# ADDENDUM NO. 4 Appoquinimink School District Whitehall Elementary School – Bid Package 'A'

December 8, 2017

NOTICE: Attach this addendum to the project manual for this project. It modifies and becomes a part of the contract documents. Work or materials not specifically mentioned herein are to be described in the main body of the specifications and as shown on the drawings. Bidders shall acknowledge receipt of this addendum on the space provided on the Bid Form. Failure to do so may subject the bidder to disqualification.

Whenever this Addendum modifies a portion of the Project Manual added information is shown as **Bold** and deleted information is shown as strikethrough.

It should be noted that the bid due date is still due. Bids shall now be due on 14 December 2017 at 2 PM at the Marion Profitt Training Center 118 South Sixth Street, Odessa, DE 19730.

The contract documents for the above referenced project, dated October 13, 2017 are amended as follows:

#### GENERAL CLARIFICATIONS:

1.) The attached substitution for Section 230450 Ductless split system by Samsung has been approved.

#### QUESTIONS AND ANSWERS: (1 – 27 answered in Addendum No. 1, 28 – 37 in Addendum No. 2)

- 38.) Please confirm that the following systems are the only systems to be used on the project. As publicly funded projects usually allow for multiple bidders. Security Instruments was hoping these systems would be opened up to more than one manufacturer. Please confirm.
  - a. The Intrusion Detection System (280725) is locked to Delmarva Systems who is no longer in business, using Detection Systems as a product that is no longer in business.
  - b. The Integrated Access Control & Security Management System (280727) is locked to Software House CCure 9000 System.
  - c. The Fire Alarm and Detection Systems (280721) is locked to Simplex only.

#### Answer:

Refer to Addendum #1 question #10.

48.) 1.) 5/S6.2 - Non-Load Bearing CMU Wall Bracing Details indicates bracing requirements at a variety of conditions with clips typically at 4'-0 on center, or at structural steel member spacing. This seems to imply that wall bracing would not be needed at load bearing masonry walls.

Confirm the steel contractor should include F & I of steel bracing of Non-Load Bearing CMU Walls only per this set of details.

- 2.) 1/A6.0, 2/A6.0 & 8/A6.0 indicate continuous angles fastened 12" on center on both sides of fire-rated and non-rated Interior CMU walls with G.W.B. spacers added at the rated walls. Where in the building are these details to be followed in place of details from 5/S6.2? Advise which prime contractor should include F & I of the continuous angles for bracing interior fire-rated masonry walls. Advise which prime contractor should include F & I of the G.W.B. spacers at bracing for interior fire-rated masonry walls. Advise which prime contractor should include F & I of the continuous angles for bracing interior non-rated masonry walls.
- 3.) 3/A6.0, 4/A6.0, 5/A6.0 & 6/A6.0 indicate continuous angles fastened 12" on center on both sides of fire-rated interior stud partition with G.W.B. spacers added between angles and wall. Advise which prime contractor should include F & I of the continuous angles for bracing interior fire-rated stud partition walls. Advise which prime contractor should include F & I of the G.W.B. spacers at bracing for interior fire-rated stud partition walls.

#### Answer:

- 1.) Bearing walls do not need to be braced per typical detail. Bearing walls are braced by floor or roof framing and detailed in the framing sections. Contract A-04 Structural Steel & Miscellaneous Metals shall furnish and install steel bracing of non-load bearing CMU walls.
- 2.) Details 1/A6.0 and 2/A6.0 occur at firewall between first floor Area "B" to lower level Area "C". Detail 8/A6.0 occurs at all other rated or non rated CMU walls. Angle size shall be per detail 5/S6.2. Contract A-04 Structural Steel & Misc. Metals shall supply steel angles to Contract A-07 Metal Studs and Drywall for installation. Contract A-07 Metal Studs and Drywall shall provide 2.5" wide piece of gyp (G.W.B. Spacers).
- 3.) Contract A-04 Structural Steel & Misc. Metals shall supply steel angles to Contract A-07 Metal Studs and Drywall for installation. Contract A-07 Metal Studs and Drywall shall also provide 2.5" wide piece of gyp (G.W.B. Spacers).

#### 58.) Per the fence detail on CG507:

- a. All manufactured listed do not manufacture a 5/8" solid picket they use tubular. Will other sizes be acceptable or are we limited based on 5/8" dimension? Please confirm.
- b. In regards to pickets having finial tops that can be removed and pose a safety hazard. Would owner consider a flat rail top across pickets?
- c. Also on the sitework bid form Alternate No. 2 and 3 are the same. I believe Alt. No 3 should be Playground Equipment (3A, 3B, 3C)

- a. Tubular pickets will be acceptable. Manufacturer picket sizes to be ¾" or 1".
- b. Assume flat or rounded finials as shown on the Fence Detail. Owner to have option to consider flat rail top during product submittal.
- c. See modified bid form in Addendum #2.
- 59.) 1. Sheet A10.3 shows PT-3 in bathrooms C105 and C106 as a floor finish. However, the finish schedule states PT-1 is the floor finish. The only Porcelain floor tile finish that could be found in the color schedule/finish schedule was PT-1. Please clarify what PT-3 is and whether or not it is to be installed in bathrooms C105 and C106 or if this is just an error on the drawings.

  2. Wall elevations show bullness capping the tile waipscot. Sheet A9.11 states that Apodized
  - 2. Wall elevations show bullnose capping the tile wainscot. Sheet A9.11 states that Anodized Aluminum Corner trims are to be provided at all outside corners in the bathrooms. Are they corner guards installed by others or are they Schluter trim pieces? I do not recommend mixing bullnose and Schluter trim it usually gives an unsightly finish where the two materials meet.
  - 3. 6x6 Quarry tile base is listed in the color schedule but is nowhere to be found. Could you please clarify whether or not we are required to provide any quarry tile base in areas C131 and C132 where quarry tile can be found? We DO NOT recommend installing quarry base at the walk in boxes do to issues bonding quarry to the metal walk in box.
  - 4. Ceramic Tile Scope of Work item #9 asks for vapor retarding sealer. Is this part of the installation or necessary? Please clarify.
  - 5. Ceramic Tile Scope of Work item #12 asks us to provide patching and leveling. At the bidding stage of this project it is not possible to determine the extent of how much leveling/patching is needed. We are aware that this is new concrete and is expected to be flat/level. However, there is a gap in the concrete spec requirements for acceptable work and what is an acceptable substrate for ceramic tile. Substrates for ceramic tile must be flat and level to within a ¼" in 10'. The concrete spec is not as strict. It is the position of the NTCA and TCNA that bidding of patching and leveling of substrates to receive ceramic be done using an allowance. Is the allowance at SOW #22 to be used for this or will there be a separate allowance for ceramic tile substrate repair?
  - 6. It is a little unclear what walls get ceramic tile in the Corridors, Stairs and other areas for Alternate 10. Can the architect please provide a wall finish plan or highlight exactly which walls get tiled?
  - 7. This has been addressed by several others but specs for ceramic tile install methods are not clear. Please specify: 1. TCNA install method, 2. where waterproofing/crack isolation membrane is to go and if it is full or partial coverage, 3. what type of mortars and grouts (epoxy or cement) are to be used and for what tiles.

#### Answer:

1.) Revise any reference to PT-3 on Drawing A10.3 to PT-1.

- 2.) They are Schluter corner trim. Corner trim shall extend to height of wainscot and be finished with a QUEDEC corner end cap to finish the open end of the profile.
- 3.) Your reference to quarry tile base could not be found. There is no quarry tile base on the project. However, quarry tile is to be installed as shown in C132 & 133.
- 4.) See revised summary of work for contract A-14 Ceramic Tile.
- 5.) Contract A-14 Ceramic Tile shall provide patching of all floors that receive ceramic tile. This contractor shall assume that the concrete has been poured within its specified FF/FL tolerances.
  - 6.) See Addendum #1 Question #26.
  - 7.) These items were addressed in Addendum No. 2 question #19.
- 1. There is no layout or design shown for the irrigation systems on the landscape plans. There also are no specifications for the type of equipment, number of zones, sprinkler heads, etc. How are we to price this item?
  - 2. What type of material is the roof drain piping, HDPE, SCH40 PVC, or SDR35?
  - 3. Can removable bollard model # Model R-8464-RA by Reliance Foundry be approved for use? A cut sheet is attached.
  - 4. The Addendum 1 bid form does not contain any alternates for the playground equipment that is called out on the landscape plans. Should we not price the playground equipment?
  - 5. The addendum 1 bid form has the same descriptions for alternates 2 and 3. Should we enter a number for both alternates?
  - 6. Who is responsible for completing the sidewalk along Mapleton Av. and Raleigh Street that is shown outside of the LOD?
  - 7. Addendum 1 scope of work for contract A-01 Sitework, Item 1 lists the sitework contractor as providing electric, telephone, data & fiber lines and gas utilities. Aren't these utilities installed by the respective utility company approved contractors?
  - 8. Addendum 1 scope of work for contract A-01 Sitework, Item 4 is blank. Is something missing from the scope of work?
  - 9. Addendum 1 scope of work for contract A-01 Sitework, Item 12. Where are the planter walls located? I see retaining walls in the plaza area, but they appear to be integral to the structural concrete contractors' work.
  - 10. Addendum 1 scope of work for contract A-01 Sitework, Item 19. What size gates are required for the temporary fencing?
  - 11. Addendum 1 scope of work for contract A-01 Sitework, Item 27. Is it the intent that the Sitework contractor provide daily street cleaning even when they are not onsite?
  - 12. Addendum 1 scope of work for contract A-01 Sitework, Item 31. The cooling tower slab and foundations appear to be integral to the structural concrete contractors' work since the footings are continuous with the building footings and the slab with pedestal is contained within. This is not what is typically site concrete work. Should they be in the Sitework of the Concrete contractors' scope of work?

- 13. Addendum 1 scope of work for contract A-01 Sitework, Item 34. Where will we be allowed to access a waterline to provide temporary water service? There does not appear to be a waterline on Raleigh Street currently.
- 14. Addendum 1 scope of work for contract A-01 Sitework, Item 63. Where will we be allowed to access a waterline to provide temporary water service for the tire wash station? 15. Addendum 1 scope of work for contract A-01 Sitework, Item 66. Where are landscape walls located on this project?

- 1.) The irrigation system and all of the equipment, number of zones and sprinkler head are to include design, layout, and the purchase and installation of the irrigation system.
- 2.) Schedule 40 PVC as specified.
- 3.) Products similar in size, material, quality and functionality may be considered by the owner at the time of product submittals. See attached product data sheet.
- 4.) Utilize updated bid form in Addendum #2.
- 5.) Utilize updated bid form in Addendum #2.
- 6.) The Mapleton Ave. and Raleigh Street sidewalk along the school frontage as called out on sheet CG 101 is included in the school project. Sidewalk on the other side of the street is not included.
- 7.) The electric service shall be provided by Contract A-20 Electrical, including trenching, ductbank, conduit, cable, utility fees, etc. The telecommunications infrastructure (ductbank) is indicated on the electrical drawings. Therefore Contract A-20 Electrical shall include all costs for trenching, excavation, concrete, stone, and backfill. The gas service is going to be installed by the utility up to the meter on the building at no cost to the owner. The mechanical contractor shall connect to the service provided by the gas utility.
- 8.) Item #4 has been left blank/void.
- 9.) Planter walls (also referred to as retaining walls) are located outside the footprint of the building and can be found on the structural and civil drawings.
- 10.)20' Gates will be required at the site construction entrance.
- 11.)Please read scope of work item #27. Street cleaning of mud, etc. will be required for the duration of sitework activities.
- 12.)Since the foundations are integral due to sizes of footings, all of the concrete associated dunnage support shall be provided Contract A-02 Concrete, not the Sitework as originally identified in Sitework scope Item #31 & in Concrete scope item #32. See modified summary of work for Contract A-01 Sitework and A-02 Concrete.
- 13.)Contract A-01 Sitework will be responsible for providing temporary water service. This contractor will coordinate with the Town of Whitehall and Artesian Water Company to connect and install a water source at the closest available point at the contractor's expense.

- 14.)Contract A-01 Sitework will be responsible for providing temporary water service. This contractor will coordinate with the Town of Whitehall and Artesian Water Company to connect and install a water source at the closest available point at the contractor's expense.
- 15.) See question #61, item #9 above.
- 62.) 1.) Item #1 indicates the Sitework scope includes "electric, telephone, data & fiber, gas". However the electric scope Items #6 and 7 indicate that the electric & communications to existing are in that scope. The gas service is not shown on the site drawing and the plumbing drawing P2.3 indicates it will be provided by the gas company. Without the gas routing would it be appropriate to have the site contractors or plumbing contractors carry an allowance for the gas company? Please clarify the extent of work that will be provided by utility companies for all electric, telephone, data, communications and gas and where the separation occurs. I would suggest 5 '-0" outside the building for the MEP trades to take over and the site contractor do all the utilities wont. Please confirm extent and your opinion on the 5'-0" separation.

  2.) Item #31 indicates the cooling tower foundation should be considered exterior and is included in the Sitework scope. However structural drawing S2.3 indicates the foundation is interior & integral with the building foundation. It seems more appropriate to be part of the concrete package. If not, please clarify coordination with concrete scope. This is the issue with the separation of slab from the edge of the building footprint. Please confirm this is acceptable.

- 1.) The electric service shall be provided by Contract A-20 Electrical, including trenching, ductbank, conduit, cable, utility fees, etc. The telecommunications infrastructure (ductbank) is indicated on the electrical drawings. Therefore Contract A-20 Electrical shall include all costs for trenching, excavation, concrete, stone, and backfill. The gas service is going to be installed by the utility up to the meter on the building at no cost to the owner. The mechanical contractor shall connect to the service provided by the gas utility.
- 2.) Since the foundations are integral due to sizes of footings, all of the concrete associated dunnage support shall be provided Contract A-02 Concrete, not the Sitework as originally identified in Sitework scope Item #31 & in Concrete scope item #32.Refer to structural drawings for slab thickness.
- 70.) 1.) Contract NO A-05 calls to Furnish & Install Vision Panels. Please clarify that this contract is only responsible for the non-aluminum vision panel frames, and that Contract A-08 will supply all glass.
  - 2.) Contract NO A-05, item #10 calls to Provide Fire Rated Accordion Folding Doors. There is a separate Contract NO A-10 for Folding Partitions. Please verify what Contract Item #10 falls under.



- 3.) Recommendation to move providing interior expansion joints from Contract No A-05 to Contract No A-07 & No A-12 since these will need to be installed into their wall and ceiling systems.
- 4.) Item #52 of Contract A-05 is listed in several different scopes of work, and is also covered by the Sitework Contract No A-01. Will the sitework contractor be responsible for this item?
- 5.) Contract NO A-05 calls to provide the low voltage wiring within the doors and for automatic door openers. However, the Electrical and Special Systems Contracts call for all wiring to the door hardware locks and door contacts for a complete Card Access System. Please verify Contract NO A-05 is only responsible to provide the hardware, and provide any necessary raceways through doors and or frames. All wiring to be completed by others.
- 6.) Who will own any fire treated plywood required in Electrical/Tel/Data rooms for new panels? If under Contract NO A-05, could you provide scope and/or locations?

#### Answer:

- 1.) Eliminate the work "Vision Panels" form Carpentry & General Work Scope #5. These will be provided by Glass & Glazing Contractor.
- 2.) The fire rated door is to be provided by the Contract A-05 Carpentry & General works and is not a part of the folding partition contract work. The fire rated door in question is B128A.
- 3.) We will keep this item as initially issued. The Carpentry & General Works Contractor will need to coordinate with the other trades to install all interior expansion joints.
- 4.) The site contractor is responsible for their vehicle traffic only. All contractor scopes of work have the same referenced note. The intent of the note was that the flaggers will be needed for their individual work (the prime or their subcontractor deliveries) that they are responsible for. That said, if multiple trucks or deliveries occur, they must be coordinated with all trades as well as the Construction Manager and may require multiple flaggers.
- 5.) Contract A-20 Electrical shall provide low voltage wiring per note 5 on Drawings E6.1.
- 6.) Contract A-05 Carpentry & General Works shall provide fire treated plywood where indicated for electrical and data panel installations. Fire rated plywood shall be installed on all walls of rooms A126, A226 and B125, from top of base to 8' high.
- 71.) Per Fence Detail on CG507, In regards to pickets having finial tops that can be removed and pose a safety hazard, would the owner consider a flat rail top across pickets?
  - 2.) May tubular pickets be used in place of solid pickets? It's my understanding the manufactures listed do not manufacture a solid picket. Please Advise.



- 1. Assume flat or rounded finials as shown on the Fence Detail. Owner to have option to consider flat rail top during product submittal.
- 2. Tubular pickets may be used in place of solid pickets.
- 74.) 1.) Line 1 in site scope lists electric, telephone, data and fiber lines, Electrical scope line 3 has the excavation and back fill in that scope for all underground. Please provide clarification that all electric, telephone, data and fiber lines excavation / back fill is in scope A-20 Electrical?
  - 2.) Item 14 requires select under SOG? Is this required if onsite material meet DELDOT spec for structural fill?
  - 3.) Item 68 states we are to grade building to elevation 100.0 minus 8". Addendum #1 states elevation 100.0 = 65.67. There are two F.Fl. elevations, are we to grade entire building to elevation to elevation 65.0 or 8" below the finish floor?
  - 4.) Note on drawing and now in specs 320523 says concrete mix for external improvements to be Whitehall Mix by Bear Concrete, is this a proprietary mix?
  - 5.) Item 31 states the cooling tower is outside the building therefore part of the site scope, it appears the foundation is attached to and part of the building footing, please confirm this is not in the building concrete scope.
  - 6.) If footing is in site scope please provide detail for interface of footing for cooling tower to building footing since they appear as one on S-2.3?
  - 7.) Please provide detail for interface of retaining wall & planter wall footing to building footing.
  - 8.) Masonry planter wall is part of scope A-03?
  - 9.) Item 24 states we are to use onsite material and import as required. We can only cover deficient amount of material in bid. If material is unsuitable will this be covered under unit price #6?
  - 10.) Please provide detail and type of downspout boot required. Specifications provide manufacturer but insufficient information to price exact type.
  - 11.) Item 27 Cleaning of the street is only if we have tracked mud while performing our work only with the exception of the 30 required visits? Other contractors responsible for their cleanup of mud tracked offsite?
  - 12.) What line striping is required for fields and what drawing is it shown on?
  - 13.) Please provide specification for planter waterproofing referred to in Item 65.
  - 14.) On Drawing CG111 (see attachment) where the proposed 8'' fire line and 6'' domestic water line connect to the 8'' water main in Raleigh Street there is a note that reads 'Connect to  $8'' \times 8''$  tee and  $8'' \times 6''$  tee'. Will the (2) tees be installed by "others" when the 8'' water main is run along the south shoulder of Raleigh Street or will the site work contractor on the Whitehall School project be expected to wet tap the 8'' main at the two locations indicated?

- 1.) The electric service shall be provided by Contract A-20 Electrical, including trenching, ductbank, conduit, cable, utility fees, etc. The telecommunications infrastructure (ductbank) is indicated on the electrical drawings. Therefore Contract A-20 Electrical shall include all costs for trenching, excavation, concrete, stone, and backfill. The gas service is going to be installed by the utility up to the meter on the building at no cost to the owner. The mechanical contractor shall connect to the service provided by the gas utility.
- 2.) No, as long as the onsite material is satisfactory and meets the compaction requirements, then imported select fill will not be required. However, it is the contractors' responsibility to determine if there is a sufficient quantity of material on site.
- 3.) Subgrade for each area will be 8" below the finished floor elevation of that area. Areas A and B elevations: Finished Floor = 65.67', Subgrade = 65'. Area C Elevations: Finished Floor = 61.00', Subgrade = 60.33'. Note that the architectural plans show the cooling tower enclosure as part of area C. There is no concrete finished floor in the enclosure. See structural drawings for floor thickness.
- 4.) The Whitehall Mix is a proprietary mix by Bear Concrete.
- 5.) The foundation must be integral due to the size of the footings, therefore, structural engineer suggests all of the concrete associated with dunnage support be provided by Contract A-03 Concrete as part of the building package.
- 6.) See response to question #5 above.
- 7.) The footings are integral with each other and therefore do not require a detail. Above grade to be soft joint and sealant.
- 8.) No. Read note #12 of Contract A-01 Sitework in spec section 011100 Summary of Work.
- 9.) It is the intent to use on site material and imported fill as required. The use of this onsite material shall conform with compaction requirements as specified on Civil drawings and in specification division 31. If there is insufficient on site material available, this contractor shall import at no additional expense to the project sufficient material to complete the work. If onsite material does not meet compaction requirements, as determined by the testing agency, then the unsatisfactory material shall be removed and replace at the unit price for select fill.
- 10.) Refer to spec section 055000 subparagraph 2.11.A.1a.
- 11.)Please read scope of work item #27. Street cleaning of mud, etc. will be required on a daily basis for the duration of sitework activities.
- 12.) The "Multipurpose Field" north of the parking lot will not be delineated with any striping.
- 13.) Refer to spec section 071416 subparagraph 2.2.
- 14.) The two tees in the Raleigh Street main will be installed by others. The school sitework contractor shall coordinate with EDIS and the adjacent Raleigh Street contractor to connect to the tees at the same time of their installation. A wet tap of the waterline is not anticipated.
- 78.) 1) Please clarify who furnishes equipment (amplifier, tuner, projector etc), indicated on sketch SK-E-26. If supplied by contract A-20, is there a spec for reference? Will alternates be accepted?

- 2) Please advise a list of State approved network cabling installers (per spec 260740). We are unable to find this information on the State of Del website.
- 3) Per Add #1 spec section modification #24, 260930 revisions, advise if alternates will be accepted for the lighting fixtures which are specified as ETC & Colorado. Also, per item #2 in this section, the front of house spot lights are listed as qty of (3) ETC, although the drawings show 6 fixtures. Please clarify,
- 4) Drawing E5.2 indicates the padmount transformer is supplied by the utility company; although, scope of work item #6, indicates the A-20 contractor provides the padmount transformer. If we are supplying the padmount transformer, we'll need a spec from the engineer, including the size. Please clarify.

#### Answer:

- 1. Provided by Contract A-21 Special Systems.
- 2. Contact State of DE Department of Technology and Information for list of installing Contractors
- 3. Yes, Quantity is to be six (6)
- 4. See addendum #3, Question #77 item #8.
- 79.) 1.) Item #22 in the scope of work for Contract # A-03 Masonry states to "Provide stucco" Don't see a reference or detail about stucco in the bidding documents. Can you provide a general location for this work and a detail that shows substrate and finish?
  - 2.) Alternate #4: Brick Veneer on Parking Lot Elevation. Is this alternate to include the Cooling Tower Enclosure, the Courtyard Wall, the Courtyard Planter Wall, the stage loading dock and the exterior wall of C123 Kitchen and C130 Vestibule?

- 1.) Eliminate item #22 from section 011100 Summary of Work, Contract A-03.
- 2.) Refer to Addendum #3, page 26, Item #2.
- 80. 1.) Specification Section 116143, Article 2.3, Paragraph C references Section 090600 that depicts the color selection for the Front Curtain. Page 4 of Section 090600 references KM as the fabric manufacturer that is not listed in section 116143. Please advise what fabric is desired. If we use KM fabric please specify the fabric type and if is to receive lining.

- 2.) Specification Section 116143, Article 2.7, Paragraph A.2 calls for the pipe batten finish to be painted black. We recommend using 1-1/2" Schedule 40 black steel pipe with a lacquer finish. Is this acceptable?
- 3.) Specification Section 116143, Article 2.7 Paragraph E indicated grade 80 chain is required. Grade 80 chain is not used in for dead-hung supports due to the size and shape of its links. ¼" Grade 30 chain is typically used to suspend dead-hung items over a stage as it greatly exceeds the minimum safety factors required for static loads. Please advise.
- 4.) Specification Section 116143, Article 2.3, Paragraph E.1.c lists Valley Forge Fabrics LINING. Is the intent to fabricate all cyclorama curtains with a lining?
- 5.) Specification Section 116143, Article 3.3, Paragraph C calls to close the ends of the pipe battens by welding and grinding smooth. We suggest installing safety end caps over the ends of the battens in lieu of welding and grinding. IS this acceptable?

#### Answer:

- 1.) KM "Prestige" Velour.
- 2.) This is acceptable.
- 3.) As long as it meets required loading.
- 4.) There is to be no lining.
- 5.) This is acceptable
- 81. 1.) Panel KP-2 appears to be a duplicate panel tag. There is a KP-2 fed from the MDP and a KP-2 fed from DP-1.
  - 2.) Is FP-1 a typo? Please confirm.

#### Answer:

- 1.) They will be called "KP-1" and "KP-2". Omit "KP-2" fed from "MDP" Addendum #2.
- 2.) Remove "KP-2" from "MDP" and change it to a service feeder to "UDS".
- 82. Please review the substitution request R.D. Bitzer Co., Inc. for Raypak Inc., XVers Condensing Boilers.

#### Answer:

The substitution for R.D. Bitzer Co., Inc. for Raypak Inc., XVers Condensing Boilers is not accepted.

83. Alternates 6, 7, and 8 involve acoustical clouds. These alternates are listed on the bid form for A-05 Carpentry and for A-12 Acoustical Ceilings. In Addendum 1, the acoustical ceiling spec was replaced and the new version includes acoustical canopy units and acoustical cloud units which would lead one to believe that contract A-12 would own the clouds that are the subject of the three alternates. Do you agree?

#### Answer:

Contract A-05 Carpentry & General Works shall provide any blocking necessary. Contract A-07 Metal Studs and Drywall shall provide any metal stud & drywall. Contract A-12 Acoustical Ceilings shall provide ACT, Grid, and any supports. Should the alternate be accepted, Contract A-12 shall provide the clouds.

84. In add. #2, page 38 and 39, they slash the word EIFS and make it Manufactured Moldings and Trim. The specification Exterior Finish Carpentry 062023, section 2.1 and 2.2 refer to basis of design as Canamould. The trim is still a EIFS product, correct?

#### Answer:

Canamould is not an EIFS product.

85. Please review the substitution request for York Building Products for 42000 Unit Masonry, Split Face Concrete Masonry Unit.

#### Answer:

Substitution request has been denied for York Building Products for 42000 Unit Masonry, Split Face Concrete Masonry Unit.

86. Fire pump: I see that they or someone did pick up on the relief valve and remote control panel [not needed] and they did clarify the pump controller. Although 2.3.A.3 still indicates a flow metering device. However, they still call for an automatic transfer switch for the pump – is there a generator? I don't see one on the "E" plans. A.2.A.3 & 2.4.B.

#### Answer:

Flow meter and automatic transfer switch not needed.

87. Please review the substitution request from Kencor Elevators/EEVI.

We do not accept this substitution request.

88. Can you provide a specification for the exterior acoustic panels at the chiller? They appear in the Addendum #1 Sk - A - 002, Elevation 2/A5.5.

#### Answer:

Remove Addendum #1 sketch Sk – A - 002.

89. Please clarify who is supposed to provide the Alternate #6, 7, & 8 scope of work in relation to the clouds.

#### Answer:

Contract A-05 Carpentry & General Works shall provide any blocking necessary. Contract A-07 Metal Studs and Drywall shall provide any metal stud & drywall. Contract A-12 Acoustical Ceilings shall provide ACT, Grid, and any supports. Should the alternate be accepted, Contract A-12 shall provide the clouds.

90. Per Addendum # 3 Question and answer 65. #2. The Roofing contractor is to furnish and install the overflow roof drains. Interior Overflow roof drains are a Trade specific item as is the primary Roof Drains, it seems the interior overflow drains should be included in item # 7 along with the primary roof drains in the Summary of Work - Contract NO. A-06 Roofing (Plumber furnishes and installs / roofer flashes), please advise. Note: If these were Overflow Scuppers the roofing contractor would own no questions asked.

#### Answer:

See question #65, item #2 in Addendum #3.

91. Can you clarify if the wall and soffit panels are in Contract A-06 Roofing scope of work? It is in the spec by not listed with our detailed scope. It does list all copings, edge metal, gutters and downspouts, but the fascia wrapping is also not listed. Please clarify.

#### Answer:

The soffit panels are the responsibility of and identified under Contract A-07 Metal Stud & Drywall summary of work. The metal roof panels are to be installed by Contract A-06 Roofing Contractor. See updated summary of work for contract A-06 Roofing, note 27.

92. Please review the substitution request from American Dryer.

#### Answer:

We accept this as an equal/alternate.

- 93. 1.) Cannot see where alt. #6 in the bid form affect painting?
  - 2.) Is the paint contractor providing the AC-2 Acoustical Clouds?
  - 3.) Is there any field painting of the EIFS Moulding? (2nd screen print)
  - 4.) Is there any field painting of GFRC railing, EIFS Moulding Canopy, or GFRC Columns? (third screen print below)

#### Answer:

- 1.) Contractor shall be required to paint soffits as part of Alt. #6.
- 2.) Contract A-12 Acoustical Ceilings shall provide the AC-2 Acoustical Clouds.
- 3.) See modifications to specifications, Item #1.
- 4.) GFRC to be painted. For moulding, see #3 above.
- 94. 1.) TS06 on plans scale to 6' wide, but in section 100600-1 schedule it indicates that it is 2' long x 3" I think it is a typo.
  - 2.) The only interior expansion joint I can find is at the transition from 2 story to single story building area, is that correct or are there any expansion joints along the main corridor of the 2 story building, it just appears to be too long to not have expansion joints?

- 1.) TS06 to be 6′ 0″ long x 3″ high.
- 2.) No other expansion joints.
- 95. The fire suppression drawings & specifications indicate A Rough Sprinkler Budget for Automatic Sprinkler Design Criteria that the fire sprinkler heads shall not exceed 225 square feet maximum for Light Hazard, with a K-Factor of 5.6 and 130 square feet maximum for Ordinary Hazard applications, with a K-Factor of 5.6. May the use of extended coverage fire sprinklers be installed in accordance to NFPA and Local Authorities Having Jurisdiction which will exceed the 130 square feet and 225 square feet maximum with a K-Factor greater than 5.6 indicated on the Rough Pressure Budget for Automatic Sprinkler Design Criteria? The specification Fire Suppression Sprinkler & Standpipe Section 210170-1, paragraph 2.7., line C. Sprinkler Types & Categories: Nominal ½" standard orifice, unless otherwise indicated or required by application is outlined. The drawings and specifications indicate that they are only to be used as a guideline and it is the responsibility of the Fire Protection Contractor to design

the fire sprinkler system, perform hydraulic calculations to meet the required system criteria in accordance to NFPA and Local Authorities Having Jurisdiction. Extended-coverage automatic fire sprinklers for these applications will provide the remote area coverage, proper density for the Light Hazard and Ordinary Hazard applications with hydraulic-calculated pressure & GPM demands as required based on water flow availability. The project will have a fire-pump and the extended coverage heads will have no problem in performance based on the city water-flow data information, combined with the fire-pump and the K-Factor of the extended coverage automatic fire sprinkler heads, main and branch-line pipe sizes, pressure requirements and flow (gpm) demand for the requirements of the hydraulically-calculated remote areas.

