

well as modification of pier and footing elevations (including wall foundation steps) at U/G MEP systems.

8. Contractor shall slope concrete to all floor drains as required by the Contract Documents.
9. Contractor shall provide all block-outs for equipment installed by others including, but not limited to, expansion control devices, floor drains, etc.
10. Contractor shall provide deepened slabs for volleyball sleeves. Coordinate with 06A contractor for locations.
11. Provide complete dewatering and subgrade management of the building pad, foundations, and immediately adjacent areas upon turnover of area/s to Contractor for performance of this work. Provide all pumping, truck access, temporary shoring, temporary protection, and related to perform this Work. Footings, foundations, slab areas, and related shall be maintained free of water, mud, and related, by this Contractor during performance of this Work, and until building pad is turned over to the Construction Manager, and all backfilling operations are complete.
12. Comply with floor flatness and floor levelness criteria specified in Contract Documents. Make corrections as needed at no additional cost to the Owner within 30 days of receipt of report.
13. Provide excavation and grading from rough design subgrade, backfill, compaction, and related for performance of this Work. Contractor shall provide excavation and backfill necessary for the installation of new masonry. Contractor shall restore subgrade disturbed by operations performed during this Work. Suitable materials/spoils disturbed during this Work shall be stockpiled in coordination with the Construction Manager and protected to prevent deterioration; unsuitable materials/spoils will be removed and hauled off-site by the 2A Contractor. If suitable stockpiled material becomes unsuitable during this Work, Contractor shall be responsible to replace with imported stone aggregate material (or approved off-site fill), including cost, handling, and removal of the unsuitable material. Contractor shall be responsible for all fine grading required to perform all concrete work. Contractor shall immediately upon completion of the foundation walls by 4A Contractor in any area, restore subgrade to compacted design elevation, including removal of spoils from the building. Subgrade shall be set to design elevation prior to commencement of Plumbing and Electrical underground work.
14. Project excavations are unclassified; Contractor is responsible for all subsurface conditions and costs associated with completing the work.
15. Provide complete fine grading for this Work to design elevation. Work includes backfilling, grading of exterior and interior walls/piers (all sides). Unless otherwise noted, the 2A Prime Contractor shall grade all areas to subgrade elevations and fine grading at areas where they have finish work.
16. Provide complete backfill and compaction to design subgrade immediately upon completing concrete placement work in all areas for this Work.
17. Contractor shall coordinate with Construction Manager and all other trades, including, but not limited to the Mechanical, Plumbing, Electrical, Fire Protection, and Kitchen Equipment Contractors to ensure all rough-in's are complete prior to all of the concrete pours associated with this Work. Contractor shall schedule all pours in advance with Construction Manager and provide two (2) week schedule updates at each progress meeting.
18. Provide all survey and layout necessary for completion of this Work. The building

column lines and a benchmark will be provided by others.

19. Contractor shall provide all welding necessary to complete work installed in this package.
20. The 2A Prime Contractor shall furnish and install all site concrete as required per the complete set of Contract Documents with the exception of those referenced in this section. The 3A Prime Contractor shall provide concrete footings for all site walls, school monument sign, canopies and pergolas and mechanical/dumpster enclosures shown on civil, structural, and architectural drawings. 3A Contractor shall provide cast in place retaining walls and associated Delegated Design.
21. Provide all cold and hot weather provisions for performance of this Work, including, but not limited to, temporary protection, enclosures, tenting, heating, shoring, additives, accelerators, insulation, blankets, and related. Any modifications to the design mixtures must be approved in advance by Construction Manager through the submittal process with the design team and Owner.
22. Contractor shall receive, unload, inventory, store, take possession via signature, protect, maintain, and install all items to be embedded in the concrete systems included in this Work, including, but not limited to, anchor bolts, masonry wall dowels, anchors, angles, supports, clips, hangers, plates, leveling plates, sleeves, hardware, accessories, and related. Contractor shall level and ground all base plates and repair or replace all damaged bolts prior to commencement of steel erection
23. Contractor shall install all masonry reinforcement systems furnished by others. Provide and maintain rebar caps for all exposed rebar installed by Contractor.
24. Independent Testing Agency services shall be provided by the Owner through the Construction Manager. Contractor shall give 72 hours' notice to the Construction Manager for the purpose of scheduling the Independent Testing Agency when on-site inspections will be required. Contractor shall not take direction from the Independent Testing Agency.
25. Contractor shall provide curing box with heat or ice; whichever is appropriate for the weather conditions, for use by the testing agency.
26. Provide complete cleaning of all exposed concrete included in this Work.
27. Contractor shall be responsible for cleaning all concrete over-pour and splatter from all surfaces adjacent to, and in the path of, all concrete operations.
28. Contractor shall provide Joint Sealers at control and expansion joints in cast in place concrete installed under this contract package.
29. Provide complete surface preparation for concrete surfaces/substrates to receive waterproofing, damp-proofing, air/vapor barrier, architectural systems, etc. provided by others.
30. Provide non-shrink grout at all steel column baseplates, leveling plates, and elevator sills.
31. Provide all floor-mounted equipment pads for all mechanical, electrical, and plumbing equipment. Contractor shall coordinate all floor depressions and related requirements with all other Contractors and Construction Manager.
32. Provide formwork, reinforcing, piers, and beams for concrete systems integrated in masonry assemblies including, but not limited to, foundation walls at geothermal mains and masonry openings/portal in fire-rated wall assemblies.
33. Provide formwork at all slab edges, equipment pads, and locker-bases including

forms at elevated deck-supported slabs where pour stop angles/accessories are not depicted in the Contract Documents. Work includes integrated wood sleeper systems, where necessary for equipment furnished by others.

34. Provide thickened slabs at locations depicted in the Contract documents as well as at embedded electrical/IT floor boxes, equipment inserts, and stair supports.
35. Trade Contractor shall coordinate and provide Plans per Concrete Note 9 on Sheet S001. Reference typical details for additional reinforcing around ganged penetrations.
36. Contractor shall coordinate curing systems and confirm compatibility with specified flooring systems.

3.05 CONTRACT PACKAGE – 04A – MASONRY

A. The Work of this Bid Package consists of the Work detailed by the following Specification Sections and as shown on the Drawings. The work is not restricted by division of Drawings or Specifications.

Perform and furnish all the work, labor, competent supervision, services, materials, equipment, hoisting, plant, tools, scaffolding, appliances, storage, and other facilities to complete the Contractor Package Trade work for the project in strict accordance with, and reasonably inferable from the Contract Documents, and as more particularly, but not exclusively, specified in section:

Division 00	Procurement and Contracting Requirements
Division 01	General Requirements
01 74 19	Construction Waste Management and Disposal
04 20 00	Unit Masonry
04 72 00	Cast Stone Masonry
06 68 00	Fiberglass Reinforced Plastic Fabrications
07 11 13	Bituminous Dampproofing
07 13 00	Sheet Waterproofing
07 14 16	Cold Fluid-Applied Waterproofing
07 16 16	Crystalline Waterproofing
07 21 00	Thermal Insulation
07 27 26	Fluid-Applied Membrane Air Barriers
07 92 00	Joint Sealants (As Applicable)
07 95 13	Expansion Joint Cover Assemblies (As Applicable)
08 31 13	Access Doors and Panels (As Applicable)
31 20 00	Earth Moving (As Applicable)

B. This Contract shall also include, but is not limited to, the items listed below for the complete performance of the Contract Package

1. Provide all concrete masonry unit and masonry veneer systems, including, but not limited to, standard CMU, polished ground face CMU, and glazed face CMU.
2. Provide all brick and face brick systems including a mock-up of each masonry brick veneer type for final approval of texture and color.
3. Provide/contribute to exterior wall mock-up for systems and assemblies provided by this package.
4. Provide all cast stone systems including, but not limited to, copings, wall and pier caps, sills, column wraps, miscellaneous trim, and date stone. Work includes retaining an independent testing agency to comply with Source Quality Control procedures.
5. Provide all mortar, grout, grout fill, sand, rebar, sealants, anchors, dowels, ties, fasteners, air and vapor barriers, fluid applied air barriers, insulation (including masonry filled cell), flashings, thru-wall flashings, concealed flashings, copings integral with this Work, shelf angle wall flashings, cavity drainage, vents, premanufactured flashings, reglets, joint specialties and reinforcement, weeps, masonry/metal accessories, and related for complete systems. Installation of reinforcement includes welding of rebar to beams and doweling of rebar into concrete slabs as shown on the Contract Documents. Embedded flashing for

roofing shall be furnished to the 4A Masonry Contractor by the 7A Roofing Contractor.

6. Contractor shall provide dumpsters for all work related to this contract package. Contractor is to comply with LEED Waste Management requirements.
7. Provide all masonry to steel ties that are not to be welded to steel.
8. Contractor shall furnish anchors and install Fiberglass Reinforced Plastic (FRP) window sill angle in accordance with 08A Contractor design. 08A Contractor shall provide engineering analysis for the connection of the FRP angle shown on the window sill details. 04A Contractor shall furnish FRP angle pre-punched with holes for fasteners designed by the 08A Contractor.
9. Contractor shall install all access panels, in building systems of this package, provided by other contractors.
10. Independent Testing Agency services shall be provided by the Owner through the Construction Manager. Contractor shall give reasonable notice to the Construction Manager for the purpose of scheduling the Independent Testing Agency when on-site inspections will be required. Contractor shall not take direction directly from the Independent Testing Agency.
11. Provide all masonry lintel systems specified in the lintel schedule/s as well as masonry/precast lintels for openings in masonry walls including doors, louvers, and mechanical duct penetrations depicted on the Contract Documents. Lintels for masonry wall penetrations not depicted or specifically referenced in the Contract Documents will be by others. Where the Contract Documents allow an option to use either masonry lintels or steel angles over openings, the 4A Prime Contractor shall provide necessary masonry lintels.
12. Contractor shall install all embedded items provided by others including, but not limited to, steel lintels, sleeves, bearing plates, anchors, anchor bolts, clips, angles, and related for complete systems. Contractor shall install hung plate assemblies that bear on masonry. Contractor shall provide any necessary welding which is required to install the above listed items.
13. Provide all special shapes, textures, trims, colors/finishes, colored mortar, glazed, and related for complete systems in accordance with the Contract Documents.
14. Provide bearing pockets contained in this Work. Contractor shall fill beam and joist pockets after erection and inspection in accordance with the Contract Documents.
15. Coordinate with Construction Manager and all other Contractors for penetrations and sleeve locations included within this Work. For mechanical or electrical openings in masonry, the Prime Contractor requiring the opening shall provide layout, lintel, and coordinate with the 4A Masonry Contractor. Contractor shall create all masonry opening in new work required by others. Pipe sleeves and conduit shall be core drilled, cut in, sleeved, and grouted by the Prime Contractor requiring the penetration.
16. Provide any and all necessary block outs, bulkheads, or depressions required for installation of expansion joint cover assemblies provided by other contractors. Provide grout infills required for the installation of expansion joint cover components.
17. Contractor shall provide all building insulation, fire safing, fire stopping systems, and sound insulation associated with this work. Contractor shall provide non-combustible material at the top of all interior masonry walls, as indicated. Where

masonry wall terminates beneath structural members above, Contractor shall provide non-combustible material between structure and deck above, and at control joints where indicated or required by AHJ. Contractor shall provide rubberized flashings and weeps, where indicated.

18. Contractor shall cover top of all masonry work daily.
19. Contractor shall receive, inventory, store, maintain, protect, and install only, all embedded items by other Contractors, including, but not limited to, bearing plates, anchor bolts, clips, angles, supports, hangers, accessories, and related for complete systems.
20. Contractor shall install only all angles required to support brick which are attached to masonry. The 5A Steel Contractor shall furnish this material to the 4A Masonry Contractor, inclusive of fasteners.
21. Provide all delivery, access, and staging systems including, but not limited to hoisting, scaffolding, platforms, lifts, and related.
22. Provide all cold and hot weather provisions necessary for uninterrupted completion of this Work including, but not limited to, admixtures, heat, enclosures, tenting, blankets, temporary protection, and related systems. It is anticipated that masonry will be required during summer and winter months. Contractor shall provide sufficient enclosures, heat and cold weather protection for this work so as to allow continuous installation of masonry work during cold weather. Contractor shall be responsible for all cold and hot weather masonry costs and charges.
23. Provide all dewatering of areas where this Work is in operation. Contractor shall maintain work areas, including foundations and footing, free of water and mud until backfilling operations are complete.
24. Provide all temporary shoring (engineered where required), bracing, supports, temporary protection for the Work.
25. Contractor shall assume temporary bracing at all 2-story masonry bearing walls (Gymnasium/Cafeteria/Music Rooms/etc.) to be erected in a single activity to the highest steel bearing elevation. Coordinate beam pocket widths with 05A Steel Contractor to facilitate rigging/installation of structural steel.
26. Contractor shall be responsible for protecting hollow metal frames set in masonry walls, checking frames during masonry work, making necessary adjustments as masonry is installed around the frames to maintain level, plumb, square, and true to the line, until frame is completely enclosed in masonry. Contractor shall not run masonry around a door frame that is missing top and /or bottom spreaders in place. Any existing damage or damage that occurs during this Work shall be immediately reported to the Construction Manager. Contractor shall accept installation of the hollow metal frames installed by others prior to proceeding with their work. Contractor shall notify the Construction Manager if frames are not set and properly braced as described. Installation of masonry on frames shall constitute acceptance.
27. Provide grouting of all hollow metal frames set in masonry.
28. Contractor shall maintain, restore, and repair all damage to grading around the building and/or site caused by all operations included in the Work at the Construction Manager's direction.
29. Contractor shall provide daily cleanup of all trash and debris generated by this work. Immediately upon completion of work and removal of scaffolding from any given room, area, or elevation, the Contractor shall rub all walls and scrape all floors to remove excess mortar, thoroughly clean all hollow metal frames and

leave floors in a broom clean condition. All excess material, trash and debris shall be picked up immediately upon removal of scaffolding at all interior and exterior elevations. Should the Contractor's cleanup be unsatisfactory, the Construction Manager shall perform the work at the Contractor's expense, without warning. Provide complete wash down of all exposed materials included in this Work.

30. Provide air and vapor barrier membranes at all exterior wall assemblies and at building envelope transitions; including substrates installed by others. Work includes all flashing/barrier membrane transitions at building envelope openings including, but not limited to, windows, louvers, penetrations, etc. for a complete system. Contractor shall coordinate air/barrier to roof membrane transitions with the 07A Roofing Contractor to provide a continuous building envelope.
31. Provide insulation including spray-insulation, at all exterior cavity wall assemblies unless specifically noted to be provided by others.
32. Contractor shall provide all work associated with Fluid-Applied Membrane Air Barriers.
33. Provide all below grade waterproofing systems at all masonry and concrete substrates including, but not limited to, elevator pit, foundation walls, site retaining wall, etc.
34. Provide all masonry and cast-stone at exterior site school signage.

3.06 CONTRACT PACKAGE 05A – STEEL CONTRACT

A. The Work of this Bid Package consists of the Work detailed by the following Specification Sections and as shown on the Drawings. The work is not restricted by division of Drawings or Specifications.

