ADDENDUM NO. 1 November 21, 2017
Appoquinimink School District
Whitehall Elementary School – Bid Package 'A'
Page 1

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~~.

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

GENERAL CLARIFICATIONS:

1. The pre-bid meeting minutes and sign in sheets are attached for your use.
2. Vandemark & Lynch waiver and indemnification agreement for electronic drawing files is attached for your use.

QUESTIONS AND ANSWERS:

1. Per the attached substitution request, is Diener Brick an acceptable substitution?
   Answer: We have received the physical brick samples for review. After reviewing them, we do not accept this substitution

2. Hot Water Duct Coil Schedule listed on sheet M6.1 identifies the Equipment # as DC - #. Yet on various mechanical sheets they are identified as DH - #. Please clarify which is correct.
   Answer: Hot Water Duct Coil Schedule is correct "DC". Change drawing identifications from "DH" to "DC".

3. Finned Tube Radiator Schedule listed on sheet M6.2 identifies the Equipment # as FT - #. Yet on various mechanical sheets they are identified as FTR - #. Please clarify which is correct.
   Answer: Finned Tube Radiation Schedule is correct - "FT". Change drawing identifications from "FTR" to "FT".

4. Fan Coil Units in Rooms A101, A102, & A106 are missing Equipment #'s. Please clarify what units are to be installed in these rooms.
   Answer: Add the following equipment identifications:

- Room #A101 - FCU/A1.7
- Room #A102 - FCU-A1.8
- Room #A106 - FCU/A1.12

5. There is a piece of mechanical equipment (PGW Mixing Unit) found in the Mechanical Room C121 that is not found on the Mechanical Schedules.
   Answer: Correct. Unit shown on floor plan and detail sheet. Specified in section 230510- Water Treatment

6. Can you get the AISC erector certification waived, there are a limited number of certified erectors in our area and this job is too small for 2 of them.
   Answer: The AISC erector certification can be waived, but the fabricator should be aware that they may be subjected to additional in shop inspection per IBC Chapter 17.

7. Is HYG Vapor Barrier an acceptable substitution?
   Answer: We have reviewed the information for the proposed substitution request from Poly-America for spec section 033000 - Cast - In - Place Concrete sub paragraph 2.7 - Vapor Retarders and we accept the request for Husky Yellow Guard Vapor Retarder. We will add Poly-America via Addendum #1.

8. Item #15, "Include all utility company related costs/fees for this work". Has the application been submitted to the power company? Pricing from the power company will not be provided unless the application has been submitted. If it has been submitted can the power company fees be posted in an addendum?
   Answer: Contact is Dave Darone at Delmarva 302-454-4299

9. The specification requires AWI Certification for Casework, is the architect willing to waive the AWI Certification requirement.
   Answer: We are not willing to accept this request to waive the AWI certification requirement. Provide as specified.

10. 1.) In the Bid Spec Volume 3 – Section 28071 – "Fire Alarm and Detection Systems" – Page 4 – Section 2.1 – Acceptable Manufacturers lists "Simplex-Grinnell" as the only acceptable manufacturer. Advantech is formally requesting to be an approved alternate vendor to provide a Honeywell Notifier Fire Alarm system with equivalent features and specifications. Please inform Advantech of any documentation or information required to obtain this approval.
    2.) In the Bid Spec Volume 3 – Section 280724 – "Area Rescue System" – Page 1 – Section 1.2 – Acceptable Manufacturers lists "Simplex, Cornell, Housing devices" as acceptable manufacturers of the Area of Rescue systems. Advantech has deployed multiple Cornell area

of rescue assistance systems in the past and is fully capable of providing an equivalent system as Simplex.
3.) Advantech understands that the Appoquinimink school district has standardized on "American Dynamics Intellex DVR through the use of NetVue", and "Software House C-Cure 9000" for the Video Surveillance & Access Control security systems. Advantech is requesting the Fire Alarm & Area of Rescue assistance portions of this bid to be opened up to create competitive pricing for the school district.
Answer: 1. Simplex-Grinnell is District standard.
2. Simplex-Grinnell is District standard.
3. Simplex-Grinnell is District standard.

11. Are the extended coverage sprinkler heads allowed? Please confirm.
Answer: Yes, extended coverage sprinklers are acceptable.

12. 1.) Drawing E5.2, details on MDP include a note referencing Alternate 16A and Drawing E601. Is there more info concerning Alt 16A. We cannot find a drawing E601.
2.) Is contact info available for the electric utility company? Are they aware of the project?
Answer: 1. Revise drawing number to E6.2. Omit Alternate.
2. Contact is Dave Darone at Delmarva 302-454-4299

13. The exterior wall types call for spray foam insulation/air barrier. There is no spec for the air barrier, only spray foam insulation. Please advise.
Answer: The spray foam insulation acts as an air barrier.

14. 1) What is the amount of Liquidated Damages for this project? I see reference made to the application thereof but find no dollar amount indicated.
2) Is there a Maintenance Bond Requirement for this project? If so, at what percentage of Contract and duration?
3) There is a Non-Resident Bonding Requirement listed in the Instructions To Bidders – Section 11.C, indicating a 6% bond (exceeding $20K) is to be submitted to the Division of Revenue. Is this in ADDITION to the 10% Bid Bond as indicated in the Advertisement To Bid? If so, is there a supplemental form this is to be prepared on or is it to be added (16%?) and submitted on the Bid Bond form issued within the contract specifications?
Answer: 1. – There are no liquidated damages on the project.
2. – There is no maintenance bond required.
3. – In the link below, please see the instructions for special requirements for building trades contractors (Page 10) Item 4. The 6% bond is paid direct to the Division of Revenue when applying for a business license. Follow the link below for further instructions.
https://revenue.delaware.gov/services/current_bt/contractor_nr.pdf

15. Detail 15/A9.9 indicates work located in corridor 128.What will be the wall surface be prior to tile in the corridors. Please confirm it will be: sheet rock, impact board, cement board, something else. Additionally, will there be a reglet at expansion needed, a cold or caulk joint, or what? Please provide clarification.
Answer: See A3 drawings for wall partition types. Please note the elevations 13, 14, and 15/A9.9 are indicated as alternate bid for Alternate No. 7. There is no expansion join in this area. There is a fire door in Lobby B128 as indicated on the plans.

16. Please review the attached substitution for Gym Equipment.
Answer: Substitution Approved.

17. Please review the attached substitution for Visual Display Units.
Answer: Substitution Approved.

18. Please provide a spec for the defibrillator called for in Contract A-05 item 30. The Miscellaneous Equipment spec only covers the cabinet.
Answer: ASD will provide defibrillator. Carpentry & General Works Contractor shall provide cabinet only.

19. 1.) Tile specification identifies a 6.5" x 6.5" and a 13" x 13" Porcelain Tile, however it drawings and specifications do no identify locations or pattern of where this tile is to be installed. Please clarify.
2.) Specifications identify a "thick set" method, is this just for the quarry tile or for all tile floors?
3.) Specifications identify redguard waterproofing is to be installed. In what locations is this product to be installed? Is this product to be installed on all floors or just on the upper levels?
4.) Joint sizes for tile floors are not identified in specifications. Should a 1/8" joint be used in construction (per manufacturer)?
5.) Plans do not identify a floor tile pattern. Is tile to be installed in a "grid" pattern, or "running bond" similar to the wall installations?
Answer: 1. Questions addressed in Addendum #1.
2. will be addressed in addendum #2 for all contractors.
3. will be addressed in addendum #2 for all contractors.
4. Grout Joints will vary based on specific tile specified. As stated per 3.3F, Provide joint widths as recommended by tile manufacturer.
5. Will be addressed in addendum #2 for all contractors

20. Please provide the location of panel CDP & Transformer T2 as shown on Drawing E5.2. Is this fed from the MDP panel?
Answer: Will be addressed in Addendum #2. Both located by "MDP" and fed from "MDP".

21. Sheathing is included in A-05 Carpentry & General Works, A-06 Roofing, & A-07 Metal Stud and Drywall. The sheathing specification covers plywood, glass – mat gypsum sheathing, and composite nail base insulated roof sheathing. Please clarify what package is responsible for each type of sheathing.
Answer: 1. Sheathing is to be broken apart as follows:
    a. Plywood Sheathing – Contract A-06 Carpentry & General Works shall be responsible for Plywood Sheathing.
    b. Glass – Mat Gypsum Sheathing – Contract A-07 Metal Studs and Drywall shall be responsible for Mat Gypsum Sheathing.
    c. Composite Nail Base Insulated Roof Sheathing – Contract A-06 Roofing shall be responsible for Composite Nail Base Insulated Roof Sheathing.

22. 1.) The electrical and special systems are broken into two separate contracts. Can they be combined or do they need to remain separate contracts?
2.) Please clarify what systems belong to what package. Please provide a detailed list of who owns what for ALL systems in the school.
3.) Is there a lightning protection system? A specification has been provided, however, it cannot be located on the drawings.
Answer: 1. Contracts A-20 Electrical & A-21 Special Systems are to remain separate contracts.
    2. Per Note 17 in 011100 Summary of Work for Contract A-20 Electrical, Spec Special systems (CCTV, intercom, telecommunications, fire alarm, area rescue system, intrusion detection, cafeteria sound reinforcement system, sound, security, time clock,) will be the responsibility of the Special Systems Contractor. However, this contractor (A-20 Electrical) 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 for special systems as indicated and also to provide 120 Volt circuits for all Special Systems.
    3. Refer to spec section 260601.

23. 1.) There are a few closets that require a coat rod and shelf assembly. What contract is responsible for these? Will a detail be provided on what is wanted?
2.) What contract is responsible for the stage front storage doors?
Answer: 1. Contract A-05 Carpentry and General Works is responsible for coat rod and shelf assembly. Provide as specified per spec section 062023-4 sub paragraph 2.5 Shelving.
    2. Contract A-05 Carpentry & General Works is responsible for providing stage front storage doors.

24. 1.) Please review the attached substitution for Soffit Panels.
2.) Please review the attached substitution for Formed Metal Roof Panels.
Answer: 1. We accept the substitution for DMI Soffit Panels.

2. We accept the substitution for DMI Formed Metal Roof Panels.

25. 1.) Per Section 280721 – "Fire Alarm & Detection Systems" – Advantech is requesting Honeywell Notifier Fire Alarm Systems be an approved equal to "Simplex-Grinell". Datasheets for the proposed Notifier NFS-640 Control Panel attached.
2.) Per Section 280725 – "Intrusion Detection System" – Page 1 – "Section 1.3 – Security Alarm System Manufacturer" – "control/communicator, control stations, and programmers shall be manufactured by Detection Systems, Inc. as provided by Delmarava Systems Corporation, Newport Delaware". Advantech is requesting Honeywell Vista Intrusion Detection systems be an approved equal. See attached datasheet for Vista 128 BPT Intrusion Control Panel.
3.) Per Section 280727 – "Integrated Access Control & Security Management System" – Page 5 – "Security Management System (SMS) shall be the Software House C-Cure 9000 System". Advantech is requesting Honeywell ProWatch be an approved equal to "Software House C-Cure 9000 System". See attached Datasheet for ProWatch. Otherwise Advantech has partnered with a manufacturer approved & certified Software House C-Cure integrator to install the approved system.
4.) Per Section 280727 – "Integrated Access Control & Security Management System" – Page 13 – "SMS shall provide comprehensive integration with American Dynamics Intellex digital video recorders through the use of NetVue." Advantech is requesting an ExacqVision Network Video Recorder be an approved equal for the video surveillance system. See attached datasheet.
Answer: 1. See attached Addendum #1 for answers.
2. See attached Addendum #1 for answers.
3. See attached Addendum #1 for answers.
4. See attached Addendum #1 for answers.

26. 1.) Ref. specification section 011100, Summary of Work, Ceramic Tile, page 54, #15, Protection. It is impossible to price policing the job site to maintain temporary protection after our work is completed and we are off the job. Can maintenance and removal of temporary protection from this bid package be assigned to the General Trades Contractor?
2.) Ref. specification section 012300, Alternates, No. 10 Ceramic Tile. We note the specification indicates the listed corridors are not to include tile in the base bid, however the finish schedule on drawing A3.7 indicates wall tile finishes. Are the wall tile finishes in the rooms listed in Alternate #10 to be included base bid?
3.) Ref. specification 093013, Tile, Page 4, paragraph 2.4, waterproofing membrane. The specifications note waterproofing membrane materials; however the installation method specified on page 10 does not indicate that waterproofing membrane is to be installed. Is waterproofing membrane to be installed? If so, where?
4.) Ref. specification 093013, Tile, Page 10, paragraph 3.8A, Interior Floor Installation. We note multiple installation methods are indicated for the floor tile however we find mention of

where they are to be used. Are all floors to be installed using TCNA F113 (cementitious thinset mortar with cementitious grout)? If no, please advise other installation methods are to be used.
Answer: 1. No. Contract A-14 Ceramic Tile must provide, maintain, and remove temporary protection as indicated.
2. Follow the Alternate No. 10 direction. No wainscot tile in locations identified in Alternate #10 should be included in base bid. All tile installations where indicated in Alternate #10 shall be priced as Alternate #10 only.
3. Will be addressed in Addendum #2.
4. Will be addressed in addendum #2.

27. 1.) Drawing L504 is on the playground. Please confirm that the fence around the playground is chain link with the exception of the one area detailed on CG101.
Answer: There will be two different types of barriers surrounding the playground area. The portion of barrier running parallel with and fronting the adjacent Mapleton Avenue will be a Street Screen Wall (without weep holes) with 3' tall decorative metal fencing and piers. The remaining fencing around the playground will be 5' tall decorative metal fence matching the street screen wall fencing. See attached highlighted excerpt from drawing CG101 for limits of playground barriers. Details for the street screen wall is provided on sheet L-501.

MODIFICATIONS TO SPECIFICATIONS:

1) SPECIFICATION SECTION 000110 Table of Contents: DELETE this section in its entirety and REPLACE with revised section attached to this addendum.

2) SPECIFICATION SECTION 000115 List of Drawings: DELETE this section in its entirety and REPLACE with revised section attached to this addendum.

3) SPECIFICATION SECTION 004100 Bid Form and Attachments: DELETE this section in its entirety and REPLACE with revised section attached to this addendum.

4) SPECIFICATION SECTION 011000 Summary of Work: DELETE this section in its entirety and REPLACE with revised section attached to this addendum.

5) SPECIFICATION SECTION 012300 Alternates: DELETE this section in its entirety and REPLACE with revised section attached to this addendum.

6) SPECIFICATION SECTION 033000 – CAST-IN-PLACE CONCRETE - Add Subparagraph 2.7 VAPOR RETARDERS A.1: Add subletter f. Poly-America.

7) SPECIFICATION SECTION 085113 – ALUMINUM WINDOWS - Add Subparagraph 2.3 ALUMINUM WINDOWS A: Add subnumber 3. Winco Window Company.

8) SPECIFICATION SECTION 093013 – TILE –
   a. Revise Subparagraph 2.2.B.1.a. to read Manufacturer: Daltile and American Olean for CT-3 only.
   b. Revise Subparagraph 2.2.B.1.b. to read Type: Matte, Semi-Gloss Color Trends, Brights.
   c. Revise Subparagraph 2.2.B.2.b. to read Size: 6" x 6" and 6" x 12" cove base, 5/16 inch thick.
   d. Revise Subparagraph 2.2.B.2.e. to read Recycled Content: Minimum 47.5 percent pre-consumer recycled content.

9) SPECIFICATION SECTION 092900 – GYPSUM BOARD - Revise Subparagraph 2.6 JOINT TREATMENT MATERIALS C.5: Change Level 5 finish to Level 4 finish.

10) SPECIFICATION SECTION 095113 – ACOUSTICAL PANEL CEILINGS - DELETE the section in its entirety and ADD entire 10-page Document attached here.

11) SPECIFICATION SECTION 096519 – RESILIENT TILE FLOORING
   a. Revise Subparagraph 2.3.A. to read Basis of Design Product: Subject to compliance with requirements, provide Armstrong; Natural Creations LVT with Diamond 10 Technology.
   b. Delete Subparagraph 2.3.A.1. Mannington Commercial and 2.3.A.2. Johnsonite; Azrock Collection VCT.
   c. Revise Subparagraph 2.3.C. to read Wearing Surface: tough, clear rigid vinyl wear layer protected by a diamond-infused UV-cured polyurethane finish, 0.020 inches thick.

12) SPECIFICATION SECTION 101100 – VISUAL DISPLAY UNITS
   a. Add Subparagraph 2.3 VISUAL DISPLAY BOARD ASSEMBLY A: Add submnuber 3. Platinum Visual Systems.
   b. Add Subparagraph 2.6 MARKERBOARD PANELS A: Add subnumber 4. Finish: Low gloss, dry-erase markers wipe clean with dry cloth or standard eraser. Suitable for use as projection screen.
   c. Revise Subparagraph 2.7.B.3. to read Mounts with 3/4-inch flat head screws (furnished).

13) SPECIFICATION SECTION 102239 – FOLDING PANEL PARTITIONS
   a. Revise Subparagraph 2.3 OPERABLE ACOUSTICAL PANELS – MANUAL J: Change to "Panel faces shall be covered with factory-applied vinyl and marker board as

indicated on drawings and specifications section 090600."

14) SPECIFICATION SECTION 116623 – GYMNASIUM EQUIPMENT
   a. Add Subparagraph 2.1 ADJUSTABLE CHIN-UP BAR A: Add subnumber **4. Draper**
   b. Add Subparagraph 2.2 SAFETY PADS A: Add subnumber **4. Draper**

15) SPECIFICATION SECTION 123216 Manufactured Plastic-Laminate-Faced Casework: ADD this section in its entirety.

16) SPECIFICATION SECTION 230450, "REFRIGERATION EQUIPMENT – HVAC"
   a. Page 230450-5, Paragraph 2.1.I.10: DELETE and REPLACE with the following:
      "10. Vibration Isolation (Field Mounted)
   b. One-inch spring isolators, level adjustable, spring and cage type for mounting under the unit base."
   c. Page 230450-12, Paragraph 2.3.E: INSERT the following:
   d. "4. Provide BACNet interface to accommodate remote monitoring and adjustment of temperature setpoint."

17) SPECIFICATION SECTION 230600, "AIR DISTRIBUTION & ACCESSORIES – HVAC"
   a. Page 230600-13, Paragraph 2.14.E: DELETE the following manufacturers:
      i. Q-Sox by Fabric Duct Systems, Inc., Air Sox by Euro Air, Hero Fabri Duct by Hero Fabri Duct, Inc.

18) SPECIFICATION SECTION 230760, "AIR HANDLING EQUIPMENT"
   a. Page 230760-1, Paragraph 1.2.A: DELETE Item 5 - Packaged Rooftop HVAC Unit with Energy Recovery.
   b. Page 230760-2, Paragraph 2.1: REPLACE Title to read:
   c. "2.1 FAN-COIL AIR HANDLING UNIT"
   d. Page 230760-11, Paragraph 2.5: DELETE in its entirety.
   e. Page 230760-15, Paragraph 3.3.A: REPLACE with the following:
   f. "A. Coordination of control work with the BAS shall include, but not be limited to, items as described in Section 230900: ATC."

19) SPECIFICATION SECTION 230861, "AIR PURIFICATION SYSTEM:"
   a. INSERT new attached Section.

20) SPECIFICATION SECTION 230900, "AUTOMATIC TEMPERATURE CONTROL"
   a. Page 230900-4, Paragraph 2.5.D.2: CHANGE the word 'sensor' to 'switch'.
   b. Page 230900-14, Paragraph 2.9.O.4: INSERT subparagraph c:
   c. "c. Space Temperature setpoint/adjustment"
   d. Page 230900-17, Paragraph 2.9.S.1: CHANGE "RTU-2" to "RTU-1" in first sentence.
   e. Page 230900-18, Paragraph 2.9.S.2: DELETE in its entirety.

21) SPECIFICATION SECTION 260731, "WIRELSS CLOCK SYSTEM"
    a. Page 260731-6, Paragraph 1.8: DELETE in its entirety.
    b. Page 260731-10, Paragraph 3.9: ADD the following:
       - *"3.9 SPARE EQUIPMENT*
       A. The Electrical Contractor shall furnish and install 10% of clocks with batteries, as directed by Owner. If this equipment is not installed, turn over to Owner as attic stock."

22) SPECIFICATION SECTION 260740, "NETWORK CABLING SYSTEMS"
    a. INSERT New Section attached.

23) SPECIFICATION SECTION 260771: REVISE to read "INTERCOM/TELECOMMUNICATIONS SYSTEM".
    a. Page 260771-1, Paragraph 1.1.C: REMOVE "Odessa Campus Project".
    b. Page 260771-1, Paragraph 1.2.A.4: DELETE in its entirety.
    c. Page 260771-1, Paragraph 1.2.B: CHANGE "Digital" to "Volp".
    d. Page 260771-2, Paragraph 1.2.E: DELETE in its entirety.
    e. Page 260771-10, Paragraph 2.1.A: REMOVE in its entirety.
    f. Page 260771-11, Paragraph 2.2.A: CHANGE to Alcatel Lucent Omni PCX Enterprise Communications System
    g. Page 260771-11, Paragraph 2.3.A: REMOVE and REPLACE with:
       -"- Office Phones #8038
       -- Classroom Phones #8018"
    h. Page 260771-11, Paragraph 2.3, WALL PLATES AND JACKS, Paragraph A:
       - CHANGE Specifications Section to 260741.
       - REMOVE Paragraphs 1 & 2.
    i. Page 260771-11, Paragraph 2.3, CABLING: REMOVE in its entirety.
    j. Page 260771-15, Paragraph 3.6.A: OMIT "3 Classroom/Office Clocks"

24) SPECIFICATION SECTION 260930, "DIMMING CONTROLS"
    a. Page 260930-9, Paragraph 2.3.J:
       - CHANGE quantity of Panic Switches to 4
       - CHANGE quantity of Entry Stations to 3
    b. Page 260930-9, Paragraph 2.3.K.1.c: REMOVE and REPLACE "1st and 2nd" with "All"
    c. Page 260930-9, Paragraph 2.3.K.1.d: REMOVE Color "black"
    d. Page 260930-10, "First, Second and Third Electrics":
       - CHANGE Quantity of Twist Locks to 9.
       - CHANGE Quantity of Circuits to 6.
    e. Page 260930-10, Paragraph 2.3.K: DELETE and REPLACE with the following:
       "K. Fixtures:

1. Border Lights: Electrical Contractor shall furnish and install border lights for 1st and 2nd electrics as indicated on plans and as mentioned above as part of base bid. Wiring to be installed and terminated at connector strip.

a. Housing shall consist of die cast aluminum end plates, extruded aluminum rails secured to a code gauge steel housing with compartment dividers. All painted surfaces shall be baked high temperature black. Rated 600 volts, 660 watts continuous operation. Rated lamp seal temperatures shall not be exceeded.

b. Unit shall be provided with leads at each end of the unit consisting of three (four) 3-wire, 600V, 200oC, UL listed conductors, 18" long in a silicone braided sleeve. Male and female connectors shall be provided as specified by catalog number

c. For mounting, unit shall be provided with a heavy steel trunion securely fastened to each of the cast steel end plates and equipped with painted malleable iron C-clamps, adjustable for up to 2" ID pipe ("U" bolts not acceptable). Each unit shall be provided with a tilt adjust knob. Optional castered carriage sets with trunions shall be provided for CVC lighting applications.

Provide the Following:

Qty.	Catalog No.	Description
12	216-046	4' Borderlight 1 circuits with Locking Connectors. Colorado batten 72 tour LED RGBWA
24	138-059	Safety cables
24	1-1/2" Conduit clamps. Removeable	

Provide all required 5 pin DMX cables to each fixture and to dimmer board.

2. Front of House Lights, Torms, and Ladder Truss: Electrical Contractor shall furnish and install six (6) spot lights as indicated on plans and as mentioned below as part of base bid.

a. Ellipsoidal Spotlights

Provide:

3 Etc. color source CE spot LED RGB-L, DMX XLR5, 26°

3 Etc. color source CE spot LED RGB-L, DMX XLR5, 36°
6 1-1/2" removeable conduit clamps.

Provide all required 5 pin DMX cables to each fixture and to dimmer board.

b. Par Spotlights

Provide:
15 Etc. color source PAR, LED RGB-L, DMX XLR5
15 1-1/2" removeable conduit clamps.

Provide all required 5 pin DMX cables to each fixture and to dimmer board.

3. Follow Spot: Provide (1) Follow spot kit with case of type Robert Juliat "Buxie" 575W fixture. Provide (3) spare lamps. Provide 25' #10 heavy duty extension cord. Yellow in color, Turn unit over to Owner."

e. Page 260930-18, Paragraph 2.4.S: CHANGE " 3 1/2" floppy disk" to "USB Drive".

25) SPECIFICATION SECTION 280721, "FIRE ALARM AND DETECTION SYSTEM"
   a. Page 280721-1: REMOVE highlighted text.
   b. Page 280721-1, Paragraph 1.1.H: ADD the following:
      - "H.Wiring shall be by Simplex Grinnell. Electrical Contractor owns all device boxes, conduit and pull strings to above accessible ceilings."
   c. Page 280721-4, Paragraph 2.1.A: DELETE in its entirety.
   d. Page 280721-12, Paragraph 5.3.A: DELETE and REPLACE with the following:
      - "A.The fire alarm contractor shall furnish and install 10% in any combination of fire alarm devices selected by Owner, including but not limited to smoke and heat detectors, speaker/strobes, and pull stations. If these devices are not installed, turn over to owner as attic stock."
      -

26) SPECIFICATION SECTION 280725, "INTRUSION DETECTION SYSTEM:"
   a. DELETE and REPLACE with the attached Section 280725, "INTRUSION SYSTEM".

27) SPECIFICATION SECTION 280727, "INTEGRATED ACCESS CONTROL & SECURITY MANAGEMENT SYSTEM"
   a. All Pages: CHANGE Section number in Footer to match section.
   b. Page 280727-16, Paragraph 3.9: ADD the following:
      - "3.9 SPARE EQUIPMENT
      A. This Contractor shall provide the district two-hundred (200) additional programmable security cards, in addition to the required project amounted, as attic

stock."

28) SPECIFICATION SECTION 280728, "CCTV – NETWORK DIGITAL VIDEO MANAGEMENT SYSTEM"
    a. INSERT New Section attached.

29) SECTION 320523 – CEMENT AND CONCRETE FOR EXTERIOR IMPROVEMENTS
Page 320523-2, Add Part 2.1.A.3: "Concrete shall be 'Whitehall Mix' by Bear Concrete, unless otherwise noted on the plans."

30) SECTION 321613 –CONCRETE CURB
Page 321613-1, Add Part 2.1.A.3: "Concrete shall be 'Whitehall Mix' by Bear Concrete, unless otherwise noted on the plans."

MODIFICATIONS TO DRAWINGS:

1) DRAWING CT503 – ENTRANCE/EXIT PLAN DETAILS AND NOTES
    a. Remove General Note #38. (This callout was removed as required for regulatory agency approval; however, the contractor is still required to use the "Whitehall Mix" for all curb and sidewalk shown on the Entrance Plan as indicated in the Site Construction Plan and in SECTION 320523 - CEMENT AND CONCRETE FOR EXTERIOR IMPROVEMENTS and SECTION 320523 - CONCRETE CURB of the Specifications.)
    b. Replace the "WHITEHALL MIX, BY BEAR CONCRETE, 4,000 PSI" callout shown in the Sidewalk Detail with "**CONCRETE**". (This callout was revised as required for regulatory agency approval; however, the contractor is still required to use the "Whitehall Mix" for all curb and sidewalk shown on the Entrance Plan as indicated in the Site Construction Plan and in SECTION 320523 - CEMENT AND CONCRETE FOR EXTERIOR IMPROVEMENTS and SECTION 320523 - CONCRETE CURB of the Specifications.)

2) DRAWING CS001 – CONSTRUCTION ENTRANCE PRE-CONSTRUCTION SITE STORMWATER MANAGEMENT PLAN
    a. Add drawing CS001 (Sheet 1 of 1) to the bid documents. The plan calls for an additional construction entrance road for access to the site.

3) All Drawings Sheets A6.1 – A6.6 - Revise GENERAL NOTES – BUILDING AND WALL SECTIONS note 1 to read ,"**1. PROJECT DATUM ELEVATION 100'-0" = 65.67'.**"

4) DRAWING A4.3 – ROOF DETAILS - Revise Detail 8/A4.3 to show Baluster Base. Refer to sketch SK-A-001.

5) DRAWING G0.1 – COVER SHEET - Add Civil drawing **CS001 – SEDIMENT AND STORMWATER MANAGEMENT PLAN – CONSTRUCTION ENTRANCE – PRE-CONSTRUCTION SITE STORMWATER MANAGEMENT PLAN.**

6) DRAWING A5.5 – PARTIAL EXTERIOR ELEVATIONS AND TYPICAL QUOIN LAYOUT –
   a. Revise PARTIAL EAST ELEVATION 2/A5.5 to show Exterior Acoustic Absorber Panels. Refer to sketch SK-A-002.
   b. Revise PARTIAL EAST ELEVATION 3/A5.5 to show Thru-Wall Step Flashing. Refer to sketch SK-A-003.

7) DRAWING A8.1 – DOOR AND FRAME TYPES AND WINDOW TYPES - Revise GENERAL NOTES – DOOR AND DOOR FRAMES note 3 to read,"**3. REFER TO SHEET A3.8 DOOR SCHEDULE FOR HEAD AND JAMB DETAIL REFERENCES.**"

8) DRAWING A9.9 – ENLARGED PLANS AND INTERIOR ELEVATIONS – CORRIDORS AND LOBBIES - Revise Details 13, 14, and 15/A9.9 titles to read, **"ELEVATION – ALTERNATE NO. 7."**

9) DRAWING A9.10 – FOLDING PARTITION TYPES AND DETAILS - Revise Folding partition types FP-2, FP-3, and FP-4. Refer to sketches SK-A-004, SK-A-005 and SK-A-006.

10) DRAWING S2.2 - Revise the foundation plan to continue the footing per 5/S3.1 under the entire length of the firewall per sketch SK-S-001.

11) DRAWING S2.2 - Revise the footing schedule to revise F12.0x6.0 to be 12′-0″ x 6′-0″ x 2′-2″. Reinforcing shown for this type of footing only shall be both top and bottom reinforcing.

12) DRAWING S2.6 - Add section cut 20/S4.2 per sketch SK-S-002.

13) DRAWING S2.8 - Revise the section cuts along line B3 and B6 between lines BD and BE to be 14/S4.3

14) DRAWING S2.9 - Add SP diagram to the sheet per sketch SK-S-007. This diagram shall apply only to the joist directly above the folding partition shown on this sheet.

