ADDENDUM NO. 2

Project: VCU – Bowe Street Deck Batting Cages
609 Bowe Street
Richmond, VA 23220

Bidding Questions

Baskervill Project # 2.180409.0
VCU Project Code 2019-01147
DEB Project Code 236-A8236-018

Date: February 01, 2019
To: All Bidders
From: Baskervill

BIDDING QUESTIONS FROM CONTRACTORS

1. Summary section 011000 1.8 & 1.9 states no owner furnished items. Dimensional Letter Signage 101419 1.2 A state Owner furnished & Installed. Panel signage 101423 has I assume the contractor furnishing & Install. Can you clarify the above is correct?

Response: All signage including code signage will be by owner. Athletics has a sign vendor they use and are working with them on the wall graphics and building entrance.

2. RFI - 083323 - The spec is very confusing and conflicts itself.
   - Are the doors listed below Type FS?
   - Are doors 103A, 105 A,B,C to be "rated"?
   - Is 2.3b 200k operation cycle required?
   - Is 2.3c STC 26 required, doors are non-insulated?
   - Is 2.3f wood bottom bar correct. Should this read aluminum or steel?
2.3i manual chain is listed, however the only way into the rooms are through this door, manual push-up would be best as the hand chain could catch on something and keep the doors from opening? Manual push-up is acceptable

2.3i 1 & 2 electric sensor & control station?

-083323 2.4 thru 3.2 may be clarified by answers to questions above

**Response:** The door schedule has been updated to reflect: doors 103A, 105A, 105B, & 105C are type FS - Non-Rated, Non-Insulated, Steel bottom bar, Manual operation.

3. Drawing C2.0 Site Layout Plan: “Proposed Ramp with 3’ guardrail” What is the wall detail for this proposed ramp? The ramp elevations on C2.1 give top of wall and bottom of wall elevations but do not include a detail showing footing for wall, wall make up, etc.

**Response:** RW-2 detail has been added to the plan.

4. Specification Section 32 33 00 Site Furnishings: This section list benches, bike racks, trash receptacles, planters and bollards. These are not shown on the plans. Where do they go and what quantities are to be included?

**Response:** Specification section 323300 Site Furnishing to be removed from the project manual.

5. Division 7, Thermal and Moisture Protection is missing from the project digital file.

**Response:** Division 7 - thermal and Moisture protection is included in project manual.

6. Missing a specification for the Aluminum louvres, Not in Div.8 or 23

**Response:** Division 8 Aluminum Louver specification to be included in project manual.

7. The existing split faced CMU irregularities exceed 1”. Do you want this surface built out, or cut back, to receive the jamb?

**Response:** Split face CMU irregularities to be cut back to receive curtain wall jamb assembly typ. See A112 for note.
8. C 2.1, Ramp section A-A Please provide details for the foundation and site wall at the ramp east edge. The plan view on Sht. C2.0 seems to indicate a curb at the south edge, section AA on C2.1 indicates water drainage over the edge. Lastly, may we assume there is no curb/wall at the west edge, this edge appears to be at grade.

Response: Regarding the wall foundation, RW-2 detail has been added to the plan. There is not curb/wall at the west edge. It is at grade.

9. Plan, S101, A elevation indication of +0'-6" occurs adjacent to the cut for the new door opening at the south existing wall. Is a 6" step at the doorway intended? Or should the top of the ramp be at +1'-0"?

Response: The top of the ramp should be at +1'-0" above the new FF.

10. Stair and Rail Detail, Sht. C2.1 Are there Cheek wall each side of the stairs? How thick? Footer elevation? Footer design?

Response: Cheek walls are not specified at this location.

11. The Door Schedule on A030 has many areas that are difficult to read, due to what looks like a formatting issue. Can this drawing be re-issued to clear this up?

Response: Sheet A030 will be reissued to show a clear door schedule.

12. Is there a selection for the Concrete Sealer? The finish schedule shows it as “TBD”.

Response: Provide a durable clear coating. Refer to Section 033543, 2.3 for list of manufacturers.

13. There is a specification 115213.19 Rear Projection – Visual Wall Display that I cannot locate in the drawings. Please either advise as to where it is, or if this specification can be omitted.

Response: Specification section 115213.19 Rear Projection – Visual Wall Display to be removed from the project manual. Drawings have been updated to show the visual wall display as OFOI, contractor to provide blocking.
14. Drawing C2.0 has a reference to existing condenser units that need to be relocated, and appear to be on an equipment pad. Please confirm if there is an existing pad, and if not, please provide details such as sizing, concrete specs, etc.

**Response:**

15. The architectural and structural plans provide design for a new pad with bollards to accommodate the back-up generator. The electrical plans refer to the generator and associated circuits as "existing". Please clarify whether the pad and generator are part of this scope of work.

**Response:** The pad and generator are part not in this scope of work and will be removed from the drawings.

16. There is a specification 323300 Site Furnishings, however I cannot locate any of these items in the construction documents. Please advise as to their location, or if this specification can be removed.

**Response:** Specification section 323300 Site Furnishing to be removed from the project manual.

17. The legend on Sheet C1.0 indicates "Hash" marks for demolition of existing concrete - drawing shows concrete walk being demolished approximately twenty-five feet from the corner of the building where the door is located. Sheet C2.0 however shows the demolition to end at the corner of the building and not going the additional twenty-five feet. Which detail is correct?

**Response:** C2.0 is correct. Revised Sheet C1.0 is provided.

18. There is an existing 15" PVC Pipe indicated on Sheet C1.0 that is to be removed and replaced with a 15" Ductile Iron Pipe. To what extent is the pipe to be removed and replaced? Is the pipe cut one foot outside the building and replaced to that point from the existing drop inlet?

**Response:** The pipe is to be cut 1' outside of the building and replaced to the existing drop inlet.

19. It is assumed that the existing drop inlet mentioned in number two above is to remain in place. The existing drop inlet is damaged and cracked in several locations. Will it be the contractor's responsibility to repair or replace the drop
inlet top if damaged when the existing PVC is removed and replaced with Ductile Iron?

**Response:** It is the contractors responsibility to repair or replace any existing structures that are damaged during the course of the project.

20. There is a proposed retaining wall shown on Sheet C2.0 and C2.1. What type of retaining wall is required? Details of the type of wall and footer is not shown.

**Response:** RW-2 detail has been added to the plan.

21. Sheet C2.0 "Grading Plan" shows what it would appear that we tie into the top of the second step. Can this be confirmed? Also, there is a small Cheek Wall on each side of the two steps. What does the contractor do with the top part of the Cheek Wall? The wall may need be partially removed to tie in.

