"	LF
350.01248	Remove Pipe, Backfill & Compact, D=48"	LF
350.01400	Remove Catch Basin	Each
350.01500	Remove Headwall	Each
350.01600	Remove Irrigation Structure	Each
350.01601	Remove Irrigation Box	Each
350.01700	Remove Concrete Ditch Lining	LF
350.01702	Remove Concrete Channel Lining	SY
350.01705	Remove Pneumatically Place Mortar	SF
350.01800	Remove Concrete Curb and Gutter	LF
350.01801	Remove Valley Gutter	SF
350.01850	Remove Concrete Single Curb	LF
350.01851	Remove Concrete Header	LF
350.01860	Remove Concrete Ribbon Curb	LF
350.01900	Remove Sidewalk	SF
350.01902	Remove Stand Pipe	Each
350.02000	Remove Gate	Each
350.02100	Remove Structure	Each
350.02250	Remove Concrete Slab	SF
350.02251	Remove Concrete Spillway	SF
350.03000	Remove and Salvage Street Light	Each
350.03010	Remove Light Pole	Each
350.04000	Remove and Salvage Traffic Sign Assembly	Each
350.05000	Remove Guardrail	LF
350.30005	Remove Barbed Wire Fence	LF
350.31000	Remove Chain Link Fence	LF
350.50000	Miscellaneous Removals and Other Work	Lump Sum
350.50003	Remove Traffic Pole Foundation	Each
350.50101	Remove Traffic Pole with Paint Containing Lead	Each
351.11000	Relocate Mailbox, Det 2066	Each
351.20000	Relocate 6' Chain Link Fence, MAG Det 160	LF
351.21100	Relocate Barbed Wire Fence, Type 1, ADOT C-12.10	LF
351.21106	Relocate 6' Chain Link Fence, ADOT C-12.20, Type 1	LF
351.22118	Relocate 6' x 18' Chain Link Single Gate	Each
351.22120	Relocate 6' x 20' Chain Link Double Gate	Each
351.40010	Relocate Traffic Sign, Det 2060	Each
351.40020	Relocate Street Name Sign, Det 2054	Each
351.46000	Relocate Sign	Each
401.01000	Traffic Control	Lump Sum
401.01100	Uniformed Off-Duty Law Enforcement Officer	Allowance
401.03000	Barricade, MAG Det 130, Type A	Each
401.03500	Barricade, MAG Det 130, Type B	LF
401.03600	Type III Barricade, Det 2057-A	LF

Item No.	Description	Unit
401.03700	Type III Barricade, Det 2057-B	LF
401.03800	Type III Barricade, Det 2057-C	LF
401.03900	Type III Barricade, Det 2057-D	LF
401.04010	Portable Concrete Barrier (PCB)	LF
401.04020	PCB Relocation	LF
401.04030	Impact Attenuation Device	Each
401.04040	Impact Attenuation Device Relocation	Each
401.06100	Changeable Message Board for Public Notification	Day
401.06102	Changeable Message Board for Public Notification (Contingent Item)	Day
401.20000	Document Existing Pavement Markings	Lump Sum
401.20002	Document Existing Pavement Markings (Contingent Item)	Lump Sum
405.00030	Survey Marker, MAG Det 120, Type C	Each
405.01000	Survey Marker, MAG Det 120, Type B	Each
405.01100	Survey Marker, MAG Det 120, Type A	Each
415.01200	Guardrail (wood post), Det 2801 & 2802	LF
415.01231	MGS Guardrail (wood post), MCDOT Det 3101 & 3102	LF
415.01300	Guardrail (steel post), Det 2803 & 2802	LF
415.01331	MGS Guardrail (steel post), MCDOT Det 3103 & 3102	LF
415.01410	Nested Guardrail, Det 2808-1	Each
415.01420	Nested Guardrail, Det 2808-2	Each
415.01430	Nested Guardrail, Det 2808-3	Each
415.01431	MGS Guardrail Long-Span, MCDOT Det 3108	Each
415.02000	Bolted Guardrail Anchor, Det 3010	Each
415.03000	Thrie Beam Guardrail Transition, Det 2812	Each
415.03131	MGS Guardrail Transition To Concrete Barrier(wood post), ADOT Det C-10.30	Each
415.03231	MGS Guardrail Transition To Concrete Barrier(Steel post), ADOT Det C-10.31	Each
416.02125	Guardrail Terminal (ET PLUS, 25')	Each
416.02131	MASH Guardrail Terminal (TL2)	Each
416.02137	Guardrail Terminal (ET PLUS, 37.5')	Each
416.02150	Guardrail Terminal (ET PLUS, 50')	Each
416.02231	MASH Guardrail Terminal (TL3)	Each
416.03000	Departure End Terminal, Det 3007	Each
416.03031	MGS W-Beam Guardrail End Anchor, ADOT Det C-10.08	Each
417.01000	Crash Cushions Short TRACC (14'x 24")	Each
417.02000	Crash Cushions TRACC (21'x 24")	Each
417.03000	Crash Cushions Wide TRACC (21'x 58")	Each
420.00124	4' Chain Link Fence, ADOT Std C-12.20, Type 1	LF
420.00126	6' Chain Link Fence, ADOT Std C-12.20, Type 1	LF
420.00180	6' High Chain Link Fence, MAG Det 160	LF
420.02624	6' X 24' Chain Link Fence Gate, MAG Det 160	Each
421.14100	Barbed Wire Fence, Type 1, ADOT C-12.10	LF
421.14200	Barbed Wire Fence, Type 2, ADOT C-12.10	LF
421.14400	Woven Wire Fence, Type 4, ADOT C-12.10	LF

Item No.	Description	Unit
421.14500	Fence Gate, Type 1, Single, ADOT C-12.10	Each
421.14520	Fence Gate, Type 1, Single , ADOT C-12.10 (L=12')	Each
421.15000	Fence, Chain Link Gate, Rolling, ADOT C-12.20	Each
421.15101	Fence, Chain Link Gate, Single, ADOT C-12.20	Each
421.15200	Fence, Chain Link Gate, Double, ADOT C-12.20	Each
430.01000	Landscape and Planting	Lump Sum
430.01001	Landscape Establishment - One (1) Year	Lump Sum
430.01005	Plant - 5 gal	Each
430.01015	Plant - 15 gal	Each
430.01021	Shrubs - 1 gal	Each
430.01025	Shrubs - 5 gal	Each
430.01035	Cactii - 5 gal	Each
430.01038	Mesquite Tree (15 Gal)	Each
430.01201	Hydro Seeding - Native Seed Mix	Acre
430.02000	Native Plant Relocation <Identify Native Plant Type>	Each
430.02001	Native Plant Relocation Ocotillo	Each
430.02002	Native Plant Relocation Barrel Cactus	Each
430.02038	Native Plant Relocation Mesquite Tree	Each
430.02040	Native Plant Relocation Palo Verde Tree	Each
430.02050	Native Plant Relocation Iron Wood Tree	Each
430.02075	Native Plant Relocation Saguaro Cactus, Single Spear	Each
430.02076	Native Plant Relocation Saguaro Cactus, Multiple Arm (15' and Under)	Each
430.02077	Native Plant Relocation Saguaro Cactus, Multiple Arm (Over 15')	Each
430.42000	Decomposed Granite, 2" Thick	SY
430.43000	Decomposed Granite, 3" Thick	SY
432.10003	Gravel Mulch, 3" Thick	SY
440.10000	Landscape / Irrigation Restoration	Lump Sum
440.40013	6" Sch. 40 PVC Irrigation Pipe	LF
460.01000	Remove Paint Stripe	LF
460.01100	Remove Painted Symbol - [IDENTIFY EACH SYMBOL TYPE]	Each
460.02000	Remove Thermoplastic Stripe	LF
460.02002	Remove Thermoplastic Stripe (Contingent Item)	LF
460.02100	Remove Thermoplastic - Left Arrow	Each
460.02101	Remove Thermoplastic - Right Arrow	Each
460.02103	Remove Thermoplastic - "Left + Through" Arrow	Each
460.02200	Remove Thermoplastic Legend "Only"	Each
460.03000	Remove Raised Pavement Marker	Each
461.01100	4" White Traffic Paint Stripe	LF
461.01200	4" Yellow Traffic Paint Stripe	LF
461.01500	Paint Symbol (Identify Symbol)	Each
461.01511	Paint Symbol (Left Turn Arrow)	Each
461.01512	Paint Symbol (Right Turn Arrow)	Each
461.01514	Paint Symbol (Lane Reduction Arrow)	Each

