City of Phoenix
Office of the City Engineer
Design and Construction Procurement

FIRE STATION 74 DESIGN-BID-BUILD
FD57100020

ADDENDUM NO. 1

ISSUE DATE: August 9, 2024

Bidders are hereby notified that the Bidding and Contract Documents for the above project, for which Bids are to be received on August 20, 2024**,** are amended as follows:

Q1.	Detail 44/A4.05 at Decon Ldry/Janitor 141 - The section callout 16/A13.11 through the cabinet next to dryers should be 17/A13.11? Reference: 44/A4.05, 16/A13.11
A1.	Correct. Detail notation on 44/A4.05 should read 17/A13.11
Q2.	Detail 44/A4.05 at Decon Ldry/Janitor 141 - Keynote 26 calls for stainless steel backsplash to underside of cabinets at countertop locations, however the elevation shows wall tile. Please clarify. Reference: 44/A4.05, 16/A13.11
A2.	Keynote 26 does not apply to this interior elevation. Decon Shower/Laundry/Janitor is floor to ceiling wall tile CT-1, with exception to stainless steel surround at mop sink.
Q3.	Detail 16/A4.02 Kitchen the base cabinet to left of range top has a section detail 6/A13.10 that calls for Plam cabinets, however the cabinets to the right of the range are noted with keynote 28 to be stainless steel. Please clarify if all cabinets in the kitchen are to be stainless steel, or if in fact some are plastic laminate. Reference: 16/A4.02, 6/13.10
A3.	All cabinets in Kitchen are to be stainless steel, uppers and lowers. Detail 16/A13.10 is shown to be drawn as stainless-steel construction. Note should read stainless steel and not plastic laminate.
Q4.	A3.31 the Dorm Lockers and under bed lockers are called out Penco - Plan notes call out keynote #20 Modular Furniture See finish schedule OFOI. Please confirm that the Dorm lockers and Under bed lockers are OFOI. Reference: Metal Lockers A3.31
A4.	All dorm furniture will be purchased through the owner's F.F.E. allowance
Q5.	Millwork section calls out for stainless steel toe base - Finish schedule shows rubber base - Please clarify base in Kitchen 108.Reference: 17/A4.02, 8/13.10.
A5.	Stainless steel toe base occurs at all stainless-steel base cabinets within kitchen 108. Walls within kitchen 108 with gypsum board/paint wall finish will have rubber base, see 15-16/A4.02.
Q6.	Removal Note 5 on C2.1 calls to salvage boulders; however, the plans do not indicate where they are to be salvaged to. Please clarify where the boulders are to be placed. Reference: C2.1.
A6.	All remaining boulders that were not relocated to Bursera Trailhead parking relocation can be used on site in lieu of purchased boulders. Drawings show location of boulders (purchased). If any of the boulders that were to be moved to the Bursera Trailhead remain on site, they may be used on site in lieu of purchased boulders.
Q7.	5/A1.23 the finial ball ornament is a gold anodized color and the flagpole and flash collar color is a clear anodized. While in the spec book on page 501 section 2.02 B the color of the ball

	ornament, flagpole, and hardware are a bronze anodized finish. Can you please confirm which finish we are using for the finish of the flagpole? Reference: 5/A1.23, Spec. Div 10 75 00
A7.	Spec updated to match 5/A1.23 as spun aluminum gold anodized finial ball and 1/4" thick gold anodized casting plate and clear anodized flagpole. New Spec Attached
Q8.	Sheet E4.2 shows a design for dispatch system, however spec Div 27 is noted as "None in this project". Please confirm that the dispatch system is not part of the scope of work, all we need to provide is the rough-in? Reference: E4.2
A8.	Not required in the scope of work. The city of Phoenix employees or hired contractors will provide and install all Cat6-low voltage wiring, and electronic equipment associated with security systems, cameras, access control, voice/data/Wi-Fi, and Dispatch Equipment. The general contractor is responsible to provide and install all back boxes, cabinets, conduits, raceways and wire racks as specified in the documents. The Dispatch Plan and other Special Systems drawings are included to show where the dispatch system equipment and other Special Systems rough in will occur or are to be located All other low voltage control wiring for system control is the responsibility of the general contractor or related sub-contractors. i.e. lighting, door controls, HVAC, fire alarm to name a few but may not be all inclusive.
Q9.	Generator spec section Part 1.5 Post. Contract Maintenance Section B, states "As part of the of bid/proposal, include a quote for maintenance contract to provide all maintenance, tests…. Including hourly rates for technicians…" Can you please confirm this is required when submitting bid? If so, can you please revise the bid form to include lines for these prices. Reference: Spec 26 32 13
A9.	This is not required and can be omitted from project scopes. If the City moves forward to contract these services, it will be done via change order.
Q10.	Sheet LP1.1 there is a note that states, "Temporary nursery - water for the temporary nursery will be provided by a temporary water tank on-site." Please clarify if this tank is to be provided by the City or GC/Subcontractor. Reference: LP1.1
A10.	GC to provide temporary water for the purpose of maintaining the nursery while in place. It does not need to be a tank, but it will be the GC responsibility to provide the water and nursery space to ensure these plants survive during nursery and transplant timeframes.
Q11.	KN#2 on E2.1, can you please clarify that the ceiling fans are not part of the scope of work that GC's are to provide? Reference: E2.1
A11.	GC to provide and install ceiling fans as noted on plans. There is an allowance in place for Owner/Owner's Rep to select prior to purchase and installation. The markups or additional costs associated with these allowances shall be included in the base fee per spec 01 21 00 section 1.05
Q12.	Plans call out using City of Phoenix Standard Details. We were able to find. several copies of standard details for public works construction on Phoenix website. Please confirm that the 2021 version is the most current and the one that should be used.
A12.	This is a City required note and must be written as using the latest documents. As of 8/1/24 those documents are the 2015 City of Phoenix Supplement to the 2015 Mag Specifications, and the 2021 City of Phoenix Supplement to the 2019 Mag Details.
Q13.	A2.21 the "S" signifies that Sound attenuation blanket full depth and height of partitions noted is required. Keynote 12/A2.01 says all interior walls shall receive sound attenuation insulation See wall types. Please confirm it is only the wall types called out with "S" as noted on A2.21, and not all interior walls as there are several without the "S" designation. Reference: A2.21 Wall Types and Keynote #12/A2.01
A13.	Walls with "S" designation are to be fully insulated with sound attenuation insulation. General note 2/A2.01 to read "all interior walls noted with subcript "S"…..".
Q14.	Separation walls at the Decon Shower only go up to 10' high but are called out as Type J fastened to underside of roof deck. On Building Sec. B/A8.01 these walls are shown only going to top of ceiling. Do you want insulation in these walls? Please clarify height and if you want insulation here. Reference: A2.21 Wall Types and B/A8.01
A14.	Wall Type "J" states "….terminate at gypsum board ceiling, see finish schedule for finish and color." Yes, the walls that encapsulate the shower stalls will be insulated up to the finish