#### Answer:

Extended coverage sprinkler heads are acceptable as long as NFPA.

96. The Addendum 3 bid form for sitework has an alternate #4 for "Brick Veneer on Parking Lot Elevation". Is this alternate meant for the masonry contractor, not the sitework contractor?

#### Answer:

See sheet A3.6, all walls outside the footprint of the building are split face CMU. See details on A3.0. See addendum #3, page 26, item #2. All exterior planter walls shall be the responsibility of Contract A-01 Sitework.

- 97. 1.) Please address this question regarding the A-04: Structural Steel & Misc. Metals scope for this bid and Addendum #3 response to question 46.Reference is made in the answer regarding wood plate anchor bolts to Detail 8/S4.3.We find no bolts and see no similarity to a parapet plate in this detail. Nor does any other detail on S4.3 seem applicable. Please provide a correct detail reference, or clarify answer.
  - 2.) The following questions were submitted regarding downspout boots: The Basis-of-Design downspout boot is listed on page 055000-7 of Section 055000 Metal Fabrications. According to the manufacturer the specified product is available in three different lengths. Where in the bid documents can the A-04 bidder find information regarding the correct length of the downspout boots? The Basis-of-Design downspout boot is subject to compliance with requirements. Where in the bid documents can the A-04 bidder find information regarding compliance with requirements? The Basis-of-Design downspout boot is compatible with 4 x 3 inch downspouts. Where in the bid documents can the A-04 bidder find information regarding downspout size for the project?

3.) Addendum #3 RFI Question 74 on page 18 lists 14 questions pertaining to various trades. Confirm submitted question 10 in this series was meant to address the concerns we expressed. No answer was provided, but a response is to be expected in a future addendum. We are concerned that the question as written does note address all that needs to be clarified. A manufacturer and part number is specified, but the part number comes in three lengths and the required length is not specified, nor is a detail found to help us determine the required length. The manufacturer offers optional cleanout access on the specified part number, but this is not mentioned in the specification. Ideally, the required length and any requirement for cleanout access should be addressed in the final response. We are still puzzled why these are being supplied by the A-04 Steel contract package.

#### Answer:

- 1.) Detail 8/S4.3 not related to question. Refer to drawings A4.3 & A4.4.
- 2.) Downspout Boots to be 3' 0''.
- 3.) See response to item #2, question 97.
- 98. We are having a hard time finding the information regarding the location of the blackout vs. light filtering shades.

#### Answer:

Reference specification section 090600 - Room Finish Schedule.

99. Please address this question regarding the A-04: Structural Steel & Misc. Metals scope for this bid and Addendum #3 response to question 49. The answer to part 4 of the question states that there are no abrasive nosings on this project We will disregard the note describing abrasive nosings at the Portland Cement Concrete Steps detail on sheet CG501 and will not include these nosings in our A-04: Structural Steel & Misc. Metals scope for this project.

#### Answer:

Our comment pertains to an interior nosing's only. Follow detail sheet CG501 as specified.

100. We have spoken to one of the flooring contractors and they are considering not bidding the project because of the requirement to water jet cut the VCT floor patterns. They have done this with sheet vinyl but not VCT. They are concerned that with the tolerances in VCT from the manufacturers, that the joints won't line up. They would prefer to field cut the patterns. As a compromise would you consider – "Water-jet cut or field cut with templates, all arcs in floor patterns." The current spec is below.

#### Answer:

We maintain the specifications current standard of quality. Field cutting of patterns shall not be acceptable method of installation.

101.) Please review the attached substitution request for Section 230450 Ductless split system by Samsung.

#### Answer:

Furlow accepts this substitution request attached and will add them per addendum #4.

- 102.) 1.) A preaction suppression system is listed on under Summary of work note 11 and specification section 210170-13, fire suppression sprinkler and standpipe systems, part 2.12. The FP Drawings riser manifold detail on FP5.1 shows a 4" Alarm Valve. Is there a single interlock preaction system being installed for this project and what area will it be protecting? (Elevator Shaft or Data/IT Room?)
  - 2.) Where does the Fire Protection system installation start under contract A-17? Summary of work lists 5′ outside the building at note 17, and at note 2 it states to provide excavation and backfill related to FP work as detailed below. Is our excavation, backfill, and underground sprinkler piping limited to within 5′ outside the building?

#### Answer:

- 1.) The 210170 Specification Section 2.12 Preaction System is being removed in Addendum #4. The are no preaction systems on the project.
- 2.) The plumbing contractor is responsible for the fire water service from the flange 12 inch above the finished floor to 5 ft. outside the building. The fire protection contractor is responsible from the face of the fire water service flange into the building. As part of Addendum #4 the fire water service detail on the fire protection drawings has been modified to clarify the FPC and the PC responsibilities. Also the plumbing plans have been modified to indicate the division of responsibility and the fire water service detail has been added to the plumbing plans.

#### **MODIFICATIONS TO SPECIFICATIONS:**

1.) Section 034900 – GLASS-FIBER-REINFORCED-CONCRETE (GFRC)

Add 2.10 FINISHES add subparagraph B. Finishing of the GFRC Parts to be carried out by the Painting Subcontractor. Proper sealing of the finished GFRC Parts must be provided to avoid joint tape read through.

- 1. The GFRC Parts shall be prepared for Level 5 Finish, which may require skim coats, filling, and sanding to hide imperfections inherent in GFRC, in accordance with ASTM C840 and C1467.
- 2.) Section 055000 METAL FABRICATIONS

  <u>Add</u> 2.11 METAL DOWNSPOUT BOOTS subparagraph A.1 add sub letter **b. Boot Lengths:**3'-0" as indicated on the drawings.
- 3.) Section 087100 DOOR HARDWARE Add 3.8 DOOR HARDWARE SETS subparagraph B add sub number **10. OT OTHER**.

Add Hardware Set 3.1

#### Set: 3.1

Doors: EXB101, EXC001

2	Continuous Hinge	CFM_SLF-HD1 PT - DOOR HEIGHT		PE
1	Removable Mullion	L980A	US28	SA
1	Rim Exit Device	LC 16 55 56 8810 862	US32D	SA
1	Rim Exit Device	LC 16 55 56 8804 862	US32D	SA
1	Cylinder (rim)	3080 CT6R	630	RU
3	Cylinder (mortise)	1080 CT6R - LENGTH/CAM TO SUIT	630	RU
4	Removable Core	8020	630	RU
2	Conc Overhead Stop	6-X36	630	RF
1	Door Closer	J7500	689	NO
1	Automatic Opener	6330	689	NO
1	Threshold	272A MSES25SS		PE
1	Rain Guard	346C		PE
1	Gasketing (mullion)	5110BL		PE
2	Sweep (w/drip edge)	3452CNB		PE
1	Frame Harness	QC-C1500P		MK
1	Door Harness	QC-C LENGTH TO SUIT		MK
1	Switch	3287		SA
1	Electric Power Transfer	EL-CEPT		SU
2	Door Switch	501		NO
1	Power Supply	3540		SA

#### Notes:

Perimeter/meeting stile seals by frame/door supplier.

Electronic Operation: Valid card and intercom signal retracts latchbolt and activates exterior door switch; key retracts latchbolt. Free egress at all times. In case of power loss, door remains locked and latched.

- 4.) Section 116143 STAGE CURTAINS

  <u>Add</u> 2.3 CURTAIN FABRICS subparagraphs B.2 add subletter **e. "Prestige"; KM Fabrics**.
- 5.) Section 142600 LIMITED-USE/LIMITED-APPLICATION ELEVATORS

  <u>Add</u> Section in its entirety (per addendum #4)
- 6.) Section 321816.13 PLAYGROUND PROTECTIVE SURFACING

  <u>Add</u> 2.1 ACCEPTABLE MANUFACTURER add **Surface America, Inc.**
- 7.) Section 210170, FIRE SUPPRESSION SPRINKLER SYSTEM
  - a. Page 210170-13, Paragraph 2.12: DELETE in its entirety.
- 8.) Specification 210171, FIRE PUMP ELECTRIC
  - a. Page 210171-4, Paragraph 2.3.A.3: DELETE and renumber subsection.
  - b. Page 210171-5, Paragraph 2.4.A.11.d: DELETE line.
  - c. Page 210171-5, Paragraph 2.4.B: DELETE in its entirety.
- 9.) Section 230450, REFRIGERATION EQUIPMENT HVAC
  - a. Page 230450-12, Paragraph 2.3.E.4: DELETE as issued in Addendum #3, item 1.a.
  - b. Page 230450-12, Paragraph 2.3.J: ADD Samsung as an approved manufacturer.
- 10.) Section 230760, AIR HANDLING EQUIPMENT
  - a. Page 230760-3, Paragraph 2.2.B.1, as issued in Addendum #3, item 3.a: REVISE the first sentence to read as follows:
  - "1. Casing panels shall consist of single wall, minimum 18-gauge galvanized solid skin with 1"-thick 1.5pcf fiberglass insulation, with erosion resistant coating on the airside surface, and minimum R-value of 10, which meets NFPA 90A and UL 181 test standards."

- b. Page 230760-6, Paragraph 2.2.L.3, as issued in Addendum #3, item 3.a: REVISE to read as follows:
- "3. BAS Controller: DDC controller shall be provided as part of the work of ATC, field mounted and wired. Coordinate with Section 230900."
- c. Page 230760-8, Paragraph 2.3.I, as issued in Addendum #3, item 3.a: REVISE the second sentence to read as follows:
- "BAS Controller: DDC controller shall be provided as part of the work of ATC, field mounted and wired. Coordinate with Section 230900."
- 11.)Section 230900, AUTOMATIC TEMPERATURE CONTROLS, as issued in Addendum #3, page 1, item 4.b under MECHANICAL.
  - a. Paragraph 2.9: Sequence of Operation:
    - i. Page 4, Paragraph 2.9.E.5: DELETE in its entirety.
    - ii. Page 5, Paragraph 2.9.E.9: DELETE subparagraph f.
    - iii. Page 10, Paragraph 2.9.Q.1: DELETE Q.1.4.
    - iv. Page 10, Paragraph 2.9.Q.2.3: DELETE the second sentence "Provide an alarm if the fan is commanded on and flow is not proven after a 20-second delay."
- 12.) Section 280721, FIRE ALARM AND DETECTION SYSTEMS
  - a. Page 280721-5, Paragraph 2.3.A: ADD the following:
    - "7. Monitor the refrigerant monitoring panel, located in the Mechanical Room. Upon activation, send alarm condition to the Fire Alarm Panel."
- 13.) Delete Section 011100 Summary of Work and replace in its entirety.
- 14.) Delete section 012300 Alternates and replace in its entirety.
- 15.)Delete section 004100 Bid Forms for the following contracts: A-05 Carpentry & General Works, A-07 Metal Studs and Drywall, A-11 Painting, A-12 Acoustical Ceilings, A-17 Fire Protection, A-20 Electrical and replace in its entirety.

#### **MODIFICATIONS TO DRAWINGS:**

1.) Drawing A3.1 – PARTIAL FIRST FLOOR PLAN – AREA 'A'

<u>Revise</u> Classroom pod Area "A". Refer to sketch SK-A-035. Typical of rooms A111,A112, A113, A114, A115, A116, A117, A118, A119, A120.1, A211, A212, A213, A214, A215, A216, A217, A218, A219, A222.1, A222, A225, A226, A227, A228, A229, A230, A231, A232, A233, A234, A235.

2.) Drawing A3.3 – LOWER LEVEL PLAN – AREA 'C'

Revise Lower Level Plan – Area "C". Refer to sketch SK-A-030.

3.) Drawing A3.7 – ROOM FINISH SCHEDULE

Delete Room C102.1 CHAIRLIFT from ROOM FINISH SCHEDULE.

Add Room "C102.1 ELEVATOR" to ROOM FINISH SCHEDULE to read Floor Finish "-", Alt. Bid Floor Finish "-", Base "-", Wainscot "-", Wall Finish "-", Cabinets "-", Countertops "-", Comments "-".

Add Room "C102.2 ELEVATOR EQUIPMENT ROOM" to ROOM FINISH SCHEDULE to read Floor Finish "VCT-1", Alt. Bid Floor Finish "LVT-1", Base "RB-1", Wainscot "-", Wall F inish "PTD-1", Cabinets "-", Countertops "-", Comments "-".

4.) Drawing A3.8 – DOOR SCHEDULE

Add Door "C102.2" to INTERIOR DOOR SCHEDULE to read Leaf 1 "3'-0"", Height "7-2"", Door Type "F", Door Material "HM", Fire Rating "---", Hardware Set "023", Frame Type "HM1", Frame Material "HM", Head Detail "1/A8.2", Jamb Detail "2/A8.2".

Revise Doors EXB101 and EXC001, revise hardware set 003 to hardware set 003.1.

Revise Door A127 to be **A127A**.

Add Doors A127B, A130A, A130B. Refer to sketch SK-A-042.

Delete Door A130.

5.) Drawing A4.0 – TYPICAL ROOF DETAILS

Roof Type "RT1" - Revise note "TAPERED RIGID INSULATION – 2" MIN. AT ROOF DRAIN SUMPS- 4 1/2" MIN ((1) 2 1/2" LAYER, (1) 2" LAYER WITH STAGGERS JOINTS) AT LOW POINTS – SLOPE 1/4" PER FT. MIN." to read "TAPERED RIGID INSULATION – 4 1/2" MIN AT LOW POINTS – SLOPE 1/4" PER FT. MIN".

6.) Drawing A4.1 – OVERALL ROOF PLAN

Revise General Notes to read "3. TYPICAL INSULATION THICKNESS SHALL BE 4 1/2" TOTAL MIN., CONSISTING OF A MINIMUM OF (2) LAYERS WITH STAGGERED JOINTS UNLESS NOTED OTHERWISE".

7.) Drawing A5's – ALL ELEVATION DRAWINGS

<u>Add</u> GENERAL NOTES – EXTERIOR ELEVATIONS add sub number 7. **ALL G.F.R.C. AND PREMANUFACTURED EXTERIOR MOULDING TO BE PAINTED.** 

- 8.) Drawing A5.5 PARTIAL EXTERIOR ELEVATIONS AND TYPICAL QUOIN LAYOUT

  <u>Delete</u> Sketch SK-A-002 that was issued in Addendum #1.
- 9.) Drawing A6.0 TYPICAL SECTION DETAILS

  Revise Details 15/A6.0 and 16/A6.0. Refer to sketch SK-A-028 and SK-A-029.
- 10.)Drawing A7.1 STAIR PLANS

  Revise Stair CS-1/Elevator Lower Level 7/A7.1. Refer to sketch SK-A-031.
- 11.)Drawing A9.3 ENLARGED PLANS AND INTERIOR ELEVATIONS CLASSROOM AND COMMONS.

Revise Enlarged Plan 1/A9.3 revise layout. Refer to sketch SK-A-037.

<u>Revise</u> Elevations 3/A9.3 and 4/A9.3 revise typical commons elevations. Refer to sketch SK-A038.

<u>Revise</u> Elevations 8/A9.3 and 12/A9.3 revise typical classroom elevations. Refer to sketch SK-A039.

12.) Drawing A9.10 – FOLDING PARTITION TYPES AND DETAILS

Add Folding Partition type **FP-5**. Refer to sketch SK-A-041.

13.) Drawing A10.1 - FLOOR PATTERN PLAN - FIRST FLOOR - AREA 'A'

<u>Revise</u> Floor Pattern Plan – First Floor – Area "A". Refer to sketch SK-A-040. Typical of rooms A111,A112, A113, A114, A115, A116, A117, A118, A119, A120.1, A211, A212, A213, A214, A215, A216, A217, A218, A219, A222.1, A222, A225, A226, A227, A228, A229, A230, A231, A232, A233, A234, A235.

- 14.) Drawing A10.2 FLOOR PATTERN PLAN FIRST FLOOR AREA 'B'

  Revise Floor Pattern Plan First Floor Area "B". Refer to sketch SK-A-032.
- 15.) Drawing A10.3 FLOOR PATTERN PLAN LOWER LEVEL AREA 'C'

  Revise Floor Pattern Plan Lower Level Area "C". Refer to sketch SK-A-033.
- 16.) Drawing A11.1 FIRST FLOOR REFLECTED CEILING PLAN AREA "A"

  Revise Reflected Ceiling Plan classroom pods Area "A". Refer to sketch SK-A-036.

  Typical of rooms A111,A112, A113, A114, A115, A116, A117, A118, A119, A120.1, A211, A212, A213, A214, A215, A216, A217, A218, A219, A222.1, A222, A225, A226, A227, A228, A229, A230, A231, A232, A233, A234, A235.
- 17.) Drawing A11.3 LOWER LEVEL REFLECTED CEILING PLAN AREA 'C'

  Revise Lower Level Reflected Ceiling Plan Area "C". Refer to sketch SK-A-034.
- 18.) Drawing FP3.1, FIRST FLOOR FIRE PROTECTION PLAN AREA "C"
  - a. ADD Sprinkler protection and notes for Chairlift and Chairlift Machine Room. Refer to attached SK-FP-1.
- 19.) Drawing FP5.2, DETAILS, NOTES, LEGENDS, AND SCHEDULE FIRE PROTECTION
  - a. CHANGE FIRE WATER SERVICE DETAILS. Refer to attached Sketch SK-FP-2.
- 20.) Drawing P2.1, PARTIAL FIRST FLOOR BELOW SLAB PLUMBING PLAN AREA "A"
  - a. MODIFY Domestic Piping, sanitary, vent, and storm piping to accommodate door and sink relocation in Classrooms A115, A117, A129, & A134.
  - b. MODIFY services to water cooler F-7 in Storage A131 to accommodate shifted location.
  - c. MODIFY Domestic Piping, sanitary, vent, and storm piping to accommodate revised floor plan in Toilet A125 & Workroom A127 (rooms flipped locations).
- 21.) Drawing P2.3, PARTIAL FIRST FLOOR BELOW SLAB PLUMBING PLAN AREA "C"
  - RELOCATE Storm piping around new chairlift pit. Refer to attached Sketch SK-P-12.

- ADD 2" storm line to below slab storm piping for sump pump to serve chairlift pit. Refer to attached Sketch SK-P-12.

# 21.) Drawing P3.1, PARTIAL FIRST FLOOR PLUMBING PLAN - AREA "A"

- a. MODIFY Domestic Piping, sanitary, vent, and storm piping to accommodate door and sink relocation in Classrooms A115, A117, A129, & A134.
- b. MODIFY services to water cooler F-7 in Storage A131 to accommodate shifted location.
- c. MODIFY Domestic Piping, sanitary, vent, and storm piping to accommodate revised floor plan in Toilet A125 & Workroom A127 (rooms flipped locations).

# 22.) Drawing P3.3, PARTIAL FIRST FLOOR PLUMBING PLAN – AREA "C"

- ADD Sump Pump Alarm "SP F-57" to Chairlift machine room. Refer to attached Sketch SK-P-13.
- ADD Condensate Service "HVAC F-16" in Chairlift Machine Room connecting to condensate piping in office B122. Refer to attached Sketch SK-P-13.
- RELOCATE Vent to roofs in toilet room chases away from fire walls. Refer to attached Sketch SK-P-13.
- ADD Fire Protection Water Service and note to Fire Pump Room Area C. Refer to attached Sketch SK-P-15.

# 23.) Drawing P3.4, PARTIAL SECOND FLOOR PLUMBING PLAN – AREA "A"

a. MODIFY Domestic Piping, sanitary, vent, and storm piping to accommodate door and sink relocation in Classrooms A215, A217, A229, & A234.

#### 24.) Drawing P4.1, GYM ROOF PLUMBING PLAN

- RELOCATE Vent to roof away from fire walls. Refer to attached Sketch SK-P-14.

#### 25.) Drawing P5.2, DETAILS – PLUMBING

- ADD Fire Water Service Detail. Refer to attached Sketch SK-P-16.

# 26.) Drawing M3.1, PARTIAL FIRST FLOOR DUCTWORK PLAN – AREA "A"

- a. MODIFY locations of ceiling returns (CR-15) in Classrooms A115, A117, A129, and A134 to accommodate revised door locations. Door shifted south toward Colum Line 2.
- b. MODIFY location of FCU-A1.6 and associated ductwork/exhaust registers in Toilet A125 and Workroom A127 to accommodate revised floor plan (rooms flipped locations).
- c. RELOCATE diffusers in Commons A130 with respect to new ceiling layout, typical (5) Commons areas.

# 27.) Drawing M3.4, PARTIAL SECOND FLOOR DUCTWORK PLAN – AREA "A"

a. MODIFY locations of ceiling returns (CR-15) in Classrooms A215, A217, A229, and A234 to accommodate revised door locations. Door shifted south toward Colum Line 2.

# 28.) Drawing 3.6, PARTIAL FIRST FLOOR PIPING PLAN – AREA "A"

a. RELOCATE thermostat in Commons A130 with respect to new interior elevation, typical (5) Commons areas

# 29.) Drawing M3.8, PARTIAL FIRST FLOOR PIPING PLAN – AREA C

a. ADD AC-4 and Refrigerant Piping to Chair Lift Machine Room. Refer to attached Sketch SK-M-9.

#### 30.) Drawing M4.1, OVERAGLL & GYM MECHANICAL ROOF PLAN

a. ADD ACC-4 and Refrigerant Piping to Gym Roof. Refer to attached Sketch SK-M-10.

# 31.) Drawing M6.1, SCHEDULES – MECHANICAL

- a. <u>DUCTLESS SPLIT SYSTEM SCHEDULE</u>
- ADD AC-4 and ACC-4 performance data. Refer to attached Sketch SK-M-11.

#### 32.) Drawing E3.1, PARTIAL FIRST FLOOR LIGHTING PLAN – AREA "A"

a. MODIFY lighting, switches, receptacles, exit sign locations in Classrooms A115, A117, A129, and A134 to accommodate revised door locations. Door shifted south toward Colum Line 2.

- b. MODIFY lighting, switches, and receptacle locations in Toilet A125 and Workroom A127 to accommodate revised floor plan (rooms flipped locations).
- c. SHIFT locations of lighting, power, and EWC locations in Electric Room A132 to accommodate plan and revision.
- d. REVISE lighting layout. Refer to attached Sketch SK-E-59.
- e. OMIT Plans 2 and 3. No Alternate #8.

# 33.) Drawing E3.3, PARTIAL FIRST FLOOR LIGHTING PLAN – AREA "C"

a. REVISE lighting for new left. Refer to attached Sketch SK-E-55.

#### 34.) Drawing E3.4, PARTIAL SECOND FLOOR LIGHTING PLAN – AREA "A"

- a. MODIFY lighting, switches, receptacles, exit sign locations in Classrooms A215, A217, A229, and A234 to accommodate revised door locations. Door shifted south toward Colum Line 2.
- b. REVISE lighting layout in Commons A230 and A216. Refer to attached Sketch SK-E-59.
- c. OMIT Plans 2 and 3. No Alternate #8.
- 35.) Drawing E3.5, PARTIAL SECOND FLOOR LIGHTING PLAN AREA "B"
  - a. REVISE lighting layout in Commons B218. Refer to attached Sketch SK-E-59.
  - b. OMIT Plan 2. No Alternate #8.

# 36.) Drawing E3.6, PARTIAL FIRST FLOOR POWER PLAN – AREA "A"

- a. MODIFY lighting, switches, receptacles, exit sign locations in Classrooms A115, A117, A129, and A134 to accommodate revised door locations. Door shifted south toward Colum Line 2.
- b. MODIFY lighting, switches, and receptacle locations in Toilet A125 and Workroom A127 to accommodate revised floor plan (rooms flipped locations).
- c. SHIFT locations of lighting, power, and EWC locations in Electric Room A132 to

accommodate plan and revision.

- d. REVISE device locations in Commons A130 and A116 to relocate Teaching Wall. Refer to attached Sketch SK-E-58.
- 37.) Drawing E3.8, PARTIAL FIRST FLOOR POWER PLAN AREA "C"
  - a. ADD devices and equipment for new lift. Refer to attached SK-E-56.
- 38.) Drawing E3.9, PARTIAL SECOND FLOOR POWER PLAN AREA "A"
  - a. MODIFY lighting, switches, receptacles, exit sign locations in Classrooms A215, A217, A229, and A234 to accommodate revised door locations. Door shifted south toward Colum Line 2.
  - b. REVISE device locations in Commons A230 and A216 to relocate Teaching Wall. Refer to attached Sketch SK-E-58.
- 39.) Drawing E3.10, PARTIAL SECOND FLOOR POWER PLAN AREA "B"
  - a. REVISE device locations in Commons B210 to relocate Teaching Wall. Refer to attached Sketch SK-E-58.
- 40.) Drawing 4.1, OVERALL & GYM ELECTRICAL ROOF PLAN
  - a. ADD equipment for new lift. Refer to attached SK-E-57.
- 41.) Drawing E5.2, DETAILS ELECTRICAL
  - a. Panel PP-1
    - ADD 80A-3/P to circuit 12. Refer to Kitchen Schedule for wiring requirements to UDS System.
  - b. <u>Distribution Panel DP-1</u>
    - <u>Breaker #1</u>: CHANGE Panel names to "KP-1" and "KP-2". Ref.er to attached Sketch SK-E-52
- 42.) Drawing E6.2, SCHEDULES ELECTRICAL

- a. ADD equipment to schedule for new lift. Refer to attached SK-E-53.
- 43.) Drawing E6.4, PANEL SCHEDULES ELECTRICAL
  - a. ADD breakers for lift equipment. Refer to attached SK-E-54.

# 44.) DRAWING S2.3

• Revise the foundation plan per sketch SK-S-017 for the change from chairlift to elevator between areas B and C.

End of Addendum No. 4

# Contract: A-05: Carpentry & General Works

# **BID FORM**

For Bids Due:	To:	<u>Appoquinimink</u>	School District	
		118 South Sixth S		
		<u>Odessa, De 19730</u>	<u>!</u>	
Name of Bidder:				
Bidder Address:				
Contact Name:		E-Mail Address:		
Delaware Business License N	Vo.:	Taxpayer ID No.:	:	
(Other License Nos.):				
(A copy of Bidder's Delaware	Business License must be attache	ed to this form.)		
Phone No.: ( )		Fax No.: (		
accordance therewith, that h Work is to be performed, and Documents without exception	ng that he has read and understa e has visited the site and has fand d that his bid is based upon the son, hereby proposes and agrees to required to execute the work de	miliarized himself with materials, systems and to provide all labor, ma	the local condition l equipment descri aterials, plant, equi	ns under which the libed in the Bidding ipment, supplies,
\$		(	(\$	)
following Alternates. An "Alternate No. 6: Aco	applicable project specification s DD" or "DEDUCT" amount is in ustical Clouds in Library	ndicated by the crossed		es not apply.
			( φ	/
Alternate No. 7: GW	B and Acoustical Clouds in Lob	<u>by</u>		
Add/Deduct			(\$	)

Alternate No. 8:	CWB and Acoustical Clouds at Co	mmons Areas		
Add/Deduct _			(\$	<del>)</del>
UNIT PRICES Unit prices conform to following Unit Prices:	applicable project specification secti	on. Refer to the specifica	tions for a complete	e description of the
<u>NOTE</u> : The difference (15%).	e in price between Add and Deduct in	n the above Unit Prices s	hould not exceed fi	fteen percent
I/We acknowledge Ado cost/schedule impact th	dendums numberedhey may have.	aı	nd the price(s) subn	nitted include any
This bid shall remain v	ralid and cannot be withdrawn for si	xty (90) days from the da	ate of opening of bic	ds, and the

The Owner shall have the right to reject any or all bids, and to waive any informality or irregularity in any bid received.

undersigned shall abide by the Bid Security forfeiture provisions. Bid Security is attached to this Bid (if required).

This bid is based upon work being accomplished by the Sub-Contractors named on the list attached to this bid.

The undersigned represents and warrants that he has complied and shall comply with all requirements of local, state, and national laws; that no legal requirement has been or shall be violated in making or accepting this bid, in awarding the contract to him or in the prosecution of the work required; that the bid is legal and firm; that he has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken action in restraint of free competitive bidding.

Upon receipt of written notice of the acceptance of this Bid, the Bidder shall, within twenty (20) calendar days, execute the agreement in the required form and deliver the Contract Bonds, and Insurance Certificates, required by the Contract Documents.

3y		Trading as	
	s / General Partner's / Corporate Name)		
(State of Cor	poration)		
isiness Address			
<u>—</u>			
itness:		Ву:	
		( Authorized Signature )	
EAL)			
•		( Title )	
		ate:	

# **ATTACHMENTS**

**Sub-Contractor List** 

Non-Collusion Statement

Bid Bond

Consent of Surety

Affidavit of Employee Drug Testing Program (1 per contractor/subcontractor)

Delaware Business License

New Castle County Business License

(Others as Required by Project Manuals)

#### SUBCONTRACTOR LIST

In accordance with Title 29, Chapter 6962 (d)(10)b <u>Delaware Code</u>, the following sub-contractor listing must accompany the bid submittal. The name and address of the sub-contractor must be listed for each category where the bidder intends to use a sub-contractor to perform that category of work. In order to provide full disclosure and acceptance of the bid by the Owner, it is required that bidders list themselves as being the sub-contractor for all categories where he/she is qualified and intends to perform such work.

<u>Subcontractor</u> <u>Category</u>	Subcontractor	Address (City & State)	Subcontractors tax payer ID # or Delaware Business license #
Overhead Coiling     Door			
2. Rough Carpentry			
2. Resinous Flooring			

#### **NON-COLLUSION STATEMENT**

This is to certify that the undersigned bidder has neither directly nor indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this proposal submitted this date

All the terms and conditions of *Contract A-05 Carpentry & General Works* have been thoroughly examined and are understood.

NAME OF BIDDER:		
AUTHORIZED REPRESENTATIVE (TYPED):		
AUTHORIZED REPRESENTATIVE (SIGNATURE):		
TITLE:		
ADDRESS OF BIDDER:		
PHONE NUMBER:		
Sworn to and Subscribed before me this	day of	20
My Commission expires	NOTARY PUBLIC	

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

# **BID BOND**

# TO ACCOMPANY PROPOSAL (Not necessary if security is used)

KNOW ALL MEN BY THESE PR	ESENTS That:	of	
i	n the County of	and State of	as
Principal, and	of	in the County of	
and State of	as Surety, leg	gally authorized to do business in the State o	of Delaware
('State"), are held and firmly unto	the <b>Appoquinimink Schoo</b>	l District in the sum of	
Dollars (S)	, or percent not to exceed		
•	•	on Contract No to b	
		Appoquinimink School District for which	
-		ur heirs, executors, administrators, and succ	essors, jointly
and severally for and in the whol	e firmly by these presents.		
NOW THE CONDITION OF THI	S OBLIGATION IS SUCH TH	at if the above bounden Principal who has	submitted to the
		to this contract for the furnishing of certain	
		f said Principal shall well and truly enter in	
		and approved by <b>Appoquinimink School</b> l	
		f official notice of the award thereof in acco	
	2 2	e to be and remain in full force and virtue.	
	O		
		in the year of our Lord t	wo thousand
and(20_	_).		
CEALED AND DELIVEDED IN T	FLIE DDECENICE OF		
SEALED, AND DELIVERED IN T	THE PRESENCE OF		
	Nam	e of Bidder (Organization)	
Corporate	Bv:		
Seal	Authorized Sign		
Attest	C		
	Title		
	Name of Surety		
Witness			
	Title		

	CONSENT OF SURETY
DATE_	
То:	Appoquinimink School District  118 South Sixth Street  Odessa, De 19730
Gentler	men:
We, the	e
	(Surety Company's Address)
a Suret	y Company authorized to do business in the State of Delaware hereby agrees that if
	(Contractor)
	(Address)
is awar	rded the Contract No.
We wil Bidders	ll write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to s.
	(Surety Company)
	Ву
	(Attorney-in-Fact)

# AFFIDAVIT OF EMPLOYEE DRUG TESTING PROGRAM

4104 Regulations for the Drug Testing of Contractor and Subcontractor Employees Working on Large Public Works Projects requires that Contractors and Subcontractors implement a program of mandatory drug testing for Employees who work on Large Public Works Contracts funded all or in part with public funds.