Perform and furnish all the work, labor, competent supervision, services, materials, equipment, hoisting, plant, tools, scaffolding, appliances, storage, and other facilities to complete the Contractor Package Trade work for the project in strict accordance with, and reasonably inferable from the Contract Documents, and as more particularly, but not exclusively, specified in section:

Division 00	Procurement and Contracting Requirements
Division 01	General Requirements
Division 05	Metals
05 12 00	Structural Steel Framing
05 12 13	Architecturally Exposed Structural Steel Framing
05 21 00	Steel Joist Framing
05 31 00	Steel Decking
05 50 00	Metal Fabrications
05 51 13	Metal Pan Stairs
05 51 19	Metal Grating Stairs
05 52 13	Exterior Pipe and Tube Railings
05 52 13	Pipe and Tube Railings
07 21 60	Structural Thermal Break
07 72 69	Roof Anchors and Safety Restraints
07 81 00	Applied Fire Protection (Ass Applicable)
07 92 00	Joint Sealants
10 73 10	Protective Covers (As Applicable)

B. This Contract shall also include, but is not limited to, the items listed below for the complete performance of the Contract Package

1. Provide all structural steel systems including, but not limited to, beams, columns, joists, steel lintels (lintel schedule), angles, channels, pipe, bridging, plates, bearing plates, bars, and related for complete systems. Work includes all surface preparation and finishes in accordance with the Contract Documents.
2. Provide all permanent and erection steel joist bridging for a complete system. Work includes relocation of bridging conflicting with MEP systems as well as bridging connections/anchors to adjacent structure (including masonry substrates) for a continuous load path.
3. Provide all metal decking systems including, but not limited to, floor deck, roof deck, acoustical roof deck (including insulation furnished to 7A Roofing Contractor), stair landings, and miscellaneous platform decking for a complete system. Work includes all deck accessories and/or miscellaneous steel at roof transitions, roof edges, pour stops at all elevated deck slab edges. Provide pour stop and/or closure angles at all deck perimeters, stairs, and openings including locations not specifically detailed on Contractor Documents.
4. Provide all metal fabrication systems including, but not limited to, monumental stair, operable partition supports, low partition/knee-wall supports, exterior in-wall steel assemblies, stairs, shelf angles, metal ladders, metal cages, alternating

tread devices, metal stair systems, metal safety railings, metal decorative railings, and related for complete systems. Interior mounted HVAC steel equipment stands/frames, Electrical Panel stands/Frames, MEP sleeves in masonry assemblies and pipe stands by others.

5. Independent Testing Agency services shall be provided by the Owner through the Construction Manager. Contractor shall give 72 hours' notice to the Construction Manager for the purpose of scheduling the Independent Testing Agency.
6. Contractor shall deliver anchor bolts and leveling plates to the jobsite within sixty (60) days of issue of Notice to Proceed. At least seven (7) days prior to start of work in each area Contractor shall check the layout and installation of all anchor bolts, leveling, and bearing plates, and provide written confirmation to the Construction Manager that all items are installed in an acceptable manner at the proper locations, and are ready for steel erection. Exception's must be specifically noted in written submittal form to the Construction Manager.
7. Provide all welding, connections, hangers, hardware, supports, shoring, bracing, fasteners, shapes, finishes, primers, penetrations, framed openings, structurally supported framed openings, shims, touch up, tolerances, temporary protection.
8. Provide all delegated design including, but not limited to, stairs, handrails, ladders, guardrails, and structural steel connections. Work includes preparation of supporting calculations prepared, signed and sealed by a Professional Engineer licensed in the State of Maryland.
9. Provide delegated design of Steel Joist per sheet S103C.
10. Provide all clip, angle, and related support welding for embedded items in concrete and masonry furnished by this Contractor where any welding is required. All welded connections not individually identified are the responsibility of this contractor.
11. Coordinate all support work and systems for other trades' equipment included in this Work with all other Contractors and the Construction Manager.
12. Furnish and deliver all embedded items associated with this Work for installation by other Contractors including, but not limited to, anchor bolts, base plates, bearing plates, sleeves, angles, channels, lintels (steel to steel installation and connections by this Contractor), clips, supports, straps, ties, anchors, shims, accessories, and related for complete systems. Items that connect both to structural steel and bear on masonry shall be installed by this Contractor. The 15A and 16A Prime Contractors will provide loose steel angle lintels for their work, which are not shown or specifically scheduled on the construction documents. Where the Contract Documents allow an option to use either masonry lintels or steel angles over openings, the 4A Masonry Contractor shall provide necessary masonry lintels. All furnish only items shall be delivered to the installing Contractor at the jobsite.
13. 05A contractor will furnish steel lintels to the 04A contractor for installation. 05A contractor will complete necessary welded or bolted connections after lintel is set by the 04A contractor.
14. Provide embedded wood-plate anchors at masonry assemblies/parapets for installation by others. Post-installed fasteners to anchor equipment, plates, and architectural systems will be the responsibility of the installing contractor.
15. Provide galvanized systems where designated and required in accordance with Contract Documents. Contractor shall provide galvanizing repair at all deck welds in accordance with the Contract Documents.
16. Provide all necessary touch up and repairs to all systems included in this Work

including, but not limited to, gouges, scratches, chipped paint, and related damages and/or defects following installation. All exposed steel must be of finishes quality, without defects or visible markings, numbering, labeling, and related. Markings on steel shall only be made with markers/materials that will not bleed through paint.

17. Within twenty-one (21) days of receipt of Notice to Proceed, the Contractor shall submit to the Construction Manager, a sequence plan layout which include proposed steel erection sequences, erection durations for each sequence, and proposed crane paths for approval.
18. Erect steel with crane located outside the footprint of the building. Maximum crane height shall be in compliance with all regulations.
19. Provide all access systems, rigging, hoisting, lifting, crane requirements, scaffolding, platforms, safety rails, temporary protection, and related for safe, compliant, installation of this Work. Crane location shall be coordinated with Construction Manager in advance, including all necessary documentation, submittals, and approved site-specific logistics and safety plan. All systems shall follow all Local, State, Federal, and related guidelines by all Authorities Having Jurisdiction.
20. 5A Steel Contractor shall immediately install, maintain, and remove at the direction of the Construction Manager (when this is permitted by the safety code) all safety railings, toe guards, and related provisions as required by all Authorities Having Jurisdiction and/or agencies responsible for safety inspections. This includes, but is not limited to, floor edges, roof edges, openings in the floor and/or roof decking, stair stringers, stair landings, and related. Devices will remain as required until the 5A Steel Contractor Demobilizes from the site. Upon demobilization the 6A General Trade Contractor shall maintain devices and remove as needed for work to commence, coordinated with all other contractors, while providing any further necessary safety devices to allow for work to commence by all contractors on site.
21. Provide BIM/Coordinated drawings for all structural steel systems, stair assemblies, floor penetration sub-framing, roof penetration sub-framing, in- wall misc./structural steel systems and exterior wall bracing. Work includes BIM coordination with relevant trades and participation in regular BIM Coordination meetings led by the 15A contractor. Coordination drawings do not excuse the contractor from responsibilities of coordinating work in the field.
22. Contractor shall coordinate with all Contractors to provide correct sizing and layout of all steel framing, supports, openings, and bracing required, prior to fabrication. Prior to commencement of construction of masonry bearing walls, the 5A Steel Contractor shall provide dedicated field use layout drawings that show dimensioned layout and elevation as well as installation details and dimensions, of all bearing plates.
23. Provide all metal fabrications (miscellaneous metals), including but not limited to, ornamental railings, handrails, ladders, rails, tracks, gates, bracing, bent plates, site railings, and other miscellaneous metal items required by the Contract Documents. The scope of this Work includes steel and misc. metals shown on all contract documents that are not shown on structural drawings.
24. Provide elevator pit ladder and support framing with grating at elevator sump. Work includes elevator sill support angles, hoist beam, and hoist beam bearing plates. Work is to be coordinated with 6A General Trades contractor for dimensions and installation locations.
25. Provide all structural and miscellaneous steel framing and sub-framing for roof top equipment, roof curbs, pipe penetration curbs as well as duct penetrations at floor and roof assemblies on Contract Documents including locations where sub-

framing is not specifically depicted on structural framing plans but implied by Typical Structural details. Contractor shall assume field erected sub-frames for roof penetrations for small roof-top equipment curbs and penetrations.

26. Provide all support steel and loose lintels for exterior school signage.
27. Provide steel top-of-wall bracing at all non-load bearing masonry walls in accordance with structural typical details. Firestopping by others.
28. Provide joist reinforcement strut-angles at roof hung basketball boards, associated pulleys, and climbing rope.
29. Provide operable partition supports, sub-framing, and bearing plates. Work includes hole in structural elements for partition support and threaded rods by others.
30. Provide prefabricated roof anchors inclusive of supplemental steel required for installation.
31. Trade Contractor shall coordinate and provide Plans per Concrete Note 9 on Sheet S001. Reference typical details for additional reinforcing around ganged penetrations.
32. Provide all structural steel and decking associated with exterior Bus Loop Canopies, Building Canopies and Courtyard Shade Structures. Standing Seam Metal Roofing at Shade Structures to be by 7A contractor.
33. Provide all Roof Anchor and fall protection safety restraints identified in the project documents.

3.07 CONTRACT PACKAGE – 06A – GENERAL TRADES CONTRACT

A. The Work of this Bid Package consists of the Work detailed by the following Specification Sections and as shown on the Drawings. The work is not restricted by division of Drawings or Specifications.

Perform and furnish all the work, labor, competent supervision, services, materials, equipment, hoisting, plant, tools, scaffolding, appliances, storage, and other facilities to complete the Contractor Package Trade work for the project in strict accordance with, and reasonably inferable from the Contract Documents, and as more particularly, but not exclusively, specified in section:

Division 00	Procurement and Contracting Requirements
Division 01	General Requirements
01 50 00	Temporary Facilities and Controls (As Applicable)
01 74 19	Construction Waste Management and Disposal
06 10 53	Miscellaneous Rough Carpentry
07 81 00	Applied Fire Protection
07 84 13	Penetration Firestopping (As Applicable)
07 91 00	Preformed Joint Sealants
07 92 00	Joint Sealants (As Applicable)
07 95 13	Expansion Joint Cover Assemblies
08 11 13	Hollow Metal Doors and Frames
08 11 16	Aluminum Flush Doors
08 14 16	Flush Wood Doors
08 17 00	Integrated Door Opening Assemblies
08 33 13	Coiling Counter Doors
08 33 23	Overhead Coiling Doors
08 71 00	Door Hardware
08 83 00	Mirrors
08 91 19	Fixed Louvers
10 00 05	Miscellaneous Specialties
10 11 00	Visual Display Units
10 14 00	Signage
10 21 13.19	Plastic Toilet Compartments
10 21 23	Cubicle Curtains and Track
10 22 13	Wire Mesh Partitions
10 22 39	Folding Panel Partitions
10 28 00	Toilet, Bath and Laundry Accessories
10 28 00.13	Electric Hand Dryers
10 44 13	Fire Protection Cabinets
10 44 16	Fire Extinguishers
10 50 00	Lockers (ADD#1)
10 56 13	Metal Storage Shelving (ADD#1)
10 81 13	Bird Control
11 00 05	Miscellaneous Equipment
11 13 13	Loading Dock Bumpers
11 30 13	Appliances
11 52 13	Projection Screens
11 61 42	Platform Curtains
11 66 23	Gymnasium Curtains
11 66 43	Basketball Scoreboard
11 66 47	Basketball Shot Timer Scoreboard

11 66 53	Gymnasium Divider
12 24 13	Window Shade Systems
12 66 00	Telescoping Stands
13 34 13	Greenhouse & Greenhouse Related Equipment
14 24 00	Passenger Elevators

B. This Contract shall also include, but is not limited to, the items listed below for the complete performance of the Contract Package

1. Provide temporary toilets and scheduled service/cleaning for all Contractor's, other Contractor's, and Construction Manager's personnel for duration of project. Contractor shall provide a minimum of one (1) temporary toilet per every ten (10) on-site personnel/workers (a minimum of two (2) toilets on-site at all times). Toilets shall be serviced/cleaned a minimum of two (2) time per week and shall include soap/sanitation dispensers and toilet paper. Contractor shall assume an average manpower count of 90 workers for the duration of the Project. Toilet counts shall be adjusted monthly, by this Contractor, to correspond with projected monthly manpower counts. Contractor shall relocate temporary toilets as required for Phasing.
2. Contractor shall provide and maintain temporary fire extinguishers as required by MOSH throughout construction areas for use by all trades.
3. Contractor shall provide all on-site general use dumpsters, haul-off and disposal for the duration of the project until the project is accepted by the owner. Waste from site demolition, existing building demolition, abatement and hazardous materials will be removed by others. Contractor shall produce, follow, and enforce a Construction Waste management Plan per Construction Waste Management Specification and LEED Requirements. Contractor shall provide all necessary documentation required. Construction debris to be sorted and separated in an off-site facility.
4. 5A Steel Contractor shall immediately install, maintain, and remove at the direction of the Construction Manager (when this is permitted by the safety code) all safety railings, toe guards, and related provisions as required by all Authorities Having Jurisdiction and/or agencies responsible for safety inspections. This includes, but is not limited to, floor edges, roof edges, openings in the floor and/or roof decking, stair stringers, stair landings, and related. Devices will remain as required until the 5A Steel Contractor Demobilizes from the site. Upon demobilization the 6A General Trade Contractor shall maintain devices and remove as needed for work to commence, coordinated with all other contractors, while providing any further necessary safety devices to allow for work to commence by all contractors on site.
5. Unless noted otherwise, Contractor shall provide, maintain, and remove MOSH/OSHA compliant rails, toe boards, etc. at the perimeter of all floors, roof, and all interior openings, stairs, pits, shafts, etc. Contractor shall temporarily fill all stair pans once stairs have been erected. Contractor shall mitigate any tripping hazards associated with differing elevations of floor slabs. Contractor shall provide fall protection rails at exterior window openings (after wall erection) when sill height does not comply with fall hazard requirements. Contractor shall patch all materials damaged by temporary rail and gate installation.
6. Contractor shall remove snow as necessary to provide access within the building, building pad, entrances to the building, pathway from parking area/s to building, Contractor's site office and parking/storage compound within the current project LOD within sixteen (16) hours of a storm for the duration of the project, or sooner where required by law anywhere on the property. Project parking areas, walks

and staging areas are to be cleared by the 2A Contractor per 2A SOW.

7. Provide temporary partitions/protection measures for security and weather protection. Contractor shall install rough carpentry partitions at all 1st floor openings, and reinforced clear poly at all 2nd floor openings. Contractor shall provide for secure, self-closing, and lockable double doors at all exterior door openings.
8. Provide complete pumping and dewatering of all building areas following slab on grade and backfill completion.
9. Contractor shall furnish and install all supports, tracks, closures, grounds, and bracing for all items installed under this Contract Package.
10. Install all Owner Supplied Contractor installed equipment and accessories per the Contractor Documents unless specifically noted to be installed by another Contractor.
11. Provide Rough Carpentry and wood sheathing work as required by the Contract Documents including, but not limited to the following items:
 - a. Provide all wood blocking/nailers, including in-wall blocking, for all systems, assemblies and equipment unless specifically noted to be by others.
 - b. Provide all plywood sheathing unless specifically noted to be by others. Work includes but is not limited to, fire-rated plywood backer panels at Electrical, Telecom, and Mechanical installations.
 - c. Provide framing, sleepers, nailers at all interior benches, nooks, casework, display cases, sills, interior wall caps, etc.
 - d. Rough carpentry and sheathing shall be treated in accordance with the Contract Documents.
12. Furnish all prefabricated expansion control assemblies. Work includes installation of expansion control assemblies in concrete and masonry including, but not limited to, interior/exterior masonry wall-to-wall assemblies, and interior concrete floor-to-floor assemblies. Contractor shall coordinate with all other Contractors and Construction Manager for all installations.
13. Provide all hollow metal door and window frames, hollow metal doors, hollow metal panels, wood doors, special doors, architectural and finish hardware, and door equipment in accordance with the Contract Documents.
14. Provide all insulation requirements within hollow metal door and window frames.
15. Provide temporary key cylinders for all door sets including hardware provided by others. Furnish and deliver permanent key cylinders for all hardware directly to the Owner. Permanent cores will be installed by the Owner, the key cabinet shall be installed by the Contractor.
16. Contractor shall review all hollow metal frame, door, and hardware schedules for correctness and compatibility. Any discrepancies shall be brought to the attention of the Construction Manager.
17. Contractor shall coordinate with all other Contractors to ensure timely installation of hollow metal work. Contractor shall install all hollow metal work plumb, square, true, and shall be responsible for maintaining and repairing the work until the 04A Masonry Contractor accepts the frames for masonry walls. Contractor shall install temporary bottom and mid-height spreaders to prevent deformation of the frames. Contractor shall remove spreaders once wall assemblies completely envelope the frame.
18. Contractor shall provide, maintain, and remove when directed protection on all doors sufficient to prevent damage. At a minimum, protection shall be $\frac{1}{4}$ " thick

cardboard on both sides of the door for the full height of the door.