	ceiling.
Q15.	There is a spec section specific for the overhead sectional door but not for the overhead coil-up door shown on J/A3.01. Please provide a spec section specifically for the overhead coil-up door. Reference: J/A3.01
A15.	An updated spec has been included for the coiling door at the fitness. The coiling door is what is expected to be installed at this location.
Q16.	KN#10, "Provide Cable TV Cabinet" since DIV 27 Communication is not part of the scope, please clarify if the TV cabinet is part of the scope of work. Reference: E3.1
A16.	Keynote 10 states "refer to sheet E5.3 for details and additional information" Keynote 10 is shown in Electrical/I.T.room as enlarged detail on E3.1. Refer to "cable tv riser diagram" Boxes, raceways are to be provided. Low voltage cabling only by city forces, See Item 2 above.
Q17.	Please confirm if the cable tray is part of the scope of work if so, can you please provide more detail about the size / model of the cable tray? Reference: E4.1
A17.	Yes, Nonspecific manufacturer 24” wide cable tray to be installed above ceiling as shown on E4.1 and installed by the GC for all to use for low voltage cabling runs. Additionally, please disregard the Electrical Contractor note on the left side of the bays on the sheet. It was left in error.
Q18.	Conduits from cable tray to IT room, for bidding purposes, can you provide the quantity and size of the conduits required? Reference: E4.1
A18.	Provide (4) 4" empty conduits with nylon pull string.
Q19.	Sheet P5.01 Sand Oil Interceptor, it calls out for 562 gallon capacity, however on sheet P2.01, it is noted as 1,000 gallon, can you please clarify which size is correct? Reference: P2.01, P5.01
A19.	This will be a 500-gallon interceptor.
Q20.	Sheet P2.01 the sewer line on the north end of the building from the building to the grease interceptor is called out as being 3". However, on CW2.1 this same sewer line is called out as 4". Please clarify the size of this sewer line. Reference: P2.01 & CW2.1
A20.	These will change to 4" on plumbing from Kitchen to and from grease interceptor.
Q21.	Sheet P2.01 there is a 2" clean out on a 3" sewer line on the north side of the building. Please clarify if this is still the intent if the sewer line is 4". Reference: P2.01
A21.	The cleanout and 3" sewer line will be revised to 4"
Q22.	Both sheets COW2.1 & COW2.2 have a note stating that the offsite water extension from STA 3+17 to STA 6+67 is to be provided as a line-item unit cost by the contractor, as the costs associated with this are to be tracked due to different funding sources. On sheet COW2.1 There is a solid line at STA 3+17, however on COW2.2 there is a call out with an arrow to the end of the water line stating bid itemized limits. Is the line-item unit cost just for the 8" water line or, is it to include all scope of work between STA 3+17 to STA 6+67 including trench & backfill, patch back, the fire hydrant tie-ins, slurry seal, etc.? Please clarify the limits of work and the boundaries for the line-item unit cost. Also, provide a line item on the bid form for this unit cost. Reference: COW2.1 & COW2.2
A22.	Base Bid should include an overall cost associated with this scope of work depicted by the Diamond shaped keynotes. Line-Item costs will be required in the schedule of values by the most responsive bidders as part of the contract submittal requirements.
Q23.	The domestic water line on sheet CWS2.1 from the main to the meter is called out as a 1-1/2" pipe. Sheet CWS2.1 also calls for a 2" reducer pressure backflow preventer and a 1-1/5" domestic meter. However, on COW2.1 this same water line is called out as a 2". Please clarify the correct size of the domestic water line, backflow preventer, and meter. Reference: CWS2.1 & COW2.1
A23.	CWS2.1 is correct, service shall be 1.5" service line and meter with a 2" backflow preventor and a 2.5" service line to the building
Q24.	P5.01 Domestic Gas Tankless Water Heater Schedule shows TGWH 1 through 5, and E3.3 Room 135 S.C.B.A. shows for electrical supply to TGWH 4 & 5. However, P2.01 and P4.02 only show for units 1 through 4. Can you please clarify if TGWH-5 is required? Reference: P2.01, P4.02, P5.01, E3.3

A24.	No, there are only 4 tankless water heaters. The schedule tag shall read 1-4.
Q25.	P2.01 and P4.02 calls out for GRH-1 and GRH-2 in Apparatus Bay, however these 2 units are not called out on any other plan sheet or schedule. Can you please provide more information about these two units if they are part of the scope of work? Reference: P2.01, P4.02
A25.	There should not be heaters in the Apparatus Bays, please delete all references, electric, equipment and gas piping associated for removal of radiant heaters in Apparatus Bays.
Q26.	Plumbing specs 2.02 Materials E specifies Compressed Air Piping; however, the plumbing plans don't call out a compressed air system, can you please confirm if the compressed air is part of the scope? Reference: Spec 22 00 00
A26.	There is no requirement for compressed air piping or compressor. The reference can be deleted from the plumbing specifications.
Q27.	M2.01 Exhaust fan in room 105,113, 114, 115 and 117 are not labeled, can you please provide labels for these units? Reference: M2.01, M3.01
A27.	Exhaust Fan EF-95 with same symbol you are referencing is the same symbol noted in toilet 102 and is marked as "typical unless noted otherwise". No need to provide notation on drawings.
Q28.	Spec sections 04 05 15, 04 05 26, and 04 22 00 are calling for the CMU & mortar to be integral water repellant. However, spec section 07 19 00 calls for exposed CMU wall surfaces to receive water repellent coatings. Please clarify the water repellent is to be integral or a topical coating applied system. Reference: Spec Sections 04 05 15, 04 05 26, 04 22 00, & 07 19 00
A28.	The 1st 3 specs in this question are for exterior concrete masonry units which should be integral and the other spec for apparatus bay where water repellant coatings are to be applied after installation.
Q29.	Question 29: Spec section 04 22 00 calls for a 4' tall x 6' wide mockup of the masonry that is not to be part of the final construction. This will add additional cost to construct and remove. Can the mockup become part of the final project if approved during mock-up review? Reference: Spec Section 04 22 00
A29.	No, this is being used as a model of construction methods to be followed by all parties and will need to be accessible from the beginning to the end of the project to illustrate the minimum standards of workmanship and integration of multiple systems.
Q30.	Question 30: Fuel tank system, the fuel required for fuel tank testing, will that be provided by owner? If it needs to be provided by the general contractor, can you specify how many gallons are required? Reference: A1.23
A30.	The GC is to provide the quantity of fuel required for startup and testing per the installation/ manufacturer’s instructions.
Q31.	Provide a dimension for the Phoenix Fire Department logo as there is no spec section for the logo or dimension provided on the exterior elevations. Reference: 1/A7.01
A31.	The logo is a 36-inch diameter disc. Artwork for etching will be provided to the successful General Contractor for use per keynote #3 on Detail 10/A1.21.
Q32.	Sheet A3.31 finish schedule, Room 140 & 141 wall finish shows for CT-1/CT-2, however interior wall elevations on sheet A4.05 & A4.06 don't show or call out for CT-2. Please clarify. Reference: A3.31,A4.05,A4.06
A32.	There is no need for decorative tile band in Decon Shower/Laundry/Janitor. Remove from schedule on A3.31.
Q33.	On both sheets A1.22 & A10.01 detail 1 calls for a 6" square bollard filled with concrete. However, on sheet S2.01 detail 10 calls for a 4" pipe. Please clarify what size and type of bollard we are to use. Reference: A10.01 & S2.01
A33.	Detail 10/S2.01 call for 4" diameter (min.) Steel pipe column, see arch for exact size, fill with concrete where indicated on arch. drawings. Note that 2/A1.22 call for 4" diameter steel post at trash enclosure with same footing style. Smaller footing to right on 10/S2.01 is for bollards on 1 & 6/A10.01 that are 6" square tube columns. These are located on the Floor Plan A2.02 inside and outside of the apparatus bays.
Q34.	A9.01 keynote #29 Waterproof underlayment at ICF walls-is this the spec for 07-27-26 Fluid-Applied vapor and Air Barrier Membrane? Clarify what product you want for the waterproof underlayment. Reference: Wall Sections - keynote 29 and Spec 07-27-26

