

JIM WHELAN  
**BOARDWALK HALL**

**TO:** Bid Responders

**FROM:** Clark Hughes

**DATE:** February 6, 2026

**SUBJECT: JIM WHELAN BOARDWALK HALL – LOBBY AUDIO VIDEO MODIFICATION – GENERAL INFORMATION**

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Bidders should be aware that all submitted sealed bids are carefully reviewed for compliance, and non-compliant bids are rejected. Please carefully review your bid submissions for compliance. The following information is required but not limited to.

Documents that must be submitted at the time of the bid.

1. Bid Bond (sect 1.15), Payment and Performance Bond (sect 1.16), Consent of Surety (sect 1.17)
2. Bidder to provide documentation evidencing that the firm meets the minimum requirements.(sect 1.18).
3. Bidder and subcontractors must provide copies of the Business Registration Certificate, New Jersey Department of Labor & Workforce Development Certificate, and Public Works Contractor Registration Certificate.
4. Bidder's Insurance certificate showing evidence of coverage limits, and declaration pages for current policies.
5. **Section: 1.0, 1.18, d - Must provide documentation**

The bidder must participate in an apprenticeship program, registered and approved by the United States Department of Labor, for each separate trade or classification for which it employs craft employees. All bidders and subcontractors must continue to participate in such apprenticeship programs for the duration of the project. In addition, the bidder will be required to show that such apprenticeship programs graduated apprentices to journeyman status for three of the past five years.

The following Exhibits provided in the bid package must be completed and executed and provided with the bid.

- |           |                                                                                      |
|-----------|--------------------------------------------------------------------------------------|
| Exhibit A | Signatory Page                                                                       |
| Exhibit B | Disclosure of Investigations                                                         |
| Exhibit C | Notice of Intent to Subcontract                                                      |
| Exhibit D | Subcontractor Utilization Form                                                       |
| Exhibit E | <i>Affirmative Action, required after notification of award</i>                      |
| Exhibit F | Political Contribution Disclosure                                                    |
|           | Part 3: Certification – One of the four options must be marked (i, ii, (C) (D)) off. |
| Exhibit G | All information on FEE Schedule is required for compliance.                          |
| Exhibit H | Affidavit of Non-Collusion                                                           |
| Exhibit I | Contract and Specification (the executed documents must be included with the bid)    |
- Contract must be signed with the submitted bid. Contract modification requests shall be presented during the Question-and-Answer period.**

**OAKVIEW VENUE GROUP**

**SOLICITATION OF BIDS**

**ATLANTIC CITY CONVENTION CENTER**

**JIM WHELAN BOARDWALK HALL**

|             |                                                                             |
|-------------|-----------------------------------------------------------------------------|
| <b>For:</b> | <b>JIM WHELAN BOARDWALK HALL</b>                                            |
|             | <b>GENERAL CONTRACTORS</b><br><b>LOBBY AUDIO VIDEO MODIFICATION PROJECT</b> |

| Event                                                                                                                                                          | Date                           | Time                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------|
| <b>Bidder's Question Due Date</b><br>(Refer to <a href="#">BID Section 1.5</a> for more information.)                                                          | WEDNESDAY<br>FEBRUARY 25, 2026 | 12:00 PM<br>1200 HOURS |
| <b>Response To Questions</b>                                                                                                                                   | WEDNESDAY<br>March 11, 2026    | 5:00 PM<br>1700 HOURS  |
| <b>Pre-bid Conference</b><br>(Refer to <a href="#">BID Section 1.8</a> for more information.)<br>2301 Boardwalk, Atlantic City, NJ, 08401. Conference Room 150 | WEDNESDAY<br>February 18, 2026 | 11:00 AM<br>1100 HOURS |
| <b>Site Visit</b><br>(Refer to <a href="#">BID Section 1.9</a> for more information.)<br>2301 Boardwalk, Atlantic City, NJ, 08401. Conference Room 150         | SAME                           | SAME                   |
| <b>Bid Submission Due Date</b><br>(Refer to BID Section 1.3 for more information.)<br>2301 Boardwalk, Atlantic City, NJ, 08401. Conference Room 150            | WEDNESDAY<br>March 18, 2026    | 11:00 AM<br>1100 HOURS |
|                                                                                                                                                                |                                |                        |

Dates are subject to change. All changes will be reflected in Addenda to the bid posted on the Boardwalk Hall/Convention Center website at <http://www.boardwalkhall.com/business-opportunities/rfps>

Issued By

OAKVIEW VENUE GROUP, as operator of Jim Whelan Boardwalk Hall and the Atlantic City Convention Center, as managing agent for Casino Reinvestment Development Authority  
2301 Boardwalk  
Atlantic city, New Jersey 08401  
Phone: 609-348-7026

Date Issued:

Friday, February 6, 2026

## NOTICE TO BIDDERS

**PUBLIC NOTICE IS HEREBY GIVEN** that sealed bids will be received by OAKVIEW VENUE GROUP, as operator of Jim Whelan Boardwalk Hall (“Boardwalk Hall”) and the Atlantic City Convention Center (the “Convention Center”), as agent on behalf of the Casino Reinvestment Development Authority (“CRDA”) for

### **LOBBY AUDIO VIDEO MODIFICATION PROJECT**

Bid forms, contracts, drawings and specifications can be obtained from the OAKVIEW VENUE GROUP website

<http://www.boardwalkhall.com/business-opportunities/rfps>

Sealed bids must be mailed, presented or delivered to OAKVIEW VENUE GROUP, 2301 Boardwalk, Atlantic City, New Jersey 08401, Attn. Clark Hughes, Capital Projects/Procurement Manager. OAKVIEW VENUE GROUP accepts no responsibility for the timeliness of any bidder’s delivery, mail, delivery or courier service.