15) DRAWING S3.2 - Delete the reference to a foundation drain in section 1/S3.2. The filter fabric and stone drainage fill remain.

16) DRAWING S4.1 - Revise section 14/S4.1 per sketch SK-S-008.

17) DRAWING S4.2 - Revise section 10 and 10A/S4.2 to move bond beam down to the course

below beam bearing.

18) DRAWING S4.2 - Add section 20/S4.2 per sketch SK-S-003.

19) DRAWING S4.3 - Revise bent plate in section 2/S4.3 to be 9″ x 4″ x ½″.

20) DRAWING S4.3 - Add section 14/S4.3 per sketch SK-S-004.

21) DRAWING S4.3 - Revise section 5/S4.3 per sketch SK-S-009 to include bent plate as shown.

22) DRAWING S5.2 - Add dimension to the braced frame elevation 2/S5.2 and section 7/S5.2 showing the offset brace dimension of 1′-6″ per sketch SK-S-010.

23) DRAWING S6.1 - Revise the lintel schedule per sketch SK-S-011.

24) DRAWING S6.1 - Add typical details 15 and 16 on S6.1 per sketches SK-S-005 and SK-S-006 for cornice return support details. Reference the architectural drawings for locations of the returns. The tubes shown are intended to be at the ends of each of the cornice returns, with the metal studs spanning between the main roof overhang and these tubes.

25) Drawing M3.1, PARTIAL FIRST FLOOR DUCTWORK PLAN – AREA "A"
   a. CHANGE Finned Tube Radiation Identifications from "FTR" to "FT".
   b. ADD the following Equipment Identifications:
      – Room A101 – FCU/A1.7
      – Room A102 – FCU/A1.8
      – Room A106 – FCU/A1.12

26) Drawing M3.2, PARTIAL FIRST FLOOR DUCTWORK PLAN – AREA "B"
   a. REVISE work in Lobby B128. Base Bid and Alternate Bid were switched.
   b. CHANGE duct coil identifications from "DH" to "DC" (Administration Area) to match schedule.

27) Drawing M3.4, PARTIAL SECOND FLOOR DUCTWORK PLAN – AREA "A"
   a. CHANGE Finned Tube Radiation Identification from "FTR" to "FT".

28) Drawing M3.5, PARTIAL SECOND FLOOR DUCTWORK PLAN – AREA "B"
   a. CHANGE Finned Tube Radiation Identification from "FTR" to "FT".

29) Drawing M3.6, PARTIAL FIRST FLOOR PIPING PLAN – AREA "A"
   a. RELOCATE T-stat in Commons A130 and Commons A116 north, plan view, on same wall to nearest space between marker walls.

b. CHANGE Finned Tube Radiation Identification from "FTR" to "FT".

30) Drawing M3.7, PARTIAL FIRST FLOOR PIPING PLAN – AREA "B"
   a. RELOCATE T-stat in Reception B115 to side wall shared with Principal B112.
   b. RELOCATE T-stat in Vestibule B120 to side wall shared with Reception B115.
   c. CHANGE duct coil identifications from "DH" to "DC" (Administration Area) to match schedule.

31) Drawing M3.9, PARTIAL SECOND FLOOR PIPING PLAN – AREA "A"
   a. RELOCATE T-stat in Commons A230 and Commons A216 north, plan view, on same wall to nearest space between marker walls.
   b. CHANGE Finned Tube Radiation Identification from "FTR" to "FT".

32) Drawing M3.10, PARTIAL SECOND FLOOR PIPING PLAN – AREA "B"
   a. RELOCATE T-stat in Commons B218 northeast, plan view, on same wall to nearest space between marker walls.
   b. CHANGE T-stat in Quiet Room B204 to a Blank Plate Sensor.
   c. CHANGE Finned Tube Radiation Identification from "FTR" to "FT".

33) Drawing M5.1, DETAILS – MECHANICAL
   a. DELETE Cabinet Unit Heater Detail.
   b. ADD "WALL PENTRATION DETAIL". Refer the attached Sketch SK-M-2.
   c. ADD REFRIGERATION PIPING DETAIL. Refer the attached Sketch SK-M-1.
   d. <u>CONDENSATE DRAIN TAP DETAIL</u>:
      – CHANGE "Cont'd on Plumbing Dwgs." to "Cont'd on Plumbing Dwgs or to Splash Block on Roof."
   e. <u>METRAFLEX EXPANSION LOOP DETAIL:</u>
      – CHANGE "Hot Water or Chilled Water Supply/Return" to "Dual Temperature Water Supply/Return".
   f. <u>CHILLER PIPING DETAIL:</u>
      – CHANGE "Flow Switch" to "Flow Switch – DP Switch".

34) Drawing M5.2, DETAILS – MECHANICAL
   a. ADD INTAKE HOOD DETAIL. Refer the attached Sketch SK-M-3.
   b. <u>EXHAUST FAN MOUNTING DETAIL:</u>
      – REVISE to read, "EXHAUST FAN MOUNTING DETAIL (EF-4 & EF-5)"
   c. <u>OUTDOOR AIR INTAKE DETAIL:</u>
      – CHANGE "Outdoor Air Intake" to "Outdoor Air Intake, OAI-3".
   d. <u>DUAL TEMP WATER COIL 2-WAY CONTROL VALVE PIPING DETAIL:</u>
      – DELETE "(Hot Water Supply)" and "(Hot Water Return)"
      – DELETE "Cabinet Unit Heaters, Fin Tube Radiators, and Hot Water Duct Coils" in

Note 7.

e. REVISE COOLING TOWER PIPING DETAIL. Refer the attached Sketch SK-M-4
f. INLINE CENTRIFUGAL PUMP DETAIL:
   – DELETE "Drain Pan (Note 1)" and Note 1.
   – CHANGE "Note 2" to read "Note 1" and "Note 3" to read "Note 2".

35) Drawing M5.3, DETAILS – MECHANICAL
   a. DELETE PRESSURIZED EXPANSION TANK DETAIL.
   b. ADD AIR AND DIRT SEPARATOR DETAIL. Refer the attached Sketch SK-M-5.
   c. ADD TABLE OF MINIMUM ROD DIAMETER FOR SINGLE RIGID ROD HANGERS DETAIL. Refer the attached Sketch SK-M-6.
   d. ADD PIPING SUPPORT SPACING TABLE DETAIL. Refer the attached Sketch SK-M-6
   e. HOT WATER DUCT COIL PIPING DETAIL:
      – CHANGE "Reheat Coil" to "Duct Coil".
   f. GLYCOL – WATER SYSTEM MAKE-UP PIPING DETAIL
      – CHANGE "GHS/R" to "GC/GCR"
      – CHANGE "GHS" to "GC".
   g. FLOOR MOUNTED PUMP PIPING DETAIL
      – CHANGE "Vibration Isolators, if Required" to "Vibration Isolators, See Inertia Pad Detail on Dwg. M5.1."

36) Drawing M6.1, SCHEDULES – MECHANICAL
   a. REVISE EXPANSION TANK SCHEDULE. Refer the attached Sketch SK-M-7.
   b. SOLIDS/AIR SEPARATOR SCHEDULE
      – CHANGE "Pipe Size To Tank" to "System Pipe Size".
      – CHANGE "1.1 FT HD" for SAS-1 to "1.2 FT HD".
      – CHANGE "1 in. Cold Water Fill Size" for SAS-2 to "–".

37) Drawing E3.1, PARTIAL FIRST FLOOR LIGHITNG PLAN – AREA "A"
   a. RELOCATE Switches in Commons Area. Refer the attached Sketches SK-E-1 and SK-E-2.

38) Drawing E3.2, PARTIAL FIRST FLOOR LIGHTING PLAN – AREA "B"
   a. Room B106
      – ADD "B" Fixture. Refer the attached Sketch SK-E-3
      – CHANGE switch control to 3-way. Refer the attached Sketch SK-E-3
   b. Room B117 – CHANGE switch control to 3-way. Refer the attached Sketch SK-E-3.
   c. Room B128 – ADD Alternate Lighting Layout. Refer the attached Sketch SK-E-4.

39) Drawing E3.4, PARTIAL SECOND FLOOR LIGHTING PLAN – AREA "A"
   a. RELOCATE switches in Commons Area. Refer the attached Sketches SK-E-5 and SK-E-6.
   b. ADD circuiting in A224. Refer the attached Sketch SK-E-7.

40) Drawing E3.5, PARTIAL SECOND FLOOR LIGHITNG PLAN – AREA "A"
   a. Room B204
   – MOVE switch control outside of room. Refer the attached Sketch SK-E-8.
   – RELOCATE switches in Commons Area. Refer the attached Sketch SK-E-9.

41) Drawing E3.6, PARTIAL FIRST FLOOR POWER PLAN – AREA "A"
   a. ADD Handsets to Commons Area. Refer the attached Sketches SK-E-10 and SK-E-11
   b. ADD data to Classrooms. Refer the attached Sketches SK-E-12 and SK-E-13.

42) Drawing E3.7, PARTIAL FIRST FLOOR POWER PLAN – AREA "B"
   a. REVISE outlet locations. Refer the attached Sketch SK-E-15.
   b. ADD 208/120V circuit for copier. Refer the attached Sketches SK-E-14 and SK-E-16.

43) Drawing E3.9, PARTIAL SECOND FLOOR POWER PLAN – AREA "A"
   a. ADD data to Classrooms. Refer the attached Sketches SK-E-17, SK-E-18, SK-E-19, AND SK-E-20.

44) Drawing E3.10, PARTIAL SECOND FLOOR POWER PLAN – AREA "B"
   a. REVISE location of device in B218. Refer the attached Sketch SK-E-21.
   b. ADD data to Classrooms. Refer the attached Sketches SK-E-22, SK-23, and SK-E-24.

45) Drawing E4.1, OVERALL & GYM ELECTRICAL ROOF PLAN
   a. ADD panel and circuit to Roof Rec. Refer the attached Sketch SK-E-25.

46) Drawing E5.1, DETAILS – ELECTRICAL
   a. REVISE typical classroom sound/video Single Line Diagram and Communications Outlet Configuration. Refer the attached Sketches SK-E-26 and SK-E-27.

47) Drawing E5.2, DETAILS – ELECTRICAL
   a. REVISE as to not refer to Drawing E6.2 for Mechanical Equipment. Refer the attached Sketch SK-E-28.

48) Drawing E6.1, SCHEDULES – ELECTRICAL
   a. REVISED FIXTURE SCHEDULE Notes and Types "C". Refer the attached Sketch SK-E-29.
   b. REVISE GENERAL SPECIAL SYSTEMS notes. Refer the attached Sketch SK-E-30.

49) Drawing E6.2, SCHEDULES – ELECTRICAL
   a. <u>MECHANICAL EQUIPMENT SCHEDULE</u>
      – ADD pump. Refer the attached Sketch SK-E-31.

– ADD Note 11. Refer the attached Sketch SK-E-31.

50) Drawing E6.4, PANEL SCHEDULES – ELECTRICAL

a. ADD circuit to PANEL SCHEDULE for Pump. Refer the attached Sketch SK-E-32.

End of Addendum No. 1

Location: Appoquinimink School District – Alfred G Waters Middle School

Present: See attached sign-in sheets from Pre-Bid Meeting dated 16 November 2017.

1.1 **INTRODUCTION**

1.1.1 Representatives from Appoquinimink School District, EDiS Company, Gilbert Associates and Vandemark & Lynch were introduced.

1.1.2 EDiS Company will be acting as construction manager for the Appoquinimink School District. The Appoquinimink School District will be holding all contracts with the contractors.

1.2 **PROJECT INFORMATION**

1.2.1 The current bid package consists of the following contracts; Contract: **A-01: Sitework,** Contract: **A-02: Concrete,** Contract: **A-03: Masonry, C**ontract: **A-04: Structural Steel & Misc. Metals,** Contract: **A-05: Carpentry & General Works,** Contract: **A-06: Roofing,** Contract: **A-07: Metal Studs & Drywall, C**ontract: **A-08: Glass & Glazing,** Contract: **A-09: Casework & Millwork,** Contract: **A-10: Folding Partitions,** Contract: **A-11: Paint & Wallcoverings, C**ontract: **A-12: Acoustical Ceilings,** Contract: **A-13: Flooring,** Contract: **A-14: Ceramic Tile,** Contract: **A-15: Kitchen Equipment, Co**ntract: **A-16: Elevator & Wheel Chair Lifts,** Contract: **A-17: Fire Protection,** Contract: **A-18: HVAC & Plumbing,** Contract: **A-19: Building Management Systems,** Contract: **A-20: Electrical,** Contract: **A-21: Special Systems,** Contract: **A-22: Testing & Balancing.** EDiS identified that Contracts 19 and 21 will be sole sourced by Albireo Energy and Simplex-Grinnell respectively. Therefore any bids received in these contracts other than Albireo Energy and Simplex-Grinnell will not be accepted by ASD.

1.2.2 The Subcontractors List was reviewed. During the meeting there were no objections or changes suggested by any attendees. However, during post meeting discussion, the following changes will be made:
- Sub list for Contract 05 Carpentry & General Works - Add Resinous Flooring Installer to the sub listings
- Sub list for Contract 9 Casework & Millwork - Add Casework Manufacturer, and Casework Installer to the sub listings
- Sub list for Contract 18 HVAC & Plumbing - Add Welded pipe Installer to the sub listings
- Sub list for Contract 20 Electrical - Add Data Installer to the sub listings
- All Contractors were directed to list themselves if self-performing work and to review the Instructions to Bidders section of the Specifications.

1.3 **BID INFORMATION**

1.3.1 Bids will be received at the office of Appoquinimink School District Office, Marion Profitt Training Center, 118 South Sixth Street Odessa, DE 19730 until **2:00 PM local time on Thursday December 7, 2017**. A room number for delivery of bids will be provided via addendum.

1.3.2 The bid opening will be public.

1.3.3 Bids should be in a sealed envelope clearly marked **APPOQUINIMINK SCHOOL DISTRICT WHITEHALL ELEMNTARY SCHOOL, BID PAC "A", Identify CONTRACT NUMBER & NAME OF CONTRACTOR**

1.3.4 Addenda are the only method to change the documents.

1.3.5 Bid bonds are required. Information on the bid bond requirements can be found in Specification Section 001113: Advertisement for Bid; and Specification Section 002113: Instructions to Bidders. A sample bid bond is included in Specification Section 004100.

1.3.6 Performance and Payment Bonds are required. Information regarding the performance and payment bonds and sample documents can be found in Specification Section 006113.

1.3.7 Bid forms are in Section 004100 of the project manual. No modifications, clarifications or qualifications are allowed.

1.3.8 The summary of work is included in Specification Section 011100.

1.3.9 The agreement form for this contract is AIA A132-2009. The Contracts will be held by ASD with Each contractor. A sample of this document is included in Specification Section 005200.

1.3.10 Insurance requirements are listed in Specification Section 006216.

1.3.11 The General Conditions of the Contract, AIA A232-2009 are in Specification Section 007200. Supplementary General Conditions are in Specification Section 007300. All contractors were advised that the Supplementary Conditions require all warranties, at a minimum, be 2 years for all work. Additional extended warranties for specific items also applies as specified in the technical specifications.

1.3.12 Prevailing Wages apply to this project. A copy of the applicable prevailing wages can be found in Specification Section 007343.

1.3.13 Allowances are in Specification Section 012100 and also identified in each scope of work.

1.3.14 Unit Prices are in Specification Section 012200. All Unit Prices were reviewed.

1.3.15 Contractors are required to use the web based project management system, Building Blok. Information on the web based project management system can be reviewed in Specification Section 013125.

1.3.16 Schedule requirements are in Specification Section 013216. EDiS identified the following dates: 7 December 2017 - Bid Date, 9 January 2018 - ASD Board Approval Date, Middle of January – Letters of Intent issued, 1 February 2018 – Mobilize, 17 May 2019 Project Substantial Completion. Contractors will NOT have the Summer of 2019 to complete contract work.

1.3.17 Submittal Register is included in Specifications Section 013219. At a minimum, all contractor will need to provide all submittal register items including closeout items. All submittal reviews must be submitted by the contractor and will be tracked on BuildingBlok.

1.3.18 Safety program requirements are in Specification Section 013523.

1.3.19 Bid Documents can be downloaded from EDiS' FTP site AFTER Bids.Delware.Gov requirements have been met and accepted by State of Delaware and ASD. Once State and ASD have approved the contractors, EDiS will provide FTP Site and login information to review all bidding documents, including and future Addendums.

1.3.20 It is the responsibility of each Bidder to review and coordinate all Project Documents. This

includes plans, specifications and addendums. Bidding documents will be available for view at the Construction Manager's office.

1.3.21 All contractors were advised that this project does require that all contractors submit drug testing affidavit for all prime and subcontractors with their bids.

1.4 **SITE VISITS**

1.4.1 There will be NO formal site visit. The site can be accessed anytime. No appointment is necessary.

1.5 **COMMUNICATION**

1.5.1 Submit all bid questions in writing and fax to EDiS fax (302) 421-5715 or email at MGrunza@EDiSCompany.Com Attn: Mark Grunza

1.5.2 No questions after seven (7) days prior to bid, **Wednesday, 29 November 2017.**

1.5.3 EDiS POC: Mark Grunza (302) 421-2956 or (302) 383-5154.

These minutes are intended to accurately reflect what transpired during the course of the meeting. If changes or discrepancies are noted, please contact the writer, in writing, within two days of receipt of these minutes.

Respectfully submitted,
EDiS Company

Mark Grunza
Senior Project Manager

MAG/jmm

PREBID MEETING SIGN-IN SHEET

DATE:	THURSDAY, 16 NOVEMBER	PROJECT	APPOQUINIMINK SCHOOL DISTRICT
TIME:	3:00 PM		NEW WHITEHALL ELEMENTARY SCHOOL
LOCATION:	ALFRED G. WATERS SCHOOL, CAFETERIA	SUBJECT:	PRE-BID MEETING

ATTENDEES (Please print legibly) (Initial next to your name)	COMPANY	TELEPHONE/FAX	E-MAIL ADDRESS
MARK GRUNZA	EDiS Company	302-421-2956 - 302-421-5715	MGRUNZA@EDISCOMPANY.COM
Scott Patschke	Horst Bocamatty	717-581-9911	spatschke@horstgroups.com
Rob Retting	Merit Mech	366-8601 368-4616	TRetting@meritmech.com
Steve Newman	Rexbold Construction	609-202-4112	snewman@rexbold.com
Bill Michelinie	BCI	302-325-2700 x104	bmichelinie@bci-online.com
MARK RINEHART	GFP CEMENT CONTRACTORS	302-325-2733 302-998-7687/302-998-7693	MARK.RINEHART@GFPCEMENT.COM
Chris Baker	Badger Electric	302-992-9922	cbaker@badgerde.com
Yusuf E. BAS	Brothers Gus. Painting	302-275-4205	yusufbas@brothers-paintinginc.com

PREBID MEETING SIGN-IN SHEET

DATE:	THURSDAY, 16 NOVEMBER	PROJECT	APPOQUINIMINK SCHOOL DISTRICT
TIME:	3:00 PM		NEW WHITEHALL ELEMENTARY SCHOOL
LOCATION:	ALFRED G. WATERS SCHOOL, CAFETERIA	SUBJECT:	PRE-BID MEETING

ATTENDEES (Please print legibly) (Initial next to your name)	COMPANY	TELEPHONE/FAX	E-MAIL ADDRESS
MARK GRUNZA	EDiS Company	302-421-2956 - 302-421-5715	MGRUNZA@EDISCOMPANY.COM
WAYNE SMYTH	CONTINENTAL ELECT	302-270-6015	SMEGINNISS@CONTINENTALELECT.com
Ethel Pew	Bear Industries Inc	302 368-1311	cjohnston@bearindustries.com
Jim McElroy	M&S PAINTING	302-995-2623	MSPAINTERS@AOL.Com
Steve Burg	Cassidy Painting	302-326 4212	STEVE@CASSIDYPAINTING.com
Michael Ehret	Corrado American	302-388-3544	mehret@corrado.com
Rick Barnhart	Corrado American	302-669-6036	rbarnhart@corrado.com
Maurice Caulk	Electri-Tech Inc.	302-668-9743	MauriceCaulk@yahoo.com.
MARIO GANGEMI	GREGGO & FERRARA	302.658.5241 x238	mario.gangemi@comcast.net
Danny Hanna	ADEL Const.	3024538286 3024538550	Dhanna@a-del.com
GREG PAPPAS	SOBIESKI MECH	302.993.0104	GPAPPAS@SOBIESKIINC.COM

PREBID MEETING SIGN-IN SHEET

DATE:	THURSDAY, 16 NOVEMBER	PROJECT	APPOQUINIMINK SCHOOL DISTRICT
TIME:	3:00 PM		NEW WHITEHALL ELEMENTARY SCHOOL
LOCATION:	ALFRED G. WATERS SCHOOL, CAFETERIA	SUBJECT:	PRE-BID MEETING

ATTENDEES (Please print legibly) (Initial next to your name)	COMPANY	TELEPHONE/FAX	E-MAIL ADDRESS
MARK GRUNZA	EDiS Company	302-421-2956 - 302-421-5715	MGRUNZA@EDISCOMPANY.COM
Harry Anderson	Creative flooring	302 653 7521	Creative-flooring@comcast.net
CHRIS FIELDING	PAINT DOCTOR	454 6400	chris@paintdoctorpainting.com
ANDY BAKER	SCHLOSSER + ASSOC.	302 738-7333	ABAKERSA@HOTMAIL.COM

PREBID MEETING SIGN-IN SHEET

DATE:	THURSDAY, 16 NOVEMBER	PROJECT	APPOQUINIMINK SCHOOL DISTRICT
TIME:	3:00 PM		NEW WHITEHALL ELEMENTARY SCHOOL
LOCATION:	ALFRED G. WATERS SCHOOL, CAFETERIA	SUBJECT:	PRE-BID MEETING

ATTENDEES (Please print legibly) (Initial next to your name)	COMPANY	TELEPHONE/FAX	E-MAIL ADDRESS
MARK GRUNZA	EDiS Company	302-421-2956 - 302-421-5715	MGRUNZA@EDISCOMPANY.COM

PREBID MEETING SIGN-IN SHEET

DATE: THURSDAY, 16 NOVEMBER
TIME: 3:00 PM
LOCATION: ALFRED G. WATERS SCHOOL, CAFETERIA

PROJECT APPOQUINIMINK SCHOOL DISTRICT
NEW WHITEHALL ELEMENTARY SCHOOL
SUBJECT: PRE-BID MEETING

ATTENDEES (Please print legibly) (Initial next to your name)	COMPANY	TELEPHONE/FAX	E-MAIL ADDRESS
MARK GRUNZA	EDiS Company	302-421-2956 - 302-421-5715	MGRUNZA@EDISCOMPANY.COM
MATTHEW OTT	D.A. NOIT, Inc	856-753-9333 / 856-753-4963	MATT@danoit.com
JIM WESCOTT	WESCOTT ELECTRIC	610-358-1100 / 358-1164	JR.WESCOTT@WESCOTTELECTRIC.com
George Little	Siemens INC.	215-429-6395	george.little@siemens.com
TONY MARENCO	MUNFORD & MILLER	302-378-7736	TMARENCO@MUNFORDANDMILLER.com
Gary Fowler	DSE	302-697-7694	gary@diamondstateengineering.com
CHERI JERNS	DSE	302-697-7694	estimator@diamondstateengineering.com
Buck High	TRI-STATE Roofers	302-995-2027 c 218-2713	bhigh01@comcast.net
Mike Boyle	Tri State Carpet	(302) 654 8193	mboyle@tristatecpt.com
James VanDusseldorp	Nikko Electrical	302-854-1006	JVandusseldorp@NikkoEmail
Matt Keough	JJID	(302) 598-1043	mkeough@jjid.com

PREBID MEETING SIGN-IN SHEET

DATE:	THURSDAY, 16 NOVEMBER	PROJECT	APPOQUINIMINK SCHOOL DISTRICT
TIME:	3:00 PM		NEW WHITEHALL ELEMENTARY SCHOOL
LOCATION:	ALFRED G. WATERS SCHOOL, CAFETERIA	SUBJECT:	PRE-BID MEETING

ATTENDEES (Please print legibly) (Initial next to your name)	COMPANY	TELEPHONE/FAX	E-MAIL ADDRESS
MARK GRUNZA	EDiS Company	302-421-2956 - 302-421-5715	MGRUNZA@EDISCOMPANY.COM
SEAN GAITNES	DIXIE CONST	302 858 5007	DENAR@DIXIECONST.COM
MARC Griffith	Peninsula Acoustical	302-653-3551	marc.peninsula@gmail.com
ERIC YIN	Battaglia	302 325 5747	eyin@battag.com
Dan Lyons	EDiS	302-421-2986	dlyons@edis company.com
Ryan Sarnecky	Tangent Cable Systems	302-229-9006	rsarnecky@tangentcable.com
Rick Grimminger	Albireo Energy	302-318-5944	rgrimminger@albireoenergy.com

PREBID MEETING SIGN-IN SHEET

DATE: THURSDAY, 16 NOVEMBER
TIME: 3:00 PM
LOCATION: ALFRED G. WATERS SCHOOL, CAFETERIA

PROJECT APPOQUINIMINK SCHOOL DISTRICT
NEW WHITEHALL ELEMENTARY SCHOOL
SUBJECT: PRE-BID MEETING

ATTENDEES (Please print legibly) (Initial next to your name)	COMPANY	TELEPHONE/FAX	E-MAIL ADDRESS
MARK GRUNZA	EDiS Company	302-421-2956 - 302-421-5715	MGRUNZA@EDISCOMPANY.COM
Duane Lindstrom	Lindstrom Exc Cnts	410 778 6344 - 778 0477	kyle@LINDEXC.com
DAN DI FRANCESCO	OLD WORLD TILEWORKS INC	302 407 5552 - / 302-384-8405	DAN@OLDWORLDTILEWORKS.COM
Michael Cuccolo	P-C Roofing Inc	(302) 322-6767 / 322-8809	Michael@PCRoofingInc.com
Joe DiCioccio	SIMPLEX	484-574-6033	JDiCioccio@SIMPLEXGRINNELL.COM
DAVE BREAKIRON	EDIS Co.		
KARLIE MURRELL	NARISSA BLDG CO		NARISSA Bldg Company
Goutham Dass	~~Goutham@narissabldgco~~ → Narissa BLDG CO.	908-619 6137	goutham@narissabldgco.com

EDiS Since 1908

PREBID MEETING SIGN-IN SHEET

DATE: THURSDAY, 16 NOVEMBER
TIME: 3:00 PM
LOCATION: ALFRED G. WATERS SCHOOL, CAFETERIA

PROJECT APPOQUINIMINK SCHOOL DISTRICT
NEW WHITEHALL ELEMENTARY SCHOOL
SUBJECT: PRE-BID MEETING

ATTENDEES (Please print legibly) (Initial next to your name)	COMPANY	TELEPHONE/FAX	E-MAIL ADDRESS
MARK GRUNZA	EDiS Company	302-421-2956 - 302-421-5715	MGRUNZA@EDISCOMPANY.COM
MIKE LEHMAN	SUPERIOR ELECTRIC	302-420-0732	mikel@superiorelectric.biz
KEN GOOD	GILBERT ARCH.	717 291-1077	kgood@gilbertarchitects.com
Tom Gilbert	GILBERT ARCH	717-291-1077	tgilbert@gilbertarch.com
Adam Smith	Tudor Electric	302 736 1444	tudorelectric@comcast.net
TONY BAFFONE	MURPHY STEEL, INC	302-366-8676/366-0984	tony@murphysteel.com
Gerry Wolczykowski	Union Wholesale Co	302-652-4962	Gerryw@uwco.com
Terry Gleason	Eastern States Const	302 995-2259/995-2460	tgleason@eastern-states.net
DAVE WALKER	J.WALKER	302 378-3500/378-3503	DAVE@J.WWALKER.BIZ
JEFF WALKER	J.W. WALKER	302-378-3500/378-3503	JESS@JWWALKER.BIZ
DAN DOWENS	H.K. GRIFFITH, INC.	302-368-4635/368-4624	DAN@HKGRIFFITH.COM
Jon Elliott	Kencor	610430 2110/430.2109	jelliott@kencorelevator.com
MARK CRIBB	CTA	454 8551 4548554	mark@ctaroofing.COM
ANI AZZALI	MASON/THOMAS BUILDING	302 293 8520	99222ri@MASONbuilding.com
Yunus Ozdemir	Brothers Custom Painting	8566202965/3025335838	yozdemir@brothers-paintinginc.com

PREBID MEETING SIGN-IN SHEET

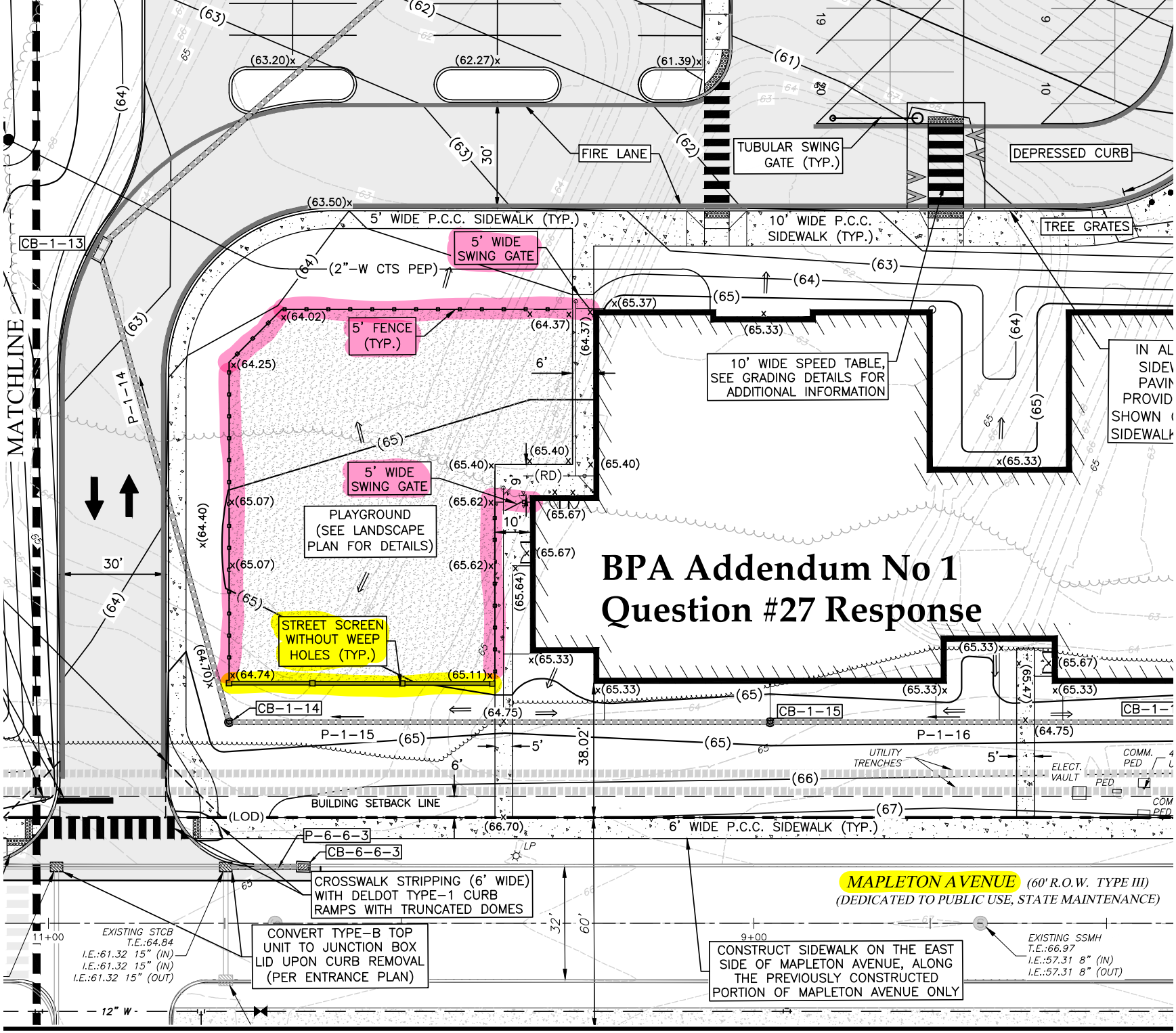
DATE:	THURSDAY, 16 NOVEMBER	PROJECT	APPOQUINIMINK SCHOOL DISTRICT
TIME:	3:00 PM		NEW WHITEHALL ELEMENTARY SCHOOL
LOCATION:	ALFRED G. WATERS SCHOOL, CAFETERIA	SUBJECT:	PRE-BID MEETING