Item No.	Description	Unit
461.01515	Paint Symbol (RR Crossing)	Each
461.01520	Paint Symbol (Bike Lane Marking Set)	Each
461.01521	Paint Symbol (Merge Arrow)	Each
461.01600	Paint Median Island	LF
461.01700	Paint Legend (Identify Legend)	Each
461.01710	Paint Legend (ONLY)	Each
462.01100	4" White Thermoplastic Traffic Stripe	LF
462.01200	4" Yellow Thermoplastic Traffic Stripe	LF
462.01500	Thermoplastic/Preformed Symbol [Identify Symbol]	Each
462.01509	Thermoplastic/Preformed Symbol (Lane Reduction Arrow)	Each
462.01510	Thermoplastic/Preformed Symbol Arrow (Straight)	Each
462.01511	Thermoplastic/Preformed Symbol Left Turn Arrow	Each
462.01512	Thermoplastic/Preformed Symbol Right Turn Arrow	Each
462.01513	Thermoplastic/Preformed Symbol Combination Turn & Straight Arrow	Each
462.01515	Thermoplastic/Preformed Symbol (RR Crossing)	Each
462.01520	Thermoplastic/Preformed Symbol (Bike Lane Marking Set)	Each
462.01530	Thermoplastic/Preformed Symbol, Handicap Parking	Each
462.01700	Thermoplastic/Preformed Legend [Identify Legend]	Each
462.01705	Thermoplastic/Preformed Legend "ONLY"	Each
462.01706	Thermoplastic/Preformed Directional Arrows (Speed Cushion/Humps)	Each
462.01720	Thermoplastic/Preformed Legend "Golf Carts Only"	Each
462.01720	Thermoplastic/Preformed Legend "Golf Carts Only"	Each
462.02020	Portland Cement, Removal of Curing Compound for Thermoplastic Application	LF
462.03020	Portland Cement, Application of Primer-Sealer for Thermoplastic Application	LF
463.01000	Reflectorized Raised Pavement Marker (Type C, Clear, Red)	Each
463.01100	Reflectorized Raised Pavement Marker (Type D, Yellow, 2-Way)	Each
463.01200	Reflectorized Raised Pavement Marker (Type G, Clear, 1-Way)	Each
463.01300	Reflectorized Raised Pavement Marker (Type H, Yellow, 1-Way)	Each
463.01400	Reflectorized Raised Pavement Marker (Type BB, Blue, 2-Way)	Each
463.01500	Reflectorized Raised Bridge & Barrier Marker	Each
463.02000	Non-Reflectorized Raised Pavement Marker (Type A, White)	Each
464.02000	Perforated Sign Post	LF
464.02001	Perforated Sign Post Foundation, Det 2058	Each
464.03000	U-Channel Sign Post	LF
464.03001	U-Channel Sign Post Installation, Det 2059	Each
465.01002	Flat Sheet Aluminum Sign Panel, High Intensity Grade	SF
465.01003	Flat Sheet Aluminum Sign Panel, Diamond Grade	SF
465.02000	Metro Street Name Sign Installation	Each
465.02010	Metro Street Name Sign Installation and Clamp per MCDOT Detail 4780-2 & 4780-3	Each
470.00001	Remove and Salvage Traffic Signal	Each
470.00004	Remove and Salvage Traffic Signal Pole and Mast Arm	Each
470.00010	Remove and Salvage Pull Boxes	Each
470.80000	Temporary Traffic Signal	Lump Sum

Item No.	Description	Unit
471.60043	No. 3 ½ Pull Box	Each
471.60045	No. 5 Pull Box	Each
471.60047	No. 7 Pull Box	Each
471.60055	No. 5 Pull Box w/ Extension	Each
471.60057	No. 7 Pull Box w/ Extension	Each
471.61112	Sch. 40 PVC Electrical Conduit, 2" w/ ¼" Nylon Pull Rope and #8 Bare Copper Wire (Trench)	LF
471.61113	Sch. 40 PVC Electrical Conduit, 2" w/ ¼" Nylon Pull Rope and #8 Bare Copper Wire (Horizontal Bore)	LF
471.61130	Sch. 40 Galvanized Electrical Conduit, 2"	LF
471.61131	Sch. 40 Galvanized Electrical Conduit, 2" w/ ¼" Nylon Pull Rope and #8 Bare Copper Wire	LF
471.61212	Sch. 40 PVC Electrical Conduit, 2½" w/ ¼" Nylon Pull Rope and w/ #8 Bare Copper Wire (Trench)	LF
471.61213	Sch. 40 PVC Electrical Conduit, 2½" w/ ¼" Nylon Pull Rope and w/ #8 Bare Copper Wire (Horizontal Bore)	LF
471.61230	Sch. 40 Galvanized Electrical Conduit, 2½"	LF
471.61231	Sch. 40 Galvanized Electrical Conduit, 2½" w/ ¼" Nylon Pull Rope and w/ #8 Bare Copper Wire	LF
471.61312	Sch. 40 PVC Electrical Conduit, 3" w/ ¼" Nylon Pull Rope and w/ # 8 Bare Copper Wire (Trench)	LF
471.61313	Sch. 40 PVC Electrical Conduit, 3" w/ ¼" Nylon Pull Rope and w/ # 8 Bare Copper Wire (Horizontal Bore)	LF
471.61330	Sch. 40 Galvanized Electrical Conduit, 3"	LF
471.61331	Sch. 40 Galvanized Electrical Conduit, 3" w/ ¼" Nylon Pull Rope and w/ # 8 Bare Copper Wire	LF
471.61412	Sch. 40 PVC Electrical Conduit, 4" w/ ¼" Nylon Pull Rope and # 8 Bare Copper Wire (Trench)	LF
471.61413	Sch. 40 PVC Electrical Conduit, 4" w/ ¼" Nylon Pull Rope and # 8 Bare Copper Wire (Horizontal Bore)	LF
471.61430	Sch. 40 Galvanized Electrical Conduit, 4"	LF
471.61431	Sch. 40 Galvanized Electrical Conduit, 4" w/ ¼" Nylon Pull Rope and # 8 Bare Copper Wire	LF
471.61530	Sch. 40 Galvanized Electrical Conduit, 5"	LF
471.61531	Sch. 40 Galvanized Electrical Conduit, 5" w/ ¼" Nylon Pull Rope and # 8 Bare Copper Wire	LF
471.61630	Sch. 40 Galvanized Electrical Conduit, 6"	LF
471.61631	Sch. 40 Galvanized Electrical Conduit, 6" w/ ¼" Nylon Pull Rope and # 8 Bare Copper Wire	LF
472.61100	Pole Foundation, Type A, Det 4720	Each
472.61200	Pole Foundation, Type E or F, Det 4720	Each
472.61300	Pole Foundation, Type J or Q, Det 4721	Each
472.61400	Pole Foundation, Type K or R, Det 4721	Each
472.61500	Pole Foundation, Type PB (Push Button), Det 4720	Each
472.62030	Pole Foundation, Type SB (Square Base), Det 4825-2	Each
472.62045	Service Pedestal Foundation, Det 4829-2	Each
472.62050	Combination Service Pedestal Battery Back-up System Foundation, Det 4724	Each
472.63000	P' Cabinet Foundation, Det 4723	Each
473.61000	6' X 6' Detector Loop	Each
473.62000	6' X 20' Quadropole Loop	Each
473.63000	6' X 30' Quadropole Loop	Each
473.64000	6' X 40' Quadropole Loop	Each
473.65000	6' X 50' Quadropole Loop	Each
473.73000	Pedestrian Push Button w/ Sign	Each
473.73001	Pedestrian Push Button w/ Sign (Install Only)	Each
473.73005	Pedestrian Push Button	Each
473.73006	Pedestrian Push Button (Install Only)	Each

