



KEY:

X - Included in price, complete
F = Furnish only
I = Install only
RI - Rough-in services an/or infrastructure
C = Coordination

ITEM DESCRIPTION

HENSEL PHELPS
Mechanical
Electrical
Plumbing
Owner
Other

COMMENTS

Review the required contract inclusions below and input trade responsibilities per the above key.
Note: Highlighted rows do not require input.

If a scope is noted as by "Other", input which trade will be completing the scope within the COMMENTS column. If there is a scope gap with a monetary impact and will require funding, input the assumed dollar value (and logic).

A1030 - PITS, PADS AND CURBS, TRENCHES

Housekeeping Pads and Curbs						x	Pads to be completed by Hardrock Concrete
Layout and anchor bolts for pads						x	Pads to be completed by Hardrock Concrete
Form, pour and finish pads						x	Pads to be completed by Hardrock Concrete
Rebar and/or wire mesh for pads						x	Pads to be completed by Hardrock Concrete
Layout for pads		x	x	x			Pads to be completed by Hardrock Concrete

B30 - ROOFING

Roof Drains				x			
Flashing for Roof Penetrations						x	plumber excluded this- need to make sure it is captured by the roofer

C10 - INTERIOR CONSTRUCTION

Blocking/backing/wall and ceiling reinforcing for Electrical/Plumbing/Mech equipment		x	x	x			
Thermal and Moisture Protection:							
Fire safing and caulking for this Subcontractor's work only		x	x	x			
Acoustical caulking as required for this Subcontractor's work only		x	x	x			
Caulking of plumbing fixtures				x			
Sleeves, blockouts, anchors and embeds		x	x	x			
Touch up painting for this Subcontractor's equipment							Excluded by all, need to include with Painter
Access panels for this Subcontractor's work only		F	F	F		I	furnish only
Architectural louvers							Excluded by Mech sub, need to be accounted for with Mech
Id and Labeling for this Subcontractor's work only		x	x	x			
Duct System Cleaning		x					
Exterior and Interior Painting (including duct, piping, and supports)						x	Excluded by all trades, need to include with Painter
Power to doors with elec, electromag, etc. devices			x				

D20 - PLUMBING

D2010 - Plumbing Fixtures							
Water Closets				x			
Urinals				x			
Lavatories				x			
Automatic flush valves and bathroom sensors							electrical is excluded with plumber and electrician forlow voltage, Alternate in Plumbing Subcontract needs to be executed



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Sinks				x				
Janitors Sinks				x				
Glass Showers Enclosures - regular and emergency		x						
Electric Water Coolers/Drinking Fountains				x				
D2020 - Domestic Water Distribution								
Kitchen Equipment Backflow/regulators						x		Covered by Food Service and Laundry Sub
Domestic Water Heating Equipment/Low voltage wiring				F				furnish only- no wiring, Need to execute alternate in Plumbing Subcontract
Insulation				x				
Domestic Water Piping				x				
Water meters					x			
Backflow Preventers/Regulators				x				
Carriers				x				
Cleanouts				x				
Electric Heating Cables - Heat Tracing				x				
D2030 - Sanitary Waste								
Ejectors				x				
Waste & Vent Piping				x				
Storm Drainage Piping				x				
Floor and Area Drains				x				excludes waterproofing at opening, to be provided by Roofer
D30 - HVAC								
D3030 - Cooling Generating Systems								
Chilled Water Systems			x					
D3040 - Distribution Systems								
Air Distribution Systems - Ductwork, AHUs, FTUs, VAVs, air devices, etc.			x					
Diffusers, Registers, Grilles & Fire/Smoke Dampers, Smoke Detectors, Heat Detectors			x					
HW/CW, condenser, refrigerant piping, insulation, valves, accessories			x					
Supply and exhaust fans			x					
Duct smoke detectors			I					Mechanical to install only- electrical excluded furnishing