**Response:** The limits of the tie in have been clarified on C2.0 and C1.0

22. The existing walk from the two steps (above) is cracked at the parking lot end. Will this walk remain "as is" and not be repaired?

**Response:** The repair of the existing walk listed above is not included in the scope of this project.

23. On Sheet C2.1 "Stair & Rail Detail", the detail indicates the proposed railing is mounted at the top and the bottom beyond the steps. The bottom of the steps will tie into the existing asphalt parking lot. The curb and gutter are being removed and there is not a proposed concrete slab shown on Sheet 2.0 extending into parking lot unless the gutter pan is to remain in place and the concrete only behind the gutter pan is removed. Even if the gutter pan which is approximately eighteen inches wide - there will not be enough concrete to go beyond the step and have a concrete footer for the rail. The detail on Sheet C2.1 indicates a four-inch slab but there is not one indicated on Sheet C2.0.

**Response:** See revised C1.0, C2.0 and C2.1 clarifying the limits of concrete removal and replacement.

24. After the shrub bed, trees and topsoil are removed the area behind the proposed wall and under the new concrete ramp will need to be backfilled to bring the elevation up to subgrade. What type of fill is required? Sand, gravel or soil?
Response: Structural fill is required. On-site soils used as structural fill should be free of debris, contain less than 5 percent organics, have a maximum particle size of 3 inches, have a maximum liquid limit (LL) of 50, and have a maximum plasticity index (PI) of 25. High plasticity on-site soils may be re-used as structural fill at depths below 2 feet relative to finished soil subgrades in building and pavement areas. If any imported fill is used, it should have a maximum LL of 40, maximum PI of 20, and otherwise meet the requirements above. Structural fill should be placed in maximum 8 to 10-inch loose lifts and compacted to at least 95 percent of the standard Proctor maximum dry density (ASTM D 698). The final 12 inches of structural fill relative to finished subgrade should be compacted to at least 98 percent of the standard Proctor maximum dry density. Structural fill should be maintained within minus one to plus 3 percent points (-1% to +3%) of optimum moisture during placement and compaction.

25. Are there any known irrigation lines in the shrub bed that is to be removed? There are none shown.

Response: Irrigation line removal and replacement are not included in the scope of this project.

26. There is an existing light pole that remains. Is the location of the power feed to this known? Will the contractor be required to hire a private locator to determine the location and then bring to owner's attention if there is a possible conflict?

Response: It is the contractor’s responsibility to locate and protect the power feed to the existing light pole.

27. Is there any special joint required for between the existing building and the proposed concrete walk?

Response: A sidewalk expansion joint is required where the building abuts the new concrete sidewalk.

28. Will the entrance from Marshall Street remain open and can it be closed during construction for safety?

Response: It can be closed during the day and then reopened at night. The contractor on the new chiller plan did that with movable barriers and they also could move them easily to accommodate a delivery or the trash trucks (see below).
29. There are four dumpsters adjacent to the site work location. Are they to remain in operation during construction?

Response: They will remain in use during construction and the trucks to service them need to access them off of Marshall Street. The contractor is NOT to put any construction waste in these dumpsters. They are to handle all of the construction debris with their own dumpster. This is one of those instances when the contractor will need to move the barriers to let the trash truck in to empty the dumpsters.

30. It appears that all interior work will need to be near completion before exterior work begins. Is this correct?

Response: GC to propose phasing for construction.

31. Are there any hand rails or guard rails to be painted?

Response: Yes, see Sheet A121 for finishes for interior handrails and guardrails. The exterior handrails and guard rails specified on C2.0 and C2.1 shall have a powdercoat finish as called out in the details on C2.1. No paint is required.

32. What walls are High Performance paint required?

Response: A121 has been updated to show level 5 finish on walls with VCU graphics.

33. Are there any liquidated damages?

Response: Refer to the General Conditions in the Project Manual

34. Are there any specs on netting/fencing for the batting cages or is this owner provided and installed?

Response: Netting and supports are to be furnished and installed by contractor. The specification section is 11 66 53 Gymnasium Dividers.

END OF ADDENDUM NO. 2
ADDENDUM No. 002

Date: 01 FEB 2019

BASKERVILL PROJECT NO 2.18409.0 | VCU PROJECT CODE 2019-01147

Owner
VIRGINIA COMMONWEALTH UNIVERSITY

Architect
BASKERVILL
101 S 15th St, Suite 200
Richmond, VA 23219

Contractor

This Addendum amends Drawings and/or Specifications for the above titled project, as indicated below, and is hereby incorporated into the Construction Documents as part thereof.

Attachments:
ADD: 02.01.19

The changes include the RFI / ADD Clarification listing/s dated 02.01.19 as follows:

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Drawings: 02.01.19

The changes included in the revised specification are in response to bidding questions.
The following drawings, issued and dated 02.01.19, are hereby revised and issued in ADD #002.

Change to Drawings:

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<td>Door schedule graphics clarification.</td>
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<td>Demolish partial height concrete plinths.</td>
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<td>A112</td>
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<td>02.01.19</td>
<td>Concrete slab and bollards, plan NW to be removed from scope of work. Apply level 5 paint to the walls indicated in plan.</td>
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<td>Apply level 5 paint to the walls indicated.</td>
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<td>C1.0</td>
<td>01.11.19</td>
<td>02.01.19</td>
<td>Location of exterior sidewalk to be demolished has been added. The extent of the tie in sidewalk to the existing stair cheek walls have been clarified. Extents of concrete removal and replacement have been clarified.</td>
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<td>C2.0</td>
<td>01.11.19</td>
<td>02.01.19</td>
<td>Handrails and guardrails called out to have powder coat. The extent of the tie in sidewalk to the existing stair cheek walls have been clarified. Extents of concrete removal and replacement have been clarified.</td>
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</table>
Handrails and guardrails called out to have powder coat. Detail RW-2 clarifies the retaining wall and footer. Extents of concrete removal and replacement have been clarified.

Ramp landing entering the space, plan SE, to be at +1'-0" elevation.

Specifications:

The changes included in the revised specification are in response to bidding questions. The following specification sections, issued and dated 02.01.19, are hereby revised and issued in ADD #002.