We hereby certify that we have in place or will implement during the entire term of the contract a Mandatory Drug Testing Program for our employees on the jobsite that complies with this regulation:

Contractor/Subcontractor Name:			
Contractor/Subcontractor Address:			
Authorized Representative (typed or prin	nted):		
Authorized Representative (signature):			
Title:			
Sworn to and Subscribed before me this	day of	20	
My Commission expires	NOTARY PUBLI	CC	<u>.</u>

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

# Contract: A-07: Metal Studs & Drywall

#### **BID FORM**

For Bids Due:	To:	Appoquinimink S			
		118 South Sixth Str Odessa, De 19730	<u>reet</u>		
Name of Bidder:					
Bidder Address:					
Contact Name:		E-Mail Address: _			
Delaware Business License No.:		Taxpayer ID No.:			
(Other License Nos.):(A copy of Bidder's Delaware Business License	se must be attached	to this form.)			
Phone No.: ( )		Fax No.: ( )_			
accordance therewith, that he has visited the Work is to be performed, and that his bid is Documents without exception, hereby prop transport and other facilities required to exeitemized below:	based upon the ma oses and agrees to p	terials, systems and oprovide all labor, mat	equipment desc terials, plant, eq	ribed in the Bi uipment, supp	idding plies,
\$			(\$		)
ALTERNATES Alternate prices conform to applicable proje following Alternates. An "ADD" or "DEDU	CT" amount is indi	_		-	ion of the
Alternate No. 6: Acoustical Clouds i	<u>in Library</u>				
Add/Deduct			(\$	)	
Alternate No. 7: GWB and Acoustic	al Clouds in Lobby				
Add/Deduct			(\$	)	

Alternate No. 8:	GWB and Acoustical Clouds at Co	mmons Areas		
Add/Deduct _			(\$	<del>)</del>
UNIT PRICES Unit prices conform to following Unit Prices:	applicable project specification section	on. Refer to the specificat	ions for a complete	e description of the
NOTE: The difference (15%).	e in price between Add and Deduct in	n the above Unit Prices sh	ould not exceed fi	fteen percent
I/We acknowledge Add	dendums numberedhey may have.	an	d the price(s) subr	nitted include any
This bid shall remain v	valid and cannot be withdrawn for six	xty (90) days from the dat	te of opening of bid	ds, and the

The Owner shall have the right to reject any or all bids, and to waive any informality or irregularity in any bid received.

undersigned shall abide by the Bid Security forfeiture provisions. Bid Security is attached to this Bid (if required).

This bid is based upon work being accomplished by the Sub-Contractors named on the list attached to this bid.

The undersigned represents and warrants that he has complied and shall comply with all requirements of local, state, and national laws; that no legal requirement has been or shall be violated in making or accepting this bid, in awarding the contract to him or in the prosecution of the work required; that the bid is legal and firm; that he has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken action in restraint of free competitive bidding.

Upon receipt of written notice of the acceptance of this Bid, the Bidder shall, within twenty (20) calendar days, execute the agreement in the required form and deliver the Contract Bonds, and Insurance Certificates, required by the Contract Documents.

		_ Trading as		
(Individual's / Ger	neral Partner's / Corporate Nam			
(State of Corporat	ion)	_		
simosa Adduosa.				
		D		
tness:			ed Signature )	
EAL)		( Authorize	eu Signature )	
,		( Title )		
		Date:		

## **ATTACHMENTS**

**Sub-Contractor List** 

Non-Collusion Statement

Bid Bond

Consent of Surety

Affidavit of Employee Drug Testing Program (1 per contractor/subcontractor)

Delaware Business License

New Castle County Business License

(Others as Required by Project Manuals)

#### SUBCONTRACTOR LIST

In accordance with Title 29, Chapter 6962 (d)(10)b <u>Delaware Code</u>, the following sub-contractor listing must accompany the bid submittal. The name and address of the sub-contractor must be listed for each category where the bidder intends to use a sub-contractor to perform that category of work. In order to provide full disclosure and acceptance of the bid by the Owner, it is required that bidders list themselves as being the sub-contractor for all categories where he/she is qualified and intends to perform such work.

<u>Subcontractor</u>			
<u>Category</u>	Subcontractor	Address (City & State)	Subcontractors tax payer ID # or Delaware Business license #
1. Metal Stud Fran	ning		
2. Fireproofing			
3. EIFS			
4. Install Drywall			
5. Finishing Dryw	all		

#### **NON-COLLUSION STATEMENT**

This is to certify that the undersigned bidder has neither directly nor indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this proposal submitted this date

All the terms and conditions of *Contract A-07 Metal Studs & Drywall* have been thoroughly examined and are understood.

My Commission expires		
Sworn to and Subscribed before me this	day of	20
NUONE NUNTER		
ADDRESS OF BIDDER:		
TITLE:		
SIGNATURE):		
AUTHORIZED REPRESENTATIVE		
AUTHORIZED REPRESENTATIVE TYPED):		
NAME OF BIDDER:		

#### **BID BOND**

# TO ACCOMPANY PROPOSAL (Not necessary if security is used)

KNOW ALL MEN BY THESE PR	ESENTS That:	of	
		and State of	as
Principal, and	of	in the County of	·
		gally authorized to do business in the State	
		ol District in the sum of	
Dollars (S)	, or percent not to exceed		
		on Contract No to	
		Appoquinimink School District for which	
•		ur heirs, executors, administrators, and suc	cessors, jointly
and severally for and in the whol	e firmly by these presents.		
NOW THE CONDITION OF TH	IS OBLICATION IS SUCH TE	nat if the above bounden Principal who has	submitted to the
		to this contract for the furnishing of certain	
		f said Principal shall well and truly enter ir	
		and approved by <b>Appoquinimink School</b>	
, ,	-	of official notice of the award thereof in according	
	2 2	e to be and remain in full force and virtue.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
terms or said proposal, their times	sengation shan se void of ele	e to be and remain in rain rorce and virtue.	
Sealed with seal and	d dated this day of	in the year of our Lord	two thousand
and(20_			
· · · · · · · · · · · · · · · · · · ·	<b>—</b> ,		
SEALED, AND DELIVERED IN	ΓHE PRESENCE OF		
		(P:11 (Q : : : : )	
	Nam	ne of Bidder (Organization)	
Corporate	Bv:		
Seal	Authorized Sigr		
Attest			
	Title		
	Name of Surety		
Witness			
	 Title		<del></del>
	Line		

	CONSENT OF SURETY
DATE <u></u>	
То:	Appoquinimink School District  118 South Sixth Street Odessa, De 19730
Gentle	emen:
We, th	e
	(Surety Company's Address)
a Suret	ty Company authorized to do business in the State of Delaware hereby agrees that if
	(Contractor)
	(Address)
is awaı	rded the Contract No.
We wil Bidder	ll write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to rs.
	(Surety Company)
	By(Attorney-in-Fact)

# AFFIDAVIT OF EMPLOYEE DRUG TESTING PROGRAM

4104 Regulations for the Drug Testing of Contractor and Subcontractor Employees Working on Large Public Works Projects requires that Contractors and Subcontractors implement a program of mandatory drug testing for Employees who work on Large Public Works Contracts funded all or in part with public funds.

We hereby certify that we have in place or will implement during the entire term of the contract a Mandatory Drug Testing Program for our employees on the jobsite that complies with this regulation:

Contractor/Subcontractor Name:				
Contractor/Subcontractor Address:				
Authorized Representative (typed or prin	nted):			
Authorized Representative (signature):				
Title:				
Sworn to and Subscribed before me this	ċ	lay of	20	
My Commission expires	NOTA	RY PUBLIC		<u>.</u>

# Contract: A-11: Paint & Wallcovering

# BID FORM

For Bids Due:		To:	Appoquinimink School District	
			118 South Sixth Street	
			Odessa, De 19730	
Name of Bidder:				
Bidder Address:				
Contact Name:	_	<u>-</u>	E-Mail Address:	
Delaware Business Lice	ense No.:	<u>.</u>	Taxpayer ID No.:	
(Other License Nos.): _				
(A copy of Bidder's Dela	ware Business License must be atta	ached	to this form.)	
Phone No.: ( )		-	Fax No.: ( )	
accordance therewith, t Work is to be performed Documents without exc	hat he has visited the site and has d, and that his bid is based upon t ception, hereby proposes and agre	famili he ma es to p	Is the Bidding Documents and that this bid is ma arized himself with the local conditions under w terials, systems and equipment described in the I provide all labor, materials, plant, equipment, sup ribed by the aforesaid documents for the lump su	hich the Bidding oplies,
\$			(\$	)
following Alternates. A  Alternate No. 6:		is indi	ion. Refer to specifications for a complete descrip cated by the crossed out part that does not apply  (\$)	
	GWB and Acoustical Clouds in I		`	
		,	/ A	
Aad/Deduct			(\$)	

Alternate No. 8:	CWB and Acoustical Clouds at Commons Areas	
——————————————————————————————————————		
Alternate No. 10:	Ceramic Tile	
Add/Deduct _		(\$)
<u>UNIT PRICES</u> Unit prices conform to following Unit Prices:	applicable project specification section. Refer to the speci-	fications for a complete description of the
<u>NOTE</u> : The difference (15%).	e in price between Add and Deduct in the above Unit Pric	es should not exceed fifteen percent
I/We acknowledge Add cost/schedule impact the	dendums numberedhey may have.	_ and the price(s) submitted include any
	ralid and cannot be withdrawn for sixty (90) days from the le by the Bid Security forfeiture provisions. Bid Security is	
The Owner shall have	the right to reject any or all bids, and to waive any inform	ality or irregularity in any bid received.
This bid is based upon	work being accomplished by the Sub-Contractors named	on the list attached to this bid.

The undersigned represents and warrants that he has complied and shall comply with all requirements of local, state, and national laws; that no legal requirement has been or shall be violated in making or accepting this bid, in awarding the contract to him or in the prosecution of the work required; that the bid is legal and firm; that he has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken action in restraint of free competitive bidding.

Upon receipt of written notice of the acceptance of this Bid, the Bidder shall, within twenty (20) calendar days, execute the agreement in the required form and deliver the Contract Bonds, and Insurance Certificates, required by the Contract Documents.

У	Trading as	
(Individual's / General Partr	ner's / Corporate Name)	
(State of Corporation)		
siness Address		
itness:	By:	
	( Authorized Signature )	
EAL)		
,	( Title )	
	Date:	

## **ATTACHMENTS**

**Sub-Contractor List** 

Non-Collusion Statement

Bid Bond

Consent of Surety

Affidavit of Employee Drug Testing Program (1 per contractor/subcontractor)

Delaware Business License

New Castle County Business License

(Others as Required by Project Manuals)

#### SUBCONTRACTOR LIST

In accordance with Title 29, Chapter 6962 (d)(10)b <u>Delaware Code</u>, the following sub-contractor listing must accompany the bid submittal. The name and address of the sub-contractor must be listed for each category where the bidder intends to use a sub-contractor to perform that category of work. In order to provide full disclosure and acceptance of the bid by the Owner, it is required that bidders list themselves as being the sub-contractor for all categories where he/she is qualified and intends to perform such work.

<u>Subcontractor</u>			
<u>Category</u>	Subcontractor	Address (City & State)	Subcontractors tax payer ID # or Delaware Business license #
1. Painting			

#### **NON-COLLUSION STATEMENT**

This is to certify that the undersigned bidder has neither directly nor indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this proposal submitted this date

All the terms and conditions of *Contract A-11 Paint & Wallcoverings* have been thoroughly examined and are understood.

AUTHORIZED REPRESENTATIVE TYPED):		
AUTHORIZED REPRESENTATIVE SIGNATURE):		
ΓΙΤLE:		
ADDRESS OF BIDDER:		
PHONE NUMBER:		
Sworn to and Subscribed before me this	day of	20
My Commission expires	NOTARY PUBLIC	

#### **BID BOND**

# TO ACCOMPANY PROPOSAL (Not necessary if security is used)

KNOW ALL MEN BY THESE PR	ESENTS That:	of	
		and State of	as
Principal, and	of	in the County of	
		gally authorized to do business in the State	
		l District in the sum of	
Dollars (S)	, or percent not to exceed		
		on Contract No to	
		Appoquinimink School District for which	
•		ur heirs, executors, administrators, and suc	cessors, jointly
and severally for and in the whol	e firmly by these presents.		
NOW THE CONDITION OF TH	IS OBLICATION IS SUCH TH	at if the above bounden Principal who has	s submitted to the
		to this contract for the furnishing of certain	
		f said Principal shall well and truly enter ir	
		and approved by <b>Appoquinimink School</b>	
, ,	5	f official notice of the award thereof in acco	
	2 2	e to be and remain in full force and virtue.	stautice with the
terms or said proposal, their times	sengation shan se void of else	e to be und remain in run force und virtue.	
Sealed with seal and	d dated this day of	in the year of our Lord	two thousand
and(20_			
SEALED, AND DELIVERED IN	THE PRESENCE OF		
		(P:11 (Q : :: :: )	
	Nam	e of Bidder (Organization)	
Corporate	Bv:		
Seal	Authorized Sign		
Attest	e		
	Title		
	Name of Surety		
Witness			
	 Title		
	line		

	CONSENT OF SURETY
DATE <u></u>	
То:	Appoquinimink School District  118 South Sixth Street Odessa, De 19730
Gentle	emen:
We, th	e
	(Surety Company's Address)
a Suret	ty Company authorized to do business in the State of Delaware hereby agrees that if
	(Contractor)
	(Address)
is awa	rded the Contract No.
	ll write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to
	(Surety Company)
	By(Attorney-in-Fact)
	(2 second y in 1 act)

# AFFIDAVIT OF EMPLOYEE DRUG TESTING PROGRAM

4104 Regulations for the Drug Testing of Contractor and Subcontractor Employees Working on Large Public Works Projects requires that Contractors and Subcontractors implement a program of mandatory drug testing for Employees who work on Large Public Works Contracts funded all or in part with public funds.

We hereby certify that we have in place or will implement during the entire term of the contract a Mandatory Drug Testing Program for our employees on the jobsite that complies with this regulation:

Contractor/Subcontractor Name:		
Contractor/Subcontractor Address:		
Authorized Representative (typed or pri	inted):	
Authorized Representative (signature):		
Title:	9	
Sworn to and Subscribed before me this	day of	
My Commission expires	NOTARY PUBLIC	<u>.</u>

# Contract: A-12: Acoustical Ceilings

## **BID FORM**

For Bids Due:	To:	Appoquinimink School Distric	<u>t                                      </u>
		118 South Sixth Street	
		<u>Odessa, De 19730</u>	
Name of Bidder:			
Bidder Address:			
Contact Name:		E-Mail Address:	
Delaware Business License No.:		Taxpayer ID No.:	
(Other License Nos.):			
(A copy of Bidder's Delaware Business L	icense must be attached	to this form.)	
Phone No.: ( )		Fax No.: ( )	
The undersigned, representing that he laccordance therewith, that he has visite Work is to be performed, and that his b Documents without exception, hereby partial transport and other facilities required to itemized below:	ed the site and has famili id is based upon the ma proposes and agrees to p	tarized himself with the local conditerials, systems and equipment desprovide all labor, materials, plant, e	itions under which the scribed in the Bidding equipment, supplies,
\$		(\$	)
ALTERNATES  Alternate prices conform to applicable procession of the prices following Alternates. An "ADD" or "Description of the process of	EDUCT" amount is indi	icated by the crossed out part that o	
Alternate No. 7: GWB and Acou	ustical Clouds in Lobby		
Add/Deduct		(\$	)

Alternate No. 8: GWB and Acoustical Clouds at Commons Areas
<u>UNIT PRICES</u> Unit prices conform to applicable project specification section. Refer to the specifications for a complete description of the following Unit Prices:
NOTE: The difference in price between Add and Deduct in the above Unit Prices should not exceed fifteen percent (15%).
I/We acknowledge Addendums numbered and the price(s) submitted include any cost/schedule impact they may have.
This bid shall remain valid and cannot be withdrawn for sixty (90) days from the date of opening of bids, and the undersigned shall abide by the Bid Security forfeiture provisions. Bid Security is attached to this Bid (if required).

The undersigned represents and warrants that he has complied and shall comply with all requirements of local, state, and national laws; that no legal requirement has been or shall be violated in making or accepting this bid, in awarding the contract to him or in the prosecution of the work required; that the bid is legal and firm; that he has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken action in restraint of free competitive bidding.

The Owner shall have the right to reject any or all bids, and to waive any informality or irregularity in any bid received.

This bid is based upon work being accomplished by the Sub-Contractors named on the list attached to this bid.

Upon receipt of written notice of the acceptance of this Bid, the Bidder shall, within twenty (20) calendar days, execute the agreement in the required form and deliver the Contract Bonds, and Insurance Certificates, required by the Contract Documents.

·		Trad	ing as	
(Individual's	/ General Partner's / Corporate	Name)		
(State of Corp	poration)			
simona Addunana				
mess Address:_				
		D		
ness:			Authorized Signature )	
EAL)		'	Tutionzed Signature )	
,		<del>-</del>	Title )	
		Date:		

## **ATTACHMENTS**

**Sub-Contractor List** 

Non-Collusion Statement

Bid Bond

Consent of Surety

Affidavit of Employee Drug Testing Program (1 per contractor/subcontractor)

Delaware Business License

New Castle County Business License

(Others as Required by Project Manuals)

#### SUBCONTRACTOR LIST

In accordance with Title 29, Chapter 6962 (d)(10)b <u>Delaware Code</u>, the following sub-contractor listing must accompany the bid submittal. The name and address of the sub-contractor must be listed for each category where the bidder intends to use a sub-contractor to perform that category of work. In order to provide full disclosure and acceptance of the bid by the Owner, it is required that bidders list themselves as being the sub-contractor for all categories where he/she is qualified and intends to perform such work.

Subcontractor			
<u>Category</u>	Subcontractor	Address (City & State)	Subcontractors tax payer ID # or Delaware Business license #
1. Acoustical Ceilings			

#### **NON-COLLUSION STATEMENT**

This is to certify that the undersigned bidder has neither directly nor indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this proposal submitted this date

All the terms and conditions of *Contract A-12 Acoustical Ceilings* have been thoroughly examined and are understood.

NAME OF BIDDER:		
AUTHORIZED REPRESENTATIVE (TYPED):		
AUTHORIZED REPRESENTATIVE (SIGNATURE):		
TITLE: _		
ADDRESS OF BIDDER:		
PHONE NUMBER:		
Sworn to and Subscribed before me this _	day of20	·
My Commission expires	NOTARY PUBLIC	

#### **BID BOND**

# TO ACCOMPANY PROPOSAL (Not necessary if security is used)

ESENTS That:	of	
n the County of	and State of	as
of	in the County of	
as Suret	y, legally authorized to do business in the State o	of Delaware
or percent not to exceed	I	
) of amount o	f bid on Contract No to b	e paid to the
for the use and benefit o	f the Appoquinimink School District for which	payment well
ourselves, our and each	of our heirs, executors, administrators, and succ	essors, jointly
e firmly by these present	s.	
a certain proposal to entawarded this Contract, and the terms of this Contract, and twenty days after the distribution shall be void of dated thisday of).	er into this contract for the furnishing of certain and if said Principal shall well and truly enter interact and approved by <b>Appoquinimink School I</b> at a of official notice of the award thereof in accordance to be and remain in full force and virtue.	material and/or to and execute  District this rdance with the
-	N. (D:11 (O )	
	Name of Bidder (Organization)	
R <sub>17</sub> .		
-		
Tuttonzed	Signature	
Title		
Title		
Name of Su	retv	
1 (61110 01 00		
Title		
	as Surety the Appoquinimink Sort percent not to exceed  of an of an or percent not to exceed  of a mount of the use and benefit or ourselves, our and each of firmly by these presents of Sobligation is Contract, and the terms of this Contract, and the terms of the contract of of the	HE PRESENCE OF  Name of Bidder (Organization)  By:  Authorized Signature  Title  Name of Surety

	CONSENT OF SURETY
DATE_	
То:	Appoquinimink School District  118 South Sixth Street Odessa, De 19730
Gentle	emen:
We, the	e
	(Surety Company's Address)
a Suret	ty Company authorized to do business in the State of Delaware hereby agrees that if
	(Contractor)
	(Address)
is awaı	rded the Contract No.
	ll write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to
	(Surety Company)
	By(Attorney-in-Fact)

# AFFIDAVIT OF EMPLOYEE DRUG TESTING PROGRAM

4104 Regulations for the Drug Testing of Contractor and Subcontractor Employees Working on Large Public Works Projects requires that Contractors and Subcontractors implement a program of mandatory drug testing for Employees who work on Large Public Works Contracts funded all or in part with public funds.

We hereby certify that we have in place or will implement during the entire term of the contract a Mandatory Drug Testing Program for our employees on the jobsite that complies with this regulation:

Contractor/Subcontractor Name:			
Contractor/Subcontractor Address:			
Authorized Representative (typed or prin	nted):		
Authorized Representative (signature):			
Title:			
Sworn to and Subscribed before me this	day of	20	
My Commission expires	NOTARY PUBLI	C	<u>.</u>

# **Contract:** A-17: Fire Protection

## **BID FORM**

For Bids Due:	To:	Appoquinimink School District 118 South Sixth Street Odessa, De 19730	
Name of Bidder:			
Bidder Address:			
Contact Name:		E-Mail Address:	
Delaware Business License No.:		Taxpayer ID No.:	
(Other License Nos.):(A copy of Bidder's Delaware Busing	oss Ligansa must be attached	to this form	
(A copy of bidder's Delaware Busine	ess License must be attached	to this form.)	
Phone No.: ( )		Fax No.: ( )	
accordance therewith, that he has v Work is to be performed, and that l Documents without exception, here	risited the site and has familinis bid is based upon the ma beby proposes and agrees to p	ds the Bidding Documents and that the local condition is a second that the local condition is a systems and equipment described all labor, materials, plant, equipment by the aforesaid documents for the local provide all labor.	ons under which the ribed in the Bidding uipment, supplies,
\$		(\$	)
following Alternates. An "ADD" or		ion. Refer to specifications for a com- cated by the crossed out part that do	
Add/Deduct		(\$	)
Alternate No. 7: GWB and	Acoustical Clouds in Lobby		
Add/Deduct		(\$	)

Alternate No. 8: GWB and Acoustical Clouds at Commons Areas	
Add/Deduct	(\$)
<u>UNIT PRICES</u> Unit prices conform to applicable project specification section. Refer to the specifications following Unit Prices:	for a complete description of the
NOTE: The difference in price between Add and Deduct in the above Unit Prices should (15%).	not exceed fifteen percent
I/We acknowledge Addendums numbered and the cost/schedule impact they may have.	e price(s) submitted include any
This bid shall remain valid and cannot be withdrawn for sixty (90) days from the date of cundersigned shall abide by the Bid Security forfeiture provisions. Bid Security is attached	. 0
The Owner shall have the right to reject any or all bids, and to waive any informality or ir	regularity in any bid received.

The undersigned represents and warrants that he has complied and shall comply with all requirements of local, state, and national laws; that no legal requirement has been or shall be violated in making or accepting this bid, in awarding the contract to him or in the prosecution of the work required; that the bid is legal and firm; that he has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken action in restraint of free competitive bidding.

This bid is based upon work being accomplished by the Sub-Contractors named on the list attached to this bid.

Upon receipt of written notice of the acceptance of this Bid, the Bidder shall, within twenty (20) calendar days, execute the agreement in the required form and deliver the Contract Bonds, and Insurance Certificates, required by the Contract Documents.

Trading as
By:
( Authorized Signature )

## **ATTACHMENTS**

**Sub-Contractor List** 

Non-Collusion Statement

Bid Bond

Consent of Surety

Affidavit of Employee Drug Testing Program (1 per contractor/subcontractor)

Delaware Business License

New Castle County Business License

(Others as Required by Project Manuals)

#### SUBCONTRACTOR LIST

In accordance with Title 29, Chapter 6962 (d)(10)b <u>Delaware Code</u>, the following sub-contractor listing must accompany the bid submittal. The name and address of the sub-contractor must be listed for each category where the bidder intends to use a sub-contractor to perform that category of work. In order to provide full disclosure and acceptance of the bid by the Owner, it is required that bidders list themselves as being the sub-contractor for all categories where he/she is qualified and intends to perform such work.

<u>Subcontractor</u>			
<u>Category</u>	Subcontractor	Address (City & State)	Subcontractors tax payer ID # or Delaware Business license #
1. Fire Protection			

#### **NON-COLLUSION STATEMENT**

This is to certify that the undersigned bidder has neither directly nor indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this proposal submitted this date

All the terms and conditions of *Contract A-17 Fire Protection* have been thoroughly examined and are understood.

NAME OF BIDDER:		
AUTHORIZED REPRESENTATIVE (TYPED):		
AUTHORIZED REPRESENTATIVE (SIGNATURE):		
TITLE:		
ADDRESS OF BIDDER:		
PHONE NUMBER:		
Sworn to and Subscribed before me this	day of	20
My Commission expires	. NOTARY PUBLIC	

#### **BID BOND**

# TO ACCOMPANY PROPOSAL (Not necessary if security is used)

ESENTS That:	of	
n the County of	and State of	as
of	in the County of	
as Suret	y, legally authorized to do business in the State o	of Delaware
or percent not to exceed	I	
) of amount o	f bid on Contract No to b	e paid to the
for the use and benefit o	f the Appoquinimink School District for which	payment well
ourselves, our and each	of our heirs, executors, administrators, and succ	essors, jointly
e firmly by these present	s.	
a certain proposal to entawarded this Contract, and the terms of this Contract, and twenty days after the distribution shall be void of dated thisday of).	er into this contract for the furnishing of certain and if said Principal shall well and truly enter interact and approved by <b>Appoquinimink School I</b> at a of official notice of the award thereof in accordance to be and remain in full force and virtue.	material and/or to and execute  District this rdance with the
-	N. (D:11 (O )	
	Name of Bidder (Organization)	
R <sub>17</sub> .		
-		
Tuttonzed	Signature	
Title		
Title		
Name of Su	retv	
1 (61110 01 00		
Title		
	as Surety the Appoquinimink Sort percent not to exceed  of an of an or percent not to exceed  of a mount of the use and benefit or ourselves, our and each of firmly by these presents of Sobligation is Contract, and the terms of this Contract, and the terms of the contract of of the	HE PRESENCE OF  Name of Bidder (Organization)  By:  Authorized Signature  Title  Name of Surety

	CONSENT OF SURETY
DATE_	
Го:	Appoquinimink School District  118 South Sixth Street Odessa, De 19730
Gentler	men:
We, the	e
	(Surety Company's Address)
a Suret	y Company authorized to do business in the State of Delaware hereby agrees that if
	(Contractor)
	(Address)
is awar	rded the Contract No.
We wil Bidders	ll write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to s.
	(Surety Company)
	By(Attorney-in-Fact)
	(1 1 (1 O I I I C I )

# AFFIDAVIT OF EMPLOYEE DRUG TESTING PROGRAM

4104 Regulations for the Drug Testing of Contractor and Subcontractor Employees Working on Large Public Works Projects requires that Contractors and Subcontractors implement a program of mandatory drug testing for Employees who work on Large Public Works Contracts funded all or in part with public funds.

We hereby certify that we have in place or will implement during the entire term of the contract a Mandatory Drug Testing Program for our employees on the jobsite that complies with this regulation:

Contractor/Subcontractor Name:		
Contractor/Subcontractor Address:		
Authorized Representative (typed or prin	nted):	
Authorized Representative (signature):		
Title:		
Sworn to and Subscribed before me this	day of	
My Commission expires	. NOTARY PUBLIC	<u>.</u>

# Contract: A-20 : Electrical

## **BID FORM**

For Bids Due:		То:	Appoquinimink Sch 118 South Sixth Stree Odessa, De 19730			
Name of Bidder:						
Bidder Address:						
_						
Contact Name:		_	E-Mail Address:			
Delaware Business License	• No.:	_	Taxpayer ID No.:			
(Other License Nos.): ( <u>A copy of Bidder's Delawa</u>	re Business License must be at	tached 1	to this form.)			
			Fax No.: ( )			
accordance therewith, that Work is to be performed, a Documents without except	ting that he has read and und he has visited the site and has nd that his bid is based upon tion, hereby proposes and agr es required to execute the wor	s famili the ma ees to p	arized himself with the terials, systems and eq provide all labor, mater	local conditi uipment desc ials, plant, eq	ions under which the cribed in the Bidding quipment, supplies,	
\$			(\$			)
-	o applicable project specificati ADD" or "DEDUCT" amount		_			the
Alternate No. 6: Ad	coustical Clouds in Library					
Add/Deduct				(\$	)	
Alternate No. 7: G	WB and Acoustical Clouds in	<u>Lobby</u>				
Add/Deduct				(\$	)	

Alternate No. 8: <u>CWB and Acoustical Clouds at Commons Areas</u>	
Add/Deduct	(\$)
<u>UNIT PRICES</u> Unit prices conform to applicable project specification section. Refer to the specification following Unit Prices:	ations for a complete description of the
NOTE: The difference in price between Add and Deduct in the above Unit Prices (15%).	should not exceed fifteen percent
I/We acknowledge Addendums numbereda cost/schedule impact they may have.	and the price(s) submitted include any
This bid shall remain valid and cannot be withdrawn for sixty (90) days from the dundersigned shall abide by the Bid Security forfeiture provisions. Bid Security is at	. 0
The Owner shall have the right to reject any or all bids, and to waive any informali	ty or irregularity in any bid received.

The undersigned represents and warrants that he has complied and shall comply with all requirements of local, state, and national laws; that no legal requirement has been or shall be violated in making or accepting this bid, in awarding the contract to him or in the prosecution of the work required; that the bid is legal and firm; that he has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken action in restraint of free competitive bidding.

This bid is based upon work being accomplished by the Sub-Contractors named on the list attached to this bid.

Upon receipt of written notice of the acceptance of this Bid, the Bidder shall, within twenty (20) calendar days, execute the agreement in the required form and deliver the Contract Bonds, and Insurance Certificates, required by the Contract Documents.