19. Provide all hardware for the project inclusive of hardware for doors provided by others; all hardware requiring low voltage connections will be wired by this contractor. 16A Contractor shall provide power connection to the power supply. Provide complete coordination with all other trades and the Construction Manager for hardware integration with systems by others. Aluminum door hardware in storefronts to be furnished to the 8A Prime Contractor for installation. Temporary cores will be furnished and installed by this contractor. Final cores to be furnished to the Owner by this contractor.
20. Contractor shall furnish the magnetic door holders. The 16A Electrical Contractor shall install the wall mounted component of the magnetic holders. This Contractor shall install the door mounted component.
21. Contractor to coordinate with all other trades and the Construction Manager for penetrations, wiring provisions, raceways, integration with any and all wired systems, framing support, connections, and related. Electrified hardware furnished by this Contractor shall include all associated power packs, electrical power transfers, transformers, relays, and related for complete system.
22. Contractor shall provide complete installation of overhead coiling doors. Contractor shall provide all jambs, sills, counters, and related as required for a complete system.
23. Provide complete surface preparation at all systems where fluid applied air/vapor barrier systems are to be applied to this Work. Surface preparation includes sealing of penetrations, closing of gaps, and providing a clean smooth surface.
24. Contractor shall provide all work associated with the gymnasium bleachers.
25. Provide all fixed metal louvers at interior and exterior wall assemblies. Work includes layout, insulation, screens, blank-off panels, and accessories for a complete system.
26. **Contractor to provide all metal storage shelving and metal lockers throughout. Coordinate housekeeping pads & curbs with 3A contractor. (ADD#1)**
27. Provide all visual display boards including, but not limited to, tackboards, tack-strips, tackable surfaces, marker-boards, trims, and accessories (flag holders, hook-clips, end stops, paper-holders, etc.).
28. Provide all interior and exterior signage including, but not limited to, room/space panel signage, stair wayfinding, wayfinding, safety/evacuation placards, bronze commemoration plaques, LEED Certification Plaque, LEED Information signages, dimensional characters, cafeteria nutrition signage, project construction sign, Monument Signage, and accessories for a complete signage package. Work includes all devices and single point connections for electrified/illuminated signage. Provide backer plates for all glass mounted signage.
29. Provide all toilet compartments, urinal screens, door panels, hardware, overhead braces, and accessories.
30. Provide all operable partition systems as required by the Contract Documents. Work includes all tracks, threaded rods and suspension system, electrical operator, integrated door and hardware, control stations, sound sills, and accessories. Coordinate top track anchor locations with 05A Steel Contractor prior to fabrication of supporting steel. Power and control wiring by 16A Electrical Contractor.
31. Contractor to provide and install all bleacher systems as indicated by contract documents.
32. Provide all toilet accessories including, but not limited to, grab bars, under

lavatory guards, custodial accessories, framed mirrors, toilet tissue dispensers, and disposal units. Work includes installation of Owner furnished accessories as well as wall mounted furring strips/shims for plush/plumb mounting of framed mirrors.

33. Provide all fire extinguishers and fire extinguisher cabinets with accessories. Provide layout to 04A Masonry Contractor for recessed cabinets.
34. Provide all metal storage shelving and resource bind storage shelving including, but not limited to shelves, bins, uprights, supports, accessories, and canopy tops. Shelving shall confirm to performance requirements in accordance with the Contract Documents.
35. Provide residential appliances as indicated by the Contract Documents. Contractor will receive delivery of, store, and install any Residential Appliances indicated as Owner Furnished – Contractor Installed. Coordinate appliances with 15A and 16A Contractors for all plumbing, venting, and electrical power. Final connections/hook-up by others.
36. Provide all projection screens including, but not limited to, viewing screens, screen mechanisms, controls, case, mounting hardware, and associated for a complete system. Coordinate with 16A Electrical Contractor for all power and control wiring; power connection by others.
37. Provide all necessary supports and support hardware for projection screens, ceiling hung projection screens shall be supported from structure above. Coordinate with all other Contractors and the Construction Manager for all installations included in this Work.
38. Provide all Gymnasium Equipment including, but not limited to, wall mounted basketball backstops, overhead suspended basketball backstops, controls, safety pads, exercise equipment, floor inserts and associated for a complete system. Furnish floor inserts to the 03A Concrete Contractor, layout by this Contractor. Provide all roof sub-framing as required for mounting of the Gymnasium Equipment to the structure. Coordinate all electrical conduit, wiring, and connections with the 16A Contractor for motorized equipment, final connections by others.
39. Provide Gymnasium equipment floor inserts (sleeves and anchors) for volleyball and tennis layouts.
40. Provide all cubicle curtains including, but not limited to, tracks, curtains/drapery, grommets, carriers, and associated for a complete system. Provide additional wire hangers and/or suspension framing to support ceiling mounted/recessed tracks.
41. Provide all roller window shades, including, but not limited to, mounting hardware, sunscreen material, black-out assemblies, motors, controls, power panel, and associated for a complete system. Coordinate power and control system with 16A Electrical Contractor. Pathways, wiring and power shall be provided by others.
42. Contractor shall coordinate with all other contractors at locations where work by other trades is within, penetrates, or mounted to any system included in the Work. Work includes cut-outs for devices, fixtures, and equipment.
43. Contractor shall unload and set in place all owner furnished appliances. Final connections shall be by others.
44. Provide complete elevator system including, but not limited to, elevator machine, power unit, hydraulics, pumps, motors, platform, supporting systems, buffers, cab finishes, controllers, hall lanterns, position indicators, signage, floor finish, and associated for a complete system
45. Coordinate with the 16A Electrical Contractor for all embedded raceways,

conduits, and boxes in masonry assemblies for elevator equipment; layout by this contractor. Provide all power and low-voltage control cabling and connections between elevator equipment furnished in the work. Primary electrical power connections, fire alarm, and telecom cabling to elevator service panel will be by others.

46. Coordinate with 05A Steel Contractor for hoist-beam, pit ladder and elevator sill support. Embedded plates for rails and equipment supports shall be furnished by this contractor.
47. Coordinate with 15A Contractor for elevator pit sump pump, sump pump controls and associated piping.
48. Contractor is responsible for scheduling and paying for all required elevator inspections, including but not limited to, the third-party pre-inspection and the Maryland State inspection.
49. Contractor shall provide an elevator punch list to the Construction Manager of deficient items impacting inspections (3) weeks prior to the scheduled inspection.
50. Contractor shall be responsible for coordinating/installing elevator phone lines and emergency dialers with the Owner and all applicable other Contractors.
51. In the case where high or low voltage power is required for elevator equipment provided and installed under this package but not shown on the Contract Documents, Contractor shall be responsible for providing all provisions necessary to provide a complete installation.
52. Contractor shall make the elevator safe and provide safety measures for work in the elevator hoist-way and pit by others. Work includes fall protection measures at all floor openings.
53. Contractor shall furnish minimum (2) two Knox Boxes, including temporary requirements. Contractor is responsible for layout and coordination with the 4A Masonry Contractor for installation.
54. Provide Greenhouse and all related Greenhouse Equipment.
55. Provide all Loading Dock Bumpers per specification 11 13 13.
56. Provide all Applied Fire Protection identified in the Contract Documents.

3.08 CONTRACT PACKAGE – 07A – ROOFING CONTRACT

A. The Work of this Bid Package consists of the Work detailed by the following Specification Sections and as shown on the Drawings. The work is not restricted by division of Drawings or Specifications.

Perform and furnish all the work, labor, competent supervision, services, materials, equipment, hoisting, plant, tools, scaffolding, appliances, storage, and other facilities to complete the Contractor Package Trade work for the project in strict accordance with, and reasonably inferable from the Contract Documents, and as more particularly, but not exclusively, specified in section:

Division 00	Procurement and Contracting Requirements
Division 01	General Requirements
01 74 19	Construction Waste Management and Disposal
07 21 00	Thermal Insulation
07 42 13	Metal Wall Panels
07 42 13.16	Standing Seam Metal Roof Panels
07 42 13.23	Metal Composite Material Wall Panels
07 92 00	Joint Sealants (As Applicable)
07 48 13	Thermal Break Cladding Support System
07 53 23	EPDM Thermoset Single-Ply Roofing
07 62 00	Sheet Metal Flashing and Trim
07 71 00	Roof Specialties
07 71 23	Gutters and Downspouts
07 71 29	Manufactured Roof Expansion Joints
07 72 00	Roof Accessories
07 72 73	Membrane Leak Detection and Testing
07 91 00	Preformed Joint Sealants (As Applicable)
10 73 10	Protective Covers

B. This Contract shall also include, but is not limited to, the items listed below for the complete performance of the Contract Package

1. Provide complete roofing and roofing insulation systems including, but not limited to, self-adhering roofing membranes, fasteners, roof membrane plies, camp membrane, flashing materials, coating materials, primers, mastic, insulations, tapered edge strips, cant strips, expansion joints and expansion joint covers, high density gypsum board, caulking and sealers, recovery boards, adhesives, snow and ice guards, roof hatches, roof hatch guardrail systems, splash blocks, misc. roof accessories, and related for complete and functioning systems
2. Provide complete formed metal wall panels systems. Work includes all associated closures, trim, flashing, fasteners, design, miscellaneous furring/supports not specifically assigned to others, etc., as required for a complete and functioning system. Coordinate with Construction Manager and all other Contractors for penetrations included withing this work.
3. Provide all exterior sheathing and insulation associated with metal panels, metal canopies, standing seam aluminum panels, parapets, sills, knee walls, etc. Provide all insulation at locations where metal framing is closed in by

gypsum board products.

4. Contractor shall provide dumpsters for all work related to this contract package. Contractor is to comply with LEED Waste Management requirements.
5. Provide all shop fabricated and manufactured prefabricated sheet metal flashing, trim, coping, and aluminum soffit systems including, but not limited to, exposed aluminum trip, aluminum copings, metal flashing, metal downspouts and boots, roof edge drainage, counter flashings, transitions, trim, and related for complete and functioning systems.
6. Contractor shall remove and clean, at the direction of the Construction Manager, all metal wall panel temporary protective coverings.
7. For all systems included in this work, provide all fasteners, concealed fasteners, adhesives, sealants, caulking, primers, hardware, joints, patterns, tapered materials, sloped drainage, drain basins and covers, overflow scuppers, expansion joins, expansion control systems, corners and trims, end caps, connections, finishes, tie-ins to all vapor barriers/drains/terminations in accordance with the Contract Documents, and related accessories and procedures for complete and functioning systems.
8. Provide rough carpentry systems related to roofing systems including, but not limited to roof curbs, curb blocking, parapet top plates, roof to wall transitions, roof to roof transitions/curbs, all blocking associated with sheet metal included in this Work, plywood decking, and canopy systems. Provide all rough carpentry as required for complete systems of this Work.
9. Contractor shall coordinate with all other Contractors and the Construction Manager for all roofing penetrations. All penetrations to be weathertight daily. Contractor is responsible for cutting, patching, and repairing all areas where penetrations occur.
10. Contractor shall coordinate roofing manufacturer inspections with Construction Manager prior to Substantial Completion.
11. Furnish and deliver any materials required to be embedded or connected to work by other trades prior to this Work commencing including, but not limited to, reglet sections, counter flashing receivers, thru wall flashing, and any other related systems integral with this Work. It is the responsibility of this Contractor to coordinate with all other trades and the Construction Manager for necessary items required for this Work that require installation by others.
12. At the Construction Manager's direction, Contractor shall hold back and temporarily seal the roof at all edges, terminations, openings, or related for completion of work by other trades. All temporary seals and terminations shall conform with manufacturer recommendations and specifications. In order to accommodate the project schedule, Contractor shall begin roofing work prior to the completion of any parapets, miscellaneous work by other trades, or related, in which case Contractor shall install temporary terminations and return to finish completion of this Work as directed by the Construction Manager.
13. Contractor shall provide temporary membrane materials below roof top equipment to remain weathertight conditions until equipment curbs, and roof-top equipment are installed. Work includes temporary flashing of roof curbs.
14. Contractor shall maintain all roofing areas for the project duration. Contractor shall provide all accommodations for drainage away from roof areas and building during construction in coordination and direction of the Construction Manager. Contractor shall remove snow from roof area within sixteen (16) hours of a storm

event, or sooner for the duration of the project, or sooner where required by law, any agencies responsible for safety regulations/inspections, or any other Authorities Having Jurisdiction anywhere on the property.

15. Provide all field-fabricated roof-to-roof and roof-to-wall expansion joints, inclusive of prefabricated roof-to-roof expansion control systems.
16. Provide (engage and retain) all manufacturer and independent 3rd party testing and inspections in accordance with the Contract Documents including, but not limited to, full time on-site 3rd party inspector for systems installed by this Contractor. Contractor to provide all test reports, inspection reports, warranties, and guarantees as required by the Contract Documents.
17. Provide all membrane pads for roof mounted accessories and equipment furnished by others.
18. Provide all membrane straps and pads to anchor lightning protection equipment, cabling, air terminals, etc. mounted to systems installed by this Contractor. Work includes coordination with 16A Electrical Contractor. Layout, mechanical fasteners, clips, adhesives, and cabling provided by others.
19. Provide all metal coping, blocking, and fasteners at masonry site walls/dumpster enclosure.
20. Contractor shall provide all roofing details inclusive of those shown in MEP drawings.
21. Contractor shall, as required to maintain the construction schedule, install a temporary roof at each area to ensure the building is watertight per the construction schedule, should roofing materials not be available to meet the schedule for each area
22. Provide 10 73 10 Protective Covers, including all associated flashings, attachments to structural steel, aluminum soffits and aluminum downspouts.
23. Provide Pre-Finished Standing Seam Metal Roofing, downspouts and all related appurtenances at courtyard Shade Structures. 5A contractor to provide structural steel.

3.09 CONTRACT PACKAGE – 08A – WINDOWS & STOREFRONT CONTRACT

A. The Work of this Bid Package consists of the Work detailed by the following Specification Sections and as shown on the Drawings. The work is not restricted by division of Drawings or Specifications.

Perform and furnish all the work, labor, competent supervision, services, materials, equipment, hoisting, plant, tools, scaffolding, appliances, storage, and other facilities to complete the Contractor Package Trade work for the project in strict accordance with, and reasonably inferable from the Contract Documents, and as more particularly, but not exclusively, specified in section:

Division 00	Procurement and Contracting Requirements
Division 01	General Requirements
06 68 00	Fiberglass Reinforced Plastic Fabrications
07 84 43	Joint Firestopping (As Applicable)
07 91 00	Preformed Joint Sealants (As Applicable)
07 92 00	Joint Sealants (As Applicable)
08 41 13	Aluminum-Framed Entrances and Storefronts
08 44 13	Glazed Aluminum Curtain Walls
08 80 00	Glazing
08 87 00	Glazing Surface Film
08 88 13	Fire-Rated Glazing

B. This Contract shall also include, but is not limited to, the items listed below for the complete performance of the Contract Package

1. Provide all windows, storefronts, and curtainwalls required by the Contract Documents including, but not limited to aluminum windows, interior and exterior aluminum doors and frames, sills, metal covers, break metal, metal panels, metal vision panels, glass, glazing, sealants, interior and exterior caulking of work in this package, insulation around all windows and behind any curtainwall systems, and all other items required by the Contract Documents to provide a complete interior and exterior window installation.
2. Provide all fasteners, connections, welding, concealed welds, joinery, expansion provisions, glazing, flashing, drainage provisions, framing, framing members, backer plates, brackets, reinforcement provisions, anchors, inserts, flashing, concealed flashing, shoring, supports, bars, rods, profiles, tubes, structural provisions, specified finishes, gaskets, sealants, joint sealants, connections, shims, accessories, and related for complete and functioning systems.
3. Install complete hardware systems provided by others for all materials included in this Work including, but not limited to door hardware sets, hinges, continuous gear hinges, mortise auxiliary locks, manual flush bolts, panic exit devices, strikes, operating trim, removable mullions, closers, concealed overhead holders, surface mounted holders, door stops, weather stripping, weather sweeps, silencers, thresholds, and related accessories for complete and functioning systems.
4. Provide wind load connections for curtain wall/storefront systems as indicated in the Contract Documents.
5. Provide complete glass and glazing systems for entire project, including systems included in this Work and included in door/window/frames opening by others in accordance with the Contract Documents, glass at casework and display cases

by others. Work includes all glass and glazing systems including, but not limited to float glass, insulating glass, glass for windows, doors, borrowed lites, storefront framing, fire-rated glazing, spandrel and insulated infill panels in framed opening, glazing sealants, glazing gaskets, glazing tape, cleaners, primers, sealers, setting blocks, spacers, edge blocks, cylindrical glazing sealant backing, accessories, delegated design, and related for complete systems.