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#### VCU HECO FORMS AND DOCUMENTS

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- **VCUHECO 6B**: 2012 VUSCB SPECIAL INSPECTIONS
- **VCUHECO 7**: GENERAL CONDITIONS
- **VCUHECO 9**: CONTRACT BETWEEN VCU AND CONTRACTOR
- **VCUHECO 9A**: WORKERS’ COMPENSATION
- **VCUHECO 9.2**: NOTICE TO PROCEED
- **VCUHECO 10**: STANDARD PERFORMANCE BOND
- **VCUHECO 10.1**: STANDARD LABOR AND MATERIAL BOND
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- **VCU HECO 11**: CONTRACT CHANGE ORDER
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- **VCU HECO GC-1**: GENERAL CONTRACTOR ESTIMATE FOR CHANGE ORDER
- **VCU HECO SC-1**: SUBCONTRACTOR ESTIMATE FOR CHANGE ORDER
- **VCU HECO SS-1**: SUB-SUBCONTRACTOR ESTIMATE FOR CHANGE ORDER
- **VCU HECO 12**: SCHEDULE OF VALUES AND CERTIFICATE FOR PAYMENT
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- **00 21 13.01**: EVA REGISTRATION REQUIREMENTS
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- **00 31 32**: GEOTECHNICAL DATA
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VIRGINIA COMMONWEALTH UNIVERSITY
CONTRACTOR REPORTING
REQUIREMENTS

The Contractor is required to submit their daily inspection reports / job logs to the VCU Project Inspector on a weekly basis. The Contractor shall submit their reports to the VCU Project Manager no later than 5:00 p.m. each Monday for the preceding week’s work. All inspection work shall have inspection reports.

Daily inspection reports / job logs must be provided for each day where work is performed on site. Each report shall include the following information:

- Project Name
- Project Code Number
- Date
- Weather
- Work Performed
- Number of Trades on Site
- Number of Workers on Site
- Issues and /or Concerns
- Project Inspector’s Name, Title
- and signature w/Date

All reports must be signed and dated by the individual preparing the report by typing their name, title and date using DocuSign (or equivalent) or by scanning a handwritten and signed document. Failure to submit the required information will be considered as non-compliant with the contract, and may result in invoices being returned without payment.
SECTION 089119 - FIXED LOUVERS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section Includes:
   1. Fixed, Aluminum Screen

1.3 DEFINITIONS

A. Louver Terminology: Definitions of terms for metal louvers contained in AMCA 501 apply to this Section unless otherwise defined in this Section or in referenced standards.

B. Horizontal Louver: Louver with horizontal blades (i.e., the axes of the blades are horizontal).

C. Vertical Louver: Louver with vertical blades (i.e., the axes of the blades are vertical).

D. Drainable-Blade Louver: Louver with blades having gutters that collect water and drain it to channels in jambs and mullions, which carry it to bottom of unit and away from opening.

E. Wind-Driven-Rain-Resistant Louver: Louver that provides specified wind-driven rain performance, as determined by testing according to AMCA 500-L.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product.
   1. For louvers specified to bear AMCA seal, include printed catalog pages showing specified models with appropriate AMCA Certified Ratings Seals.

B. Shop Drawings: For louvers and accessories. Include plans, elevations, sections, details, and attachments to other work. Show frame profiles and blade profiles, angles, and spacing.
   1. Show weep paths, gaskets, flashing, sealant, and other means of preventing water intrusion.
   2. Show mullion profiles and locations.

C. Delegated-Design Submittal: For louvers indicated to comply with structural performance requirements, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
1.5 INFORMATIONAL SUBMITTALS
A. Product Test Reports: Based on evaluation of comprehensive tests performed according to AMCA 500-L by a qualified testing agency or by manufacturer and witnessed by a qualified testing agency, for each type of louver and showing compliance with performance requirements specified.

1.6 QUALITY ASSURANCE
A. Welding Qualifications: Qualify procedures and personnel according to the following:
   1. AWS D1.2/D1.2M, "Structural Welding Code - Aluminum."

1.7 FIELD CONDITIONS
A. Field Measurements: Verify actual dimensions of openings by field measurements before fabrication.

PART 2 - PRODUCTS

2.1 MANUFACTURERS
A. Source Limitations: Obtain louvers from single source from a single manufacturer where indicated to be of same type, design, or factory-applied color finish.

2.2 PERFORMANCE REQUIREMENTS
A. Delegated Design: Design louvers, including comprehensive engineering analysis by a qualified professional engineer, using structural performance requirements and design criteria indicated.
B. Structural Performance: Louvers shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated without permanent deformation of louver components, noise or metal fatigue caused by louver-blade rattle or flutter, or permanent damage to fasteners and anchors. Wind pressures shall be considered to act normal to the face of the building.
   1. Wind Loads: Determine loads based on pressures as indicated on Drawings.
C. Louver Performance Ratings: Provide louvers complying with requirements specified, as demonstrated by testing manufacturer's stock units identical to those provided, except for length and width according to AMCA 500-L.
D. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes.
   1. Temperature Change (Range): 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.
2.3 FIXED, EXTRUDED-ALUMINUM SCREEN

A. Horizontal, Continuous-Line, Screen Blades and accessories, supported and lined up with heavy gauge extruded aluminum blade braces positively interlocked to each blade and mechanically secured to extruded aluminum supports. Aluminum supports fixed directly to horizontal or vertical steel supports with extruded aluminum clip angles. All fasteners to be stainless steel or aluminum.

1. Manufacturers: Subject to compliance with requirements, provide Econo-Line 160 Vision Line Architectural Grilles and Vision Barriers by CS Group or equal by one of the following:
   a. Ameristar Fence Products; an ASSA ABLOY company.
   b. Ametco Manufacturing Corporation.

2. Blade Depth: 4-inch supported and lined up with heavy gauge extruded aluminum blade braces positively interlocked to each blade and mechanically secured to extruded aluminum supports.

3. Frame and Blade Nominal Thickness: Blades to be fabricated from extruded aluminum sections in 6063-T52 alloy, minimum .081" thick and spaced approximately 6½" on center.

4. Screens to be fabricated from extruded aluminum sections in 6061-T6 alloy, and spaced at 2.4" o.c.

5. Free Area minimum 61.8%.

6. Blades to be secured to vertical rods. Rods to be spaced at 4" on center.

7. Screens to be fixed directly to vertical steel supports (not by c/s) or to spandrel beams with extruded aluminum clip angles.

8. All fasteners to be stainless steel.

2.4 MATERIALS

A. Aluminum Extrusions: ASTM B 221 (ASTM B 221M), Alloy 6063-T5, T-52, or T6.

B. Aluminum Sheet: ASTM B 209 (ASTM B 209M), Alloy 3003 or 5005 with temper as required for forming, or as otherwise recommended by metal producer for required finish.

C. Fasteners: Use types and sizes to suit unit installation conditions.

1. Use Phillips flat-head tamper-resistant screws for exposed fasteners unless otherwise indicated.

2. For fastening aluminum, use aluminum or 300 series stainless-steel fasteners.

3. For color-finished louvers, use fasteners with heads that match color of louvers.

D. Postinstalled Fasteners for Concrete and Masonry: Torque-controlled expansion anchors, made from stainless-steel components, with capability to sustain, without failure, a load equal to 4 times the loads imposed, for concrete, or 6 times the load imposed for masonry, as determined by testing according to ASTM E 488, conducted by a qualified independent testing agency.

E. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D 1187.

2.5 FABRICATION

A. Factory assemble louvers to minimize field splicing and assembly. Disassemble units as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation.
B. Vertical Assemblies: Where height of louver units exceeds fabrication and handling limitations, fabricate units to permit field-bolted assembly with close-fitting joints in jambs and mullions, reinforced with splice plates.

1. Continuous Vertical Assemblies: Fabricate units without interrupting blade-spacing pattern.

C. Maintain equal louver blade spacing, to produce uniform appearance.

D. Include supports, anchorages, and accessories required for complete assembly.

E. Provide vertical mullions of type and at spacings indicated, but not more than is recommended by manufacturer, or 72 inches (1830 mm) o.c., whichever is less.

1. Semirecessed Mullions: Where indicated, provide mullions partly recessed behind louver blades so louver blades appear continuous. Where length of louver exceeds fabrication and handling limitations, fabricate with interlocking split mullions and close-fitting blade splices designed to permit expansion and contraction.

2. Exterior Corners: Prefabricated corner units with mitered blades with concealed close-fitting splices and with semirecessed mullions at corners.

F. Provide extended sills for recessed louvers.

G. Join frame members to each other and to fixed louver blades with fillet welds concealed from view unless otherwise indicated or size of louver assembly makes bolted connections between frame members necessary.

2.6 ALUMINUM FINISHES

A. Finish louvers after assembly.

B. Clear Anodic Finish: AAMA 611, AA-M12C22A41, Class I, 0.018 mm or thicker.

C. High-Performance Organic Finish: Two-coat fluoropolymer finish complying with AAMA 2605 and containing not less than 70 percent PVDF resin by weight in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.

1. Color and Gloss: As selected by Architect from manufacturer's full range.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates and openings, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

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

A. Coordinate setting drawings, diagrams, templates, instructions, and directions for installation of anchorages that are to be embedded in concrete or masonry construction. Coordinate delivery of such items to Project site.

3.3 INSTALLATION

A. Locate and place louvers level, plumb, and at indicated alignment with adjacent work.

B. Use concealed anchorages where possible. Provide brass or lead washers fitted to screws where required to protect metal surfaces and to make a weathertight connection.

C. Form closely fitted joints with exposed connections accurately located and secured.

D. Provide perimeter reveals and openings of uniform width for sealants and joint fillers, as indicated.

E. Protect unpainted galvanized and nonferrous-metal surfaces that are in contact with concrete, masonry, or dissimilar metals from corrosion and galvanic action by applying a heavy coating of bituminous paint or by separating surfaces with waterproof gaskets or nonmetallic flashing.

F. Install concealed gaskets, flashings, joint fillers, and insulation as louver installation progresses, where weathertight louver joints are required. Comply with Section 079200 "Joint Sealants" for sealants applied during louver installation.

3.4 ADJUSTING AND CLEANING

A. Clean exposed louver surfaces that are not protected by temporary covering, to remove fingerprints and soil during construction period. Do not let soil accumulate during construction period.

B. Before final inspection, clean exposed surfaces with water and a mild soap or detergent not harmful to finishes. Thoroughly rinse surfaces and dry.

C. Restore louvers damaged during installation and construction so no evidence remains of corrective work. If results of restoration are unsuccessful, as determined by Architect, remove damaged units and replace with new units.

1. Touch up minor abrasions in finishes with air-dried coating that matches color and gloss of, and is compatible with, factory-applied finish coating.

END OF SECTION 089119
SECTION 115213.19 - REAR PROJECTION - VISUAL WALL DISPLAY – \textit{REVISED TO OFCI}

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section Includes:
   1. Video Wall Display, flexible Visual Wall display screens and controls – \textit{Owner Furnished Contractor Installed}

B. Related Requirements:
   1. Section 055000 "Metal Fabrications" for metal support framing for Visual Wall display screens.

1.3 OWNER SUBMITTALS

A. Product Data: For each type of product.

B. Shop Drawings: Show layouts and types of Visual Wall display screens. Include the following:
   1. For rigid Visual Wall display screens:
      a. Frame details.
      b. Anchorage details.
      c. Details of juncture of exposed surfaces with adjacent finishes.
      d. Accessories.
   2. For manually operated, flexible Visual Wall display screens:
      a. Drop lengths.
      b. Anchorage details.
      c. Accessories.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Environmental Limitations: Do not deliver or install Visual Wall display screens until spaces are enclosed and weathertight, wet work in spaces is complete and dry, and temporary HVAC system is operating and maintaining ambient temperature and humidity conditions at occupancy levels during the remainder of the construction period.

B. Store Visual Wall display screens in manufacturer's protective packaging and according to manufacturer's written instructions.
1.5 COORDINATION
   A. Coordinate layout and installation of Visual Wall display screens with adjacent construction, including ceiling suspension systems, light fixtures, HVAC equipment, fire-suppression system, and partitions.

PART 2 - PRODUCTS

2.1 MANUFACTURERS
   A. Basis of Design: Coordinate with Owner system by
      1. LAS Series by LG Electronics
      2. Nexnova

2.2 VIDEO CONTROL
   A. LED Controller
      1. General: Digital media system for switching 32 analog, digital, fiber optic, or streaming inputs to 32 digital, fiber optic, or streaming outputs.
      2. Communications: Software
         a. Ethernet: 10/100/1000 Mbps, auto-switching, auto-negotiating, auto-discovery full/half duplex, DHCP, Private Network Mode
            1) Web-based software- LG web OS 3.0
            2) Control & Monitoring
            3) E-mail Alerts

2.3 VIDEO DISPLAYS
   A. 90” Display (Type 1)
      1. General: 90” high definition LCD panel with LED backlight

PART 3 - EXECUTION

3.1 FLEXIBLE VISUAL WALL DISPLAY SCREEN INSTALLATION
   A. Install Visual Wall display screens at locations indicated to comply with screen manufacturer's written instructions.
   B. Install Visual Wall display screens with screen cases in position and in relation to adjoining construction indicated. Securely anchor to supporting substrate in a manner that produces a smoothly operating screen with vertical edges plumb and viewing surface flat when screen is lowered.
      1. Install low-voltage controls according to NFPA 70 and complying with manufacturer's written instructions.
a. Wiring Method: Install wiring in raceway except in accessible ceiling spaces and in gypsum board partitions where unenclosed wiring method may be used. Use UL-listed plenum cable in environmental air spaces, including plenum ceilings. Conceal raceway and cables except in unfinished spaces.

2. Test electrically operated units to verify that screen controls, limit switches, closures, and other operating components are in optimum functioning condition.