у	Trading as	
(Individual's / General Partne	r's / Corporate Name)	
(State of Corporation)		
einoce Addroce:		
itness:		
	By:	

## **ATTACHMENTS**

**Sub-Contractor List** 

Non-Collusion Statement

Bid Bond

Consent of Surety

Affidavit of Employee Drug Testing Program (1 per contractor/subcontractor)

Delaware Business License

**New Castle County Business License** 

(Others as Required by Project Manuals)

#### SUBCONTRACTOR LIST

In accordance with Title 29, Chapter 6962 (d)(10)b <u>Delaware Code</u>, the following sub-contractor listing must accompany the bid submittal. The name and address of the sub-contractor must be listed for each category where the bidder intends to use a sub-contractor to perform that category of work. In order to provide full disclosure and acceptance of the bid by the Owner, it is required that bidders list themselves as being the sub-contractor for all categories where he/she is qualified and intends to perform such work.

<u>Subcontractor</u>			
<u>Category</u>	Subcontractor	Address (City & State)	Subcontractors tax payer ID # or Delaware Business license #
1. Electrical			
2. Data Installer			

# **NON-COLLUSION STATEMENT**

This is to certify that the undersigned bidder has neither directly nor indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this proposal submitted this date

All the terms and conditions of *Contract A-20 Electrical* have been thoroughly examined and are understood.

NAME OF BIDDER:

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

My Commission expires \_\_\_\_\_\_. NOTARY PUBLIC \_\_\_\_\_\_.

# **BID BOND**

# TO ACCOMPANY PROPOSAL (Not necessary if security is used)

KNOW ALL MEN BY THESE PR	ESENTS That:	of	
		and State of	as
Principal, and	of	in the County of	
and State of	as Surety, legal	ly authorized to do business in the State	of Delaware
('State"), are held and firmly unto	o the <b>Appoquinimink School I</b>	District in the sum of	
Dollars (S	, or percent not to exceed		
Dollars (S	) of amount of bid or	n Contract No to	be paid to the
		ppoquinimink School District for whic	
-		heirs, executors, administrators, and suc	cessors, jointly
and severally for and in the whol	e firmly by these presents.		
NOW THE CONDITION OF TH	IS OBLIGATION IS SUCH That	if the above bounden Principal who has	s submitted to the
		this contract for the furnishing of certain	
services within the State, shall be	awarded this Contract, and if s	aid Principal shall well and truly enter i	nto and execute
this Contract as may be required	by the terms of this Contract an	d approved by Appoquinimink School	<b>District</b> this
Contract to be entered into within	n twenty days after the date of c	official notice of the award thereof in acco	ordance with the
terms of said proposal, then this	obligation shall be void or else t	o be and remain in full force and virtue.	
Sealed withseal an	d dated thisday of	in the year of our Lord	two thousand
and(20_	_).	·	
CEALED AND DELIVEDED IN	ELIE DDECENICE OF		
SEALED, AND DELIVERED IN	THE PRESENCE OF		
	Name	of Bidder (Organization)	
Corporate	By:		
Seal	Authorized Signat		
Attest	e e		
	Title		
	Name of Surety		
Witness			
	 Title		<del></del>

	CONSENT OF SURETY
DATE_	
То:	Appoquinimink School District  118 South Sixth Street  Odessa, De 19730
Gentler	men:
We, the	e
	(Surety Company's Address)
a Suret	y Company authorized to do business in the State of Delaware hereby agrees that if
	(Contractor)
	(Address)
is awar	rded the Contract No.
We wil Bidders	ll write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to s.
	(Surety Company)
	Ву
	(Attorney-in-Fact)

# AFFIDAVIT OF EMPLOYEE DRUG TESTING PROGRAM

4104 Regulations for the Drug Testing of Contractor and Subcontractor Employees Working on Large Public Works Projects requires that Contractors and Subcontractors implement a program of mandatory drug testing for Employees who work on Large Public Works Contracts funded all or in part with public funds.

We hereby certify that we have in place or will implement during the entire term of the contract a Mandatory Drug Testing Program for our employees on the jobsite that complies with this regulation:

Contractor/Subcontractor Name:				
Contractor/Subcontractor Address:				
Authorized Representative (typed or prin	nted):			
Authorized Representative (signature):				
Title:				
Sworn to and Subscribed before me this	ċ	day of	20	
My Commission expires	NOTA	RY PUBLIC	<u>.</u>	

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

#### SECTION 011100 - SUMMARY OF WORK

#### 1. RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Sections, apply to work of this Section.

#### 2. CONTRACTS

A. The work will be performed under separate prime contracts managed by the Construction Manager.

## 3. <u>ALTERATIONS & COORDINATION</u>

A. Contractor shall be responsible to coordinate their work with the work of others, including, but not limited to, the preparation of general coordination drawings, diagrams and schedules, and control of site utilization, from the beginning of activity, through project close-out and warranty periods.

# 4. KNOWLEDGE OF CONTRACT REQUIREMENTS

- A. The Contractor and his Subcontractors, Sub-subcontractors and material men shall consult in detail the Contract Documents for instructions and requirements pertaining to the Work, and at his and their cost, shall provide all labor, materials, equipment and services necessary to furnish, install and complete the work in strict conformance with all provisions thereof.
- B. The Contractor will be held to have examined the site of the Work prior to submitting his proposal and informed himself, his Subcontractors, Sub-subcontractors and material men of all existing conditions affecting the execution of the Work.
- C. The Contractor will be held to have examined the Contract Documents and modifications thereto, as they may affect subdivisions of the Work and informed himself, his Subcontractors, Sub-subcontractors and material men of all conditions thereof affecting the execution of the Work.
- D. The Scope of Work for the Contract is not necessarily limited to the description of each section of the Specifications and the illustrations shown on the Drawings. Include all minor items not expressly indicated in the Contract Documents, or as might be found necessary as a result of field conditions, in order to complete the Work as it is intended, without any gaps between the various subdivisions of work.
- E. The Contractor will be held to be thoroughly familiar with all conditions affecting labor in the area of the Project including, but not limited to, Unions, incentive pay, procurements, living, parking and commuting conditions and to have informed his

Subcontractors and Sub-subcontractors thereof.

## 5. <u>CONTRACT DOCUMENTS INFORMATION</u>

- A. The Contract Documents are prepared in accordance with available information as to existing conditions and locations. If, during construction, conditions are revealed at variance with the Contract Documents, notify the Construction Manager immediately, but no more than three (3) days from the day the variance is first known. Failure to give timely notice shall operate to waive any claim Contractor might otherwise have for an adjustment to Contract Time or Sum as a consequence of such variance.
- B. The Specifications determine the kinds and methods of installation of the various materials, the Drawings establish the quantities, dimensions and details of materials, the schedules on the Drawings give the location, type and extent of the materials.
- C. Dimensions given on the Drawings govern scale measurements and large scale drawings govern small scale drawings, except as to anything omitted unless such omission is expressly noted on the large scale drawings.
- D. The techniques or methods of specifying to record requirements varies throughout text, and may include "prescriptive", "open generic/descriptive", "compliance with standards", "performance", "proprietary", or a combination of these. The methods used for specifying one unit of work has no bearing on requirements for another unit of work.
- E. Whenever a material, article or piece of equipment is referred to in the singular number in the Contract Documents, it shall be the same as referring to it in the plural. As many such materials, articles or pieces of equipment shall be provided as are required to complete the Work.
- F. Whenever a material, article or piece of equipment is specified by reference to a governmental, trade association of similar standard, it shall comply with the requirements of the latest publication thereof and amendments thereto in effect on the bid date.
- G. In addition to the requirements of the Contract Documents, Contractor's work shall also comply with applicable standards of the construction industry and those industry standards are made a part of Contract Documents by reference, as if copied directly into Contract Documents, or as if published copies were bound herein.
- H. Where compliance with two (2) or more industry standards, contract requirements, or sets of requirements is specified, and overlapping of those different standards or requirements establishes different or conflicting minimums or levels of quality, then the most stringent requirements, which are generally recognized to be also the most costly, is intended and will be enforced, unless specifically detailed language written into the Contract Documents clearly indicates that a less stringent requirement is to be fulfilled.

- Refer apparently equal but different requirements, and uncertainties as to which level of quality is more stringent, to Architect for decision before proceeding.
- I. Reference standards referenced directly in Contract Documents or by governing regulations have precedence over non-reference standards which are recognized in industry for applicability of work.
- J. Contractor's bid is based on the complete set of Contract Documents including documents not specifically issued as part of the bid pack but referenced in same.

# 6. SCOPE OF WORK/GENERAL INFORMATION

- A. A Scope of Work for each contract to be awarded on the project follows in this section. When a Contract has been awarded to a Contractor, the successful Contractor will be listed after the title of the Contract. When no Contract has yet been awarded, no Contractor's name will be listed. Previous Scopes of Work include addendum changes.
- B. Contractor is responsible for performing the work listed in the Summary of Work for his contract. Contractor is also responsible for knowing the work that has been assigned to preceding contracts. No additional compensation or extension of time will be allowed a Contractor due to his ignorance of the work assigned to his Contract or to other contracts which may affect his work. The Contractor is responsible, however, for all items which are covered in the Specifications and Drawings relating to their Contract if not specifically mentioned in the Summary of Work.
- C. The Construction Manager will provide on-site a source for temporary electric, temporary water and portable sanitation facilities only. It is each Contractor's responsibility to make the necessary connections, including all material for temporary electric and water. Please note that utility charges for office trailers will be the responsibility of the individual Contractors.
- D. A dumpster will be provided on site for free use by Contractors to dispose of non-hazardous, common, work-related refuse. The masonry contractor will provide their own dumpster for masonry debris. Clean-up is the responsibility of each Contractor. Clean up shall be performed on a daily basis. Contractors not complying will be advised in writing and back charged for all costs associated with the cleanup of their work.
- E. Contractors are reminded that there are limited storage areas available on site. Off-site storage will be the responsibility of each individual Contractor.
- F. Office trailer permits off site will be the responsibility of each individual Contractor. On site Contractor's field offices, one (1) per Contractor, if required, will be located as directed by the Construction Manager.
- G. Contractor will be prepared to discuss and submit a detailed project schedule seven (7)

days after receipt of Notice to Proceed and to begin its submittal process. The Project Schedule is an integral part of this contract. Certain construction sequences and priorities must take place in order to meet the target dates. Concentrated work periods will occur and each Contractor is responsible to staff the project as required by the current Construction Schedule or as directed by the Construction Manager. Contractor will cooperate with the Construction Manager in planning and meeting the required sequences of work and Project Schedule as periodically updated by the Construction Manager.

- H. All bids must include insurance limits in accordance with Article 11 of the Section 007300 SUPPLEMENTARY CONDITIONS.
- I. Hoisting, scaffolding and material handling is the responsibility of each Contractor, unless otherwise noted.
- J. Contractor will be responsible for layout of its own work. The Construction Manager will provide benchmark and layout of the building line.
- K. Contractor will be responsible to keep clean public roadways soiled by construction traffic on a daily basis. If cleaning is not done, the Construction Manager may perform the cleaning on an overtime basis and backcharge the Contractor responsible.
- L. Contractor Scopes of Work and Schedule are interrelated. Familiarity with each is required.
- M. The Construction Manager will provide testing services for soil, concrete and steel. Other testing as required by the Contract Documents will be in accordance with the technical specifications and/or the individual scope of work. Refer to Specification Section 004500 - QUALITY CONTROL.
- N. Safety is the responsibility of each individual Contractor. The project will be governed under the guidelines of OSHA.
- O. Inter-Contractor shop drawing distribution will be performed by the Construction Manager. Contractor is individually responsible for either coordinating his work with these distributed drawings or notifying the Construction Manager, in writing, of any discrepancies.
- P. Coordination with other trades will be required. The Contractor will be required to attend periodic coordination meetings with other trades where requirements, conflicts and coordination issues will be discussed and resolved. Attendance when requested will be mandatory. If inter-Contractor coordination is not satisfactorily performed, the conflicting Contractors shall mutually share the cost to relocate and/or reinstall their work.

- Q. Contractor shall submit a schedule of values to the Construction Manager prior to the submission of their first invoice for approval through Building Blok.
- R. Contractor is expected to review and coordinate its Work with the complete set of Contract Documents, including all items noted as by his trade whether or not shown on that particular set of drawings. Documents are available at the site for review.
- S. Contractor is responsible for obtaining all necessary permits required for his work, including street permits. Unless otherwise noted, building permit shall be secured by the Construction Manager. Any subcontractor who will be restricting access to street, right of way or adjacent property must notify the Construction Manager 48 hours in advance.
- T. Contractor's License: Submit a copy of all business licenses required by local and state agencies.
- U. Contractor shall absorb, without additional compensation, any and all costs of working beyond normal hours to maintain job progress in accordance with the current construction schedule.
- V. No asbestos or PCB's in or on any material or equipment will be accepted or allowed on this project. All hazardous materials will be treated in accordance with all State and Federal regulations.
- W. Daily cleanup of the work is the responsibility of each individual Contractor which includes broom cleaning of their debris as required. Contractor will be individually back charged by the Construction Manager for clean up not satisfactorily performed by the Contractor.
- X. In the event asbestos is uncovered, the Contractor shall notify the Construction Manager of the areas requiring removal of asbestos. The Construction Manager shall then coordinate the removal with the Owner.
- Y. This project is to be constructed adjacent to and in existing buildings. Contractor shall exercise all due precautions to minimize noise, air pollution and any other construction hazards which in any way would cause discomfort or danger to the occupants of the existing building in the area.
- Z. The Safety Cable System shall not be altered or removed without a written request submitted to the Project Manager with a copy to the Field Manager. It shall be the responsibility of each and every Contractor that is removing or altering the Safety Cable System to maintain the fall protection safety provided by the safety cable and not leave the area unprotected. Each and every Contractor shall be responsible to re-install the Safety Cable System immediately after work is completed. Each and every Contractor shall be responsible to re-install the Safety Cable System in accordance to OSHA standards.

- AA. Normal work hours for this project are from 7:00 a.m. to 3:30 p.m. Any work to be performed outside of these hours must receive prior approval from the Construction Manager. Requests to work beyond normal work hours shall be submitted at least 48 hours prior.
- AB. Contractor is responsible for having a competent project superintendent/foreman on-site during all work performed under its contract.
- AC. In the event the Contractor has non-English speaking employees or subcontractors on the project, they shall have a superintendent or foreman on site, at all times, who speaks English and can communicate with Contractor's employees. Should the Contractor fail to meet this requirement, at any time, Construction Manager may direct all Work to stop until the proper supervision is on site. The Contractor will be responsible for maintaining the project work schedule and make up at its own expense, any delay to the Schedule resulting from the work stoppage.
- AD. <u>Punch List Procedures</u>: Contractor shall be given a copy of the punch list with his appropriate work identified. Contractor shall have nine (9) calendar work days to complete its punch list work. On the 10th day or as determined by the Construction Manager, the Construction Manager shall employ other contractors, as required, to complete any incomplete punch list work and retain from the appropriate Contractors retainage all costs incurred.
- AE. All contractor shall provide the necessary safety barricades and railings required to complete their work and comply with all OSHA, local code and contract specifications.
- AF. <u>Prohibition of Using Photographs on EDiS Projects</u>: The Contractor and all associated subcontractors agrees to not issue any news release or advertising pertaining to the Work or the Project, including references to the Project on the Contractor's/subcontractor website or other social media outlets, without obtaining EDiS' prior written approval, in each instance. The Contractor, for itself, its employees, vendors and subcontractors, agrees to not use the name of the Owner, the Project, EDiS or any photographs, videos, or other images of the Project in connection with any of Contractor's business promotion activities, advertising, website, social media outlets, or operations, without EDiS' prior written approval in each instance.
- AG. All contractor vehicles, their companies subcontractors vehicles and all delivery vehicles will need to utilize the tire wash at all times prior to leaving the site. Any contractors that do not use or clean vehicles or tires vehicles well enough that additional cleaning will be needed, will be back charged all additional costs and could be removed or not allowed further vehicle access if not corrected. Access to the site is a privilege and this rule will be strictly enforced.

- AH This contractor shall must provide a silica exposure plan that meets or exceeds the new 2017 silica OSHA requirements. At a minimum, and it must be implemented in to the safety plan, including all monitoring, testing, limits exposure, provide respiratory plan and/or equipment modifications such as water and keep records of exposures.
- AI The following contractors are to provide BIM services as detailed in spec section 013700 BIM Execution Plan:
  - 1.) Contract: A-01: Sitework
  - 2.) Contract: A-02: Concrete
  - 3.) Contract: A-03: Masonry
  - 4.) Contract: A-04: Structural Steel & Misc. Metals
  - 5.) Contract: A-05: Carpentry & General Works
  - 6.) Contract: A-06: Roofing
  - 7.) Contract: A-07: Metal Studs & Drywall and Sprayed Fire Protection
  - 8.) Contract: A-09: Casework & Millwork
  - 9.) Contract: A-10: Folding Partitions
  - 10.) Contract: A-12: Acoustical Ceilings
  - 11.) Contract: A-15: Kitchen Equipment
  - 12.) Contract: A-16: Elevator & Wheel Chair Lifts
  - 13.) Contract: A-17: Fire Protection
  - 14.) Contract: A-18: HVAC & Plumbing
  - 15.) Contract: A-20: Electrical

#### CONTRACT NO. A-01 - SITEWORK

- A. Work included in this contract consists of, but is not necessarily limited to, all labor, materials and equipment for:
  - Technical Specification Sections:

Division 0 Bidding and Contract Requirements

Division 1 General Requirements

Division 3 Concrete

Section 071416 Cold Fluid-Applied Waterproofing Section 116800 Play Field Equipment and Structures

Division 21 Fire Suppression

Division 22 Plumbing
Division 23 Mechanical
Division 26 Electrical
Section 260130 Manholes
Division 31 Earthwork

Division 32 Exterior Improvements

Section 311000 Site Clearing Section 312000 Earth Moving

Section 312500 Erosion and Sediment Controls

Section 320523 Cement and Concrete for Exterior Improvements

Section 321216 Asphalt Paving Section 321613 Concrete Curb

Section 321816.13 Playground Protective Surfacing

Section 323113 Tubular Barrier Gate

Section 323119 Decorative Metal Fencing and Gates

Section 323157 Cast-In-Place Concrete for Screen Wall Footings

Section 323319 Bicycle Racks Section 329000 Planting

Section 331417 Water Service Piping Section 333100 Sanitary Sewerage Section 334000 Stormwater Utilities

Division 33 Utilities

This contract also includes, but is not necessarily limited to, all labor, materials and equipment for the following:

- 1. Provide all sitework, site clearing, landscaping, electric, telephone, data & fiber lines, gas, storm, sanitary and water utilities, concrete & asphalt paving, exterior concrete steps, tree grates, signage, curbs, walks and topsoil/seeding.
- 2. A site visit and site examination is strongly encouraged, but not mandatory, in the preparation of this bid.

- 3. Provide water meter pit.
- 4. Void
- Furnish, install, maintain and remove erosion & sediment control system including erosion sediment control plan. Maintain sediment control until substantial completion established by DNREC.
- 6. Provide compost filter log sediment trap, inlet protection, stabilization matting, check dams, dust control, topsoil stockpile disposal area and associated silt fence.
- 7. Provide clearing, grubbing and removal of trees, roots and stumps.
- 8. Provide topsoil stripping and stockpiling on site and include all E & S measures to comply throughout substantial completion.
- 9. Contractors should carefully review the soil borings as they relate to the extent of rubble to be removed and other man made obstructions. Saw cutting and removal of sidewalks, curbs, etc. in the performance of work is this Contractor's responsibility. Rock excavation (if applicable) will be paid for on a unit price basis.
- 10. Provide rough grading for area defined on site drawings for building, lawn areas, bituminous roads, parking and walkways. Preparation of subgrade for building slabs, walks and pavements.
- 11. Provide site entrances. This shall include all subbases, tie-in details, handicapped requirements and clearances as indicated. Saw-cut paving shall be in accordance with drawing notes and where indicated on contract documents. Additional saw cutting may be necessary, but not specifically identified, to correctly perform the scope of work.
- 12. Provide all excavation, installation and backfill of planter walls. Provide foundations and sidewalks (Include colored concrete where indicated). All sidewalks shall include expansion and control joints as indicated.
- 13. This Contractor to provide a tabletop (subgrade elevation) to the building pad which meets the tolerances set forth in the specifications and which is accepted by the Construction manager before footing and underground MEP excavation begins. This contractor to extend the bulk excavation outside of the building plan in order to facilitate construction and maintain safety requirements. Concrete Contractor will be responsible for laying out, excavating, and backfilling all concrete work as shown on the structural and architectural drawings. Written acceptance of the building pad condition will be provided by the concrete contractor before foundation work proceeds. Once the Concrete Contractor has accepted this work it will be the responsibility of the Concrete Contractor to maintain and dewater the building pad and all excavations until the concrete work is complete and backfilled. The Concrete Contractor and this Contractor are to coordinate this procedure

so that there are no additional costs to the Owner for additional excavation or concrete. Spoils left after backfilling of foundations is complete are to be left outside the building perimeter by the concrete contractor and gathered by this contractor and spread on site.

- 14. Furnish, install and maintain select fill under slab.
- 15. The certified construction reviewer (CCR) will be provided by Vandemark & Lynch. This contractor to coordinate with the CCR being provided by the owner.
- 16. Provide all DelDOT permits related to work for this project.
- 17. Furnish, install and remove temporary orange construction fencing as required by Construction Manager (include 1,000 linear feet in base bid to be utilized by the Construction Manager).
- 18. Remove/relocate utilities including, but not limited to the removal of light standards.
- 19. Furnish, install, maintain and remove temporary site fencing at the completion of the project. Temporary fencing shall consist of 900' of movable 6'-0" chain link fencing sections. There will also be two construction gates that will need to be mounted at each end of the entrances in to the new school. These gates will need to be lockable.
- 20. Provide proof rolling of limit of excavation.
- 21. All utilities shall be brought to within +/- 5 feet of the building line by this Contractor. The connection and all utilities from +/- 5 feet and into the building shall be by others.
- 22. Provide perimeter drains at all buildings (including within 5' of the building perimeter). Provide downspout adaptors and coordinate with roofer for the correct downspout size.
- 23. Backfilling as detailed below is the responsibility of this Contractor. Soil types shall be in accordance with Del Dot standard specifications.
- 24. It is the intent to use on site material, imported fill as required. The use of this onsite material shall conform with the compaction requirements as specified on Civil drawings and in Specification Division 31. If the on site material does not meet those requirements or if there is insufficient on site material available, this contractor shall import at no additional expense to the project sufficient material to complete the work.
- 25. Provide perimeter protection of all excavated areas until suitably backfilled.
- 26. Provide, maintain and remove stabilized construction entrance once substantial excepted by DNREC.
- 27. Provide street cleaning of mud, etc. on a daily basis for the duration of sitework activities.

In addition to the street cleaning, this contractor will also include all costs associated for the use of an additional 30, 1 hour, street sweeper uses on an as needed basis to be directed by the Construction Manager. Any costs for deliver, pick up or remobilization of sweepers should be included in base bid.

- 28. Include all costs for temporary barricades, arrows, pedestrian protection, flagmen, etc. required to complete the work.
- 29. Provide site utilities to playing fields and courtyards, including irrigation lines as part of this contract.
- 30. Base bid shall include all standard dewatering measures; utilizing trenches, crocks, stone and portable pumping measures. This contractor to provide these measures as required to perform their work. Well pointing if necessary will be handled as a negotiated cost by the Owner.
- 31. It is the intent that this contractor provide all exterior (Outside of building footprint) concrete and associated expansion materials including walks, planters, ramps, etc. All interior (Inside of building footprint to be completed by the concrete contractor. The cooling tower concrete slab and foundations will be considered outside the building and therefore are to be included in the Sitework contractor's scope. See addendum #4 question 62, item #2.
- 32. This Contractor shall provide and maintain all temporary access roads as detailed in Contract Documents, until completion of project.
- 33. Provide playing field construction including grading, preparation of subbase, planting mix, seeding and line striping.
- 34. Provide a temporary water means for other trades to utilize. Include all costs associated with metering from local utilities as well as valves and hoses for contractors to utilize. The Construction Manager will not provide this service.
- 35. Hardware for permanent exterior gates will be provided by Carpentry & General Works Contractor and the security will be provided by the Special Services Contractor. These locations are indicated on the Architectural and Civil Drawings. The Sitework Contractor shall provide the gates and associated adjacent fencing. The balance of hardware will be provided by the Carpentry & General Works Contractor, as indicated on the door hardware schedule. The Electrical & Special Systems Contractors shall provide all power and coordination with fire alarm integration.
- 36. Respread topsoil from the established topsoil stockpile and fertilize as required to establish lawn areas. Provide permanent stabilization grass seeding at all areas following the completion of construction activities. This contractor is responsible for all weeding, watering, fertilization, and grass cutting to ensure 100% grass growth in the entirety of

these areas.

- 37. Provide all plant material and all associated work including, but not limited to, fabric, staking, watering, sod installations, mulching, weeding, etc.
- 38. Provide soil mix in beds and topsoil. Provide all additional soil mix required to set plant materials and final grading.
- 39. Provide filter fabric, weed, check and mulch.
- 40. Provide all trees, shrubs, plantings, ornamental grasses & ground covers.
- 41. Provide specified warranties.
- 42. Provide pricing for all alternates as described in Section 012300-Alternates.
- 43. Provide excavation, installation of foundations and backfilling for street screen walls. The masonry and fence will be provided by Masonry & Steel contractors respectively.
- 44. Provide decorative metal fencing and gates as indicated.
- 45. Provide playground protective surfacing.
- 46. Provide all bike racks and associated pads for mounting.
- 47. Provide all bollards. Include standard & removable bollards, along with excavation, backfill and the finished painting.
- 48. Furnish and install all site signage. This includes all traffic, pedestrian and School related signage not mounted on buildings, including fire lane curbing and signage.
- 49. Provide all yard and fire hydrants as indicated. Include all thrust block details as directed.
- 50. Provide all painting of fire lane, curbs, striping as indicated.
- 51. This contractor shall pay particular attention to all notes that identify requirements for inspections, reviews, installation requirements, etc.
- 52. Coordinate with Plumbing and Electrical Contractors. The Sitework Contractor shall provide all tie-ins to the downstream side of grease trap. The Plumbing contractor shall provide all excavation, backfill and piping from building to grease trap. It is the intent that no additional costs will be provided for lack of coordination that requires relocation of newly installed site utilities for the installation of the grease trap by Plumbing or Electrical Contractors.

- 53. All dimensions and elevations shown on plans must be field verified by this contractor PRIOR to construction. This contractor must notify owner & engineer in writing if discrepancies exist PRIOR to proceeding with construction. No extra compensation shall be paid to the contractor for work having to be re-done due to dimensions or grades shown incorrectly on these plans if written notification has not been provided.
- 54. This subcontractor shall pay particular attention to the requirements pertaining to the stormwater management inspection and maintenance schedule and the install and maintenance items.
- 55. It shall be assumed there is at least 1 marked flagger to escort trucks through the project site.
- 56. Provide daily fine cleanup of the work is the responsibility of each individual Contractor which includes broom cleaning of their debris as required. Daily Fine clean up, on a daily basis, shall be defined as those means/methods utilized to perform the daily cleaning tasks without producing dust, noise and stacking of stored materials. Furnish fine clean up on a daily basis. All debris must be removed from the work area at the end of each work day to the appropriate dumpster.
- 57. Provide an allowance, included in base bid, to provide, maintain and remove upon construction manager direction, 250' of stoned roadway, 20'-0" wide. Road shall have consist of fabric, 10" of stone for the length of the road and the means to compact it.
- 58. Provide an allowance, included in base bid, to provide, maintain and remove upon construction manager direction, 1,600′ of stoned roadway, 10′-0″ wide. Road shall have consist of fabric, 10″ of stone for the length of the road and the means to compact it.
- 59. Provide all playground equipment and playground exposed and subsurface material installations. This shall also include all excavations, foundations, backfilling of equipment bases.
- 60. This is not a secure site. All contractors are responsible for concealing, locking and/or removing any materials on a daily basis. ASD and EDiS will not be responsible for any lost tools, materials or equipment.
- 61. Provide generators and other means for temporary services for the completion of your work.
- 62. Provide temporary lighting as required for the completion of all work included in this scope of work.
- 63. Furnish and install wash station, labor to wash tires, clean and drain the area as required before vehicles leave the site daily. Clean tires and tracks of all vehicles before leaving the construction site. Wash station will be utilized by other contractors and will be removed only when directed by EDiS. Furnish and install Non-freeze Hose Bib, water line, valve

- box & drainpipe to daylight or plug for the contractor tire wash areas, and for building construction.
- 64. Furnish and install and maintain concrete wash out areas for other subcontractors and their suppliers for project duration. Remove this item at conclusion of project and complete as indicated on finished drawings.
- 65. Provide Fluid-Applied Waterproofing at planters.
- 66. Furnish and install all landscape walls including excavation & backfill, sub base, perforated piping and stone. All foundations shall include: concrete & rebar. Wall materials other than concrete, such as masonry brick & caps, fencing/guards along top of walls will be provided by others. Coordinate brick shelf, embeds, light fixtures, etc.
- 67. This contractor must provide a silica exposure plan that meets or exceeds the new 2017 silica OSHA requirements before any work can commence. At a minimum, it must be implemented in to the company safety plan, include all monitoring, testing, limits exposure, provide respiratory plan and/or equipment modifications such as adding water to equipment during exposed work and keep records of exposure.
- 68. The Sitework Subcontractor will provide the area beneath the building to an elevation 99.33 +/- 1/2". (This accounts for Elevation 100'-00" FF minus (4"SOG & 4" of drainage fill and vapor barrier) The area will then be turned over to the Concrete Contractor who will be excavating and installing the foundations. Backfilling around the foundation walls, inside and outside, will be the responsibility of the Concrete Contractor. The Concrete Contractor will also be responsible for additional excavation and backfilling within the building as may be required to accommodate the sloped floors in the auditorium, varying slab thicknesses, depressed slabs and grade changes. Close coordination with the Sitework, Masonry, Mechanical and Electrical Contractors is required.
- 69. Provide a \$25,000 allowance, included in base bid, to be used at the discretion of the Construction Manager.
- 70. Provide all manholes.
- 71. Provide all fencing associated with the street screen walls.