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Condensate piping			x		x			scope double up
Condensate Pumps								Excluded by Mechanical & Plumbing Subcontractor, need to be accounted for by Mechanical
D3050 - Terminal & Package Units								
Fan Coil Units			x					
Motors								
VFD's			F	I				Installation by Electrical
Starters and Disconnects				x				excluded by mech
D3060 - Controls & Instrumentation								
HVAC/Lighting/Temperature Controls			x					
Integrated Automation System - complete								
Conduit and other pathways								to be install by electrical sub- excluded by electrical subcontractor
Wire and cable			x					
Devices, equipment, programming			x					
Furnish and install HVAC control panels			x					
D3070 - Systems Testing, Balancing, Commissioning								
System Balancing			x					
Air & Water Balance Services			x					
D50 - Electrical								
D5010 - Electrical Service & Distribution								
Main Service to buildings - complete, to include switchgear, transformers, substations				x				
Secondary Distribution - complete, to include switches, ckt breakers, equipment connections				x				
Motors, Motor Control Centers, Motor Controllers				x				
Starters and disconnects				x				
Fuses				x				
General power to receptacles				x				
Temp power to temp HVAC systems								excluded by both Elect and HVAC Subcontracts
D5020 - Lighting								



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Interior Lighting - to include specialty, emergency

x

Lighting Controls - standard, dimming, sensors, connection to BAS

x

Temporary task lighting for alternate trades

x

x

Temp egress lighting

x

D5030 - Communications (C4I / IT) & Security

Vertical IT backbone cable infrastructure (copper and fiber)

x

Horizontal IT backbone cable infrastructure (copper and fiber)

x

E10 - EQUIPMENT

Toilet and Bath Accessories (Low voltage)

alternate within Plumbing subcontract

Kitchen Equipment

I

F

To be installed by Plumber, furnished by Kitchen and Laundry Subcontractor

Interconnecting piping and accessories

x

E20 - FURNISHINGS

Furniture

Provide power, data, voice and other services to faceplates of systems furniture (GFGI FF&E)

x

G30 - SITE CIVIL / MECHANICAL UTILITIES

G3010 - Water Supply

Domestic water distribution from main to within 10' of building

5' per contract, need additional funding from Plumber

Water for landscaping - hose bibbs at building perimeter only

x

by Landscaping Subcontractor

Temp Backflow Preventer for construction use

x

Temp hose bib connections required for construction use

Excluded

Water meter usage feeds (for Construction Phasing)

x

G3020 - Sanitary & Storm Sewer

Sanitary sewer from main to within 10' of building

5' per contract, need additional funding from Plumber

Storm drainage from main to within 10' of building

5' per contract, need additional funding from Plumber



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Mechanical Contractor Representative

Date

Electrical Contractor Representative

Date

Plumbing Contractor Representative

Date

SCOPE GAPS WITH MONETARY IMPACT	ESTIMATED \$ VALUE	CONTINGENCY REQUIRED FOR WHAT TRADE?
Architectural louvers	\$ 25,000.00	Mechanical
Automatic flush valves and bathroom sensors	\$ 67,500.00	Plumbing
Domestic Water Heating Equipment/Low voltage wiring	Inc in Above	Plumbing
Duct smoke detectors	\$ 25,000.00	Electrical
Condensate Pumps	\$ 25,000.00	Plumbing
Conduit and other pathways (for Controls)	\$ 75,000.00	Electrical
Temp power to temp HVAC systems	\$ 75,000.00	Electrical
Toilet and Bath Accessories	Inc in Above	Plumbing
Domestic water distribution from main to within 10' of building	\$ 5,000.00	Plumbing
Temp hose bib connections required for construction use	\$ 5,000.00	Plumbing
Sanitary sewer from main to within 10' of building	\$ 5,000.00	Plumbing
Storm drainage from main to within 10' of building	\$ 5,000.00	Plumbing

TOTALS:		SUGGESTED CONTINGENCY	
Mechanical	\$ 25,000.00	Mechanical (1% of contract)	\$ 17,562.00
Electrical	\$ 175,000.00	Electrical (3% of contract)	\$ 120,320.00
Plumbing	\$ 112,500.00	Plumbing (3% of contract)	\$ 114,630.00