A34.	Liquid applied at all exterior surfaces that are to receive veneer or other finish treatments.
Q35.	Spec section 03 11 19 part 2.01.A.1 has Fox Blocks as an approved manufacture. However, ICF Walls GSN note 4 on sheet S0.01 states that the ICF wall system has been designed in compliance with the Nudura ICF wall system and if contractor proposes to use anther wall system, it shall be submitted during the bidding process for approval by the architect and structural engineer. Please clarify if we need to submit a Substitution Request ASAP to insure it is in prior to the 12-day requirement in the Information for Bidders. Reference: Spec Section 03 11 19 & S0.01
A35.	Fox Block is an acceptable product and has already been approved in the Specs. No further Substitution Request will need to be submitted. Note: any changes between the basis of design and actual selected approved products will be the full responsibility of the successful GC and sub-contractors to coordinate in the field.
Q36.	Where is the Spray-applied Polyurethane Foam insulation and the HFC Blown Typed Closed cell foam insulation. Please clarify. Reference: Spec 07 21 00
A36.	These are called out on the plans; roof wells are spray foam roofing and the closed cell foam or approved alternate is required to close up any raceways or opening created in the ICF foam walls.
Q37.	Room 140 Decon/Shower, the bigger shower fixture SH1 is called out in the (3) smaller non-ADA shower location, the smaller shower fixture SH2 is called out in the bigger ADA shower location. It appears that it should be the other way, can you please confirm? Reference: P1.01 & P2.01
A37.	In Room 140 Decon Showers these are called out correctly. SH2 states "with flexible hose…" as is needed in an ADA shower. Rm 115 is called out as a SH1 and should read SH2 as it is an ADA shower which will require shower head with hose.
Q38.	Sheet P2.01 Room 113 and Room 114 Shower Room doesn't call out for Trench Drain, however Foundation plan S1.01 shows trench drain there. Can you please clarify if trench drains are needed there? Reference: P2.01 & S
A38.	No trench drains in these two toilet rooms.
Q39.	Can grid lines please be provided on architectural and structural floor & roof plans? Reference: General Questions
A39.	Those are intended to be used on post & beam plans. This is cmu/frame and grid lines are not needed. GC can add their own to the files that are shared with the successful general contractor.
Q40.	Several of the footings on sheet S1.01 are not scaled to what they are called out. The WF6 footings are called out to be 3'-4" wide however are drawn as being 4' wide. There are 4 of the F3 footings that are drawn to the F2 size. One of the F3 is 4' wide. The WF3 from the north Apparatus Bay wall are drawn being 3' and 3'-4" wide, however on the footing schedule they are 2'-8". There is a F4 footing that is drawn being 4'x4'. Call outs are correct. Reference: S1.01
A40.	There is to be no scaling of drawings. General note on sheet S1.01 (very bold text) states "See S1.00 for foundation schedules, each footing has a corresponding # that references the size of the footing at that location. See additional note present on S1.01 that states the bottom and top of footing elevations as well.
Q41.	Sheet P2.01 calls out the south primary roof drains being 3", however on the civil drawings where the primary drains tie into the storm drain it is calling for a 4". Please clarify. Reference: P2.01 & C4.1
A41.	Yes, these can be different sizes where the storm drain can be larger, but not smaller than roof drain size. Must have larger pipe to allow for flows to storm drain over distance from bldg. Roof Drains Lines below grade may increase in size. From plumbing to civil drawings.
Q42.	Detail 19/A6.02 calls out concrete splash blocks where occurs per civil drawings. However, the splash blocks do not occur. Spec section 12 93 00 Site Furnishings and Accessories clarify pre-cast splash blocks, however, per the Geotechnical Investigation pre-cast loose splash blocks should not be used and any discharge should be to pavement, retention basins, or a discharge point located at least 10 feet away from the building. This will only affect the overflow roof drains as the primary will tie into the storm drain below grade. Please clarify. Reference:

	A6.02
A42.	Splash blocks are for overflow drains as specified in Geotech Report. These are to let the occupants know that there is an issue on the roof if water is pouring out of it and also directing water away from the building foundation.
Q43.	The callout for #45 1/2" exterior grade plywood substrate and #46 3/8" exterior grade plywood - this does not match what is shown on the structural plans for roof sheathing. Structural call out 5/8" plywood sheathing. Which should we go by? Reference: A9.01 Keynotes 45, 46 and S1.02
A43.	#46 is 3/8" and is located on underside of covered patio at lineal ceiling treatment. When compared to Structural Detail it states see Architectural for size. #45 should be 5/8" per Structural.
Q44.	During the prebid meeting, it was stated that fire alarm is part of the scope of work GC to provide, however the specifications is not provided, can you please provide more information about the fire alarm system (ie. System manufacturer)? Reference:
A44.	This is a Deferred Submittal and to be provided, designed and installed by successful GC selected for this project.
Q45.	Confirm 'City of Phoenix Bursera Helipad' scopes of work are to be included. Reference: General.
A45.	Yes, it was included in the plans for bid.
Q46.	Geotechnical Report dated 6/7/2024 states that heavy duty equipment and/or rock removal will be required for deep excavations in section 3.0 Analysis and Recommendations. Due to competitive bid situation, can a Hard Dig Allowance be assigned for all bidding General Contractors to carry in order to maintain level playing field? Reference: 00 00 00 General
A46.	Based on the boring logs we do not anticipate hard digging up to 10 feet deep.
Q47.	Sheet C2.1 Demolition Plan has 'FOR REFERENCE ONLY' above the Removal Notes. Please clarify if this work has already been performed or if we need to include in our estimate. Reference: 02 00 00 Existing Conditions
A47.	Those are for reference to see other sheets and/or disciplines work that was completed prior for the relocation of the Bursera Temporary Parking.
Q48.	If this work is to be included in our estimate, please advise where the (92) salvaged boulders and (30) salvaged parking blocks are to be stockpiled on site. Reference: 02 00 00 Existing Conditions
A48.	See question 6 above for response and clarification.
Q49.	Reference Note 32 on C2.1, please confirm Utility Boxes to be relocated is the responsibility of the Utility Company. Reference: 02 00 00 Existing Conditions
A49.	They will need to be adjusted to accommodate the new sidewalk and ramps. The relocation/adjustments of the boxes will be by the General Contractor as required by the serving Utility Provider.
Q50.	Reference Note 29 on C3.1, please provide detail for Concrete Electrical Equipment Pad. Reference: 03 00 00 Concrete
A50.	The pad thickness be 6 " minimum, 2500 PSI concrete or as specified by Genset Manufacturer. The overall housekeeping pad is to be 51'-4" wide by 20'-0" long to accommodate all the electrical equipment planned for this location. Note: The Utility Company had requested the SES, and ATS be rotated 90 degrees for drive access. This pad size takes that into account.
Q51.	Can Civil CAD files be provided? Reference: 31 00 00 Earthwork
A51.	Not at this time. Cad files of the Permitted Drawings will be provided to the successful General Contractor for use to construct the project and prepare shop drawing submittals.
Q52.	The window spec has solarban60, and plans call for solarban70. Also spec calls for Med Bronze aluminum and plans call for Clear Anodized. Please advise. Spec Section 08 80 00 section 2.03
A52.	The Specification should read Solarban 70 which was required by plan review and comcheck to meet the new energy standards. The specifications should also refer to the plans which call for the clear anodized finishes.
Q53.	I noticed that the elevations for the fuel storage tank and fill station only shows the electrical on

	page A1.23, it also says see tank schedule for more information but I'm having some difficulty finding that. All required information on the fuel island is shown on sheet A1.11 KN 28 which then Reference: 17/A1.23.
A53.	All the spec information is on those sheets, then supported by the specifications and the electrical sheets E1.1 & E1.2. No missing information, everything is in the plans
Q54.	Sheet A2.21, Partition Type D & N, states to install (1) layer of 5/8 gypsum board on top of Insulated Concrete Forms (ICF) full height. Is it acceptable to laminate/glue the gypsum board on top of the ICF or will furring (3-5/8" framing) be required?
A54.	The ICF has internal studs that are designed for mechanical fasteners needed for the substrate rather that is gypsum board, veneer ties, etc. No additional framing is needed unless called out specifically. Refer to manufacturers install manuals for further information.
Q55.	There are a few discrepancies concerning single curb vs curb & gutter when you compare Arch Site Plan against C3.1 Site Plan. Please confirm we are to price curb types shown on C3.1.
A55.	The civil drawings will prevail over the architectural plans. This is a result of several independent permits and reviews.
Q56.	Please provide a detail for the Concrete Pavers that shows the required sub-base and all other details necessary for complete install (compacted ABC? Slurry? Thicknesses? Etc.).
A56.	The installation of the pavers is as follows: 12" deep non-expansive fill used as subgrade or lime treat 8" per Mag Spec 3.10 and Geotechnical Report. Then 4" thick aggregate base course per Mag Specs Section 702. Compacted to 100% maximum dry density, followed by 8" Class "AA" PCC per Mag Specs Section 725. Pavers shall be set on the concrete per pattern and color specified and finished with sand swept into all joints.
Q58.	Keynote 38 on Arch Site Plans calls for Concrete Unit Pavers colors to be a "Foundry and Graphite color blend". Foundry is a light gray, and Graphite is a dark charcoal. But Belgard has a standard color option called "Rio", which is a blend of light gray & dark charcoal. I'm guessing the color called out in the plans is just referring to Belgard's "Rio". Is this correct? Or is the design intent to be a mix of Foundry and Graphite colored pavers?
A58.	The color "Foundry" is now a special-order item. Please replace the color Foundry with color "Rio" The mix is to be a 50:50 mix of the "Graphite" and "Rio". The balance of the Keynote is to remain
Q59.	Reference Note 16 on CWS2.1, confirm costs associated with bringing 'new gas service line, refer to utility provider' to the building will be covered by owner outside of this estimate. If expectation is for General Contractor to include these costs, please provide an Allowance for all bidding General Contractors to carry.
A59.	The General Contractor shall be responsible to provide and install the gas piping downstream from the gas meter riser. This includes all regulators, not a part of the gas riser provided by the utility company. Also provide trenching, backfill and sleeving for SWG piping as shown on plans and per typical utility details. The utility company will bring gas lines through the sleeve and provide a gas meter.
Q60.	CFS2.1 shows what appears to be a new 6" fire hydrant on the south side of the site just north of Chandler Blvd, but it is not keynoted with KN #82. Please clarify if this is to be a new fire hydrant.
A60.	Yes, this is correct, and it is to be included in the scope of work. Symbol and line type depict the item referenced
Q61.	Reference Note 17 on CWS2.1, confirm costs associated with bringing 'new communication service line, refer to utility provider' to the building will be covered by owner outside of this estimate. If expectation is for General Contractor to include these costs, please provide an Allowance for all bidding General Contractors to carry.
A61.	The GC will intercept the existing communication raceway in Chandler Blvd. and provide and install (4) new 2" conduits north from that point to the No.9 communication Vault as shown on the plans.
Q62.	The steel beam schedule on sheet S1.00 calls out the SB3 to be a HSS 4x3x1/4, and the location of these beams are on S1.03 at each of the corners of the Apparatus Bay with detail 255. However, detail 255/S4.03 calls for this beam to be HSS 4x2x3/16. Please clarify what