# **CONTRACT NO. A-02 - CONCRETE**

A. Work included in this contract consists of, but is not necessarily limited to, all labor, materials and equipment for:

Division 0	<b>Bidding and Contract Requirements</b>
Division 1	General Requirements
Section 033000	Cast-In-Place Concrete
Section 033600	Concrete Floor Sealer
Section 071700	Bentonite Waterproofing
Section 072100	Thermal Insulation
Section 079200	Joint Sealants
Division 31	Earthwork
Division 32	Exterior Improvements

Division 33 Utilities

This contract also includes, but is not necessarily limited to, all labor, materials and equipment for the following:

- 1. Provide concrete footings, foundations, foundation walls, piers, wall footings, grade beams, elevator pit walls and slab, slabs on grade, slabs on deck and all forms and reinforcing steel.
- 2. Provide all form work, concrete, reinforcement, excavation, etc. required to complete this work
- 3. This Contractor will be responsible for laying out all concrete work as shown on the structural and architectural drawings.
- 4. This Contractor shall furnish and install steel & fiber reinforcing, admixtures, curing compound, under slab thermal insulation, foundation wall insulation, reglets, key ways, saw cutting, joint filler strips, joint fillers, control and construction joints (including required caulking at control and construction joints) as required in the Contract Documents.
- 5. Provide floor and slab treatments
- 6. Provide concrete floor sealers.
- 7. Provide bonding agents.
- 8. Provide perimeter insulation at foundation walls.
- 9. Provide underslab vapor barrier, insulation, reglets, waterstops, control and construction joints (including required caulking at control and construction joints).

- 1. Provide placement of related items furnished under other Specification Sections. This includes but is not limited to anchor bolts, plates, embeds, sleeves, etc. Installation must be completed within required tolerances. Anchor bolt assemblies to be placed with templates only. Furnish and install any additional grouting after anchor bolts are installed if needed to be drilled in. Coordinate and provide penetrations through wall, floors, etc. including cutting, patching and fire safing. The contractor requiring wall sleeves in concrete & masonry walls must supply and locate these to the concrete and masonry contractors for them to install. Include costs in base bid to install these sleeves, supplied by others.
- 10. Anchor bolts and leveling plates will be installed by this Contractor and furnished by the Structural Steel contractor. Installation within required tolerances. Anchor bolt assemblies to be placed with templates only. Contractor shall supply as-built drawings to steel erector for coordination prior to steel placement.
- 11. Provide all block outs and embedment's required by plans and specifications.
- 12. This Contractor to furnish and install all sleeves for incoming utilities at the perimeter walls.
- 13. This Contractor is responsible for grouting all structural steel base or leveling plates.
- 14. This contractor shall include all hot and cold concrete weather materials and practices. This includes, but is not limited to frost protection, hot/cold water additives and admixtures and pumping as required. This Contractor is also responsible for the premiums associated with any added costs for hot water, heated aggregate and all admixtures for cold or hot weather concrete practices.
- 15. Coordinate the "Notch" in the concrete slabs to allow for a future Contractor to easily install expansion joint details.
- 16. Provide concrete fill at steel pan stair treads, landings and associated items.
- 17. Provide concrete and accessories for slab on deck at stage.
- 18. Provide dewatering after acceptance from Sitework Contractor until re-acceptance by the Sitework Contractor.
- 19. Furnish, install and maintain stone underslab. Sitework contractor is to provide a building pad to this contractor. Upon sign off of acceptance by this contractor, this contractor to provide dewatering and maintenance of open trenches including clean-off of mud from poured footings. This contractor to provide excavation and backfill of all concrete work including footings, grade beams, and foundation walls. Spoils left after backfill is complete are to be lost on site. Provide access to other trades such as Masonry and Roofing Contractors for foundation work. This Contractor and the Sitework Contractor are to coordinate this procedure so that there are no additional costs to the Owner for additional

excavation or concrete.

- 20. This Contractor to excavate down to the bottom of all wall and column footings as shown on drawings. This Contractor is responsible for excavating all elevator pits, stairs and ramps as shown on drawings. This Contractor is also responsible for the backfill of these areas.
- 21. The Sitework Subcontractor will bring the area beneath the building to an elevation 99.33 +/- 1/2". (This accounts for Elevation 100'-00" FF minus (4"SOG & 4" of drainage fill and vapor barrier) The area will then be turned over to the Concrete Contractor who will be excavating and installing the foundations. Backfilling around the foundation walls, inside and outside, will be the responsibility of the Concrete Contractor. The Concrete Contractor will also be responsible for additional excavation and backfilling within the building as may be required to accommodate the sloped floors in the auditorium, varying slab thicknesses, depressed slabs and grade changes. Close coordination with the Sitework, Masonry, Mechanical and Electrical Contractors is required.
- 22. Provide and maintain perimeter fall protection at excavated areas per OSHA standards.
- 23. Provide pipe, and associated materials & backfill for foundation drainage.
- 24. Provide dewatering for perimeter waterproofer.
- 25. Provide certified anchor bolt verification drawings to the Construction Manager for review prior to steel erection.
- 26. Equipment bases and foundations shall be the responsibility of the Contractor providing the equipment.
- 27. Asphalt concrete paving and portland cement concrete paving, sidewalks and curbs shall be provided by others.
- 28. All concrete testing will be completed by the Construction Manager, however, it will be the responsibility of this Contractor to furnish all samples.
- 29. Provide offsite disposal of all unsuitable excavated materials.
- 30. The Construction Manager will verify that FF/FL compliance is verified by an independent testing agency within 48 hours of completion of pours, per ACI (Section 8.15.4). This contractor must maintain the specified tolerances as indicated in Section 033000. All costs associated with any grinding or patching required to meet minimal tolerances of flooring finishes will be completed by this contractor at no additional cost to the project.
- 31. Provide specified sloping for floor drains/trenches as needed. (Drains to be furnished by Mechanical Contractor.)

- 32. It is the intent that this contractor provide all interior (Inside the building footprint) concrete and associated expansion materials. All exterior (Outside of building footprint to be completed by the sitework contractor. The cooling tower concrete slab and foundations will be considered outside the building and therefore are to be included in the Sitework contractors scope. The concrete contractor shall provide the concrete associated with the cooling tower, see questions #62, item #2.
- 33. This Contractor shall include the finishing of concrete slabs around floor penetrations throughout the first and second floor slab areas. These penetrations will consist of electrical boxes, stubbed conduits, sprinkler, mechanical piping and electrical and technology conduit stubs, etc.
- 34. This Contractor shall also include all work included in finishing the concrete floors to all floor drains and/or trench drains. Include all sloping and beveling to create a positive flow to the drains.
- 35. This Contractor shall include a minimum of four additional out of sequence remobilizations for concrete slab installation.
- 36. It is the intent to use on site material. The use of this onsite material shall conform with the compaction requirements as specified on civil drawings and in Specification Division 31. If the on-site material does not meet those requirements or if there is insufficient on site material available, this contractor shall import at no additional expense to the project sufficient material to complete the work.
- 37. Provide daily fine cleanup of the work is the responsibility of each individual Contractor which includes broom cleaning of their debris as required. Daily Fine clean up, on a daily basis, shall be defined as those means/methods utilized to perform the daily cleaning tasks without producing dust, noise and stacking of stored materials. Furnish fine clean up on a daily basis. All debris must be removed from the work area at the end of each work day to the appropriate dumpster.
- 38. Provide pricing for all alternates as described in Section 012300-Alternates.
- 39. This contractor shall provide rebar shop drawings within 2 weeks of award so that the fully coordinated shop drawings with MEP Trades and BIM Coordinator are submitted within 8 weeks from award of project.
- 40. Provide waterproofing systems at foundations and elevator pit as directed where exterior grade is above the floor elevations. The exterior planter concrete waterproofing will be completed by the Sitework Contractor.
- 41. All costs for barricades, arrows, pedestrian protections, flag men, etc. will be part of this Contract. It shall be assumed there is at least 1 marked flagger to escort trucks through the

project site.

- 42. This contractor shall maintain, utilize and dispose of materials in the washout area created by Site Contractor. At the completion of the concrete installations, this contractor shall remove all hard concrete and spoils in timely, organized fashion for the Sitework Contractor to complete restoration.
- 43. Prepare concrete SOG at vestibule to proper elevation for walk off mat.
- 44. Provide generators and other means for temporary services for the completion of your work.
- 45. Install steel nosings in stairwells that will be supplied by the steel contractor.
- 46. Provide all means of transporting concrete including, but not limited to: pump trucks, cranes, ramps, chutes, buggies.
- 47. Provide at least a 48 hour notice prior to any delivery. All deliveries are to be between 7:00 AM and 3:30 PM.
- 48. This is not a secure site. All contractors are responsible for concealing, locking and/or removing any materials on a daily basis. ASD and EDiS will not be responsible for any lost tools, materials or equipment.
- 49. This contractor must provide a silica exposure plan that meets or exceeds the new 2017 silica OSHA requirements before any work can commence. At a minimum, it must be implemented in to the company safety plan, include all monitoring, testing, limits exposure, provide respiratory plan and/or equipment modifications such as adding water to equipment during exposed work and keep records of exposure.
- 50. Provide a \$10,000 allowance to be used at the discretion of the Construction Manager.

#### CONTRACT NO. A-03 - MASONRY

- A. Work included in this contract consists of, but is not necessarily limited to, all labor, materials and equipment for:
  - Technical Specification Sections:

Division 0 Bidding and Contract Requirements

Division 1 General Requirements

Division 3 Concrete

Section 034500 Precast Architectural Concrete

Section 042000 Unit Masonry
Section 071900 Water Repellants
Section 072100 Thermal Insulation

Section 072119 Foamed-In Place Insulation Section 078413 Penetrating Firestopping

Section 078443 Joint Firestopping Section 097100 Preformed Joint Seals

Section 079200 Joint Sealants

Section 323158 Unit Masonry for Screen Wall

This contract also includes, but is not necessarily limited to, all labor, materials and equipment for the following:

- 1. Provide concrete masonry units, concrete building brick, decorative masonry units (Splitface brick), clay face brick, associated ties and reinforcing, dowels (including drilling and grout), grout, mortar, (standard, colored and pigmented) bond beams, joint fillers, steel reinforcing bars, masonry joint reinforcement, ties and anchors, control & expansion joints, anchors, fire safing/stopping, insulation, flashings and trim, rigid insulation & vapor barrier, cavity drainage, and all miscellaneous accessories to provide a complete masonry system, accessories and related work.
- Provide caulking of masonry to masonry and to dissimilar materials. Furnish and install
  all sealants, fillers, compressible fillers, backer rod, bonding agents, and sealers, for this
  contractor's materials. Furnish and install all sealants where materials provided by this
  contractor abut similar or dissimilar materials. Provide to all adjacent materials installed
  prior to your work.
- 3. Provide integral masonry flashings, expansion joints, insulation and other related items as required. Include all cavity accessories, including but not limited to: weeps vents, flashing components (including end dams and corners), reglets, termination bars, mortar net, etc. All flashing and sealants must comply with the air/vapor barrier.
- 4. Provide Mock up as required.

- 5. Provide grouting of door frames at masonry openings.
- 6. Provide weather protection and temporary material considerations for Hot/Cold whether installations as required to perform the work and maintain the project schedule.
- 7. Furnish and install any cranes, scaffolding, lifts and/or hydro means as required to complete the work.
- 8. Provide dewatering of work areas.
- 9. Furnish and install layout of the work including responsibility for all elevations and dimensions as they affect other Subcontractor's work.
- 10. Provide lintels either required by this Contract or install loose lintels furnished by others.
- 11. Provide fill at hollow concrete masonry units.
- 12. Provide all setting of reinforcing steel in block walls.
- 13. Provide thermal insulation.
- 14. Provide precast/cast stone work, including all fasteners and flashing and date stone.
- 15. Provide temporary protection for final wash down/cleaning of masonry. Furnish and install final cleaning of masonry provided under this contract after completion of erection and after permission is given. Cleaning will be to the satisfaction of ASD/EDiS Company. Protect work of other Bid Categories from contact with cleaner.
- 16. Flashing Summary:
  - a. Thru wall and cavity flashing below the roof line shall be by the Masonry Contractor.
  - b. Thru wall and cavity flashing above the roof line shall be by the Roofing Contractor.
- 2. Provide necessary cutting, fitting and building into masonry work, embedments provided by others. Coordinate and provide penetrations through wall, floors, etc. including cutting, patching and fire safing. The contractor requiring wall sleeves in concrete & masonry walls will supply and locate these to the concrete and masonry contractors for them to install. Include costs in base bid to install these sleeves supplied by others.
- 17. Provide all firesafing/stopping and fire caulking as required. Work related to masonry work.
- 18. Provide bond beams including reinforcing and fill.
- 19. At elevator entrance, provide toothed in outside walls and add additional temporary lintel above elevator door frame.

- 20. Provide stone veneer and required attachments and fasteners.
- 21. Provide all masonry veneer anchors and stainless steel reinforcement where required.

#### 22. Provide stucco.

- 23. This contractor will be responsible for providing their own dumpster and masonry debris disposal off site.
- 24. Coordinate with all other trades including but not limited to Metal Stud, Masonry, Carpentry & General Works, Glass & Glazing, Mechanical, Plumbing, Electrical, Fire Protection and Roofing contractors. Masonry openings that are made too large or too small, or in incorrect locations will be corrected at no additional cost to ASD/EDiS. The cost will be absorbed by the Masonry Subcontractor. Coordinate with respective trades before layout of work. Report any discrepancies at a minimum of ahead of installation to EDiS.
- 25. This contractor is responsible for temporary enclosures at mixing station and work areas to continue work through winter conditions. Any materials and or heating equipment for areas or materials will be provided by this contractor. Temporary Heat will NOT be provided by the construction manager.
- 26. Provide pricing for all alternates as described in Section 012300-Alternates.
- 27. Provide sprayed insulation/air barrier system. Provide rigid insulation in cavity and all foamed in place (sprayed insulation) for all areas. This includes areas below grade & areas where the foam overlaps the walls on to dissimilar materials, such as roof decking. Include, at a minimum, 4 out of sequence mobilization and complete as scheduled.
- 28. This contractor shall provide rebar shop drawings and all masonry components with lead times greater than 2 weeks within 2 weeks of award so that the fully coordinated shop drawings with MEP Trades and BIM Coordinator are submitted within 8 weeks from award of project.
- 29. Provide rigid insulation at all voids where indicated. (See typical/similar details like 9/A4.3 or 16/A6.0)
- 30. Provide mortar control nets.
- 31. Provide water repellents as directed to all masonry units as directed.
- 32. Provide daily fine cleanup of the work is the responsibility of each individual Contractor which includes broom cleaning of their debris as required. Daily Fine clean up, on a daily basis, shall be defined as those means/methods utilized to perform the daily cleaning tasks without producing dust, noise and stacking of stored materials. Furnish fine clean up on a

- daily basis. All debris must be removed from the work area at the end of each work day to the appropriate dumpster.
- 33. All costs for barricades, arrows, pedestrian protections, flag men, etc. will be part of this Contract. It shall be assumed there is at least 1 marked flagger to escort trucks through the project site.
- 34. Provide multiple mobilizations.
- 35. Provide the masonry in the street screen walls. The excavation, installation of foundations and backfilling for street screen walls will be completed by the Sitework Contractor. The fence will be provided by Steel contractor.
- 36. Provide generators and other means for temporary services for the completion of your work.
- 37. Provide at least a 48 hour notice prior to any delivery. All deliveries are to be between 7:00 AM and 3:30 PM.
- 38. This is not a secure site. All contractors are responsible for concealing, locking and/or removing any materials on a daily basis. ASD and EDiS will not be responsible for any lost tools, materials or equipment.
- 39. This contractor must provide a silica exposure plan that meets or exceeds the new 2017 silica OSHA requirements before any work can commence. At a minimum, it must be implemented in to the company safety plan, include all monitoring, testing, limits exposure, provide respiratory plan and/or equipment modifications such as adding water to equipment during exposed work and keep records of exposure.
- 40. Provide a \$20,000 allowance to be used at the discretion of the project manager.
- 41. Provide delegated design for precast concrete lintels and water table.

## CONTRACT NO. A-04 - STRUCTURAL STEEL & MISCELLANEOUS METALS

- A. Work included in this contract consists of, but is not necessarily limited to, all labor, materials and equipment for:
  - Technical Specification Sections:

Division 0	Bidding and Contract Requirements
Division 1	General Requirements
Section 051200	Structural Steel Framing
Section 052100	Steel Joists Framing
Section 053100	Steel Decking
Section 055000	Metal Fabrications
Section 055113	Metal Pan Stairs
Section 055213	Pipe & Tube Railings
Section 107316	Metal Canopies

This contract also includes, but is not necessarily limited to, all labor, materials and equipment for the following:

- 1. Provide structural steel, prefabricated building columns, field-installed shear connections, embeds, joists, shelf angles, loose lintels, steel weld plates, stairs & railings.
- Provide all metal floor and roof decking with the exception of the perimeter roof dormers.
   At the perimeter roof dormers, the steel contractor shall furnish only metal decking to the Metal Stud & Drywall Contractor to install where deck bears on metal studs framing. Add to MS&D
- 3. Continuous bent plate as per typical conditions identified on details 1-2 & 4/A4.2 are to be provided by Metal Stud Contractor. Do not include costs for this work.
- 4. Furnish anchor bolts and leveling plates to the Concrete Contractor for placement in concrete piers.
- 5. Provide as-built verification of all anchor bolts will be required PRIOR to commencing with steel erection.
- 6. Provide roof sump pans and related work.
- 7. Provide framing out for openings (roof drains, mechanical openings, access hatches, stairs, etc.). Assume opening frames will be field installed.
- 8. Prime paint systems, galvanizing, and related finishing of steel items, including touch up. This contractor shall provide primer that is compatible with specified fireproofing materials and finish painting where required.

#### 9. Provide all masonry anchors.

- 10. Furnish, install, and maintain, a two line OSHA safety cable/railing at the perimeter of all levels including the roof, along any column lines that become a perimeter condition, and any interior floor or roof openings due to the erection sequence. Cables are to be installed in two continuous strands with a turn-buckle tightening device every 50′ to allow for proper maintenance to tighten cables. Anchor the cable by using 2″ x 2″ x 5/16″ x 44″ high angle welded to the perimeter steel and columns at 15′ o.c. Include diagonal braces to prevent deflection of the angle at the cable attachment points. The installed cables must be maintained by this contractor for the duration or until the permanent system has been installed to where there is no fall concern. Assume additional mobilizations as needed for maintenance after demobilization and removal when directed by EDiS. All costs associated with the removal, once directed by the Construction Manager, are to be included by this contractor.
- 11. The Steel Contractor will provide all connections to masonry whether they are field welds or shop welds. Conditions that require in field welding and assembly are the responsibility of this Contractor. Field coordination with the masonry installer will be this Contractor's responsibility.
- 12. All steel testing will be the responsibility of the Construction Manager, however, this Contractor will cooperate with the testing agency in the inspection at the fabrication shop and in the field.
- 13. Confirm layout, installation and alignment of attachments at the slab edge condition prior to installation.
- 14. No electrical power for welders will be provided.
- 15. Provide data and submittal information related to the Scope of this Contract signed and sealed by a Professional Engineer as required by the Contract Documents. **Provide delegated design for structural steel, pipe tube railings, stairs and handrails.**
- 16. This Contractor shall fabricate, weld and install all reinforcing anchors that connect the structural steel to the masonry systems. Provide all shop fabrication, a field installation and field welding regardless of the weld symbols.
- 17. This Contractor shall include all necessary staging, rigging, matting and remobilizations to accommodate this erection sequence.
- 18. Provide all stairs, handrails, railings, steel ladders and accessories.
- 19. Supply steel nosing's in stairs to concrete contractor to install.

- 20. Furnish loose steel lintels, angles, plates and embedded items to other contractors for them to install.
- 21. Provide miscellaneous rough hardware, iron shapes, framing and support angles.
- 22. Provide metal decking for slab on deck at stage.
- 23. Bollards will be provided by sitework contractor. Do not include costs in base bid.
- 24. Provide gratings.
- 25. Louvers and grilles will be provided by others.
- 26. Metal Downspout Boots will be supplied by this contractor and installed by Roofing Contractor.
- 27. Provide overhead door frames.
- 28. Provide elevator hoist beam.
- 29. Provide elevator sills
- 30. Provide elevator pit cover
- 31. Provide wrapping of stainless steel opening at elevator doors
- 32. Provide ships ladders.
- 33. Provide galvanizing, as required.
- 34. Provide acoustic metal deck.
- 35. Provide floor stops at all perimeter and interior openings/edges.
- 36. Provide all anchoring devices, fasteners, inserts and other related items associated with the installation of the above within this summary of work section.
- 37. Provide field touch-up paint.
- 38. Provide required labor for verification of field dimensions throughout the project.
- 39. Provide pricing for all alternates as described in Section 012300-Alternates.
- 40. This contractor shall provide all structural shop drawings, including trusses bar joists and stairs within 2 weeks of award so that the fully coordinated shop drawings with MEP

Trades and BIM Coordinator are submitted within 8 weeks from award of project.

- 41. Provide all cranes, scaffolding and lifts for this work.
- 42. Include all costs for barricades, arrows, pedestrian protections, flag men, etc. will be part of this Contract. It shall be assumed there is at least 1 marked flagger to escort trucks through the project site.
- 43. Provide premanufactured canopy and all associated finishes and fasteners. Provide shop drawings and coordinate the MEP trade installations within the structure.
- 44. Provide the fence associated with the street screen walls. The excavation, installation of foundations and backfilling for street screen walls will be completed by the Sitework Contractor. The masonry will be provided by Masonry contractor.
- 45. Sequencing and fabrication must follow agreed-to construction, based on the schedule provided in project manual. Any deviations from this plan must be approved prior to contract award.
- 46. Provide daily fine cleanup of the work is the responsibility of each individual Contractor which includes broom cleaning of their debris as required. Daily Fine clean up, on a daily basis, shall be defined as those means/methods utilized to perform the daily cleaning tasks without producing dust, noise and stacking of stored materials. Furnish fine clean up on a daily basis. All debris must be removed from the work area at the end of each work day to the appropriate dumpster.
- 47. Provide at least a 48 hour notice prior to any delivery. All deliveries are to be between 7:00 AM and 3:30 PM.
- 48. This is not a secure site. All contractors are responsible for concealing, locking and/or removing any materials on a daily basis. ASD and EDiS will not be responsible for any lost tools, materials or equipment.
- 49. Provide a \$40,000 allowance to be used at the discretion of the project manager.
- 50. Cold formed trusses will be provided by Contract A-07 Metal Studs and Drywall.

# CONTRACT NO. A-05 - CARPENTRY AND GENERAL WORK

- A. Work included in this contract consists of, but is not necessarily limited to, all labor, materials and equipment for:
  - Technical Specification Sections:

Division 0	Bidding and Contract Requirements
Division 1	General Requirements
Section 061000	Rough Carpentry
Section 061600	Sheathing
Section 072100	Thermal Insulation
Section 078413	Penetrating Firestopping
Section 078443	Joint Firestopping
Section 079200	Joint Sealants
Section 079513.13	Interior Expansion Joint Cover Assemblies
Section 081113	Hollow Metal Doors & Frames
Section 081416	Flush Wood Doors
Section 083323	Overhead Coiling Doors
Section 083513.23	Accordion Folding Fire Doors
Section 087100	Door Hardware
Section 096723	Resinous Flooring
Section 097723	Tackable Wall Panels
Section 098433	Sound-Absorbing Wall units
Section 100600	Specialty Schedule
Section 101100	Visual Display Units
Section 101416	Plaques
Section 101419	Dimensional Letter Signage
Section 101423	Panel Signage
Section 102113	Plastic Toilet Compartments
Section 102123	Cubicle Curtains and Track
Section 102600	Wall and Corner Protection
Section 102800	Toilet, Bath and Laundry Accessories
Section 104413	Fire Extinguisher Cabinets
Section 104416	Fire Extinguishers
Section 105113	Metal Lockers
Section 107516	Ground-Set Flagpoles
Section 110000	Miscellaneous Equipment
Section 115213	Projection Screens
Section 116143	Stage Curtains
Section 116623	Gymnasium Equipment
Section 122413	Roller Window Shades
Section 124813	Entrance Floor Mats and Frames

This contract also includes, but is not necessarily limited to, all labor, materials and equipment for

#### the following:

- 1. Provide labor and materials to perform the work related to all carpentry and general work.
- 2. All rough carpentry related to the exterior skin of the building including wood nailers, sheeting and blocking. Include all fire treating or exterior grade materials as required.
- 3. All rough carpentry related to the interior of the building including blocking, sheathing wood nailers, etc. for the installation of fire extinguishers, doors, door stops, hold opens, instructions boards, tac boards, brackets, lockers, railings windows, signage, stage or gymnasium equipment, window shades, toilet accessories, cabinets, toilet partitions, casework, millwork, etc. including fire treating, as required.
- 4. Roof curbs, pipe, hoods and vent equipment & supports are to be supplied by contractor in which the units, piping, etc. are being supplied. The openings for the curbs in the roofing materials shall be cut by the Roofing Contractor. Openings in the metal deck shall be cut by the contractor in which the units are being provided. The roofing contractor shall provide all flashing and sealing of the curbs. Any wood blocking required will be provided by Carpentry & General Works Contractor.
- 5. Furnish and install hollow metal, steel and wood doors, frames, vision panels, and finish hardware.
- 6. Provide hardware for all doors. (Aluminum, FRP, hollow metal, steel and wood) The aluminum and FRP doors will be provided by the Glass & Glazing Contractor. Install finish hardware at all hollow metal, steel and wood doors. All low voltage wiring within the wood, steel and hollow metal doors and frames is to be installed by Contract A-20 Electrical. All low voltage wiring within the Aluminum & FRP doors and frames is to be installed by Contract A-20 Electrical. Final connection and power supply to be provided by Electrical Contractor. Attend Hardware Coordination Meetings with security contractor, electrical contractor and owner in order to insure complete system is being provided.
- 7. All door, frame & hardware materials are to be stored by this Contractor until delivery is requested. Material to be delivered within the site and off loaded to hardware room or room to be installed by this contractor. Once on site, this contractor must maintain a door & hardware room on-site that maintains climate requirements. The room security will be this contractor's responsibility.
- 8. Provide insulated & non insulated overhead coiling doors.
- 9. Hardware for permanent exterior gates will be provided by Carpentry & General Works Contractor and the security will be provided by the Special Services Contractor. These locations are indicated on the Architectural and Civil Drawings. The Sitework Contractor shall provide the gates and associated adjacent fencing. The balance of hardware will be

- provided by the Carpentry & General Works Contractor, as indicated on the door hardware schedule. The Electrical & Special System Contractors shall provide all power and coordination with fire alarm integration.
- 10. Provide Fire rated accordion folding fire doors. This shall include all hardware, trim, fasteners, warranties, etc.
- 11. Coordinate electrical requirements with any automatic door operations, magnetic hold opens or card readers.
- 12. Provide all keying for all doors. All lock sets (Hollow Metal, Wood Doors, Aluminum Entrances). Provide Owner with copy of pin schedule.
- 13. Provide wood stairs to stage.
- 14. Provide construction cylinders.
- 15. Furnish and install hold open closers with fire alarm interface: Power wiring by Electrical Contractor. Fire alarm ties in by Electrical Contractor.
- 16. Coordinate card reader requirements with electrical hardware.
- 17. Provide all field trimming required to adjust to existing conditions.
- 18. All material to be stored by this Subcontractor until delivery is requested. Material to be delivered to the site and off loaded by others. Deliveries to correspond to the construction schedule. Provide 48 hour notice prior to delivery.
- 19. Coordinate electrical requirements with any automatic door operations (include overhead doors). Provide low-voltage wiring required for overhead and automatic door operations.
- 20. Provide field assistance to Electrical and Glazing Subcontractors.
- 21. Provide recessed walk-off entrance mats and frames.
- 22. All Kitchen Equipment identified on K-Series drawings will be provided by Kitchen Equipment Contractor.
- 23. Provide new theatrical and stage equipment. This shall include: stage curtains, scrims and drops, draw curtain tracks and curtain rigging. Coordinate electrical requirements with the Electrical Contractor.
- 24. Provide resinous flooring and integral base. Coordinate slab tolerances with concrete contractor. Engage installer who is certified at resinous floor installations. Provide protection, maintenance and the removal of finished products once accepted by

- Construction Manager. Protection shall consist of kraft paper, taped down on all areas of floor and masonite over high traffic areas on top of the kraft paper.
- 25. Provide all visual display boards, white boards, marker boards, marker wall, chalk boards, tack boards, tack walls, tack strips, display rails, sound-absorbing wall units and all angles, fasteners & adhesives. Provide acoustical wall absorber wall panels. (A formal shop drawing for acoustical wall absorber wall panels will be required)
- 26. Provide Projection screens. Included in this work shall be consist of, but not be limited to: coordination of all structural or MEP components, controls, mounting supports, fasteners and trim associated. Electric service is the responsibility of the Electrical Subcontractor. All other control wiring, as specified, will be the responsibility of this Subcontractor.
- 27. Provide Lockers and bases, including but not limited to: blocking, fasteners, filler/trim pieces hardware hooks/shelves & caulking.
- 28. Provide Toilet partitions including hardware, blocking, fasteners and caulking as needed. Coordinate any structural requirements with the structural steel and carpentry contractors.
- 29. Provide Fire extinguishers, extinguisher cabinets and accessories.
- 30. Provide defibrillator <del>and</del> cabinet. Alarm power wiring will be provided by Electrical Contractor.
- 31. Provide Knox Box. The location of the Knox Box must be coordinated and confirmed by local Fire Chief prior to installation.
- 32. Provide cubicle curtains and track system. Include all accessories including hardware, blocking, fasteners and caulking as needed. Coordinate any structural requirements with the structural steel and carpentry contractors.
- 33. Provide Toilet and bath accessories including keys, blocking, fasteners and caulking as needed. This shall include, but not be limited too washroom accessories, underlavatory guards, custodial accessories and electric hand dryers. (Power to hand dryers will be provided by Electrical Contractor)
- 34. Provide all signage (interior and exterior) with all fasteners, brackets, adhesives and finishes.
- 35. Provide building plaque with all fasteners, brackets, adhesives and finishes. Coordinate location with substrates to ensure proper mounting.
- 36. Provide Window treatments and all associated fasteners, blocking, hardware, etc.
- 37. Provide flagpole, cables, pulleys and American flag. Include all costs associated with

- excavation, concrete, anchor bolts, bases and other support as required by the manufacturer's instructions.
- 38. Provide wall and corner protection. This shall include all shop drawings, warranties, attic stock and fasteners and adhesives.
- 39. Provide wall pads.
- 40. Provide all gymnasium equipment, including chin up bars and safety pads and specified demonstrations.
- 41. Provide all cranes, scaffolding and lifts for this work
- 42. Smartboards will be supplied by Owner. The brackets and associated blocking for these units will be provided by this contractor. Coordinate locations for blocking and brackets closely with Special Systems Contractor.
- 43. Provide interior architectural expansion joint systems, including joint covers materials at walls, floors & ceilings. This contractor must coordinate installations with Metal Stud & Drywall & Acoustical Ceiling contractors. Exterior expansion joints will be by others.
- 44. Provide all Mirrors.
- 45. Provide generators and other means for temporary services for the completion of your
- 46. Verification of field dimensions is the responsibility of this Subcontractor.
- 47. Provide all anchoring devices, fasteners, inserts and other related items associated with the installation of the above items.
- 48. This Subcontractor shall at a minimum provide and maintain for the length of the project, one temporary fire extinguisher for each 3,000 sq. ft. of the protected building area. Fire extinguishers shall be 10lb, Multi-Purpose (ABC) dry chemical, UL labeled, with a rating of 3a:40bc.
- 49. Provide all temporary barricades at all openings in floors, staircases and duct chases and maintain throughout completion of project. Include removal and disposal at completion of project. Protection, at a minimum will consist of (3) 2 x 4 rails and 1/2" plywood framed at all openings. Rails shall be at top, middle and toe boards to meet or exceed OSHA requirements.
- 50. Provide pricing for all alternates as described in Section 012300-Alternates.
- 51. Provide attic stock as indicated for all above items provided by this contractor.