3. Test manually operated units to verify that screen-operating components are in optimum functioning condition.

3.2 PROTECTING AND CLEANING RIGID VISUAL WALL DISPLAYSCREENS

A. Provide temporary covering of Visual Wall display screens until time of Substantial Completion. Use type of covering approved by screen manufacturer that effectively protects screen from abrasion, breakage, or other damage.

B. Clean Visual Wall displays screens on both faces immediately before date scheduled for inspection intended to establish date of Substantial Completion. Use methods and cleaning materials recommended by screen manufacturer, taking care not to scratch or damage optical coatings or screen substrates.

END OF SECTION 115213.19
SECTION 11 66 53 - GYMNASIUM DIVIDERS – Revised as Noted

PART 1 - GENERAL

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

1.2 SUMMARY
   A. Section Includes:
      1. Roll-up divider systems.
      2. Indoor batting cage system.
      
1.3 PREINSTALLATION MEETINGS
   A. Preinstallation Conference: Conduct conference at Project site.

1.4 ACTION SUBMITTALS
   A. Product Data: For each type of product.
      1. Motors: Show nameplate data, ratings, characteristics, and mounting arrangements.
   B. Shop Drawings: For gymnasium dividers.
      1. Include plans showing alignment of curtains in relation to sport-court layout and overhead structural supports.
      2. Include elevations, sections, details, and attachments to other work.
      3. Include system clearances, stacking requirements, and limits for fitting into adjacent construction.
      4. Include point loads and locations for attachment of gymnasium dividers to structure.
      
   C. Samples: For each exposed product and for each item and color specified.

1.5 INFORMATIONAL SUBMITTALS
   A. Coordination Drawings: Reflected ceiling plans with divider-curtain layouts, drawn to scale, on which the following items are shown and coordinated with each other, based on input from installers of the items involved:

   1. Structural members to which divider-curtain systems will be attached.
   2. Suspended ceiling components, if any.
   3. Items supported from building structure, including the following:
a. Lighting fixtures.
b. Air outlets and inlets.
c. Speakers.
d. Sprinklers.

B. Qualification Data: For Installer.

C. Product Certificates: For each type of gymnasium divider.

D. Sample Warranty: For special warranty.

1.6 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For gymnasium dividers to include in operation and maintenance manuals.

1.7 QUALITY ASSURANCE

A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.

1.8 WARRANTY

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

1. Failures include, but are not limited to, the following:
   a. Faulty operation of gymnasium dividers.
   b. Tearing or deterioration of fabric, seams, or other materials beyond normal use.

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

PART 2 - PRODUCTS

2.1 TOP-ROLL DIVIDER SYSTEMS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   1. Draper Inc.
   2. IPI by Bison.
   3. Jaypro Sports, LLC.

B. Source Limitations: Obtain from single source from single manufacturer.

C. Divider-Curtain System: Electrically operated, top-roll drive pipe, and as follows:
   1. Outer Edge Hems: Double turned and welded.
   2. Supports and Fittings: Corrosion-resistant steel clamps and hangers.
3. Drive Pipe: 3-1/8-inch nominal diameter, fabricated from steel, aluminum, or PVC pipe or tubing, with a minimum number of joints as necessary for required lengths. Steel shall be galvanized or shop primed and shop finished with black paint.
4. Curtain Battens: 1-1/2-inch nominal diameter, fabricated from steel pipe or tubing, with a minimum number of joints as necessary for required lengths. Provide galvanized steel, or shop prime and shop finish with black paint.

2.2 CEILING SUSPENDED SINGLE PULL BATTLING CAGE

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   1. Carron Net Co.
   2. IPI by Bison
   3. Jaypro Sports

B. Source Limitations: Obtain from single source from single manufacturer.

C. Baseball Netting: Nylon, 1-3/4 inches (44 mm) mesh used for baseball barrier. Refer to drawings for size and shape:
   1. Nets shall be dead-hung.
   2. Installation Hardware:
      a. Cable: Cable assembly for suspending and drawing the nets as required per the drawings and as scheduled on the Court/Track Event Layout drawings. Including turnbuckles, 1/4 inch (6 mm) galvanized steel cable, cable clamps, and thimbles. Contractor to provide eye bolts/anchors of whatever type appropriate for wall type where cable assembly is to be installed. Attachment hardware to be determined by application.
      b. Hardware:
         1) 2 3/8" O.D. Drive Pipe
         2) Cable guides
         3) Cable clamps
         4) 1/8" Aircraft Cable - Wire Rope: 7-by-19 wire rope made from wire complying with ASTM A 492, Type 316
         5) Eyebolt Cable Clamp; three places per cable guide pair
         6) T-Fitting Pipe
      c. Operation:
         1) Beam Clamp with double Unistrut
         2) 2-3/8" O.D. Drive Pipe
         3) 1 HP Hi-Torque Motor 110 Volt, Single Phase
      d. Netting:
         1) 1-3/4" Square #42 Black Nylon
         2) Height: 12-foot
         3) Length: As indicated on the drawings

2.3 ELECTRIC OPERATORS

A. Deleted.
2.4 DIVIDER CURTAINS

A. Curtain, Mesh: Woven mesh of polyester yarn coated with vinyl, weighing not less than 9 oz./sq. yd.
   1. Mesh Color: Black.

B. Hems: Folded and electronically welded.

C. Seams: Electronically welded.

D. Overall Curtain Dimensions:


2.5 DIVIDER SYSTEM ACCESSORIES

A. Safety Lock: Locks drive system when speed exceeds 1-1/2 fps.

2.6 SUPPORT MATERIALS AND FASTENERS

A. General-Purpose Support Cable: 1/8" Aircraft Cable - Wire Rope: 7-by-19 wire rope made from wire complying with ASTM A 492, Type 316. Provide coating type, chain size, number, and installation method according to manufacturer's written instructions.

B. Anchors, Fasteners, Fittings, and Hardware: Manufacturer's standard corrosion-resistant or noncorrodible units; concealed; tamperproof, vandal-resistant design.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for alignment of mounting substrates, installation tolerances, operational clearances, locations of connections to building electrical system, and other conditions affecting performance of the Work.

   1. Verify critical dimensions.
   2. Examine supporting structure.
   3. Examine wall assemblies, where reinforced to receive anchors and fasteners, to verify that locations of concealed reinforcements are clearly marked. Locate reinforcements and mark locations.

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

3.2 INSTALLATION, GENERAL

A. Comply with manufacturer's written installation instructions.

B. Install gymnasium dividers after other finishing operations, including painting, have been completed unless otherwise indicated.
C. Install gymnasium dividers level, plumb, square, and true; anchored securely to supporting structure; positioned at locations and elevations indicated; in proper relation to adjacent construction; and aligned with sport-court layout.