Sealed bids shall be submitted in the manner prescribed in the bid specifications. The sealed envelopes must be labeled, **“LOBBY AUDIO VIDEO MODIFICATION PROJECT at JIM WHELAN BOARDWALK HALL”** and contain the bidder’s name and address and the bid opening date

Bids will be received, opened and read aloud in public at OAKVIEW VENUE GROUP offices at 2301 Boardwalk, Atlantic City, New Jersey on **(March 18, 2026) at (11:00AM)**, eastern prevailing time.

Bidders are required to comply with the requirements of N.J.A.C. 17:27 (Affirmative Action), Americans with Disabilities Act of 1990 (42 U.S.C. 12101, et.seq.), N.J.S.A. 52:32-44 (Business Registration), and N.J.S.A. 10:5-1 (Law Against Discrimination).

Dated: February 6, 2026

## **1.0 INFORMATION FOR BIDDERS**

### **1.1 Background**

The Atlantic City Convention Center (“Convention Center”), located at One Convention Boulevard, Atlantic City, NJ, has 486,000 square feet of continuous exhibit space. The exhibit hall is divisible into five separate halls, ranging in size from 29,400 square feet to 199,500 square feet.

The Convention Center’s 45 meeting rooms on the third and fourth level of the Convention Center surround the expansive atrium lobby and total 109,100 square feet. Room dimensions range from 11,800 square feet to 672 square feet. The rooms’ amenities include soundproof panels, assisted lighting systems and voice, video and data communications.

The Convention Center’s ample pre-function space, more than 32,000 square feet, is well suited to registration, retail or dining needs. The building is served by 29 covered loading docks, four drive in roll-up doors, mechanical levelators and 1400 indoor parking spaces. The Convention Center is connected to the Atlantic City Rail Terminal that runs the Atlantic City line from Philadelphia to Atlantic City. A pedestrian bridge links the Convention Center to the adjoining Sheraton Hotel. Located within a few hours’ drive of nearly one-third of the nation’s population and 20 percent of the country’s business addresses, the Convention Center is easily accessible for convention, tradeshow and meeting attendees.

Jim Whelan Boardwalk Hall (“Boardwalk Hall”), located on the boardwalk between Mississippi and Georgia Avenues, Atlantic City, NJ, is a major icon for Atlantic City. Boardwalk Hall has a maximum capacity of approximately 14,000 in the arena and the ballroom which seats up to 3,500. Boardwalk Hall hosts a wide range of events from concerts to family shows like Sesame Street, to sporting events and other entertainment.

The facilities have established as their primary goal the highest level of service to their customers and clients. All operating entities in each facility must adhere to the following objectives:

- a) Offer services according to the highest industry standards and in the best interest of each facility, the community and the State of New Jersey
- b) Operate in a manner consistent with the public interest, providing each facility with full accountability for, and accurate records of all transactions conducted within each venue.
- c) Provide the highest level of safety, service and cooperation to clients and attendees of the facilities.
- d) Hold and maintain in good standing all required applicable local, state and federal licenses and permits for the services required herein. Failure to maintain said licenses and permits may be cause for termination of contract.

### **1.2 Purpose and Intent**

OAKVIEW VENUE GROUP is releasing this Bid for General Construction (the “Solicitation”) to solicit bids to engage general construction services for **LOBBY AUDIO VIDEO MODIFICATION PROJECT** as more fully set forth in the contract awarded from this Solicitation.

OAKVIEW VENUE GROUP intends to award a contract to the lowest responsible bidder whose bid conforms to these specifications. OAKVIEW VENUE GROUP, however, reserves the right to separately procure individual requirements that are the subject of the contract during the term when deemed by OAKVIEW VENUE GROUP to be in OAKVIEW VENUE GROUP’s best interest. OAKVIEW VENUE GROUP reserves the right

to reject any and all bids when it is determined by OAKVIEW VENUE GROUP to be in its best interest. OAKVIEW VENUE GROUP further reserves the right to waive minor irregularities in bids submitted in response to this Solicitation.