Item No.	Description	Unit
473.73010	Audible Pedestrian Push Button w/ Sign	Each
473.73011	Audible Pedestrian Push Button w/ Sign (Install Only)	Each
473.80100	Video Image Detection System - Detection for 1 Approach	Each
473.80200	Video Image Detection System - Detection for 2 Approaches	Each
473.80300	Video Image Detection System - Detection for 3 Approaches	Each
473.80400	Video Image Detection System - Detection for 4 Approaches	Each
473.80401	Video Image Detection System - Detection for 4 Approaches (Install Only)	Each
474.60114	Type A Signal Pole 14'	Each
474.60115	Type A Signal Pole 14' (Install Only)	Each
474.60116	Type A Signal Pole 16'	Each
474.60117	Type A Signal Pole 16' (Install only)	Each
474.60118	Type A Signal Pole 18'	Each
474.60119	Type A Signal Pole 18' (Install only)	Each
474.60210	Type E Signal Pole w/ 12' Mast Arm	Each
474.60220	Type E Signal Pole w/ 15' Mast Arm	Each
474.60230	Type E Signal Pole w/ 18' Mast Arm	Each
474.60240	Type E Signal Pole w/ 20' Mast Arm	Each
474.60300	Type F Signal Pole	Each
474.60301	Type F Signal Pole (Install Only)	Each
474.60310	Type F Signal Pole w/ 12' Mast Arm	Each
474.60320	Type F Signal Pole w/ 15' Mast Arm	Each
474.60330	Type F Signal Pole w/ 18' Mast Arm	Each
474.60340	Type F Signal Pole w/ 20' Mast Arm	Each
474.60341	Type F Signal Pole w/ 20' Mast Arm (Install Only)	Each
474.60400	Type J Signal Pole	Each
474.60401	Type J Signal Pole (Install Only)	Each
474.60440	Type J Signal Pole w/ 20' Mast Arm	Each
474.60441	Type J Signal Pole w/ 20' Mast Arm (Install Only)	Each
474.60450	Type J Signal Pole w/ 25' Mast Arm	Each
474.60451	Type J Signal Pole w/ 25' Mast Arm (Install Only)	Each
474.60460	Type J Signal Pole w/ 30' Mast Arm	Each
474.60461	Type J Signal Pole w/ 30' Mast Arm (Install Only)	Each
474.60470	Type J Signal Pole w/ 35' Mast Arm	Each
474.60471	Type J Signal Pole w/ 35' Mast Arm (Install Only)	Each
474.60480	Type J Signal Pole w/ 40' Mast Arm	Each
474.60481	Type J Signal Pole w/ 40' Mast Arm (Install Only)	Each
474.60500	Type Q Signal Pole	Each
474.60501	Type Q Signal Pole (Install Only)	Each
474.60540	Type Q Signal Pole w/ 20' Mast Arm	Each
474.60541	Type Q Signal Pole w/ 20' Mast Arm (Install Only)	Each
474.60550	Type Q Signal Pole w/ 25' Mast Arm	Each
474.60551	Type Q Signal Pole w/ 25' Mast Arm (Install Only)	Each
474.60560	Type Q Signal Pole w/ 30' Mast Arm	Each

Item No.	Description	Unit
474.60561	Type Q Signal Pole w/ 30' Mast Arm (Install Only)	Each
474.60570	Type Q Signal Pole w/ 35' Mast Arm	Each
474.60571	Type Q Signal Pole w/ 35' Mast Arm (Install Only)	Each
474.60580	Type Q Signal Pole w/ 40' Mast Arm	Each
474.60581	Type Q Signal Pole w/ 40' Mast Arm (Install Only)	Each
474.60600	Type K Signal Pole	Each
474.60601	Type K Signal Pole (Install Only)	Each
474.60650	Type K Signal Pole w/ 45' Mast Arm	Each
474.60651	Type K Signal Pole w/ 45' Mast Arm (Install Only)	Each
474.60660	Type K Signal Pole w/ 50' Mast Arm	Each
474.60661	Type K Signal Pole w/ 50' Mast Arm (Install Only)	Each
474.60670	Type K Signal Pole w/ 55' Mast Arm	Each
474.60671	Type K Signal Pole w/ 55' Mast Arm (Install Only)	Each
474.60730	Type R Signal Pole	Each
474.60731	Type R Signal Pole (Install Only)	Each
474.60750	Type R Signal Pole w/ 45' Mast Arm	Each
474.60751	Type R Signal Pole w/ 45' Mast Arm (Install Only)	Each
474.60760	Type R Signal Pole w/ 50' Mast Arm	Each
474.60761	Type R Signal Pole w/ 50' Mast Arm (Install Only)	Each
474.60770	Type R Signal Pole w/ 55' Mast Arm	Each
474.60771	Type R Signal Pole w/ 55' Mast Arm (Install Only)	Each
474.60800	Type PB, Push Button Pole	Each
474.60801	Type PB Push Button Pole (Install Only)	Each
474.64000	Wood Pole for Temporary Signals	Each
474.70200	20' Mast Arm	Each
474.70201	20' Mast Arm (Install Only)	Each
474.70250	25' Mast Arm	Each
474.70251	25' Mast Arm (Install Only)	Each
474.70300	30' Mast Arm	Each
474.70301	30' Mast Arm (Install Only)	Each
474.70350	35' Mast Arm	Each
474.70351	35' Mast Arm (Install Only)	Each
474.70400	40' Mast Arm	Each
474.70401	40' Mast Arm (Install Only)	Each
474.70450	45' Mast Arm	Each
474.70451	45' Mast Arm (Install Only)	Each
474.70500	50' Mast Arm	Each
474.70501	50' Mast Arm (Install Only)	Each
474.70550	55' Mast Arm	Each
474.70551	55' Mast Arm (Install Only)	Each
475.61400	Electrical Service Pedestal System, Det 4829	Each
475.61401	Electrical Service Pedestal System, Det 4829 (Install Only)	Each
475.61450	Combination Electrical Service Pedestal and Battery Back-up System, Det 4731	Each