ATTENDEES (Please print legibly) (Initial next to your name)	COMPANY	TELEPHONE/FAX	E-MAIL ADDRESS
MARK GRUNZA	EDiS Company	302-421-2956 - 302-421-5715	MGRUNZA@EDISCOMPANY.COM

PREBID MEETING SIGN-IN SHEET

DATE:	THURSDAY, 16 NOVEMBER	PROJECT	APPOQUINIMINK SCHOOL DISTRICT
TIME:	3:00 PM		NEW WHITEHALL ELEMENTARY SCHOOL
LOCATION:	ALFRED G. WATERS SCHOOL, CAFETERIA	SUBJECT:	PRE-BID MEETING

ATTENDEES (Please print legibly) (Initial next to your name)	COMPANY	TELEPHONE/FAX	E-MAIL ADDRESS
MARK GRUNZA	EDiS Company	302-421-2956 - 302-421-5715	MGRUNZA@EDISCOMPANY.COM


BPA Addendum No 1
Question #27 Response
MATCHLINE
CB-1-13
P-1-14
5' WIDE P.C.C. SIDEWALK (TYP.)
10' WIDE P.C.C. SIDEWALK (TYP.)
TREE GRATES
FIRE LANE
TUBULAR SWING GATE (TYP.)
DEPRESSED CURB
(2"-W CTS PEP)
5' WIDE SWING GATE
5' FENCE (TYP.)
10' WIDE SPEED TABLE, SEE GRADING DETAILS FOR ADDITIONAL INFORMATION
PLAYGROUND (SEE LANDSCAPE PLAN FOR DETAILS)
STREET SCREEN WITHOUT WEEP HOLES (TYP.)
CB-1-14
CB-1-15
P-1-15
P-1-16
UTILITY TRENCHES
ELECT. VAULT
COMM. PED
BUILDING SETBACK LINE
6' WIDE P.C.C. SIDEWALK (TYP.)
P-6-6-3
CB-6-6-3
CROSSWALK STRIPPING (6' WIDE) WITH DELDOT TYPE-1 CURB RAMPS WITH TRUNCATED DOMES
CONVERT TYPE-B TOP UNIT TO JUNCTION BOX LID UPON CURB REMOVAL (PER ENTRANCE PLAN)
CONSTRUCT SIDEWALK ON THE EAST SIDE OF MAPLETON AVENUE, ALONG THE PREVIOUSLY CONSTRUCTED PORTION OF MAPLETON AVENUE ONLY
MAPLETON AVENUE (60' R.O.W. TYPE III)
(DEDICATED TO PUBLIC USE, STATE MAINTENANCE)
EXISTING STCB T.E.:64.84 I.E.:61.32 15" (IN) I.E.:61.32 15" (IN) I.E.:61.32 15" (OUT)
EXISTING SSMH T.E.:66.97 I.E.:57.31 8" (IN) I.E.:57.31 8" (OUT)
11+00
9+00
12" W

VANDEMARK
& LYNCH, INC.
ENGINEERS • PLANNERS • SURVEYORS
4305 MILLER ROAD
WILMINGTON, DE 19802-1901
(302) 764-7635 FAX (302) 764-4170
www.vandemarklynch.com

WAIVER AND INDEMNIFICATION AGREEMENT FOR RECEIPT OF ELECTRONIC DRAWING FILES

Job No. 24349.00 Drawing No. Whitehall Elementary School

The undersigned RECIPIENT of the above referenced electronic drawing file from VanDemark & Lynch, Inc., UNDERSTANDS and AGREES to the following:

(1) The product of VanDemark & Lynch's services are plans, specifications, and reports duly signed and sealed by a professional engineer or land surveyor. Electronic drawing files are not prepared or checked by a professional engineer or land surveyor and are not to be considered a product of our services.

(2) By accepting these electronic files, the undersigned, on behalf of the undersigned and on behalf of all other vested interests, hereby acknowledges that the above-referenced file may not represent the current conditions of the subject property (the Plan(s) and/or File(s)). Some construction may have been performed on the site and VanDemark & Lynch, Inc. may not have been involved with the project during, or since, the construction took place.

(3) Electronic drawing files may differ from the final plans and construction plans may differ from what was actually constructed. It is the responsibility of the RECIPIENT to compare the electronic files to the final plans and/or the final construction and notify VanDemark & Lynch, Inc. within 30 days of any differences. Any use of the electronic files by the RECIPIENT to determine coordinates, distances, bearings, or other measurements for construction, construction stakeout, or design is done solely at the risk of the RECIPIENT, and the RECIPIENT agrees to indemnify and hold harmless, to the fullest extent permitted by law, VanDemark & Lynch, Inc. from all claims, liabilities, losses, damages, and costs resulting therefrom.

(4) Electronic drawing files include only the information required to reproduce the specific plan, worksheet, or sketch. Field data and calculations are our instrument of service, and are not included in any electronic files.

(5) Electronic drawings are protected under the copyright laws of the United States of America, and are provided for the sole use of the RECIPIENT. The RECIPIENT shall not alter, copy, transmit, or otherwise reproduce any electronic drawing file without the written consent of VanDemark & Lynch, Inc.

(6) If any of the information or data delivered in electronic drawing files is altered, whether inadvertently or otherwise, or if the electronic drawing file is converted from the system and format used by VanDemark & Lynch, Inc. to an alternate system or format, the RECIPIENT agrees to indemnify and hold harmless, to the fullest extent permitted by law, VanDemark & Lynch, Inc. from all claims, liabilities, losses, damages, and costs resulting therefrom.

(7) The undersigned, on behalf of the undersigned and on behalf of all other vested interests, hereby releases and discharges V&L, each person or entity deemed to control or to be controlled by V&L, and their respective partners, shareholders, directors, officers and employees, of and from all demands, suits, causes of action, or other claims, of any kind or nature, arising out of, resulting from, or in any way connected to the Plan(s), including, without limitation, claims based upon the inadequateness of the Plan(s), V&L's failure to update or otherwise "bring current" the Plan(s), or the undersigned's or another's use, reuse, misuse or modification of the Plan(s).

ACCEPTED BY:

Company: _____

Address: _____

Signature: _____

Printed name: _____

Title: _____

Date: _____

SECTION 000115 LIST OF DRAWINGS

DRWG NO.	DRAWING NAME	BID PACKS	ISSUE DATE	LATEST REV. DATE
G0.1	Cover Sheet	BPA	10/13/17	10/13/17
CT001	Entrance / Exit Plan Details And Notes	BPA	10/13/17	10/13/17
CT101	Entrance / Exit Plan	BPA	10/13/17	10/13/17
CT102	Entrance / Exit Plan	BPA	10/13/17	10/13/17
CT501	Entrance / Exit Plan Turning Diagrams	BPA	10/13/17	10/13/17
CT502	Entrance / Exit Plan Turning Diagrams	BPA	10/13/17	10/13/17
CT503	Entrance / Exit Plan Details And Notes	BPA	10/13/17	10/13/17
CI001	Fire Marshal Plan	BPA	10/13/17	10/13/17
CI100	Fire Marshal Plan	BPA	10/13/17	10/13/17
CI500	Fire Marshal Plan	BPA	10/13/17	10/13/17
CG001	Site Construction Cover Plan	BPA	10/13/17	10/13/17
CG101	Site Construction Grading Plan	BPA	10/13/17	10/13/17
CG102	Site Construction Grading Plan	BPA	10/13/17	10/13/17
CG103	Site Construction Grading Plan	BPA	10/13/17	10/13/17
CG104	Site Construction Grading Plan	BPA	10/13/17	10/13/17
CG105	Site Construction Grading Details	BPA	10/13/17	10/13/17
CG106	Site Construction Grading Details	BPA	10/13/17	10/13/17
CG111	Site Construction	BPA	10/13/17	10/13/17
CG112	Site Construction Utility Plan – Roof Drain	BPA	10/13/17	10/13/17
CG113	Site Construction	BPA	10/13/17	10/13/17
CG114	Site Construction Utility Profile	BPA	10/13/17	10/13/17
CG501	Site Construction Details And Notes	BPA	10/13/17	10/13/17
CG502	Site Construction Details And Notes	BPA	10/13/17	10/13/17
CG503	Site Construction Details And Notes	BPA	10/13/17	10/13/17
CG504	Site Construction Details And Notes	BPA	10/13/17	10/13/17
CG505	Site Construction Details And Notes	BPA	10/13/17	10/13/17
CG506	Site Construction Details And Notes	BPA	10/13/17	10/13/17
CG507	Site Construction Plan	BPA	10/13/17	10/13/17
CS001	**Sediment And Stormwater Management Plan Construction Entrance - Pre-Construction Site Stormwater Management Plan**	**BPA**	**11/20/17**	
L-101	Landscape Plan Cover Sheet	BPA	10/13/17	10/13/17
L-102	Landscape Plan	BPA	10/13/17	10/13/17
L-103	Landscape Plan	BPA	10/13/17	10/13/17
L-104	Landscape Plan	BPA	10/13/17	10/13/17
L-105	Landscape Plan	BPA	10/13/17	10/13/17
L-501	Landscape Plan Planting Schedule & Details	BPA	10/13/17	10/13/17
L-502	Sediment And Stormwater Management Plan &	BPA	10/13/17	10/13/17

	Inspection Schedule			
L-503	Open Space Management Program	BPA	10/13/17	10/13/17
L-504	Playground Design	BPA	10/13/17	10/13/17
DRWG NO.	DRAWING NAME	BID PACKS	ISSUE DATE	LATEST REV. DATE
L-505	Landscape Lighting Plan	BPA	10/13/17	10/13/17
L-506	Landscape Lighting Plan	BPA	10/13/17	10/13/17
C-001	Sediment & Stormwater Management Cover Sheet	BPA	10/13/17	10/13/17
C-101	Pre-Construction Site Stormwater Management Plan	BPA	10/13/17	10/13/17
C-102	Construction Site Stormwater Management Plan	BPA	10/13/17	10/13/17
C-103	Post Construction Stormwater Management Plan Infiltration Basin Facility	BPA	10/13/17	10/13/17
C-104	Bmp Contributing Drainage Area Plan	BPA	10/13/17	10/13/17
C-105	Pre-Limit Of Disturbance Drainage Area Plan	BPA	10/13/17	10/13/17
C-501	Construction Site Details And Notes	BPA	10/13/17	10/13/17
C-502	Construction Site Details And Notes	BPA	10/13/17	10/13/17
C-503	Construction Site Details And Notes	BPA	10/13/17	10/13/17
C-504	Construction Site Details And Notes	BPA	10/13/17	10/13/17
C-505	Construction Site Details And Notes	BPA	10/13/17	10/13/17
C-506	Construction Site Details And Notes	BPA	10/13/17	10/13/17
A1.1	Overall First Floor Plan	BPA	10/13/17	10/13/17
A1.2	Overall Second Floor Plan	BPA	10/13/17	10/13/17
A1.3	Overall First Floor – Life Safety	BPA	10/13/17	10/13/17
A1.4	Overall Second Floor – Life Safety	BPA	10/13/17	10/13/17
A3.0	Partition Types	BPA	10/13/17	10/13/17
A3.1	Partial First Floor Plan – Area “A”	BPA	10/13/17	10/13/17
A3.2	Partial First Floor Plan – Area “B”	BPA	10/13/17	10/13/17
A3.3	Partial First Floor Plan – Area “C”	BPA	10/13/17	10/13/17
A3.4	Partial Second Floor Plan – Area “A”	BPA	10/13/17	10/13/17
A3.5	Partial Second Floor Plan – Area “B”	BPA	10/13/17	10/13/17
A3.6	Room Finish Schedule	BPA	10/13/17	10/13/17
A3.7	Door Schedule	BPA	10/13/17	10/13/17
A3.8	Plan & Details	BPA	10/13/17	10/13/17
A3.9	Plan Details	BPA	10/13/17	
A3.10	Plan Details	BPA	10/13/17	
A4.0	Typical Roof Details	BPA	10/13/17	10/13/17
A4.1	Overall Roof Plan	BPA	10/13/17	10/13/17
A4.2	Roof Details	BPA	10/13/17	10/13/17
A4.3	Roof Details	BPA	10/13/17	10/13/17
A4.4	Roof Details	BPA	10/13/17	
A4.5	Roof Details	BPA	10/13/17	10/13/17
A5.1	Overall Exterior Elevations	BPA	10/13/17	10/13/17
A5.2	Partial Exterior Elevations	BPA	10/13/17	10/13/17

A5.3	Partial Exterior Elevations	BPA	10/13/17	10/13/17
A5.4	Partial Exterior Elevations	BPA	10/13/17	10/13/17
A5.5	Partial Exterior Elevations	BPA	10/13/17	10/13/17
DRWG NO.	DRAWING NAME	BID PACKS	ISSUE DATE	LATEST REV. DATE
A6.0	Typical Section Details	BPA	10/13/17	10/13/17
A6.1	Building Sections	BPA	10/13/17	10/13/17
A6.2	Wall Sections	BPA	10/13/17	10/13/17
A6.3	Wall Sections	BPA	10/13/17	10/13/17
A6.4	Wall Sections	BPA	10/13/17	10/13/17
A6.5	Wall Sections	BPA	10/13/17	10/13/17
A6.6	Wall Sections	BPA	10/13/17	10/13/17
A7.0	Typical Stair And Railing Details	BPA	10/13/17	10/13/17
A7.1	Stair Plans And Sections	BPA	10/13/17	10/13/17
A7.2	Elevator Plans, Sections And Details	BPA	10/13/17	10/13/17
A7.3	Elevator Plans, Sections And Details	BPA	10/13/17	
A8.1	Door And Frame Types And Window Types	BPA	10/13/17	10/13/17
A8.2	Door Details	BPA	10/13/17	10/13/17
A8.3	Window Details	BPA	10/13/17	10/13/17
A8.4	Rolling Door Details	BPA	10/13/17	
A9.0	Typical Miscellaneous Details	BPA	10/13/17	10/13/17
A9.1	Enlarged Plans And Interior Elevations – Administration And Nurse's Suites	BPA	10/13/17	10/13/17
A9.2	Enlarged Plans And Interior Elevations – Assistant Principal, Faculty Planning, Work Room, And Speech/Hearing	BPA	10/13/17	10/13/17
A9.3	Enlarged Plans And Interior Elevations – Classrooms And Commons	BPA	10/13/17	10/13/17
A9.4	Enlarged Plans And Interior Elevations – SGI's, Resource, Guidance, Quiet Room, And Sensory	BPA	10/13/17	10/13/17
A9.5	Enlarged Plans And Interior Elevations – Library	BPA	10/13/17	10/13/17
A9.6	Enlarged Plans And Interior	BPA	10/13/17	10/13/17
A9.7	Enlarged Plans And Interior Elevations – Music, Ensemble, And Art	BPA	10/13/17	10/13/17
A9.8	Enlarged Plans And Interior Elevations – Cafeteria, Gymnasium, Fitness And Custodian	BPA	10/13/17	10/13/17
A9.9	Folding Partition Types And Details	BPA	10/13/17	10/13/17
A9.10	Enlarged Plan – Toilet Rooms & Janitor Closets	BPA	10/13/17	10/13/17
A9.11	Enlarged Plan – Toilet Rooms & Janitor Closets	BPA	10/13/17	
A10.0	Floor Transition Details	BPA	10/13/17	10/13/17
A10.1	Partial Floor Pattern Plan 1st Floor Area A	BPA	10/13/17	10/13/17
A10.2	Partial Floor Pattern Plan 1st Floor Area B	BPA	10/13/17	10/13/17
A10.3	Partial Floor Pattern Plan Lower Level Area C	BPA	10/13/17	10/13/17

A10.4	Partial Floor Pattern Plan Second Floor Area A	BPA	10/13/17	10/13/17
A10.5	Partial Floor Pattern Plan Second Floor Area B	BPA	10/13/17	10/13/17
A11.0	Bulkhead Types	BPA	10/13/17	10/13/17
DRWG NO.	DRAWING NAME	BID PACKS	ISSUE DATE	LATEST REV. DATE
A11.2	First Floor Reflected Ceiling Plan – Area "B"	BPA	10/13/17	10/13/17
A11.3	First Floor Reflected Ceiling Plan – Area "C"	BPA	10/13/17	10/13/17
A11.4	Second Floor Reflected Ceiling Plan – Area "A"	BPA	10/13/17	10/13/17
A11.5	Second Floor Reflected Ceiling Plan – Area "B"	BPA	10/13/17	10/13/17
K101	Kitchen Equipment Plan	BPA	10/13/17	10/13/17
K102	Kitchen Building Conditions & Ventilation Plan	BPA	10/13/17	10/13/17
K103	Kitchen Plumbing Rough-In Plan	BPA	10/13/17	10/13/17
K103A	Plumbing Details	BPA	10/13/17	10/13/17
K104	Kitchen Electric Rough-In Plan	BPA	10/13/17	10/13/17
K104A	Electrical Details	BPA	10/13/17	10/13/17
K501	Fabrications	BPA	10/13/17	10/13/17
K502	Utility Raceway Details	BPA	10/13/17	10/13/17
K503	Ventilator Details	BPA	10/13/17	10/13/17
K504	Ventilator Wiring Diagram	BPA	10/13/17	10/13/17
S1.1	Structural Notes	BPA	10/13/17	10/13/17
S2.1	Foundation Plan – Area A	BPA	10/13/17	10/13/17
S2.2	Foundation Plan – Area B	BPA	10/13/17	10/13/17
S2.3	Foundation Plan – Area C	BPA	10/13/17	10/13/17
S2.4	Second Floor Framing Plan – Area A	BPA	10/13/17	10/13/17
S2.5	Second Floor Framing Plan – Area B	BPA	10/13/17	10/13/17
S2.6	Low Roof Framing Plan – Area C	BPA	10/13/17	10/13/17
S2.7	Roof Framing Plan – Area A	BPA	10/13/17	10/13/17
S2.8	Roof Framing Plan – Area B	BPA	10/13/17	10/13/17
S2.9	High Roof Framing Plan – Area C	BPA	10/13/17	10/13/17
S3.1	Foundation Sections	BPA	10/13/17	10/13/17
S3.2	Foundation Sections	BPA	10/13/17	
S4.1	Framing Sections	BPA	10/13/17	10/13/17
S4.2	Framing Section	BPA	10/13/17	10/13/17
S4.3	Framing Section	BPA	10/13/17	
S5.1	Braced Frames	BPA	10/13/17	10/13/17
S5.2	Braced Framing and details	BPA	10/13/17	10/13/17
S6.1	Typical Foundation Sections	BPA	10/13/17	10/13/17
S6.2	Typical Framing Details	BPA	10/13/17	10/13/17
M1.1	Legend Mechanical	BPA	10/13/17	10/13/17
M3.1	Partial First Floor Ductwork Plan – Area "A"	BPA	10/13/17	10/13/17
M3.2	Partial First Floor Ductwork Plan – Area "B"	BPA	10/13/17	10/13/17
M3.3	Partial First Floor Ductwork Plan – Area "C"	BPA	10/13/17	10/13/17
M3.4	Partial Second Floor Ductwork Plan – Area "A"	BPA	10/13/17	10/13/17

M3.5	Partial Second Floor Ductwork Plan – Area "B"	BPA	10/13/17	10/13/17
M3.6	Partial First Floor Piping Plan – Area "A"	BPA	10/13/17	10/13/17
M3.7	Partial First Floor Piping Plan – Area "B"	BPA	10/13/17	10/13/17
DRWG NO.	DRAWING NAME	BID PACKS	ISSUE DATE	LATEST REV. DATE
M3.9	Partial Second Floor Piping Plan – Area "A"	BPA	10/13/17	10/13/17
M3.10	Partial Second Floor Piping Plan – Area "B"	BPA	10/13/17	10/13/17
M4.1	Overall Mechanical Roof Plan	BPA	10/13/17	10/13/17
M5.1	Details – Mechanical	BPA	10/13/17	10/13/17
M5.2	Details – Mechanical	BPA	10/13/17	10/13/17
M5.3	Details – Mechanical	BPA	10/13/17	10/13/17
M6.1	Schedules – Mechanical	BPA	10/13/17	10/13/17
M6.2	Schedules – Mechanical	BPA	10/13/17	10/13/17
M9.1	Enlarged Mechanical Room Piping Plan – Area C	BPA	10/13/17	10/13/17
P2.1	Partial First Floor Below Slab Plumbing Plan – Area "A"	BPA	10/13/17	10/13/17
P2.2	Partial First Floor Below Slab Plumbing Plan – Area "B"	BPA	10/13/17	10/13/17
P2.3	Partial First Floor Below Slab Plumbing Plan – Area "C"	BPA	10/13/17	10/13/17
P3.1	Partial First Floor Plumbing Plan – Area "A"	BPA	10/13/17	10/13/17
P3.2	Partial First Floor Plumbing Plan – Area "B"	BPA	10/13/17	10/13/17
P3.3	Partial First Floor Plumbing Plan – Area "C"	BPA	10/13/17	10/13/17
P3.4	Partial Second Floor Plumbing Plan – Area "A"	BPA	10/13/17	10/13/17
P3.5	Partial Second Floor Plumbing Plan – Area "B"	BPA	10/13/17	10/13/17
P4.1	Overall & Gym Plumbing Roof Plan	BPA	10/13/17	10/13/17
P5.1	Details – Plumbing	BPA	10/13/17	10/13/17
P5.2	Details – Plumbing	BPA	10/13/17	10/13/17
P5.3	Details – Plumbing	BPA	10/13/17	10/13/17
P6.1	Legends And Schedules - Plumbing	BPA	10/13/17	10/13/17
P9.1	Enlarged Kicthen Equipment Plan – Plumbing	BPA	10/13/17	10/13/17
FP3.1	Partial First Floor Fire Protection Plan – Area "A"	BPA	10/13/17	10/13/17
FP3.2	Partial First Floor Fire Protection Plan – Area "B"	BPA	10/13/17	10/13/17
FP5.1	Details, Legends, Notes And Schedule – Fire Protection	BPA	10/13/17	10/13/17
FP5.2	Details – Fire Protection	BPA	10/13/17	10/13/17
E3.1	Partial First Floor Lighting Plan – Area "A"	BPA	10/13/17	10/13/17
E3.2	Partial First Floor Lighting Plan – Area "B"	BPA	10/13/17	10/13/17
E3.3	Partial First Floor Lighting Plan – Area "C"	BPA	10/13/17	10/13/17
E3.4	Partial Second Floor Lighting Plan – Area "A"	BPA	10/13/17	10/13/17
E3.5	Partial Second Floor Lighting Plan – Area "B"	BPA	10/13/17	10/13/17
E3.6	Partial First Floor Power Plan – Area "A"	BPA	10/13/17	10/13/17
E3.7	Partial First Floor Power Plan – Area "B"	BPA	10/13/17	10/13/17
E3.8	Partial First Floor Power Plan – Area "C"	BPA	10/13/17	10/13/17
E3.9	Partial Second Floor Power Plan – Area "A"	BPA	10/13/17	10/13/17
E3.10	Partial Second Floor Power Plan – Area "B"	BPA	10/13/17	10/13/17
E4.1	Overall Electrical Roof Plan	BPA	10/13/17	10/13/17

E4.2	Site Plan	BPA	10/13/17	10/13/17
E5.1	Detail – Electrical	BPA	10/13/17	10/13/17
E5.2	Detail – Electrical	BPA	10/13/17	10/13/17
DRWG NO.	DRAWING NAME	BID PACKS	ISSUE DATE	LATEST REV. DATE
E6.1	Schedules – Electrical	BPA	10/13/17	10/13/17
E6.2	Schedules - Electrical	BPA	10/13/17	10/13/17
E6.3	Schedules - Electrical	BPA	10/13/17	10/13/17
E6.4	Panel Schedules - Electrical	BPA	10/13/17	10/13/17
E6.5	Panel Schedules - Electrical	BPA	10/13/17	10/13/17
E6.6	Panel Schedules - Electrical	BPA	10/13/17	10/13/17
E9.1	Enlarged Kitchen Equipment Plan	BPA	10/13/17	10/13/17

SECTION 000110 TABLE OF CONTENTS

DIVISION 00 - PROCUREMENT AND CONTRACT REQUIREMENTS

000110	Table of Contents
000115	List of Drawings
001113	Advertisement for Bid
002113	Instructions to Bidders
003132	Geotechnical Data
004100	Bid Forms
005200	Agreement Forms
006113	Performance and Payment Bond Forms
006216	Certificate of Insurance
007200	General Conditions
007300	Supplementary General Conditions
007343	Wage Rate Requirements
008114	Drug Testing Forms

DIVISION 01 - GENERAL REQUIREMENTS

011100	Summary of Work - Work Covered by Contract Documents
012100	Allowances
012200	Unit Prices
012300	Alternates
012600	Change Order Procedures
012613	Contractor Compensation
012900	Payment Procedures
013113	Project Coordination Meetings
013119	Pre-installation Meetings
013125	Web-Based Project Management System
013216	Construction Schedule
013219	Submittals Register
013226	Contractor Daily Reports
013300	Submittal Procedures
013500	Contractor Employee Background Check
013523	Safety Program
013700	Building Information Modeling Coordination
014500	Quality Control
015200	Construction Facilities & Temporary Controls
016200	Material and Equipment
017123	Field Engineering
017700	Contract Closeout

DIVISION 03 – CONCRETE

033000 Cast-In-Place Concrete
033600 Concrete Floor Sealer
034500 Precast Architectural Concrete
034900 Glass-Fiber-Reinforced Concrete (GFRC)

DIVISION 04 - MASONRY

042000 Unit Masonry

DIVISION 05 - METALS

051200 Structural Steel Framing
052100 Steel Joist Framing
053100 Steel Decking
054000 Cold-Formed Metal Framing
055000 Metal Fabrications
055113 Metal Pan Stairs
055213 Pipe and Tube Railings

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

061000 Rough Carpentry
061600 Sheathing
062013 Exterior Finish Carpentry
062023 Interior Finish Carpentry
064023 Interior Architectural Woodwork

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

071416 Cold Fluid-Applied Waterproofing
071700 Bentonite Waterproofing
071900 Water Repellents
072100 Thermal Insulation
072119 Foamed-In-Place Insulation
073113 Asphalt Shingles
074113.13 Formed Metal Roof Panels
074293 Soffit Panels
074646 Fiber-Cement Siding
075323 Ethylene-Propylene-Diene-Monomer (EPDM) Roofing
076200 Sheet Metal Flashing and Trim
077100 Roof Specialties
077200 Roof Accessories
078100 Applied Fireproofing

078413 Penetration Firestopping
078443 Joint Firestopping
079100 Preformed Joint Seals
079200 Joint Sealants
079513.13 Interior Expansion Joint Cover Assemblies

DIVISION 08 - OPENINGS

081113 Hollow Metal Doors and Frames
081416 Flush Wood Doors
081613 FRP Flush Doors
083113 Access Doors and Frames
083323 Overhead Coiling Doors
0835113.23 Accordion Folding Fire Doors
084113 Aluminum-Framed Entrances and Storefronts
085113 Aluminum Windows
087100 Door Hardware
088000 Glazing
088813 Fire-Resistant Glazing

DIVISION 09 - FINISHES

090600 Room Finish Schedule – Color Legend
092216 Non-Structural Metal Framing
092900 Gypsum Board
093013 Tiling
095113 Acoustical Panel Ceilings
096400 Wood Flooring
096513 Resilient Base and Accessories
096519 Resilient Tile Flooring
096723 Resinous Flooring
096813 Tile Carpeting
097723 Tackable Wall Panels
098433 Sound-Absorbing Wall Units
099123 Interior Painting

DIVISION 10 - SPECIALTIES

100600 Instructional Board Schedule
101100 Visual Display Units
101416 Plaques
101419 Dimensional Letter Signage
101423 Panel Signage
102113 Plastic Toilet Compartments
102123 Cubicle Curtains and Track

102239 Folding Panel Partitions
102600 Wall and Corner Protection
102800 Toilet, Bath and Laundry Accessories
104413 Fire Protection Cabinets
104416 Fire Extinguishers
105113 Metal Lockers
107316 Metal Canopies
107516 Ground-Set Flag Poles

DIVISION 11 - EQUIPMENT

110000 Miscellaneous Equipment
114000 Foodservice Equipment
115213 Projection Screens
116143 Stage Curtains
116623 Gymnasium Equipment
116800 Play Field Equipment and Structures

DIVISION 12 - FURNISHINGS

120600 Plastic Laminate Casework Schedule
122413 Roller Window Shades
123216 Manufactured Plastic-Laminate-Faced Casework
123623 Plastic-Laminate-Clad Countertops
123661.16 Solid Surfacing Countertops
124813 Entrance Floor Mats and Frames

DIVISION 14 - CONVEYING EQUIPMENT

142123.16 Machine Room-Less Electric Traction Passenger Elevators
144200 Wheelchair Lifts

DIVISION 21 – FIRE SUPPRESSION

210170 Fire Suppression Sprinkler System and Standpipe System
210171 Fire Pump – Electric

DIVISION 22 - PLUMBING

220000 General Provisions – Plumbing/Fire Protection
220010 Basic Materials and Methods – Plumbing
220030 Insulation & Covering – Plumbing
220110 Drainage Systems – Plumbing
220120 Domestic Water Systems – Plumbing
220130 Gas Piping Systems – Plumbing

220140 Fixtures – Plumbing
220150 Equipment – Plumbing
220190 Testing – Plumbing
220191 Balancing – Plumbing

DIVISION 23 - HEATING, VENTILATING, AND AIR CONDITIONING (HVAC)

230200 General Provisions – HVAC
230210 Basic Materials and Methods – HVAC
230215 Valves
230230 Insulation & Covering – HVAC
230300 Vibration and Sound Isolation – HVAC
230400 Heating Generation Equipment
230410 Heating Generation Auxiliary Equipment
230450 Refrigeration Equipment – HVAC
230500 Piping Systems & Accessories – HVAC
230510 Water Treatment (HVAC)
230600 Air Distribution & Accessories – HVAC
230605 Fans
230725 Terminal Heating Units
230760 Air Handling Equipment
230861 Air Purification System
230900 Automatic Temperature Controls
230950 Testing & Balancing of Mechanical Systems

DIVISION 26 - ELECTRICAL
260000 General Provisions – Electrical
260055 Electrical Identification
260110 Raceways
260120 Wires and Cables
260135 Electrical Boxes & Fittings
260140 Wiring Devices
260155 Motor Starters
260160 Panelboards
260165 Switchboards
260170 Motor and Circuit Disconnects
260180 Overcurrent Protective Devices
260190 Supporting Devices
260195 Power System Studies
260430 Metering Equipment
260452 Grounding
260460 Transformers
260470 Distribution Circuits
260471 Feeder Circuits
260472 Branch Circuits

260475 Elevator Electrical Systems
260510 Building Lighting
260520 Roadway & Parking Area Lighting
260601 Lightning Protection Systems
260731 Wireless Clock System
260740 Network Cabling Systems
260771 Intercom/Telecommunication and Clock System
260772 Cafetorium Sound Reinforcement System
260930 Dimming Controls

DIVISION 28 - ELECTRONIC SAFETY AND SECURITY

280721 Fire Alarm and Detection Systems
280724 Area Rescue System
280725 Intrusion ~~Detection~~ System
280727 Integrated Access Control & Security Management System
280728 CCTV Network Digital Video Management System

DIVISION 31 - EARTHWORK

311000 Site Clearing
312000 Earthmoving
312500 Erosion and Sediment Controls

DIVISION 32 - EXTERIOR IMPROVEMENTS

320523 Cement and Concrete for Exterior Improvements
321216 Asphalt Paving
321613 Concrete Curb
321816.13 Playground Protective Surfacing
323114 Tubular Barrier Gate
323119 Decorative Metal Fencing and Gates
323157 Cast-In-Place Concrete for Screen Wall Footings
323158 Unit Masonry for Screen Wall
323319 Bicycle Racks
329000 Planting

DIVISION 33 - UTILITIES

331417 Water Service Piping
333100 Sanitary Sewerage
334000 Stormwater utilities

END OF SECTION

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. ALTERATIONS & COORDINATION

   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. CONTRACT DOCUMENTS INFORMATION

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. Punch List Procedures: 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. **Prohibition of Using Photographs on EDiS Projects**: 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.