1. Verify clearances for movable components of gymnasium dividers throughout entire range of operation and for access to operating components.

D. Electric Operators Installation: Connect electric operators to building electrical system.

3.3 ADJUSTING

A. Adjust movable components of gymnasium dividers to operate safely, smoothly, easily, and quietly, free from binding, warp, distortion, uneven tension, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range; and lubricate as recommended in writing by manufacturer.

B. Limit Switch Adjustment: Set and adjust upper and lower limit controls.

END OF SECTION 11 66 53
SECTION 32 18 13 - SYNTHETIC GRASS SURFACING – Revised as Noted

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section includes synthetic grass surfacing.

1.3 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Shop Drawings: For synthetic grass surfacing.

1. Include sections and details.

2. Show locations of seams and method of seaming.

3. Show layout of game lines, numbers, and letters. Indicate application method of each line and marking.

4. Show location and layout of team logo/graphics.

C. Samples: For each type of synthetic grass surfacing indicated.

1. Turf Fabric: 12 inches square.

2. Shock-Attenuation Pad: 12 inches square.

1.5 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Installer.

B. Product Test Reports: For each synthetic grass surfacing assembly.

1.6 CLOSEOUT SUBMITTALS

A. Maintenance Data: For synthetic grass surfacing, including maintenance cleaning instructions, to include in maintenance manuals.
1.7 MAINTENANCE MATERIAL SUBMITTALS

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

1. Turf Fabric: Minimum of 300 sq. ft..
2. Seaming Tape and Adhesive: One roll of seaming tape and one gallon of adhesive.
3. One new set of maintenance tools, of type recommended by synthetic grass surfacing manufacturer for installation.

1.8 QUALITY ASSURANCE

A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.

1.9 DELIVERY, STORAGE, AND HANDLING

A. Store materials in location and manner to allow installation of synthetic grass surfacing without excess disturbance of granular base.

1.10 WARRANTY

A. Special Warranty: Manufacturer agrees to repair or replace synthetic grass surfacing that fails in materials or workmanship within specified warranty period.

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

   a. Deterioration and excessive wear.
   b. Deterioration from UV light.
   c. Excessive loss of shock attenuation.
   d. Seam separation, including game lines and markings.

2. Warranty Period: 12 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Turf Fabric: Turf fabric tested according to the following methods, with additional test method conditions for each method according to ASTM F 1551.

1. Tuft Bind: Not less than 10 lbf according to ASTM D 1335.
2. Breaking Strength: Minimum 250 lbf in warp direction and minimum 250 lbf perpendicular to warp direction, according to ASTM D 5034.

B. Synthetic Grass Surfacing: Assembly tested according to the following methods, with additional test method conditions for each method according to ASTM F 1551.

1. Shock Attenuation: No greater than 130 G(max) at time of installation according to ASTM F 355.
2. Abrasiveness Index: 100 microns thick according to ASTM F 1015.
3. Athletic Shoe Traction Index: Determined according to ASTM F 2333 for baseball shoe, as follows:
   a. Translational: Mean value(s) 1.40 to 1.50.

C. Permeability: 1 in./h of rainfall capacity according to ASTM F 2898 or EN 15330-1

D. Durability: Minimum of 10,000 wear cycles according to EN 15306 (Lisport test).

2.2 SYNTHETIC GRASS SURFACING

A. Synthetic Grass Surfacing: Complete surfacing system, consisting of synthetic yarns bound to water-permeable backing and infill indicated, suitable for baseball playing fields.

1. Basis of Design: Subject to compliance with requirements, provide product Strike One 5MM (SHAWGRASS) Turf by Shaw Sports, Turf Division of Berkshire Hathaway; or equal by one of the following:
   a. Field Turf, a Tarkett Sports Company; Vintage Series
   b. Hellas.

B. Turf Fabric: Woven turf fabric with multicolored fiber and UV resistance, complying with the following:

2. Lead Content of Yarn Fiber: Maximum of 100 ppm according to ASTM F 2765.
3. Pile Weight: 40 to 50 oz./sq. yd. according to ASTM D 5848
4. Pile Height: 2 to 2-1/2 inches according to ASTM D 5823

C. Backing: Manufacturer's standard woven or nonwoven polypropylene primary backing with urethane-coated secondary backing; provide perforations or drainage channels sufficient to meet permeability indicated.

1. Pad/Cushion: Manufacturer’s standard 5mm, 3/16 inch backing cushion.
   a. Weight: 3.5 oz/yard²

2. The rubber pads are SBR rubber fibers or granules bound together with a polyurethane binder and usually come as roll or piece goods and should be permeable. The foam cushion layers are typically polyurethane or polyvinyl chloride and should be water permeable for drainage.

D. Game Lines and Markings: Provide game lines and markers in widths and colors according to requirements indicated on Drawings.

1. Application Method: Tufted in to the maximum extent practicable, with remaining lines inlaid.
2. Team Logo/Graphic: Provide inlaid team logo/graphic in colors and design indicated.

E. Seaming Method: Sewn.

2.3 MATERIALS

A. Seam Adhesive: One- or two-part urethane, recommended or approved by synthetic grass surfacing manufacturer, and suitable for ambient conditions at time of installation.
B. Seam Tape: Synthetic grass manufacturer's recommended seam tape, minimum 15 inches wide, 18 inches wide for inlaid game lines.

C. Seaming Cord: Seaming cord or thread, recommended by the synthetic grass surfacing manufacturer.

D. Game Line Paint: Permanent paint as recommended or approved by synthetic grass surfacing manufacturer.

2.4 MISCELLANEOUS MATERIALS

A. Metal Edge Strips: Angle or L-shaped, height to match tile and setting-bed thickness, metallic or combination of metal and PVC or neoprene base, designed specifically for flooring applications; stainless-steel, ASTM A 666, 300 Series exposed-edge material.

1. Manufacturers:
   a. GenoTek
   b. Schluter Systems L.P

2. Edge Strip TR-01 - Schluter®-RENO-V
   a. Description: Ball-and-socket hinged profile with sloped exposed surface, tapered leading edge, integrated trapezoid-perforated anchoring leg, and integrated grout joint spacer.
   b. Material and Finish:
      1) AE - Satin Anodized Aluminum
   c. Height: Height as required

3. Edge Strip TR-02  - Schluter®-SCHIENE
   a. Description: L-shaped profile with 1/8" (3.2 mm) wide top section and vertical wall section that together form the visible surface, integrated trapezoid-perforated anchoring leg, and integrated grout joint spacer
   b. Anchoring Leg:
      1) Provide with straight anchoring leg
   c. Material and Finish:
      1) A – Aluminum, Satin Anodized
   d. Height: Height as required

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine base and other conditions, with Installer present, for compliance with requirements for installation tolerances, permeability, and other conditions affecting performance of the Work.