6. Contractor shall provide engineering analysis, as required by the Contract Documents and for the typical windowsill and jamb details. Contractor shall be responsible for any and all costs associated with changes to the Contract Documents arising from this engineering analysis.
7. Contractor shall provide engineering analysis for the connection of the Fiberglass Reinforced Plastic (FRP) angle shown on the window sill details. 04A Contractor shall furnish FRP angle pre-punched with holes for fasteners designed by this Contractor. Contractor shall provide signed and sealed connection requirements for angle attachment to CMU to include size, type, spacing, embedment depth and edge distance. 04A Contractor shall furnish anchors and install FRP sill angle in accordance with 08A Contractor design.
8. Coordinate and participate in all hardware meetings with the 06A Contractor.
9. Provide all joint sealant systems associated with aluminum and glazing assemblies and where systems meet dissimilar materials.
10. Provide miscellaneous trim, break metal, closure pieces, accessories, and related at adjacent construction for finished and complete system.
11. Provide all field measuring and verification of openings in accordance with the Contract Documents.
12. Contractor to coordinate with all other trades and the Construction Manager for penetrations, wiring provisions, raceways, integration with any and all wired systems, framing support, connections, and related. Electrified hardware furnished by this Contractor shall include all associated power packs, electrical power transfers, transfers, relays, and related for complete system.
13. Coordinate with all other contractors at locations where work by other trades is within, penetrates, or mounted to any system included in this Work. Work includes cut-outs for devices, fixtures, and equipment.
14. Contractor shall provide, maintain, and remove when directed, protection on all storefront doors sufficient to prevent damage. At a minimum, protection shall be $\frac{1}{4}$ " thick cardboard on both sides of the door for the full height of the door.
15. Protective film and coverings shall remain in place on finish products during the duration of the project and only be removed at the direction of the Construction Manager.
16. Provide all access, safety, rigging, hoisting, platforms, lifting, scaffolding, temporary protection, and related systems for all work. All safety and access systems must be coordinated and approved by the Construction Manager. Contractor shall protect roofing surfaces with plywood when working above, near or adjacent to.
17. The 6A General Trade Contractor shall furnish and install temporary key cylinders. The 6A General Trade Contractor shall furnish permanent key cylinders directly to the Owner.
18. Contractor shall, when glazing wood door lites, set all nails and putty all holes to match door finish.

19. Ten (10) days prior to Substantial Completion of the Project, the Contractor shall repair any broken glass, wash, and polish all glass surfaces and frames.

3.10 CONTRACT PACKAGE – 09A – GYPSUM CONTRACT

A. The Work of this Bid Package consists of the Work detailed by the following Specification Sections and as shown on the Drawings. The work is not restricted by division of Drawings or Specifications.

Perform and furnish all the work, labor, competent supervision, services, materials, equipment, hoisting, plant, tools, scaffolding, appliances, storage, and other facilities to complete the Contractor Package Trade work for the project in strict accordance with, and reasonably inferable from the Contract Documents, and as more particularly, but not exclusively, specified in section:

Division 00	Procurement and Contracting Requirements
Division 01	General Requirements
05 40 00	Cold Formed Metal Framing
06 16 43	Gypsum Sheathing
07 21 00	Thermal Insulation
07 84 43	Joint Firestopping (As Applicable)
07 91 00	Preformed Joint Sealants (As Applicable)
07 92 00	Joint Sealants (As Applicable)
08 31 13	Access Doors and Panels (As Applicable)
09 21 16.23	Gypsum Board Shaft Wall Assemblies
09 22 16	Non-Structural Metal Framing
09 22 19	Special Accessories for Gypsum Board Assemblies
09 29 00	Gypsum Board
09 51 00	Acoustical Ceilings
09 52 50	Interactive Acoustical Panel System
09 84 00	Acoustical Panels

B. This Contract shall also include, but is not limited to, the items listed below for the complete performance of the Contract Package

1. Provide all cold formed metal framing, light gauge metal framing, structural metal stud framing, drywall partition, and ceiling assemblies, acoustical ceiling assemblies, exterior gypsum sheathing assemblies, cementitious backer board assemblies, and acoustical and thermal insulation systems.
2. Provide engineered design (delegated design) of any cold formed metal framing work as required in accordance with the Contract Documents, including exterior walls, interior non-load bearing walls, and horizontal framing. Member gauges, box headers depth/configurations, jamb stud quantities, etc. depicted/noted on the Contract Documents shall be assumed diagrammatic and shall be assumed minimum sizes to comply with Architectural partition schedules. Variations in stud gauges, box headers, quantities, connections, stud spacing, etc. for compliance with performance requirements (delegated design) from minimum requirements will be the responsibility of this Contractor.
3. Provide all plywood and gypsum wall sheathing at exterior wall assemblies, and at interior partition types depicted on the interior partition schedule.
4. Provide all thermal and acoustical insulation at all in-wall assemblies, exterior soffits and interior applications unless specifically noted to be provided by others, vermiculite insulation within CMU by 04A Masonry Contractor. Work includes exterior wall assemblies at joist seats, window, and door shim spaces.
5. Contractor shall furnish and install all building insulation, and sound insulation,

not specifically required by other Contract Packages.

6. Contractor shall provide all drywall work inclusive of patching around any new devices which may not be clearly identified on the Contract Documents, patching around light fixtures, and diffusers.
7. Provide all in-wall and in-ceiling metal strapping/backing support systems attached to metal studs for all wall-mounted and ceiling-mounted equipment by all other Contractors shown on Contract Documents. Contractor shall coordinate with all other trades and Construction Manager for locations and extent of in-wall metal strapping/backing systems.
8. Provide all wood blocking for systems/assemblies provided by this Contractor including, but not limited to, wall mounted panels.
9. At locations where miscellaneous steel or prefabricated posts are not depicted on the Contract Documents, Contractor shall provide additional framing and associated connections including, but not limited to, above- ceiling kickers at all storefront assemblies' heads and rigid connections/clips at supporting knee-walls below storefront assembly sills.
10. Provide all gypsum board shaft wall assemblies, including all accessories for a complete system.
11. Contractor is responsible for all materials, connections, and attachments at any cold formed metal framing to dissimilar materials connections occur.
12. Contractor shall furnish and install drywall, ceiling systems, and acoustical work including, but not limited to, gypsum board systems, acoustical treatments, suspension systems, acoustical ceilings, sound diffuser panels, wall treatment, cold formed metal framing, sheathing, metal studs, re- engineered steel stud trusses, acoustical insulation, thermal insulation, safing insulation, acoustical sealants, joint sealants, tile backing panels, drywall accessories, and all related work required by the Contract Documents. Contractor shall be responsible for coordination of this work with the other Contractors and the Construction Manager. Contractor shall obtain the approval of the Construction Manager prior to the installation of drywall.
13. Provide and install all metal studs and cold-formed metal framing as indicated on the Contract Drawings regardless of what materials are to be applied to the studs/framing members.
14. Provide all internal metal backing for the support of casework, toilet accessories, handrail, and display rails, and other identified ceiling and wall mounted items shown on the drawings.
15. Provide complete radiused and pyramidal sound diffusing panel systems including all accessories, fasteners, ceiling suspension grids, clips, trim, and layout for a complete system.
16. Provide all ceiling and wall mounted acoustical panel systems including all accessories, fasteners, furring, clips, blocking, trim, and layout for a complete system.
17. Contractor shall coordinate with all other contractors at locations where work by other trades is within, penetrates, or mounted to any system included in this Work. Work includes cut-outs for devices, fixtures, and equipment. Contractor shall ensure all required inspections have been made prior to closing in walls and ceilings.
18. Provide all cutting, patching, sealing, and related around all Mechanical, Electrical, Plumbing, Fire Protection, Structural, and related work where drywall

systems are installed around work of other trades.

19. Provide all framed openings in drywall walls and ceilings required by work installed by others. Work includes installation of sleeves furnished by others.
20. Provide all firestopping, sealants, smoke-stop and acoustical materials as specified between all systems included in this Work and dissimilar materials.
21. Contractor shall install all access panels, in building systems of this package, provided by other contractors.
22. Contractor shall clean all tracks prior to wall close-in.

3.11 CONTRACT PACKAGE – 09B – FLOORING CONTRACT

A. The Work of this Bid Package consists of the Work detailed by the following Specification Sections and as shown on the Drawings. The work is not restricted by division of Drawings or Specifications.

Perform and furnish all the work, labor, competent supervision, services, materials, equipment, hoisting, plant, tools, scaffolding, appliances, storage, and other facilities to complete the Contractor Package Trade work for the project in strict accordance with, and reasonably inferable from the Contract Documents, and as more particularly, but not exclusively, specified in section:

Division 00	Procurement and Contracting Requirements
Division 01	General Requirements
07 92 00	Joint Sealants (As Applicable)
09 30 13	Ceramic Tiling
09 65 00	Resilient Flooring
09 65 10	Hybrid Resilient Flooring
09 65 13	Resilient Base & Accessories
09 65 67	Resilient Sheet Athletic Flooring
09 67 23	Resinous Flooring

B. This Contract shall also include, but is not limited to, the items listed below for the complete performance of the Contract Package

1. Contractor shall coordinate with all other contractors at locations where work by other trades is within, penetrates, or mounted to any system included in the Work. Work includes cut-outs for devices, fixtures, and equipment.
2. Contractor shall provide moisture testing and protection of test kits on all concrete slabs.
3. Contractor shall coordinate with all other contractors to ensure proper layout of flooring depressions, transitions, and patterns.
4. Contractor shall inspect the substrate before installation of finished materials. The substrate to receive new flooring/tiling shall be patched, grounded, sanded, or leveled as required to accept new finishes at no additional costs. The installation of new finishes shall be an indication of the Contractor's acceptance of the substrate, and he will assume the responsibility for any unacceptable finished work caused by substrate conditions. Contractor shall notify Construction Manager prior to commencing work regarding unacceptable substrates.
5. Provide all flooring required by the Contract Documents, including, but not limited to all ceramic floor tile, wall tile, base (including at casework), thresholds (marble, slate or stone), setting beds, waterproof membranes, underlayment, carpet, resilient flooring, vinyl composition tile and trim, luxury vinyl tile, Resilient Sheet Athletic Flooring, Resinous flooring systems, hybrid floorings, wood flooring, entrance floor mats, transition strips, adhesives, traffic coatings, base and accessories. Contractor shall perform all layout associated with this work. Contractor shall coordinate with all other Contractors to ensure proper layout of flooring depressions, transitions, and patterns.
6. Contractor shall protect all new flooring after installation as required by the Construction Manager, flooring protection will be a minimum of Ram Board (or equivalent as approved by Construction Manager) at all areas. Resinous flooring shall be protected by a coroplast type product or as recommended by

manufacturer.

7. Provide all adhesives, grout, setting beds, reducers, transitions, trim, metal edge strips, finishes, colors, textures, waterproofing membranes, sleepers, channels, sanding, and finishing, thresholds, underlayment, crack isolation and waterproof membranes, sealers, accessories, and related for complete systems.
8. Floor finish shall be continuous under all casework, furnishings, equipment, and related free-standing fixtures that are set on the floor.
9. Provide setting bed, mesh fabric, quarry tile, and base as indicated in the Contract Documents.
10. Provide all floor transitions and thresholds.
11. Contractor shall perform all cleaning and waxing for the project prior to the production of the Architect's Punchlist. Wax shall be Buckeye Clarion25. Six (6) coats of wax will be applied. Installation of wax to be coordinated with HCPS Facilities Staff to witness.

3.12 CONTRACT PACKAGE – 09C – PAINTING CONTRACT

A. The Work of this Bid Package consists of the Work detailed by the following Specification Sections and as shown on the Drawings. The work is not restricted by division of Drawings or Specifications.

Perform and furnish all the work, labor, competent supervision, services, materials, equipment, hoisting, plant, tools, scaffolding, appliances, storage, and other facilities to complete the Contractor Package Trade work for the project in strict accordance with, and reasonably inferable from the Contract Documents, and as more particularly, but not exclusively, specified in section:

Division 00	Procurement and Contracting Requirements
Division 01	General Requirements
07 92 00	Joint Sealants (As Applicable)
07 92 19	Acoustical Joint Sealants
09 91 23	Interior Painting
09 96 00	High Performance Coatings
09 96 72	Fluid Applied Insulative Coating

B. This Contract shall also include, but is not limited to, the items listed below for the complete performance of the Contract Package

1. Contractor shall coordinate with all other contractors at locations where work by other trades is within, penetrates, or mounted to any system included in the Work. Work includes cut-outs for devices, fixtures, and equipment.
2. Contractor shall inspect the drywall work with a drop light before the prime coat of paint and perform all necessary point-up. The Architect and Construction Manager will also inspect before and after the prime coat of paint. Any point-up shall be at no additional cost to the owner.
3. Provide all painting systems including, but not limited to, priming, block filling, finish painting, special coatings at all exterior or interior exposed surfaces including, but not limited to, masonry, concrete, drywall, hollow metal frames and doors, access panels, railings, supports, exposed structure, exposed steel, exposed metal deck, exposed electrical conduit and boxes, exposed lintels, bollards, miscellaneous metals, stained and/or sealed concrete floors, woodwork, and related in accordance with the Contract Documents.
4. Contractor shall provide all painting as required for all building systems inclusive, but not limited to gas piping, exposed piping, exposed ductwork inside the building or on roof, interior surface of ductwork connecting to return/exhaust grills, conduit as required per electrical drawings, etc.
5. Provide all joint sealants and caulking at painted surfaces to dissimilar materials including, but not limited to hollow metal frames, access panels, and where not specifically assigned to other Contractors. Sealants shall be installed prior to final paint.
6. Contractor shall provide all exterior and interior joint sealant (caulking) for brick, concrete (except sidewalk caulking), door frames, thresholds, exterior louvers, sills, flooring, expansion, contraction, control and isolation joints, etc. as required by the Contract Documents. Contractor shall also caulk the top of vinyl floor base and the ceiling wall angles in the kitchen, the rooms that are part of the kitchen suite, and the cafeteria, along with any kitchen equipment (including mirrors) mounted to the walls. Contractor shall provide all interior and exterior joint sealant

(caulking) where dissimilar materials meet with the exception of those referenced in other contract packages. Sealants shall be installed prior to final paint.

7. Provide concrete sealer at exposed interior horizontal surfaces including, but not limited to, mechanical, utility, storage, custodial, electrical, and data/IT rooms in accordance with the Contract Documents.
8. Contactor shall provide complete surface preparation for this Work, including scraping, sanding, puttying, rust and scaling removal, and related in accordance with the Contract Documents. Bare areas from surface preparation shall be primed and painted by this Contractor.
9. Contractor shall perform a walkthrough prior to mobilization for Painting Activities and only commence with Painting after confirming preceding Prime Contractors are complete with caulking, point up, repairs, etc. Any deficiencies shall be reported by this Contractor in writing to the Construction Manager at least five (5) days prior to mobilization. Failure to comply with this requirement will not relieve any schedule restraints related to completion of work.
10. Provide all back priming as required by the Contract Documents.
11. Provide all minor touch-up and re-painting caused by installation of adjacent work; minor touch-up shall be defined as one (1) hour for every 1,500 SF of painted surfaces included in the Work.
12. Testing for mil. thickness may be performed during painting; Contractor is to cooperate with testing agency.
13. Contractor shall not apply first coat of finish paint to any surface until substrates are completed including, but not limited to, point-up/touch-up at masonry, gypsum, and Architecturally Exposed Structural Steel Framing (AEFF) assemblies.
14. Final coat of finish paint shall not be applied until all permanent attached furniture and equipment is installed. Contractor shall notify the Construction Manager prior to applying final finish coat in any area. Work includes installation of protection of adjacent work.
15. Provide all painting systems and stencils at fire rated assemblies; UL and Fire-rating labels installed by others shall not be painted.
16. Remove and dispose of all empty paint, sealer, or product in accordance with Construction Waste Management Plan and LEED requirements.
17. Provide temporary protection of adjacent work including, but not limited to, sprinkler heads, casework, tile, doors, surface mounted equipment and devices, etc. prior to paint operations. Contractor will remove/clean all overspray on adjacent finished work.
18. Coordinate paint compatibility for finish/top-coat paint applied over shop/factory primed and galvanized systems including, but not limited to, miscellaneous and structural steel, countertop brackets, access panels, hollow metal doors and frames, etc. Work includes application of barrier coats over incompatible primers.
19. Provide all painting mock-ups in accordance with the Contract Documents.
20. Contractor shall paint hardware and rigging for Operable Partitions, Theatrical Rigging as required by the Contract Documents.
21. Contractor shall furnish and install touch-up paint at all equipment installed by this Contractor.