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
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.

5. 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 project. 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.

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.

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	Bidding and Contract Requirements
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.

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 (Split-face 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.

2. 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.

CONTRACT NO. A-04 - STRUCTURAL STEEL

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.

2. 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.

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 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.

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 this contractor. All low voltage wiring within the Aluminum & FRP doors and frames is to be installed by the Glass & Glazing contractor. 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 ~~and~~ 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 work.

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

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

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).

11. 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.

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
Section 092900	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.

3. Provide steel stud construction related to framing out for openings in interior and exterior walls.

4. Provide secondary support framing.

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, 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.

20. Install metal decking at mansard trusses. Metal decking and trusses are to be supplied by steel contractor.

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). Exterior metal studding, insulation, gypsum board and Tyvek will be provided by Contract A-07.
    a. Provide EIFS as field applied or panelized.
        i. Provide caulking of the following:
            1. EIFS to EIFS
            2. EIFS to Masonry
            3. EIFS to Aluminum
    b. Provide flashing required at EIFS system.
    c. Provide any rough blocking built into panelized EIFS is the responsibility of this Contractor.
    d. Provide hoisting and scaffolding as required.
    e. Provide anchors for supporting EIFS panels.
    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.

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

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

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 this contractor. 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 by this contractor. 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.

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:

- Technical Specification sections:

Division 0	Bidding and Contract Requirements
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

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 casework and millwork.

2. Provide all field trimming required to adjust to existing conditions.

3. 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.

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

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 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.

11. 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.

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

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

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 <u>will</u> <u>not</u> 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.

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

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

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.

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

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

1. 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.

2. 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

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

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

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

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.

8. 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 144200	Wheel Chair Lifts
Division 21	Fire Suppression
Division 22	Plumbing
Division 23	Heating, Ventilating and Air Conditioning
Division 26	Electrical
Division 27	Communications

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

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.

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

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

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	Bidding and Contract Requirements
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

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

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.

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, tie-downs or foundation requirements.

27. Provide trap priming system.

28. Provide fuel detection/monitoring system in accordance with local codes.

27. 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

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

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	Bidding 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.

2. 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 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.

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, cafetetoium 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 release 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.

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.

5. 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.

11. 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

Contract: A-01: Sitework

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 Business License must be attached to this form.)

Phone No.: ( ) _____ - _____ Fax No.: ( ) _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

$_____ ($_____)

ALTERNATES
Alternate prices conform to applicable project specification section. Refer to specifications for a complete description of the following Alternates. An "ADD" or "DEDUCT" amount is indicated by the crossed out part that does not apply.

Alternate No. 1: Landscape Irrigation at Building

Add/Deduct _____ ($ _____)

Alternate No. 2: Multi-Purpose Field Irrigation

Add/Deduct _____ ($ _____)

Alternate No. 3: Multi-Purpose Field Irrigation

Add/Deduct _____ ($ _____)

Alternate No. 9: Trees Along Mapleton & Raleigh Areas

Add/Deduct _____ ($ _____)

Alternate No. 11: Additional Construction Entrance Access Road

Add/Deduct _____ ($ _____)

UNIT PRICES

Unit prices conform to applicable project specification section. Refer to the specifications for a complete description of the following Unit Prices:

	BULK		TRENCH	
	Add	Deduct	Add	Deduct
1. Price per Cubic Yard for earth excavation	_____c/y	_____c/y	_____c/y	_____c/y
2. Additional mass concrete in footings	_____c/y	_____c/y	_____c/y	_____c/y
3. Price per cubic yard for concrete in foundation walls (including forms and reinforcement)	_____c/y	_____c/y	_____c/y	_____c/y
4. Price per cubic yard for reinforced concrete on grade.	_____c/y	_____c/y	_____c/y	_____c/y
5. Price per cubic yard for reinforced concrete. Including forms) for structural slabs above grade	_____c/y	_____c/y	_____c/y	_____c/y
6. Price per cubic yard for excavation and backfill With select material	_____c/y	_____c/y	_____c/y	_____c/y

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 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.

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.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

_____
(State of Corporation)

Business Address:_____
_____
_____
_____

Witness: _____ By: _____
(Authorized Signature)

(SEAL)

_____
(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 Delaware Code, 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 Category	Subcontractor	Address (City & State)	**Subcontractors tax payer ID # or Delaware Business license #**
1. Sitework			
2. Paving			
3. Landscaping			
4. Irrigation			

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-01 Sitework*** 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 PRESENTS That: _____of _____in the County of _____ and State of _____ as Principal, and _____of _____in the County of _____ _____ and State of _____ as Surety, legally authorized to do business in the State of Delaware ('State"), are held and firmly unto the **Appoquinimink School District** in the sum of _____ Dollars (S_____), or percent not to exceed _____ _____ Dollars (S_____) of amount of bid on Contract No. _____ to be paid to the **Appoquinimink School District** for the use and benefit of the **Appoquinimink School District** for which payment well and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the **Appoquinimink School District** a certain proposal to enter into this contract for the furnishing of certain material and/or services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute this Contract as may be required by the terms of this Contract and approved by **Appoquinimink School District** this Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____seal and dated this____day of _____in the year of our Lord two thousand and _____(20__).

SEALED, AND DELIVERED IN THE PRESENCE OF

_____
Name of Bidder (Organization)

Corporate
Seal

By:_____
Authorized Signature

Attest _____

_____
Title

_____
Name of Surety

Witness_____

_____

_____
Title

CONSENT OF SURETY

DATE_____

To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Gentlemen:

We, the _____

_____
(Surety Company's Address)

_____

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

_____
(Contractor)

_____
(Address)

_____

is awarded the Contract No. _____

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

_____
(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 printed): _____

Authorized Representative (signature): _____

Title: _____

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.

Contract: A-02 : Concrete

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 Business License must be attached to this form.)

Phone No.: ( ) _____ - _____ Fax No.: ( ) _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

$_____ ($_____)

ALTERNATES
Not Applicable

UNIT PRICES
Unit prices conform to applicable project specification section. Refer to the specifications for a complete description of the following Unit Prices:

	BULK		TRENCH	
	Add	Deduct	Add	Deduct
1. Price per Cubic Yard for earth excavation	_____c/y	_____c/y	_____c/y	_____c/y

2. Additional mass concrete in footings	_____c/y	_____c/y	_____c/y	_____c/y
3. Price per cubic yard for concrete in foundation walls (including forms and reinforcement)	_____c/y	_____c/y	_____c/y	_____c/y
4. Price per cubic yard for reinforced concrete on grade.	_____c/y	_____c/y	_____c/y	_____c/y
5. Price per cubic yard for reinforced concrete. Including forms) for structural slabs above grade	_____c/y	_____c/y	_____c/y	_____c/y
6. Price per cubic yard for excavation and backfill With select material	_____c/y	_____c/y	_____c/y	_____c/y

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 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.

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.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

_____
(State of Corporation)

Business Address:_____
_____
_____
_____

Witness: _____ By: _____
(Authorized Signature)

(SEAL)

_____
(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 Delaware Code, 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 Category	Subcontractor	Address (City & State)	**Subcontractors tax payer ID # or Delaware Business license #**
1. Concrete	_____	_____	_____
1. Reinforcement Installation	_____	_____	_____

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-02 Concrete*** 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 PRESENTS That: _____of _____in the County of _____ and State of _____ as Principal, and _____of _____in the County of _____ _____ and State of _____ as Surety, legally authorized to do business in the State of Delaware ('State"), are held and firmly unto the **Appoquinimink School District** in the sum of _____ Dollars (S_____), or percent not to exceed _____ _____ Dollars (S_____) of amount of bid on Contract No. _____ to be paid to the **Appoquinimink School District** for the use and benefit of the **Appoquinimink School District** for which payment well and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the **Appoquinimink School District** a certain proposal to enter into this contract for the furnishing of certain material and/or services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute this Contract as may be required by the terms of this Contract and approved by **Appoquinimink School District** this Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____seal and dated this____day of _____in the year of our Lord two thousand and _____(20__).

SEALED, AND DELIVERED IN THE PRESENCE OF

_____
Name of Bidder (Organization)

Corporate Seal

By:_____
Authorized Signature

Attest _____

_____
Title

_____
Name of Surety

Witness_____

_____

_____
Title

CONSENT OF SURETY

DATE_____

To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Gentlemen:

We, the _____

_____
(Surety Company's Address)

_____

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

_____
(Contractor)

_____
(Address)

_____

is awarded the Contract No. _____

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

_____
(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 printed): _____

Authorized Representative (signature): _____

Title: _____

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.

Contract: A-03 : Masonry

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 Business License must be attached to this form.)

Phone No.: ( ) _____ - _____ Fax No.: ( ) _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

$_____ ($_____)

ALTERNATES
Alternate prices conform to applicable project specification section. Refer to specifications for a complete description of the following Alternates. An "ADD" or "DEDUCT" amount is indicated by the crossed out part that does not apply.

Alternate No. 4: Brick Veneer on Parking Lot Elevation

Add/Deduct _____ ($ _____)

UNIT PRICES
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 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.

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.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

_____
(State of Corporation)

Business Address:_____
_____
_____
_____

Witness: _____ By: _____
(Authorized Signature)

(SEAL)

_____
(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 Delaware Code, 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 Category	Subcontractor	Address (City & State)	**Subcontractors tax payer ID # or Delaware Business license #**
1. Masonry	_____	_____	_____
2. Caulking	_____	_____	_____

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-03 Masonry*** 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 PRESENTS That: _____of _____in the County of _____ and State of _____ as Principal, and _____of _____in the County of _____ _____ and State of _____ as Surety, legally authorized to do business in the State of Delaware ('State"), are held and firmly unto the **Appoquinimink School District** in the sum of _____ Dollars (S_____), or percent not to exceed _____ _____ Dollars (S_____) of amount of bid on Contract No. _____ to be paid to the **Appoquinimink School District** for the use and benefit of the **Appoquinimink School District** for which payment well and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the **Appoquinimink School District** a certain proposal to enter into this contract for the furnishing of certain material and/or services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute this Contract as may be required by the terms of this Contract and approved by **Appoquinimink School District** this Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____seal and dated this____day of _____in the year of our Lord two thousand and _____(20__).

SEALED, AND DELIVERED IN THE PRESENCE OF

_____
Name of Bidder (Organization)

Corporate Seal

By:_____
Authorized Signature

Attest _____

_____
Title

_____
Name of Surety

Witness_____

_____

_____
Title

CONSENT OF SURETY

DATE_____

To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Gentlemen:

We, the _____

_____
(Surety Company's Address)

_____

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

_____
(Contractor)

_____
(Address)

_____

is awarded the Contract No. _____

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

_____
(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 printed): _____

Authorized Representative (signature): _____

Title: _____

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.

Contract: A-04 : Structural Steel & Misc Metals

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 Business License must be attached to this form.)

Phone No.: ( ) _____ - _____ Fax No.: ( ) _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

$_____ ($_____)

ALTERNATES
Not Applicable

UNIT PRICES
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 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.

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.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

_____
(State of Corporation)

Business Address:_____
_____
_____
_____

Witness: _____ By: _____
(Authorized Signature)

(SEAL) _____
(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 Delaware Code, 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 Category	Subcontractor	Address (City & State)	**Subcontractors tax payer ID # or Delaware Business license #**
1. Structural Steel			
2. Misc Metals			

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-04 Structural Steel & Misc Metals*** 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 PRESENTS That: _____of _____in the County of _____ and State of _____ as Principal, and _____of _____in the County of _____ _____ and State of _____ as Surety, legally authorized to do business in the State of Delaware ('State"), are held and firmly unto the **Appoquinimink School District** in the sum of _____ Dollars (S_____), or percent not to exceed _____ _____ Dollars (S_____) of amount of bid on Contract No. _____ to be paid to the **Appoquinimink School District** for the use and benefit of the **Appoquinimink School District** for which payment well and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the **Appoquinimink School District** a certain proposal to enter into this contract for the furnishing of certain material and/or services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute this Contract as may be required by the terms of this Contract and approved by **Appoquinimink School District** this Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____seal and dated this____day of _____in the year of our Lord two thousand and _____(20__).

SEALED, AND DELIVERED IN THE PRESENCE OF

_____
Name of Bidder (Organization)

Corporate
Seal

By:_____
Authorized Signature

Attest _____

_____
Title

_____
Name of Surety

Witness_____

_____

_____
Title

CONSENT OF SURETY

DATE_____

To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Gentlemen:

We, the _____

_____
(Surety Company's Address)

_____

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

_____
(Contractor)

_____
(Address)

_____

is awarded the Contract No. _____

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

_____
(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 printed): _____

Authorized Representative (signature): _____

Title: _____

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.

Contract: A-05 : Carpentry & General Works

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 Business License must be attached to this form.)

Phone No.: ( ) _____ - _____ Fax No.: ( ) _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

$_____ ($_____)

ALTERNATES
Alternate prices conform to applicable project specification section. Refer to specifications for a complete description of the following Alternates. An "ADD" or "DEDUCT" amount is indicated by the crossed out part that does not apply.

Alternate No. 6: Acoustical Clouds in Library

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 _____ ($ _____)

UNIT PRICES

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 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.

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.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

_____
(State of Corporation)

Business Address:_____
_____
_____
_____

Witness: _____ By: _____
(Authorized Signature)

(SEAL)

_____
(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 Delaware Code, 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 Category	Subcontractor	Address (City & State)	**Subcontractors tax payer ID # or Delaware Business license #**
1. 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 PRESENTS That: _____of _____in the County of _____ and State of _____ as Principal, and _____of _____in the County of _____ _____ and State of _____ as Surety, legally authorized to do business in the State of Delaware ('State"), are held and firmly unto the **Appoquinimink School District** in the sum of _____ Dollars (S_____), or percent not to exceed _____ _____ Dollars (S_____) of amount of bid on Contract No. _____ to be paid to the **Appoquinimink School District** for the use and benefit of the **Appoquinimink School District** for which payment well and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the **Appoquinimink School District** a certain proposal to enter into this contract for the furnishing of certain material and/or services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute this Contract as may be required by the terms of this Contract and approved by **Appoquinimink School District** this Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____seal and dated this____day of _____in the year of our Lord two thousand and _____(20__).

SEALED, AND DELIVERED IN THE PRESENCE OF

_____
Name of Bidder (Organization)

Corporate Seal

By:_____
Authorized Signature

Attest _____

_____
Title

_____
Name of Surety

Witness_____

_____

_____
Title

CONSENT OF SURETY

DATE_____

To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Gentlemen:

We, the _____

_____
(Surety Company's Address)

_____

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

_____
(Contractor)

_____
(Address)

_____

is awarded the Contract No. _____

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

_____
(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 printed): _____

Authorized Representative (signature): _____

Title: _____

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.

Contract: A-06 : Roofing

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 Business License must be attached to this form.)

Phone No.: ( ) _____ - _____ Fax No.: ( ) _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

$_____ ($_____)

ALTERNATES
Not Applicable

UNIT PRICES
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 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.

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.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

_____
(State of Corporation)

Business Address:_____
_____
_____
_____

Witness: _____ By: _____
(Authorized Signature)

(SEAL)

_____
(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 Delaware Code, 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 Category	Subcontractor	Address (City & State)	**Subcontractors tax payer ID # or Delaware Business license #**
1. EPDM Membrane Roof System	_____	_____	_____
2. Asphalt Shingle Roof System	_____	_____	_____

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-06 Roofing*** 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 PRESENTS That: _____of _____in the County of _____ and State of _____ as Principal, and _____of _____in the County of _____ _____ and State of _____ as Surety, legally authorized to do business in the State of Delaware ('State"), are held and firmly unto the **Appoquinimink School District** in the sum of _____ Dollars (S_____), or percent not to exceed _____ _____ Dollars (S_____) of amount of bid on Contract No. _____ to be paid to the **Appoquinimink School District** for the use and benefit of the **Appoquinimink School District** for which payment well and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the **Appoquinimink School District** a certain proposal to enter into this contract for the furnishing of certain material and/or services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute this Contract as may be required by the terms of this Contract and approved by **Appoquinimink School District** this Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____seal and dated this____day of _____in the year of our Lord two thousand and _____(20__).

SEALED, AND DELIVERED IN THE PRESENCE OF

_____
Name of Bidder (Organization)

Corporate Seal

By:_____
Authorized Signature

Attest _____

_____
Title

_____
Name of Surety

Witness_____

_____

_____
Title

CONSENT OF SURETY

DATE_____

To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Gentlemen:

We, the _____

_____
(Surety Company's Address)

_____

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

_____
(Contractor)

_____
(Address)

_____

is awarded the Contract No. _____

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

_____
(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 printed): _____

Authorized Representative (signature): _____

Title: _____

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.

Contract: A-07 : Metal Studs & Drywall

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 Business License must be attached to this form.)

Phone No.: ( ) _____ - _____ Fax No.: ( ) _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

$_____ ($_____)

ALTERNATES
Alternate prices conform to applicable project specification section. Refer to specifications for a complete description of the following Alternates. An "ADD" or "DEDUCT" amount is indicated by the crossed out part that does not apply.

Alternate No. 6: Acoustical Clouds in Library

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 _____ ($ _____)

UNIT PRICES

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 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.

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.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

_____
(State of Corporation)

Business Address:_____
_____
_____
_____

Witness: _____ By: _____
(Authorized Signature)

(SEAL)

_____
(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 Delaware Code, 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 Category	Subcontractor	Address (City & State)	**Subcontractors tax payer ID # or Delaware Business license #**
1. Metal Stud Framing			
2. Fireproofing			
3. EIFS			

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.

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 PRESENTS That: _____of _____in the County of _____ and State of _____ as Principal, and _____of _____in the County of _____ _____ and State of _____ as Surety, legally authorized to do business in the State of Delaware ('State"), are held and firmly unto the **Appoquinimink School District** in the sum of _____ Dollars (S_____), or percent not to exceed _____ _____ Dollars (S_____) of amount of bid on Contract No. _____ to be paid to the **Appoquinimink School District** for the use and benefit of the **Appoquinimink School District** for which payment well and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the **Appoquinimink School District** a certain proposal to enter into this contract for the furnishing of certain material and/or services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute this Contract as may be required by the terms of this Contract and approved by **Appoquinimink School District** this Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____seal and dated this____day of _____in the year of our Lord two thousand and _____(20__).

SEALED, AND DELIVERED IN THE PRESENCE OF

_____
Name of Bidder (Organization)

Corporate Seal

By:_____
Authorized Signature

Attest _____

_____
Title

_____
Name of Surety

Witness_____

_____

_____
Title

CONSENT OF SURETY

DATE_____

To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Gentlemen:

We, the _____

_____
(Surety Company's Address)

_____

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

_____
(Contractor)

_____
(Address)

_____

is awarded the Contract No. _____

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

_____
(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 printed): _____

Authorized Representative (signature): _____

Title: _____

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.

Contract: A-08 : Glass & Glazing

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 Business License must be attached to this form.)

Phone No.: ( ) _____ - _____ Fax No.: ( ) _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

$_____ ($_____)

ALTERNATES
Not Applicable

UNIT PRICES
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 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.

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.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

_____
(State of Corporation)

Business Address:_____
_____
_____
_____

Witness: _____ By: _____
(Authorized Signature)

(SEAL)

_____
(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 Delaware Code, 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 Category	Subcontractor	Address (City & State)	**Subcontractors tax payer ID # or Delaware Business license #**
1. Exterior Glass			
2. Interior Glass			

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-08 Glass & Glazing*** 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 PRESENTS That: _____of _____in the County of _____ and State of _____ as Principal, and _____of _____in the County of _____ _____ and State of _____ as Surety, legally authorized to do business in the State of Delaware ('State"), are held and firmly unto the **Appoquinimink School District** in the sum of _____ Dollars (S_____), or percent not to exceed _____ _____ Dollars (S_____) of amount of bid on Contract No. _____ to be paid to the **Appoquinimink School District** for the use and benefit of the **Appoquinimink School District** for which payment well and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the **Appoquinimink School District** a certain proposal to enter into this contract for the furnishing of certain material and/or services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute this Contract as may be required by the terms of this Contract and approved by **Appoquinimink School District** this Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____seal and dated this____day of _____in the year of our Lord two thousand and _____(20__).

SEALED, AND DELIVERED IN THE PRESENCE OF

_____
Name of Bidder (Organization)

Corporate Seal

By:_____
Authorized Signature

Attest _____

_____
Title

_____
Name of Surety

Witness_____

_____

_____
Title

CONSENT OF SURETY

DATE_____

To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Gentlemen:

We, the _____

_____
(Surety Company's Address)

_____

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

_____
(Contractor)

_____
(Address)

_____

is awarded the Contract No. _____

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

_____
(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 printed): _____

Authorized Representative (signature): _____

Title: _____

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.

Contract: A-09 : Casework & Millwork

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 Business License must be attached to this form.)

Phone No.: ( ) _____ - _____ Fax No.: ( ) _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

$_____ ($_____)

ALTERNATES
Alternate prices conform to applicable project specification section. Refer to specifications for a complete description of the following Alternates. An "ADD" or "DEDUCT" amount is indicated by the crossed out part that does not apply.

UNIT PRICES
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 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.

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.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

_____
(State of Corporation)

Business Address:_____
_____
_____
_____

Witness: _____ By: _____
(Authorized Signature)

(SEAL)

_____
(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 Delaware Code, 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 Category	Subcontractor	Address (City & State)	**Subcontractors tax payer ID # or Delaware Business license #**
1. Casework	_____	_____	_____
2. Casework Manufacturer	_____	_____	_____
3. Casework 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-09 Casework & Millwork*** 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 PRESENTS That: _____of _____in the County of _____ and State of _____ as Principal, and _____of _____in the County of _____ _____ and State of _____ as Surety, legally authorized to do business in the State of Delaware ('State"), are held and firmly unto the **Appoquinimink School District** in the sum of _____ Dollars (S_____), or percent not to exceed _____ _____ Dollars (S_____) of amount of bid on Contract No. _____ to be paid to the **Appoquinimink School District** for the use and benefit of the **Appoquinimink School District** for which payment well and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the **Appoquinimink School District** a certain proposal to enter into this contract for the furnishing of certain material and/or services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute this Contract as may be required by the terms of this Contract and approved by **Appoquinimink School District** this Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____seal and dated this____day of _____in the year of our Lord two thousand and _____(20__).

SEALED, AND DELIVERED IN THE PRESENCE OF

_____
Name of Bidder (Organization)

Corporate Seal

By:_____
Authorized Signature

Attest _____

_____
Title

_____
Name of Surety

Witness_____

_____

_____
Title

CONSENT OF SURETY

DATE_____

To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Gentlemen:

We, the _____

_____
(Surety Company's Address)

_____

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

_____
(Contractor)

_____
(Address)

_____

is awarded the Contract No. _____

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

_____
(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 printed): _____

Authorized Representative (signature): _____

Title: _____

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.

Contract: A-10 : Folding Panel Partitions

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 Business License must be attached to this form.)

Phone No.: ( ) _____ - _____ Fax No.: ( ) _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

$_____ ($_____)

ALTERNATES
Not Applicable

UNIT PRICES
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 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.

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.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

_____
(State of Corporation)

Business Address:_____
_____
_____
_____

Witness: _____ By: _____
(Authorized Signature)

(SEAL)

_____
(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 Delaware Code, 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 Category	Subcontractor	Address (City & State)	**Subcontractors tax payer ID # or Delaware Business license #**
1. Folding Partitions Manufacturer			
2. Folding Partitions 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-10 : Folding Panel Partitions*** 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 PRESENTS That: _____of _____in the County of _____ and State of _____ as Principal, and _____of _____in the County of _____ _____ and State of _____ as Surety, legally authorized to do business in the State of Delaware ('State"), are held and firmly unto the **Appoquinimink School District** in the sum of _____ Dollars (S_____), or percent not to exceed _____ _____ Dollars (S_____) of amount of bid on Contract No. _____ to be paid to the **Appoquinimink School District** for the use and benefit of the **Appoquinimink School District** for which payment well and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the **Appoquinimink School District** a certain proposal to enter into this contract for the furnishing of certain material and/or services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute this Contract as may be required by the terms of this Contract and approved by **Appoquinimink School District** this Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____seal and dated this____day of _____in the year of our Lord two thousand and _____(20__).

SEALED, AND DELIVERED IN THE PRESENCE OF

_____
Name of Bidder (Organization)

Corporate Seal

By:_____
Authorized Signature

Attest _____

_____
Title

_____
Name of Surety

Witness_____

_____

_____
Title

CONSENT OF SURETY

DATE_____

To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Gentlemen:

We, the _____

_____
(Surety Company's Address)

_____

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

_____
(Contractor)

_____
(Address)

_____

is awarded the Contract No. _____

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

_____
(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 printed): _____

Authorized Representative (signature): _____

Title: _____

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.

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: _____ E-Mail Address: _____

Delaware Business License No.:_____ Taxpayer ID No.: _____

(Other License Nos.): _____
(A copy of Bidder's Delaware Business License must be attached to this form.)

Phone No.: ( ) _____ - _____ Fax No.: ( ) _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

$_____ ($_____)

ALTERNATES
Alternate prices conform to applicable project specification section. Refer to specifications for a complete description of the following Alternates. An "ADD" or "DEDUCT" amount is indicated by the crossed out part that does not apply.

Alternate No. 6: Acoustical Clouds in Library

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 _____ ($ _____)

Alternate No. 10: Ceramic Tile

Add/Deduct _____ ($ _____)

UNIT PRICES

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 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.

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.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

_____
(State of Corporation)

Business Address:_____
_____
_____
_____

Witness: _____ By: _____
(Authorized Signature)

(SEAL)

_____
(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 Delaware Code, 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 Category	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.

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 PRESENTS That: _____of _____in the County of _____ and State of _____ as Principal, and _____of _____in the County of _____ _____ and State of _____ as Surety, legally authorized to do business in the State of Delaware ('State"), are held and firmly unto the **Appoquinimink School District** in the sum of _____ Dollars (S_____), or percent not to exceed _____ _____ Dollars (S_____) of amount of bid on Contract No. _____ to be paid to the **Appoquinimink School District** for the use and benefit of the **Appoquinimink School District** for which payment well and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the **Appoquinimink School District** a certain proposal to enter into this contract for the furnishing of certain material and/or services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute this Contract as may be required by the terms of this Contract and approved by **Appoquinimink School District** this Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____seal and dated this____day of _____in the year of our Lord two thousand and _____(20__).

SEALED, AND DELIVERED IN THE PRESENCE OF

_____
Name of Bidder (Organization)

Corporate Seal

By:_____
Authorized Signature

Attest _____

_____
Title

_____
Name of Surety

Witness_____

_____

_____
Title

CONSENT OF SURETY

DATE_____

To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Gentlemen:

We, the _____

_____
(Surety Company's Address)

_____

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

_____
(Contractor)

_____
(Address)

_____

is awarded the Contract No. _____

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

_____
(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 printed): _____

Authorized Representative (signature): _____

Title: _____

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.

Contract: A-12 : Acoustical Ceilings

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 Business License must be attached to this form.)

Phone No.: ( ) _____ - _____ Fax No.: ( ) _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

$_____ ($_____)

ALTERNATES
Alternate prices conform to applicable project specification section. Refer to specifications for a complete description of the following Alternates. An "ADD" or "DEDUCT" amount is indicated by the crossed out part that does not apply.

Alternate No. 6: Acoustical Clouds in Library

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 _____ ($ _____)

UNIT PRICES

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 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.