**All capitalized terms not otherwise defined in this Solicitation shall have the meaning ascribed to them in the contract awarded through this Solicitation.**

**IN ADDITION TO MEETING ALL OTHER REQUIREMENTS OF THIS SOLICITATION, ALL BIDDERS MUST MEET THE MINIMUM REQUIREMENTS OUTLINED IN SECTION 1.18 HEREIN.**

### **1.3 Bid Submission**

In order to be considered, a bid must be delivered, in a sealed envelope, to the following:

CLARK HUGHES  
CAPITAL PROJECTS/PROCUREMENT MANAGER  
OAKVIEW VENUE GROUP  
2301 BOARDWALK  
ATLANTIC CITY, NEW JERSEY 08401

by the date and time located on the cover page. Bidders are cautioned to allow adequate delivery time to ensure timely delivery of bids. **THE EXTERIOR OF ALL BID PACKAGES ARE TO BE LABELED “LOBBY AUDIO VIDEO MODIFICATION PROJECT at JIM WHELAN BOARDWALK HALL”**

**Bids submitted by facsimile or electronically will not be considered.**

### **1.4 Number of Bid Copies**

The bidder must submit **two (2) complete ORIGINAL bids**, clearly marked as the “ORIGINAL” bids. The bidder should submit **three (3) full, complete, and exact copies** of the original bid.

### **1.5 Questions and Answers**

Global Spectrum will accept questions and inquiries pertaining to this bid from all potential bidders electronically. Questions shall be directed to the staff person identified in Section 1.3 above, at the following email address:

[ACRFP-QUESTIONS@GLOBAL-SPECTRUM.COM](mailto:ACRFP-QUESTIONS@GLOBAL-SPECTRUM.COM)  
[BRAULIO ROSSY <BROSSY@NETTAARCHITECTS.COM>](mailto:BRAULIO ROSSY <BROSSY@NETTAARCHITECTS.COM>)

The cut-off date for electronic questions will be as indicated on the cover page.

The subject line of all emailed questions should say **“BID FOR, LOBBY AUDIO VIDEO MODIFICATION PROJECT JIM WHELAN BOARDWALK HALL- Bid Inquiry”**.

**Any requested exceptions to the Contract, appended as Exhibit J, shall be raised by the bidder as a question during the Question and Answers period through the same procedure set forth in this provision of the Solicitation. Any amendment to the Contract shall be determined by OAKVIEW VENUE GROUP Venue Management, in its sole and absolute discretion, with such determination to be set forth in the Question**

**and Answer addendum issued, if any, after the Question and Answer deadline. OAKVIEW VENUE GROUP reserves the right to reject any and all proposed amendments to the Contract.**

Bidders are not to contact OAKVIEW VENUE GROUP Venue Management directly, in person or by telephone, concerning this bid. All questions and answers will be posted on the Boardwalk Hall/Convention Center's website at [www.boardwalkhall.com/business-opportunities/rfps](http://www.boardwalkhall.com/business-opportunities/rfps), as soon as practicable, after the question and answer deadline.

### **1.6 Addenda: Revisions to this Bid Solicitation**

In the event that it becomes necessary to clarify or revise this Solicitation, such clarification or revision will be by addendum. Any addendum to this bid will become part of this bid and part of any contract award as a result of this bid. **ALL BID ADDENDA WILL BE POSTED ON THE BOARDWALK HALL/CONVENTION CENTER WEBSITE** at [www.boardwalkhall.com/business-opportunities/rfps](http://www.boardwalkhall.com/business-opportunities/rfps).

It is the sole responsibility of the bidder to be knowledgeable of all addenda related to this bid. There are no designated dates for release of addenda. Therefore interested bidders should check the Boardwalk Hall/Convention Center website on a daily basis from the time of bid issuance through bid opening.

### **1.7 Bidder Responsibility**

The bidder assumes the sole responsibility for the complete effort required in submitting a bid in response to this Solicitation. No special consideration will be given after bids are opened because of a bidder's failure to be knowledgeable as to all of the requirements of this bid. OAKVIEW VENUE GROUP assumes no responsibility and bears no liability for cost incurred by a bidder in the preparation and submittal of a bid in response to this Solicitation.

The bidder will be required to be knowledgeable with respect to the construction industry and existing conditions at the project location, and to take same into account when submitting its bid.

### **1.8 Pre-Bid Conference**

A Pre-bid conference for discussion of the project in general will be held at the date and time indicated on the cover page, in the offices of OAKVIEW VENUE GROUP Venue Management at 2301 Boardwalk, Atlantic City, New Jersey. At that time Global Spectrum and any consultants will provide prospective bidders with an overview of the project.

**1.9 Site Visit** A site visit will be conducted on the date indicated on the cover page, immediately following the Pre-bid Conference. Contractors will be given access to the project area immediately following the pre bid meeting. Bidders are urged to inspect the site where construction services are to be performed and to satisfy themselves regarding all general and local conditions that may affect the cost of contract performance, to the extent that the information is reasonably obtainable. In no event shall failure to inspect the site constitute grounds for a claim after contract award.

### **1.10 Bid Opening**

On the date and time bid are due under this Solicitation, the names of the bidders submitting bids and the amount bid will be publicly announced. The bid opening will take place at the offices of Global Spectrum located at 2301 Boardwalk, Atlantic City, New Jersey 08401.

## **1.11 Price Alterations**

Bid prices must be typed or written in blue ink. Any price change (including "white-outs") must be initialed. Failure to initial price changes shall preclude a contract award from being made to the bidder.

## **1.12 Bid Errors**

A bidder may withdraw its bid as follows:

A bidder may request that its bid be withdrawn prior to bid opening. Such request must be made, in writing, to the staff person identified in Section 1.3 above. If the request is granted, the bidder may submit a revised bid as long as the bid is received prior to the announced date and time for bid opening and at the place specified.