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

3.2 INSTALLATION

A. Avoid disturbance of base during installation of [shock-attenuation pad and turf fabric.]
B. Shock-Attenuation Pad Installation: Roll out pad and allow to relax a minimum of six hours prior to final fit and trim. Stagger head seams between adjacent rows. Fit seams snugly without stretching or forcing.

C. Provide seams flat and snug, with no gaps or fraying. Remove yarns that are trapped within seams. Attach turf fabric to perimeter restraint system as recommended by the manufacturer.

D. Install inlaid game lines and markings by cutting through turf fabric and installing snugly fitting game line turf fabric. Provide seaming tape that extends minimum 6 inches beyond seam.

E. Repair loose seams and bubbles formed due to expansion of turf fabric prior to installation of infill.

F. Evenly broadcast and groom infill by machine in proportions and depth after settling as recommended by the manufacturer, and to meet indicated performance requirements. Rake fibers trapped by infill to surface.

G. Painted Game Lines: Apply lines and markings as recommended by the game line paint manufacturer.

END OF SECTION 32 18 13
1. VERIFY EXISTING PARTITION THICKNESS PRIOR TO FABRICATING DOOR FRAME.
2. PROVIDE EITHER WALL STOPS OR TRACK TYPE OVERHEAD STOPS AS REQUIRED. FLOOR STOPS ARE NOT ACCEPTABLE.
3. DOORS SHOULD NOT BE UNDERCUT MORE THAN 3/4" ABOVE NEW FINISHED SURFACES.
4. DOOR FRAMES AT INSULATED PARTITIONS SHALL RECEIVE INSULATION IN JAMB & HEAD CAVITY.
5. ALL FRAMES & ANCHORS TO BE INSTALLED ACCORDING TO FRAME MANUFACTURER'S INSTRUCTIONS.
6. ALL HM FRAMES TO BE FULLY WELDED, UNO.
7. RATED OPENINGS SHALL RECEIVE UL RATED FRAME ASSEMBLY.
8. PROVIDE 6" MINIMUM CLEAR BETWEEN JAMB & ADJACENT PARTITION. REFER TO ACCESSIBILITY DIAGRAMS FOR CODE-REQUIRED CLEARANCES AT OPENINGS.

UNLESS OTHERWISE INDICATED PROVIDE THE FOLLOWING HARDWARE FINISHES AS APPROPRIATE FOR EACH HARDWARE ITEM THROUGHOUT THE PROJECT.

- BHMA 626/652 SATIN CHROME
- BHMA 630 SATIN STAINLESS STEEL
- BHMA 689 ALUMINUM PAINTED

PROVIDE HARDWARE FOR DOOR OPENINGS OCCURRING IN FIRE RATED CONSTRUCTION THAT IS LISTED AND LABELED AS APPROPRIATE FOR THE OPENING AND REQUIRED FIRE RATING. PROVIDE SELF-CLOSING AND LATCHING HARDWARE FOR ALL FIRE RATED OPENINGS, TYPICAL. COMPLY WITH NFPA 80, TYPICAL.

COMPLY WITH CURRENT REQUIREMENTS OF ADA AND ICC/ANSI A117.1.

UNLESS OTHERWISE INDICATED ALL LOCKING AND LATCHING HARDWARE SHALL BE GRADE 1.

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**Door Schedule**

<table>
<thead>
<tr>
<th>No.</th>
<th>Door Number</th>
<th>Frame Type</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>FF EXISTING 2ND FLOOR SLAB</td>
<td>102C FG</td>
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<td></td>
</tr>
<tr>
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<td>FF EXISTING</td>
<td></td>
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<td>102G (2)F</td>
<td>FF EXISTING</td>
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<tr>
<td>FF EXISTING 2ND FLOOR SLAB</td>
<td>102H (2)F</td>
<td>FF EXISTING</td>
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</tbody>
</table>

**Door Hardware Notes**

- ALL DOORS TO BE SATIN CHROME, BHMA 630 SATIN STAINLESS STEEL, BHMA 689 ALUMINUM PAINTED EXCEPT WHERE OTHERWISE INDICATED.
- PROVIDE SELF-CLOSING AND LATCHING HARDWARE FOR ALL FIRE RATED OPENINGS, TYPICAL.
- PROVIDE ACCESS CONTROL INTO BATTING FACILITY.
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**Door Frame Types**

- SINGLE PANEL
- DOUBLE PANEL

**Typical Door Location**
1. **General Demolition Notes:**
   - Contractors and Subcontractors shall not remove any structural members of the building at any time.
   - Contractors shall not remove any mechanical, electrical, or plumbing systems.
   - Contractors shall not remove any wall partitions.
   - Contractors shall not remove any access doors.

2. **Patch & Repair Notes:**
   - Contractors shall patch all holes in existing walls to remain when wall mounted items are to be removed.
   - Contractors shall remove all fire extinguishers and cabinets in walls to be demolished and return to owner for future reuse.
   - Contractors shall patch and repair all walls disturbed for new mechanical and electrical work.
   - Contractors shall match all existing conditions for all required modifications in renovated areas.

3. **Grading/Levels Legend:**
   - Represents grade level.
   - Represents upstream.
   - Represents downstream.

4. **Key Notes:**
   - **Demolition Notes:**
     - Contractors are responsible for the removal and disposal of all demolition materials.

5. **Grading/Levels Legend:**
   - Represents grade level.
   - Represents upstream.
   - Represents downstream.

6. **Patch & Repair Notes:**
   - Contractors shall repair to the final finish.

7. **General Demolition Notes:**
   - Contractors shall match all existing conditions for all required modifications in renovated areas.
   - Contractors shall patch and repair all walls disturbed for new mechanical and electrical work.

8. **Grading/Levels Legend:**
   - Represents grade level.
   - Represents upstream.
   - Represents downstream.

9. **Key Notes:**
   - **Demolition Notes:**
     - Contractors are responsible for the removal and disposal of all demolition materials.

10. **Grading/Levels Legend:**
    - Represents grade level.
    - Represents upstream.
    - Represents downstream.

11. **Patch & Repair Notes:**
    - Contractors shall repair to the final finish.

12. **General Demolition Notes:**
    - Contractors shall match all existing conditions for all required modifications in renovated areas.
    - Contractors shall patch and repair all walls disturbed for new mechanical and electrical work.

13. **Grading/Levels Legend:**
    - Represents grade level.
    - Represents upstream.
    - Represents downstream.