3.13 CONTRACT PACKAGE – 011A – KITCHEN EQUIPMENT

A. The Work of this Bid Package consists of the Work detailed by the following Specification Sections and as shown on the Drawings. The work is not restricted by division of Drawings or Specifications.

Perform and furnish all the work, labor, competent supervision, services, materials, equipment, hoisting, plant, tools, scaffolding, appliances, storage, and other facilities to complete the Contractor Package Trade work for the project in strict accordance with, and reasonably inferable from the Contract Documents, and as more particularly, but not exclusively, specified in section:

Division 00	Procurement and Contracting Requirements
Division 01	General Requirements
07 84 13	Penetration Firestopping (As Applicable)
07 84 43	Joint Firestopping (As Applicable)
07 92 00	Joint Sealants (As Applicable)
11 40 00	Food Service Equipment

B. This Contract shall also include, but is not limited to, the items listed below for the complete performance of the Contract Package

1. Provide all kitchen equipment, appliances, storage units, shelving, walk-in cooler/freezers, refrigeration systems, exhaust canopies, carts, fixtures, and related for complete and functioning systems. Work includes all equipment listed on Kitchen Equipment schedule (exclude cash register, menu board, and ice cream cabinet noted to be provided by others) with associated accessories and appurtenances.
2. Contractor shall coordinate all work with mechanical and electrical contractors.
3. Contractor to participate in the BIM Coordination process led by the 15A contractor, including regularly scheduled BIM Coordination meetings.
4. Contractor shall provide single point connections. Final connections shall be by others.
5. Contractor shall provide all necessary joint sealants as required by the documents, and authorities having jurisdiction for all work at kitchen. Contractor shall have manpower on site during inspections to address any issues that arise during the inspections.
6. Provide all necessary floor preparation for installation of flooring systems at the walk-in refrigerator and freezers. Contractor to coordinate with other contractors to ensure proper layout of required slab depressions.
7. Contractor shall provide final cleaning of all items installed under this contract.
8. Contractor shall provide daily clean up and removal, to the 6A provided dumpsters, of all trash and debris generated by the work. Should the Contractor's clean-up be unsatisfactory, the Construction Manager shall perform the work at the Contractor's expense.
9. Contractor shall coordinate with all other contractors at locations where work by other trades is within, penetrates, or mounted to any system included in the Work. Work includes cut-outs for devices, fixtures, and equipment.
10. Contractor shall coordinate all Work with respective Contractor(s) including the 15A and 16A Contractors for layout of underground work, mechanical openings, duct openings, pipe sleeves, and embedded piping/raceways; layout is the responsibility of this contractor.
11. Provide all refrigerant piping for equipment provided by this Contractor. Work

includes furnishing sleeves and layout to the 04A Masonry Contractor.

12. Provide all roof curbs and integral flashings, sheathing and insulation for equipment specified in this package. Cutting and patching/replacement of the roofing system will be by others. Layout, cutting and patching of roof structure shall be provided by this Contractor. Contractor shall cut decking once curbs are in place and immediately cover, or install equipment, over openings to maintain fall protection requirements.
13. Contractor shall secure all necessary permits and inspections pertaining to this work.
14. Contractor shall provide all supports required for this work, including hangers from structure above for exhaust canopies. The Work includes joist chord reinforcing/bracing in accordance with the Contract Documents.
15. Contractor shall provide all pathways, piping, and connections for his equipment. Final connections to power, water, and drainage sources shall be provided by the 15A and 16A Contractors.
16. Contractor shall provide concrete housekeeping pads for this Work.
17. Provide all supports, fasteners, hardware, accessories, and related required for complete systems.
18. Contractor shall fabricate equipment in a manner permitting field-erection/installation assuming interior/exterior walls, door frames, and roof structure are installed/completed.
19. Provide all necessary equipment devices and accessories needed for BACNet integration of furnished equipment with Building Management System.
20. Provide all necessary testing, integration with other systems, independent testing and requirements of the Authorities Having Jurisdiction, and related for complete systems.
21. Provide complete temporary protection of Kitchen Equipment including rigid materials not susceptible to tearing, such as Masonite or similar materials. Materials susceptible to tearing, such as craft paper, poly, cardboard, and similar will not be accepted. Construction Manager must approve materials and methods of protection prior to acceptance of this Work.
22. Provide all adjustments, cleaning, and sanitize food service equipment.
23. Provide all control joints, expansion joints, accessories, firestopping, joint fillers, food grade caulking, and sealants as required by the Contract Documents with the exception of those specifically included in other Contractors' Work.
24. Contractor shall take part in all commissioning activities for equipment furnished in the Work.

3.14 CONTRACT PACKAGE – 012A – FURNISHINGS

A. The Work of this Bid Package consists of the Work detailed by the following Specification Sections and as shown on the Drawings. The work is not restricted by division of Drawings or Specifications.

Perform and furnish all the work, labor, competent supervision, services, materials, equipment, hoisting, plant, tools, scaffolding, appliances, storage, and other facilities to complete the Contractor Package Trade work for the project in strict accordance with, and reasonably inferable from the Contract Documents, and as more particularly, but not exclusively, specified in section:

Division 00	Procurement and Contracting Requirements
Division 01	General Requirements
07 92 00	Joint Sealants (As Applicable)
06 40 23	Interior Architectural Woodwork
06 42 19	Plastic-Laminate-Faced Wood Paneling
10 00 05	Miscellaneous Specialties
10 50 00	Lockers-(ADD#1)
10 56 13	Metal Storage Shelving (ADD#1)
10 56 13.23	Cantilever Metal Library Shelving
10 56 26	Mobile Storage Shelving
12 35 50	Educational Casework
12 35 51	Musical Instrument Storage Cabinets
12 36 00	Countertops

B. This Contract shall also include, but is not limited to, the items listed below for the complete performance of the Contract Package

1. Provide finish carpentry and interior architectural woodwork, including, but not limited to, wood and solid surface sills/caps, plastic laminate (PLAM), countertops, grommets, backsplashes, brackets, accessories, lockers, hardware, shelving (utility, closet, stackable, adjustable, etc.), casework, trim, millwork, veneered plywood, and related for complete systems.
2. Contractor to coordinate all required curbs with the 3A contractor.
3. Provide all glazing integrated in casework and millwork.
4. Provide all Cantilever Metal Library Shelving/Furniture and Instrument Storage Casework.
5. Contractor to provide all joint sealant associated with the work of this package.
6. Contractor shall coordinate with the 15A and 16A Prime Contractors for built-in items and to avoid conflicts with work of other trades.
7. Contractor shall coordinate cabinet keying with Owner and Construction Manager.
8. Contractor shall make all cutouts in casework required for receptacles, switches, devices, and fixtures installed in casework by others.
9. Two (2) weeks prior to completion of the project, or as directed by the Construction Manager during a particular phase, Contractor shall scrupulously clean all casework tops, shelves, and doors, and clean interior spaces of all casework, furniture, and shelving items installed under this contract.
10. Provide all display cases and associated glazing, light fixtures, shelves, shelve supports, and visual display surfaces. Coordinate light fixture connections with 16A Electrical Contractor.
11. Contractor shall coordinate with all other contractors at locations where work by other trades is within, penetrates, or mounted to any system included in the Work.

Work includes cut-outs for devices, fixtures, and equipment.

12. Contractor to include multiple mobilizations as required to meet the contract schedule and coordinate with interfacing trades.

3.15 CONTRACT PACKAGE – 15A – MECHANICAL, PLUMBING, SPRINKLER CONTRACT

- A. The Work of this Bid Package consists of the Work detailed by the following Specification Sections and as shown on the Drawings. The work is not restricted by division of Drawings or Specifications.

Perform and furnish all the work, labor, competent supervision, services, materials, equipment, hoisting, plant, tools, scaffolding, appliances, storage, and other facilities to complete the Contractor Package Trade work for the project in strict accordance with, and reasonably inferable from the Contract Documents, and as more particularly, but not exclusively, specified in section:

Division 00	Procurement and Contracting Requirements
Division 01	General Requirements
01 51 00	Temporary Utilities (As Applicable)
01 57 31	Indoor Air Quality (IAQ) Management V4.1
03 10 00	Concrete Forming and Accessories (As Applicable)
03 20 00	Concrete Reinforcing (As Applicable)
03 30 00	Cast-In-Place Concrete (As Applicable)
05 12 00	Structural Steel Framing (As Applicable)
07 92 00	Joint Sealants (As Applicable)
07 84 13	Penetration Firestopping (As Applicable)
08 31 13	Access Doors and Panels (As Applicable)
10 28 00	Toilet, Bath and Laundry Accessories (As Applicable)
11 30 00	Appliances (As Applicable)
11 40 00	Food Service Equipment (As Applicable)
12 36 00	Countertops (As Applicable)
Division 21	Fire Suppression
Division 22	Plumbing
Division 23	Heating Ventilating and Air Conditioning
31 10 00	Site Clearing (As Applicable)
31 20 00	Earth Moving (As Applicable)

- B. This Contract shall also include, but is not limited to, the items listed below for the complete performance of the Contract Package

1. Contractor shall obtain all required permits and provide all tests and certifications arising from work under this package, as required to obtain a Use and Occupancy permit.
2. Contractor shall secure pressure vessel and boiler inspections as required by the State of Maryland
3. Provide a complete designed and engineered fire suppression sprinkler system in accordance with all applicable requirements and specifications in the Contract Documents, and in accordance with all requirements of the Authorities Having Jurisdiction including, but not limited to, engineered design, testing, and reports, necessary for permitting and design process, complete permitting process and fees through approval, hydro/flow testing, piping, hangers, backflow preventers, connections, devices, heads, fasteners, gauges, hardware, valves, labeling/demarcation, vibration isolation systems, head placement and layout requirements, visual devices, audible devices, integration and coordination with fire

alarm systems connections, concealed components as specified, testing, flushing, cleaning, coordination and compliance with all Authorities Having Jurisdiction, inspections coordination through final approvals, maintenance during construction through substantial completion, accessories, and related for a complete and functioning system.

4. Provide complete plumbing systems from 5' outside of the building including, but not limited to sanitary sewer piping systems, stormwater drainage systems, incoming fire service water piping systems, plumbing fixture systems, and related for complete and functioning systems. Domestic water piping will be provided by this contractor within the building and connected to the piping connection provided by the 2B contractor per detail 1 on P-031. This Work includes final connections, and cleanouts. The 2B and 15A Prime Contractors shall coordinate required terminations. The 2B Prime Contractor shall furnish and install all site utilities to within five (5) feet of the building footprint (inclusive of courtyard utilities) or to proposed location of cleanouts. The 2B Prime Contractor shall be responsible for connections to existing water, storm and sewer utilities inclusive of coordinating with the utility provider. All ends of utilities shall be capped and clearly marked above grade by the Contractor which installs their piping first. The Prime Contractor who installs their piping last shall make final connections to piping installed by others. The 2B Prime Contractor shall clean all storm drain piping within ten days prior to substantial completion. The 2B Prime Contractor shall provide all cleanouts, piping, and concrete markers associated with cleanouts outside of the building footprint as required by the Contract Documents inclusive of the Plumbing Drawings.
5. Provide complete mechanical/HVAC systems including, but not limited to, pipe insulation, HVAC units, cabinet heaters, fans, ductwork, diffusers, grilles, dampers, HVAC controls systems, and related for complete mechanical/HVAC systems.
6. Contractor shall comply with all General Structural Notes as they apply to this Work.
7. Provide complete foundation drainage at the elevator pit including connections to site utility lines. All connections shall be coordinated with the 2A Site Contractor.
8. Contractor shall provide temporary building conditioning. Provide temporary heating to maintain a minimum ambient temperature of 50°F and temporary cooling to maintain a maximum ambient temperature of 80°F.
9. Provide all steel pipe stands, hangers, supports, and HVAC equipment stands/frames, including miscellaneous steel support members and lintels, for equipment, ductwork, and piping furnished by this Contractor.
10. Contractor shall be familiar with the load limitations of steel joists and beams at floor and roof framing; specifically, the application of concentrated loads and location requirements in accordance with Contract Documents. Contractor shall assume trapeze supports, floor mounted pipe stands, etc. where feasible to satisfy requirements.
11. Contractor shall coordinate with 05A Steel Contractor regarding openings, supports, framing, and bracing for mechanical equipment. Contractor shall furnish to the 05A Steel Contractor complete marked up steel drawings showing proposed actual opening, layout, support, and fabrication dimensions and load information for all roof top equipment necessary for detailing, fabrication, and erection of steel.
12. Provide all sleeves for piping and equipment furnished by this Contractor; layout provided by this Contractor. Provide all loose lintels for piping, ductwork and equipment penetrations in masonry assemblies unless specifically noted to be by others; including:
 - a) Loose lintels specifically denoted on Structural Plans are provided by 05A Steel Contractor; layout by this Contractor.
 - b) Loose masonry/precast lintels for duct penetrations in masonry assemblies specifically depicted on the Contract Documents are provided by the 4A

Masonry Contractor; layout by this Contractor.

- c) Loose steel lintels, including cutting, installation, grouting, and patching for penetrations installed after the erection of substrates shall be provided by this contractor.
- 13. Contractor shall be responsible for all sleeves, cutting, core drilling, x-ray, GPR scanning, and patching that is required to complete this Work. Provide all cutting and patching of floors, walls, and partitions required for installation of this Work. The contractor shall restore these areas to original condition acceptable for final finishes as determined by the Construction Manager and in accordance with the Contract Documents.
- 14. Provide all louver systems required for complete fire suppression, plumbing, and mechanical installations. (Architectural louvers shown on the "A" drawings will be provided by others.) Coordinate with all other trades and the Construction Manager before any louver installation prior to completion of any applicable substrates and/or surfaces constructed by other trades. Any louver installations that occur following the completion of any applicable substrate and/or surfaces that involve cost and repairs will be the responsibility of this Contractor.
- 15. Provide cut-outs and tie-in at all blank-off panels for Architectural louvers provided by others.
- 16. Contractor shall be responsible for coordination of this work with other Contractors and the Construction Manager. Work includes layout for penetrations and embedded items in surface/substate construction installed by others. Contractor shall coordinate with 3A Concrete Contractor regarding layout of underground work, mechanical openings in walls and slabs, and embedded items. Coordinate with 4A Masonry Contractor regarding layout of duct openings, pipe sleeves, and embedded piping. Contractor shall provide layout for ductwork penetrations, and sleeves and layout for pipe penetrations.
- 17. The Contractor shall furnish layouts for all penetrations and cut-outs in casework and exposed finishes furnished by others.
- 18. Contractor shall protect drains/cleanouts with tape or appropriate materials to prevent debris generated by other Contractors from clogging drainage piping. Contractor shall be responsible for removing and cleaning of protective material.
- 19. Provide all excavation, grading, backfill, and compaction associated with work included this package. Contractor shall confirm and accept subgrade elevation prior to beginning underground work. Commencement of underground work shall constitute acceptance of subgrade in the general area of the work. Contractor shall be responsible for restoring subgrade disturbed by their operations, and removal of spoils to a central location for disposal from the site by others. Stockpiled materials shall be protected to prevent deterioration. Unprotected stockpiled materials that become unsuitable shall be replaced by this Contractor at no additional cost.
- 20. Contractor shall restore subgrade to design elevation upon completion of underground work in all areas. Confirm subgrade elevation before beginning underground work.
- 21. Provide all pumping, dewatering, truck access (closed meters and permits if required), temporary shoring and temporary protection to perform the work.
- 22. Provide all cleaning, treatment, sterilization, and flushing of all piping systems at completion. Contractor shall inspect via video camera line inspection all piping installed under this cope prior to any slab pour and the completion of each phase. Provide electronic file clearly identifying location of inspection for all inspections to the Construction Manager within three (3) business days of video inspection. Any obstruction found shall be reported to the Construction Manager in writing.
- 23. Provide all caulking around all plumbing fixtures, sub-slab ventilation piping, wall and

floor penetrations, and louvers provided in this contract. Coordinate roof penetrations with the 07A Roofing Contractor; flashing and sealants integral with the roof membrane systems provided by others.