- 52. All costs for barricades, arrows, pedestrian protections, flag men, etc. will be part of this Contract. It shall be assumed there is at least 1 marked flagger to escort trucks through the project site.
- 53. Provide daily fine cleanup of the work is the responsibility of each individual Contractor which includes broom cleaning of their debris as required. Daily Fine clean up, on a daily basis, shall be defined as those means/methods utilized to perform the daily cleaning tasks without producing dust, noise and stacking of stored materials. Furnish fine clean up on a daily basis. All debris must be removed from the work area at the end of each work day to the appropriate dumpster.
- 54. Hardware for permanent exterior gates will be provided by Carpentry & General Works Contractor and the security will be provided by the Special Services Contractor. These locations are indicated on the Architectural and Civil Drawings. The Sitework Contractor shall provide the gates and associated adjacent fencing. The balance of hardware will be provided by the Carpentry & General Works Contractor, as indicated on the door hardware schedule. The Electrical & Special System Contractors shall provide all power and coordination with fire alarm integration.
- 55. Provide at least a 48 hour notice prior to any delivery. All deliveries are to be between 7:00 AM and 3:30 PM.
- 56. This is not a secure site. All contractors are responsible for concealing, locking and/or removing any materials on a daily basis. ASD and EDiS will not be responsible for any lost tools, materials or equipment.
- 57. This contractor must provide a silica exposure plan that meets or exceeds the new 2017 silica OSHA requirements before any work can commence. At a minimum, it must be implemented in to the company safety plan, include all monitoring, testing, limits exposure, provide respiratory plan and/or equipment modifications such as adding water to equipment during exposed work and keep records of exposure.
- 58. Provide \$25,000 allowance to be used at the discretion of the Construction Manager for temporary window enclosures
- 59. Provide \$25,000 allowance to be used at the discretion of the Construction Manager.

## CONTRACT NO. A-06 - ROOFING

- A. Work included in this contract consists of, but is not necessarily limited to, all labor, materials and equipment for:
  - Technical Specification Sections:

Division 0 Bidding and Contract Requirements

Division 1 General Requirements Section 055000 Metal Fabrications

Section 061600 Sheathing

Section 072100 Thermal Insulation Section 073113 Asphalt Shingles

Section 074113.13 Formed Metal Roof Panels

Section 075323 Ethylene-Propylene-Diene-Monomer (EPDM) Roofing

Section 076200 Sheet Metal Flashing and Trim

Section 077100 Roof Specialties Section 077200 Roof Accessories

Section 078413 Penetrating Firestopping

Section 078443 Joint Firestopping Section 079200 Joint Sealants

- 1. Provide Furnish and install all roofing, including accessories for a complete and watertight installation. System shall include, but not be limited to: tapered insulation, PVC materials, adhesives and fasteners, sealants, insulation (including design), flashings, cants, copings, reglets and counter flashings, roof-edge specialties, crickets, walkway pads, downspouts, lamb tongue, mechanical & plumbing penetrations, roof overflow drains, temporary openings at all penetrations and temporary and permanent flashing at all mechanical equipment curbs.
- 2. Provide elastomeric membrane roofing system (EPDM), including rigid and tapered insulation and all related accessories.
- 3. Provide asphalt shingle roofing system, including insulation and all related accessories.
- 4. This contractor shall carefully review the edge of roof details to determine if the roof can be placed before the exterior wall assembly is complete. This contractor shall include <u>all</u> costs associated with returning to the jobsite to complete the roof perimeter after wall assembly is complete.
- 5. Bentonite and Foamed-in place insulation will be by others.

- 6. Provide caulking related to roofing, flashing and roof accessories.
- 7. The roof drains and associated plumbing shall be provided by the Mechanical Contractor. Flashing and installation of the roof drains shall be by the Roofing Contractor. Openings for the roof drains in the roofing materials shall be cut by the Roofing Contractor. Openings in the metal deck shall be cut by others.
- 8. Provide all metal parapet coping and fasteners & sealants.
- 9. Provide roof hatches. Roof hatches should also include the safety rails (guard rails) as indicated on 8/A4.0 & Section 077200. Blocking to be provided by Carpentry & General Works Contractor.
- 10. Provide walk pads (Traffic pads).
- Perform cutting, patching and maintenance of temporary patch at all roof openings prior to roof completion. This includes, but is not limited to openings for MEP RTU units, drains, hatches, etc.
- 12. Provide metal drip edges.
- 13. Roof curbs, pipe, hoods and vent equipment & supports are to be supplied by contractor in which the units, piping, etc. are being supplied. The openings for the curbs in the roofing materials shall be cut by the Roofing Contractor. Openings in the metal deck shall be cut by the contractor in which the units are being provided. The roofing contractor shall provide all flashing and sealing of the curbs. Any wood blocking required will be provided by Carpentry & General Works Contractor.
- 14. Provide expansion joints and associated insulation that are integral to the roof.
- 15. Provide all gutters and downspouts.
- 16. Metal Downspout Boots will be supplied by the Structural Steel Contractor and installed by this contractor.
- 17. Provide all flashing, copings, roof edge components, base flashing, sealing, and insulation around floor curbs, parapets, pitch pockets, vents, stacks, drains, roof hatches, ducts, and other structural, architectural, mechanical, and electrical penetrations in the roof to form a watertight roofing system as indicated. Provide all counter flashing to roof and to walls.
- 18. Wood blocking shall be provided by Carpentry & General Works Contractor.
- 19. Flashing and sheet metal. Flashing Summary:
  - a. Thru wall and cavity flashing below the roof line shall be by the Masonry Contractor.
  - b. Thru wall and cavity flashing above the roof line shall be by the Roofing Contractor.

- 20. Provide at least a 48 hour notice prior to any delivery. All deliveries are to be between 7:00 AM and 3:30 PM.
- 21. Provide pricing for all alternates as described in Section 012300-Alternates.
- 22. All costs for barricades, arrows, pedestrian protections, flag men, etc. will be part of this Contract. It shall be assumed there is at least 1 marked flagger to escort trucks through the project site.
- 23. Provide daily fine cleanup of the work is the responsibility of each individual Contractor which includes broom cleaning of their debris as required. Daily Fine clean up, on a daily basis, shall be defined as those means/methods utilized to perform the daily cleaning tasks without producing dust, noise and stacking of stored materials. Furnish fine clean up on a daily basis. All debris must be removed from the work area at the end of each work day to the appropriate dumpster.
- 24. Provide all cranes, scaffolding and lifts for this work
- 25. This is not a secure site. All contractors are responsible for concealing, locking and/or removing any materials on a daily basis. ASD and EDiS will not be responsible for any lost tools, materials or equipment.
- 26. Provide a \$20,000 allowance to be used at the discretion of the project manager.
- 27. Provide all clips, fasteners, sealants, labor and materials to complete the Formed Metal Roof Panels.
- 28. Provide delegated design for all roof curbs and accessories.
- 29. Provide perlite insulation board.

# CONTRACT NO. A-07 - METAL STUDS & DRYWALL

- A. Work included in this contract consists of, but is not necessarily limited to, all labor, materials and equipment for:
  - Technical Specification Sections:

Division 0	Bidding and Contract Requirements
Division 1	General Requirements
Section 034900	Glass-Fiber-Reinforced Concrete (GFRC)
Section 053100	Steel Decking
Section 054000	Cold-Formed Metal Framing
Section 055000	Metal Fabrications
Section 062013	Exterior Finish Carpentry
Section 072100	Thermal Insulation
Section 074293	Soffit Panels
Section 074646	Fiber-Cement Siding
Section 076200	Sheet Metal Flashing and Trim
Section 078100	Applied Fireproofing
Section 078413	Penetrating Firestopping
Section 078443	Joint Firestopping
Section 097100	Preformed Joint Seals
Section 079200	Joint Sealants
Section 083113	Access Doors & Frames
Section 092216	Non-Structural Metal Framing

Gypsum Board

This contract also includes, but is not necessarily limited to, all labor, materials and equipment for the following:

- 1. Provide structural stud assembly for the exterior skin of the building.
- 2. Provide steel stud construction related to the roof details at dormers.
- Provide steel stud construction related to framing out for openings in interior and exterior walls.
- 4. Provide secondary support framing.

Section 092900

- 5. Provide clips, anchors, supports and other accessories that interface between steel framing and steel studding.
- 6. Provide metal studs, insulation, gypsum wallboard, taping and spackling.
- 7. Provide tile backing board for ceramic tile. All walls shall meet or exceed NTCA tolerances

for ceramic tile installations. Any additional reworking required to meet these tolerances will be this contractor's responsibility in cost and schedule.

- 8. Provide all metal stud framing required to back up EIFS Manufactured Molding and Trim, cementitious siding, brick, etc.
- 9. Provide metal furring.
- 10. Provide all glass fiber reinforced gypsum work including materials, taping.
- 11. Provide batt insulation, both thermal and acoustical and related work.
- 12. Include molded shapes.
- 13. Provide acoustical sealant of penetrations in insulated drywall partitions.
- 14. Provide access doors & frames installations in both masonry & drywall walls (assume 30 total).
- 15. Include fire taping and sealing at perimeter edge and as shown on the Drawings.
- 16. Provide all cranes, scaffolding and lifts for this work.
- 17. Comebacks and out-of-sequence work may be required and as such should be included.
- 18. Include all necessary field measurements.
- 19. Engineered shop and installation drawings as required.
- Install metal decking at mansard trusses. Metal decking and trusses are to be supplied by steel contractor. Contract A-07 Metal Stud and Drywall will provide cold formed metal trusses and cold formed box members.
- 21. Provide all exterior wall sheathing (DensGlass, flashings, etc.), asphalt felts and Tyvek on structural steel studs.
- 22. Provide cementitious siding, fascia's, trim pieces, etc. Confirm nothing else is required here
- 23. Installation of masonry veneer anchors are not to be included in this work. They will be provided by the Masonry Contractor.
- 24. No power for welding equipment will be provided.
- 25. Provide fire resistant joint systems at floors and walls.

- 26. Include two (2) passes per floor to "touch-up" mechanical penetrations to ensure ratings required. The first pass will be required prior to ceiling grid installation and the second pass will be required prior to final inspection for Certificate of Occupancy.
- 27. Bidders are advised to pay particular attention to top of wall conditions, fire and smoke safing of slabs and acoustical sealants.
- 28. Provide pricing for all alternates as described in Section 012300-Alternates.
- 29. This contractor shall provide all structure shop drawings within 2 weeks of award so that the fully coordinated shop drawings with MEP Trades and BIM Coordinator are submitted within 8 weeks from award of project.
- 30. All costs for barricades, arrows, pedestrian protections, flag men, etc. will be part of this Contract. It shall be assumed there is at least 1 marked flagger to escort trucks through the project site.
- 31. Provide daily fine cleanup of the work is the responsibility of each individual Contractor which includes broom cleaning of their debris as required. Daily Fine clean up, on a daily basis, shall be defined as those means/methods utilized to perform the daily cleaning tasks without producing dust, noise and stacking of stored materials. Furnish fine clean up on a daily basis. All debris must be removed from the work area at the end of each work day to the appropriate dumpster.
- 32. Provide GFRC decorative columns and balusters.
- 33. Provide Exterior Insulated Finish System (EIFS). Manufactured Molding and Trim. Exterior metal studding, insulation, gypsum board and Tyvek will be provided by Contract A-07.
  - a. Provide EIFS Manufactured Molding and Trim as field applied or panelized.
    - i. Provide caulking of the following:
      - 1. EIFS Manufactured Molding and Trim to EIFS Manufactured Molding and Trim
      - 2. EIFS Manufactured Molding and Trim to Masonry
      - 3. EIFS Manufactured Molding and Trim to Aluminum
  - b. Provide flashing required at EIFS system Manufactured Molding and Trim.
  - c. Provide any rough blocking built into panelized EIFS Manufactured Molding and Trim is the responsibility of this Contractor.
  - d. Provide hoisting and scaffolding as required.
  - e. Provide anchors for supporting EIFS panels Manufactured Molding and Trim.
  - f. Provide scoring, beads and joints as required and as detailed on the contract documents.
- 34. Provide fireproofing, both exposed and concealed.

- a. Provide clean up on a daily basis, all over spray materials. Provide perimeter protection around areas of fireproofing installation to protect surrounding materials and public properties. Any damages caused by overspray of fireproofing materials will be repaired and compensated for by this contractor.
- b. Inspection of the fireproofing will be the responsibility of the Construction Manager.
- c. Protect fireproofing according to advice of fireproofing manufacturer and installer from damage resulting from construction operations or other causes so that fireproofing will be without damage or deterioration at time of Substantial Completion.
- d. Coordinate installation of fireproofing with other work in order to minimize the need for other trades to cut or remove fireproofing. As other trades successively complete installation of their work, maintain protection of structure afforded by fireproofing by patching any areas which have been removed or damaged prior to concealment of fireproofing by other work.
- e. Repair or replace work which has not been successfully protected.
- f. Prepare all surfaces including priming substrate, if needed.
- g. Provide all required steel frame fireproofing whether clearly shown or not on the drawings. Do not include concrete fire proofing.
- 35. Provide at least a 48 hour notice prior to any delivery. All deliveries are to be between 7:00 AM and 3:30 PM.
- 36. This is not a secure site. All contractors are responsible for concealing, locking and/or removing any materials on a daily basis. ASD and EDiS will not be responsible for any lost tools, materials or equipment.
- 37. The steel contractor will provide all metal floor and roof decking with the exception of the perimeter roof dormers. At the perimeter roof dormers, the steel contractor shall furnish only metal decking to the Metal Stud & Drywall Contractor to install where deck bears on metal studs framing. All labor and materials to install it are the responsibility of the Metal Stud & Drywall Contractor.
- 38. Expansion joints integral to the metal stud & drywall systems will be provided by Carpentry & General Works contractor. This contractor must coordinate the installation to ensure layout is consistent with wall installation.
- 39. Provide continuous bent plates as indicated in typical condition details 1-2 & 4/A4.2. The steel contractor will not include any costs for this work.
- 40. Provide a \$20,000 allowance to be used at the discretion of the Construction Manager.
- 41. Provide delegated design for cold formed metal framing and GFRC.

#### CONTRACT NO. A-08 – GLASS & GLAZING

- A. Work included in this contract consists of, but is not necessarily limited to, all labor, materials and equipment for:
  - Technical Specification Sections:

Division 0 Bidding and Contract Requirements

Division 1 General Requirements
Section 078413 Penetrating Firestopping

Section 078443 Joint Firestopping Section 079200 Joint Sealants Section 081613 FRP Flush Doors

Section 084113 Aluminum-Framed Entrances and Storefronts

Section 085113 Aluminum Windows

Section 088000 Glazing

Section 088813 Fire-Resistant Glazing

- 1. Provide all storefront and all glass and glazing systems.
- 2. Provide manual aluminum door systems and handling.
- 3. Provide automatic aluminum door systems, including hardware.
- 4. Install finish hardware for aluminum and FRP doors only. Hardware for all doors will be supplied by Contract A-05, Carpentry & General Works and installed by this subcontractor. This contractor is responsible for coordinating door hardware with their aluminum entrances to ensure each opening is properly prepped for hardware being supplied by Contract A-08. All low voltage wiring within the aluminum doors and frames is to be installed by the **contract A-20 Electrical**. Final connection and power supply to be provided by Contract A-20 Electrical Contractor.
- 5. Provide all glass and glazing at exterior of building.
- 6. Provide all interior glass and glazing systems.
- 7. Provide all interior door, partition, vision panel and window glass. The door frames and doors will be provided by the Carpentry & General Works Contractor
- 8. Coordinate glass types with partition and door fire ratings. Contact Construction Manager with any discrepancies. This contractor will provide fire-resistant glass & glazing system.

- 9. Provide caulking related to all glass. This includes all interior and exterior glass systems.
- 10. Provide mock-ups as required by the Drawings and Specifications.
- 11. Provide custom break metal trim and infill.
- 12. Provide all hoisting/scaffolding related to the work of this Contract.
- 13. Coordinate edge of slab tolerances and field verify all rough openings.
- 14. Provide caulk between the materials supplied under this section and the adjacent surfaces.
- 15. Provide pricing for all alternates as described in Section 012300-Alternates.
- 16. All costs for barricades, arrows, pedestrian protections, flag men, etc. will be part of this Contract. It shall be assumed there is at least 1 marked flagger to escort trucks through the project site.
- 17. Provide daily fine cleanup of the work is the responsibility of each individual Contractor which includes broom cleaning of their debris as required. Daily Fine clean up, on a daily basis, shall be defined as those means/methods utilized to perform the daily cleaning tasks without producing dust, noise and stacking of stored materials. Furnish fine clean up on a daily basis. All debris must be removed from the work area at the end of each work day to the appropriate dumpster.
- 18. Provide doors and frames for all aluminum and FRP doors. The hollow metal, steel and wood doors will be provided by the Carpentry & General Works Contractor. All low voltage wiring within aluminum and FRP doors and frames is to be installed **Contract A-20 Electrical**. Final connection and power supply to be provided by Electrical Contractor.
- 19. All door, frame & hardware materials are to be stored by this Contractor until delivery is requested. Material to be delivered within the site and off loaded by this contractor. Once on site, this contractor must maintain a door & hardware room on-site. The room security will be this contractor's responsibility.
- 20. Provide at least a 48 hour notice prior to any delivery. All deliveries are to be between 7:00 AM and 3:30 PM.
- 21. This is not a secure site. All contractors are responsible for concealing, locking and/or removing any materials on a daily basis. ASD and EDiS will not be responsible for any lost tools, materials or equipment.
- 22. Provide a \$10,000 allowance to be used at the discretion of the project manager.
- 23. Provide delegated design for glass & glazing.

Division 0

#### CONTRACT NO. A-09 - CASEWORK AND MILLWORK

A. Work included in this contract consists of, but is not necessarily limited to, all labor, materials and equipment for:

**Bidding and Contract Requirements** 

• Technical Specification sections:

Division 1	General Requirements
Section 062023	Interior Finish Carpentry
Section 064023	Interior Architectural Woodwork

Section 079200 Joint Sealants

Section 120600 Plastic Laminate Casework Schedule

Section 123216 Manufactured Plastic-Laminate-Faced Casework

Section 123623 Plastic-Laminate-Clad Countertops

Section 123661.16 Solid Surface Countertops

- 1. Provide labor and materials to perform the work related to all casework and millwork.
- 2. Provide all field trimming required to adjust to existing conditions.
- Provide all millwork, casework, trim and hardware and including all toe kicks, student cubbies, shelves, enclosures at lockers, filler strips and window stools were indicated in the project document.
- 4. Provide all wardrobe and closet specialties such as hardware, hooks, shelves, etc.
- 5. Coordinate power and data requirements and locations with the electrical contractor for locations and sizes of holes needed.
- 6. Comply with AWI quality certifications.
- 7. Provide solid surface column wraps, countertops, filler strips and backsplashes were indicated in the project documents. Provide slotted aluminum picture rail where integral with solid surface wall coverings.
- 8. Provide solid surface base. Solid surface base was eliminated. Any rubber base will be completed by the flooring contractor.
- 9. Coordinate cutting holes in casework with other trades.
- 10. Coordinate blocking requirements with Contract A-05: Carpentry & General Works.

- 11. Provide caulking and joint sealers integral to casework/millwork and to dissimilar materials.
- 12. Provide pricing for all alternates as described in Section 012300-Alternates.
- 13. Provide all keying to all cabinets as specified.
- 14. Provide main reception desk, stage front, proscenium opening.
- 15. Provide specified warranties.
- 16. Provide mockups as specified.
- 17. All costs for barricades, arrows, pedestrian protections, flag men, etc. will be part of this Contract. It shall be assumed there is at least 1 marked flagger to escort trucks through the project site.
- 18. Provide daily fine cleanup of the work is the responsibility of each individual Contractor which includes broom cleaning of their debris as required. Daily Fine clean up, on a daily basis, shall be defined as those means/methods utilized to perform the daily cleaning tasks without producing dust, noise and stacking of stored materials. Furnish fine clean up on a daily basis. All debris must be removed from the work area at the end of each work day to the appropriate dumpster.
- 19. Provide at least a 48 hour notice prior to any delivery. All deliveries are to be between 7:00 AM and 3:30 PM.
- 20. This is not a secure site. All contractors are responsible for concealing, locking and/or removing any materials on a daily basis. ASD and EDiS will not be responsible for any lost tools, materials or equipment.
- 21. Provide \$5,000 allowance to be used at the discretion of the Construction Manager.

#### CONTRACT NO. A-10 - FOLDING PANEL PARTITIONS

- A. Work included in this contract consists of, but is not necessarily limited to, all labor, materials and equipment for:
  - Technical Specification sections:

Division 0 Bidding and Contract Requirements

Division 1 General Requirements

Section 079200 Joint Sealants

Section 102239 Folding Panel Partitions

Division 26 Electrical

- 1. Provide labor and materials to perform the work related to all work associated with completing Folding Panel Partitions.
- 2. Provide all field trimming required to adjust to existing conditions.
- 3. Provide coordinated shop drawings that reflect all structural requirements with the structural steel, metal studs, ceilings, electrical power, lighting and communication systems, etc.
- 4. Provide all trim components, hardware, hinges, operators for electrical units, appropriate finishes, sensors, key switches and pocket doors for concealing doors when not in use.
- 5. Electrical connections will be provided by Electrical Contractor. This contractor shall provide assistance to Electrical Contractor for coordination and installation of necessary connections.
- 6. Provide any required signage for safe operations
- 7. Provide attic stock, warranty and demonstrations for all materials and types of panels.
- 8. Provide specified testing, adjusting, warranty and training demonstrations on the operation.
- 9. Provide pricing for all alternates as described in Section 012300-Alternates.
- 10. Contrary to specification section 102239.2.3.J, base bid should include panel faces that are 4′-0″ high, not full height as indicated.
- All costs for barricades, arrows, pedestrian protections, flag men, etc. will be part of this Contract. It shall be assumed there is at least 1 marked flagger to escort trucks through the project site.

- 12. Provide daily fine cleanup of the work is the responsibility of each individual Contractor which includes broom cleaning of their debris as required. Daily Fine clean up, on a daily basis, shall be defined as those means/methods utilized to perform the daily cleaning tasks without producing dust, noise and stacking of stored materials. Furnish fine clean up on a daily basis. All debris must be removed from the work area at the end of each work day to the appropriate dumpster.
- 13. Provide all supplementary steel as needed to hang partitions from structural support steel, provided by the Structural Steel Contractor, as shown in partition details 1 & 2/A9.10. It is assumed, no additional steel will be required below structural support steel. If so, it will be provided by this contractor.
- 14. Provide at least a 48 hour notice prior to any delivery. All deliveries are to be between 7:00 AM and 3:30 PM.
- 15. This is not a secure site. All contractors are responsible for concealing, locking and/or removing any materials on a daily basis. ASD and EDiS will not be responsible for any lost tools, materials or equipment.
- 16. Provide delegated design for Operable Folding Partitions.

## CONTRACT NO. A-11 - PAINT

- A. Work included in this contract consists of, but is not necessarily limited to, all labor, materials and equipment for:
  - Technical Specification Sections:

Division 0 Bidding and Contract Requirements

Division 1 General Requirements

Section 079200 Joint Sealants

Section 090600 Room Finish Schedule – Color Legend

Section 099123 Paints and Coatings

- 1. Provide all painting (all walls, floors and ceilings indicated on the finish schedule).
- 2. Provide sealing all interior joints between dissimilar materials that require sealants.
- 3. Provide all preparation and painting of exterior elements as described in the Schedule Section 099123 and the finish schedule.
- 4. Paint all exposed block work and concrete work as shown on the room finish schedule. Epoxy Flooring will be provided by Carpentry & General Works contractor.
- 5. Prime, stain or seal all wood trim and doors. It is the intent of the specifications that all wood doors are factory stained/painted.
- 6. Provide supplementary ventilation as required in enclosed spaces.
- 7. Provide paint and caulk to all hollow metal frames and doors as shown on the door schedule.
- 8. Provide painting of all metal stairs and railings.
- 9. Prefinished items will not be painted by this Contractor.
- 10. Paint all semi-exposed wood blocking as indicated on the drawing.
- 11. Provide protection of adjacent surfaces.
- 12. Provide minor patching prior to application of finishes.
- 13. Provide attic stock for all materials provided by this contract.

- 14. Final coat of paint is to be installed after ceilings are installed, if directed by Construction Manager.
- 15. Provide pricing for all alternates as described in Section 012300-Alternates.
- 16. This Contractor to allow 200 man hours and all equipment and required paint materials for these man hours to be used as directed by the Construction Manager.
- 17. Provide all cranes, scaffolding and lifts for this work
- 18. Provide daily fine cleanup of the work is the responsibility of each individual Contractor which includes broom cleaning of their debris as required. Daily Fine clean up, on a daily basis, shall be defined as those means/methods utilized to perform the daily cleaning tasks without producing dust, noise and stacking of stored materials. Furnish fine clean up on a daily basis. All debris must be removed from the work area at the end of each work day to the appropriate dumpster.
- 19. Provide at least a 48 hour notice prior to any delivery. All deliveries are to be between 7:00 AM and 3:30 PM.
- 20. This is not a secure site. All contractors are responsible for concealing, locking and/or removing any materials on a daily basis. ASD and EDiS will not be responsible for any lost tools, materials or equipment.
- 21. Provide \$10,000 allowance to be used at the discretion of the Construction Manager.
- 22. Provide all painting of GFRC as indicated in Addendum #4. This contractor shall provide all access to the GFRC.

# CONTRACT NO. A-12 - ACOUSTICAL CEILINGS

- A. Work included in this contract consists of, but is not necessarily limited to, all labor, materials and equipment for:
  - Technical Specification Sections:

Division 0 Bidding and Contract Requirements

Division 1 General Requirements
Section 072100 Thermal Insulation
Section 079200 Joint Sealants

Section 095113 Acoustical Panel Ceilings

- 1. Provide acoustical panel ceilings, suspension system and hangers.
- 2. Provide supplemental suspension hangers at large ducts above ceilings and at openings for lighting fixtures.
- 3. Provide continuous acoustical sealant on back of vertical leg before installing moldings where required by the project documents.
- 4. Provide hold down clips where required by governing regulations for fire resistant ratings.
- 5. Expansion joints integral to the acoustical ceiling systems will be provided by Carpentry & General Works contractor. This contractor must coordinate the installation to ensure layout is consistent with ceiling grid installation
- 6. Provide reflected ceiling layout as depicted on the Reflected Ceiling Plans. Report any conflicts with MEP obstructions prior to commencing with any work.
- 7. Provide paint to all cut edges. All colors are to be supplied by manufacturer for matching purposes.
- 8. This Contractor shall cut openings in ceilings for architectural penetrations, sprinkler heads, lights, mechanical diffusers and grilles, etc. All trades must provide layout to Sprinkler Contractor.
- 9. Provide attic stock.
- 10. Provide fire rated assemblies where indicated.

- 11. This contractor shall pay particular attention to the layout, colors and types of ceilings. All acoustical ceiling tiles are to be installed as indicated on Architectural Drawings.
- 12. Provide pricing for all alternates as described in Section 012300-Alternates.
- 13. Provide coordinated shop drawing for review and approval prior to installation.
- 14. All costs for barricades, arrows, pedestrian protections, flag men, etc. will be part of this Contract. It shall be assumed there is at least 1 marked flagger to escort trucks through the project site.
- 15. Provide all cranes, scaffolding and lifts for this work.
- 16. Provide daily fine cleanup of the work is the responsibility of each individual Contractor which includes broom cleaning of their debris as required. Daily Fine clean up, on a daily basis, shall be defined as those means/methods utilized to perform the daily cleaning tasks without producing dust, noise and stacking of stored materials. Furnish fine clean up on a daily basis. All debris must be removed from the work area at the end of each work day to the appropriate dumpster.
- 17. Provide at least a 48 hour notice prior to any delivery. All deliveries are to be between 7:00 AM and 3:30 PM.
- 18. This is not a secure site. All contractors are responsible for concealing, locking and/or removing any materials on a daily basis. ASD and EDiS will not be responsible for any lost tools, materials or equipment.
- 19. Provide \$5,000 allowance to be used at the discretion of the Construction Manager.
- 20. Provide ACT grid 7 tiles as well as any supports and clouds if accepted

#### CONTRACT NO. A-13 - FLOORING

- A. Work included in this contract consists of, but is not necessarily limited to, all labor, materials and equipment for:
  - Technical Specification Sections:

Division 0 Bidding and Contract Requirements

Division 1 General Requirements

Section 079200 Joint Sealants

Section 090600 Room Finish Schedule – Color Legend

Section 096400 Wood Flooring

Section 096513 Resilient Base and Accessories

Section 096519 Resilient Tile Flooring

Section 096813 Tile Carpeting

- Provide all flooring, with exception of epoxy floor, in accordance with the finish schedule and specifications. Epoxy Floor Paint will be provided by Carpentry & General Works contractor.
- Prepare subfloor for finished flooring including leveling and patching. Base bid shall
  include all flashing/patching and surface preparation required to perform the work of this
  Contractor.
- 3. Provide wood flooring, thresholds and all underlayments, including but not limited to: sleepers, vapor barriers, reducer strips and fasteners and leveling compounds. Provide protection of all wood flooring, maintenance of and the removal of products once accepted by Construction Manager. Protection shall consist of kraft paper, duct taped down on all areas of wood floor and Masonite over high traffic areas on top of the kraft paper.
- 4. Provide all resilient flooring, thresholds reducer strips, leveling compounds and accessories. This work shall include all flooring (VCT, Polyester, LVT & rubber floor tiles), base, stair treads, moldings, adhesives, fasteners and accessories. Per ASD, the floor polishing of resilient flooring will be completed by ASD. Do NOT include costs in base bid for polishing of these floors.
- 5. Provide all carpeting. Include all patching, adhesives, edge strips, reducer strips, leveling compounds and fasteners.
- 6. Provide all transition, thresholds and reducer strips at edges of flooring systems except when they terminate at ceramic. Ceramic Tile contractor shall provide ceramic thresholds.