If, after bid opening but before contract award, a bidder discovers an error in its bid, the bidder may make written request to the staff person identified in Section 1.3 above for authorization to withdraw its bid from consideration for award. Evidence of the bidder's good faith in making this request shall be used in making the determination. Some of the factors that may be considered are that the mistake is so significant that to enforce the contract resulting from the bid would be unconscionable; that the mistake relates to a material feature of the contract; that the mistake occurred notwithstanding the bidder's exercise of reasonable care; and that Global Spectrum will not be significantly prejudiced by granting the withdrawal of the bid.

All bid withdrawal requests must include the bid title and the final bid opening date and sent to the following address:

OAKVIEW VENUE GROUP  
2301 Boardwalk  
Atlantic City, New Jersey 08401  
Attn: Staff person identified in Section 1.3 above  
**BID WITHDRAWAL REQUEST**

If during a bid evaluation process, an obvious pricing error made by a potential contract awardee is found, OAKVIEW VENUE GROUP shall issue written notice to the bidder. The bidder will have five (5) days after receipt of the notice to confirm its pricing. If the vendor fails to respond, its bid shall be considered withdrawn, and no further consideration shall be given it.

## **1.13 Joint Ventures**

If a joint venture is submitting a bid, the agreement between the parties relating to such joint venture should be submitted with the joint venture's bid. Authorized signatories from each party comprising the joint venture must sign the bid. A separate Disclosure of Investigations and Actions Involving Bidder, Affirmative Action Employee Information Report, Disclosure of Political Contributions (c.51) and Business Registration or Interim Registration must be supplied for each party to a joint venture.

## 1.14 Contents of Bid - Open Public Records Act

Subsequent to bid opening, all information submitted by bidders in response to the bid solicitation is considered public information, except as may be exempted from public disclosure by the Open Public Records Act, N.J.S.A. 47:1A-1 et seq., and the common law.

A bidder may designate specific information as not subject to disclosure when the bidder has a good faith legal/factual basis for such assertion. CRDA reserves the right to make the determination and will advise the bidder accordingly. The location in the bid of any such designation should be clearly stated in a cover letter. CRDA WILL NOT HONOR ANY ATTEMPT BY A BIDDER EITHER TO DESIGNATE ITS ENTIRE BID AS PROPRIETARY, CONFIDENTIAL AND/OR TO CLAIM COPYRIGHT PROTECTION FOR ITS ENTIRE BID.

## 1.15 Bid Bond

Any entity submitting a bid in response to this Solicitation must submit a guarantee payable to OAKVIEW VENUE GROUP so that if the contract is awarded to the bidder, the bidder will enter into a contract there for and will furnish any performance bond or other security required. The guarantee shall be in the amount of 10% of the bid amount, but not in excess of \$20,000. The guarantee can be submitted, at the option of the bidder, by certified check, cashier check or bid bond.

The Bid Bond must contain an Affidavit of Surety's Attorney-In-Fact (Power of Attorney). The Attorney-In-Fact must be an authorized agent of the surety to act for the surety and be authorized to bind the surety to pay the bid bond in a penal sum of 10% of the bid amount, not to exceed \$20,000.

Failure to provide a bid bond or a valid power of attorney, as specified, with the bid will result in rejection of the bid for noncompliance.

## 1.16 Payment and Performance Bond

The bidder shall submit with its bid a Consent of Surety or Surety Agreement, from a surety or sureties licensed to do business in the State of New Jersey and acceptable to Global Spectrum, stating that it will provide an **unconditional bond in an amount equal to 100% of the contract price (bid amount)**. Failure to provide the Consent of Surety or Surety Agreement will result in rejection of the bid as non-responsive.

The Consent of Surety or Surety Agreement shall be obtained for a bond for the faithful performance of all provisions of the specifications relating to the performance of the contract. The surety corporation bonds shall be furnished by only those sureties listed in the US Treasury Department Circular 570 and authorized to do business in the State of New Jersey. The bonds shall be accompanied by a certification as to authorization of the attorney-in-fact to commit the surety company, a Surety Disclosure Statement and Certification in compliance with N.J.S.A. 2A:44-143d and a true and correct statement of the financial condition of said surety company.

Failure to provide a Consent of Surety or Surety Agreement, a Surety Disclosure Statement and Certification and a valid power of attorney, as specified, with the bid will result in rejection of the bid for noncompliance.

## 1.17 Standards for Surety Bond Companies

The following requirements must be met for surety companies:

- All surety companies must have the minimum capital and surplus or net cash assets required, pursuant to N.J.S.A. 17:17-6 or N.J.S.A. 17:17-7, whichever is applicable, at the time the invitation to bid is issued. A Financial Statement must be submitted.
- All surety companies must complete a Surety Disclosure Statement and Certification for all **payment and performance bonds**, regardless of project cost, pursuant to N.J.S.A. 2A:44-143d.
- All surety companies must be authorized to transact such business in New Jersey, pursuant to N.J.S.A. 17-17-10 or 17:32-1 et seq., as applicable.