24. Contractor shall provide all caulking, joint sealants, safing, fire safing, fire stopping systems, and sound insulation associated with or required by this Work.
25. Provide complete grease interceptor system to 5ft past interceptor, including, but not limited to, excavation, backfill, structure, baffles, sub-base, piping, manholes, manhole frames, cleanout w/ concrete pads, and associated for a complete system. Contractor shall provide all piping from the building to the grease interceptor
26. Provide all BWV, piping, cleanouts, access boxes, and tie-in for all condensate piping systems.
27. Provide all associated plumbing and HVAC duct for Kitchen equipment furnished by others. Final connections to furnished equipment shall be by this Contractor. Work includes, but is not limited to, domestic water piping, condensate piping, FOG piping, floor sinks, floor drains, valves, balancing, drain valve assemblies, inlets, equipment BACNet integration to BMS, and associated for a complete system.
28. Provide all exhaust duct (stainless), ventilation grille, ventilation hood, and exhaust controls for Kiln; Kiln provided by others.
29. Provide all locations and layout for penetrations. Contractor shall provide drawings which indicate specific dimensioned size and location of all fire suppression, plumbing, and HVAC equipment, piping, and related which require structural support, penetrations, and/or reinforcement. All openings, supports, framing, bracing required for equipment, and related shall be noted on the provided drawings. If this is not provided as per schedule, Contractor shall be responsible for furnishing and installing the necessary framing, bracing, reinforcing, and any related provisions necessary for a complete and functioning systems.
30. Contractor shall be responsible for the final connections to items such as, but not limited to, food service equipment, casework, furnishings, shop equipment, owner supplied equipment, and outside utilities.
31. Furnish all VFD's as well as equipment integrated motor starters, conductors, safety switches, controls, and related for all equipment included in this Work to 16A Electrical Contractor for installation, mounting, wiring and all connections. Maintain all required clearances per NEC. All programming and startup shall be provided by this Contractor. Disconnect switches that are not integral with equipment will be furnished and installed by the 16A Electrical Contractor.
32. Provide identification of all devices, materials, and equipment included in this Work.
33. Provide cleaning of all pipeline strainers before substantial completion. Cleaning of strainers shall be verified by balancing and testing agency.
34. Contractor shall lead and manage the BIM/coordinated drawing process. Contractor shall be responsible for compiling electronic data from other trade contractors and product conformed set that includes his work as well as the work of others, for submission. Contractor shall be responsible for all reproduction costs associated with this submission. Drawings to be printed in color to designate different trades. Contractor is responsible for managing its subcontractors during this process. BIM/Coordinated drawings shall be completed as to not inhibit progress according to Construction Schedule. Coordination Drawings do not excuse the contractor from responsibilities of coordinating the work in the field.
35. Contractor shall provide all temporary measures for tying in roof drains, such that positive drainage away from the building and building interior is achieved. Coordinate temporary measures with Construction Manager prior to installation.

36. Receive, unload, inventory, store, maintain, protect, and install only all duct mounted smoke detectors furnished by others.
37. All welding work shall be by certified welders in accordance with the Contract Documents. Copies of welder's certificates shall be submitted to Construction Manager prior to start of subject work.
38. Provide all roof curbs, integral flashings, sheathing, and insulation for equipment specified in this package. Cutting and patching/replacement of the roofing system will be by others. Layout, cutting, and patching of roof structure shall be provided by this Contractor. Contractor shall cut decking once curbs are in place and then immediately cover, or install the equipment, over the openings to maintain fall protection requirements.
39. Contractor shall coordinate with all other contractors in reference to roofing penetrations. All penetrations to be weathertight daily to protect roofing, building, equipment, and related.
40. Contractor shall provide all roof drain receivers.
41. Contractor shall provide and install all Under Lavatory Guards as required by the Contract Documents and the Authorities Having Jurisdiction.
42. Furnish all access panels specifically depicted on the Architectural Drawings and access panels/doors required for accessing Work provided by this Contractor. Access panels' fire rating shall be equal to or exceed that of the assembly in which it is located. Access panels installation shall be by the 04A and 09A Contractors in gypsum and masonry assemblies. Work includes all hardware, cylinders, and layout.
43. Access doors for equipment provided by this Contractor shall be of sufficient size to access all ATC and electrical connections.
44. Furnish access panels required all systems included in this work at non- accessible ceilings. Assume a minimum of two (2) 24"x24" access doors at gypsum ceiling assemblies in vestibules, stairs.
45. Provide all Automated Temperature Controls including, but not limited to, raceways (in-wall and above ceilings), wiring, cabling, DDC panels, valves, dampers, AFMS, flow meters, freeze-stats, gauges, thermostats, sensors, identification, point-to-point, programming, sequencing and associated for a complete system. Raceways and boxes embedded in masonry substrates shall be by the 16A Contractor; layout provided by this Contractor.
46. DDC panel power and data wiring for DDC panels depicted on the Contract Documents as well as up-to an additional ten (10) locations shall be provided by the 16A Contractor, layout by this Contractor. Power and data cabling for additional equipment furnished as part of the Work will be the responsibility of this Contractor.
47. Provide all BMS integration for equipment furnished by others per the Contract Documents.
48. Permanent climate control equipment start-ups will take place during construction as directed by the Construction Manager. The permanent climate control systems shall remain in operation following start up, as directed by the Construction Manager. Contractor shall provide and maintain filter media, as required, at all return air locations. Provide all filter changes as required to protect equipment during heating and cooling periods, as well as complete filter change on all units, within ten (10) days prior to TAB activities as well as ten (10) days prior to Substantial Completion. Specified equipment warranties shall commence upon substantial completion and Owner acceptance of the phase. Contractor shall comply with all requirements during equipment start-up and usage.
49. Contractor shall perform all work required for specified protection, cleaning, and performance of new and temporary HVAC equipment and systems.

50. Protect open ends of installed work and uninstalled materials by means suitable to prevent entrance of any material or elements of weather.
51. Provide all testing, adjusting, balancing, and commissioning as required by the schedule and in accordance with the Contract Documents.
52. Contractor shall coordinate all equipment pad locations and requirements with all other Contractors and the Construction Manager prior to any installations. Contractor will be responsible for installation of any equipment pads not indicated on the Contract Documents.
53. Contractor shall participate in the commissioning process as required by the Contract Documents. Contractor shall reimburse the Owner for any additional cost incurred as a result of the Contractors failure to perform in accordance with commissioning requirements and schedule. Commissioning, inclusive of acceptable ATC/BMS graphics, shall be completed as applicable prior to substantial completion. Contractor shall provide necessary manpower to assist the Architect, Owner, Construction Manager, and CXa as necessary for the successful completion of commissioning.
54. Contractor shall tie BMS system to lighting control system as required per Contract Documents.
55. In the event high or low voltage is required, but not shown for BMS work, this shall be provided by this Contractor.
56. Retain an independent qualified Air Quality testing agency (industrial hygienist) to provide Indoor Air Quality Testing. Contractor shall include costs for initial testing and one (1) retest. Flushing between testing activities shall be coordinated by this Contractor.
57. Contractor shall provide and maintain temporary water services in the building as directed by the Construction Manager. A minimum of one (1) hose bib with frost-proof hydrants shall be provided per area at locations approved by the Construction Manager.
58. AHU units are being installed within Mechanical Mezzanines at the roof level. Contractor shall assume Mechanical Mezzanines roof structure will be in place at the time of installation and shall require AHUs to be delivered in sections and field assembled in the Mezzanines.
59. Trade Contractor shall coordinate and provide Plans per Concrete Note 9 on Sheet S001. Reference typical details for additional reinforcing around ganged penetrations.

3.16 CONTRACT PACKAGE – 16A – ELECTRICAL CONTRACT

A. The Work of this Bid Package consists of the Work detailed by the following Specification Sections and as shown on the Drawings. The work is not restricted by division of Drawings or Specifications.

Perform and furnish all the work, labor, competent supervision, services, materials, equipment, hoisting, plant, tools, scaffolding, appliances, storage, and other facilities to complete the Contractor Package Trade work for the project in strict accordance with, and reasonably inferable from the Contract Documents, and as more particularly, but not exclusively, specified in section:

Division 00	Procurement and Contracting Requirements
Division 01	General Requirements
01 51 00	Temporary Utilities (As Applicable)
03 10 00	Concrete Forming and Accessories (As Applicable)
03 20 00	Concrete Reinforcing (As Applicable)
03 30 00	Cast-In-Place Concrete (As Applicable)
05 12 00	Structural Steel Framing (As Applicable)
07 92 00	Joint Sealants (As Applicable)
07 84 13	Penetration Firestopping (As Applicable)
08 31 13	Access Doors and Panels (As Applicable)
08 33 13	Coiling Counter Doors (As Applicable)
08 33 23	Overhead Coiling Doors (As Applicable)
08 71 00	Door Hardware (As Applicable)
10 28 00.13	Electric Hand Dryers (As Applicable)
11 30 00	Appliances (As Applicable)
11 40 00	Food Service Equipment (As Applicable)
11 52 13	Projection Screens (As Applicable)
11 66 23	Gymnasium Equipment (As Applicable)
11 66 43	Basketball Scoreboard (As Applicable)
11 66 47	Basketball Shot Timer Scoreboard (As Applicable)
11 66 53	Gymnasium Divider (As Applicable)
12 24 13	Window Shade Systems (As Applicable)
14 24 00	Passenger Elevators (As Applicable)
Division 21	Fire Suppression (As Applicable)
Division 22	Plumbing (As Applicable)
Division 23	Heating Ventilating and Air Conditioning (As Applicable)
Division 26	Electrical
Division 27	Communications
Division 28	Electronic Safety and Security
31 10 00	Site Clearing (As Applicable)
31 20 00	Earth Moving (As Applicable)

B. This Contract shall also include, but is not limited to, the items listed below for the complete performance of the Contract Package

1. Provide all site and building electrical systems indicated in the Contract Documents, including, but not limited to, electrical service, switchgear, panels, transformers, light fixtures, power, lighting, emergency generator, conduit, wire, electrical devices, supports, accessories, and related for complete and functioning systems, Contractor shall be responsible for coordination of this work with the other Contractors and the Construction Manager. All electrical work on

site shall be included in this Work.

2. Contractor shall coordinate with all other Contractors to provide all required embedded items, including, but not limited to, conduits, boxes, panel boxes, accessories, and related for complete and functioning systems. The Contractor shall be responsible for the proper location of all embedded items.
3. Provide all raceways and boxes for ATC thermostats, wall mounted controllers and CO₂ sensors embedded in masonry assemblies; raceways in gypsum assemblies and ceilings will be by others.
4. Contractor shall coordinate, obtain, and pay for all required permits and provide all test and inspections required to obtain a Use and Occupancy permit and to satisfy all requirements of the Authorities Having Jurisdiction.
5. Provide complete power connections and final connections for all equipment installed under this package and other Contractor packages, including, but not limited to, food service equipment, pumps, motors, panels, automatic door devices, casework, appliances, owner furnished equipment, fume hoods, athletic equipment, elevator, lifts, and related as required by the Contract Documents. Contractor shall provide power for appliances and equipment provided by others. Contractor shall coordinate with appliance/equipment furnishing Contractor, to ensure that proper rough-ins and receptacles are provided under this Contract.
6. The VFD's, equipment integrated motor starters, equipment integrated switches, and related HVAC, Mechanical, and Plumbing items will be provided by others for installation, mounting, wiring and, final connections by this Contractor. Maintain all required clearances per NEC. All programming and startup shall be provided by the 15A Prime Contractor. Provide all disconnect switch systems that are not integral with equipment.
7. Provide all motor starters, conductors, safety switches, controls, and related for equipment included in this Work and for equipment provided by others unless specifically noted otherwise.
8. Provide all junction boxes, disconnect switches, receptables, U/G conduit, accessories, wiring, power connections, and related for Kitchen Equipment furnished by the 6A General Trade Contractor. Work includes all low-voltage wiring for integration of Equipment to Building Management System.
9. Provide all low-voltage control cabling/wiring, power, raceways, and final connections for equipment furnished by others including, but not limited to, roller window shades, projector screens, theater equipment, signage, gymnasium equipment, display cases, operable partitions, and interactive panels.
10. Provide complete fire alarm and security systems as indicated by the Contract Documents. Provide all required electrical connections to alarm devices, including, but not limited to, water gongs, flow switches, tamper switches, electric hardware, relay modules, control modules, monitoring modules, duct detectors, and fire/smoke dampers. The Electrical Contractor shall provide complete engineered drawings detailing the Fire Alarm System, for approval by the Fire Marshall's Office. The Contractor shall be responsible for all costs associated with securing a Fire Alarm Permit from the Fire Marshall's Office, as well as implementation in the field of all components necessary for a complete Fire Alarm System.
11. The 06A Contractor shall furnish the magnetic door holders. The 16A Electrical Contractor shall install the wall mounted component of the magnetic holders. 06A Contractor shall install the door mounted component.
12. Contractor shall submit the fire alarm wiring diagram within thirty (30) days after "Notice of Intent to Award"; subsequent requisitions will not be accepted until this requirement is met.

13. Provide all Fire Alarm relays for all HVAC equipment with safety controls integration.
14. Provide all sleeves, conduit, power wiring, and related for electric door hardware devices provided and set by others. Provide all equipment and wiring for the security, access, and fire alarm systems.
15. Contractor shall provide all caulking and joint sealers associated with or required by this Work. Contractor shall provide all safing, fire safing, fire stopping systems, and sound insulation associated with this work.
16. The Owner will be applying for energy credits and refunds through various programs. Contractor shall provide separate invoices to identify cost of specific individual pieces of equipment, as identified during the course of the project by the Owner's Consultant to facilitate this process.
17. Contractor shall be responsible for providing and locating access panels required to access his work through finished assemblies. Access panels' fire rating shall be equal to or exceed that of the assembly in which it is located. Access panels installation shall be by the 04A and 09A Contractors in gypsum and masonry assemblies. Work includes all hardware, cylinders, and layout.
18. Provide all excavation, grading, backfill, and compaction associated with this Work. Contractor shall confirm and accept the subgrade elevation prior to beginning underground work. Commencement of underground work shall constitute acceptance of subgrade in general area of the work. Contractor shall be responsible for restoring subgrade disturbed by operations included in this Work, and removal of spoils to a central location for disposal from the site by others. Stockpiled materials shall be protected to prevent deterioration. Unprotected stockpiled materials that become unsuitable shall be replaced by this Contractor at no additional cost. Contractor shall similarly restore stone base beneath slabs on grade to the condition it was left by the 3A Concrete Contractor upon completion of slab-on-grade rough-ins.
19. Provide all site lighting including, but not limited to, U/G conduit, power and control wiring, pull/hand boxes, fixtures, control panels/devices, time- switch, foundations, and associated for a complete system.
20. Provide all U/G conduit, power wiring, communication/fiber optic cabling, and pull/hand boxes for the exterior school sign.
21. Contractor shall be responsible for all sleeves, cutting, core drilling, x-ray, GPR scanning, and patching that is required to complete this Work. Provide all cutting and patching of floors, walls, and partitions required for installation of this work. The Contractor shall restore these areas to original condition acceptable for final finishes as determined by the Construction Manager and in accordance with the Contract Documents.
22. Coordinate all required penetrations/cut-outs through finish systems including, but not limited to, casework, acoustical panels, ceramic tile, ceiling tiles, hollow-metal assemblies, and storefront. Penetrations/cut-outs in exposed finishes shall be provided by the installing Contractor; layout provided by this Contractor.
23. Contractor shall furnish and install all sleeves, conduit, and power wiring for electrical hardware devices provided by the 6A General Trade Contractor. The 6A General Trade Contractor shall furnish and install all equipment, low voltage wiring and connections for integral and control wiring for electric hardware devices. The 16A Electrical Contractor shall furnish and install all equipment, wiring and connections for power, security, access, and fire alarm systems.
24. Provide layout for all casework cut-outs required for electrical work. Provide all electrical devices in casework including power for display case light fixtures.
25. Provide all building generators including, but not limited to, generator(s), above

and below grade conduits and cabling, panels, controls, transfer switches, and related for a complete and functional system.