14. **Key Notes:**
    - **Demolition Notes:**
      - Contractors are responsible for the removal and disposal of all demolition materials.

15. **Grading/Levels Legend:**
    - Represents grade level.
    - Represents upstream.
    - Represents downstream.

16. **Patch & Repair Notes:**
    - Contractors shall repair to the final finish.

17. **General Demolition Notes:**
    - Contractors shall match all existing conditions for all required modifications in renovated areas.
    - Contractors shall patch and repair all walls disturbed for new mechanical and electrical work.

18. **Grading/Levels Legend:**
    - Represents grade level.
    - Represents upstream.
    - Represents downstream.

19. **Key Notes:**
    - **Demolition Notes:**
      - Contractors are responsible for the removal and disposal of all demolition materials.

20. **Grading/Levels Legend:**
    - Represents grade level.
    - Represents upstream.
    - Represents downstream.

21. **Patch & Repair Notes:**
    - Contractors shall repair to the final finish.

22. **General Demolition Notes:**
    - Contractors shall match all existing conditions for all required modifications in renovated areas.
    - Contractors shall patch and repair all walls disturbed for new mechanical and electrical work.

23. **Grading/Levels Legend:**
    - Represents grade level.
    - Represents upstream.
    - Represents downstream.

24. **Key Notes:**
    - **Demolition Notes:**
      - Contractors are responsible for the removal and disposal of all demolition materials.

25. **Grading/Levels Legend:**
    - Represents grade level.
    - Represents upstream.
    - Represents downstream.

26. **Patch & Repair Notes:**
    - Contractors shall repair to the final finish.

27. **General Demolition Notes:**
    - Contractors shall match all existing conditions for all required modifications in renovated areas.
    - Contractors shall patch and repair all walls disturbed for new mechanical and electrical work.

28. **Grading/Levels Legend:**
    - Represents grade level.
    - Represents upstream.
    - Represents downstream.

29. **Key Notes:**
    - **Demolition Notes:**
      - Contractors are responsible for the removal and disposal of all demolition materials.

30. **Grading/Levels Legend:**
    - Represents grade level.
    - Represents upstream.
    - Represents downstream.

31. **Patch & Repair Notes:**
    - Contractors shall repair to the final finish.

32. **General Demolition Notes:**
    - Contractors shall match all existing conditions for all required modifications in renovated areas.
    - Contractors shall patch and repair all walls disturbed for new mechanical and electrical work.
CONCRETE
18" RCP
APPROX DIR
8" +/- PVC
AND STEPS
CONCRETE WALK
8" +/- PVC
AND STEPS
190.5'
CAGES
BOWE STREET
TOP=189.72'
FF=193.22'
INV OUT=185.18'
LAMP POST
INV IN=185.99' (S)
SAN
TOP=189.37'
DRAINAGE MH
TO BE REMOVED
UGP
15" PVC
TO BE REMOVED
UGP
CONCRETE
GRAVEL
8" +/- PVC
CREPE MYRTLE
189.7'
CP MAGNAIL
EL: 189.58'
SAN
UGP
SAN
189.2'
24" RCP
190
SAN
INV OUT=180.77'
INV IN=180.92'
TOP=190.01'
SAN
INV OUT=177.93'
INV IN=180.92'
DRAINAGE MH
DRAINAGE MH
10" DECIDUOUS
24" RCP
190.8'
SAN
INV
66' +/- RIGHT OF WAY
191.0'
DIRECTION
G
SAN
G
SIDEWALK
UNKNOWN SIZE AND TYPE (BRICK LINED)
SAN
10" DECIDUOUS
190.8'
SAN
G
SAN
G
TREE/SHRUB TO BE REMOVED
DRAINAGE MANHOLE
CURB TO BE REMOVED
FOUND PROPERTY MARKER
CURB TO BE REMOVED
2.180409.0
236-A8236-018
2019-01147
BOWE STREET
DECK BATTING CAGES
05/11/19
ISSUE FOR BID
EXISTING CONDITIONS & DEMOLITION PLAN
C1.0
CONTRACTOR TO COORDINATE ANY NECESSARY UTILITY RELOCATIONS DIRECTLY WITH APPLICABLE UTILITY PROVIDER.

3. ACCURACY STANDARDS UNLESS OTHERWISE NOTED.
2. MAP AND DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM RESPONSIBLE CHARGE OF MARC C. SNIDER, LS FROM AN ACTUAL GROUND

EXISTING CONDITIONS: PLAN

DEMOIITION PLAN

CONSTRUCTION PERIOD:
NO MATERIALS TO BE REMOVED FROM THE SITE UNLESS NOTED.

STEMAGES:
1. CONSTRUCTION PERIOD.
2. EVIDENCE OF THE DATE AND LOCATION OF ALL sites.
3. EVIDENCE OF THE DATE AND LOCATION OF ALL sites.
4. EVIDENCE OF THE DATE AND LOCATION OF ALL sites.
5. EVIDENCE OF THE DATE AND LOCATION OF ALL sites.
6. EVIDENCE OF THE DATE AND LOCATION OF ALL sites.

NOTATIONS:
1. CONSTRUCTION PERIOD.
2. EVIDENCE OF THE DATE AND LOCATION OF ALL sites.
3. EVIDENCE OF THE DATE AND LOCATION OF ALL sites.
4. EVIDENCE OF THE DATE AND LOCATION OF ALL sites.
5. EVIDENCE OF THE DATE AND LOCATION OF ALL sites.
6. EVIDENCE OF THE DATE AND LOCATION OF ALL sites.

SPECIFIC ITEMS TO REMOVED:
1. CONSTRUCTION PERIOD.
2. EVIDENCE OF THE DATE AND LOCATION OF ALL sites.
3. EVIDENCE OF THE DATE AND LOCATION OF ALL sites.
4. EVIDENCE OF THE DATE AND LOCATION OF ALL sites.
5. EVIDENCE OF THE DATE AND LOCATION OF ALL sites.
6. EVIDENCE OF THE DATE AND LOCATION OF ALL sites.

GENERAL REMOVAL:
1. CONSTRUCTION PERIOD.
2. EVIDENCE OF THE DATE AND LOCATION OF ALL sites.
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5. EVIDENCE OF THE DATE AND LOCATION OF ALL sites.
6. EVIDENCE OF THE DATE AND LOCATION OF ALL sites.

MATERIALS TO BE REMOVED:
1. CONSTRUCTION PERIOD.
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REFERENCES:
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NOTES:
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SPECIAL ITEMS:
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5. EVIDENCE OF THE DATE AND LOCATION OF ALL sites.
6. EVIDENCE OF THE DATE AND LOCATION OF ALL sites.

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SD: 1'-0" 
SD: 1'-0"

SHEET 1 OF 1