Item No.	Description	Unit
475.61451	Combination Electrical Service Pedestal and Battery Back-up System, Det 4731 (Install Only)	Each
475.62000	Controller Cabinet Assembly, Type P, Det 4730	Each
475.62001	Controller Cabinet Assembly, Type P, Det 4730 (Install Only)	Each
475.83010	Emergency Vehicle Pre-emption Equipment	Each
475.83011	Emergency Vehicle Pre-emption Equipment (Install Only)	Each
475.83020	Railroad Pre-emption Equipment	Each
475.83021	Railroad Pre-emption Equipment (Install Only)	Each
475.85100	Solar Power System	Each
476.00100	Advance Flasher Assembly	Each
476.02010	Traffic Signal Face (Pedestrian) (Countdown Numerals)	Each
476.10000	Solar Advanced Flasher Assembly (Continuous)	Each
476.10010	Solar Advanced Flasher Assembly (Time Clock)	Each
476.12110	12" Signal Indication, Type 'F' Signal Face w/ Type XI Side Mounting Assembly Det 4775	Each
476.12111	12" Signal Indication, Type 'F' Signal Face w/ Type XI Side Mounting Assembly Det 4775 (Install Only)	Each
476.12120	12" Signal Indication, Type 'F' Signal Face w/ Type II Plumbizer Mounting Assembly Det 4778	Each
476.12121	12" Signal Indication, Type 'F' Signal Face w/ Type II Plumbizer Mounting Assembly Det 4778 (Install Only)	Each
476.12150	12" Signal Indication, Type 'F' Signal Face w/ Type V Mounting Assembly Det 4794	Each
476.12170	12" Signal Indication, Type 'F' Signal Face w/ Type VII Mounting Assembly Det 4795	Each
476.12210	12" Signal Indication, Type 'G' Signal Face w/ Type XI Side Mounting Assembly Det 4775	Each
476.12211	12" Signal Indication, Type 'G' Signal Face w/ Type XI Side Mounting Assembly Det 4775 (Install Only)	Each
476.12220	12" Signal Indication, Type 'G' Signal Face w/ Type II Plumbizer Mounting Assembly Det 4778	Each
476.12221	12" Signal Indication, Type 'G' Signal Face w/ Type II Plumbizer Mounting Assembly Det 4778 (Install Only)	Each
476.12250	12" Signal Indication, Type 'G' Signal Face w/ Type V Mounting Assembly Det 4794	Each
476.12270	12" Signal Indication, Type 'G' Signal Face w/ Type VII Mounting Assembly Det 4795	Each
476.12310	12" Signal Indication, Type 'Q' Signal Face w/ Type XI Side Mounting Assembly Det 4775	Each
476.12311	12" Signal Indication, Type 'Q' Signal Face w/ Type XI Side Mounting Assembly Det 4775 (Install Only)	Each
476.12320	12" Signal Indication, Type 'Q' Signal Face w/ Type II Plumbizer Mounting Assembly Det 4778	Each
476.12321	12" Signal Indication, Type 'Q' Signal Face w/ Type II Plumbizer Mounting Assembly Det 4778 (Install Only)	Each
476.12330	12" Signal Indication, Type 'Q' Signal Face w/ Type III Pole Top Mounting Assembly Det 4773	Each
476.12331	12" Signal Indication, Type 'Q' Signal Face w/ Type III Pole Top Mounting Assembly Det 4773 (Install Only)	Each
476.12350	12" Signal Indication, Type 'Q' Signal Face w/ Type V Mounting Assembly Det 4794	Each
476.12370	12" Signal Indication, Type 'Q' Signal Face w/ Type VII Mounting Assembly Det 4795	Each
476.12410	12" Signal Indication, Type 'R' Signal Face w/ Type XI Side Mounting Assembly Det 4775	Each
476.12411	12" Signal Indication, Type 'R' Signal Face w/ Type XI Side Mounting Assembly Det 4775 (Install Only)	Each
476.12420	12" Signal Indication, Type 'R' Signal Face w/ Type II Plumbizer Mounting Assembly Det 4778	Each
476.12421	12" Signal Indication, Type 'R' Signal Face w/ Type II Plumbizer Mounting Assembly Det 4778 (Install Only)	Each
476.12450	12" Signal Indication, Type 'R' Signal Face w/ Type V Mounting Assembly Det 4794	Each
476.12470	12" Signal Indication, Type 'R' Signal Face w/ Type VII Mounting Assembly Det 4795	Each
476.12510	12" Signal Indication, Type 'F (Modified)' Signal Face w/ Type XI Side Mounting Assembly Det 4775	Each
476.12511	12" Signal Indication, Type 'F (Modified)' Signal Face w/ Type XI Side Mounting Assembly Det 4775 (Install Only)	Each
476.12520	12" Signal Indication, Type 'F (Modified)' Signal Face w/ Type II Plumbizer Mounting Assembly Det 4778	Each
476.12521	12" Signal Indication, Type 'F (Modified)' Signal Face w/ Type II Plumbizer Mounting Assembly Det 4778 (Install Only)	Each

Item No.	Description	Unit
476.62010	Pedestrian Signal Indication w/ Type XI Side Mounting Assembly Det 4775	Each
476.62011	Pedestrian Signal Indication w/ Type XI Side Mounting Assembly Det 4775 (Install Only)	Each
476.62015	Pedestrian Signal Indication w/ Type V Mounting Assembly Det 4794	Each
476.62017	Pedestrian Signal Indication w/ Type VII Mounting Assembly Det 4795	Each
477.61120	Luminaire, Mast Arm 12'	Each
477.61121	Luminaire, Mast Arm 12' (Install Only)	Each
477.61150	Luminaire, Mast Arm 15'	Each
477.61151	Luminaire, Mast Arm 15' (Install Only)	Each
477.61200	Luminaire, Mast Arm 20'	Each
477.61201	Luminaire, Mast Arm 20' (Install Only)	Each
477.61250	Luminaire, Mast Arm 25'	Each
477.70040	LED Luminaire Minor Roadway, Horizontal Mount	Each
477.70041	LED Luminaire Minor Roadway, Horizontal Mount (Install Only)	Each
477.70060	LED Luminaire Major Roadway, Horizontal Mount	Each
477.70061	LED Luminaire Major Roadway, Horizontal Mount (Install Only)	Each
477.82500	250 Watt HPS Luminaire (Horizontal Mount)	Each
477.82501	250 Watt HPS Luminaire (Horizontal Mount) (Install Only)	Each
477.84000	400 Watt HPS Luminaire (Horizontal Mount)	Each
478.01000	Electrical Conductors	Lump Sum
481.00200	Inspect Existing ITS Pull Boxes and Conduit	Lump Sum
481.01100	ITS Type A Pull Box Det 4805-1	Each
481.01101	ITS Type A Pull Box Det 4805-1 (Install Only)	Each
481.01200	ITS Type B Pull Box Det 4805-2	Each
481.01201	ITS Type B Pull Box Det 4805-2 (Install Only)	Each
481.01300	ITS Type C Pull Box Det 4805-3	Each
481.01301	ITS Type C Pull Box Det 4805-3 (Install Only)	Each
481.01400	ITS Type D Pull Box Det 4805-4	Each
481.01401	ITS Type D Pull Box Det 4805-4 (Install Only)	Each
481.01500	ITS Type E Pull Box Det 4806	Each
481.01501	ITS Type E Pull Box Det 4806 (Install Only)	Each
481.05300	Geotextile Innerduct 3" 3-Cell	LF
481.05400	Geotextile Innerduct 4" 3-Cell	LF
481.20036	Insert 2" Conduit thru 36" Foundation - Core Drill & Grout	Each
481.61100	2 Inch PVC Fiber Optic Conduit (Trench)	LF
481.61143	2 Inch HDPE Fiber Optic Conduit (Directional Drill)	LF
481.61200	2 1/2 Inch PVC Fiber Optic Conduit (Trench)	LF
481.61243	2 1/2 Inch HDPE Fiber Optic Conduit (Directional Drill)	LF
481.61300	3 Inch PVC Fiber Optic Conduit (Trench)	LF
481.61343	3 Inch HDPE Fiber Optic Conduit (Directional Drill)	LF
481.61400	4 Inch PVC Fiber Optic Conduit (Trench)	LF
481.61443	4 Inch HDPE Fiber Optic Conduit (Directional Drill)	LF
481.64000	Multiduct, Premanufactured 4-Cell PVC Rigid Innerducts with No Outer Duct (Trench)	LF
481.64400	4 Inch Multiduct, Premanufactured with PVC Outer Duct and 4 Rigid Innerducts (Trench)	LF