	size beam should be used.
A62.	Disregard the beam size on detail 255. Use the beam sizes and layout shown on the high roof framing plan and steel beam schedule.
Q63.	Sheet S1.03 has detail 221 called out on the north and south side of the Apparatus Bay. This detail on S4.02 has keynote 14 for steel tube beam per detail 222 in the first and seconded high flute inboard of wall. Section x of detail 222 shows a steel tube beam however does not clarify what the steel tube size is or how we are to attached/install this with in the flute. Are the 221 detail call outs on S1.03 meant to be over the SB4 beams on the west and east end of the Apparatus Bay or is there additional steel beam the span all the way? If there are additional beams, please provide the size.
A63.	These beams are the SB4 beams shown on S1.03. they only occur in the bays where indicated on the framing plan.
Q64.	On sheet S1.03 at the northwest and southwest corners of the Apparatus Bay there seems to be an unmarked beam that the SB3 beams go to. Detail 255 shows an angle steel, however that seems to run the full length. Please clarify.
A64.	That member on the framing plan is just the steel edge angle per keynote 5 on detail 221. The intent of that was to show that the angle was continuous between the ST1 frame and corner of roof at the four corners (no splice allowed at the SB3 beam). this is typical at the 4 corners.
Q65.	Detail 44/S2.03 seems to be the only detail provided showing how the masonry walls and ICF walls are to connect and only shows 2 #4 dowels at top of walls. Please clarify/confirm that there are no additional tie in locations (mid span, bottom of wall, x' on center, etc.).
A65.	This only occurs in two locations on the plan. Provide dowels only at the roof bond beam level and the top of wall elevation. No dowels are required at any given spacing are required between those locations.
Q66.	Detail 18/A1.22 calls for the planters to be pre-cast. However, there are no specs for the pre-cast. Can the planters be cast-in-place or a pre-cast spec be provided?
A66.	This should be a cast in place concrete planter similar to Detail 18/A1.22. 2500 psi 8” thick concrete walls and base with footing to be 6” wider in all directions. Per Detail 11/A1.22 overall footing is to be 26’ x 4’ x 8”
Q67.	The Civil site plan C3.1 and C4.1 G&P do not show 2' wide valley gutter at the Public Parking concrete pavers as shown on Arch. Site Plan and LL1.1 - Landscape Plan. Please confirm which is correct?
A67.	Match the civil drawings. It was modified to the perimeter curb line instead of crossing the parking stalls.
Q68.	Detail 18/A1.22 and reference note 30/C3.1 both refer to a hardscape plan, however this plans sheet does not seem to be in the bid documents. Please provide the hardscape plan sheet.
A68.	See Sheet A1.11 and Detail 11/A1.22 for details. Hardscape plan was deleted from project documents.
Q69.	Detail 119/S3.01 is for the elevation’s changes in concrete slab on grade and calls out a 2" max for the depressed slab. However, at the Decon niche it is calling for a 4" depressed slab. Please provide a detail for depressed slabs greater than 2".
A69.	See Architectural Details. Detail 119 would still apply for this condition.it is recommended to use 1 #4 bar continuous around at the slab step (1 ½” clr from top of slab and step in concrete) at the 4” step to help mitigate cracking.
Q70.	Sheet A3.31 Interior Finishes, Window Blinds, noted see plans for location. However, the floor plan doesn't call them out. Can you please provide locations of them?
A70.	The Mini Blinds and Blackout shades are called on each window type in the hexagon symbol on sheet A2.02 designated with a "BO" subscript per the legend and reference Detail 6/A3.11.
Q71.	Sheet A3.21 KN#11, it calls out "Red" Phone, can you please confirm only rough-in box and conduit are required for general contractor to provide?
A71.	Yes, raceway and back boxes only. The Phone, the Exterior Red Box and wiring by the city staff or hired sub-contractor.
Q72.	General note 2 on A 3.21 states for the contractor to provide marker boards and locations to be owner verified, however no locations are marked on the plans. Please provide the quantity of the marker boards to be included in GC's bid.

A72.	Delete from the Scope of work. They will be provided and installed as part of the Allowance per Addendum.
Q73.	Where do you want the Desert Cobble per detail 4/ LL2.2.
A73.	See Detail 7 BOULDER AND COBBLE which has a callout that states “DESERT COBBLE AGGREGATE SURFACE ON SLOPE WITH HYDROSEEDING.” As further clarification, the desert cobble should be applied to all the areas that will be hydroseeded.
Q74.	On sheet A1.11 keynote 14 clarifies that the masonry site wall is a Mesastone peppercorn block, however keynote 46 for the screen wall does not. Please confirm that the screen wall will match the site wall.
A74.	Yes, all site CMU wall elements are to be the same type, size and color. Match KN 14 but heights per detail 18/A1.21.
Q75.	The exterior elevations on A7.01 of the Apparatus Bay shows soldier course at the windows, overhead doors, and an accent. However, the interior elevation on A8.02 only shows the soldier course at the overhead doors. Please confirm that the soldier course is only at the overhead doors on the interior.
A75.	The end walls of the Apparatus bays are double wythe walls so the solider course would only be seen at the exterior of each of these items and not seen on the interior face of the double wythe.
Q76.	On sheet A2.21 the walls at the Fitness Room are called out as G with 8x8x16 CMU. However, on sheet A2.21 these same walls are called out as E2 8x4x16 CMU. Please verify what size of CMU is to be used for the Fitness Room.
A76.	The reference on the wall schedule on sheet A2.21 should read 4x8x16 at Fitness Exterior walls only. All exterior exposed CMU Block is to be 4" high units. See Sections and Elevations for additional information.
Q77.	Both wall types F & G are called out as having 8x8x16 CMU and refers to finish schedule for CMU type and color. Per the finish schedule there is only CMU-1 & CMU-2 that are both 8x4x16. Please confirm that all the building CMU is to be an 8x4x16 CMU.
A77.	The interior wythe and single wythe CMU walls on the interior spaces are 8x8x16. The note is correct. Please reference the building and wall sections in the A8.0 and A9.0 series drawings
Q78.	Both wall types F & G are called out as having 8x8x16 CMU and refers to finish schedule for CMU type and color. Per the finish schedule there is only CMU-1 & CMU-2 that are both 8x4x16. Please confirm that all the building CMU is to be a 8x4x16 CMU.
A78.	The interior wythe and single wythe CMU walls on the interior spaces are 8x8x16. The note is correct. Please reference the building and wall sections in the A8.0 and A9.0 series drawings
Q79.	There does not seem to be any details for the door frame of the man door shown on detail 13/A1.22. Please provide additional details/information on the frame for this door.
A79.	The Detail references similar to that at the trash enclosure. But instead of round posts, we recommend 2 tubes for the jambs placed at each CMU jamb. One for the hinge to anchor to and the other for the strike.
Q80.	Detail 10/A1.21 note 1 calls for the gate to be painted, however spec section 32 31 19 calls for a powder coated finish. Please clarify what finish is to be used.
A80.	The Detail is incorrect. City of Phoenix requires Powder Coating of exterior metal elements
Q81.	Detail 18/A1.22 shows the footing dimensions as "see structural" however the structural do not have any planter details. Please clarify the dimensions.
A81.	2500 psi 8” thick concrete walls and base with footing to be 6” wider in all directions. Per Detail 11/A1.22 overall footing is to be 26’ x 4’ x 8”
Q82.	Construction note 39 on C3.1 is for the bus pad and refers to COP STD DET P1258. Detail P1258 note 1 refers to 2 more details P1260 & P1262. Both of these details are for power at bus stops, however the electrical plans do not show any power here. Please confirm that we do not need to provide any power scope at the bus stop pad.
A82.	Correct, the scope of work is just to install the bus pad, No electrical or additional infrastructure required.
Q83.	Sheet C3.1 calls out a sidewalk scupper at the public parking lot per construction note 8, however A1.11 does not show the sidewalk scupper. Please clarify.
A83.	Civil and Architectural both show the scupper, but it was only called out on the civil, which