**THE DOCUMENTS REQUIRED TO BE SUBMITTED UNDER THIS PROVISION SHALL BE PLACED IN A SEPARATE SEALED ENVELOPE AND ATTACHED TO THE SEALED ENVELOPE CONTAINING THE BID SUBMISSION.**

## 1.18 Minimum Requirements

- a) **Construction experience involving three (3) related construction projects equal to or greater than the amount bid.**

Project Name & Location: \_\_\_\_\_  
Contract Value for this bidder: \$ \_\_\_\_\_

Project Name & Location: \_\_\_\_\_  
Contract Value for this bidder: \$ \_\_\_\_\_

Project Name & Location: \_\_\_\_\_  
Contract Value for this bidder: \$ \_\_\_\_\_

- b) **Minimum of ten (10) years related construction experience.**

Bidder should provide a company resume to document construction experience.

- c) **Successful completion of at least three (3) substantially similar construction projects for public or private owners, completed in the past five (5) years.**

The Bidder must provide specific information that demonstrates the similarity of the work, and allows for evaluation of the submittal.

Project Name & Location: \_\_\_\_\_  
Bidders contract value: \_\_\_\_\_  
Bidders scope of work on project: \_\_\_\_\_  
Project duration: \_\_\_\_\_  
Project completed on: \_\_\_\_\_  
Project Reference contact: \_\_\_\_\_

Project Name & Location: \_\_\_\_\_  
Bidders contract value: \_\_\_\_\_  
Bidders scope of work on project: \_\_\_\_\_  
Project duration: \_\_\_\_\_  
Project completed on: \_\_\_\_\_  
Project Reference contact: \_\_\_\_\_

Project Name & Location: \_\_\_\_\_  
Bidders contract value: \_\_\_\_\_  
Bidders scope of work on project: \_\_\_\_\_  
Project duration: \_\_\_\_\_  
Project completed on: \_\_\_\_\_  
Project Reference contact: \_\_\_\_\_

- d) **The bidder must participate in an apprenticeship program, registered and approved by the United States Department of Labor, for each separate trade or classification for which it employs craft employees. All bidders and subcontractors must continue to participate in such apprenticeship programs for the duration of the project. In addition, the bidder will be required to show that such apprenticeship programs graduated apprentices to journeyperson status for three of the past five years.**

### **1.19 Balanced Bid**

Each pay item should reflect the actual cost, which the bidder anticipates incurring for the performance of that particular item, together with a proportional share of the bidder's anticipated profit, overhead and costs to perform work for which no Pay Item is provided. In no event will the Project Owner consider any claim for additional compensation arising from the bid on an item or group of items, inaccurately reflecting a disproportionate share of the bidder's anticipated profit, overhead and other costs.

## **2.0 SCOPE OF WORK**

The work on this project consists of the following:

LOBBY AUDIO VIDEO MODIFICATION PROJECT at the Jim Whelan Boardwalk Hall. Refer to plans created by Netta Architects

## **3.0 PROPOSAL PREPARATION AND SUBMISSION**

### **3.1 Contract Schedule**

OAKVIEW VENUE GROUP requires that all construction work undertaken pursuant to a contract award as the result of this bid shall be completed within **( 9 ) work weeks** pending lead time of all critical material from the date of commencement of work as set forth in the Notice to Proceed.

## **3.2 REQUIRED BID SUBMITTALS AND COMPLIANCE INFORMATION**

### **A) Signatory page**

The bidder must complete and submit the signatory page attached as **Exhibit A**, which must be signed by an authorized representative of the bidder, evidencing the bidder's concurrence with all of the terms and conditions of this bid. If the bidder is a limited partnership, the signatory page must be signed by a general

partner. If the bidder is a joint venture, the signatory page must be signed by a principal of each party to the joint venture. **Failure to comply will result in rejection of the bid.**

**B) Disclosure of Investigations/Actions Involving Bidder**

The bidder shall provide a detailed description of any investigation, litigation, including administrative complaints or other administrative proceedings, involving any public sector clients during the past five (5) years including the nature and status of the investigation, and, for any litigation, the caption of the action, a brief description of the action, the date of inception, current status, and, if applicable, disposition. The bidder shall use the Disclosure of Investigations and Actions Involving Bidder form attached as **Exhibit B**.

**C) Business registration certificate from the Division of Revenue**

As a condition of entering into a contract, pursuant to an amendment to N.J.S.A. 52:32-44, State and local entities (including the CRDA) are prohibited from entering into a contract with an entity unless the bidder and each subcontractor named in the bid has a valid Business Registration Certificate on file with the Division of Revenue.

The contractor and any subcontractor providing goods or performing services under the contract, and each of their affiliates, shall, during the term of the contract, collect and remit to the Director of the Division of Taxation in the Department of Treasury the use tax due pursuant to the "Sales and Use Tax Act, P.L. 1966, c. 30 (N.J.S.A. 54:32B-1 et seq) on all their sales of tangible personal property delivered into the State.

The bidder must be properly registered to do business with the State of New Jersey as of the date of contract award, and provide a copy of the bidder's NJ Business Registration Certificate with its bid. If not already registered with the New Jersey Division of Revenue, registration can be completed online at the Division of Revenue website: <http://www.state.nj.us/treasury/revenue/index.html>.