Item No.	Description	Unit
481.64443	4 Inch Multiduct, Premanufactured with HDPE Outer Duct and 4 Rigid Innerducts (Directional Drill)	LF
482.00012	Fiber Optic Cable (Single Mode 12)	LF
482.00096	Fiber Optic Cable (Single Mode 96)	LF
482.00250	Underground Fiber Optic Splice Closure	Each
482.00251	Underground Fiber Optic Splice Closure (Install Only)	Each
482.00280	Fiber Optic Patch Panel (12 Port)	Each
482.00285	Fiber Optic Patch Panel (96 Port)	Each
482.00290	Fiber Optic Termination Panel (12 Port)	Each
482.00295	Fiber Optic Termination Panel (96 Port)	Each
482.00300	Integrated Fiber Optic Splice and Termination Panel (12 Port)	Each
482.00301	Integrated Fiber Optic Splice and Termination Panel (12 Port) - Install Only	Each
482.00350	Integrated Fiber Optic Splice and Termination Panel (96 Port)	Each
482.00351	Integrated Fiber Optic Splice and Termination Panel (96 Port) - Install Only	Each
482.00400	Jumper Cable	Each
482.00401	Jumper Cable (Install Only)	Each
483.00010	CCTV Camera	Each
483.00030	CCTV Camera Assembly, Analog	Each
483.00031	CCTV Camera Assembly, Analog (Install Only)	Each
483.00040	CCTV Camera Assembly, HD Digital	Each
483.00041	CCTV Camera Assembly, HD Digital (Install Only)	Each
483.00100	CCTV Camera Power Cable	Each
483.00120	CCTV Camera Control Cable	Each
483.00200	CCTV Controller Cabinet Assembly, Type P, Det 4730	Each
483.00201	CCTV Controller Cabinet Assembly, Type P, Det 4730 (Install Only)	Each
484.86001	Dynamic Message Sign (Install Only)	Each
486.10040	Field Hardened Ethernet Backbone Switch	Each
486.10041	Field Hardened Ethernet Backbone Switch (Install Only)	Each
486.10050	Field Hardened Ethernet Access Switch	Each
486.10051	Field Hardened Ethernet Access Switch (Install Only)	Each
486.20100	Wireless Access Point, 2.4 GHZ	Each
486.20101	Wireless Access Point, 2.4 GHZ (Install Only)	Each
486.20150	Wireless Access Point, 5.0 GHZ	Each
486.20151	Wireless Access Point, 5.0 GHZ (Install Only)	Each
486.20200	Rugged Linear 2x2 MIMO Radio, 900 MHZ	Each
486.20201	Rugged Linear 2x2 MIMO Radio, 900 MHZ (Install Only)	Each
486.20210	Rugged Linear 2x2 MIMO Radio, 2.4 GHZ	Each
486.20211	Rugged Linear 2x2 MIMO Radio, 2.4 GHZ (Install Only)	Each
486.20250	Rugged Linear 2x2 MIMO Radio, 5.0 GHZ	Each
486.20251	Rugged Linear 2x2 MIMO Radio, 5.0 GHZ (Install Only)	Each
486.20300	Broadband CPE, 2.4 GHZ	Each
486.20301	Broadband CPE, 2.4 GHZ (Install Only)	Each
486.20350	Broadband CPE, 5.0 GHZ	Each
486.20351	Broadband CPE, 5.0 GHZ (Install Only)	Each

Item No.	Description	Unit
486.30100	Omni Antenna, 2.4 GHZ	Each
486.30101	Omni Antenna, 2.4 GHZ (Install Only)	Each
486.30150	Omni Antenna, 5.0 GHZ	Each
486.30151	Omni Antenna, 5.0 GHZ (Install Only)	Each
486.30200	Dish Antenna, 2.4 GHZ	Each
486.30201	Dish Antenna, 2.4 GHZ (Install Only)	Each
486.30250	Dish Antenna, 5.0 GHZ	Each
486.30251	Dish Antenna, 5.0 GHZ (Install Only)	Each
486.30300	Yagi Antenna, 900 MHZ	Each
486.30301	Yagi Antenna, 900 MHZ (Install Only)	Each
486.30400	Sector Antenna, 900 MHZ	Each
486.30401	Sector Antenna, 900 MHZ (Install Only)	Each
486.30420	Sector Antenna, 2.4 GHZ	Each
486.30421	Sector Antenna, 2.4 GHZ (Install Only)	Each
486.30450	Sector Antenna, 5.0 GHZ	Each
486.30451	Sector Antenna, 5.0 GHZ (Install Only)	Each
486.40100	Industrial Frame Router	Each
486.40101	Industrial Frame Router (Install Only)	Each
486.40200	Field Hardened Network Gateway Router	Each
486.40201	Field Hardened Network Gateway Router (Install Only)	Each
486.50100	Serial Expansion Device	Each
486.50101	Serial Expansion Device (Install Only)	Each
502.01025	Drilled Shaft Foundation, 2.5' Dia.	LF
502.01030	Drilled Shaft Foundation, 3' Dia.	LF
502.01035	Drilled Shaft Foundation, 3.5' Dia.	LF
502.01040	Drilled Shaft Foundation, 4' Dia.	LF
502.01045	Drilled Shaft Foundation, 4.5' Dia.	LF
502.01050	Drilled Shaft Foundation, 5' Dia.	LF
502.01060	Drilled Shaft Foundation, 6' Dia.	LF
502.03000	Drilled Shaft Wet Conditions Extra Cost (Contingent Item)	LF
503.01020	Soldier Pile Shoring	LF
505.01100	MAG Class AA Concrete	CY
505.01300	MAG Class A Concrete	CY
505.01400	MAG Class B Concrete	CY
505.01521	Structural Concrete ADOT Class S, f'c=3000 PSI	CY
505.01529	Structural Concrete ADOT Class S, f'c=2900 PSI	CY
505.01536	Structural Concrete ADOT Class S, f'c=3600 PSI	CY
505.01540	Structural Concrete ADOT Class S, f'c=4000 PSI	CY
505.01543	Structural Concrete ADOT Class S, f'c=4300 PSI	CY
505.01545	Structural Concrete ADOT Class S, f'c=4500 PSI	CY
505.01550	Structural Concrete ADOT Class S, f'c=5000 PSI	CY
505.02100	Reinforcing Steel	LB
505.03000	Restrainer, Vertical (Expansion)	Each