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.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

_____
(State of Corporation)

Business Address:_____
_____
_____
_____

Witness: _____ By: _____
(Authorized Signature)

(SEAL)

_____
(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 Delaware Code, 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 Category	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 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 PRESENTS That: _____of _____in the County of _____ and State of _____ as Principal, and _____of _____in the County of _____ _____ and State of _____ as Surety, legally authorized to do business in the State of Delaware ('State"), are held and firmly unto the **Appoquinimink School District** in the sum of _____ Dollars (S_____), or percent not to exceed _____ _____ Dollars (S_____) of amount of bid on Contract No. _____ to be paid to the **Appoquinimink School District** for the use and benefit of the **Appoquinimink School District** for which payment well and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the **Appoquinimink School District** a certain proposal to enter into this contract for the furnishing of certain material and/or services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute this Contract as may be required by the terms of this Contract and approved by **Appoquinimink School District** this Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____seal and dated this____day of _____in the year of our Lord two thousand and _____(20__).

SEALED, AND DELIVERED IN THE PRESENCE OF

_____
Name of Bidder (Organization)

Corporate Seal

By:_____
Authorized Signature

Attest _____

_____
Title

_____
Name of Surety

Witness_____

_____

_____
Title

CONSENT OF SURETY

DATE_____

To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Gentlemen:

We, the _____

_____
(Surety Company's Address)

_____

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

_____
(Contractor)

_____
(Address)

_____

is awarded the Contract No. _____

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

_____
(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 printed): _____

Authorized Representative (signature): _____

Title: _____

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.

Contract: A-13 : Flooring

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 Business License must be attached to this form.)

Phone No.: ( ) _____ - _____ Fax No.: ( ) _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

$_____ ($_____)

ALTERNATES
Alternate prices conform to applicable project specification section. Refer to specifications for a complete description of the following Alternates. An "ADD" or "DEDUCT" amount is indicated by the crossed out part that does not apply.

Alternate No. 5: LVT instead of VCT

Add/Deduct _____ ($ _____)

UNIT PRICES
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 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.

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.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

_____
(State of Corporation)

Business Address:_____
_____
_____
_____

Witness: _____ By: _____
(Authorized Signature)

(SEAL)

_____
(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 Delaware Code, 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 Category	Subcontractor	Address (City & State)	**Subcontractors tax payer ID # or Delaware Business license #**
1. Carpet			
2. Wood Flooring			
3. VCT			

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-13 Flooring*** 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 PRESENTS That: _____of _____in the County of _____ and State of _____ as Principal, and _____of _____in the County of _____ _____ and State of _____ as Surety, legally authorized to do business in the State of Delaware ('State"), are held and firmly unto the **Appoquinimink School District** in the sum of _____ Dollars (S_____), or percent not to exceed _____ _____ Dollars (S_____) of amount of bid on Contract No. _____ to be paid to the **Appoquinimink School District** for the use and benefit of the **Appoquinimink School District** for which payment well and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the **Appoquinimink School District** a certain proposal to enter into this contract for the furnishing of certain material and/or services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute this Contract as may be required by the terms of this Contract and approved by **Appoquinimink School District** this Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____seal and dated this____day of _____in the year of our Lord two thousand and _____(20__).

SEALED, AND DELIVERED IN THE PRESENCE OF

_____
Name of Bidder (Organization)

Corporate Seal

By:_____
Authorized Signature

Attest _____

_____
Title

_____
Name of Surety

Witness_____

_____

_____
Title

CONSENT OF SURETY

DATE_____

To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Gentlemen:

We, the _____

_____
(Surety Company's Address)

_____

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

_____
(Contractor)

_____
(Address)

_____

is awarded the Contract No. _____

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

_____
(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 printed): _____

Authorized Representative (signature): _____

Title: _____

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.

Contract: A-14 : Ceramic Tile

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 Business License must be attached to this form.)

Phone No.: ( ) _____ - _____ Fax No.: ( ) _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

$_____ ($_____)

ALTERNATES
Alternate No. 10: Ceramic Tile

Add/Deduct _____ ($ _____)

UNIT PRICES
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 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.

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.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

_____
(State of Corporation)

Business Address:_____
_____
_____
_____

Witness: _____ By: _____
(Authorized Signature)

(SEAL)

_____
(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 Delaware Code, 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 Category	Subcontractor	Address (City & State)	**Subcontractors tax payer ID # or Delaware Business license #**
1. Ceramic Tile	_____	_____	_____

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-14 Ceramic Tile*** 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 PRESENTS That: _____of _____in the County of _____ and State of _____ as Principal, and _____of _____in the County of _____ _____ and State of _____ as Surety, legally authorized to do business in the State of Delaware ('State"), are held and firmly unto the **Appoquinimink School District** in the sum of _____ Dollars (S_____), or percent not to exceed _____ _____ Dollars (S_____) of amount of bid on Contract No. _____ to be paid to the **Appoquinimink School District** for the use and benefit of the **Appoquinimink School District** for which payment well and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the **Appoquinimink School District** a certain proposal to enter into this contract for the furnishing of certain material and/or services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute this Contract as may be required by the terms of this Contract and approved by **Appoquinimink School District** this Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____seal and dated this____day of _____in the year of our Lord two thousand and _____(20__).

SEALED, AND DELIVERED IN THE PRESENCE OF

_____
Name of Bidder (Organization)

Corporate Seal

By:_____
Authorized Signature

Attest _____

_____
Title

_____
Name of Surety

Witness_____

_____

_____
Title

CONSENT OF SURETY

DATE_____

To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Gentlemen:

We, the _____

_____
(Surety Company's Address)

_____

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

_____
(Contractor)

_____
(Address)

_____

is awarded the Contract No. _____

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

_____
(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 printed): _____

Authorized Representative (signature): _____

Title: _____

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.

Contract: A-15 : Kitchen Equipment

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 Business License must be attached to this form.)

Phone No.: ( ) _____ - _____ Fax No.: ( ) _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

$_____ ($_____)

ALTERNATES
Not Applicable

UNIT PRICES
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 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.

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.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

_____
(State of Corporation)

Business Address:_____
_____
_____
_____

Witness: _____ By: _____
(Authorized Signature)

(SEAL)

_____
(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 Delaware Code, 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 Category	Subcontractor	Address (City & State)	**Subcontractors tax payer ID # or Delaware Business license #**
1. Kitchen Equipment	_____	_____	_____

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-15 Kitchen Equipment*** 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 PRESENTS That: _____of _____in the County of _____ and State of _____ as Principal, and _____of _____in the County of _____ _____ and State of _____ as Surety, legally authorized to do business in the State of Delaware ('State"), are held and firmly unto the **Appoquinimink School District** in the sum of _____ Dollars (S_____), or percent not to exceed _____ _____ Dollars (S_____) of amount of bid on Contract No. _____ to be paid to the **Appoquinimink School District** for the use and benefit of the **Appoquinimink School District** for which payment well and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the **Appoquinimink School District** a certain proposal to enter into this contract for the furnishing of certain material and/or services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute this Contract as may be required by the terms of this Contract and approved by **Appoquinimink School District** this Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____seal and dated this____day of _____in the year of our Lord two thousand and _____(20__).

SEALED, AND DELIVERED IN THE PRESENCE OF

_____
Name of Bidder (Organization)

Corporate Seal

By:_____
Authorized Signature

Attest _____

_____
Title

_____
Name of Surety

Witness_____

_____

_____
Title

CONSENT OF SURETY

DATE_____

To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Gentlemen:

We, the _____

_____
(Surety Company's Address)

_____

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

_____
(Contractor)

_____
(Address)

_____

is awarded the Contract No. _____

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

_____
(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 printed): _____

Authorized Representative (signature): _____

Title: _____

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.

Contract: A-16 : Elevator & Wheel Chair Lifts

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 Business License must be attached to this form.)

Phone No.: ( ) _____ - _____ Fax No.: ( ) _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

$_____ ($_____)

ALTERNATES
Not Applicable

UNIT PRICES
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 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.

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.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

_____
(State of Corporation)

Business Address:_____
_____
_____
_____

Witness: _____ By: _____
(Authorized Signature)

(SEAL)

_____
(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 Delaware Code, 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 Category	Subcontractor	Address (City & State)	**Subcontractors tax payer ID # or Delaware Business license #**
1. Elevators	_____	_____	_____
2. Wheel Chair Lifts	_____	_____	_____

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-16 Elevator & Wheel Chair Lifts*** 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 PRESENTS That: _____of _____in the County of _____ and State of _____ as Principal, and _____of _____in the County of _____ _____ and State of _____ as Surety, legally authorized to do business in the State of Delaware ('State"), are held and firmly unto the **Appoquinimink School District** in the sum of _____ Dollars (S_____), or percent not to exceed _____ _____ Dollars (S_____) of amount of bid on Contract No. _____ to be paid to the **Appoquinimink School District** for the use and benefit of the **Appoquinimink School District** for which payment well and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the **Appoquinimink School District** a certain proposal to enter into this contract for the furnishing of certain material and/or services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute this Contract as may be required by the terms of this Contract and approved by **Appoquinimink School District** this Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____seal and dated this____day of _____in the year of our Lord two thousand and _____(20__).

SEALED, AND DELIVERED IN THE PRESENCE OF

_____
Name of Bidder (Organization)

Corporate Seal

By:_____
Authorized Signature

Attest _____

_____
Title

_____
Name of Surety

Witness_____

_____

_____
Title

CONSENT OF SURETY

DATE_____

To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Gentlemen:

We, the _____

_____
(Surety Company's Address)

_____

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

_____
(Contractor)

_____
(Address)

_____

is awarded the Contract No. _____

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

_____
(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 printed): _____

Authorized Representative (signature): _____

Title: _____

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.

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 Business License must be attached to this form.)

Phone No.: ( ) _____ - _____ Fax No.: ( ) _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

$_____ ($_____)

ALTERNATES
Alternate prices conform to applicable project specification section. Refer to specifications for a complete description of the following Alternates. An "ADD" or "DEDUCT" amount is indicated by the crossed out part that does not apply.

Alternate No. 6: Acoustical Clouds in Library

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 _____ ($ _____)

UNIT PRICES

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 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.

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.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

_____
(State of Corporation)

Business Address:_____
_____
_____
_____

Witness: _____ By: _____
(Authorized Signature)

(SEAL)

_____
(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 Delaware Code, 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 Category	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 _____.

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 PRESENTS That: _____of _____in the County of _____ and State of _____ as Principal, and _____of _____in the County of _____ _____ and State of _____ as Surety, legally authorized to do business in the State of Delaware ('State"), are held and firmly unto the **Appoquinimink School District** in the sum of _____ Dollars (S_____), or percent not to exceed _____ _____ Dollars (S_____) of amount of bid on Contract No. _____ to be paid to the **Appoquinimink School District** for the use and benefit of the **Appoquinimink School District** for which payment well and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the **Appoquinimink School District** a certain proposal to enter into this contract for the furnishing of certain material and/or services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute this Contract as may be required by the terms of this Contract and approved by **Appoquinimink School District** this Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____seal and dated this____day of _____in the year of our Lord two thousand and _____(20__).

SEALED, AND DELIVERED IN THE PRESENCE OF

_____
Name of Bidder (Organization)

Corporate Seal

By:_____
Authorized Signature

Attest _____

_____
Title

_____
Name of Surety

Witness_____

_____

_____
Title

CONSENT OF SURETY

DATE_____

To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Gentlemen:

We, the _____

_____
(Surety Company's Address)

_____

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

_____
(Contractor)

_____
(Address)

_____

is awarded the Contract No. _____

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

_____
(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 printed): _____

Authorized Representative (signature): _____

Title: _____

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.

Contract: A-18 : HVAC & Plumbing

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 Business License must be attached to this form.)

Phone No.: ( ) _____ - _____ Fax No.: ( ) _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

$_____ ($_____)

ALTERNATES
Not Applicable

UNIT PRICES
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 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.

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.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

_____
(State of Corporation)

Business Address:_____
_____
_____
_____

Witness: _____ By: _____
(Authorized Signature)

(SEAL)

_____
(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 Delaware Code, 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 Category	Subcontractor	Address (City & State)	**Subcontractors tax payer ID # or Delaware Business license #**
1. Mechanical	_____	_____	_____
2. Plumbing	_____	_____	_____
3. Ductwork	_____	_____	_____
4. Insulation	_____	_____	_____
5. Welded Pipe 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-18 HVAC & Plumbing*** 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 PRESENTS That: _____of _____in the County of _____ and State of _____ as Principal, and _____of _____in the County of _____ _____ and State of _____ as Surety, legally authorized to do business in the State of Delaware ('State"), are held and firmly unto the **Appoquinimink School District** in the sum of _____ Dollars (S_____), or percent not to exceed _____ _____ Dollars (S_____) of amount of bid on Contract No. _____ to be paid to the **Appoquinimink School District** for the use and benefit of the **Appoquinimink School District** for which payment well and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the **Appoquinimink School District** a certain proposal to enter into this contract for the furnishing of certain material and/or services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute this Contract as may be required by the terms of this Contract and approved by **Appoquinimink School District** this Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____seal and dated this____day of _____in the year of our Lord two thousand and _____(20__).

SEALED, AND DELIVERED IN THE PRESENCE OF

_____
Name of Bidder (Organization)

Corporate Seal

By:_____
Authorized Signature

Attest _____

_____
Title

_____
Name of Surety

Witness_____

_____

_____
Title

CONSENT OF SURETY

DATE_____

To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Gentlemen:

We, the _____

_____
(Surety Company's Address)

_____

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

_____
(Contractor)

_____
(Address)

_____

is awarded the Contract No. _____

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

_____
(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 printed): _____

Authorized Representative (signature): _____

Title: _____

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.

Contract: A-19 : Building Management System

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 Business License must be attached to this form.)

Phone No.: ( ) _____ - _____ Fax No.: ( ) _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

$_____ ($_____)

ALTERNATES
Not Applicable

UNIT PRICES
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 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.

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.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

_____
(State of Corporation)

Business Address:_____
_____
_____
_____

Witness: _____ By: _____
(Authorized Signature)

(SEAL)

_____
(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 Delaware Code, 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 Category	Subcontractor	Address (City & State)	**Subcontractors tax payer ID # or Delaware Business license #**
1. Bldg Management System	_____	_____	_____

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-19 Building Management Systems*** 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 PRESENTS That: _____of _____in the County of _____ and State of _____ as Principal, and _____of _____in the County of _____ _____ and State of _____ as Surety, legally authorized to do business in the State of Delaware ('State"), are held and firmly unto the **Appoquinimink School District** in the sum of _____ Dollars (S_____), or percent not to exceed _____ _____ Dollars (S_____) of amount of bid on Contract No. _____ to be paid to the **Appoquinimink School District** for the use and benefit of the **Appoquinimink School District** for which payment well and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the **Appoquinimink School District** a certain proposal to enter into this contract for the furnishing of certain material and/or services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute this Contract as may be required by the terms of this Contract and approved by **Appoquinimink School District** this Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____seal and dated this____day of _____in the year of our Lord two thousand and _____(20__).

SEALED, AND DELIVERED IN THE PRESENCE OF

_____
Name of Bidder (Organization)

Corporate Seal

By:_____
Authorized Signature

Attest _____

_____
Title

_____
Name of Surety

Witness_____

_____

_____
Title

CONSENT OF SURETY

DATE_____

To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Gentlemen:

We, the _____

_____
(Surety Company's Address)

_____

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

_____
(Contractor)

_____
(Address)

_____

is awarded the Contract No. _____

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

_____
(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 printed): _____

Authorized Representative (signature): _____

Title: _____

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.

Contract: A-20 : Electrical

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 Business License must be attached to this form.)

Phone No.: ( ) _____ - _____ Fax No.: ( ) _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

$_____ ($_____)

ALTERNATES
Alternate prices conform to applicable project specification section. Refer to specifications for a complete description of the following Alternates. An "ADD" or "DEDUCT" amount is indicated by the crossed out part that does not apply.

Alternate No. 6: Acoustical Clouds in Library

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 _____ ($ _____)

UNIT PRICES

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 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.

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.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

_____
(State of Corporation)

Business Address:_____
_____
_____
_____

Witness: _____ By: _____
(Authorized Signature)

(SEAL)

_____
(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 Delaware Code, 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 Category	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: _____

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 PRESENTS That: _____of _____in the County of _____ and State of _____ as Principal, and _____of _____in the County of _____ _____ and State of _____ as Surety, legally authorized to do business in the State of Delaware ('State"), are held and firmly unto the **Appoquinimink School District** in the sum of _____ Dollars (S_____), or percent not to exceed _____ _____ Dollars (S_____) of amount of bid on Contract No. _____ to be paid to the **Appoquinimink School District** for the use and benefit of the **Appoquinimink School District** for which payment well and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the **Appoquinimink School District** a certain proposal to enter into this contract for the furnishing of certain material and/or services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute this Contract as may be required by the terms of this Contract and approved by **Appoquinimink School District** this Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____seal and dated this____day of _____in the year of our Lord two thousand and _____(20__).

SEALED, AND DELIVERED IN THE PRESENCE OF

_____
Name of Bidder (Organization)

Corporate
Seal

By:_____
Authorized Signature

Attest _____

_____
Title

_____
Name of Surety

Witness_____

_____

_____
Title

CONSENT OF SURETY

DATE_____

To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Gentlemen:

We, the _____

_____
(Surety Company's Address)

_____

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

_____
(Contractor)

_____
(Address)

_____

is awarded the Contract No. _____

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

_____
(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 printed): _____

Authorized Representative (signature): _____

Title: _____

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.

Contract: A-21: Special Systems

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 Business License must be attached to this form.)

Phone No.: ( ) _____ - _____ Fax No.: ( ) _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

$_____ ($_____)

ALTERNATES
Not Applicable

UNIT PRICES
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 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.

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.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

_____
(State of Corporation)

Business Address:_____
_____
_____
_____

Witness: _____ By: _____
(Authorized Signature)

(SEAL)

_____
(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 Delaware Code, 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 Category	Subcontractor	Address (City & State)	**Subcontractors tax payer ID # or Delaware Business license #**
1. Fire Alarm			
2. Intrusion Detection			
3. Security Wireless Clocks			

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-21 Special Systems*** 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 PRESENTS That: _____of _____in the County of _____ and State of _____ as Principal, and _____of _____in the County of _____ _____ and State of _____ as Surety, legally authorized to do business in the State of Delaware ('State"), are held and firmly unto the **Appoquinimink School District** in the sum of _____ Dollars (S_____), or percent not to exceed _____ _____ Dollars (S_____) of amount of bid on Contract No. _____ to be paid to the **Appoquinimink School District** for the use and benefit of the **Appoquinimink School District** for which payment well and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the **Appoquinimink School District** a certain proposal to enter into this contract for the furnishing of certain material and/or services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute this Contract as may be required by the terms of this Contract and approved by **Appoquinimink School District** this Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____seal and dated this____day of _____in the year of our Lord two thousand and _____(20__).

SEALED, AND DELIVERED IN THE PRESENCE OF

_____
Name of Bidder (Organization)

Corporate Seal

By:_____
Authorized Signature

Attest _____

_____
Title

_____
Name of Surety

Witness_____

_____

_____
Title

CONSENT OF SURETY

DATE_____

To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Gentlemen:

We, the _____

_____
(Surety Company's Address)

_____

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

_____
(Contractor)

_____
(Address)

_____

is awarded the Contract No. _____

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

_____
(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 printed): _____

Authorized Representative (signature): _____

Title: _____

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.

Contract: A-22: Testing & Balancing

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 Business License must be attached to this form.)

Phone No.: ( ) _____ - _____ Fax No.: ( ) _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

$_____ ($_____)

ALTERNATES
Not Applicable

UNIT PRICES
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 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.

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.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

_____
(State of Corporation)

Business Address:_____
_____
_____
_____

Witness: _____ By: _____
(Authorized Signature)

(SEAL)

_____
(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 Delaware Code, 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 Category	Subcontractor	Address (City & State)	**Subcontractors tax payer ID # or Delaware Business license #**
1. Testing & Balancing			

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-22 Testing & Balancing*** 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 PRESENTS That: _____of _____in the County of _____ and State of _____ as Principal, and _____of _____in the County of _____ _____ and State of _____ as Surety, legally authorized to do business in the State of Delaware ('State"), are held and firmly unto the **Appoquinimink School District** in the sum of _____ Dollars (S_____), or percent not to exceed _____ _____ Dollars (S_____) of amount of bid on Contract No. _____ to be paid to the **Appoquinimink School District** for the use and benefit of the **Appoquinimink School District** for which payment well and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the **Appoquinimink School District** a certain proposal to enter into this contract for the furnishing of certain material and/or services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute this Contract as may be required by the terms of this Contract and approved by **Appoquinimink School District** this Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____seal and dated this____day of _____in the year of our Lord two thousand and _____(20__).

SEALED, AND DELIVERED IN THE PRESENCE OF

_____
Name of Bidder (Organization)

Corporate Seal

By:_____
Authorized Signature

Attest _____

_____
Title

_____
Name of Surety

Witness_____

_____

_____
Title

CONSENT OF SURETY

DATE_____

To: **Appoquinimink School District**
118 South Sixth Street
Odessa, De 19730

Gentlemen:

We, the _____

_____
(Surety Company's Address)

_____

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

_____
(Contractor)

_____
(Address)

_____

is awarded the Contract No. _____

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

_____
(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 printed): _____

Authorized Representative (signature): _____

Title: _____

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.

END OF SECTION

SECTION 012300 - ALTERNATES

1. GENERAL PROVISIONS

A. The general provisions of the Contract, including the Conditions of the Contract (General, Supplementary and other conditions, if any) and Division 1 as appropriate, apply to the Work specified in this Section.

B. Refer to provisions in AIA Document A232 – 2009 Edition, GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION, CONSTRUCTION MANAGER AS ADVISOR EDITION, for requirements in addition to those specified in Division 1.

C. For work being constructed under separate prime contracts, provisions of this Section apply to each contract being bid.

2. BASE BID

A. The Base Bid shall consist of all work shown or specified in the Contract Documents, exclusive of any Additive Alternates specified herein.

B. The Base Bid shall include all work in any Subtractive Alternates specified herein.

3. ALTERNATES

A. State in the Bid Form the amount to be added to the Base Bid for each Alternate specified.

B. See Section 002113 - INSTRUCTIONS TO BIDDERS for related information.

C. The description of Alternates contained herein is in summary form. Detailed requirements for materials and execution shall be as specified in other sections and as shown on drawings.

Alternate No. 1: Landscape Irrigation at Building

a. Base Bid: Provide landscaping as indicated on the drawings
b. Alternate: Provide an irrigation system around the building. Connect to 2" waterline at northwest side of building as shown on Utility Plan. The extent of the irrigation area is from the face of building to back of curb as indicated on the Landscape Plan.

Alternate No. 2: Multi-Purpose Field Irrigation

c. Base Bid: Provide 2" waterline with hose reel connection that starts at the 2" waterline on the northwest side of building, crossing travel lane and terminating at the corner of multi-purpose field.
a. Alternate: Provide an irrigation system that covers the multi-purpose field as indicated on the landscape plan.

Alternate No. 3: Playground Equipment

a. Base Bid: Provide large Play Assembly Items, playing surface and fencing around playground and equipment as depicted on Landscape Plan.
b. Alternate: 3.A – Provide Swing Assembly Items as depicted on Landscape Plan.
c. Alternate: 3.B – Provide Play Assembly Items as depicted on Landscape Plan.
d. Alternate: 3.C – Provide Play Items as depicted on Landscape Plan. (3-Saddle Seats, Ten Spin and Tarantula Climber).

Alternate No. 4: Brick Veneer on Parking Lot Elevation

a. Base Bid: Provide split face CMU and cast stone bands to the parking lot elevations shown on the drawings.
b. Alternate: Provide brick veneer and cast stone bands in lieu of split face CMU.

Alternate No. 5: LVT instead of VCT

a. Base Bid: Install vinyl composition tile (VCT) in locations indicated on the room finish schedule.
b. Alternate: Install luxury vinyl tile (LVT) instead of vinyl composition tile (VCT) in locations indicated on the room finish schedule.

Alternate No. 6: Acoustical Clouds in Library

a. Base Bid: Provide ACT and down lights as indicated in Library
b. Alternate: Provide ACT and acoustical clouds in the library with pendant light fixtures as indicated and sprinkler heads for above and below clouds.

Alternate No. 7: GWB and Acoustical Clouds in Lobby

a. Base Bid: Provide ACT ceilings in the Lobby, 2x2 light fixtures and three (3) 2x2 diffusers as indicated on the drawings.
b. Alternate: Delete the ACT ceilings in the Lobby and provide drywall ceiling and acoustical clouds. Provide sprinkler heads for above and below clouds. Provide three (3) sidewall diffusers.

Alternate No. 8: GWB and Acoustical Clouds at Commons Areas

a. Base Bid: Provide ACT ceilings in the Commons Areas and Provide down light fixtures as indicated on the drawings.
b. Alternate: Delete the ACT ceilings in the Commons Areas and provide drywall ceilings and acoustical clouds. Provide pendant light fixtures as indicated and provide sprinkler heads for above and below clouds

Alternate No. 9: Trees along Mapleton Avenue & Raleigh Street

a. Base Bid: Provide trees along Mapleton Avenue and Raleigh Street as indicated on the Landscape Plan drawings.
b. Alternate: Provide same quantity of trees, located as shown on the Landscape Plan. Instead of 2 ½″ diameter, increase them to 4″ diameter trees.

Alternate No. 10: Ceramic Tile

a. Base Bid: No ceramic tile in Corridors A122, B124, A221, and B215, Lobby B128, Vestibule B120, Stair B-S1, and Waiting B2015.
b. Alternate: Provide ceramic tile in Corridors A122, B124, A221, and B215, Lobby B128, Vestibule B120, Stair B-S1, and Waiting B205 as shown on the Room Finish Schedule and Interior Elevations.

Alternate No. 11: Additional Construction Entrance Access Road

a. Base Bid: Per plans and specifications
b. Alternate: Provide costs associated with installation, maintenance, access road and site amenities. See drawing CS001.

END OF SECTION

SECTION 095113

ACOUSTICAL PANEL CEILINGS
(Addendum No. 1 – Section replaced in its entirety)

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 acoustical panels and exposed suspension systems for ceilings.

B. Products furnished, but not installed under this Section, include anchors, clips, and other ceiling attachment devices to be cast in concrete.

1.3 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.4 ACTION SUBMITTALS

A. Submittals and samples must be issued within 90 days of the start of construction.

B. Product Data: For each type of product.

C. Samples: For each exposed product and for each color and texture specified, 6 inches in size.

D. Samples for Verification: For each component indicated and for each exposed finish required, prepared on Samples of size indicated below.

1. Acoustical Panel: Set of 6-inch-square Samples of each type, color, pattern, and texture.
2. Exposed Suspension-System Members, Moldings, and Trim: Set of 6-inch-long Samples of each type, finish, and color.
3. Canopies and Clouds (Alternate Bid): Samples of each type and color.

1.5 INFORMATIONAL SUBMITTALS

A. Coordination Drawings: Reflected ceiling plans, drawn to scale, on which the following items are shown and coordinated with each other, using input from installers of the items involved:

1. Suspended ceiling components.
2. Structural members to which suspension systems will be attached.
3. Size and location of initial access modules for acoustical panels.
4. Perimeter moldings.

5. Items penetrating finished ceiling including the following:

    a. Lighting fixtures.
    b. Air outlets and inlets.
    c. Speakers.
    d. Sprinklers.
    e. Access panels.

B. Qualification Data: For testing agency.

C. Product Test Reports: For each acoustical panel ceiling, for tests performed by a qualified testing agency.

D. Evaluation Reports: For each acoustical panel ceiling suspension system and anchor and fastener type, from ICC-ES.

1.6 CLOSEOUT SUBMITTALS

A. Maintenance Data: For finishes to include in maintenance manuals.

1.7 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Acoustical Ceiling Panels: Provide four standard cartons of each type acoustic units to Owner, upon substantial completion.
2. Suspension-System Components: Quantity of each exposed component equal to 2 percent of quantity installed.
3. Hold-Down Clips: Equal to 2 percent of quantity installed.
4. Impact Clips: Equal to 2 percent of quantity installed.
5. Touch-up Paint: Provide touch-up paint for every Colorations Color and Custom Color specified.

1.8 QUALITY ASSURANCE

A. Mockups: Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.

1. Build mockup of typical ceiling area as shown on Drawings.
2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
3. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.9 DELIVERY, STORAGE, AND HANDLING

A. Deliver acoustical panels, suspension-system components, and accessories to Project site in original, unopened packages and store them in a fully enclosed, conditioned space where they

will be protected against damage from moisture, humidity, temperature extremes, direct sunlight, surface contamination, and other causes.

B. Before installing acoustical panels, permit them to reach room temperature and a stabilized moisture content.

1.10 FIELD CONDITIONS

A. Environmental Limitations: Do not install acoustical panel ceilings until spaces are enclosed and weatherproof, wet work in spaces is complete and dry, work above ceilings is complete, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.

1. Pressurized Plenums: Operate ventilation system for not less than 48 hours before beginning acoustical panel ceiling installation.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Surface-Burning Characteristics: Comply with ASTM E 84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

1. Flame-Spread Index: Comply with ASTM E 1264 for Class A materials.
2. Smoke-Developed Index: 450 or less.

B. Fire-Resistance Ratings: Comply with ASTM E 119; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

1. Indicate design designations from UL's "Fire Resistance Directory" or from the listings of another qualified testing agency.

2.2 ACOUSTICAL PANELS, GENERAL

A. Source Limitations: Obtain each type of acoustical ceiling panel, canopy, cloud and supporting suspension system from single source from single manufacturer.

B. Glass-Fiber-Based Panels: Made with binder containing no urea formaldehyde.

C. Acoustical Panel Standard: Provide manufacturer's standard panels of configuration indicated that comply with ASTM E 1264 classifications as designated by types, patterns, acoustical ratings, and light reflectances unless otherwise indicated.

1. Mounting Method for Measuring NRC: Type E-400; plenum mounting in which face of test specimen is 15-3/4 inches away from test surface according to ASTM E 795.

D. Acoustical Panel Colors and Patterns: Match appearance characteristics indicated for each product type.

2.3 MANUFACTURERS

A. Suspension System:
1. Basis-of-Design: Armstrong World Industries; (877) 276-7876; www.armstrong.com
2. Chicago Metallic; (800) 638-5192; www.chicagometallic.com
3. USG; (800) 950-3839; www.usg.com

B. Acoustical Units, Canopies and Clouds:
1. Basis-of-Design: Armstrong World Industries
2. Certainteed; (800) 233-8990; www.certainteed.com
3. USG.