	would prevail over architectural scope.
Q84.	There is a discrepancy with regards to the tile roofing in relation to the spec and plans. The spec section 07 32 16 part 2 section 2.03 Insulation and cover board. "Roof plan sections and details do not call out for any insulation and/or 1/2" cover board on this roof." There does, however, exist a detail A602 # 11 which does show two layers of 1/2" rigid insulation and one layer of Dens deck prime board. This detail, however, cannot be found in any referenced cut section detail contained on the roof plan. Please confirm that Detail A602 # 11 is obsolete and is not to be used on this property.
A84.	Detail 11/A6.02 was for the metal deck roof area over the Apparatus bays. The same condition should apply at areas with tile and wood deck sheathing. This would apply to Details 1,3,4,9,10,12,15 /A6.02
Q85.	Will specifications be provided for Div 28 Access Control, Video Surveillance and other physical security systems. These are not included in the latest specifications documentation provided.
A85.	Not required in the scope of work. The city of Phoenix employees or hired contractors will provide and install all Cat6-low voltage wiring, and electronic equipment associated with security systems, cameras, access control, voice/data/Wi-Fi, and Dispatch Equipment. The general contractor is responsible to provide and install all back boxes, cabinets, conduits, raceways and wire racks as specified in the documents. The Dispatch Plan and other Special Systems drawings are included to show where the dispatch system equipment and other Special Systems rough in will occur or are to be located All other low voltage control wiring for system control is the responsibility of the general contractor or related sub-contractors. i.e. lighting, door controls, HVAC, fire alarm, to name a few but may not be all inclusive.

CHANGES TO PROCUREMENT REQUIREMENTS:

1. Delete the provided Proposal form and replace with attached revised Proposal Form.

CHANGES TO SPECIFICATIONS:

1. Delete the following section(s) entirety and replace with the following attached section(s):
    - Specification Section 08 33 00 – Coiling Doors
    - Specification Section 10 75 00 – Flagpole

2. Modify Section 01 21 00 Allowances, item 3.04 “schedule of Allowances” to add the following: Allowance N0.6 FF & E: Include lump sum of Five hundred Twenty-Five Thousand and no/100 Dollars ($525,000.00) for purchase of FF & E items as directed by Owner. The markups or additional costs associated with these allowances shall be included in the base fee per spec 01 21 00 section 1.05. The Allowance is reserved for the following items:
    - Natural gas BBQ's
    - Picnic Tables
    - Training Monitors
        - (1) 75"
        - (3) 65"
        - (4) Wall TV Brackets
    - Station Seating
    - Metal Bed Frames-Twin XL Size
    - Twin XL Mattresses
    - Dorm Metal Knock Down Lockers Size-24"x24"72"
    - Fitness Room Equipment Package
    - Goodman's System Furniture Package
    - Marker/Cork Board
    - SCBA-Compressor System Package

SUBSTITUTION SUBMITTAL REQUESTS:

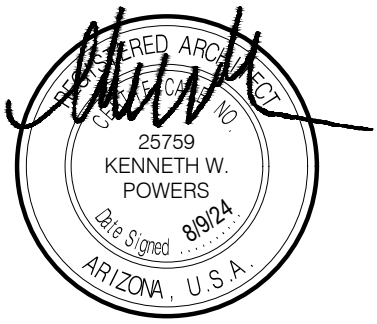
Division 5
Metal Fabrication/Aluminum Ladders - O'Keeffe's Inc. - APPROVED

Division 7
Fluid Applied Vapor Permeable Air Barrier - Henry's Air-Bloc 17MR – APPROVED.

Division 10
Metal Lockers – Lockers MFG Knock Down Plus - APPROVED for 12 x 12 lockers in Restrooms and Decon only- Dorm Lockers are purchased from Owner's F.F.E. Allowance to match city product standards.

NOTE: Bidders must acknowledge receipt of this Addendum by listing the number and date, where provided, on the PROPOSAL P-1.

END OF ADDENDUM



EXPIRES: 12-31-2024

Bid Proposal

Project Name: New Fire Station 74
Project No: FD57100020

Item No.	Description	Unit	Quantity	Total
1	Building Construction	LS	1	
2	Site/off site Improvements	LS	1	
	TOTAL BASE BID			

_____ _____ & _____/100

DOLLARS
(WRITTEN WORDS)

REVISED: AUGUST 9, 2024

SECTION 08 33 00

COILING DOORS AND GRILLES

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:
1. Motor operated overhead coiling insulated service doors.

1.02 SUBMITTALS

A. Shop Drawings: Submit Shop Drawings showing elevations, sections and details indicating dimensions, materials, finishes, conditions for anchorage and support for each door as indicated on Drawings and as required. Should additional support be required, submit calculations prepared by an Engineer registered in the State of Arizona. Indicate door number matching numbers scheduled on Drawings.

B. Product Data: Describe operation, hardware and accessories.

C. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.

D. Verification Samples: For each finish product specified, two samples, minimum size 6 inches long, representing actual product, color, and patterns.

E. Maintenance and Operating Manuals: Furnish complete manuals describing the materials, devices and procedures to be followed in operating and maintaining all doors under this section. Include manufacturer's brochures and parts lists describing the actual materials used in the product.

1.03 QUALITY ASSURANCE

A. Performance Requirements: Design exterior doors to meet windload of 20 psf, but not less than design wind loads indicated on General Structural Notes on Drawings, whichever is greater.

B. Regulatory Requirements: Comply with applicable requirements of the laws, codes, ordinances and regulations of federal, state and municipal authorities having jurisdiction.

C. Products Requiring Electrical Connection: Listed and classified by Underwriters Laboratories, Inc. acceptable to authority having jurisdiction as suitable for purpose specified.

D. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this Section with minimum five (5) years documented experience. Manufacturer shall provide a list of at least ten (10) completed projects having overhead coiling doors of similar design and extent as this project.

E. Installer Qualifications: Installer of coiling door system shall be authorized and certified representatives of the manufacturer.

F. Single-Source Responsibility: Provide doors, tracks, motors, and accessories from one manufacturer for each type of door. Provide secondary components from source acceptable to manufacturer of primary components.