Item No.	Description	Unit
505.03100	Restrainer, Fixed	Each
505.04100	Bridge Deck Joint Assembly (Compression Seal)	LF
505.04110	Bridge Deck Joint Assembly (Strip Seal)	LF
505.05120	Bridge Fence and Parapet	LF
505.05140	Bridge Concrete Barrier	LF
505.05143	F - Shape Concrete Bridge Barrier (32")	LF
505.05151	Concrete Half Barrier Transition, Det 3012-2	Each
505.06000	Reinforced Concrete Approach Slab	SF
505.06401	Concrete Scupper, MAG Det 206, S/W=4', 1-4' Curb opening	Each
505.06501	Concrete Scupper, MAG Det 206, S/W=5', 1-4' Curb opening	Each
505.06502	Concrete Scupper, MAG Det 206, S/W=5', 2-4' Curb openings	Each
505.06503	Concrete Scupper, MAG Det 206, S/W=5', 3-4' Curb openings	Each
505.06511	Concrete Scupper Spillway, MAG Det 206, 1-4' Curb opening	LF
505.06512	Concrete Scupper Spillway, MAG Det 206, 2-4' Curb openings	LF
505.06513	Concrete Scupper Spillway, MAG Det 206, 3-4' Curb openings	LF
505.10100	Catch Basin, MAG Det 530, Type A	Each
505.10110	Catch Basin, MAG Det 531, Type B	Each
505.10120	Catch Basin, MAG Det 532, Type C	Each
505.10130	Catch Basin, MAG Det 533, Type D, L=0	Each
505.10131	Catch Basin, MAG Det 533, Type D, L=3	Each
505.10132	Catch Basin, MAG Det 533, Type D, L=6	Each
505.10133	Catch Basin, MAG Det 533, Type D, L=10	Each
505.10134	Catch Basin, MAG Det 533, Type D, L=17	Each
505.10136	Catch Basin, MAG Det 533, Type D, Sump Double Wing L=6' (Per Wing)	Each
505.10137	Catch Basin, MAG Det 533, Type D, Sump Double Wing L=10' (Per Wing)	Each
505.10138	Catch Basin, MAG Det 533, Type D, Sump Double Wing L=17' (Per Wing)	Each
505.10140	Catch Basin, MAG Det 534, Type E	Each
505.10145	Catch Basin, MAG Det 534, Type E - Double	Each
505.10150	Catch Basin, MAG Det 535, Type F	Each
505.10160	Catch Basin, MAG Det 537, Type G	Each
505.10165	Catch Basin, MAG Det 537, Type G - Double	Each
505.10170	Catch Basin, MAG Det 538, Type H	Each
505.12110	Catch Basin, ADOT C-15.10, Type 1	Each
505.12120	Catch Basin, ADOT C-15.10, Type 1 - Double	Each
505.12140	Catch Basin ADOT C-15.30, Type 4 - Single	Each
505.12300	Catch Basin, ADOT C-15.80, Flush w/ Apron	Each
505.12301	Concrete Apron, ADOT C-15.80	Each
505.12310	Catch Basin, ADOT C-15.81, Side Slope w/ Apron	Each
505.12320	Catch Basin, ADOT C-15.91, Type B Curb	Each
505.13612	Catch Basin COP Std. P-1569-1, Type M	Each
505.13614	Catch Basin COP Std P-1569-1, Type M-1, L=3'	Each
505.13615	Catch Basin COP Std P-1569-1, Type M-1, L=6'	Each
505.13616	Catch Basin COP Std P-1569-1, Type M-1, L=10'	Each

Item No.	Description	Unit
505.13617	Catch Basin COP Std P-1569-1, Type M-1, L=17'	Each
505.13624	Catch Basin COP Std P-1569-1, Type M-2, L=3'	Each
505.13625	Catch Basin COP Std P-1569-1, Type M-2, L=6'	Each
505.13626	Catch Basin COP Std P-1569-1, Type M-2, L=10'	Each
505.13627	Catch Basin COP Std P-1569-1, Type M-2, L=17'	Each
505.13712	Catch Basin COP Std. P-1569-2, Type M	Each
505.13714	Catch Basin COP Std P-1569-2, Type M-1, L=3'	Each
505.13715	Catch Basin COP Std P-1569-2, Type M-1, L=6'	Each
505.13716	Catch Basin COP Std P-1569-2, Type M-1, L=10'	Each
505.13717	Catch Basin COP Std P-1569-2, Type M-1, L=17'	Each
505.13724	Catch Basin COP Std P-1569-2, Type M-2, L=3'	Each
505.13725	Catch Basin COP Std P-1569-2, Type M-2, L=6'	Each
505.13726	Catch Basin COP Std P-1569-2, Type M-2, L=10'	Each
505.13727	Catch Basin COP Std P-1569-2, Type M-2, L=17'	Each
505.13800	Catch Basin, Mesa Det M-64	Each
505.13845	Catch Basin, Mesa Det M-64, Type E - Double	Each
505.17002	2' Concrete Cut-Off Walls, MAG Det 552 (Upstream)	LF
505.17014	4' Concrete Cut-Off Walls, MAG Det 552 (Downstream, w/ weep holes and aggregate drain)	LF
505.18000	Retaining Wall, ADOT SD 7.01	SF
505.20080	MAG Class A Non-Reinforced Concrete Slab 8" Thick	SF
505.20090	MAG Class A Non-Reinforced Concrete Slab 9" Thick	SF
505.40511	Concrete Slipform Ditch Lining (Structural Concrete, f'c=3,000 psi), B=1'	LF
505.40512	Concrete Slipform Ditch Lining (Structural Concrete, f'c=3,000 psi), B=2'	LF
505.40513	Hand-Placed Concrete Canal Lining (Structural Concrete, f'c=3,000 psi)	CY
506.01300	Precast Concrete Beams, ASSHTO Type III	LF
506.06000	Elastomeric Bearing Pads	Each
508.07010	Cattle Guard, ADOT C-11.10, 10-Grill Units	Each
508.07200	Cattle Guard, Drainage Type, ADOT C-11.20 [IDENTIFY # GRILL UNITS]	Each
510.10000	Concrete Block Junction Box [Indicate Size], MAG Det 504	Each
515.10000	Flap Gate, Waterman Model F-10 w/Setting Collar, for 48" Pipe or approved equal	Each
515.20006	Bollard, 6" Dia., MAG Det 140, Type I	Each
515.30000	Access Gates [Indicate Size]	Each
515.40100	Steel Jacket Assembly [Indicate Size] per Column	Each
516.02610	Irrigation Gate, Waterman Canal Model C-10, (24")	Each
520.01035	Safety Rail (Height = 3'-6") MAG Det 145	LF
520.01047	Safety Rail (Height = 4'-8") MAG Det 145	LF
523.01010	Headwall (Concrete)	SF
523.01020	Headwall (Block)	SF
523.10118	Headwall, MAG Det 501, Straight Type, 18" Pipe	Each
523.10124	Headwall, MAG Det 501, Straight Type, 24" Pipe	Each
523.10130	Headwall, MAG Det 501, Straight Type, 30" Pipe	Each
523.10136	Headwall, MAG Det 501, Straight Type, 36" Pipe	Each
523.10142	Headwall, MAG Det 501, Straight Type, 42" Pipe	Each