C. FRP-Faced Gypsum Panels:
1. Basis-of-Design: NUDO Products, Inc; (800) 826-4132; www.nudo.com
2. Crane Composites, Inc; Kemlite; (800) 435-0080; www.kemlite.com
3. Ciesco, Inc; (610) 518-2233); www.ciescoinc.com

2.4 ACOUSTICAL UNIT MATERIALS

A. Type ACT-1 Acoustical Panels: ASTM E1264, conforming to the following:
1. Size: 24” x 48” x 3/4".
2. Type: Armstrong “School Zone Fine Fissured” (1714).
3. Composition: Mineral Composite.
4. Light Reflectance: 85 percent, minimum.
5. NRC Range: 0.70 or higher.
6. CAC Ranger: 35 to 40.
7. Edge: Square lay-in.
8. Color: White. Grid color to match tile.

B. Type ACT-2 Acoustical Panels: ASTM E1264, conforming to the following:
1. Size: 24” x 48” x 5/8”.
2. Type: Armstrong “Fine Fissured” (1729).
3. Composition: Mineral Composite.
4. Light Reflectance: 85 percent, minimum.
5. NRC Range: 0.50 to 0.60.
6. CAC Range: 35 to 39.
7. Edge: Square lay-in.
8. Color: White. Grid color to match tile.

C. Type ACT-3 Acoustical Panels: ASTM E1264, conforming to the following:
1. Size: 24” x 24” x 3/4".
2. Type: Armstrong “School Zone Fine Fissured” (1713).
3. Composition: Mineral Composite.
4. Light Reflectance: 85 percent, minimum.
5. NRC Range: 0.70 or higher.
6. CAC Ranger: 35 to 40.
7. Edge: Square lay-in.
8. Color: White. Grid color to match tile.

D. Type ACT-4 Acoustical Panels: ASTM E1264, conforming to the following:
1. Size: 24” x 24” x 5/8”.
2. Type: Armstrong “Fine Fissured” (1728).
3. Composition: Mineral Composite.
4. Light Reflectance: 85 percent, minimum.

5. NRC Range: 0.50 to 0.60.
6. CAC Range: 35 to 39.
7. Edge: Square lay-in.
8. Color: White. Grid color to match tile.

E. Type ACT-6, ACT-7 and ACT-8 Acoustical Panels: ASTM E1264, conforming to the following:
1. Size: 24” x 24” x 7/8”.
2. Type: Armstrong “Calla” (2820).
3. Composition: Mineral Fiber.
4. NRC Range: 0.75 to 0.85.
5. CAC Range: 35 to 40.
6. Edge: Square lay-in.
7. Color: Colorations Colors and Custom Color to match Sherwin Williams paint color; Refer to 090600 Color Legend.

	Armstrong Product	USG Product	Certainteed Product
ACT-1	School Zone Fine Fissured (1714)	Radar ClimaPlus (22541)	Approved equal
ACT-2	Fine Fissured (1729)	Radar ClimaPlus (2410)	Fine Fissured (HHF-197)
ACT-3	School Zone Fine Fissured (1713)	Radar ClimaPlus (22521)	Approved equal
ACT-4	Fine Fissured (1728)	Radar ClimaPlus (2210)	Fine Fissured (HHF-157)
ACT-6 ACT-7 ACT-8	Calla Colorations (2820)	Approved equal	Approved equal

F. Toxicity/IEQ:
1. Provide one of the following anti-microbial treatment to inhibit growth of mold and mildew:
   a. Coating-Based Antimicrobial Treatment: Provide acoustical panels with face and back surfaces coated with antimicrobial treatment; and showing no mold or mildew growth when tested in accordance with ASTM D3273.
   b. Panel-Based Antimicrobial Treatment: Provide acoustical panels manufactured with antimicrobial treatment in the panels.

2.5 FRP-FACED GYPSUM PANEL MATERIALS

A. Type ACT-5 FRP-Faced Gypsum Ceiling Panels:
1. Size: 24” x 48” x 1/2".
2. Composition: 0.030 Class A flame spread fiberglass-reinforced plastic (FRP) laminated to fire-rated, moisture-resistant gypsum panel.
3. Face Finish: White textured FRP.
4. Edge: Square lay-in.

B. FRP-Faced Gypsum Ceiling Panels shall be warranted by manufacturer for 10 years against delamination.

2.6 ACOUSTICAL CANOPY UNITS (ALTERNATE BID)

A. Armstrong SoundScapes Acoustical Canopy:
1. Surface Texture: Smooth.

2. Composition: Wet formed mineral fiber.
3. Surface finish: DuraBrite acoustically transparent membrane on all sides and edges.
4. Color: Custom Color to match Sherwin Williams paint color; Refer to 090600 Color Legend.
5. Size: 46-1/2" x 75”.
6. Thickness: 1-1/4”.
7. Edge Detail: Square edge.
8. Panel Configuration: Hill Canopy (6258)
9. Arc Radius: 10 feet, 9 inches.
10. Flame Spread: ASTM E 84, Class A
11. Acoustical Absorption: ASTM C423, minimum 30 Sabin/panel.
12. Mold/Mildew Inhibitor: The surface and back of the product to be treated with BioBlock, a paint that contains a special biocide that inhibits or retards the growth of mold and mildew, ASTM D3273.

B. Installation Hardware:
1. Hardware is partially embedded with little visible support mechanisms.
2. As recommended by manufacturer.

2.7 ACOUSTICAL CLOUD UNITS (ALTERNATE BID)

A. Armstrong SoundScapes Acoustical Cloud:
1. Surface Texture: Smooth.
2. Composition: Fiberglass
3. Surface finish: DuraBrite acoustically transparent membrane on fronts and edges.
4. Color: Colorations Colors and Custom Color to match Sherwin Williams paint color; Refer to 090600 Color Legend.
5. Shapes:
   a. Square, nominal 4 foot x 4 foot (5440).
   b. Small Rectangle, nominal 4 foot x 6 foot (5448).
6. Thickness: 7/8”.
7. Edge Detail: Square edge.
8. Flame Spread: ASTM E 84, Class A
9. Acoustical Absorption: ASTM C423, minimum 1.00 Sabins/square foot.
10. Antimicrobial protection: Inherent – resists the growth of mold/mildew and bacterial growth.

B. Installation Hardware:
1. As recommended by manufacturer including deck hanging kit.

2.8 METAL SUSPENSION SYSTEMS, GENERAL

A. Metal Suspension-System Standard: Provide manufacturer's standard direct-hung metal suspension systems of types, structural classifications, and finishes indicated that comply with applicable requirements in ASTM C 635/C 635M.

B. Attachment Devices: Size for five times the design load indicated in ASTM C 635/C 635M, Table 1, "Direct Hung," unless otherwise indicated. Comply with seismic design requirements.

C. Wire Hangers, Braces, and Ties: Provide wires complying with the following requirements:

1. Zinc-Coated, Carbon-Steel Wire: ASTM A 641/A 641M, Class 1 zinc coating, soft temper.

2. Size: Select wire diameter so its stress at three times hanger design load (ASTM C 635/C 635M, Table 1, "Direct Hung") will be less than yield stress of wire, but provide not less than 0.106-inch-diameter wire.

D. Angle Hangers: Angles with legs not less than 7/8-inch-wide; formed with 0.04-inch-thick, galvanized-steel sheet complying with ASTM A 653/A 653M, G90 coating designation; with bolted connections and 5/16-inch-diameter bolts.

E. Stabilizer Bars: Manufacturer's standard perimeter stabilizers.

2.9 METAL SUSPENSION SYSTEM

A. Basis-of-Design Product: Subject to compliance with requirements, provide products by Armstrong World Industries, Inc; or a comparable product by one of the following:

1. CertainTeed Corporation.
2. Rockfon (Roxul Inc.).
3. USG Corporation.

B. Metal Suspension-System Standard: Provide manufacturer's standard, direct-hung, metal suspension system and accessories according to ASTM C 635/C 635M and designated by type, structural classification, and finish indicated.

C. Wide-Face, Capped, Double-Web, Steel Suspension System: Main and cross runners roll formed from cold-rolled steel sheet; prepainted, hot-dip galvanized, G30 coating designation; with prefinished 15/16-inch-wide metal caps on flanges.

1. Structural Classification: Intermediate-duty system.
2. End Condition of Cross Runners: Override (stepped).
3. Face Design: Flat, flush.
4. Cap Material:
   a. Kitchen/Dishwashing Areas: Aluminum, Armstrong #HD8200 WA or approved equal.
   b. All Other Areas: Steel with powder coat finish.
5. Cap Finish:
   a. White at ACT-1, ACT-2, ACT-3, ACT-4 and ACT-5.
   b. 15/16 inch in Calla Collorations color to match ceiling Calla Colorations at ACT-6, ACT-7 and ACT-8.

2.10 METAL EDGE MOLDINGS AND TRIM

A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

1. Armstrong World Industries, Inc.
2. CertainTeed Corporation.
3. Chicago Metallic Corporation.
4. Fry Reglet Corporation.
5. Gordon, Inc.
6. USG Corporation.

B. Roll-Formed, Sheet-Metal Edge Moldings and Trim: Type and profile indicated or, if not indicated, manufacturer's standard moldings for edges and penetrations that comply with

seismic design requirements; formed from sheet metal of same material, finish, and color as that used for exposed flanges of suspension-system runners.

1. Provide manufacturer's standard edge moldings that fit acoustical panel edge details and suspension systems indicated and that match width and configuration of exposed runners unless otherwise indicated.
2. For lay-in panels with reveal edge details, provide stepped edge molding that forms reveal of same depth and width as that formed between edge of panel and flange at exposed suspension member.

C. Extruded-Aluminum Edge Moldings and Trim: Where indicated, provide manufacturer's extruded-aluminum edge moldings and trim of profile indicated or referenced by manufacturer's designations, including splice plates, corner pieces, and attachment and other clips, complying with seismic design requirements and the following:

1. Baked-Enamel or Powder-Coat Finish: Minimum dry film thickness of 1.5 mils. Comply with ASTM C 635/C 635M and coating manufacturer's written instructions for cleaning, conversion coating, and applying and baking finish.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, including structural framing to which acoustical panel ceilings attach or abut, with Installer present, for compliance with requirements specified in this and other Sections that affect ceiling installation and anchorage and with requirements for installation tolerances and other conditions affecting performance of acoustical panel ceilings.

B. Examine acoustical panels before installation. Reject acoustical panels that are wet, moisture damaged, or mold damaged.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Measure each ceiling area and establish layout of acoustical panels to balance border widths at opposite edges of each ceiling. Avoid using less-than-half-width panels at borders, and comply with layout shown on reflected ceiling plans.

B. Layout openings for penetrations centered on the penetrating items.

3.3 INSTALLATION

A. Install acoustical panel ceilings according to ASTM C 636/C 636M and manufacturer's written instructions.

1. Fire-Rated Assembly: Install fire-rated ceiling systems according to tested fire-rated design.

B. Suspend ceiling hangers from building's structural members and as follows:

1. Install hangers plumb and free from contact with insulation or other objects within ceiling plenum that are not part of supporting structure or of ceiling suspension system.
2. Splay hangers only where required and, if permitted with fire-resistance-rated ceilings, to miss obstructions; offset resulting horizontal forces by bracing, countersplaying, or other equally effective means.
3. Where width of ducts and other construction within ceiling plenum produces hanger spacings that interfere with location of hangers at spacings required to support standard suspension-system members, install supplemental suspension members and hangers in form of trapezes or equivalent devices.
4. Secure wire hangers to ceiling-suspension members and to supports above with a minimum of three tight turns. Connect hangers directly either to structures or to inserts, eye screws, or other devices that are secure and appropriate for substrate and that will not deteriorate or otherwise fail due to age, corrosion, or elevated temperatures.
5. Secure flat, angle, channel, and rod hangers to structure, including intermediate framing members, by attaching to inserts, eye screws, or other devices that are secure and appropriate for both the structure to which hangers are attached and the type of hanger involved. Install hangers in a manner that will not cause them to deteriorate or fail due to age, corrosion, or elevated temperatures.
6. Do not support ceilings directly from permanent metal forms or floor deck. Fasten hangers to cast-in-place hanger inserts, postinstalled mechanical or adhesive anchors, or power-actuated fasteners that extend through forms into concrete.
7. When steel framing does not permit installation of hanger wires at spacing required, install carrying channels or other supplemental support for attachment of hanger wires.
8. Do not attach hangers to steel deck tabs.
9. Do not attach hangers to steel roof deck. Attach hangers to structural members.
10. Space hangers not more than 48 inches o.c. along each member supported directly from hangers unless otherwise indicated; provide hangers not more than 8 inches from ends of each member.
11. Size supplemental suspension members and hangers to support ceiling loads within performance limits established by referenced standards and publications.

C. Secure bracing wires to ceiling suspension members and to supports with a minimum of four tight turns. Suspend bracing from building's structural members as required for hangers, without attaching to permanent metal forms, steel deck, or steel deck tabs. Fasten bracing wires into concrete with cast-in-place or postinstalled anchors.

D. Install edge moldings and trim of type indicated at perimeter of acoustical ceiling area and where necessary to conceal edges of acoustical panels.

1. Screw attach moldings to substrate at intervals not more than 16 inches o.c. and not more than 3 inches from ends, leveling with ceiling suspension system to a tolerance of 1/8 inch in 12 feet. Miter corners accurately and connect securely.
2. Do not use exposed fasteners, including pop rivets, on moldings and trim unless approved by Architect.

E. Install suspension-system runners so they are square and securely interlocked with one another. Remove and replace dented, bent, or kinked members.

F. Install acoustical panels with undamaged edges and fit accurately into suspension-system runners and edge moldings. Scribe and cut panels at borders and penetrations to provide a neat, precise fit.

1. Arrange directionally patterned acoustical panels as follows:

a. As indicated on reflected ceiling plans.

2. For square-edged panels, install panels with edges fully hidden from view by flanges of suspension-system runners and moldings.
3. For reveal-edged panels on suspension-system runners, install panels with bottom of reveal in firm contact with top surface of runner flanges.
4. Paint cut edges of panel remaining exposed after installation; match color of exposed panel surfaces using coating recommended in writing for this purpose by acoustical panel manufacturer.
5. Install hold-down and impact clips in areas indicated; space according to panel manufacturer's written instructions unless otherwise indicated.
   a. Hold-Down Clips: Space 24 inches o.c. on all cross runners.

6. Protect lighting fixtures and air ducts to comply with requirements indicated for fire-resistance-rated assembly.

3.4 CLEANING

A. Clean exposed surfaces of acoustical panel ceilings, including trim, edge moldings, and suspension-system members. Comply with manufacturer's written instructions for cleaning and touchup of minor finish damage.

B. Remove and replace ceiling components that cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.

END OF SECTION

SECTION 123216

MANUFACTURED PLASTIC-LAMINATE-FACED CASEWORK

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 plastic-laminate-faced cabinets of stock design.

1.3 DEFINITIONS

A. Definitions in the AWI's, AWMAC's, and WI's "Architectural Woodwork Standards" apply to the work of this Section.

1.4 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

B. Keying Conference: Conduct conference at Project site. Incorporate keying conference decisions into final keying requirements.

1.5 COORDINATION

A. Coordinate sizes and locations of framing, blocking, furring, reinforcements, and other related units of Work specified in other Sections to ensure that casework can be supported and installed as indicated.

1.6 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work. Show fabrication details, including types and locations of hardware. Show installation details, including field joints and filler panels. Indicate manufacturer's catalog numbers for casework.

C. Keying Schedule: Include schematic keying diagram and index each key set to unique designations that are coordinated with the Contract Documents.

D. Samples for Initial Selection: For cabinet finishes.

E. Samples for Verification: 8-by-10-inchSamples for each type of finish.

1.7 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Installer.

B. Quality Standard Compliance Certificates: AWI Quality Certification Program certificates.

C. Sample Warranty: For special warranty.

1.8 QUALITY ASSURANCE

A. Installer Qualifications: An authorized representative who is trained and approved by manufacturer for installation of units required for this Project and who is a certified participant in AWI's Quality Certification Program.

1.9 DELIVERY, STORAGE, AND HANDLING

A. Deliver casework only after painting, utility roughing-in, and similar operations that could damage, soil, or deteriorate casework have been completed in installation areas. If casework must be stored in other than installation areas, store only in areas where environmental conditions meet requirements specified in "Project Conditions" Article.

B. Keep finished surfaces covered with polyethylene film or other protective covering during handling and installation.

1.10 FIELD CONDITIONS

A. Environmental Limitations: Do not deliver or install casework until building is enclosed, wet work is complete, and HVAC system is operating and maintaining temperature and relative humidity at occupancy levels during the remainder of the construction period. Maintain temperature and relative humidity during the remainder of the construction period in range recommended for Project location by the AWI's, AWMAC's, and WI's "Architectural Woodwork Standards."

B. Established Dimensions: Where casework is indicated to fit to other construction, establish dimensions for areas where woodwork is to fit. Provide allowance for trimming at site, and coordinate construction to ensure that actual dimensions correspond to established dimensions.

C. Locate concealed framing, blocking, and reinforcements that support casework by field measurements before being enclosed, and indicate measurements on Shop Drawings.

1.11 WARRANTY

A. Special Warranty: Manufacturer agrees to repair or replace components of casework that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, the following:

a. Delamination of components or other failures of glue bond.
b. Warping of components.
c. Failure of operating hardware.

2. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Basis of Design Product: Subject to compliance with requirements, provide products manufactured by TMI Systems Design Corp., or comparable product by one of the following:

1. Advanced Cabinet Systems (ACS).
2. Case Systems.
3. Stevens Industries, Inc.

B. Source Limitations: Obtain plastic-laminate-faced cabinets from single manufacturer.

2.2 CASEWORK, GENERAL

A. Quality Standard: Unless otherwise indicated, comply with the AWI's, AWMAC's, and WI's "Architectural Woodwork Standards" for grades of casework indicated for construction, finishes, installation, and other requirements.

1. Grade: Custom.
2. Provide labels and certificates from AWI certification program indicating that casework, including installation, complies with requirements of grades specified.

B. Product Designations: Drawings indicate configurations of manufactured plastic-laminate-faced cabinets by referencing designations of Casework Design Series numbering system in Appendix A of the AWI's, AWMAC's, and WI's "Architectural Woodwork Standards."

2.3 CASEWORK

A. Design:

1. Flush overlay.

B. Grain Direction for Wood Grain Plastic Laminate:

1. Vertical on both doors and drawer fronts, with continuous vertical matching.
2. Lengthwise on face frame members.
3. Vertical on end panels.
4. Side to side on bottoms and tops of units.
5. Vertical on knee-space panels.
6. Horizontal on aprons.

C. Exposed Materials:

1. Plastic Laminate: Grade HGS.

a. Colors and Patterns: Refer to Section 090600.

2. Unless otherwise indicated, provide specified edge banding on all exposed edges.

D. Semiexposed Materials:

1. Plastic Laminate: Grade HGS unless otherwise indicated. Provide plastic laminate for semiexposed surfaces unless otherwise indicated.

a. Provide plastic laminate of same grade as exposed surfaces for interior faces of doors and drawer fronts and other locations where opposite side of component is exposed.

2. Unless otherwise indicated, provide specified edgebanding on all semiexposed edges.

E. Concealed Materials:

1. Plastic Laminate: Grade BKL.
2. Particleboard.

2.4 MATERIALS

A. Particleboard: ANSI A208.1, Grade M-2.

B. Plastic Laminate: High-pressure decorative laminate complying with NEMA LD 3.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

a. Wilsonart International.

C. Edgebanding for Plastic Laminate: Rigid PVC extrusions, through color with satin finish, 0.12 inch (3 mm) thick at doors, drawer fronts, and shelving in open cabinets; 0.018 inch (0.46 mm) thick elsewhere.

D. Thermoset Decorative Panels: Particleboard finished with thermally fused, melamine-impregnated decorative paper and complying with requirements of NEMA LD 3, Grade VGL, for Test Methods 3.3, 3.4, 3.6, 3.8, and 3.10.

E. Edgebanding for Thermoset Decorative Panels: PVC or polyester edgebanding matching thermoset decorative panels.

2.5 COLORS AND FINISHES

A. Thermoset Decorative Panel Colors, Patterns, and Finishes: As selected by Architect from casework manufacturer's standard selections.

B. Plastic-Laminate Colors, Patterns, and Finishes: Refer to Section 090600.

C. PVC Edgebanding Color: Refer to Section 090600.

2.6 FABRICATION

A. Plastic-Laminate-Faced Cabinet Construction: As required by referenced quality standard, but not less than the following:

1. Bottoms and Ends of Cabinets, and Tops of Wall Cabinets and Tall Cabinets: 3/4-inch particleboard.
2. Shelves:

    a. Behind Doors:

        1) Shelves up to 27 inches wide shall be 3/4-inch thick
        2) Shelving over 27 inches wide shall be 1-inch thick.

    b. Thickness at all widths of open cabinets to be 1-inch.
    c. Shelves over 36 inches wide shall receive two, 1-1/2-inch furring channel stiffeners to support shelves.
    d. Tall Cabinets: 36 inches wide and wider shall have 1 fixed shelf at mid-height of cabinet.

3. Backs of Cabinets: 1/2-inch-thick particleboard dadoed into sides, bottoms, and tops where not exposed.
4. Detached Toe Kick/Support Rail: Continuous ladder-type support rail, constructed of 3/4-inch-thick by 4 inches high, unfinished plywood. Toe kick to be inset 4 inches from front of cabinet.
5. Drawer Fronts: 3/4-inch particleboard.
6. Drawer Slide System:

    a. Basis of Design Product: Subject to compliance with requirements, provide the following:

        1) Grass America; Zargen Drawer System.

7. Doors: 3/4-inch-thick, with particleboard cores.

B. Filler Strips: Provide as needed to close spaces between cabinets and walls, ceilings, and indicated equipment. Fabricate from same material and with same finish as cabinets.

C. The following performance details are Project requirements and must be met by casework manufacturer. Deviations will not be allowed.

1. Lamination System: Doors, finished end panels, and other decorative exterior laminate surfaces shall be composed of minimum 3/4-inch core, laminated exterior with 0.030-inch high pressure plastic laminate, and interior with 0.020-inch high pressure cabinet liner. Lamination with hybrid P.V.A. Type III water-resistant adhesives. Total thickness 13/16-inch. No exceptions.
2. Structural Cabinet Body: Cabinet backs shall be minimum 1/4-inch thick, inset from rear of body, fully housed four sides, and back-shimmed. Provide 3/4-inch thick stiffeners glued and fastened to back/body as specified herein. Back perimeter and stiffeners to be fully sealed with hot melt adhesive.
3. Interior Space: All cabinets shall have clear span interiors. No vertical dividers allowed, unless by specified architectural design.
4. Heavy Components: Wall cabinet tops and bottoms, and all book stack shelves shall be minimum 1-inch thick, for additional load support. Shelves in door cabinets 27 inches wide and over shall be 1-inch thick. Shelves in open cabinets, regardless of width, shall be 1-inch thick.
5. Structural Drawer Body: Drawer body shall be 1/2-inch thick minimum with bottom recessed, captured all four sides and sealed with hot melt adhesive. Provide under body stiffener as specified herein.

6. Cabinet Base: Cabinet sub base shall be one of the following: a. Separate and continuous ladder-type platform design leveled and floor mounted prior to cabinet body placement. Material to be exterior grade plywood.

    a. Cabinet sides with continuous 3/4-inch exterior grade plywood toe-kick fascia panel.
    b. Non-aligning fronts will not be acceptable.

2.7 CASEWORK HARDWARE AND ACCESSORIES

A. Hardware, General: Unless otherwise indicated, provide manufacturer's standard satin-finish, commercial-quality, heavy-duty hardware.

    1. Use threaded metal or plastic inserts with machine screws for fastening to particleboard except where hardware is through-bolted from back side.

B. Butt Hinges: Powder-coated, semiconcealed, five-knuckle hinges complying with BHMA A156.9, Grade 1, with antifriction bearings and rounded tips. Provide two hinges for doors less than 48 inches high, and provide three hinges for doors more than 48 inches high.

C. Pulls: Satin-nickel finished, steel wire pulls, fastened from back with two screws. For sliding doors, provide recessed flush pulls. Provide two pulls for drawers more than 24 inches wide.

D. Door Catches: Nylon-roller spring catch. Provide two catches on doors more than 48 inches high.

E. Drawer Slides: BHMA A156.9, Type B05091.

    1. Standard Duty (Grades 1, 2, and 3): Side mounted and extending under bottom edge of drawer; partial-extension type; epoxy-coated steel with polymer rollers.
    2. Heavy Duty (Grade 1HD-100): Side mounted; full-extension type; zinc-plated, steel ball-bearing slides.

F. Drawer and Hinged Door Locks: Cylindrical (cam) type with chrome-plated finish, and complying with BHMA A156.11.

    1. All casework doors and drawers to receive locks.
    2. Provide a minimum of two keys per room and six master keys.
    3. Keying: Key all locks in a single room alike. Each room shall be keyed differently. Entire building shall be master keyed. Provide and set up key cabinet.

G. Adjustable Shelf Supports: Two-pin locking plastic shelf rests complying with BHMA A156.9, Type B04013.

H. Coat Hooks: Double.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas, with Installer present, for compliance with requirements for installation tolerances, location of framing and reinforcements, and other conditions affecting performance of the Work.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 CASEWORK INSTALLATION

A. Grade: Install cabinets to comply with same grade as item to be installed.

B. Install casework level, plumb, and true; shim as required, using concealed shims. Where casework abuts other finished work, apply filler strips and scribe for accurate fit, with fasteners concealed where practical.

C. Base Cabinets: Set cabinets straight, level, and plumb. Adjust subtops within 1/16 inch of a single plane. Align similar adjoining doors and drawers to a tolerance of 1/16 inch. Bolt adjacent cabinets together with joints flush, tight, and uniform.

D. Wall Cabinets: Hang cabinets straight, level, and plumb. Adjust fronts and bottoms within 1/16 inch of a single plane. Fasten to hanging strips, masonry, framing, wood blocking, or reinforcements in walls and partitions. Align similar adjoining doors to a tolerance of 1/16 inch.

E. Fasten cabinets to adjacent cabinets and to masonry, framing, wood blocking, or reinforcements in walls and partitions to comply with the AWI's, AWMAC's, and WI's "Architectural Woodwork Standards."

F. Install hardware uniformly and precisely. Set hinges snug and flat in mortises unless otherwise indicated. Adjust and align hardware so moving parts operate freely and contact points meet accurately. Allow for final adjustment after installation.

G. Adjust casework and hardware so doors and drawers operate smoothly without warp or bind. Lubricate operating hardware as recommended by manufacturer.

3.3 CLEANING

A. Repair or remove and replace defective work as directed on completion of installation.

B. Clean finished surfaces, touch up as required, and remove or refinish damaged or soiled areas to match original factory finish, as approved by Architect.

END OF SECTION

SECTION 230861-AIR PURIFICATION SYSTEM

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. The general provisions of the contract, including the conditions of the contract (General, Supplementary and other Conditions, if any) and Division 1 as appropriate, apply to the work specified in this section.

B. Refer to Section 230200 for HVAC General Provisions.

C. Refer to Section 230210 for HVAC Basic Materials & Methods.

1.2 DESCRIPTION OF WORK

A. This Section describes the design, performance and installation of an air purification system intended for use as part of another manufacturer's air handling unit as shown on the plans, details and equipment schedules.

B. This Section includes work necessary and/or required and materials and equipment for construction of a complete system.

1.3 REFERENCED STANDARDS

A. Refer to Section 230200 for a general description of requirements applying to this section.

B. The following codes and standards are referenced through out. The edition to be used is that currently enforced by the authority having jurisdiction (AHJ) or in absence of such direction that referenced by the current enforceable IBC code or as indicated by the contract documents, except where specifically referenced by this section of the specifications.

1. ASHRAE Standards 62 & 52
2. National Electric Code NFPA 70
3. UL 867-2007 including ozone chamber test required as of December 21, 2007
4. UL 2998 Environment – No Ozone Certification
5. The cold plasma equipment and power supply shall be UL listed.
6. The technology shall have been tested to DO-160 by an independent lab and successfully passed all requirements for shock, vibration, EMF and line noise. Manufacturers not tested to DO-160 shall not be acceptable. DO-160 is normally used to test devices in aviation applications, but this standard is applicable to confirm EMF and line noise in HVAC applications.

1.4 QUALITY ASSURANCE

A. Refer to Section 230210 for a general description of requirements applying to this Section.

B. Basis of design is Global Plasma Solutions. The Air Purification System shall be a product of an established manufacturer within the USA. Direct Current (DC) Ion modules manufactured outside the USA and assembled in the USA on mounting plates or formed channels shall not be acceptable.

C. A qualified representative from the manufacturer shall be available to inspect the installation of the air purification system to ensure installation in accordance with manufacturer's recommendation.

D. Technologies that do not address gas disassociation such as UV Lights, Powered Particulate Filters and/or polarized media filters shall not be considered. Uni-polar ion generators shall not be acceptable. "Plasma" particulate filters shall not be acceptable. Any system containing titanium

dioxide (Ti02), which has been listed by the CDC as a known carcinogen, shall not be acceptable.

E. Projects designed using ASHRAE Standard 62, IAQ Procedure shall require the manufacturer to provide Indoor Air Quality calculations using the formulas within ASHRAE Standard 62.1-2007 to validate acceptable indoor air quality at the quantity of outside air scheduled with the technology submitted. The manufacturer shall provide independent test data on a previous installation performed within the last two years and in a similar application, that proves compliance to ASHRAE 62 and the accuracy of the calculations. The data shall be based on the manufacturer's use of the same make and model number as the equipment submitted on this project.

F. The Air Purification Technology shall have been tested by UL to prove conformance to UL 867-2007 including the ozone chamber testing and peak ozone test for electronic devices. Manufacturers that achieved UL 867 prior to December 21, 2007 and have not been tested in accordance with the newest UL 867 standard with the ozone amendment shall not be acceptable. All manufacturers requesting prior approval shall submit their independent UL 867 test data with ozone results to the engineer for preliminary review and during the submittal process. All manufacturers shall submit a copy with their quotation. Contractors shall not accept any proposal without the proper ozone testing documentation.

G. The maximum allowable ozone concentration per the UL 867-2007 chamber test shall be 0.001 PPM. The maximum peak ozone concentration per the UL 867-2007 peak test as measured 2 inches away from the electronic air cleaner's output shall be no more than 0.001 PPM. Manufacturers with ozone output exceeding these ozone values shall not be acceptable.

H. All manufacturers shall have their product tested to UL 2998 Environmental Standard for confirmation of no ozone with certificate available. The final report shall indicate the ozone levels and high voltage output the device's electrode(s) were operating during the test. Reports that do not include high voltage output during the UL 2998 testing shall not be acceptable.

1.5 SUBMITTALS

A. Submit shop drawings in accordance with Section 230200.

B. Product Data: Submit manufacturer's technical product data for ion generators including:

1. Schedule of plasma generators indicating unit designation, number of each type required for each unit/application.

2. Data sheet for each type of plasma generator, and accessory furnished; indicating construction, sizes, and mounting details.