- 7. Provide cleaning and protection upon completion of rooms or areas.
- 8. Provide attic stock of each material as specified.
- 9. Provide finish floor material in elevator cab. See Alternate pricing for this work.
- 10. Provide cutting and fitting around work of others.
- 11. Provide pricing for all alternates as described in Section 012300-Alternates.
- 12. Provide coordinated shop drawing for all flooring materials as indicated in flooring technical specifications.
- 13. All ceramic tile will be the responsibility of the ceramic tile contractor. This contractor will only be responsible for modifying work to meet thresholds of ceramic tile installations.
- 14. Provide mock ups as specified.
- 15. Provide multiple moisture tests, of all flooring systems, prior to installation.
- 16. Provide in base bid all costs for the storage of all material off site until environmental conditions allow for delivery to site and/or delivery is directed by Construction Manager.
- 17. All costs for barricades, arrows, pedestrian protections, flag men, etc. will be part of this Contract. It shall be assumed there is at least 1 marked flagger to escort trucks through the project site.
- 18. Provide daily fine cleanup of the work is the responsibility of each individual Contractor which includes broom cleaning of their debris as required. Daily Fine clean up, on a daily basis, shall be defined as those means/methods utilized to perform the daily cleaning tasks without producing dust, noise and stacking of stored materials. Furnish fine clean up on a daily basis. All debris must be removed from the work area at the end of each work day to the appropriate dumpster.
- 19. Provide at least a 48 hour notice prior to any delivery. All deliveries are to be between 7:00 AM and 3:30 PM.
- 20. This is not a secure site. All contractors are responsible for concealing, locking and/or removing any materials on a daily basis. ASD and EDiS will not be responsible for any lost tools, materials or equipment.
- 21. Provide \$10,000 allowance to be used at the discretion of the Construction Manager.

# CONTRACT NO. A-14 - CERAMIC TILE

- A. Work included in this contract consists of, but is not necessarily limited to, all labor, materials and equipment for:
  - Technical Specification Sections:

Division 0 Bidding and Contract Requirements

Division 1 General Requirements

Section 079200 Joint Sealants

Section 090600 Room Finish Schedule – Color Legend

Section 093013 Tile

- 1. Provide ceramic tile, quarry tile, porcelain tile, glazed wall tile, stone thresholds and associated membranes, setting materials, epoxy grouts (where indicated), sealers and strips. Epoxy Floor Paint will be by provided by Carpentry & General Works contractor.
- 2. Provide quarry tile system, grout, underlayments, edge strips and sealers.
- 3. Provide porcelain tile and related components.
- 4. Provide setting beds and thin set applications as directed.
- 5. Provide crack suppression membrane for this tile installation.
- 6. Provide waterproofing and anti-fracture membrane at all tile locations as specified by the project documents.
- 7. Provide metal trim pieces (schluter strips, etc.) integral to the tile installations.
- 8. Provide metal strips installed as part of the tile installation.
- 9. Provide vapor retarding sealer prior to tile application.
- 10. Provide grout sealant according to manufacturer's directions.
- 11. Provide cutting and fitting around work installed by others.
- 12. Provide patching and leveling.
- 13. Provide expansion joints.

- 14. Provide mock ups as specified.
- 15. Provide protection, maintenance and the removal of finished products once accepted by Construction Manager. Protection shall consist of kraft paper, taped down on all areas of floor and masonite over high traffic areas on top of the kraft paper. (If recommended by tile manufacturer, provide coat of protective cleaner to all floors and walls. Do not remove until Construction Manager Direction. Upon notice from Construction Manager, remove protective cleaner from the tile surfaces for final inspection.
- 16. Provide attic stock.
- 17. Provide pricing for all alternates as described in Section 012300-Alternates.
- 18. Provide daily fine cleanup of the work is the responsibility of each individual Contractor which includes broom cleaning of their debris as required. Daily Fine clean up, on a daily basis, shall be defined as those means/methods utilized to perform the daily cleaning tasks without producing dust, noise and stacking of stored materials. Furnish fine clean up on a daily basis. All debris must be removed from the work area at the end of each work day to the appropriate dumpster.
- 19. Provide at least a 48 hour notice prior to any delivery. All deliveries are to be between 7:00 AM and 3:30 PM.
- 20. This is not a secure site. All contractors are responsible for concealing, locking and/or removing any materials on a daily basis. ASD and EDiS will not be responsible for any lost tools, materials or equipment.
- 21. This contractor must provide a silica exposure plan that meets or exceeds the new 2017 silica OSHA requirements before any work can commence. At a minimum, it must be implemented in to the company safety plan, include all monitoring, testing, limits exposure, provide respiratory plan and/or equipment modifications such as adding water to equipment during exposed work and keep records of exposure.
- 22. Provide \$5,000 allowance to be used at the discretion of the Construction Manager.

#### CONTRACT NO. A-15 - KITCHEN EQUIPMENT

- A. Work included in this contract consists of, but is not necessarily limited to, all labor, materials and equipment for:
  - Technical Specification Sections:

Division 0 Bidding and Contract Requirements

Division 1 General Requirements
Section 078433 Joint Fire Stopping
Section 079200 Joint Sealants

Section 114000 Food Service Equipment

Division 21 Fire Suppression

Division 22 Plumbing
Division 26 Electrical

- 1. Provide all materials, services, equipment and appliances necessary to provide all foodservice equipment to its final installation location as specified.
- 2. All final connections shall be made by the Electrical and Mechanical Contractors. Provide coordination with Special Systems, Electrical and Mechanical contractor to prevent any additional cost to the Owner.
- 3. Provide the labor, equipment and materials to uncrate, assemble, install in place, level & plumb and completely install all food service equipment with exception of electrical and plumbing installations which will be completed by others.
- 4. Any discrepancies between the Drawings, Specifications and site conditions or ambiguities in the documents shall immediately be reported to the Construction Manager in writing. Inconsistencies shall be corrected in writing or by reissuing the drawings. If the Contract Documents disagree with the quality or quantity of work required, the better quality or greater quantity shall be supplied unless otherwise instructed in writing by the Construction Manager. Any work performed by the Contractor at locations in question after his discovery of discrepancies, inconsistencies, ambiguities, or errors, without securing resolution, shall be at the Contractor's risk.
- 5. This Contractor shall verify all measurements at the site and assume full responsibility for their correctness before proceeding with his work. No extra compensation will be allowed because of differences between site conditions and those indicated on the drawings.
- 6. Manufactured articles, materials, and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer and shall be

protected from damage until acceptance. Prefinished products which are damaged before or after installation shall be replaced with new and perfect materials. Materials finished after installation which are damaged shall be refinished or replaced as the Construction Manager may direct. No additional charge will be honored by the Construction Manager for repair or replacement of finished materials.

- 7. Should this Contractor feel that the Contract Documents call for work which he cannot guarantee, he shall so state, in writing, prior to bidding. Proceeding with any operation shall be construed as acceptance of all guarantee conditions.
- Secure certificates of inspection and occupancy required by authorities having jurisdiction.
   Deliver copies of certificates to the Construction Manager prior to filing application for final payment.
- 9. It is this Contractor's responsibility to make certain statutes, building codes, and regulations including those of the appropriate health agencies having jurisdiction over this type of facility are met.
- 10. Provide protection of all equipment during and after installation has been completed.
- 11. Provide coordinated shop drawings that indicate all MEP requirements and accurately reflect the actual conditions and spacing of the area.
- 12. Provide specified warranties.
- 13. All foodservice components consist of those items identified in Section 114000 and the "K" Series drawings that identify the Food Service items. All items are to be included in the base bid of this contract to completely provide all systems in their entirety. This contractor shall pay particular attention to the "Standard Details" section of typical drawings within Specification section 114000.
- 14. Welding of materials must comply with all specified acceptable means.
- 15. Any items furnished as part of this Scope of Work that require mechanical or electrical rough ins or services that are different from those shown on the Contract Drawings shall be so noted at the time of bid. Failure to do so shall make this Contractor liable for costs of any changes required by same.
- 16. Provide all caulking and sealants for proper installation and in accordance with public health regulations.
- 17. Provide startup, testing and demonstrate all equipment installed under this category of work. Provide proposed schedule, including names and telephone numbers of attending representatives at least (3) three weeks in advance of demonstration.

- 18. Obtain approvals and permits and coordinate inspections and testing with governing local and state agencies.
- 19. Provide pricing for all alternates as described in Section 012300-Alternates.
- 20. Provide licensed electrician to make all interconnections within equipment furnished by this contractor.
- 21. This contractor shall provide all equipment shop drawings within 2 weeks of award so that the fully coordinated shop drawings with MEP Trades and BIM Coordinator are submitted within 8 weeks from award of project.
- 22. All costs for barricades, arrows, pedestrian protections, flag men, etc. will be part of this Contract. It shall be assumed there is at least 1 marked flagger to escort trucks through the project site.
- 23. Provide daily fine cleanup of the work is the responsibility of each individual Contractor which includes broom cleaning of their debris as required. Daily Fine clean up, on a daily basis, shall be defined as those means/methods utilized to perform the daily cleaning tasks without producing dust, noise and stacking of stored materials. Furnish fine clean up on a daily basis. All debris must be removed from the work area at the end of each work day to the appropriate dumpster.
- 24. Provide at least a 48 hour notice prior to any delivery. All deliveries are to be between 7:00 AM and 3:30 PM.
- 25. This is not a secure site. All contractors are responsible for concealing, locking and/or removing any materials on a daily basis. ASD and EDiS will not be responsible for any lost tools, materials or equipment.
- 26. Provide \$5,000 allowance to be used at the discretion of the Construction Manager.

#### CONTRACT NO. A-16 – ELEVATOR & WHEEL CHAIR LIFTS

- A. Work included in this contract consists of, but is not necessarily limited to, all labor, materials and equipment for:
  - Technical Specification Sections:

Division 0 Bidding and Contract Requirements

Division 1 General Requirements
Section 078413 Penetrating Firestopping

Section 142123.16 Machine Room-Less Electric Traction Passenger Elevators

Section 142600 Limited-Use/Limited-Application Elevators

Section 144200 Wheel Chair Lifts
Division 21 Fire Suppression
Division 22 Plumbing

Division 23 Heating, Ventilating and Air Conditioning

Division 26 Electrical

Division 27 Communications

- 1. Provide passenger elevator complete.
- 2. Provide new vertical wheelchair lifts complete.
- 3. Electric service and disconnect switch for the elevators are the responsibility of the Electrical Subcontractor. All other control wiring, as specified, will be the responsibility of this Subcontractor.
- 4. This Contractor shall cooperate with the Construction Manager in laying out the core dimensions and sill elevations.
- 5. Provide demonstration/training for both elevator and wheel chair lifts.
- 6. Provide specified warranties and maintenance services.
- 7. The grouting of all elevator sill angles will be the responsibility of the Concrete Contractor.
- 8. This Contractor to furnish and install all rough wiring necessary for the installation of emergency telephones. All communication devices will be furnished and installed by the Owner.
- 9. The Carpentry & General Works Contractor will furnish and install temporary barricades at all openings in the building, including the elevator. It is the responsibility of this

- contractor to maintain this temporary protection and railings at hoist ways after installation of elevator has commenced throughout certification/testing.
- 10. Provide pricing for all alternates as described in Section 012300-Alternates.
- 11. Provide card reader operation system. Special Systems Contractor will provide final terminations.
- 12. Provide start up and training of elevator and lifts.
- 13. All costs for barricades, arrows, pedestrian protections, flag men, etc. will be part of this Contract. It shall be assumed there is at least 1 marked flagger to escort trucks through the project site.
- 14. Provide daily fine cleanup of the work is the responsibility of each individual Contractor which includes broom cleaning of their debris as required. Daily Fine clean up, on a daily basis, shall be defined as those means/methods utilized to perform the daily cleaning tasks without producing dust, noise and stacking of stored materials. Furnish fine clean up on a daily basis. All debris must be removed from the work area at the end of each work day to the appropriate dumpster.
- 15. Provide at least a 48 hour notice prior to any delivery. All deliveries are to be between 7:00 AM and 3:30 PM.
- 16. This is not a secure site. All contractors are responsible for concealing, locking and/or removing any materials on a daily basis. ASD and EDiS will not be responsible for any lost tools, materials or equipment.
- 17. Provide wall pads on all sides of elevator prior to turnover of elevator.
- 18. Provide in base bid all costs associated with moving/operating car to leave cab in pit or to top of shaft so that other trades can provide access for their work to be completed once cab installation is underway. Provide a minimum of 8 Hours of time in base bid.
- 19. Provide \$5,000 allowance to be used at the discretion of the Construction Manager.
- 20. Provide limited-use/limited-application elevator in its entirety.

## CONTRACT NO. A-17 - FIRE PROTECTION

- A. Work included in this contract consists of, but is not necessarily limited to, all labor, materials and equipment for:
  - Technical Specification Sections:

Division 0 Bidding and Contract Requirements

Division 1 General Requirements

Division 3 Concrete

Section 078413 Penetrating Firestopping

Section 078443 Joint Firestopping Section 079200 Joint Sealants

Section 210170 Fire Suppression Sprinkler System

Section 210171 Fire Pump – Electric

Section 220000 General Provisions – Plumbing/Fire Protection

Division 22 Plumbing
Division 26 Electrical

Division 27 Communications

Division 28 Electronic Safety and Security

Division 31 Earthwork

- 1. Provide piping, fittings, couplings, valves and sprinkler heads.
- 2. Excavation and backfill related to fire protection work as detailed below is the responsibility of this Contractor. Soil types shall be in accordance with Del Dot standard specifications.
- 3. Backfilling is the responsibility of this Contractor. Soil types shall be in accordance with project documents.
- 4. Provide as-built drawings.
- 5. Provide concrete equipment pads, curbs and thrust blocks for fire protection work.
- 6. Provide testing and inspections.
- 7. Provide cutting and patching.
- 8. Provide firesafing.
- 9. Provide design.

- 10. Flow and tamper switches to be supplied by this Contractor and wired by the Electrical Contractor. It is this Contractors responsibility to provide flow and tamper switches to meet applicable state and local codes.
- 11. Provide **preaction suppression system**, controller, jockey pumps, flow meter and related work. Wiring of pump and controller to be by the Electrical Contractor.
- 12. Provide fire pump and accessories.
- 13. Provide meter, if required, and all applicable fees.
- 14. This Contractor to coordinate the need for and compatibility of his system to the emergency generator, supplied by others.
- 15. Provide pipe identification.
- 16. Provide flow tests of fire hydrants around site in preparation of hydraulic design.
- 17. Provide fire main from +/- 5 feet outside building including connection in the building. This Contractor shall coordinate building entry location with the Site Contractor to eliminate any additional cost to Owner.
- 18. Provide the necessary coordination with trade to avoid interferences with other work and make corrections at no extra charge.
- 19. Provide specified warranties.
- 20. Submissions will be reviewed once and any resubmittals will be reviewed once. Any other submittals will be billed to the contractor at the Engineers standard rates. Please thoroughly review all submissions prior to forwarding to avoid these costs.
- 21. Provide start up training and demonstration of new system.
- 22. Provide attic stock as specified.
- 23. Provide fully coordinated shop drawings with MEP Trades and BIM Coordinator within 8 weeks from award of project.
- 24. Provide daily fine cleanup of the work is the responsibility of each individual Contractor which includes broom cleaning of their debris as required. Daily Fine clean up, on a daily basis, shall be defined as those means/methods utilized to perform the daily cleaning tasks without producing dust, noise and stacking of stored materials. Furnish fine clean up on a daily basis. All debris must be removed from the work area at the end of each work day to the appropriate dumpster.

- 25. All heads to be located center of tile.
- 26. Provide at least a 48 hour notice prior to any delivery. All deliveries are to be between 7:00 AM and 3:30 PM.
- 27. This is not a secure site. All contractors are responsible for concealing, locking and/or removing any materials on a daily basis. ASD and EDiS will not be responsible for any lost tools, materials or equipment.
- 28. Provide \$5,000 allowance to be used at the discretion of the Construction Manager.

# CONTRACT NO. A-18 - HVAC AND PLUMBING

- A. Work included in this contract consists of, but is not necessarily limited to, all labor, materials and equipment for:
  - Technical Specification Sections:

Division 0	<b>Bidding and Contract Requirements</b>

Division 1 General Requirements

Division 3 Concrete

Section 078413 Penetrating Firestopping

Section 078443 Joint Firestopping
Section 079200 Joint Sealants
Division 11 Equipment

Division 14 Conveying System
Division 21 Fire Suppression

Division 22 Plumbing

Section 220000 General Provisions – Plumbing/Fire Protection Section 220010 Basic Materials and Methods – Plumbing

Section 220030 Insolation & Covering - Plumbing Section 220110 Drainage Systems - Plumbing

Section 220120 Domestic Water Systems – Plumbing Section 220130 Gas Piping Systems – Plumbing

Section 220140 Fixtures – Plumbing
Section 220150 Equipment – Plumbing
Section 220190 Testing – Plumbing
Section 220191 Balancing – Plumbing
Section 230200 General Provisions – HVAC

Section 230210 Basic Materials and Methods – HVAC

Section 230215 Valves

Section 230230 Insulation & Covering – HVAC
Section 230300 Vibration Isolation – HVAC
Section 230400 Heating Generation Equipment

Section 230410 Heating Generation Auxiliary Equipment

Section 230450 Refrigeration Equipment – HVAC Section 230500 Piping Systems and Accessories

Section 230510 Water Treatment (HVAC)

Section 230600 Air Distribution & Accessories - HVAC

Section 230605 Fans

Section 230725 Thermal heating Units
Section 230760 Air Handling Equipment
Section 230861 Air Purification System

Division 26 Electrical

Division 27 Communications

Division 28 Electronic Safety and Security

Division 31 Earthwork

Division 32 Exterior Improvements

Division 33 Utilities

- 3. Provide a complete mechanical, plumbing and piping system as indicated on the Drawings and in the Specifications.
- 4. Division 26 of the specifications should be reviewed as it relates to the power wiring and other requirements for HVAC equipment including the coordination of furnishing and installing motor starters as provided in the specifications.
- 5. This Contractor shall be responsible to designate an individual within his organization, intimately familiar with this project and assigned on site, to act as the System Start-up Coordinator. This individual must be pre-approved by the Construction Manager. This individual's responsibilities shall include, but not be limited to, coordinating the start-up of all mechanical equipment, including the coordination between the Electrical Contractor, the Controls Contractor, and all testing, adjusting and balancing work. This individual shall report on a weekly basis, in written form, to the Construction Manager. These reports shall include a summary of current conditions including manufacturers' start-ups, systems' deficiencies noted to date and the remediation of same, coordination issues between trades, system interfacing and forecasting, as necessary to project the completion of each individual system within the building.
- 6. Provide excavation and backfill for underground mechanical/plumbing work as detailed below is the responsibility of this Contractor. Soil types shall be in accordance with Del Dot standard specifications. Refer to Division 31 and 33 of the specifications.
- 7. Backfilling is the responsibility of this Contractor. Soil types shall be in accordance with project documents.
- 8. Provide all Equipment bases and housekeeping pads related to plumbing and HVAC equipment.
- 9. Provide permits/meters.
- 10. Provide pipe and duct insulation.
- 11. Coordinate and provide penetrations through wall, floors, etc. including cutting, patching and fire safing. The contractor requiring wall sleeves in concrete & masonry walls must supply and locate these to the concrete and masonry contractors for them to install.
- 12. Coordinate with the Testing and Balancing Contractor.

- 13. All guarantees and warranties to begin at the substantial completion of the entire project. Maintain equipment prior to substantial completion.
- 14. Provide all cranes, scaffolding and lifts for this work including any rigging.
- 15. Provide coordination with Building Management Systems Contractor.
- 16. Provide ductwork, flex duct, grilles and diffusers.
- 17. Provide roof drains & **roof overflow drains**. Contract A-06 Roofing shall cut the roofing membrane and provide flashings for the drains.
- 18. Provide louvers and vents related to HVAC operations.
- 19. Coordinate damper size, location and type of damper with architectural drawings.
- 20. Provide piping work associated with the emergency generator (including fuel piping and exhaust piping). Include initial fill up of fuel tanks.
- 21. Provide temporary heat and ventilation installation, maintenance and removal. Refer to Division 1, Specification Section 015123 TEMPORARY HEATING, COOLING, & VENTILATION, for specific scope. The new equipment WILL NOT be used for temporary heating. This Subcontractor will furnish, install, and maintain the temporary heating equipment. Included in the base bid for this contract is a \$50,000 allowance. (See note#42) Temporary heating fuel consumption associated with the temporary heating will utilize a portion of these costs. All unused portions of the allowance will be returned at the end of the project.
- 22. Provide gas piping, meter and pressure regulator valve.
- 23. Provide electric baseboard heat.
- 24. Provide duct testing to be verified by the TAB Contractor.
- 25. Provide precast mop receptors
- 26. Provide grease interceptor and vault Include excavation & backfill and any stone, tiedowns or foundation requirements.
- 27. Provide trap priming system.
- 28. Provide fuel detection/monitoring system in accordance with local codes.
- 30. Roof curbs, pipe, hoods and vent equipment & supports are to be supplied by contractor

in which the units, piping, etc. are being supplied. The openings for the curbs in the roofing materials shall be cut by the Roofing Contractor. Openings in the metal deck shall be cut by the contractor in which the units are being provided. The roofing contractor shall provide all flashing and sealing of the curbs. Any wood blocking required will be provided by Carpentry & General Works Contractor.

- 29. All utilities will be brought to within +/- 5 feet of the building line by others. The Mechanical Contractor is responsible for connecting the utilities from +/- 5 feet outside the building line and completing the system within the building.
- 30. Install Owner prepurchased equipment, if applicable.
- 31. Provide access panels for all access to Mechanical or Plumbing components or equipment.
- 32. Provide final connection of kitchen equipment and appliances.
- 33. Provide as-built drawings.
- 34. Provide pricing for all alternates as described in Section 012300-Alternates.
- 35. Coordinate with Sitework Contractor, who will provide all tie-ins to the downstream side of grease trap and Electrical Contractor. This contractor, shall provide all excavation, backfill and piping from building to grease trap. It is the intent that no additional costs will be provided for lack of coordination that requires relocation of newly installed site utilities for the installation of the grease trap.
- 36. Provide daily fine cleanup of the work is the responsibility of each individual Contractor which includes broom cleaning of their debris as required. Daily Fine clean up, on a daily basis, shall be defined as those means/methods utilized to perform the daily cleaning tasks without producing dust, noise and stacking of stored materials. Furnish fine clean up on a daily basis. All debris must be removed from the work area at the end of each work day to the appropriate dumpster.
- 37. Submissions will be reviewed once and any resubmittals will be reviewed once. Any other submittals will be billed to the contractor at the Engineers standard rates. Please thoroughly review all submissions prior to forwarding to avoid these costs.
- 38. Provide fully coordinated shop drawings with MEP Trades and BIM Coordinator within 8 weeks from award of project.
- 39. Provide at least a 48 hour notice prior to any delivery. All deliveries are to be between 7:00 AM and 3:30 PM.
- 40. All costs for barricades, arrows, pedestrian protections, flag men, etc. will be part of this Contract. It shall be assumed there is at least 1 marked flagger to escort trucks through the

project site.

- 41. This is not a secure site. All contractors are responsible for concealing, locking and/or removing any materials on a daily basis. ASD and EDiS will not be responsible for any lost tools, materials or equipment.
- 42. Provide \$50,000 allowance to be used at the discretion of the Construction Manager.

# CONTRACT NO. A-19 – BUILDING MANAGEMENT SYSTEMS

- A. Work included in this contract consists of, but is not necessarily limited to, all labor, materials and equipment for:
  - Technical Specification sections:

Division 0	Bidding and Contract Requirements
Division 1	General Requirements
Section 078413	Penetrating Firestopping
Section 078443	Joint Firestopping
Section 079200	Joint Sealants
Division 11	Equipment
Division 14	Conveying System
Division 21	Fire Suppression
Division 22	Plumbing
Division 23	Heating, Ventilating and Air Conditioning
Section 230900	Automatic Temperature Controls (DDC)
Division 26	Electrical
Division 27	Communications
Division 28	Electronic Safety and Security
Division 33	Utilities

- 1. Provide automatic temperature controls for equipment whose main purpose include all items in the automatic temperature control scope. Provided, however, that the controls do not directly switch the power lines to the equipment; the wiring of such controls to remain the responsibility under Contract Scope 16000.
- 2. Provide environmental controls for the building mechanical system for a complete & operational system. System shall control all mechanical equipment systems & components per plans and specifications.
- 3. Provide ventilation controls.
- 4. Provide cooling controls.
- 5. Provide humidification controls.
- 6. Provide refrigeration controls.
- 7. Motorized dampers when not specified as part of the factory packaged equipment supplied to job site for distribution and installation by others.

- 8. Provide both reading and remote reading gauges, transmitters and recorders for automatic temperature controls.
- 9. Provide building centralization controls including centralized temperature, humidity, pressure and flow indication and recorders, centralization of air conditioning, heating, ventilation, humidification and refrigeration equipment operation.
- 10. Provide building life safety control and equipment safety control including: fire alarm, fan shut downs, operators and controls for motorized smoke dampers, operators and controls for motorized fire dampers, firestats, freeze protection thermostats, shut down safety devices forming part of automatic temperature control.
- 11. Provide permits as required for work under this contract scope.
- 12. Provide inspections as required under this contract scope.
- 13. Provide electrical thermostats intended for automatic temperature controls complete with subbases or adapter plates to mount on standard electrical box.
- 14. Provide remote reading gauges, transmitters and recorders for automatic temperature control.
- 15. Provide access doors when specifically requires for access to automatic temperature controls.
- 16. Provide control wiring and/or air piping required for all automatic temperature controls supplied under this contract scope.
- 17. Provide wiring for remote thermostats and remote prewired auxiliary control panels for packaged equipment.
- 18. Provide boiler feed water control wiring.
- 19. Provide the magnetic starter coil and relay coils intended for automatic temperature controls, including interlocking between starters and/or relays when controlled automatically.
- 20. Provide access panels directly associated with this work if not included by other division.
- 21. Exclude direct reading temperature and pressure gauges connected directly to non-potable water systems.
- 22. Exclude motorized dampers when specified as integral part of packaged equipment.
- 23. Exclude automatic temperature controls when specified as integral part of packaged equipment.

- 24. Exclude flow measuring and control devices.
- 25. Exclude direct reading temperature and pressure gauges connected directly to refrigeration systems.
- 26. Exclude filter gauges directly connected to duct systems.
- 27. Provide electrical wiring for thermostats and controls which directly switch the power line to the equipment (directly shall mean not through magnetic coil) is by Electrical Contractor.
- 28. Power wiring will be provided by the Electrical Contractor.
- 29. Control power supply outlets are to be provide by the Electrical Contractor.
- 30. Provide pricing for all alternates as described in Section 012300-Alternates.
- 31. Provide transmitters for ATC.
- 32. Start, test and demonstrate all equipment installed under this category of work. Provide proposed schedule, including names and telephone numbers of attending representatives at least (3) three weeks in advance of demonstration.
- 33. Submissions will be reviewed once and any resubmittals will be reviewed once. Any other submittals will be billed to the contractor at the Engineers standard rates. Please thoroughly review all submissions prior to forwarding to avoid these costs.
- 34. Provide at least a 48 hour notice prior to any delivery. All deliveries are to be between 7:00 AM and 3:30 PM.
- 35. This is not a secure site. All contractors are responsible for concealing, locking and/or removing any materials on a daily basis. ASD and EDiS will not be responsible for any lost tools, materials or equipment.
- 36. Provide daily fine cleanup of the work is the responsibility of each individual Contractor which includes broom cleaning of their debris as required. Daily Fine clean up, on a daily basis, shall be defined as those means/methods utilized to perform the daily cleaning tasks without producing dust, noise and stacking of stored materials. Furnish fine clean up on a daily basis. All debris must be removed from the work area at the end of each work day to the appropriate dumpster.
- 37. Contractor shall provide a \$1,500 allowance to be used at the direction of the Construction Manager. Any unused allowance will be returned to the owner.

# CONTRACT NO. A-20 - ELECTRICAL

- A. Work included in this contract consists of, but is not necessarily limited to, all labor, materials and equipment for:
  - Technical Specification Sections:

Division 0	<b>Bidding and Contract Requirements</b>
DIVIDION 0	brading and contract requirements

Division 1 General Requirements

Division 3 Concrete
Section 078400 Fire Stopping
Section 078443 Joint Firestopping
Section 079200 Joint Sealants
Division 11 Equipment

Division 14 Conveying System
Division 21 Fire Suppression

Division 22 Plumbing

Division 23 Heating, Ventilating and Air Conditioning

Section 260000 General Provisions – Electrical

Section 260055 Electrical Identification

Section 260110 Raceway

Section 260120 Wires & Cables

Section 260135 Electrical Boxes & Fittings

Section 260140 Wiring Devices Section 260155 Motor Starters Section 260160 Panelboards Section 260165 Switchboards

Section 260170 Motor and Circuit Disconnects Section 260180 Overcurrent Protective Devices

Section 260190 Supporting Devices
Section 260195 Power System Studies
Section 260430 Metering Equipment

Section 260452 Grounding Section 260460 Transformers

Section 260470 Distribution Circuits
Section 260471 Feeder Circuits
Section 260472 Branch Circuits

Section 260475 Elevator Electrical Systems

Section 260510 Building Lighting

Section 260520 Roadway & Parking Area Lighting

Section 260601 Lightning Protection System
Section 260740 Network Cabling Systems

Section 260930 Dimming Controls
Division 27 Communications

Division 28	Electronic Safety and Security
Division 31	Earthwork
Division 32	Exterior Improvements
Division 33	Utilities

This contract also includes, but is not necessarily limited to, all labor, materials and equipment for the following:

- 1. Provide a complete electrical system as indicated on the drawings, schedules and in the specifications.
- Divisions 22 and 23 of the specifications should be reviewed as it relates to the power wiring and other requirements for Plumbing and HVAC equipment including the coordination of furnishing and installing motor starters and controllers as detailed in the Specifications and on the Drawings.
- 3. Excavation and backfill for underground electrical work as required below is the responsibility of this Contractor. Soil types shall be in accordance with Del DOT standard specifications. Backfilling is the responsibility of this Contractor. Soil types shall be in accordance with project documents.
- 4. Provide concrete for duct banks, light standards, above ground conduit encasement, equipment bases and any other concrete work specifically related to the electrical work. Include requirements of New Castle County, State and local codes for concrete encasement.
- 5. Provide temporary electric installation, maintenance and removal. Refer to Division 1, Specification Section 015113 TEMPORARY ELECTRIC, for specific scope.
- 6. Provide pad mounted transformer, and new conduit and transformer pad and wiring from existing primary switch for new incoming service. New transformer and service must be ordered immediately as this will be used for temporary power service. The service provider will supply the transformer, electrical contractor shall be responsible for installation and terminations of the transformer.
- 7. Provide new communications ductbank from existing communications manhole.
- 8. Provide permits and inspections.
- 9. Provide penetrations through walls, floors, etc. including cutting, patching and fire safing.
- 10. Electric service and disconnect switch for the elevators are the responsibility of this contractor. All other control wiring, as specified, will be the responsibility of the Elevator Contractor.