**D) New Jersey Prevailing Wage Act, N.J.S.A. 34:11-56.25 et. seq. and Public Works Contractor Registration Act Certificate, N.J.S.A. 34:11-56.48 et seq.**

The New Jersey Prevailing Wage Act requires the payment of minimum rates of pay to laborers, craftsman and apprentices employed on public works projects. Covered workers must receive the appropriate craft prevailing wage rate as determined by the Commissioner of Labor and Workforce Development. Prevailing wage rates are wage rates established for a particular craft or trade in the locality in which the public work is performed. In New Jersey, these rates vary by county and by the type of work performed.

**THIS CONTRACT IS SUBJECT TO THE NEW JERSEY PREVAILING WAGE ACT.** Anyone interested in bidding or engaging in any contract resulting from this bid must register with the Department of Labor and Workforce Development, Division of Wage and Hour Compliance as required by the Public Works Contractor Registration Act, N.J.S.A. 34:11-56.48 et seq. The New Jersey Department of Labor and Workforce Development makes official wage determination and debarment list information available on its website at [www.nj.gov/labor/lssc/lspubcon.html](http://www.nj.gov/labor/lssc/lspubcon.html). By accessing this website official New Jersey Prevailing Wage Rate Determinations may be obtained.

**The bidder and subcontractors must be properly registered with the Department of Labor and Workforce Development under the Public Works Contractor Registration Act, N.J.S.A. 34:11-56.48**

et seq., as of the bid opening date, and must submit a copy of the bidder's Public Works Contractor Registration Act certificate with its bid.

**E) Notice to all Contracts Set-Off for State Tax Notice**

Pursuant to L. 1995, c. 159, effective January 1, 1996, and notwithstanding any provision of the law to the contrary, whenever any taxpayer, partnership or S corporation under contract to provide goods or services or construction projects to the State of New Jersey or its agencies or instrumentalities, including the legislative and judicial branches of State government, is entitled to payment for those goods or services at the same time a taxpayer, partner or shareholder of that entity is indebted for any State tax, the Director or the Division of Taxation shall seek to set off that taxpayer's or shareholder's share of the payment due the taxpayer, partnership, or S corporation. The amount set off shall not allow for the deduction of any expenses or other deductions which might be attributable to the taxpayer, partner or shareholder subject to set-off under this act.

The Director of the Division of Taxation shall give notice of the set-off to the taxpayer and provide an opportunity for a hearing within thirty (30) days of such notice under the procedures for protests established under R.S. 54:49-18. No requests for conference, protest, or subsequent appeal to the Tax Court from any protest under this section shall stay the collection of the indebtedness. Interest that may be payable by the State, pursuant to P.L. 1987, c. 184 (c. 52-32-32 et seq.), to the taxpayer shall be stayed.

**F) Notice of Intent to Subcontract**

The bidder shall complete the attached Notice of Intent to Subcontract Form (**Exhibit C**) to advise Global Spectrum as to whether or not a subcontractor will be utilized to provide any goods or services under the contract.

**G) Subcontractor Utilization Form**

If the bidder intends to utilize subcontractor(s), the Subcontractor Utilization Form (**Exhibit D**) must be completed and submitted with the bid. The bidder must identify all subcontractors that the bidder intends to utilize to perform work required under this contract.

**H) Affirmative Action**

Each contractor shall submit to Global Spectrum, after notification of award, one of the following:

- Appropriate evidence that the contractor is operating under an existing federally approved or sanctioned affirmative action program.
- A certificate of employee information report approval, issued in accordance with N.J.A.C. 17:27-4
- An employee information report (Form AA201), **Exhibit E**.

**I) Requirements of N.J.S.A. 19:44A-20.13-25 (Formerly Executive Order 134)**

The bidder is required to complete the attached Political Contributions Disclosure form. The requirement is a precondition to entering into a contract with Global Spectrum. The Political Contributions Disclosure form is attached as **Exhibit F**.

**(i) Additional Disclosure Requirement of P.L. 2005, c. 271**

Contractor is required to file an annual disclosure statement on political contributions with the New Jersey Election Law Enforcement Commission (ELEC), pursuant to P.L. 2005, c. 271, section 3 if the contractor receives contracts in excess of \$50,000 from a public entity in a calendar year. It is the contractor's responsibility to determine if filing is necessary. Failure to so file can result in imposition of financial penalties by ELEC. Additional information about this requirement is available from ELEC at 888-313-3532 or at [www.elec.state.nj.us](http://www.elec.state.nj.us).

**J) Insurance Certificates**

The contractor shall provide OAKVIEW VENUE GROUP Venue Management with documentation, including certificates and declaration pages, evidencing its current policies of insurance, and if the bidder is awarded hereunder, such policies of insurance shall name the OAKVIEW VENUE GROUP as an "Additional Insured".

**K) Schedule of Estimated Quantities, Unit Prices, and Lump Sum Items**

The bidder must submit its pricing using the format set forth in the OAKVIEW VENUE GROUP supplied Schedule of Estimated Quantities, Unit Prices, and Lump Sum Items attached as **Exhibit G** to this Solicitation.