3. Performance data for each type of plasma device furnished.

4. Indoor Air Quality calculations using the formulas within ASHRAE Standard 62.1-2007 to validate acceptable indoor air quality at the quantity of outside air Scheduled (when projects are designed with outside air reduction).

5. Product drawings detailing all physical, electrical and control requirements.

6. Copy of UL 867 independent ozone test.

7. Copy of UL 2998 conformance certificate.

8. Statement on the manufacturer's letterhead stating that the technology contains no titanium dioxide (Ti02).

9. Job-specific, factory wiring diagrams and instructions for field installation of all components.

1.6 SUBSTITUTIONS

A. The listed equivalent or substituted manufacturers along with the bidding related contractor shall be completely responsible to comply with all requirements on all contract documents. This shall include, but not limited to, space requirements, code clearances, the type, horsepower, capacities, number and size of services required from other trades, including all required ancillary items provided by other trades. If the manufacturer or related bidding contractor does not comply with these requirements, this Contractor shall be responsible for any and all additional costs associated with the changes required by other trades.

1.7 WARRANTY

A. Equipment shall be warranted by the manufacturer against defects in material and workmanship for a period of eighteen months after shipment or twelve months from owner acceptance, whichever occurs first. Labor to replace equipment under warranty shall be provided by the owner or installing contractor.

PART 2 – PRODUCTS

2.1 AIR PURIFCATION SYSTEM

A. GENERAL: The air purification system(s) shall be of the size, type, arrangement and capacity indicated and required by the unit furnished and shall be of the manufacturer specified.

B. Each air handling unit, so designated on the drawings, details, equipment schedules and/or specifications shall contain a Plasma Generator with Bi-polar Ionization output as described herein.

C. The Bi-polar Ionization system shall be capable of:

1. Effectively killing microorganisms downstream of the bi-polar ionization equipment (mold, bacteria, virus, etc.).

2. Controlling gas phase contaminants generated from human occupants, building structure, furnishings and outside air contaminants.

3. Capable of reducing static space charges.

4. Effectively reducing space particle counts.

5. All manufacturers shall provide documentation by an independent NELEC accredited laboratory that proves the product has minimum kill rates for the following pathogens given the allotted time and in a space condition:

   a. MRSA - >96% in 30 minutes or less
   b. E.coli - > 99% in 15 minutes or less
   c. TB - > 69% in 60 minutes or less
   d. C. diff - >86% in 30 minutes or less
   e. Noro Virus -> 93.5% in 30 minutes or less
   f. Legionella -> 99.7% in 30 minutes or less

   Manufacturers not providing the equivalent space kill rates shall not be acceptable. All manufactures requesting prior approval shall provide to the engineer independent test data from a NELAC accredited independent lab confirming kill rates and time meeting the minimum requirements stated. Products tested only on Petri dishes to prove kill rates shall not be acceptable. Products being sold under different trade names than those tested shall not be acceptable.

6. Capable of modular field assembly in 6-inch sections.

D. The bi-polar ionization system shall operate in a manner such that equal amounts of positive and negative ions are produced. Uni-polar ion devices shall not be acceptable. Ionizers with positive and negative output (DC type) shall not be acceptable. All ionizers provided shall be AC type ionizers with one electrode pulsing between positive and negative.

1. Air exchange rates may vary through the full operating range of a constant volume or VAV system. The quantity of air exchange shall not be increased due to requirements of the air purification system.

2. Velocity Profile: The air purification device shall not have maximum velocity profile.

E. Humidity: Plasma Generators shall not require preheat protection when the relative humidity of the entering air exceeds 85%. Relative humidity from 0 - 100%, condensing, shall not cause damage, deterioration or dangerous conditions within the air purification system. Air purification system shall be capable of wash down duty.

F. Equipment Requirements:

1. Electrode Specifications (Bi-polar Ionization):

a. Each alternating current (AC) Ionization Bar with Bi-polar Ionization output shall include a minimum of eighteen carbon fiber cluster ion needles per foot of coil face width shall be provided. The entire cooling coil width shall have equal distribution of ionization across the face. Systems without ion needles at least 0.50” apart shall not be acceptable. The plasma electrode shall require no more than 1.0” in the direction of airflow for mounting. All hardware required for mounting shall be provided by the air purification manufacturer except self-tapping screws for the power supply. Bi-polar ionization tubes manufactured of glass and steel mesh shall not be acceptable due to replacement requirements, maintenance, and performance output reduction over time, ozone production and corrosion.

b. Electrodes shall be provided in 6-inch increments, epoxy filled for an IP55 rating and utilizing brass connection hardware that is recessed into the connection joint once fully engaged and assembled.

c. Electrodes shall be energized when the main unit disconnect is turned on.

d. The ionization output shall be a minimum of 60 million ions/cc per inch of cooling coil width as measured 1 inch from the cold plasma needles.

e. Ionization bars shall be provided with magnet mounting kits to prevent penetration into cooling coils.

f. Ionization bars shall be constructed of UL 94VO and UL746C composite material.

G. Air Handler Mounted Units: Where so indicated on the plans and/or schedules. Mount the Plasma Generator and wire it to the remote mount power supply using the cables provided by the air purification manufacturer. A 24VAC, 115VAC or 208-230VAC circuit shall be provided to the plasma generator power supply panel. No more than 15 watts shall be required per power supply. Each power supply shall be capable of powering up to 6 ionization bars or a total of 100 linear feet of bar. Each plasma generator shall be designed with powder coated metal casing, liquid tight flexible conduit and a high voltage quick connector.

H. Plasma Requirements: Plasma Generators with Bi-polar ionization output shall be capable of controlling gas phase contaminants and shall be provided.

1. The Bi-polar ionization system shall consist of Bi-Polar Plasma Generator and power supply. The Bi-polar system shall be installed where indicated on the plans or specified to be installed. The device shall be capable of being powered by 24VAC, 115VAC or 208-230VAC without the use of an external transformer. Ionization systems requiring isolation transformers shall not be acceptable.

2. Ionization Output: The ionization output shall be controlled such that an equal number of positive and negative ions are produced (AC Ionizers only are acceptable). Imbalanced levels shall not be acceptable.

3. Ionization output from each bar shall be a minimum of 60 million ions/cc per inch of bar when tested at 1" from the ionization bar. Bars with needles spaced further apart than 0.5" shall not be acceptable.

4. Each plasma electrode shall be made from an all composite, UL 94V0 and UL 746C rated material for prevention of corrosion and electrical insulation.

5. Ozone Generation: The operation of the electrodes or Bi-polar ionization units shall conform to UL 2998 as tested by UL proving no ozone output.

I. Electrical Requirements:

1. Wiring, conduit and junction boxes shall be installed within housing plenums in accordance with NEC NFPA 70. Plasma Generator shall accept an electrical service of 24VAC or 115 VAC, 1 phase, 60 Hz. Coordinate all electrical requirements with air purification manufacturer's submittals.

J. Control Requirements:

1. All Plasma Generators shall have internal short circuit protection, overload protection, and automatic fault reset. Systems requiring fuses shall not be acceptable.

2. The Plasma Generator power supply shall have internal circuitry to sense the ionization output and provide dry contact alarm status to the BMS as well as a local "Plasma On" indication light.

3. The ionization system shall be provided with a stand-alone, independent ion sensor designed for plenum mounting to the ionization bar to monitor the ion output and report to the BAS system that the ion device is working properly. Ion systems provided without an independent ion sensor, shall not be permitted. The control voltage to power the ion sensor shall be 24VAC to 260VAC and draw no more than 150mA of current. The sensor shall provide at minimum, dry contact status to the BAS and optionally a BacNet or Lonworks interface as specified on the control drawings. Manufacturers not providing a stand-alone ion sensor shall not be acceptable.

4. Mount and wire the Plasma device within the air handling unit specified or as shown or the drawings. The contractor shall follow all manufacturer IOM instructions during installation.

5. A fiberglass NEMA 4X panel with Plasma On/Off Indicator Light (interfaced with stand-alone ionization detector), Ionization Output On/Off Indicator Light and an On/Off Illuminated Switch shall be provided to house the power supply, as noted on the schedule.

K. Manufacturers: Global Plasma Solutions, American Ion, Active Air Solutions.

1. Any listed equivalent manufacturer and the Mechanical Contractor shall be completely responsible to comply with all requirements on the contract documents. This shall include, but not be limited to, space requirements, code clearances, the type, horsepower, capacities, number and size of services required from other trades.

PART 3 – EXECUTION

3.1 GENERAL

A. The Contractor shall be responsible for maintaining all air systems until the owner accepts the building.

3.2 ASSEMBLY: PLASMA GENERATOR

A. All equipment shall be assembled and installed in a workmanlike manner to the satisfaction of the manufacturer’s authorized representative.

B. Any material damaged by handling, water or moisture shall be replaced, at no cost to the owner.

C. All equipment shall be protected from dust and damage on a daily basis throughout construction.

3.3 TESTING

A. Provide the manufacturers recommended electrical tests.

3.4 START-UP & TRAINING

A. A manufacturer's local authorized representative shall provide installation, start-up supervision, and training of owner's personnel in the proper operation and maintenance of all equipment.

END OF SECTION 230861

SECTION 260740 – NETWORK CABLING SYSTEMS

PART 1 – GENERAL

1.1 GENERAL PROVISIONS

A. Refer to other sections for General Requirements, etc., which shall apply to the work specified in this section. The following specifications for network cabling are based on the Communications Cabling Construction Standards generated and implemented for all State of Delaware schools and was developed by the State of Delaware, Center for Educational Technology (DCET).

B. The following names shall be the only hardware and cable manufacturer's considered for this project at this time:

1. Hardware

   a. Ortronics, Inc.
   b. Hubbell Premise Wiring Channel Solutions
   c. Systimax Solutions
   d. Siemon
   e. Leviton NextLAN
   f. Panduit

2. Wire and Cable

Indoor	Outdoor
a. Berk-Tek	a. Superior Essex
b. Mohawk/CDT	

C. In general, the network sub-contractor will furnish, install and test all cabling and terminations herein specified for distribution of the station/field wiring.

D. It shall be the responsibility of this Contractor to obtain the 3/05 State Standards and Specifications. This document shall be a guideline for installation and basis for estimating.

E. The Electrical Contractor shall utilize one of the approved State of Delaware installing contractors as indicated on the State list. The contractors are approved for furnishing, installation and testing of the entire network. The contractor must be certified and authorized for the installation of premises cabling system and shall assume responsibility for certifying the installation and providing a warranty for a period of no less than 25 years.

1.2 SCOPE

A. Perform all work necessary and/or required and furnish all materials and equipment for a complete network cabling system as described herein.

B. The data communications system shall be installed, consisting of the following components:

1. Optical fiber network backbone
2. Twisted pair copper work station cabling
3. Work station outlets
4. Cable support system

The MDF shall be connected to each IDF via a single, twelve- strand, composite, optical fiber cable. Each classroom and office data outlet shall be connected to its respective IDF via a four twisted-pair, Cat 6 data cables.

C. The hardware shall include equipment racks, patch panels, station outlets, Cat 6 data cables, optical fiber cables, all required terminations and labeling to provide for a complete data distribution system.

D. In general, one or more data outlets shall be provided for each computer station in classrooms, library and in offices where indicated on floor plans. The teacher's station outlet located in each classroom shall have data/Voip, and audio cable connections.

1.3 SUBMITTALS

A. Furnish shop drawings and descriptive data, complete with project designations for the following:

1. Equipment Racks
2. Patch Panels
3. Station Outlets
4. Cat 6 Data/Voip Cables
5. Optical Fiber Cables – 50/125 Micron
6. Cable Support System
7. Wire Management Materials
8. Video cables as indicated in schedule on drawing.

1.4 DOCUMENTATION

A. The contractor shall provide a complete system walk-through, by suitably qualified personnel, to personnel designated by the owner, to instruct them on the installed system's location, operation and maintenance.

B. Prior to assembly and installation, the contractor shall submit the following, on reproducible media, to the engineer for review

1. Final schematic drawings of all circuitry, including outlet conductor assignments and all component callouts.

2. Equipment modifications drawings.

3. Front mechanical drawings of each equipment rack.

C. At the completion of the installation, the contractor shall provide one (1) copy of each of the following:

1. Equipment manufacturer's operation and maintenance manuals for each piece of equipment.

2. "As-built" drawings for all equipment installed.

3. "As-built" drawings on contract blueprints of all wire, cable and conduit placement throughout the building.

4. "From-To" listing of in-building wiring and outlets, listing color coding scheme and conductor assignments.

PART 2 – PRODUCTS

2.1 DATA OUTLETS

A. The jacks used for the data outlets shall be of the modular snap-in type.. A modular 110 PCB RJ-45 telephone jack (45* angle) will be used for all voice grade cable terminations. A modular 110 PCB RJ-45 data jack (45* angle) will be used for all Cat 6 data grade cable terminations. A single flush "F" connector module will be used for all coax video cable terminations. A dual SC module

(45* angle) will be used for all fiber optic cable terminations. All modular jacks will be mounted in a single or double gang faceplate based on the number of services required at that station. All RJ-45 jacks shall have dust covers installed.

The jack color code and lettering scheme is as follows:

1.	Telephone Jack	Cat 6 voice grade cable	red tab – Voice
2.	Data Jack	Cat 6 data grade cable	blue tab – Data

2.2 MDF and IDF EQUIPMENT RACKS

A. The MDF and each IDF shall contain a minimum of one (1) 23.75” wide x 7’-0” high equipment rack to mount the data electronics and patch panels onto. The equipment racks shall have 77.75” of rack mounting space on 19” wide rails.

B. The free-standing equipment racks shall be steel, grounded and bolted to each other and to the slab. All racks shall include rack top cable tray, cable management equipment and a 120-volt power strip.

C. Provide one (1) server rack in MDF Room. Rack to be 4 post frame with steel rails, 44 rack units, 6” to 32” adjustable mounting rails. Black in color. Unit to be similar to Ortronics Mighty Mo 4-Mation Model No. OR-60400224 or approved equal.

2.3 HORIZONTAL DISTRIBUTION SYSTEM

A. Horizontal Cable Specifications:

Indoor:
1. Plenum, 4 pair, 24 awg, Category 6 data cable (blue jacket).
2. Plenum, 4 pair, 24 awg, Category 6 voice cable (gray jacket).
3. Plenum, 12 strand, tight buffer, FDDI Multimode 50/125 micron fiber optic cable.

Outdoor
1. Four (4) pair, 23 AWG, Category 6 Data Cable (black jacket) shielded, weatherproof, Superior Essex #BBDG6.

2. Twelve (12) strand, 50/125 micron, tight buffer fiber optic cable, weatherproof, plenum Superior Essex.

3. Fifty (50) pair, 22 AWG, twisted pair, copper, dual shielded weatherproof, Superior Essex PE-39.

B. Cable Support Systems:

1. Cable support system shall be a hanger and plastic mesh system designed to support Video cables, telephone cables and high performance data cables. Caddy Cat. No. CatTrax Series or approved equal.

2. Cable Tray shall be a 12” wide aluminum tray with a 4” load depth and 6” rung spacing. Tray shall be complete with all mounting hardware required. B-Line Systems, Inc. Cat. No. 25A06-12-144 or approved equal.

2.4 CABLE TERMINATIONS

A. All classroom data outlet jacks shall be wired with Cat 6 data cable using the TIA/EIA-568-B standards. In the IDF and MDF rooms the data contractor shall furnish and install rack mounted patch panels, the number of patch panels and number of required ports shall be based on the number of classroom data outlets being terminated. On the rear of these patch panels the data

contractor shall terminate each Cat 6 cable from the each classroom data outlet. Each port shall be labeled as to room and data outlet served.

B. All office, work and conference room data jacks shall be wired with Cat 6 data cable using the TIA/EIA-568-B standards. In the MDF/IDF room the data contractor shall furnish and install rack mounted patch panels, the number of patch panels and number of required ports shall be based on the number of data outlets being terminated. On the rear of these patch panels the data contractor shall terminate each Cat 6 data cable from the administration area. Each port shall be labeled as to room and data outlet served.

C. In the MDF/IDF room the data contractor shall furnish and install one (1) rack mount interconnect center, with required adapter plates on the MDF rack. The data contractor shall terminate each twelve (12) strand fiber optic cable from each classroom IDF rack and using duplex SC adapters.

PART 3 – EXECUTION

3.1 INSTALLATION PRACTICES

A. Installation shall include delivery, unloading, setting in place, fastening to walls, floors, ceilings, or other structures where required, interconnecting wiring of system components, equipment alignment and adjustment, and all other related work whether or not expressly defined herein. Installation shall be performed in accordance with applicable standards, codes, requirements and recommendations of National, State, and Local authorities having jurisdiction, and the N.E.C. (National Electrical Code).

B. All boxes, equipment, etc., shall be installed plumb and square, and firmly secured in place.

C. Conduit sleeves shall be installed from the station outlet to within 12” of the cable support system. These sleeves shall be the responsibility of the data contractor and are required to accommodate both the data and communication wiring. After completion of the data and communication wiring the data contractor shall fire seal all sleeves with a UL approved fire stop in accordance with the NFPA (National Fire Protection Agency).

D. All sleeves shall be EMT conduit installed with plastic conduit bushings to protect data and communication wiring from damage.

E. In all cases, the Fiber Optic, Cat 6 data, and all communication cables shall be installed above the ceiling structure in the cable support system. No cable shall be exposed on any ceiling or wall, nor shall any cable lay-on or be in contact with the ceiling structure or it’s support system. The data contractor shall furnish and install large conduit sleeves above non-accessible ceilings where the cable support system must pass through, these sleeves shall be sized to handle both data and communication cabling.

3.2 CABLE INSTALLATION

A. All data cables shall be installed in accordance with manufacturer’s recommended tension and bending specifications. Any lubricants used must be manufacturer guaranteed to be non-destructive to cable sheaths.

B. All data cables shall be permanently marked with a wrap-around vinyl self-laminating printable marker label (Thomas & Betts E-Z-CODE WSL or approved equivalent) at both ends. There shall be no unmarked cables within the system at any location. Labels shall contain the room number, and the location and drop number within the room. All labeling shall be typed onto the label, not handwritten. Label all cable ends and individual jacks. All jacks shall be labeled to provide visibility when viewed behind cabinets and desks. All cables shall be labeled with jack numbers to permit identification in the event of damage to jacks.

C. All data and communication cables shall not be run in close proximity to, in the same bundle, or parallel with power cables, in order to reduce signal contamination.

D. No cable shall be installed with a bend radius less than that recommended by the cable manufacturer.

3.3 FIBER OPTIC CABLE INSTALLATION

A. The fiber optic cable shall be installed in the cable support system and conduit sleeves from MDF to IDF and from IDF to classroom outlets in accordance with cable manufacturer's recommended tension and bending specifications. It will be the responsibility of the data contractor to ensure the quality of the fiber optic cable when received and prior to installation.

B. All fiber optic cable terminations shall be furnished and installed in accordance with termination equipment manufacturer's recommended and required specifications. It will be the responsibility of the data contractor to ensure the quality of the terminations when installation is complete.

3.4 TESTING

A. General Test Procedures: Before an application for final acceptance of the work will be considered, all tests stated within this section shall be satisfactorily completed. The data work shall include miscellaneous tasks, (i.e.. removal of station faceplates) deemed necessary to demonstrate compliance with the requirements of the data specifications, and cable and equipment manufacturer's recommended installation procedures.

B. Upon completion of testing and problem resolution, all connections must be 100% error free: " Error Free" is defined to mean the item meets all the manufacturer's specifications and recommendations as published in their latest manufacturing manuals for proper installation and testing. In addition, the item must conform with all other related industrial practices and standards, Building Trades, and Electrical and Telecommunications Industry Standards and Practices.

C. Copper Cable Test Procedures: Contractor must complete cable system performance verifications on all copper and fiber cable as specified below and provide the test results. Category 6 and fiber optic cables must meet or exceed all manufacturer's and EIA/TIA standards for performance and installation.

1. All copper and fiber optic testing documentation is to be submitted.

2. After the installation is complete, in addition to any other required testing, the data contractor shall at a minimum, conduct and report on the following tests of copper cabling:

a. MDF-to-IDF tests of all new pairs installed under this contract to determine continuity, shorts, crossed pairs, correct pinning and grounds.

b. IDF to information outlet tests of all cable pairs installed under this contract to determine continuity, shorts, crossed pairs, correct pinning and grounds.

c. The Category 6 cabling, serving jacks installed from the IDF closet to the data outlets at the workstations is to be manufacturer verified and warranted for Category 6 compliance. All manufacturer's performance certificates and extended warranties are to be provided upon completion of the testing and manufacturer certification.

d. All Category 6 cabling is to be tested end to end and documented for Category 6 compliance at all frequencies up to and including 100 MHz. Such testing is to comply with procedures and standards outlined by the cable manufacturer and EIA/TIA TSB-67 concerning testing of Category 6 cable plant. A Microtest Pentascanner Level 11 tester with 2 Way Injector is the instrument to be used for such testing to insure that cable pairs

are defect free. “Defect Free” for the copper cable is defined as a copper pair not having any pair reversals, split pairs, shorts or opens. Test results shall be provided to the Engineer within 2 days after testing or 5 days prior to the Owner connecting electronic equipment onto the cable network, whichever is sooner. The data contractor must also provide testing summary reports of all Category 5e cables including run numbers, and pass/fail results with respect to length, impedance, DC resistance, mutual capacitance, attenuation, NEXT loss and active ACR. The data contractor must also provide spread sheet analysis of the linearly dependent parameters of length DC resistance, mutual capacitance and attenuation the field measured values shall be compared to the specifications values on one spread sheet.

e. In the event that a Category 6 cable fails to perform to the manufacturer’s specifications, the data contractor will remove the cable and replace it with a new cable. Replacing the defective cable at no additional expense to the contract.

f. End-to-end testing is required for every RJ-45 connection. “End-to-End” testing is defined here as testing all cable links to the very last termination point.

g. The data contractor shall provide copies of all copper cable test results.

D. Fiber Optic Cable Test Procedures: All fiber optic cables and associated equipment, must be thoroughly tested. The fiber optic cable will be accepted only after each strand is tested in accordance with the specifications defined herein. All strands are to be tested and found to be 100% acceptable.

1. The data contractor shall test all cables, connectors, associated equipment and hardware furnished and installed by the data contractor upon receipt of same as defined herein.

2. The following must be met for the testing of the fiber optic cable: As a minimum the data contractor shall test, as described below, all optical fiber cable strands installed within the scope of this project:

a. Fully test complete links only. Piecemeal testing is not acceptable.

b. Perform end-to-end, bi-directional attenuation (loss) test for each fiber strand at 850nm and 1300nm wavelengths. Conduct tests in accordance with E-526-14, method B and with test instrument manufacturer’s published instructions.

(1) Demonstrate that measured link loss does not exceed the value based on the number of noted connector pairs, the connector’s published loss per mated pair and the cable’s published loss based on distance.

(2) Strands whose measured attenuation falls outside the acceptable range shall be subject to further inspection and testing to determine the nature of the fault.

(3) Horizontal End-to-End testing of individual optical fibers is considered to be from each IDF closet to the data workstation outlet.

c. Faults related to connectorizations shall be corrected and the fiber re-tested as stated above until acceptable attenuation measurements are received.

d. Where defects are to be inherent in the fiber itself, notify the Engineer in writing. Upon obtaining approval by the Engineer, replace any cable having fewer than the manufacturer’s guaranteed number of serviceable fibers.

e. Remove all newly installed defective cables from cable support system. Do not abandon cables in place.

f. All test results and corrective procedures are to be documented and submitted to the Engineer.

g. Recommended test equipment:

(1) Optical fiber power meter and Light Source: Siecor CPM-950/1300 meter and OS-100D Light Source, or equivalent.

(2) TDR-Tektrom TFP2 FiberMaster, Laser Precision TD-2000 or equivalent with 850nm and 1300nm emitter modules and bud copy printout, or equal.

(3) Optical fiber inspection scope: Cambridge Instruments 10x fiber scope or equivalent.

h. All fiber optic cabling is to be installed in a manner to comply with and allows DCET to receive the manufacturer's extended warranty. The data contractor is to be certified and authorized to provide the extended warranty.

E. Replacement: Any fiber strand, connector, or module installed by the data contractor which fails to meet the loss budget or tests below the manufacturer's standards, shall be replaced at no additional cost to the project. The replacement cable, connector, or part shall be tested after repairs have been made to verify compliance. Only equipment that meets the installation requirements stated herein shall be accepted.

F. Documentation:

1. Proper labeling and documentation will allow a technician to quickly trace a particular cable link and will significantly reduce the time and cost of moves, adds, changes and troubleshooting. Both labeling and documentation depend on the use of a system-wide coding scheme that will identify and locate each component of the data system and allow all components to be linked in a logical fashion.

2. There are three components of wiring system documentation:

a. Labeling data closet termination areas aids in identifying the source and function of a circuit.

b. A labeling scheme simplifies the documentation process.

c. "As-built" documents provide a permanent record of data infrastructure. These documents are a critical management resource. As a result, it is imperative that "as built" documentation be prepared as part of the data infrastructure project. In addition, these documents must be kept current throughout the system's life cycle.

G. Cable and Data Outlet Identification:

1. The data contractor shall furnish and install cable tags labeled with identifying cable numbers.

2. The data contractor shall clearly and consistently mark the appropriate designation strip labels on all hardware. Data contractor shall submit for approval a sample of all designation labels.

3. The data contractor shall affix outlet identification labels, machine printed or typed, with identifying cable numbers.

4. Subsequent to pulling and terminating cables, the data contractor shall place the appropriate cable tags within six (6) inches of each Category 5e cable and eighteen (18) inches of each optical fiber cable end.

5. If at any time during the project, the cable tape becomes illegible or removed, the data contractor shall immediately replace it with a duplicate preprinted cable tag.

6. The data contractor shall provide a listing keyed to cable types of all cable identification numbers.

7. Data contractor shall label each data outlet with the following label scheme:

   If the IDF closet “A” is the origination point of the cable feeding the data outlet “007”in classroom 129, the following is the configuration of the label to be installed;

   IDF Closet – Classroom-data outlet
   Example: A-129-007

   Data contractor will submit for approval sample of all data outlet designation labels.

H. As-Built Documentation:

1. Maintaining records and documents is the most important portion of the administration of a data infrastructure. Maintenance and moves, adds and changes can become very tedious if a current set of records and documents are not maintained. In fact, isolation and resolution of problems are often delayed because configuration information is either unavailable or outdated.

2. Subsequent to the installation and prior to acceptance, the data contractor shall prepare and issue As-Built drawings, in an AutoCAD format latest version, that shall reflect the lengths of cables installed, the actual manner and conditions of installation, including all deletions from additions to or departures from the contract documents. The documents are to include the data outlet station numbers and cable routing where it varies from the original plan. A copy of these documents will be stored in the MDF, with a master copy located at the School District’s office.

END OF SECTION 260740

SECTION 280725 – INTRUSION SYSTEM

PART 1 – GENERAL

1.1 SCOPE OF WORK

A. The Contractor shall provide, install, and program a functionally complete, integrated Intrusion System per Manufacturer's guidelines, codes described, within these specifications.

1.2 QUALIFICATIONS

A. The alarm contractor shall provide all equipment and accessories for a complete electrically supervised security alarm system as described herein and shown in the drawings.

B. Model numbers and designations, which appear herein, indicate design, quality, and type of material as well as operating characteristics.

C. The security alarm system products shall be built modular in construction for ease of expansion and service. Functions shall be on replaceable panels or modules to accommodate functional changes when required. All critical wiring and connectors shall be supervised so as to give a trouble signal if removed or disconnected.

1.3 MANUFACTURERS

A. The control/communicator, control stations, and programmers shall be supplied by SimplexGrinnell model Bosch 7412gV2 unless noted otherwise.

1.4 SUBMITTALS

A. Submittals at bid time:

1. For bid evaluation, bid submittals shall include six (10) sets of the items described below:

a. Specification sheets (cut sheets) of all proposed equipment.

b. Equipment list identifying:

Model number of each unit.
Quantities of each type of device.
Unit costs

2. Specification compliance: A letter submitted with the bid, responding to specification sub-sections individually, indicating exceptions, substitutions, and alternates. The Contractor shall submit requests for substitutions (as well as all relevant technical data pertaining to the substituted equipment) to the specifier 10 days prior to the close of bid for evaluation and approval.

B. Submittals after award of contract:

1. Drawings: Shop drawings to provide details of proposed system and the work to be provided. These include point-to-point drawings of systems and wiring diagrams of individual devices.

2. Permits: The Contractor shall be responsible for identifying requirements for permits from the local police department for the installation of the alarm system specified herein and shall assist the owner in obtaining the relevant alarm permits.

1.5 DOCUMENTATION TO BE SUBMITTED BY THE CONTRACTOR UPON COMPLETION OF SYSTEM INSTALLATION

A. "As-builts": Upon completion of installation, the Contractor shall prepare "as-built" drawings of the system. These "As-builts" shall be 30 in. x 42 in. (76 cm x 107 cm) reproducible drawings of each floor plan indicating exact device locations, panel terminations, cable routes and wire numbers as tagged and color-coded on the cable tag.

Additionally, final point-to-point wiring diagrams of each type of device (on 30 in. x 42 in. or 76 cm x 107 cm format) shall be included in the "as-builts."

"As-builts" shall be submitted to the Owner for approval prior to the system acceptance walk-through.

B. Operation and maintenance manuals: Three (3) sets of operating manuals shall be provided explaining the operation and maintenance of the system.

1.6 ON-SITE SECURITY PERSONNEL TRAINING

A. The Contractor upon completion of installation shall furnish training in the complete operation of the systems.

1.7 SYSTEM APPROVALS

A. The system shall be the standard product of one manufacturer, and the manufacturer shall have been in business manufacturing similar products for at least 5 years.

B. After-sales support: The Contractor shall be a factory-authorized and trained dealer of the system and shall be factory-trained and certified to maintain/repair the system after system acceptance.

1.8 QUALITY ASSURANCE

A. All equipment, systems, and materials furnished and installed under this section shall be installed in accordance with the applicable standards of:

National codes: NEC, NFPA, UBC, BOCA, SBCCI
Approvals and listings: UL, FM, (CSFM, NYC-MEA, when applicable)
Local Authorities Having Jurisdiction

1.9 WARRANTY

A. All components, parts, and assemblies supplied by the Manufacturers and installed by the Contractor shall be warranted against defects in material and workmanship for a period of at least 12 months (parts and labor), commencing upon date of acceptance by Owner. A qualified factory-trained service representative shall provide warranty service.