1.04 DELIVERY, STORAGE AND HANDLING

A. Packing and Shipping: Deliver materials to site in Manufacturer's original unopened packaging with labels intact showing name, brand and type.

B. Storage: Store material in dry protected location off the ground in accordance with manufacturer's instructions. Adequately protect against damage while stored at the site.

C. Handling: Comply with Manufacturer's instructions.

1.05 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.06 COORDINATION

A. Coordinate Work with other operations and installation of adjacent finish materials to avoid damage to installed materials.

1.07 WARRANTY

A. Warranty: Furnish two (2) year written warranty signed by the manufacturer and installer agreeing to repair or replace work which has failed as a result of defects in materials or workmanship. Upon notification within the warranty period, such defects shall be repaired at no cost to the Owner.

B. Manufacturer's 2 year limited warranty for PowderGuard Premium Powder Coat Finish.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Furnish products of one of the following Manufacturers, except as approved by the Architect, subject to compliance with Specification requirements:
1. McKeon Rolling Steel Door Company, Inc. www.Mckeondoor.com
2. Cookson Co. www.cooksondoor.com
3. Cornell Iron Works, Inc. www.cornelliron.com
4. Overhead Door Corp. www.overheaddoor.com

B. Basis of Design: Drawings and Specifications are based on products manufactured by Overhead Door Corporation.

2.02 COILING DOORS

A. Insulated Coiling Door: Overhead Door Model 625, complete with guides, hood, operating mechanism, and special features as specified and as indicated on Drawings, or equivalent from one of the specified manufacturers.
1. The load of barrel and curtain shall be supported by 2 grease-sealed ball bearings.

2. Curtain: Curtain: Interlocking roll-formed slats as specified following. Endlocks shall be attached to each end of alternate slats to prevent lateral movement.
   a. Flat profile type F-265i for doors up to 40 feet wide with aluminum 040-inch (1 mm) exterior and aluminum .024-inch (6 mm) interior.
   b. Slat cavity filled with CFC-free foamed-in-place, polyurethane insulation.
      1) R-Value: 7.7, U-Value: 0.13.
      2) Sound Rating: STC-21.
3. Performance:
   a. Through Curtain Sound Rating: Sound Rating: STC-28 (STC-30+ with HZ noise generator) as per ASTM E90.
   b. Installed System Sound Rating: STC-21 as per ASTM E90.
   c. U-factor: 0.91 NFRC test report, maximum U-factor of no higher than 1.00.
   d. Air Infiltration: Meets ASHRAE 90.1 & IECC 2012/2015 C402.4.3 Air leakage <1.00 cfm/ft2.
4. Slats and Hood Finish:
   a. Aluminum: Slats and hood shall be aluminum finished as follows.
      1) Powder Coat: PowderGuard Premium powder coat color as selected by the Architect.
5. Weatherseals:
   a. Vinyl bottom seal, exterior guide and internal hood seals.
   b. Interior guide weatherseal.
   c. Lintel weatherseal.
   d. Air Infiltration Package, IECC 2012/2015 listed; product to meet C402.4.3 2012 Air leakage <1.00 cfm/ft2.
      1) Air infiltration perimeter seal package includes: guide cover, guide cap, dual brush exterior guide seal, 4 inch finned lintel brush seal and vinyl bottom seal.
6. Bottom Bar: Extruded aluminum angle minimum thickness 1/8 inch bolted back to back to reinforce curtain in the guides.
7. Guides: Three structural steel angles.
8. Brackets: Galvanized steel to support counterbalance, curtain and hood.
9. Finish; Bottom Bar, Guides, Headplate and Brackets:
   a. Finish: PowderGuard Premium powder coat color as selected by the Architect.
10. Counterbalance: Helical torsion spring type housed in a steel tube or pipe barrel, supporting the curtain with deflection limited to 0.03 inch per foot of span. Counterbalance is adjustable by means of an adjusting tension wheel.
11. Hood: Provide with internal hood baffle weatherseal.
    a. Aluminum hood with intermediate supports as required.
12. Operation: Overhead Door Model RHX True Gear Head Type Door Operator:
    a. Electric Motor: UL listed.
       1) Rating: 3/4 horsepower or 1 horsepower three phase with automatic thermal reset overload.
    b. Motor frame comply with: NEMA 56 3/4 and 1 hp all phases.
    c. Construction: Totally Enclosed Fan Cooled – TEFC construction.
    d. The operator shall be suited for NEMA ICS 6 Type 4 water tight dust tight environment.
    e. Reduction: Primary reduction is worm gear in oil bath.
    f. Duty cycle: Accommodate heavy usage, up to 60 cycles per hour under a large constant load.
       1) Brake: DC Disc type with selectable Progressive Braking for smooth stopping.
       2) Clutch: Adjustable torque-limiter type.

3) Limit System: LimitLock limit system, magnetic type providing absolute positioning with push to set and remote setting capabilities. Limit system shall remain synchronized with the door during manual operation and supply power interruptions.

g. Control System: Microprocessor based with relay motor controls on a single board. System incorporates a 16 character Liquid Crystal Display (LCD) to display the system status. System shall include the following:

h. Capable of monitoring and reporting on a variety of operating conditions, including: Current operating status, Current command status, Motor movement status, Current error status (if applicable), Hoist Interlock status (if applicable), External Interlock status, and 24VDC status.

1) A delay-on-reverse operating protocol.
2) Maximum run timers in both directions of travel that limit motor run time in the event a clutch slips or some other problem occurs.
3) Provisions for the connection of a 2-wire monitored photo-eye or a 2-wire monitored edge sensor, as well as non-monitored 2-wire sensing edges, photo-eyes or other entrapment protection devices.
4) Control action will be constant contact close until a monitored entrapment device is installed, allowing for selection of momentary contact.
5) Provisions for connection of single and/or 3-button control stations.
6) Provisions for connection of an external 3-wire radio controls and related control devices.
7) On board open, close and stop control keys for local operation.
8) CodeDodger radio receiver that is dual frequency cycling at 315 Mhz and 390 Mhz capable of storing 250 single button and/or 250 Open-Close-Stop transmitters with the ability to add and/or delete transmitters individually, identify and store activating transmitter IDs.

i. Mounting: As indicated on Drawings or selected by Architect.

j. Release: Release shall be a pull and hold type mechanism with single cable operation and an integrated interlock switch on hoist units.

k. Hoist: Chain hoist consists of chain pocket wheel, chain guard and smooth hand chain on hoist units.

l. Entrapment Protection: Monitored electric sensing edge.

m. Control accessories:

1) Push-button operated control stations with open, close, and stop buttons. Interior surface mounted controls located as indicated on Drawings or as directed by Architect.
2) Exterior vehicle loop detectors for automatic closing of doors upon exit after time delay. Time delay for closing to be adjustable.
3) Provide connections to Owner’s control system.

n. Special Operation:

1) Vehicle detector operation.
2) Radio control operation.
3) Card reader control.
4) Timer Close Module for unattended timed door closing. Auxiliary control inputs, safety inputs, timer hold input and automatic door closing feature with selectable time delay. Safety inputs can be configured using on board keypad.