Failure to submit all information required in the Fee Schedule will result in the bid being considered non-responsive. Each bidder is required to hold its prices firm through issuance of contract.

**L) Affidavit of Non-Collusion, Exhibit H.**

The bidder must submit the affidavit attached as **Exhibit H** with its bid.

**M) Compliance with Executive Order 151, dated August 28, 2009**

Small Business Enterprise Requirement: It is the policy of the CRDA and as required by Executive Order 151 ("EO 151") that small businesses (each a "small business enterprise" or "SBE"), as determined and defined by the State of New Jersey, Division of Minority and Women Business Development ("Division") and the New Jersey Department of the Treasury ("Treasury") in N.J.A.C. 17:14 et seq. or other application regulation, should have the opportunity to participate in CRDA contracts.

To the extent the Contractor engages subcontractors or sub-consultants to perform services for OAKVIEW VENUE GROUP pursuant to this Contract, the firm must demonstrate to the OAKVIEW VENUE GROUP's satisfaction that a good faith effort was made to utilize subcontractors and sub-consultants who are registered with the Division as SBEs. Be advised that the CRDA shall be evaluated quarterly by the Division, based on its attainment of the Participation Goals set forth in the State of New Jersey Construction Services Disparity Study (October, 2005) and the State of New Jersey Disparity Study of Procurement in Professional Services, Other Services, and Goods and Commodities (June, 2005).

Evidence of a "good faith effort" includes, but is not limited to:

1. The Firm shall request listings of SBEs from the Division (609) 292-2146 and attempt to contact same.

2. The Firm shall keep specific records of its efforts, including records of all requests made to the Division, the names of SBEs contacted, and the means and results of such contacts, including without limitation receipts from certified mail and telephone records.

3. The Firm shall actively solicit and shall provide OAKVIEW VENUE GROUP Venue Management with proof of solicitations of SBEs for the provision of services, including advertisements in general circulation media, professional service publications and small business, minority-owned business or women-owned business focus media.

4. The Firm shall provide evidence of efforts made to identify categories of services capable of being performed by SBEs.

5. The Firm shall provide all potential subcontractors and sub-consultants that the Firm has contacted pursuant to 2 or 3 above with detailed information regarding the scope of work of the subject contract.

6. The Firm shall provide evidence of efforts made to use the goods and/or services of available community organizations, consultant groups, and local, State, and federal agencies that provide assistance in the recruitment and placement of SBEs.

Furthermore, the Firm shall submit proof of its subcontractors' and/or sub-consultants' SBE registrations, and shall complete such other forms as may be required by OAKVIEW VENUE GROUP Venue Management for State reporting as to participation.

Pursuant to Executive Order 151 the participants' goals for this Contract are African-Americans 2.47%, Asian-Americans 1.47%, Hispanics 1.1%, Native Americans .07% and Caucasian Females 3.74%.

#### **N) Contract and Specification**

The bidder shall **review and execute** the Contract and Specification attached hereto as **Exhibit I**. Exceptions taken, during the Question and Answer period, to the Contract may be considered as a factor in evaluating responsiveness of bids. OAKVIEW VENUE GROUP Venue Management reserves all rights to reject any and all bids based upon exceptions taken to the Contract. Execution of the Contract is not to be construed as entering into a contract with OAKVIEW VENUE GROUP Venue Management but rather as a submission of an offer to contract with OAKVIEW VENUE GROUP Venue Management. **Failure to submit a signed contract shall result in the bid being deemed non-responsive.**

#### **4.0 EXHIBITS**

|           |                                                                   |
|-----------|-------------------------------------------------------------------|
| Exhibit A | Signatory Page                                                    |
| Exhibit B | Disclosure of Investigations/Actions Involving Bidder             |
| Exhibit C | Notice of Intent to Subcontract                                   |
| Exhibit D | Subcontractor Utilization Form                                    |
| Exhibit E | Affirmative Action Forms                                          |
| Exhibit F | Political Contributions Disclosure                                |
| Exhibit G | Schedule of Estimated Quantities, Unit Prices, and Lump Sum Items |
| Exhibit H | Affidavit of Non-Collusion                                        |
| Exhibit I | Contract and Specification                                        |

**Exhibit A**  
**SIGNATORY PAGE**

**BID: LOBBY AUDIO VIDEO MODIFICATION PROJECT**

**FOR INFORMATION: OAKVIEW VENUE GROUP**  
2301 Boardwalk  
Atlantic City, New Jersey 08401  
609-348-7026

**Name, Address, Phone, Facsimile, Email and Contact person for Bidder:**

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**SIGNATURE OF THE BIDDER'S AUTHORIZED REPRESENTATIVE ATTESTS THAT THE BIDDER HAS READ, UNDERSTANDS AND AGREES TO ALL OF THE TERMS AND CONDITIONS SET FORTH IN THE SOLICITATION, INCLUDING ADDENDA. BY SIGNING BELOW, BIDDER AGREES TO HOLD ITS BID FIRM THROUGH THE NOTICE OF CONTRACT AWARD, DURING ANY CHALLENGE TO THE AWARD, AND, IF AWARDED A CONTRACT, FOR THE DURATION OF THE PROJECT THROUGH SUBSTANTIAL COMPLETION. FAILURE OF THE BIDDER TO HOLD PRICES FIRM OR TO MEET OTHER TERMS AND CONDITIONS AS DEFINED IN THE SOLICITATION MAY RESULT IN THE BIDDER BEING SUSPENDED OR DEBARRED FROM CONTRACTING WITH CRDA.**