PART 2 – PRODUCTS

2.1 BASE SYSTEM PANEL (PC4020)

A. The base panel shall have a capacity of 16 hardwired zones and the ability to accommodate up to 128 addressable devices on two addressable loops. The total capacity of the security control panel shall be 128 zones. All zones shall be fully supervised and programmable. Panel shall be complete with integral power supply and supervised battery charger, auxiliary power for powering security detection devices, programmable switched auxiliary power supply for 4-wire smoke detectors, integral supervised digital alarm communicator, supervised bell/siren output, and two

general purpose programmable outputs which can be programmed as general purpose outputs or as the system's addressable loops.

1. System Communication Bus: The system shall be complete with a standard, non-shielded, 4-conductor station wire bus for powering and communicating with remote hardwired system expansion modules and devices. For the connection of various system modules, communication bus wire runs (#18 AWG) of up to 3500 ft (1066 m.) shall be standard, and the system shall allow for an additional 3500 ft (1066 m.) of communication bus wire for each communication bus expander added (max. 16).

2. Panel Zone Expansion: The panel shall be expandable to a maximum of 128 zones by adding standard hardwired 8 and/or 16-zone modules to the base panel, by adding up to 128 addressable detection devices to one or both of the addressable loops on the base panel, and by adding 64 wireless zones, and up to 8 wireless receivers to the four-wire communication bus. The system shall be capable of expansion using hardwired, addressable and wireless simultaneously in any combination that suits the application.

3. User Codes: The system shall provide for 1,500 user codes, select table as either 4 or 6 digits. For access control, user codes shall be assignable to 1 of 64 access levels. User codes shall be assignable to one or multiple partitions.

4. Partitions: The system shall be programmable for up to 8 fully independent partitions, with each partition having its own account code. Keypads shall be assignable as partition keypads or global keypads. Each zone in the system shall be assignable to one or more partitions.

5. Automation: The system shall be complete with an automation control module capable of controlling 32 X-10 or CEBus control devices, by event and by schedule. The system shall include 16 schedules to control automation devices. Automation shall be controllable from any system keypad and through a local or remote tone telephone.

6. Scheduling: The system shall provide for 99 date schedules with 4 intervals per schedule, 4 holiday schedules with 2 years of scheduling capacity, 50 open/close suppression schedules and 16 automation schedules. All schedules shall be programmable from the LCD system keypads and by either local or remote upload/download.

7. Ground Fault Detection: The system shall include an integral ground fault detector, which shall detect a single ground fault on any extended conductor in the system.

8. Supervision: Each zone in the system shall be supervised. The base panel and any remote panel with its own AC input shall be supervised for AC loss. Batteries for the base panel and all remote panels shall be supervised for low power and be short circuit-protected. Each addressable device and each wireless input device shall be supervised for its presence. The communications bus shall be supervised for low voltage and the presence of each enrolled module and keypad. Digital alarm communicators shall be supervised for telephone line trouble and failure to communicate.

9. Central Station Reporting: The system shall provide high speed 10 bps and 20 bps 1400/2300 Hz handshake, Contact ID and SIA reporting formats and shall be capable of being programmed to call up to 3 telephone numbers. The system shall also allow communication to a pager. The telephone numbers shall be programmable for backup dialing should the primary number fail. The system shall be programmable for split reporting so that alarms/restorals, openings/closing and miscellaneous events can be sent to different telephone numbers. The system shall report a separate account code for each partition and for non-partition (system) events. The system shall provide opening/closing scheduled suppression to prevent opens and closes from being reported to the central station. The system shall be capable of reporting all alarms, troubles, and system status information by

combinations of all communication methods installed including: digital communication DVACS, and Cellemetry.

10. TCP/IP LAN/WAN Communications: The system shall have the ability to communicate all alarm signals to a central station or dedicated PC (equipped with appropriate software), through a constant connection providing full supervision of the link between the panel and the TCP/IP receiver. Communication shall be via a LAN or WAN, compatible with 10BaseT and 100BaseT Ethernet TCP/IP communications.

11. System Printer: The system shall be capable of output to a serial printer installed anywhere on the communication bus, and capable of printing all system events, alarms and restorals, including the partition, date, and time of these events.

12. 2-Way Serial Port: The system shall support a 2-way data port, offering RS-232 serial communications at data transfer rates of from 300 to 4800 bps. This port shall provide real-time access to all system events and allow system integrators to send control commands to the control panel.

13. False Alarm Prevention: The system shall include the following false alarm prevention features:

    - audible exit delay, audible exit fault
    - arm/disarm bell squawk
    - urgency on entry delay
    - TLM trouble and low battery trouble transmission delay
    - swinger shutdown programmable by zone
    - transmission delay by zone
    - police code (cross zone) transmission
    - opening after alarm transmission
    - recent close code transmission
    - AC fail
    - arming/disarming from outside the protected space using access control or wireless key

14. Power Supply/Relay Output Modules: The system shall be capable of including up to 64 fully programmable output relays with form 'C' contacts rated 2 Amps at 30VDC. Relays shall be added in modules of four and may be located anywhere on the communication bus. Each module shall include a supervised 700mA 12VDC battery charger, and integral power supply to supply up to 2.2 Amps of auxiliary power at 12VDC to power directly connected devices or repower the communication bus.

15. Low Power Outputs: The system shall be capable of including up to 144 low power outputs with each output able to supply 50mA at 12 VDC. Outputs shall be added in increments of 16 and may be added anywhere on the communication bus.

16. System Event Buffer: The system shall have a 3,000-event buffer. All events shall be printable from the system printer. The 2,800 most recent events shall be viewable on the LCD system keypad. All events shall be viewable by upload/download to a PC.

17. System Software: The base panel shall come complete with the software necessary to implement every system feature and to allow for the addition of every expansion or functional module without changes or addition to the basic software.

18. System Programming: The system shall be fully programmable from the LCD keypads and shall also allow event buffer viewing at the keypads. Separate PC-based upload/download software shall allow programming and operation from a directly connected local computer, or

from a remote computer via a telephone line or TCP/IP LAN/WAN communications. Remote access shall be controlled by the owner to prevent unauthorized access. All system programming shall be maintained in nonvolatile memory so that programming information is retained even if all AC and battery power is removed.

19. Remote Annunciation: The system shall be capable of remote zone alarm and system status annunciation of up to 144 points, by adding 12, 32 and 64 point annunciators anywhere on the communication bus. Annunciators shall be capable of being flush-mounted. The annunciators shall provide point and/or graphic annunciation capability.

20. System Keypads (LCD4501): The system shall accommodate up to 16 LCD keypads which are powered from the base panel via the four-wire communications bus. LCD keypads shall have a display capacity of at least 32 alphanumeric characters with adjustable brightness and contrast. Keys shall be backlit for low light ease of use. Keypads shall include individual "Armed", "Ready" and "Trouble" indicators, three keypad-activated alarm keys, and five programmable function keys.

2.2 MATERIALS

A. Addressable Contact Input Module: Provide DSC model # AMP-701 input module for non-addressable devices. Uses 2-wire connection for power and data to the control panel. The AMP-701 has three alarm input terminals to which an external device can be connected. The terminals monitor alarm, tamper and trouble states.

B. Interface to Door Hardware: Provide all necessary interface equipment required. Coordinate with door hardware provider.

C. Passive Infrared Motion Detector: Provide as shown on plans PIR detectors.

1. Wall-Mounted Units: Maximum detection range for individual units exceeds scheduled distance by 25 percent, but not less than 50 feet (15m)

2. Ceiling-Mounted Units: Full 360-degree conical spot-detection pattern. With the device mounted at 8 feet above the floor the pattern at floor level is a minimum diameter of 24 feet. With device mounted at 12 feet above the floor the pattern at floor level is a minimum diameter of 40 feet.

D. Door Switches: Provide as shown on plans magnetic type door switch.

1. Flush-mounted units: unobtrusive, flush with surface of door frame and door.

2. Overhead door units: door mounted magnet and floor mounted switch. Unit shall be listed for outdoor locations.

PART 3 – EXECUTION

3.1 INSTALLATION

A. Install all equipment and materials in accordance with the "current" recommendations of the manufacturer. The work shall also be in accordance with:

1. Installation criteria defined in these specifications and in the construction documents.
2. Factory Representative.
3. Approved submittals.
4. Applicable requirements of referenced standards.

3.2 SUPERVISION

A. The contractor shall provide the following services as part of the contract:

1. Supervision of sub-contractors.
2. Coordination of other contractors for system-related work (electrical contractor, finish hardware contractor, architect, and general contractor).
3. Attending site construction/coordination meetings.
4. Keeping updated construction drawings at the construction site.
5. Meeting construction deadlines per the construction schedule.

3.3 PROGRAMMING

A. Programming of the system shall include the following tasks:

1. Programming system configuration parameters (hardware and software, zone/circuit numbers, communication parameters).

2. Programming operational parameters such as opening/closing reports and windows, system response text (custom English) displays of events, activation of relays that drive auxiliary devices, and identifying types of zones/loops.

3. Programming pass codes according to the authorities and functions defined by the owner.

4. Other system programming tasks required by the owner. These additional programming requirements shall be coordinated between the owner and the contractor.

3.4 TESTING

A. Operational Testing: The contractor shall perform thorough operational testing and verify that all system components are fully operational.

B. Hard-copy System Printout: The contractor shall submit a hard-copy system printout of all components tested and certify 100 percent operation indicating all devices/panels/units have passed the test criteria set forth by the manufacturer.

C. Acceptance Test Plan Form: An acceptance test plan form shall be prepared/provided by the contractor prior to the acceptance walk-through.

This form shall include separate sections for each device/panel/unit as well as a column indicating the manufacturer's performance allowance/margin, a column indicating the result of the testing performed by the contractor (pass/fail), and an empty column for recording findings during the walk-through.

3.5 COMMISSIONING

A. The contractor shall certify completion in writing and schedule the commissioning walk-through. The contractor shall provide all the tools and personnel needed to conduct an efficient commissioning process.

END OF SECTION 280725

SECTION 280728 – CCTV – NETWORK DIGITAL VIDEO MANAGEMENT SYSTEM

PART 1 – GENERAL

1.1 SYSTEM DESCRIPTION

A. The Network Digital Video Management System ("Network DVMS") shall be a feature-rich IP video distributed solution, designed for multi-site and multiple-server installations requiring 24/7 video surveillance.

B. The Network DVMS shall consist of the following major components:

1. Client Viewer.
2. NVR (Network Video Recorder) Server.
3. Add on: Transaction Data Integration Module.
4. Add on: Central Alarm Management Module.
5. Add on: PDA Server and PDA Client

C. The Network DVMS - Client Viewer ("Client Viewer")

1. The Client Viewer shall be the central operating control point for the Network DVMS system. The Client Viewer shall provide the end-user full video monitoring and control for a fully distributed solution for either single-site or multi-site applications for single-server or multiple-server installations requiring 24/7 surveillance with support for devices from different vendors.

2. The Client Viewer shall uniquely integrate a multitude of disparate solutions into a single feature-rich application including seamless integration with a fully distributed, centralized-managed video surveillance platform.

3. The Client Viewer shall provide an easy to use, fully integrated GUI (Graphical User Interface) that supports within the same application the following features:

a. Scalability - For enterprise and other high-end users, the Client Viewer shall scale to provide support for an unlimited number of cameras using multiple NVR servers. Overall, the Client Viewer shall be fully scalable to support a varying number of cameras based on the NVR server selected by the end-user, including the following other options:

(1) For small-to-medium (SMB) users, the Client Viewer shall scale to provide support for a maximum of 25 cameras using a single NVR server.

(2) For commercial users, the Client Viewer shall scale to provide support for a maximum of 64 cameras using a single NVR server.

b. Touch Screen Controls - The Client Viewer shall support intuitive touch-screen controls, menus and video navigation. Through the touch-screen interface the end-user shall be able to navigate menus directly from the video viewing monitor without the aid of a keyboard or mouse (no need to right click, etc.).

c. NVR Management - The Client Viewer shall support the management of a single Network Video Recorder (NVR), and an entire system of NVRs.

d. Intelligent Menus and Controls - The Client Viewer shall provide intelligent menus that automatically appear and disappear as needed by the operator to only show those controls necessary to perform the end-user function. For example, for a PTZ camera, the GUI shall intelligently show a virtual joystick to control optical zoom, digital zoom and preset controls within the camera view. The GUI shall react to the user's actions and only present those controls and tools required by the current mode of operation.

e. Kinetic / Horizontal Timeline – The Client Viewer shall provide a user interface to allow for "kinetic" manipulation of a graphical timeline representation of recorded video. The user shall uniquely be able to kinetically (i.e., via the momentum and speed of mouse movement) vary the speed that the recorded video timescale is moved forward/backward in time.

f. Instant Video Playback and Analysis "Timeslicer" - The Client Viewer shall provide for instant video playback and analysis of video content/events by providing a spectrum of video thumbnails over a period of time for quick end-user analysis.

g. Integrated Event Management - The Client Viewer shall provide integrated event management including automation of event push video, pop-up events, and alerts without the need of additional software modules or add-on software.

h. Mapped Based Navigation - The Client Viewer shall provide a map-based navigation of cameras and/or camera groups.

i. Integration of Data for Multiple-Users – The system shall provide the ability to share and store common bookmarks and event handling data across multiple users.

j. Interactive Carousel - The Client Viewer shall provide fully interactive video carousel functionality, whereas a series of video camera views will presented to the end-user as a rotating carousel. For the rotating carousel, the end-user shall have the full capability to interact with the video including the ability to interrogate the video as a clip, expand the video view for the video shown, control the camera, etc.

D. The Network DVMS – NVR

1. A single NVR Server or multiple NVR Servers shall provide video recording for the Network DVMS. The NVR Server shall consist of the following software components which may be resident on a single server, or installed on multiple servers within an overall Network DVMS:

   a. Recording and Image server
   b. Administrator Application
   c. PDA Server.

2. The Network DVMS shall support multiple NVR Servers. Each of the NVR Servers shall be assignable as either a master or a slave NVR Server.

3. The NVR Server shall be used for recording video feeds and for communicating with cameras and other devices.

4. The system shall support an unlimited number of NVR Servers. One or more NVR Servers may be used in a system depending on the number of cameras or physical system configuration.

5. The NVR Server shall support the use of pre and post recording on motion/event recording. The pre and post recording time period shall be selectable in seconds.

6. Logging – The Network DVMS shall provide an overall System log, an Event log, and an Audit log.

E. Transaction Data Integration Module

1. The Network DVMS shall include support for an add-on Transaction Data Integration Module designed to integrate with Point of Sale (POS) or Automated Teller Machine (ATM) data and time-link video recordings with POS or ATM transactions.

F. Central Alarm Management Module

1. The Network DVMS shall include support for an add-on graphical Central Alarm Management application module. The alarm management module shall allow for the continuous monitoring of the operational status and event-triggered alarms from system servers, cameras and other external devices. The alarm management module shall support graphical displays with interactive icons to display the status of cameras and other inputs.

G. PDA (Personal Digital Assistant) Server and Client

1. The Network DVMS shall include support for add-on PDA Servers and PDA Clients to allow for viewing using a remote wireless PDA.

H. Certified Installer Program

1. The Network DVMS software vendor shall provide a certified partner program, whereby training and certification programs shall qualify the suitability of the installers. The vendor shall provide various levels of training including advanced training (i.e., “Gold” level).

I. Network Topology

1. The Network DVMS System shall support the use of separate or common networks, VLANS or switches for connecting cameras to the NVR servers/clients. This shall provide physical network separation between the camera and servers/clients.

J. Virtual Computing

1. The Network DVMS System shall support the use of VMware to run NVR servers and client applications on virtual computers, servers, and networks.

PART 2 – PRODUCTS

2.1 NETWORK DVMS – CLIENT VIEWER

A. The main end-user interface and therefore the core application for the DVMS shall be the Client Viewer. The Client Viewer shall support the following features:

1. A scalable solution that is frontward and backward scalable with an entire line of Network Video Recorders (NVRs).

2. Intuitive, touch screen-enabled interface.

3. Intelligent GUI that reacts to the user’s actions at any given moment, presenting only the controls and tools required by the current mode of operation.

4. Kinetic / Horizontal Timeline – The following features shall be supported:

a. Kinetic variability (i.e., via the momentum and speed of mouse movement) of the speed that the recorded video timescale is moved forward/backward in time. The faster the mouse is “swiped”, the faster the timeline will move.

b. The timeline GUI shall provide intelligent pop-up controls for controlling forward, reverse, pause, etc. controls.

c. The timeline GUI shall provide simple “+” and “-“ controls to quickly change the scale of the timeline.

d. The timeline GUI controls shall provide an intuitive “odometer” like numerical interface for reading and changing the recorded time viewed.

5. Exporting Clips – The Client Viewer shall provide multiple methods to export video clips including:

   a. The ability to export a video segment via clicking on start and stop times (via icons) of recorded video using a timeline.

   b. The ability to export a video segment via the use of the tool bar.

   c. Export options shall include the ability to export to print, individual frames, and create bookmarks (on the timeline).

6. “Timeslicer” Instant Video Playback and Analysis - The Client Viewer shall provide for instant video playback and analysis of video content/events by providing a spectrum of video thumbnails over a period of time for quick end-user analysis. The user shall have the ability to vary the thumbnail intervals based on:

   a. Time – Intervals shall be selectable.
   b. Motion – Intervals shall be based on time or amount of motion.
   c. Alerts.
   d. Sequences.

7. PTZ Controls – The Client Viewer shall provide a wide variety of PTZ controls:

   a. Both optical PTZ (if the camera is a PTZ camera) and digital PTZ controls shall be provided, including:

      (1) Point to a location to re-center the pan-tilt field of view.
      (2) Drag a rectangle within the current field of view to zoom into.
      (3) Virtual joystick with intelligent pop-up menus.
      (4) Preset overlays.

   b. Digital PTZ controls shall be provided for both fixed cameras and PTZ cameras. Digital PTZ controls shall include instant investigation in live monitoring mode as well as for stored video. A window-in-window view shall be provided to show both the zoomed in area, as well as the full field of view of the camera.

8. Highly configurable carousel mode with controls for previous/next camera in sequence, pause/resume carousel, instant investigation capability, and optical and digital PTZ control.

9. Automated (on-event) or manual (peer-to-peer) push live video.

10. Shared and private views, configurable for up to 64 cameras from multiple servers (in multiple server installations).

    a. Multiple hotspots.
    b. Carousel views.
    c. Push video views.
    d. Web pages.

11. Multiple screen support for dual-screen and quad-screen systems.

12. Instant camera change. Quickly substitute one or more of a view's cameras with other cameras.

13. Control PTZ (Pan/Tilt/Zoom) and 360° view cameras, including a virtual PTZ joystick.

14. Use digital zoom on live as well as recorded video.

15. Manually activate surveillance system events.

16. Manually activate external outputs (e.g. sirens or lights).

17. Use sound notifications for attracting attention to detected motion or system events.

18. Get quick overviews of video sequences with detected motion.

19. Get quick overviews of detected alerts or system events.

20. Perform “Smart Searches” to quickly search selected areas of video recordings for motion.

21. Skip gaps during playback of recordings.

22. Configure and use several different joysticks.

23. Print images, with optional comments.

24. Copy images for subsequent pasting into word processors, e-mail, etc.

25. Export recordings (e.g. for use as evidence) in AVI (movie clip), JPEG (still image), and surveillance system database formats. The AVI and database formats can include audio.

26. Select between language versions, independent of the language used on the main surveillance system.

B. Log-on and Authentication

1. The Client Viewer log-on shall provide the option to select either Basic or Windows based authentication.

    a. Basic Authentication – The Client Viewer shall support logon using an account database which requires user name and password credentials.

    b. Windows Authentication – The Client Viewer shall support Microsoft Active Directory Support – The Client Viewer shall support logon using the NTLM (NT LAN Manager) challenge handshake with Microsoft Domain Controllers in conjunction with a local Microsoft Windows user account database.

C. GUI Menu Options Supported

1. The Client Viewer shall provide a main GUI menu uncluttered from other menu panes. Intelligent menu items shall appear as necessary. For instance, when a camera view is right-clicked or left-click/touched and held for 1 second, various relevant selection options shall be available to the end-user:

    a. A camera icon – to instantly select another camera; a selection of available cameras will be presented.

    b. A clipboard icon – to save the current view to the clipboard.

    c. A push video icon – to push video to a recipient; a selection of available recipients will be presented.

    d. A remove camera icon – to remove the camera from the pane.

2. In addition to the main camera view, the Client Viewer main GUI menu shall provide the end-user the following controls when “mouse” over occurs:

   a. Select View Setup/Editing Utility
   b. Exit
   c. About

3. Tool Bar - In addition to the main camera view, the Client Viewer main GUI menu shall at a minimum, provide the following tool bar selections:

   a. View Setup/Editing Utility.

      (1) Edit Views – Camera Views and Groups shall be organized as folders and the GUI shall provide an intuitive interface to select and change views and groups in a file folder manner. The Edit Views menu shall allow the options to add/delete shared or private views, add/delete groups, and perform other folder management functions. Camera matrix view setup options shall include: 1 x 1, 1 + 3 wide, 2 x 2, 1 + 5, 2 + 4 wide, 1 + 7, 1 + 8 wide, 3 x 3, 2 + 8, 4 x 3 wide, 4 x 4, 5 x 5, 6 x 6, 7 x 7, and 8 x 8 camera views. Edit Views shall provide utilities to configure either Shared Views or Private Views as follows:

         (a) Shared Views – The Client Viewer shall provide both the viewing and setup for Shared Views. These Shared Views shall typically be setup by a system administrator. The Shared Views shall be stored on the NVR and accessed by the end-user based on their log-on.

         (b) Private Views – The Client Viewer shall provide the capability for each end-user to create their own Private Views.

      (2) Cameras

         (a) Server – Within the folder “Server”, the Client Server shall list the cameras by name and type of camera available within a given NVR. The Client Viewer shall allow easy manipulation of cameras and views by supporting “drag and drop” capability.

         (b) Hotspot – The Client Viewer shall support Hotspots which are typically used in the main (larger) viewing pane, surrounded by smaller panes. This feature shall allow one position of a view to be designated as a Hotspot. Specific to the Hotspot, settings for the Hotspot shall include:

            i. Image Quality.
            ii. Framerate.

         (c) Carousel – The Client Viewer shall support a Carousel feature for viewing of sequential multiple cameras. The setup menus for the Carrousel feature shall include:

            i. Image Quality.
            ii. Framerate.
            iii. Default Dwell Time – for each camera to be viewed.

         (d) Web Page – The Client Viewer shall provide the ability to view a “Web Page” by inputting a Web URL within a text box or a JPEG image based on inputting the image file path.

(e) Push Video – The Client Viewer shall provide the ability to display on-event live video streams and alerts. The events will be displayed in a first-in-first-out order and rotate between the different push video panes. Within the Push Video display, the setup menus for the Push Video feature shall be:

i. Image Quality.
ii. Framerate.
iii. TCP/IP Port.
iv. Password.

(3) Image Properties – The following shall be the image quality settings (may vary based on type of camera):

(a) Quality – The Client Viewer shall provide the ability to vary picture quality. The options shall be:

i. Full – Native camera resolution.
ii. Super High.
iii. High.
iv. Medium.
v. Low.

(b) Framerate – The Client Viewer shall provide the ability to vary the Framerate. The options shall be:

i. No limit (full Framerate).
ii. Medium.
iii. Low.

(c) Audible Alert – The Client Viewer shall produce audio alerts based on events. The options shall be:

i. Never.
ii. On Motion.
iii. On Event.
iv. On Motion or Event.

(d) Aspect Ratio – The Client Viewer shall provide the ability to present the video as follows:

i. Keep Original.
ii. Fit to Window.

D. Client Viewer System Requirements

1. The Client Viewer shall allow the use of computer, servers, storage and switches from any manufacturer with components that meet the minimum requirements.

2. The following are the minimum requirements for the computers running the Client Viewer software:

a. The Client Viewer shall support Microsoft Windows XP Professional in conjunction with the Microsoft .Net 2.0 Framework, and DirectX 9.0 or newer.

b. CPU – Intel P4 or higher (Intel Core 2™ recommended), minimum 2.4 GHz.

c. RAM – Minimum of 1 GB.

d. Network – Ethernet (100 megabit or higher recommended).

e. Graphics Adapter – AGP or PCI-Express, 128 MB RAM, Direct 3D supported.

2.2 NETWORK DVMS - NVR SERVER

A. Video Compression Format - The NVR Server shall support H.264, MPEG-4 (both ASP and SP), and MJPEG video compression formats for the video stream from all devices including analog cameras connected to encoders, DVRs, and IP cameras connected to the system.

B. Multi-Stream Support - The NVR Server shall support multi-stream support - The NVR Server shall support H.264 / MPEG-4 / MJPEG optimized multi-streaming. The system shall allow a single video stream from a device to be independently recorded at one specified frame rate by the NVR Server, and viewed by Client Views at a different Framerate setting.

C. Storage and Archiving - Each NVR Server shall have a default storage area. A storage area is a directory where the database content, primarily recordings from the connected cameras is stored. Recordings from the connected cameras shall be stored in individual camera databases. The system shall allow an unlimited amount of storage to be allocated for each connected device. The system shall allow archiving to be enabled on a per camera basis and allow the user to define which archiving drive shall be used for each camera.

D. NAT Firewall Support - The system shall support port forwarding, which shall allow clients from outside of a Network Address Translation (NAT) firewall to connect to NVR Servers without using a VPN.

E. Supported Devices

1. The system shall support devices from the following manufacturers at a minimum: ACTi, Advantech, AgileMesh, Appro, Arecont Vision, Axis Communications, Baxall, Bosch, Canon, CBC Ganz, Convision, Digimerge, Discrete, D-Link, , DVTel, Etrovision, Extreme CCTV, FLIR Systems, GE Security, Hitron, Hunt, Infinova, Intellinet, Ipix Corporation, ipx, IQinvision / IQeye, JVC, Linudix, Lumenera, Mobotix (including support of MxPEG), Panasonic, Pelco, Pantax, Philips, Pixord, Polar, Samsung, Samsung Techwin, Sanyo, Sony, Speco, Stardot, Toshiba, Toshiba Teli, Vantage, Veo, Verint, Videology, Vivotek, Webgate, Xview.

2. The system shall support specific devices, where the specific supported model numbers shall be listed for each manufacture on an up-to-date on-line web-site.

F. Administrator Application – The Administrator Application shall provide a feature-rich administration window for system configuration and day-to-day administration of the system. Within the Administrator Application, the following shall be selectable to allow specific system administration setup functionality. This shall include: A Service Manager, A Scheduler, General Settings, Archive Setup, the ability to Add/Edit/Remove a Device, I/O Setup and Control, and Event Setup. Sub-features shall be the ability to setup PTZs, route messages and alerts including email and SMS messaging setup, and archive setup. Specific features supported by the Administrator Application shall be:

1. Audio Settings including the ability to associate an audio feed to a video input and 2-way audio support.

2. Motion Detection Settings including the ability to trigger video recording and events on motion.

3. Image Quality including settings for Compression Level, Brightness, Contrast, Color, Rotate Image, and Bandwidth Control/Priority

4. Event Notifications including how end-users will be notified when events occur.

5. Outputs Configuration including the ability to control outputs on devices based on motion, manual control or other settings.

6. I/O Setup including that ability to Add, Edit, Name, Enable/Disable Events and optionally assign timers to end an event sequence.

7. Event Buttons for manually triggered events.

8. I/O Control including a graphical mapping of all system events.

9. User Administration including the ability to add either Basic Users or Windows (Active Directory) Users, plus the ability to Delete Users, Change Passwords, set Global User Rights, and set Camera User Rights.

G. Outside Network Access – A user interface shall be provided to select if the system can be accessed from a client PC that has an IP address that is outside of the local IP address range. This function is used to allow access from a remote PC over the Internet. The configuration settings shall include the ability to select an Outside IP Address, Outside IP Port, Local IP Ranges, and Maximum Number of Clients

H. NVR Server System Requirements

1. The following are the minimum requirements for the computers running the NVR Server:

a. CPU – Intel P4 or higher (Intel Core 2 Duo recommended), minimum 2.4 GHz.

b. RAM – Minimum of 1 GB (2 GB recommended).

c. Network – Ethernet (100 megabit or higher recommended).

d. Graphics Adapter – AGP or PCI-Express, minimum 1024x768 (1280x1024 recommended), 16 bit color.

e. Hard Disk Type – E-IDE, PATA, SATA, ISCSI, SCSI, SAS (7200 RPM or faster).

f. Hard Disk Space – Minimum 80 GB free (depends on number of cameras and recording settings).

g. Operating System – Microsoft Vista Business/Enterprise/Ultimate (32 bit or 64 bit running as a 32 bit application), Windows 2003 Server (32 bit or 64 bit running as a 32 bit application), and Windows XP Professional (32 bit or 64 bit running as a 32 bit application).

2.3 TRANSACTION DATA INTEGRATION MODULE

A. The Transaction Data integration module shall allow the operator to search and view Transaction Data from third-party systems time-linked with video recordings of when the transaction activities occurred.

B. The module shall integrate digital video surveillance images with Point of Sale (POS) or Automated Teller Machine (ATM) transaction data. The module shall allow the operator to efficiently answer questions critical to an investigation.

C. The module shall allow the ATM or POS transaction data to be integrated with the system via an open interface supporting a serial server, serial cable or IP connection. The module shall be compatible with any TCP/IP or serial ASCII data source.

D. The module shall include a filter to allow the user to edit the transaction data and remove unwanted or unnecessary data from the ATM or POS database.

E. The module shall allow the user to search for transactions by register/ATM, camera, date, time or free text. All Transaction Data shall be stored in a SQL database.

F. The module shall utilize a client / server architecture using HTTP or TCP directly for communication.

2.4 CENTRAL ALARM MANAGEMENT MODULE

A. The alarm management module shall allow for continuous monitoring of the operational status and event-triggered alarms from servers, cameras and other devices. The alarm management module shall provide a real-time overview of alarm status or technical problems while allowing for immediate visual verification and troubleshooting.

B. The alarm management module shall provide an interface and navigational tools through the client. The module shall provide a detailed listing of all active or incoming alarms with the ability to reassign alarms to other operators.

C. The module architecture shall be .NET based with the server component accessed through a client application running on Windows XP Professional or Windows Server 2003 servers. Central logging of incoming alarms and system information in a SQL database.

2.5 PDA CLIENT

A. The PDA Client shall allow for the viewing of live and recorded images within the Network DVMS using a wireless PDA.

B. The PDA Client shall provide a camera menu to select a camera to view, PTZ controls including presets, recorded video playback controls, and event management.

2.6 PDA SERVER

A. PDA Server shall be provided as an optional front-end add-on module to the NVR Server.

B. The PDA Server shall provide an interface between NVR Server and the remote PDA clients

C. The PDA Server shall use the Microsoft IIS (Internet Information Services) and .Net framework.

END OF SECTION 280728