5) Auxiliary Output Module for up, down, and mid-stop limit status via several auxiliary sets of dry contacts that are microprocessor controlled. ADA compliant outputs that activate when door is moving up, down, or both directions and can be configured using the on board keypad.

13. Locking: Cylinder lock for electric operation.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verification of Conditions: Examine substrates, supports, and other conditions under which work is to be performed and report detrimental conditions in writing to Architect. Commencement of Work will be construed as acceptance of subsurfaces.

1. Verify that openings are prepared with headers level, jambs plumb, floor level, without projections, and correctly dimensioned to receive assemblies.

B. Coordination: Coordinate with other Work which affects, connects with, or will be concealed by this Work.

3.02 PREPARATION

A. Clean surfaces thoroughly prior to installation.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.03 INSTALLATION

A. Doors are to be installed by the manufacturer or authorized representative in strict accordance with Manufacturer's printed instructions.

B. Use anchorage devices to securely fasten assembly to wall construction and building framing without distortion or stress.

C. Securely and rigidly brace components suspended from structure. Secure guides to structural members only.

D. Fit and align assembly including hardware; level and plumb, to provide smooth operation.

E. Motor Operated Units: Coordinate installation with Division 26 electrical service and control connections. Complete wiring from disconnect to unit components. Install wiring in accordance with applicable local codes and the National Electrical Code Standard. All wiring materials and devices shall be UL listed.

F. Coordinate installation of sealants and backing materials at frame perimeter as specified in Section 07 92 00.

G. Install perimeter trim and closures.

H. Instruct Owner's personnel in proper operating procedures and maintenance schedule.

I. Lubricate tracks and other moving components in accordance with manufacturer's instructions.

3.04 ERECTION TOLERANCES

A. Maintain dimensional tolerances and alignment with adjacent work.

B. Maximum Variation From Plumb: 1/16 inch.

C. Maximum Variation From Level: 1/16 inch.

D. Longitudinal or Diagonal Warp: Plus or minus 1/8 inch per 10 ft straight edge.

3.05 ADJUSTING

A. Upon completion of installation, including work by other trades, test and adjust coiling doors to operate easily, free from warp, twist, distortion, or binding.

B. Adjust hardware and operating assemblies for smooth and noiseless operation.

3.06 PROTECTION AND CLEANING

A. Protect installed work using adequate and suitable means during and after installation until Project completion and acceptance by Owner.

B. Remove, repair or replace materials which have been damaged in any way.

C. Clean surfaces of grime and dirt using cleaning materials and methods recommended by the manufacturer.

D. During the course of the Work and on completion, remove and dispose of excess materials, equipment and debris away from premises.

END OF SECTION

SECTION 10 75 00

FLAGPOLES

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes: Internal halyard ground set flagpole, including baseplate and foundation sleeve.

B. Related Sections:
1. Division 03 Concrete Sections for concrete foundation and foundation sleeve.
2. Division 26 – Electrical, for ground-set up-lighting for light poles.

1.02 SYSTEM DESCRIPTION

A. Design Requirements: Comply with National Association of Architectural Metal Manufacturer's "Guide Specifications for the Design of Metal Flagpoles," Standard FP-1.

1.03 SUBMITTALS

A. Shop Drawings: Submit Drawings showing sizes, finishes, methods of installation and accessories.

B. Samples: Submit samples showing material and finish.

C. Manufacturer’s calculated engineering data for base.

1.04 DELIVERY, STORAGE AND HANDLING

A. Packing and Shipping: Deliver materials to site in Manufacturer's original unopened packaging with labels intact. Protect finished surfaces with removable wrapping or coating which will not bond when exposed to sunlight.

B. Storage: Adequately protect against damage while stored at the site.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Furnish products of one of the following Manufacturers, except as approved by the Architect, subject to compliance with Specification requirements.
1. American Flagpole Division, Kearney-National www.americanflagpole.com
2. Baartol www.baartol.com
3. Concord Industries www.flagpoles.com
4. Eder Flag Manufacturing co., Inc. www.ederflag.com
5. Ewing Group www.ewinggroup.com
6. Morgan-Francis Div. www.morgan-francis.com
7. The Flag Company, Inc.; Flag Pole Warehouse www.flagwarehouse.com
8. Pole-Tech Co., Inc. www.poletech.com

2.02 FLAGPOLES

A. Poles: Cone tapered aluminum ground set of seamless cold drawn ASTM B241, 6063-T6 aluminum tubing with 0.188-inch wall thickness, with base and top diameter as required for height(s) of poles specified.
1. Height(s): 30'-0", unless otherwise indicated on Drawings.
2. Finish: Clear anodized.

B. Accessories: Equip pole with the following:
1. Internal Halyard Fittings: Manufacturer's standard cable based internal halyard and winch mount system with locking door and reinforced door frame assembly.
2. Truck Assembly: Single sheave, revolving truck assembly.
3. Ball: 14 gauge Gold Anodized spun aluminum flag pole ball ornament of diameter to be compatible with height of pole and no larger than butt (bottom) diameter of pole.
4. Provide upgraded 1/4 inch thick Gold anodized aluminum casting base.

C. Pole and Hardware Finishes: Clear Anodized.

D. Foundation: 16 gauge corrugated galvanized foundation tube with self-centering bottom plate and hardwood or resilient wedges and lightning protector ground spikes, as shown on Drawings.

E. Concrete: 3,000 psi minimum unless otherwise noted on Drawings, meeting requirements of Section 03 30 00.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verification of Conditions: Examine subsurfaces to receive Work and report detrimental conditions in writing to Architect. Commencement of Work will be construed as acceptance of subsurfaces.

3.02 PREPARATION

A. Coat metal sleeve surfaces below grade and surfaces in contact with dissimilar materials with heavy coat of bituminous paint or manufacturer's standard protective bituminous tape.

3.03 INSTALLATION

A. Coordinate installation with installation of adjacent site improvements including flagpole lighting.

B. Install flagpole, base assembly, and fittings in accordance with Manufacturer's instructions.

C. Electrically ground flagpole installation.

D. Install foundation plate and centering wedges for flagpole base set in concrete and fasten. Fill foundation tube sleeve with sand and compact.

E. Allow concrete to cure at least 14 days before erecting pole.

3.04 CLEANING

A. During the course of the Work and on completion, remove and dispose of excess materials, equipment and debris away from premises. Leave Work in clean condition.

END OF SECTION