26. The Contractor shall provide all hangers and supports, including miscellaneous steel support members and lintels, for piping and equipment furnished as a part of this Work when not indicated as by others.
27. Contractor shall be familiar with the load limitation of steel joists at floor and roof framing; specifically, the application of concentrated loads and location requirements in accordance with Contract documents. Contractor shall assume trapeze supports, floor mounted free-standing equipment stands, etc. where feasible to satisfy requirements. Contractor shall comply with all General Structural Notes as they apply to this Work.
28. Contractor shall participate in the BIM/coordinated drawing process. Contractor shall coordinate with all other Contractors and the Construction Manager during this process. Provide hard copies and electronic copies to the primary coordinated drawing facilitating Contractor, to be assigned by the Construction manager. Contractor is responsible for managing its subcontractors during this process. BIM/Coordinated drawing to be completed as to not inhibit progress according to the Construction Schedule. Coordination Drawings do not excuse the Contractor from responsibilities of coordinating work in the field.
29. Provide BIM/Coordinated drawings for all power distribution and lighting systems including, but not limited to, raceways 1-1/2" inches (and larger), electrical equipment, junction boxes 12"x12" (and Larger), duct-banks, and light fixtures.
30. Contractor shall obtain and pay for all permits to relocate site electrical service with service provider.
31. Contractor shall coordinate, obtain, and pay for all permits to provide telecom service with service provider. Work includes all U/G conduit, raceways, and equipment in accordance with the Contract Documents.
32. Contractor shall furnish, install, and maintain, in accordance with MOSH and OSHA codes, temporary electric service and lighting as the work progresses throughout building and site. As partitions are erected, the Contractor shall provide temporary lighting in individual rooms that confirms with MOSH and OSHA standards. Contractor shall furnish, install, and remove to the Construction Manager's approval, adequate temporary electrical service to the Construction Manager's Trailer. Contractor shall provide temporary electric to Building Pad. At no time is any area to have less than 10 foot- candles of light or 1-150w (or LED Equivalent) bulb/400sf. Maintain lamps and relocate temporary lights and power as progress of work requires. Provide a minimum of one quad outlet within reach of 100-foot extension cord from any point in the building, on separate breakers. Provide adequate temporary power to any specialty equipment of other Trade Contractors. No temporary electrical service may be interrupted or terminated at any time, without prior written approval of the Construction Manager.
33. Provide temporary power with separate metering for the temporary conditioning plan (heating/cooling/humidity) equipment furnished by the Construction Manager. Contractor shall coordinate with the utility provider for temporary electrical service.
34. Contractor shall be required to provide the 4A Masonry Contractor with a high voltage power service withing 50 feet of masonry work for each phase/area.
35. Provide identification of all devices, material, and equipment included in this Work. Material stencils for systems painted by others will be provided by this Contractor.
36. Contractor shall furnish, install, maintain, and remove when directed, security lighting at roof level of the building to shine down on site. Lighting shall be 400-

watt fixtures with timer or photo electric control. Fixtures to be placed 80' on center. Work includes all conduit, wiring, fixtures, bulbs, and incidentals. Contractor shall patch or repair conditions as necessary after removal.

37. Contractor shall neatly and properly secure all new and existing above ceiling cables, wires, conduits, etc. in a code compliant manner, as required by Authorities Having Jurisdiction.
38. Provide all roof curbs and integral flashings for equipment specified in this package. Cutting and patching/replacement of the roofing system will be by others. Layout, cutting, and patching of roof structure shall be provided by this Contractor. Contractor shall cut decking once curbs are in place and then immediately cover, or install the equipment, over opening to prevent anyone from falling through.
39. Contractor shall coordinate with all other contractors in reference to roofing penetrations. All penetrations to be weathertight daily to protect roofing, building, equipment, and related.
40. Contractor shall coordinate with the applicable Contractors regarding motor starters for mechanical equipment, duct detectors, fire alarm connections, door contacts and hardware, security systems, and related. Contractor shall furnish and deliver all motor starters, duct mounted smoke detectors, conductors, safety switches, controls, and related not specifically assigned to others in the Contract Documents.
41. Duct mounted smoke detectors shall be furnished by the 16A Electrical Contractor and installed by the 15A Contractor. All controls, piping, conduit, wiring, etc. associated with duct smoke detectors shall be furnished and installed by this contractor.
42. The 6A General Trade Contractor shall provide all Gymnasium Equipment. The 6A General Trade Contractor shall furnish all electrical components to the 16A Electrical Contractor for installation. The 16A Electrical Contractor shall provide all conduit, wiring, connections, etc. for low voltage, control, and power wiring associated with the Gymnasium Equipment.
43. Contractor shall provide all pumping, dewatering, truck access (closed meters and permits if required), temporary shoring and temporary protection to perform this Work.
44. Provide complete electrical service to the building. Coordinate all work with the local power company.
45. Provide all concrete duct banks, light pole bases, and related for complete systems. Provide any other concrete necessary for this Work if not specified to be included by another Contractor. Provide layout to 03A Concrete Contractor for service transformer pad and equipment pads.
46. Contractor shall participate in the commissioning process as required by the Contract Documents. Contractor shall reimburse the Owner for any additional cost incurred as a result of the Contractors failure to perform in accordance with commissioning requirements and schedule. Commissioning, inclusive of acceptable ATC graphics, shall be completed as applicable prior to substantial completion. Contractor shall provide necessary manpower and assist Architect, Owner, CM, and CXa as necessary for the successful completion of commissioning.
47. In the event high or low voltage is required, but not shown for BAS work, this shall be provided by the 15A Contractor.
48. Provide telecom wiring and equipment/dialer for emergency phone at Elevator.
49. Provide support steel, sub-framing, and bearing plates for cord reels indicated in

the contract documents.

50. Provide all power and IT data drops for depicted DDC/ATC panels as well as for equipment furnished by others scheduled to interface with Building management System. The Work shall include an additional ten (10) power and IT data drops for DDC/ATC panel not specifically depicted on the Contract Documents; locations to be determined.

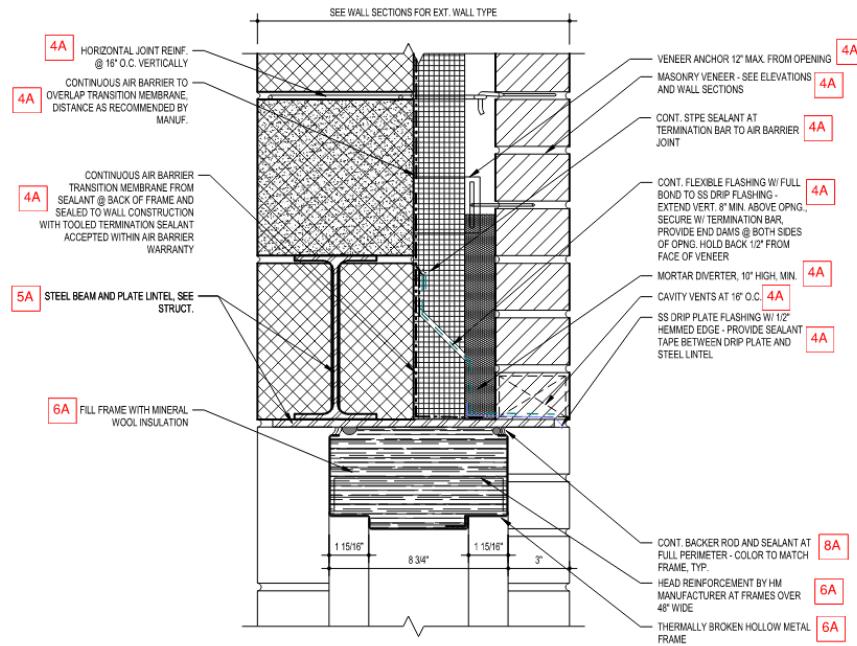
51. Provide complete designed and engineered lightning protection system in accordance with all applicable requirements including, but not limited to, engineered design, U/G cabling, ground-loop conductors, ground rods, air terminals, down-conductors, concrete-encased electrodes, conduit, testing, sealant, adhesives, accessories, and related for a complete and functioning system. Work includes providing layout and coordination with 07A Roofing Contractor for equipment/materials anchored to roof assemblies.

52. Provide all Theater and Stage Equipment including, but not limited to, relay panels, DIN enclosures, DMX repeater, connector strips and plug-in stations, light fixtures, rigging equipment, drapery, tracks, and associated for a complete system. Contractor shall coordinate with the 16A Contractor for all power, embedded raceways, embedded boxes and data connections; Layout provided by this Contractor, Wiring, 110V or more, will be by the 16A Contractor. Low-voltage cabling between components and equipment furnished in the Work will be the responsibility of this Contractor.

53. Trade Contractor shall coordinate and provide Plans per Concrete Note 9 on Sheet S001. Reference typical details for additional reinforcing around ganged penetrations.

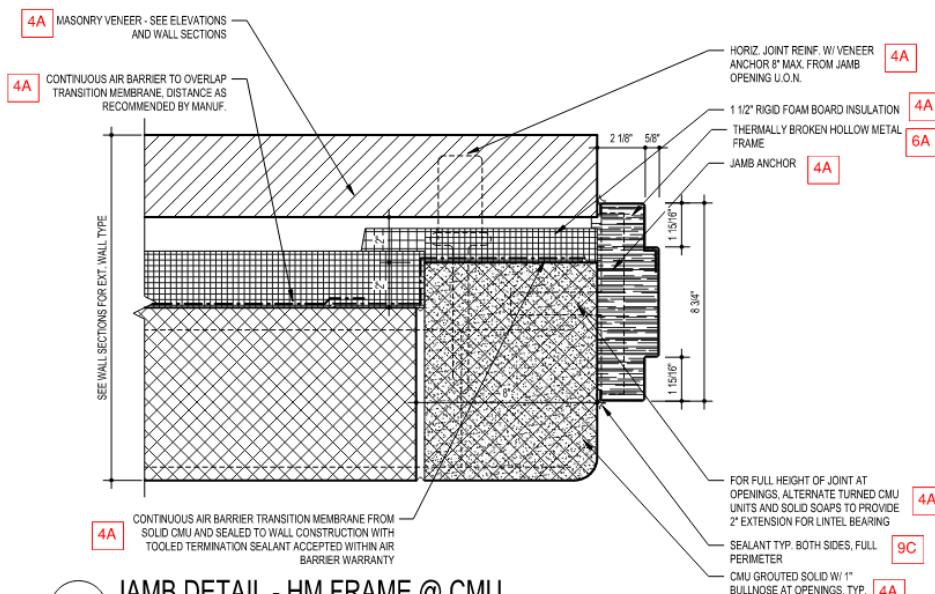
3.17 **CONTRACT PACKAGES – SCOPE SKETCHES** (Sketches not to scale)

A. Sketch – CMSK001



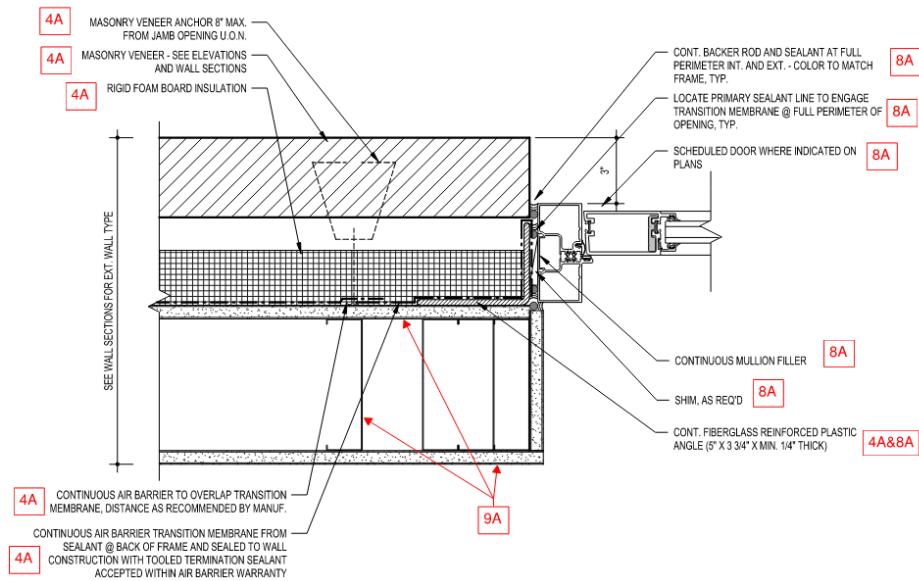
J18 HEAD DETAIL - HM FRAME @ CMU
 3' = 1'-0"

B. Sketch – CMSK002



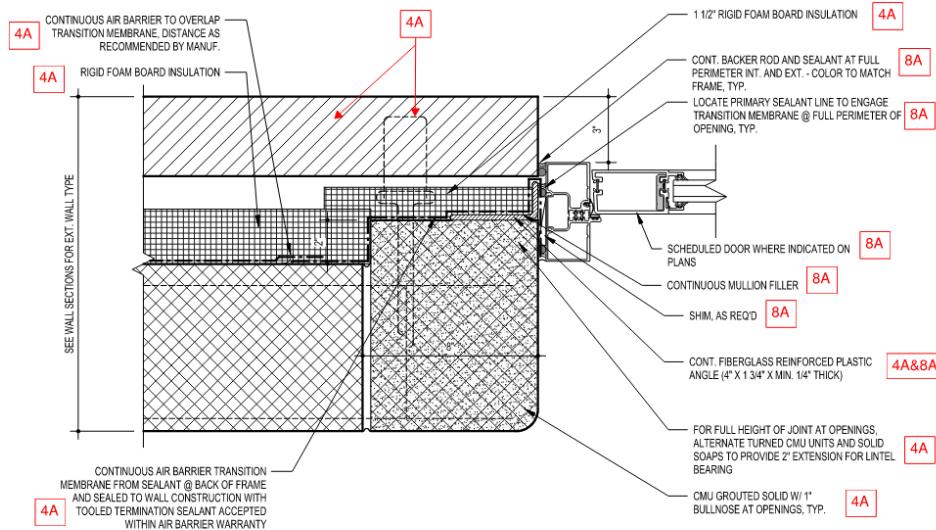
F18 JAMB DETAIL - HM FRAME @ CMU
 3' = 1'-0"

C. Sketch – CMSK003



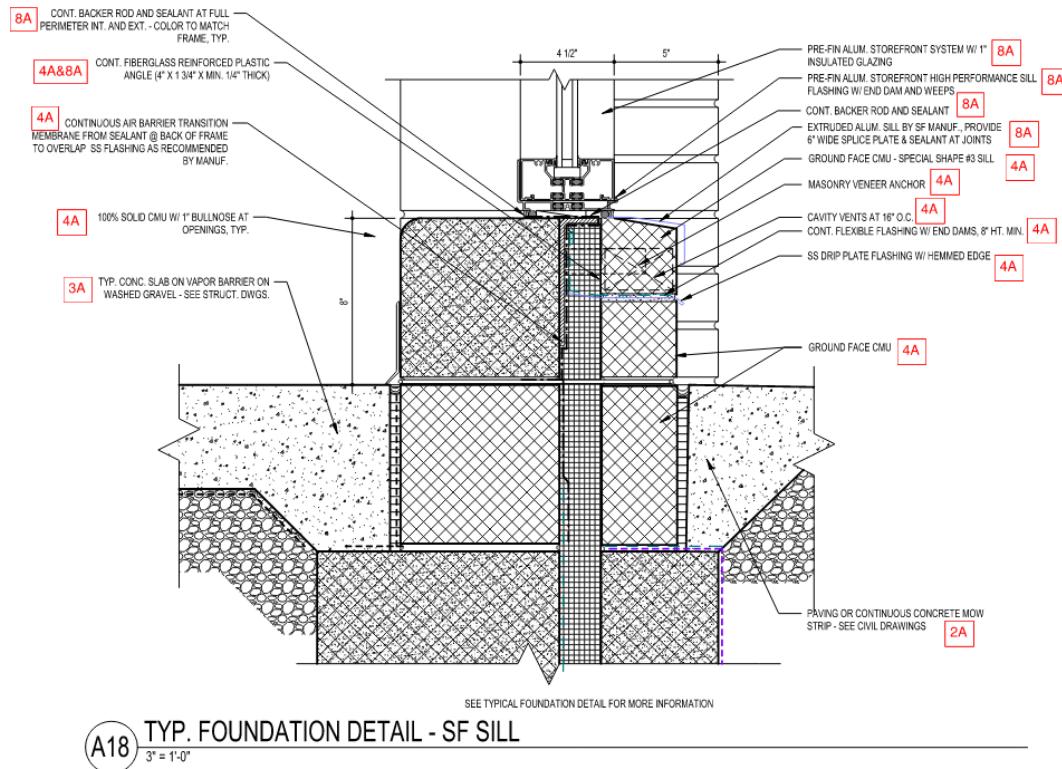
J13 JAMB DETAIL - STOREFRONT @ MTL STUDS
 3" = 1'-0"