Item No.	Description	Unit
523.10148	Headwall, MAG Det 501, Straight Type, 48" Pipe	Each
523.10224	Headwall, MAG Det 501, Straight Type, 2-24" Pipe	Each
523.10230	Headwall, MAG Det 501, Straight Type, 2-30" Pipe	Each
523.10236	Headwall, MAG Det 501, Straight Type, 2-36" Pipe	Each
523.10242	Headwall, MAG Det 501, Straight Type, 2-42" Pipe	Each
523.10318	Headwall, MAG Det 501, Straight Type, 3-18" Pipe	Each
523.11118	Headwall, MAG Det 501, 'L' Type, 18" Pipe	Each
523.11124	Headwall, MAG Det 501, 'L' Type, 24" Pipe	Each
523.11130	Headwall, MAG Det 501, 'L' Type, 30" Pipe	Each
523.11136	Headwall, MAG Det 501, 'L' Type, 36" Pipe	Each
523.12112	Headwall, MAG Det 501, 'U' Type, 12" Pipe	Each
523.12118	Headwall, MAG Det 501, 'U' Type, 18" Pipe	Each
523.12124	Headwall, MAG Det 501, 'U' Type, 24" Pipe	Each
523.12130	Headwall, MAG Det 501, 'U' Type, 30" Pipe	Each
523.12136	Headwall, MAG Det 501, 'U' Type, 36" Pipe	Each
523.12148	Headwall, MAG Det 501, 'U' Type, 48" Pipe	Each
523.12236	Headwall, MAG Det 501, 'U' Type, 2-36" Pipe	Each
523.12330	Headwall, MAG Det 501, 'U' Type, 3-30" Pipe	Each
523.12342	Headwall, MAG Det 501, 'U' Type, 3-42" Pipe	Each
523.13148	Headwall, Inlet (1:4), MAG Det 501-3, 48" Pipe	Each
523.13248	Headwall, Outlet (1:4), MAG Det 501-3, 48" Pipe	Each
523.13266	Headwall, Outlet (1:4), MAG Det. 501-3, 66" Pipe	Each
523.14124	Headwall, MAG Det 501-4, 24" Pipe	Each
523.14130	Headwall, MAG Det 501-4, 30" Pipe	Each
523.15230	Headwall, Drop Inlet, MAG Det 501-5, 2-30" Pipe	Each
523.30118	Access Barrier, 18" PHX Det P1563	Each
523.30124	Access Barrier, 24" PHX Det P1563	Each
523.30130	Access Barrier, 30" PHX Det P1563	Each
523.30136	Access Barrier, 36" PHX Det P1563	Each
523.30142	Access Barrier, 42" PHX Det P1563	Each
523.30148	Access Barrier, 48" PHX Det P1563	Each
523.30166	Access Barrier, 66" Phx. Det. P1563	Each
523.71130	Headwall, ADOT B-11.11, 30" Pipe	Each
523.71230	Headwall, ADOT B-11.11, 2-30" Pipe	Each
523.71236	Headwall, ADOT B-11.11, 2-36" Pipe	Each
523.71240	Headwall, ADOT B-11.11, 2-24" Pipe	Each
523.71330	Headwall, ADOT B-11.11, 3-30" Pipe	Each
523.71336	Headwall, ADOT B-11.11, 3-36" Pipe	Each
523.71436	Headwall, ADOT B-11.11, 4-36" Pipe	Each
523.71442	Headwall, ADOT B-11.11, 4-42" Pipe	Each
523.74348	Headwall, ADOT B-11.14, 3-48" Pipe	Each
523.85196	Headwall, Outlet ADOT B-12.50, 96" Pipe	Each
525.02000	Pneumatically Placed Mortar (Shotcrete) [Indicate Thickness]	SY

Item No.	Description	Unit
525.02075	Pneumatically Placed Mortar, 3" Thick	SF
525.02100	Pneumatically Placed Mortar, 4" Thick	SF
525.02150	Pneumatically Placed Mortar (Shotcrete) 6" Thick	SY
525.03100	Channel Lining, Concrete or Pneumatically Placed Mortar, 4" Thick	SY
525.03216	Channel Lining, Concrete, 3" Thick	SY
535.21000	Pressure Crack Filling	LF
535.22000	Gravity Crack Filling	SF
540.44000	Scour Monitoring System Testing and Activation	Lump Sum
602.20024	Steel Casing Pipe Sleeve, ASTM A-283 Grade C,24"Dia. x (0.375") Thick	LF
603.30018	18" HDPE	LF
603.30024	24" HDPE	LF
603.30030	30" HDPE	LF
604.01005	Controlled Low Strength Material, ½ Sack	CY
604.01010	Controlled Low Strength Material, 1 Sack	CY
604.01015	Controlled Low Strength Material, 1½ Sack	CY
610.01006	6" AWWA C-900, Class 150 Waterline w/ Fittings	LF
610.01008	8" AWWA C-900, Class 150 Waterline w/ Fittings	LF
610.02006	6" Ductile Iron Pipe Waterline w/ Fittings	LF
610.02008	8" Ductile Iron Pipe Waterline w/ Fittings	LF
610.02012	12" Ductile Iron Pipe Waterline w/ Fittings	LF
610.02016	16" Ductile Iron Pipe Waterline w/ Fittings	LF
610.02024	24" Ductile Iron Pipe Waterline w/ Fittings	LF
610.02030	30" Ductile Iron Pipe Waterline w/ Fittings	LF
610.02036	36" Ductile Iron Pipe Waterline w/ Fittings	LF
610.05106	Vert. Realign 6" Waterline, MAG Det 370	Each
610.05112	Vert. Realign 12" Waterline, MAG Det 370	Each
610.05116	Vert. Realign 16" Waterline at 90" Storm Drain Per MAG Det 370	Each
610.06001	Construct Pipe Support MAG Det 403-1 Type A	Each
610.10108	Concrete Encasement w/ Reinforcement, 8" Pipe, MAG Det 404	LF
610.10110	Concrete Encasement w/ Reinforcement, 10" Pipe, MAG Det 404	LF
610.10208	Concrete Encasement w/o Reinforcement, 8" Pipe, MAG Det 404	LF
610.10210	Concrete Encasement w/o Reinforcement, 10" Pipe, MAG Det 404	LF
610.27000	Relocate Fire Hydrant, MAG Det 360	Each
610.27500	Adjust Fire Hydrant, MAG Det 360	Each
610.28500	Install Fire Hydrant, MAG Det 360	Each
615.04006	6" PVC Sanitary Sewer Pipe	LF
615.04008	8" PVC Sanitary Sewer Pipe	LF
615.04010	10" PVC Sanitary Sewer Pipe	LF
615.04012	12" PVC Sanitary Sewer Pipe	LF
615.04018	18" PVC Sanitary Sewer Pipe	LF
615.04021	21" PVC Sanitary Sewer Pipe	LF
615.10008	8" DIP, Restrained Joints	LF
615.10012	12" DIP, Restrained Joints	LF