- 11. Provide testing.
- 12. The Concrete Contractor shall furnish, install and maintain stone fill under slab. The Sitework Contractor shall leave the building pad site at subgrade to within +/- ¼" in preparation to receive stone fill. The Mechanical and Electrical Contractors shall complete their work under the slab on grade and shall be responsible to return the pad to the subgrade elevation left by the Sitework Contractor. The Concrete Contractor shall then adjust the select material to final subgrade, fine grade the slab and place the vapor barrier and stone fill.
- 13. All guarantees and warranties to begin at the substantial completion of the entire project. Maintain equipment prior to substantial completion.
- 14. Provide hoisting, rigging and scaffolding.
- 15. Provide all primary service work, including all utility company related costs/fees for this work.
- 16. Provide all heat tracing.
- 17. Special systems (CCTV, intercom, classroom sound enhancement, telecommunications, fire alarm, area rescue system, intrusion detection, cafetorium sound reinforcement system, sound, security, time clock,) will be the responsibility of the Special Systems Contractor. However, this contractor must coordinate with Special Systems Contractor as indicated on the drawings and as specified. This contractor shall provide all device boxes, conduit to volt circuits above accessible ceilings with pull strings for special systems as indicated and also to provide 120 Volt circuits for all Special Systems.
- 18. Cable distribution will be installed by the Special Systems Contractor.
- 19. This contractor shall be responsible for to coordinate with door hardware contractor and provide all required wiring from the electrical transfers to the door hardware locks and up to the power supplies. This contractor shall be responsible for all 120 Volt circuits indicated on the floor plans for power supplies and the interconnection between the two power supplies along with the integration of the card access system.
- 20. Provide all required wiring for door releases at Doors-A123, A124A, EXC111 & EXC 102. Door release is only on Doors EXB101, B120A, B115A and B115B from the receptions desk.
- 21. This contractor shall also be responsible to coordinate and extend the existing district wide card access system to cover entire building to be integrated with the intrusion system for card arm/disarm system. This contractor to provide all device boxes, conduit to above accessible ceiling with pull strings.
- 22. Provide lightning protection with master UL certification.

- 23. Provide grounding of building columns and interior spaces as required.
- 24. Provide pull strings and boxes for voice/data boxes.
- 25. Provide network cabling system
- 26. Provide as-built drawings.
- 27. Provide rough-in and final connection and related work for equipment provided under other contracts (i.e. kitchen, elevators, HVAC, sprinkler, motorized doors, etc.). Provide power to automatic hardware. Low voltage wiring from the controller to hardware shall be provided by the Doors, Frames and Hardware Contractor; Final connections to be by this contractor.
- 28. Provide complete audio and audiovisual systems. Above accessible ceilings with pull strings.
- 29. Provide all required boxes, conduit and pull strings to accessible locations for Simplex-Grinnell systems.
- 30. Provide rough-in and final connection of kitchen equipment and appliances. Refer to Specification Section 114000 Food Service Equipment for specifics. Coordinate power/plug requirements with rough in for equipment with the Kitchen Equipment Contractor.
- 31. Provide stage lighting systems including coordination, fixtures, controls, wiring, light grids, supports and attachments.
- 32. Roof curbs, pipe, hoods and vent equipment & supports are to be supplied by contractor in which the units, piping, etc. are being supplied. The openings for the curbs in the roofing materials shall be cut by the Roofing Contractor. Openings in the metal deck shall be cut by the contractor in which the units are being provided. The roofing contractor shall provide all flashing and sealing of the curbs. Any wood blocking required will be provided by Carpentry & General Works Contractor.
- 33. Carpentry & General Works contractor shall provide defibrillators and cabinets. Alarm connection and power wiring will be provided by Special Systems Contractor.
- 34. Provide pricing for all alternates as described in Section 012300-Alternates.
- 35. Submissions will be reviewed once and any resubmittals will be reviewed once. Any other submittals will be billed to the contractor at the Engineers standard rates. Please thoroughly review all submissions prior to forwarding to avoid these costs.
- 36. Provide fully coordinated shop drawings with MEP Trades and BIM Coordinator within

8 weeks from award of project.

- 37. Projection screens and the control wiring associated, will be provided by the Carpentry & General Works contractor. Electric power to these gates the screens are the responsibility of the Electrical Subcontractor.
- 38. All costs for barricades, arrows, pedestrian protections, flag men, etc. will be part of this Contract. It shall be assumed there is at least 1 marked flagger to escort trucks through the project site.
- 39. Provide power to hand dryers. The hand dryers will be supplied and installed by Carpentry & General Works Contractor.
- 40. Provide site lighting and all reinforced lighting bases and associated conduit.
- 41. Coordinate with Sitework Contractor, who will provide all tie-ins to the downstream side of grease trap and the Plumbing Contractor, who will provide all excavation, backfill and piping from building to grease trap. It is the intent that no additional costs will be provided for lack of coordination that requires relocation of newly installed site utilities for the installation of the grease trap.
- 42. Provide installation for all wireless access points furnished by owner
- 43. Provide daily fine cleanup of the work is the responsibility of each individual Contractor which includes broom cleaning of their debris as required. Daily Fine clean up, on a daily basis, shall be defined as those means/methods utilized to perform the daily cleaning tasks without producing dust, noise and stacking of stored materials. Furnish fine clean up on a daily basis. All debris must be removed from the work area at the end of each work day to the appropriate dumpster.
- 44. Provide conduits and pull strings to Special System Contractor for card access systems. The Special System contractor shall provide wiring from panel to door contact and from panel to power transfer. Electrical Contractor shall provide conduit to door frame.
- 45. Hardware for permanent exterior gates will be provided by Carpentry & General Works Contractor and the security will be provided by the Special Services Contractor. These locations are indicated on the Architectural and Civil Drawings. The Sitework Contractor shall provide the gates and associated adjacent fencing. The balance of hardware will be provided by the Carpentry & General Works Contractor, as indicated on the door hardware schedule. The Electrical & Special System Contractors shall provide all power and coordination with fire alarm integration.
- 46. Provide at least a 48 hour notice prior to any delivery. All deliveries are to be between 7:00 AM and 3:30 PM.

- 47. This is not a secure site. All contractors are responsible for concealing, locking and/or removing any materials on a daily basis. ASD and EDiS will not be responsible for any lost tools, materials or equipment.
- 48. Provide \$40,000 allowance to be used at the discretion of the Construction Manager.
- 49. Per drawing E4.2 issued with Addendum #3, See General Electrical Note #4. Include the \$275,000 allowance as part of the base bid. The actual costs will be verified by the provider prior to installation. If the costs are more/less a change order will be issued for the difference.

# CONTRACT NO. A-21 – SPECIAL SYSTEMS

- A. Work included in this contract consists of, but is not necessarily limited to, all labor, materials and equipment for:
  - Technical Specification sections:

Division 0	Bidding and Contract Requirements
Division 1	General Requirements
Section 078400	Fire Stopping
Section 078443	Joint Firestopping
Section 079200	Joint Sealants
Division 11	Equipment
Division 14	Conveying System
Division 21	Fire Suppression
Division 22	Plumbing
Division 23	Heating, Ventilating and Air Conditioning
Division 26	Electrical
Section 260731	Wireless Clock System
Section 260771	Intercom/Telecom Communication and Clock System
Section 260772	Cafetorium Sound Reinforcement System
Division 27	Communications
Section 280721	Fire Alarm and Detection System
Section 280724	Area Rescue System
Section 280725	— Intrusion Detection System
Section 280725	Intrusion System
Section 280728	CCTV Network Digital Video Management System
Section 280727	Integrated Access Control & Security Management System
Division 31	Earthwork
Division 32	Exterior Improvements
Division 33	Utilities

This contract also includes, but is not necessarily limited to, all labor, materials and equipment for the following:

- 1. Provide a complete Life Safety System including Fire Alarm, Area Rescue System, Intrusion and Detection and Sound System. Provide intercom/telecommunication and clock system.
- 2. Provide complete audio/audiovisual system.
- 3. Provide a complete CCTV, intercom, telecommunications, area rescue system, intrusion detection, cafetetoium sound reinforcement system, sound, security, time clock systems. However, this contractor must coordinate with Electrical Contractor as indicated on the drawings and as specified. The Electrical Contractor shall provide all device boxes, conduit and pull strings to circuits for special systems as indicated and also to provide 120 Volt circuits

for all Special Systems.

- 4. Provide complete fire alarm system is to be provided by this contractor. Water flow devices are supplied and installed by the Sprinkler Contractor and wired by this Contractor. Include tie-in to fire sprinkler flow and tamper switch.
- Provide card access system. Provide coordination with door and frame installation for a complete system. This contractor shall provide wiring from panel to door contact and from panel to power transfer. Electrical Contractor shall provide conduit to door frame.
- 6. Provide penetrations through walls, floors, etc., including cutting, patching and fire safing.
- 7. Provide video/local origination and distribution system.
- 8. Provide and coordinate for inspections and testing.
- 9. Provide permits for work of this contract.
- 10. Provide coordination of the work of this contract with the Electrical Contractor, including final equipment locations.
- Smart boards TVs will be supplied by Owner and mounted and terminated by this contractor.
   The Carpentry & General Works Contractor will install the clips and blocking to the wall for hanging.
- 12. Provide fire resistive sealants for the work of this contract.
- 13. Provide pricing for all alternates as described in Section 012300-Alternates.
- 14. Provide locking.
- 15. Provide digital keypad access control devices. This Contractor to expand the existing district wide card access system to cover this entire building as indicated.
- 16. Carpentry & General Works contractor shall provide defibrillators and cabinets. The electrical Contractor will provide power and raceway. Provide alarm connection.
- 17. Provide card reader terminations and programming at elevator.
- 18. Submissions will be reviewed once and any resubmittals will be reviewed once. Any other submittals will be billed to the contractor at the Engineers standard rates. Please thoroughly review all submissions prior to forwarding to avoid these costs.
- 19. Provide fully coordinated shop drawings with MEP Trades and BIM Coordinator within 8 weeks from award of project.

- 20. The hardware for exterior gates will be provided by the Carpentry & General Works Contractor. These gates and locations are indicated on the Civil Drawings. The Sitework Contractor shall provide the gates, associated adjacent fencing and balance of hardware as indicated on the door hardware schedule. The Electrical & Special System Contractors shall provide all power and coordination with fire alarm integration.
- 21. Provide all special systems (CCTV, sound, security, time clock,). This contractor must coordinate with Electrical Contractor as indicated on the drawings and as specified.
- 22. Provide cable distribution for all Special Systems Contractor.
- 23. Provide all required devices for door release at Doors A123, A124A, EXC111 & EXC 102. Door release is only on Doors EXB101, B120A, B115A and B115B from the receptions desk.
- 24. Provide daily fine cleanup of the work is the responsibility of each individual Contractor which includes broom cleaning of their debris as required. Daily Fine clean up, on a daily basis, shall be defined as those means/methods utilized to perform the daily cleaning tasks without producing dust, noise and stacking of stored materials. Furnish fine clean up on a daily basis. All debris must be removed from the work area at the end of each work day to the appropriate dumpster.
- 25. Provide at least a 48 hour notice prior to any delivery. All deliveries are to be between 7:00 AM and 3:30 PM.
- 26. This is not a secure site. All contractors are responsible for concealing, locking and/or removing any materials on a daily basis. ASD and EDiS will not be responsible for any lost tools, materials or equipment.

# CONTRACT NO. A - 22: TESTING & BALANCING

- A. Work included in this contract consists of, but is not necessarily limited to, all labor, materials, and equipment for:
  - Technical Specification sections:

Division 0	Bidding and Contract Requirements
Division 1	General Requirements
Division 11	Equipment
Division 14	Conveying System
Division 21	Fire Suppression
Division 22	Plumbing
Division 23	Heating, Ventilating and Air Conditioning
Section 230950	Testing & Balancing of Mechanical Systems
Division 26	Electrical
Division 27	Communications
Division 28	Electronic Safety and Security

This contract also includes, but is not necessarily limited to, all labor, materials and equipment for the following:

- 1. Provide water and air testing and balancing.
- 2. Contractor shall prepare, at a minimum, a preliminary balance report for the New Castle County Final Inspection.
- 3. Provide pricing for all alternates as described in Section 012300-Alternates.
- 4. Submissions will be reviewed once and any resubmittals will be reviewed once. Any other submittals will be billed to the contractor at the Engineers standard rates. Please thoroughly review all submissions prior to forwarding to avoid these costs.
- 5. Provide complete signed and sealed testing report prior to substantial completion and final inspection as required by county L&I.
- 6. This contractor has been allotted 30 days to complete all work and provide final, sealed balancing report by the Construction Manager. This contractor will need to work closely with the Construction Manager and all MEP trades to sequence work so that the completion of the balancing is completed in a manner that does not delay acceptance from NCC or ASD.
- 7. Provide confirmation of duct testing completed by Mechanical Contractor.
- 8. This contractor must provide all lifts or scaffold means to access all elements.

- 9. Provide at least a 48 hour notice prior to any delivery. All deliveries are to be between 7:00 AM and 3:30 PM.
- 10. This is not a secure site. All contractors are responsible for concealing, locking and/or removing any materials on a daily basis. ASD and EDiS will not be responsible for any lost tools, materials or equipment.

**END OF SECTION** 

#### **SECTION 142600**

### LIMITED-USE/LIMITED-APPLICATION ELEVATORS

# PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

### 1.2 SUMMARY

A. Section includes limited-use/limited-application (LU/LA) elevators.

# 1.3 DEFINITIONS

- A. Definitions in ASME A17.1/CSA B44 apply to Work of this Section.
- B. LU/LA: Limited use/limited application.

### 1.4 ACTION SUBMITTALS

A. Product Data: Include capacities, sizes, performances, operations, safety features, finishes, and similar information. Include Product Data for car enclosures, hoistway entrances, and operation, control, and signal equipment.

# B. Shop Drawings:

- 1. Include plans, elevations, sections, and large-scale details indicating service at each landing, machine room layout, coordination with building structure, relationships with other construction, and locations of equipment.
- 2. Indicate loads imposed on building structure at points of support and power requirements.
- C. Samples for Initial Selection: For finishes involving color selection.
- D. Samples for Verification: For exposed car finishes, hoistway doors, and frames; 3-inch-square Samples.

# 1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Manufacturer Certificates: Signed by elevator manufacturer certifying that hoistway, pit, and machine room layout and dimensions, as shown on Drawings, and electrical service, as shown and specified, are adequate for elevator being provided.

- C. Preinstallation Examination Report: Indicating dimensional discrepancies and conditions detrimental to performance or indicating that dimensions and conditions were found to be satisfactory.
- D. Sample Warranty: For special warranty.

## 1.6 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For elevators to include in emergency, operation, and maintenance manuals.
  - Submit manufacturer's/installer's standard operation and maintenance manual, according to ASME A17.1.
- B. Inspection and Acceptance Certificates and Operating Permits: As required by authorities having jurisdiction, for normal, unrestricted elevator use.
- C. Continuing Maintenance Proposal: Provide a continuing maintenance proposal from Installer to Owner, in the form of a standard one-year maintenance agreement, starting on date initial maintenance service is concluded. State services, obligations, conditions, and terms for agreement period and for future renewal options.

# 1.7 QUALITY ASSURANCE

A. Installer Qualifications: Elevator manufacturer or an authorized representative who is trained and approved by manufacturer.

# 1.8 DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, and handle materials, components, and equipment in manufacturer's protective packaging. Store materials, components, and equipment off of ground, under cover, and in a dry location.

# 1.9 COORDINATION

- A. Coordinate installation of sleeves, block outs, and items that are embedded in concrete or masonry for elevator equipment. Furnish templates and installation instructions and deliver to Project site in time for installation.
- B. Coordinate locations and dimensions of other work relating to LU/LA elevators including sumps and floor drains in pits; entrance subsills; electrical service; and electrical outlets, lights, and switches in hoistways, pits, and machine rooms.

# 1.10 WARRANTY

- A. Manufacturer's Special Warranty: Manufacturer agrees to repair or replace elevator work that fails in materials or workmanship within specified warranty period.
  - 1. Failures include, but are not limited to, operation or control system failure, including excessive malfunctions; performances below specified ratings; excessive wear; unusual

deterioration or aging of materials or finishes; unsafe conditions; need for excessive maintenance; abnormal noise or vibration; and similar unusual, unexpected, and unsatisfactory conditions.

2. Warranty Period: 3 years limited warranty on parts from date of shipment from factory.

## PART 2 - PRODUCTS

## 2.1 MANUFACTURERS

- A. Basis-of-Design Product: Subject to compliance with requirements, provide Savaria; Orion Elevator as distributed by Liftavator, Inc, or a comparable product by one of the following:
  - 1. American Crescent Elevator Mfg., Corp.
  - 2. Federal Elevator Inc.
  - 3. Nationwide Lifts. Inc.
  - 4. Schumacher Elevator Co.
- B. Limited Use Limited Application Elevator: The elevator described here is a LULA Elevator consisting of a roped hydraulic tower with a lifting platform.

# 2.2 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with ASME A17.1/CSA B44.
- B. Accessibility Requirements: Comply with requirements for LU/LA elevators in the United States Access Board's ADA-ABA Accessibility Guidelines and with ICC A117.1.

## 2.3 SYSTEMS AND COMPONENTS

- A. Elevator System, General: Manufacturer's standard LU/LA elevator. Unless otherwise indicated, manufacturers' standard components shall be used, as included in standard LU/LA elevators and as required for complete system.
  - 1. Rated Load: 1400 lb.
  - 2. Rated Speed: 30 fpm.
  - 3. Travel: 4'-8" feet. Maximum of 25 feet.
  - 4. Cab Configuration:
    - a. Enter/exit front/rear.
  - 5. Car Platform Size:
    - a. 48" W by 54" D N/A for 90-degree configs.
  - 6. Levels Serviced:
    - a. 2.
  - 7. Car Operation: Automatic.
  - 8. Power Supply:

- a. 208 Volt, 3 Phase, 30 Amps + 110 Volt, 15-amp, 1 Phase 60 Hz.
- 9. Drive System: 2:1 roped hydraulic.
- 10. Emergency Power: Battery operation in down direction.
- 11. Controller: PLC.
- 12. Motor/Pump: 208 3 Phase, / 5HP.
- 13. Manual Lowering: Outside the hoistway in machine room.
- B. Car Enclosure: Fire rated steel cab construction.
  - 1. Cab Walls:
    - a. Steel Architectural White (standard).
  - 2. Optional Plastic Laminate Panels:
    - a. No Plastic Laminate Panels Steel Cab Only (standard).
  - 3. Ceiling Finish:
    - a. Steel Architectural White with four recessed incandescent down lights.
  - 4. Car doors and frames shall be 1 1/2-hour ULC Fire rated and 2 speed horizontally sliding.
  - 5. Door finish shall be:
    - a. Stainless Steel brushed #4 (optional).
  - 6. Handrail: A stainless steel single handrail, with 1-1/2-inch diameter rail and with both ends returned to the side guard, shall be located on the control wall of the cab.
- C. Automatic Landing Doors
  - Landing doors and frames shall be 1 1/2-hour ULC Fire rated, 2 speed horizontally sliding with concealed mechanical interlock.
  - 2. Door finish shall be:
    - a. Stainless Steel brushed #4 (optional).
- D. Car Operation:
  - 1. Car Operating Panel shall consist of metal push bottoms with illuminated haloes, tactile identifications, emergency stop/alarm button, on/off key switch and emergency light mounted on a removable stainless-steel panel (Type 304 #4 Stainless Steel Finish).
  - 2. Digital floor indicator and directional indicator in cab and at each landing.
  - 3. An ADA hands free phone will be supplied within car operating panel.
  - 4. Emergency Operation The car shall be equipped with a battery-operated light fixture, emergency battery lowering device and alarm in case of normal building supply failure. The battery shall be the rechargeable type with an automatic recharging system. A manual lowering device shall be located outside the hoistway in the machine room.
  - 5. Fire Service:
    - a. Phase 1 fire recall service only (optional) mandatory for 2010 A17.1 code.
- E. Pumping Unit and Controller:

- 1. The pumping unit and controller shall be in a separate machine room. The controller and pump unit shall be pre-wired and tested prior to shipment. Pump unit shall incorporate the following features:
  - a. Smooth stops at each landing.
  - b. Submersible pump and motor.
  - c. Adjustable pressure relief valve.
  - d. Manually operable down valve to lower lift in the event of an emergency. This valve shall be activated from the machine room.
  - e. Gate valve to isolate cylinder from pump unit.
  - f. Emergency lowering by battery power from the car control

# F. Cylinder and Plunger:

- 1. The cylinder shall be constructed of steel pipe of sufficient thickness and suitable safety margin. The top of the cylinder shall be equipped with a cylinder head with an internal guide ring and self-adjusting packing.
- 2. The plunger shall be constructed of a solid steel shaft of proper diameter machined true and smooth. The plunger shall be provided with a stop electrically welded to the bottom to prevent the plunger from leaving the cylinder.
- 3. Cable: Aircraft Cable 2 by 3/8-inch DIA. Minimum breaking strength of 12,000 lb each.

# G. Leveling Device:

- 1. The lift shall be provided with an anti-creep device which will maintain the carriage level within 1/2 inch of each landing.
- 2. All limit switch and leveling device switches shall be located in a position to be inaccessible to unauthorized persons.
- H. Guide Yoke: The 2:1 guide yoke assembly shall be supplied with one (1) sheave, guide shoes, bearings and guards.
- I. Terminal Stopping Devices: Normal terminal stopping devices shall be provided at top and bottom of runway to stop the car positively and automatically.
- J. Guide Rails and Brackets: Steel 8 lb per ft guide rails and adjustable brackets shall be used to guide the platform and sling.
- K. Wiring: All wiring and electrical connections shall comply with applicable codes. Insulated wiring shall have flame-retardant and moisture-proof outer covering and shall be run in conduit or electrical wire ways if located outside the unit enclosure. Quick disconnect harnesses shall be used when possible.

### PART 3 - EXECUTION

## 3.1 EXAMINATION

A. Examine elevator areas, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work. Verify critical dimensions and examine supporting structure and other conditions under which elevator work is to be installed.

- B. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

## 3.2 INSTALLATION

- A. Install cylinder plumb and accurately located for elevator car position and travel. Anchor securely in place, supported at pit floor and braced at intervals as needed to maintain alignment. Anchor cylinder guides at spacing needed to maintain alignment and avoid overstressing guides.
- B. Sound Isolation: Mount rotating and vibrating equipment on vibration-isolating mounts to minimize vibration transmission to structure and structure-borne noise from elevator system.
- C. Lubricate operating parts of systems as recommended by manufacturers.
- D. Alignment: Coordinate installation of hoistway entrances with installation of elevator guide rails for accurate alignment of entrances with car. Reduce clearances to minimum, safe, workable dimension at each landing.
- E. Leveling Tolerance: 1/4 inch, up or down, regardless of load and direction of travel.
- F. Set sills flush with finished floor surface at landing. Fill space under sill solidly with nonshrink, nonmetallic grout.
- G. Locate hall lanterns either above or beside hoistway entrance at a minimum of 72 inches above finished floor unless hall lanterns are built into entrance frames.

# 3.3 FIELD QUALITY CONTROL

- A. Acceptance Testing: On completion of elevator installation and before permitting elevator use, perform acceptance tests as required and recommended by ASME A17.1/CSA B44 and by authorities having jurisdiction.
- B. Advise Owner, Architect, and authorities having jurisdiction in advance of dates and times that tests are to be performed.

### 3.4 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to operate elevator(s).
- B. Check operation of elevator with Owner's personnel present before date of Substantial Completion. Determine that operation systems and devices are functioning properly.

#### 3.5 MAINTENANCE SERVICE

A. Initial Maintenance Service: Beginning at Substantial Completion, maintenance service shall include 12 months' full maintenance by skilled employees of elevator Installer. Include monthly preventive maintenance, repair or replacement of worn or defective components, lubrication,

cleaning, and adjusting as required for proper elevator operation. Parts and supplies shall be manufacturer's authorized replacement parts and supplies.

- 1. Perform maintenance during normal working hours.
- 2. Perform emergency callback service during normal working hours with response time of two hours or less.

**END OF SECTION** 



# **Engineered Products Group**

# 1504 Kirkwood Highway Wilmington, DE 19805

Wednesday, December 06, 2017

# **Attention:John McGirk**

Merit Mechanical Co. 39 Albe Drive Newark, DE 19702 Phone: 302-366-8601

Fax: 302-368-4616

Representative: Sam Coniglio

Office Phone: 302-996-0900 Office Fax: 302-996-0999 Cell Phone: 302-598-9572 E-Mail: sconiglio@bssinc.net

Letter of Request

Page 1 of

**Project Name: Whitehall Elementary School** 

**Mechanical Engineer: Furlow Associates** 

Dear John,

In accordance with the instructions for substitution, we are requesting that the following equipment be added as an approved equal:

ITEM: Ductless Split System

TAG: AC-\*/ACC-\*

SPEC SECTION: Section 230450-11 Part 2.3 Ductless Split System Heat Pump Unit

SUBSTITUTION REQUEST: Samsung

Please submit this request for substitution on your letterhead as soon as time will allow. Thank you for consideration. Please call me if any additional information is needed

Sincerely,

Sam Coniglio

Sam Coniglio Sales Representative

## SUBMITTAL AR12KSFPDWQXCV / AR12KSFPDWQNCV

Page 1 of 3

Samsung "Quantum", wall mounted evaporator, split system

Job Name	Location			
Purchaser	Engineer			
Submitted to	Reference	Approval	Construction	
Unit Designation	Schedule #			

System Model Num Indoor Unit Model N Outdoor Unit Model Nominal Capacity* Capacity Range	Number	AR12KSFPDWQ AR12KSFPDWQNCV
Outdoor Unit Mode  Nominal Capacity*		
Nominal Capacity*	I Number	VD13K6LDD///OAC/
		AR12KSFPDWQXCV
Capacity Range	Cooling / Heating (Btu/h)	12,000 / 13,600
	Cooling (Btu/h)	3,000 - 13,500
	Heating (Btu/h)	4,000 - 14,500
SEER / EER		17 / 10.50
COP HSPF		3.26
AHRI Reference Nu	ımher	8.5 9035288
		1 / 208-230 / 60
		176 - 254
	Cooling (A)	1.3 / 5.2 / 6.0 1.6 / 5.4 / 5.8
'		1.675.475.6
		10.5
· · · · · · · · · · · · · · · · · · ·		
		32 1/4 X 11 1/4 X 8 7/16
(In.)		31 1/8 X 21 9/16 X 11 1/4
Weight (lbs.)		18.08 62.8
Condensate Conne		62.8 11/16" OD
		20 / 41
Ontdoor Out (dR)	-	46
Outdoor		14 ≤ T ≤ 115
Outdoor	U	5 ≤ T ≤ 75
Indoor	•	61 ≤ T ≤ 90
	Heating	T ≤ 80
Indoor & Outdoor	High side (flare)	1/4"
		3/8"
	• ( )	50 / 10
Maximum Vertical Separation (ft.)		26
Туре		R410A
		Electronic Expansion Valve
	OZ.	31.7
Charged for		25 feet
Additional Refrigerant		0.16 oz./ft. over 25 ft.
Туре		BLDC Rotary
RLA	A	7.0
Туре		BLDC motor with cross-flow fan
Air Volume	CFM (High)	390
Consumption	Watts	27
FLA	Amps	0.07
Motor		BLDC motor with axial fan (1
Output	Watts	39
FLA	Amps	0.17
Air Volume	CFM (max.)	1,400
Wireless controller		DB61-06087A
Condensate numn	Aspen Mini Orange	ASP-MO-UNIV 110-250
Condensate pullip	Blue Diamond	BD-BLUE-230
Wired controller	Standard	AR-WRS 1
		AR-WRP <sup>2</sup> DB93-11412A
		DB93-11412A DB93-11405A
External contract control interface module		
(requires sub-PCB and sub-PCB harness)		MIM-B14
Wall bracket (for outdoor unit)		CKN-250
Line sets - insulated and flared, interconnect		25' - ILS2506
	Front	50' - ILS5006
		WBF-3M WBB-5M
Certifications		_ (UL 1995)
Burden		
Devices		
	Working Voltage Ri Operating Current (Min./Std./Max.) Max. Breaker Min. Circuit Ampac W X H X D (in.) Weight (lbs.) Condensate Conne Indoor Unit (dB) Outdoor Unit (dB) Outdoor Unit (dB)  Outdoor Unit (dB)  Outdoor Unit (dB)  Type Control Method Factory Charge Charged for Additional Refrigera  Type RLA  Type RLA  Type RLA  Wolume Wired controller Consumption FLA Air Volume Wired controller sul External contract cor (requires sub-PCB al Wall bracket (for ou Line sets - insulate cables included Wind Baffle / Guard  Certifications  Devices	Working Voltage Range (VAC) Operating Current (Cooling (A) (Min./Std./Max.) Heating (A) Max. Breaker Amps Min. Circuit Ampacity (A)  W X H X D Indoor Unit (in.) Outdoor Unit Outdoor Unit Condensate Connection  Indoor Unit (dB) Quiet / High Outdoor Unit (Gooling Heating) Indoor Heating Indoor Boutdoor Heating Indoor Hit





(actual equipment appearance may vary)

### **General Information**

- Outdoor unit shall provide 208/230V power to indoor unit via 14 AWG X 3 interconnect power cable
- Electro-static, washable, main filter as standard

#### Construction

- Indoor unit chassis shall be UL94 V0 with a galvanized steel mounting bracket
- The outdoor unit shall be galvanized steel with a baked on powder coated finish for durability

# Heat Exchanger

• The heat exchangers shall be mechanically bonded fin to copper tube

# Refrigerant System

- The compressor shall be hermetically sealed, inverter controlled, BLDC Rotary
- Refrigerant flow shall be controlled by electronic expansion valve at outdoor unit

#### Indoor Fan

- The indoor fan shall be a single, antibacterial cross-flow type
- Three fan speed settings and auto setting
- Automatic (motorized) vertical swing louver (up/down)

#### Controls

- Control signal shall be DDC type signal
   Interconnect control wiring shall be 16 AWG X 2 shielded wire between outdoor and indoor units
- The indoor unit shall ship with a wireless controller and batteries as standard
- · Optional wired control options available

#### Convenience

- · Auto restart
- LED status indicator lights on front of the indoor unit to display unit operation
- "Fast Comfort" mode to quickly reach set temperature
- · Auto changeover
- 24 hour, single event timer
- · Good'sleep mode
- Quiet mode
- · Dry mode
- Single event, ON/OFF timer
- Single User Mode to reduce energy consumption during low demand operation
- · Air filter cleaning can be done easily without opening the indoor unit
- · Beep ON/OFF with included wireless controller

Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice. Refer to www.AHRIdirectory.org for current reference numbers.



- Nominal cooling capacities are based on: Indoor temperature: 80 °F DB, 67°F WB. Outdoor temperature: 95°F DB, 75°F WB
- \* Nominal heating capacities are based on: Indoor temperature: 70°F DB, 60°F WB. Outdoor temperature: 47°F DB, 43°F WB
- <sup>1</sup> AR-WRS includes MWR-WH00 wired controller, sub-PCB (DB93-11412A), and sub-PCB harness (DB93-11405A)
  <sup>2</sup> AR-WRP includes MWR-WE10 wired controller, sub-PCB (DB93-11412A), and sub-PCB harness (DB93-11405A)

Samsung "Quantum", wall mounted evaporator, split system Indoor unit dimensional drawing

Unit: inches