D. Sketch – CMSK004

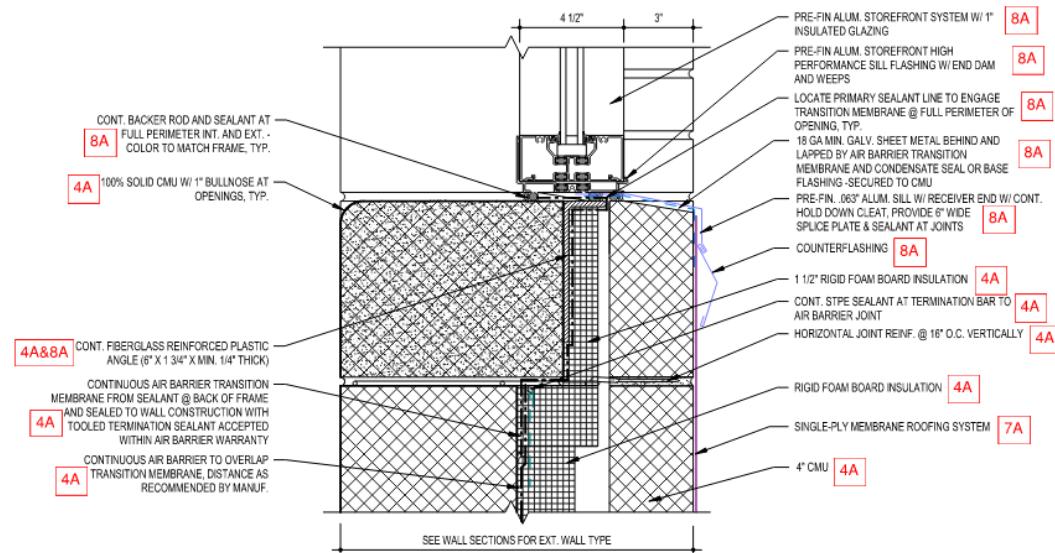


F13 JAMB DETAIL - SF DOOR @ CMU
 3" = 1'-0"

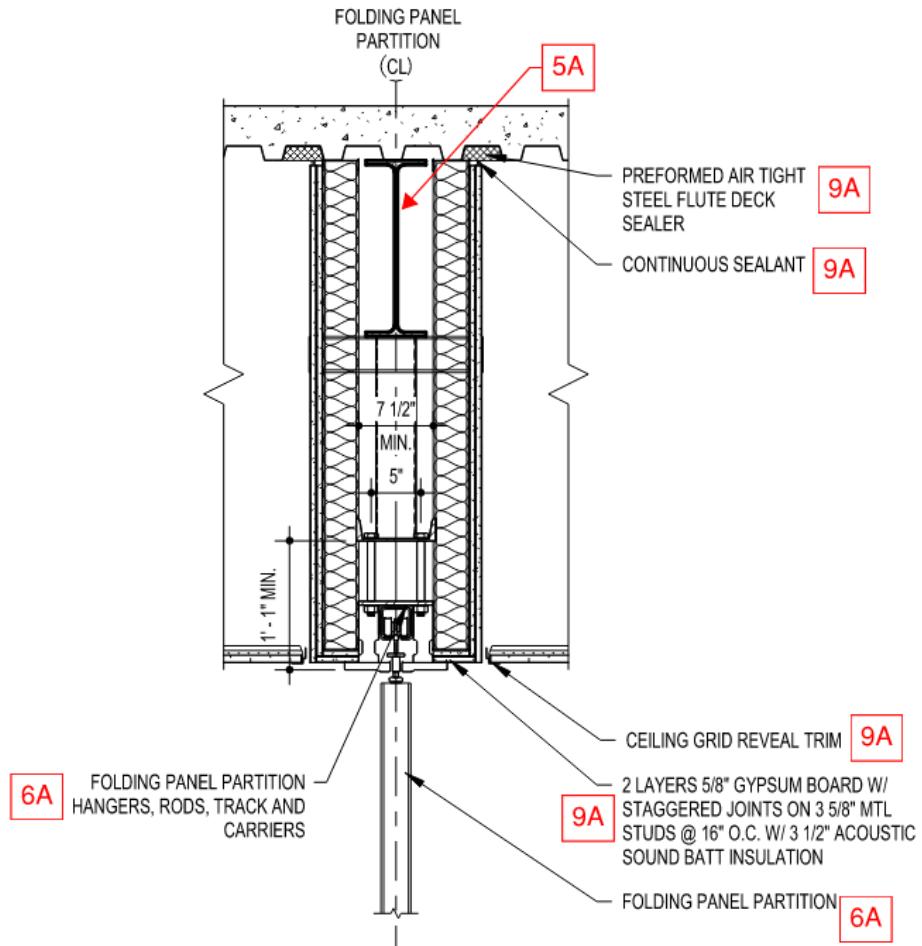
E. Sketch – CMSK005



F. Sketch – CMSK006



G. Sketch – CMSK007

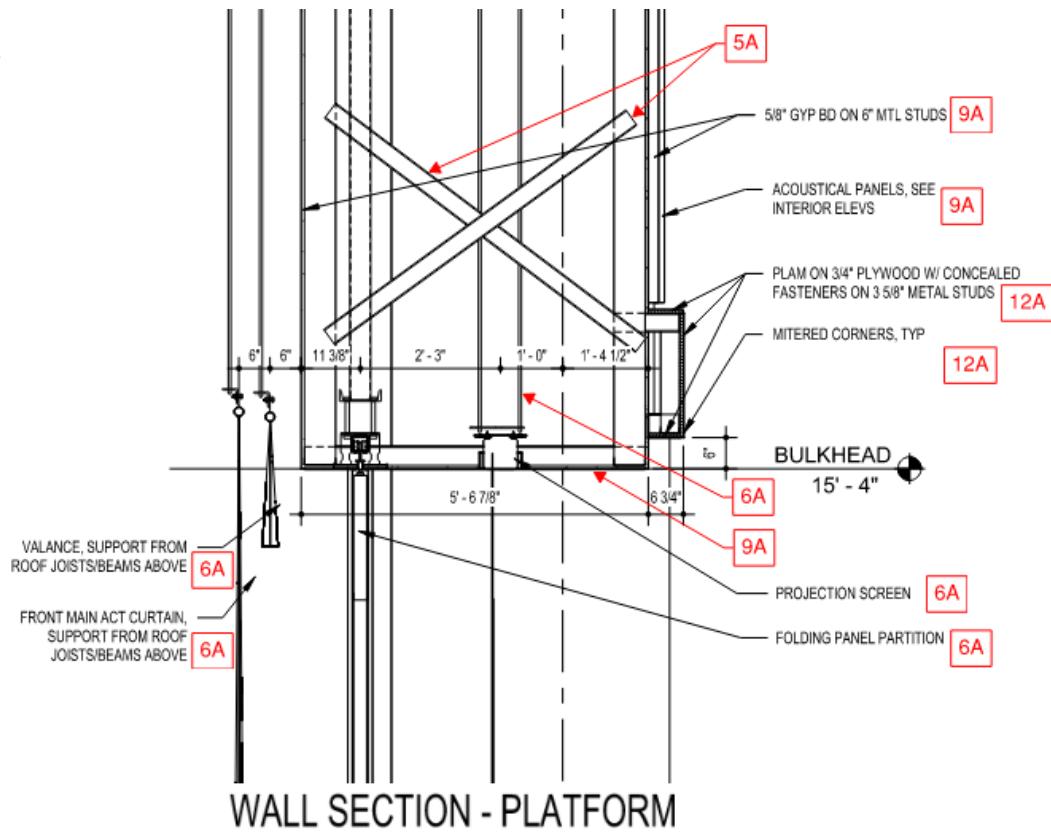


E6

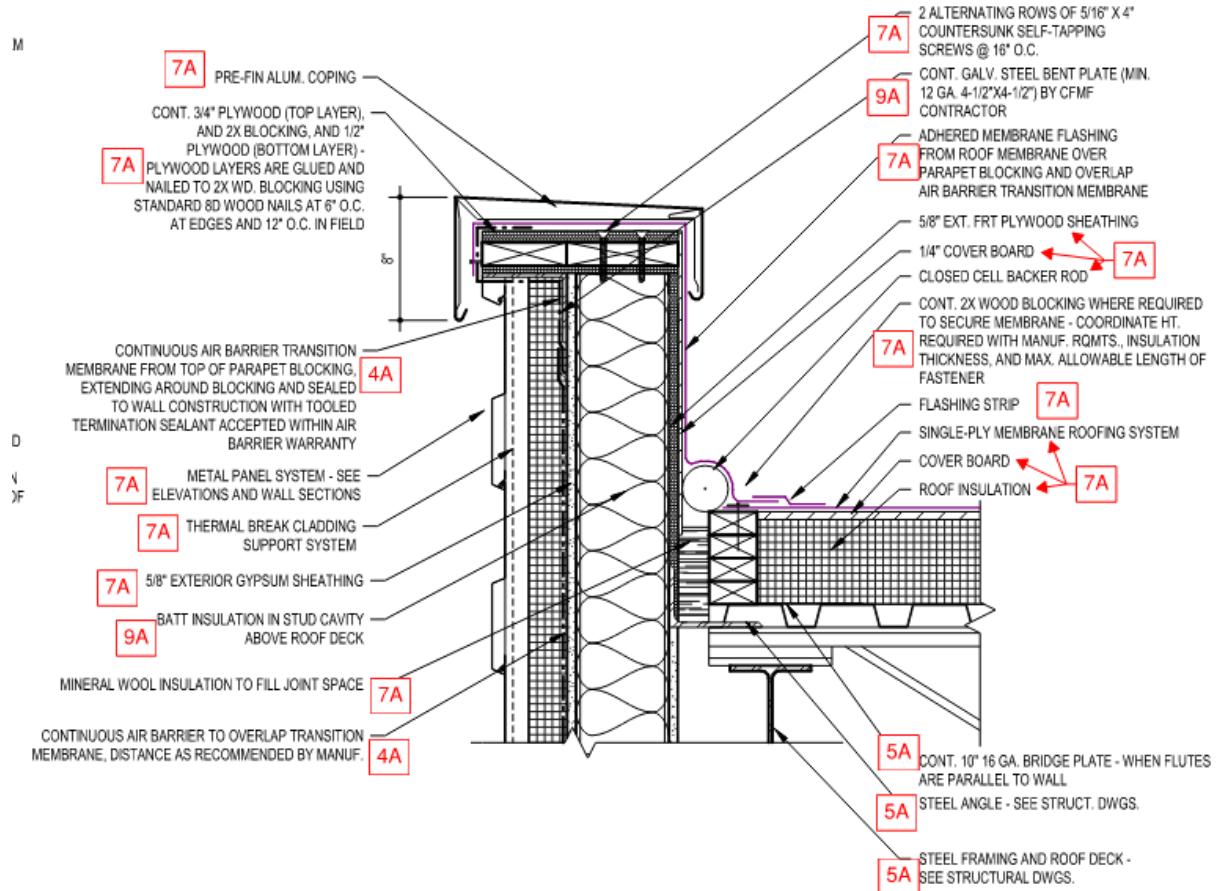
DETAIL - FOLDING PARTITION

3/4" = 1'-0"

H. Sketch – CMSK008

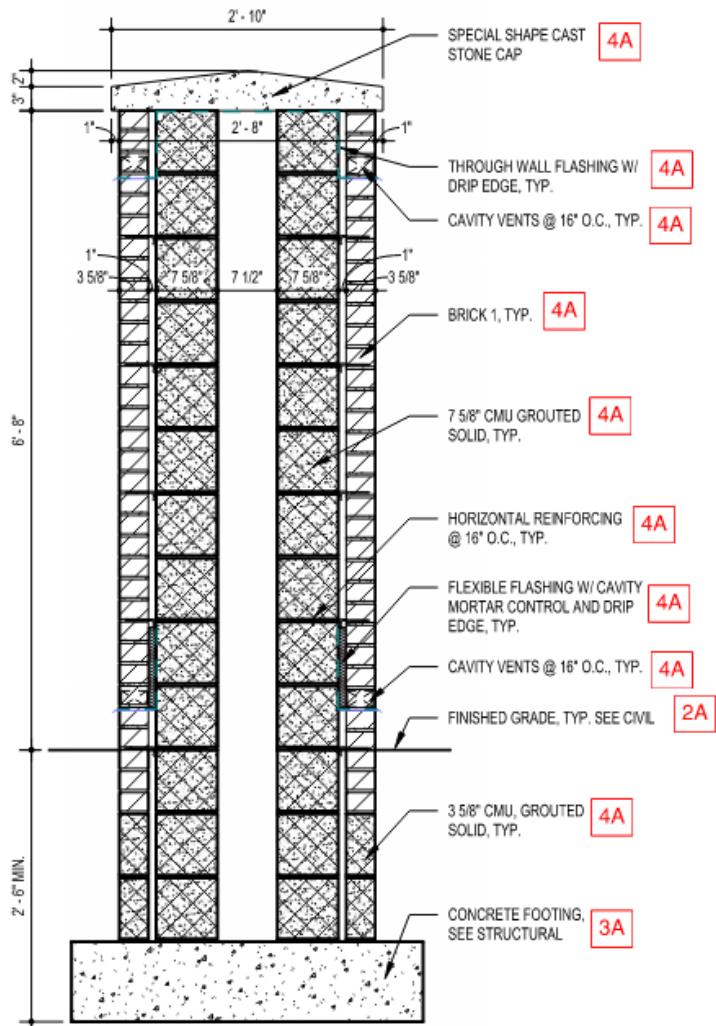
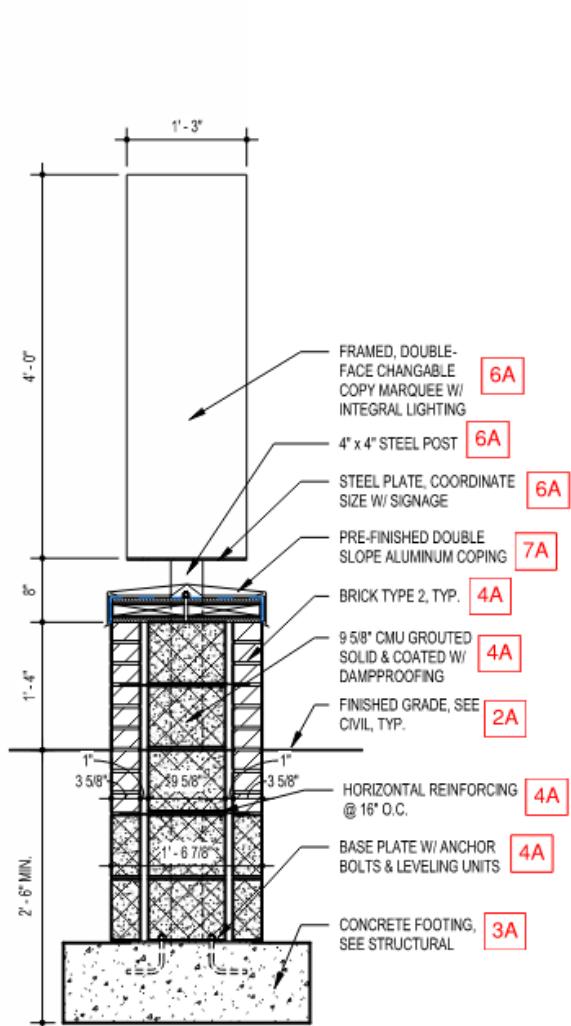


I. Sketch – CMSK009



D9 TYP. MTL. PANEL PARAPET @ STUD BACK-UP W/ ROOF EJ
1 1/2" = 1'-0"

J. Sketch – CMSK010



H16 SITE SIGN - SECTION

H13 SITE SIGN - SECTION