Item No.	Description	Unit
615.10024	24" DIP, Restrained Joints	LF
615.10030	30" DIP, Restrained Joints	LF
615.20018	18" Ductile Iron Pipe w/ Fittings	LF
618.00100	Storm Drain Lateral Pipe Connection, MAG Det 524	Each
618.00718	Concrete Pipe Encasement, MAG Det 507, 18" Pipe	LF
618.00724	Concrete Pipe Encasement, MAG Det 507, 24" Pipe	LF
618.00808	Pipe Plug, MAG Det 427, 8" Pipe	Each
618.00812	Pipe Plug, MAG Det 427, 12" Pipe	Each
618.00815	Pipe Plug, MAG Det 427, 15" Pipe	Each
618.00818	Pipe Plug, MAG Det 427, 18" Pipe	Each
618.00824	Pipe Plug, MAG Det 427, 24" Pipe	Each
618.00836	Pipe Plug, MAG Det 427, 36" Pipe	Each
618.00842	Pipe Plug, MAG Det 427, 42" Pipe	Each
618.00860	Pipe Plug, MAG Det 427, 60" Pipe	Each
618.00860	Pipe Plug, MAG Det 427, 60" Pipe	Each
618.00915	Concrete Pipe Collar for 15" Pipe, MAG Det 505	Each
618.00918	Concrete Pipe Collar for 18" Pipe, MAG Det 505	Each
618.00924	Concrete Pipe Collar for 24" Pipe, MAG Det 505	Each
618.00930	Concrete Pipe Collar for 30" Pipe, MAG Det 505	Each
618.00942	Concrete Pipe Collar for 42" Pipe, MAG Det 505	Each
618.00945	Concrete Pipe Collar for 45" Pipe, MAG Det 505	Each
618.01018	Concrete End Section 18" Pipe	Each
618.01024	End Section 24" Pipe, MAG Det 545	Each
618.01030	End Section 30" Pipe, MAG Det 545	Each
618.01036	End Section 36" Pipe, MAG Det 545	Each
618.20312	12" RGRCP, Class III	LF
618.20315	15" RGRCP, Class III	LF
618.20318	18" RGRCP, Class III	LF
618.20324	24" RGRCP, Class III	LF
618.20327	27" RGRCP, Class III	LF
618.20330	30" RGRCP, Class III	LF
618.20336	36" RGRCP, Class III	LF
618.20342	42" RGRCP, Class III	LF
618.20348	48" RGRCP, Class III	LF
618.20354	54" RGRCP, Class III	LF
618.20360	60" RGRCP, Class III	LF
618.20366	66" RGRCP, Class III	LF
618.20390	90" RGRCP, Class III	LF
618.20412	12" RGRCP, Class IV	LF
618.20415	15" RGRCP, Class IV	LF
618.20418	18" RGRCP, Class IV	LF
618.20424	24" RGRCP, Class IV	LF
618.20430	30" RGRCP, Class IV	LF

Item No.	Description	Unit
618.20436	36" RGRCP, Class IV	LF
618.20442	42" RGRCP, Class IV	LF
618.20448	48" RGRCP, Class IV	LF
618.20454	54" RGRCP, Class IV	LF
618.20460	60" RGRCP, Class IV	LF
618.20466	66" RGRCP, Class IV	LF
618.20472	72" RGRCP, Class IV	LF
618.20512	12" RGRCP, Class V	LF
618.20515	15" RGRCP, Class V	LF
618.20518	18" RGRCP, Class V	LF
618.20524	24" RGRCP, Class V	LF
618.20530	30" RGRCP, Class V	LF
618.20536	36" RGRCP, Class V	LF
618.20548	48" RGRCP, Class V	LF
618.20560	60" RGRCP, Class V	LF
618.21318	18" x 28" RGRCP Arch Pipe, Class A-III	LF
618.21322	22" x 36" RGRCP Arch Pipe, Class A-III	LF
618.21418	18" x 28" RGRCP Arch Pipe, Class A-IV	LF
618.21422	22" x 36" RGRCP Arch Pipe, Class A-IV	LF
618.22429	29" x 45" HERGRCP, Class HE-IV	LF
618.23445	45" x 29" VERGRCP, Class VE-IV	LF
621.10000	Φ CMP, [Indicate gauge & coating]	LF
621.10180	18" CMP, 18 Gauge (0.052" thickness), Galvanized	LF
621.10240	24" CMP, 18 Gauge (0.052" thickness), Galvanized	LF
621.10300	30" CMP, 18 Gauge (0.052" thickness), Galvanized	LF
621.10360	36" CMP, 18 Gauge (0.052" thickness), Galvanized	LF
621.10420	42" CMP, 18 Gauge (0.052" thickness), Galvanized	LF
621.11480	48" CMP, 16 Gauge, Bituminous-Coated Type A	LF
621.30150	End Section 15" CMP	Each
621.30180	End Section 18" CMP	Each
621.30240	End Section 24" CMP	Each
621.30251	End Section 28" x 20" CMPA, Bituminous Coated AASHTO M-190	Each
621.30300	End Section 30" CMP	Each
621.30420	End Section 42" CMP	Each
621.30480	End Section 48" CMP	Each
621.31361	Double End Section For 36" CMP, ADOT C-13.10, Bituminous Coated, AASHTO M-190	Each
621.50018	18" Slotted Drain, ADOT C-13.60	LF
622.01015	Pipe Culvert, 15" Diameter	LF
622.01024	Pipe Culvert, 24" Diameter	LF
622.01048	Pipe Culvert, 48" Diameter	LF
622.03024	Flared End Section for 24" Pipe Culvert	Each
625.01010	48" Sanitary Sewer Manhole, MAG Det 420 & 424	Each
625.01020	60" Sanitary Sewer Manhole, MAG Det 420 & 424	Each

Item No.	Description	Unit
625.01100	Storm Drain Manhole, MAG Det 520 & 522	Each
625.01103	Storm Drain Manhole; MAG Det 520 & 522 W/5' Diameter Shaft	Each
625.01200	Storm Drain Manhole, MAG Det 521 & 522 (D = INDICATE DIAMETER)	Each
625.01260	Storm Drain Manhole, MAG Det 521 & 522, 60" Pipe	Each
625.01354	Storm Drain Manhole Junction Structure, Det. S2	Each
625.01366	Storm Drain Manhole Junction Structure, Det. S1	Each
625.10101	Drywell, additional depth beyond basic bid	LF
625.10130	Drywell, "Maxiwell IV" or equal, basic depth 30'	Each
625.10160	Drywell, "Maxwell IV" Or Equal, Basic Depth 60'	Each
625.21100	Irrigation Standpipe, MAG Det 503, Type A	Each
630.01104	4" Gate Valve w/ Box & Cover	Each
630.01106	6" Gate Valve w/ Box & Cover	Each
630.01108	8" Gate Valve w/ Box & Cover	Each
630.01112	12" Gate Valve w/ Box & Cover	Each
630.01116	16" Gate Valve w/ Box & Cover	Each
635.04100	Concrete Lined (Irrigation) Ditch with 1' Bottom	LF
635.04200	Concrete Lined (Irrigation) Ditch with 2' Bottom	LF
635.04300	Concrete Lined (Irrigation) Ditch with 3' Bottom	LF
636.03040	Irrigation Canal Lining, Pneumatically Placed Mortar (4")	SY
636.40000	Irrigation Canal Lining, Class A Concrete	SY
711.01410	Rubber Asphalt Binder (RAB)	Ton
713.01000	Emulsified Asphalt (SS-1h, Diluted)	Ton
725.20000	Portland Cement ASTM C-150, Type II	Ton
725.20002	Portland Cement ASTM C-150, Type II (Contingent Item)	Ton