**Name and Title of Person**

**Authorized to sign bid:**

**Signature:**

**Date:**

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## **Exhibit B**

### **DISCLOSURE OF INVESTIGATIONS AND ACTIONS INVOLVING BIDDER**

The bidder shall provide a detailed description of any investigation, litigation, including administrative complaints or other administrative proceedings, involving any public sector client during the past five (5) years including the nature and status of the investigation, and, for any litigation, the caption and docket number of the action, a brief description of the action, the date of inception, current status, and, if applicable, disposition.

#### **Investigation(s)**

Indicate "NONE" if no investigations were undertaken. Attach additional pages if necessary.

| <b>Person or Entity</b> | <b>Date of Inception</b> | <b>Brief Description</b> | <b>Disposition/Status (if applicable)</b> | <b>Bidder Contact Name and Telephone for additional information</b> |
|-------------------------|--------------------------|--------------------------|-------------------------------------------|---------------------------------------------------------------------|
|-------------------------|--------------------------|--------------------------|-------------------------------------------|---------------------------------------------------------------------|

#### **Litigation/Administrative Complaints**

Indicate "NONE" if no Litigation/Administrative Complaints. Attach additional pages if necessary.

| <b>Person or Entity</b> | <b>Date of Inception</b> | <b>Caption of the Action</b> | <b>Brief Description of the Action</b> | <b>Current Status or Disposition (if applicable)</b> | <b>Bidder Contact Name and Telephone for additional information</b> |
|-------------------------|--------------------------|------------------------------|----------------------------------------|------------------------------------------------------|---------------------------------------------------------------------|
|-------------------------|--------------------------|------------------------------|----------------------------------------|------------------------------------------------------|---------------------------------------------------------------------|

Exhibit C

**NOTICE OF INTENT TO SUBCONTRACT FORM**

THIS FORM MUST BE COMPLETED AND INCLUDED AS PART OF EACH BIDDER'S BID. FAILURE TO SUBMIT THIS FORM MAY BE CAUSE FOR REJECTION OF THE BID AS NON-RESPONSIVE.

SOLICITATION TITLE: \_\_\_\_\_

BID OPENING DATE: \_\_\_\_\_

BIDDERS NAME AND ADDRESS:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

INSTRUCTIONS: PLEASE CHECK ONE OF THE STATEMENTS BELOW

\_\_\_\_\_ If awarded this contract, I will engage subcontractors to provide certain goods and/or services.

**ALL BIDDERS THAT INTEND TO ENGAGE SUBCONTACTORS SHALL ALSO SUBMIT A SUBCONTRACTOR UTILIZATION PLAN FORM WITH THEIR BID.**

\_\_\_\_\_ If awarded this contract, I do not intend to engage subcontractors to provide any goods and/or services.

**ALL BIDDERS THAT DO NOT INTEND TO ENGAGE SUBCONTACTORS CERTIFY AS FOLLOWS:** I hereby certify that if the award is granted to my firm and if I determine at any time during the course of the contract to engage subcontractors to provide certain goods and/or services, I will submit the Subcontractor Utilization Form to OAKVIEW VENUE GROUP Venue Management for approval, in advance of any such engagement.

\_\_\_\_\_  
Authorized Signatory for Bidder

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

## Exhibit D

### SUBCONTRACTOR UTILIZATION FORM

#### INSTRUCTIONS

Any bidder intending to subcontract any parts of a contract with the OAKVIEW VENUE GROUP must complete a **Notice of Intent to Subcontract** and a **Subcontractor Utilization Form**.

Bidders are instructed to list **all** proposed subcontractors on the Form. Any bidder intending to subcontract that does not complete a Notice of Intent to Subcontract and a Subcontractor Utilization Form may be subject to rejection of its proposal as non-responsive.

IF BIDDER INTENDS TO UTILIZE SUBCONTRACTORS, FAILURE TO COMPLETE AND SUBMIT THIS FORM WITH BID MAY RESULT IN REJECTION OF THE PROPOSAL AS NON-RESPONSIVE.

SOLICITATION TITLE: \_\_\_\_\_

BID OPENING DATE: \_\_\_\_\_

BIDDER NAME & ADDRESS:

\_\_\_\_\_  
\_\_\_\_\_

BIDDER CONTACT PERSON & PHONE:

\_\_\_\_\_

**Instructions: List all businesses to be used as subcontractors. Attach copies for extended lists.**

| Subcontractor's Name, Address, Telephone and Vendor ID Number | Type(s) of Goods or Services to be Provided | Estimated Value of Subcontract(s) | Hourly rates for subcontract(s) |
|---------------------------------------------------------------|---------------------------------------------|-----------------------------------|---------------------------------|
|                                                               |                                             |                                   |                                 |
|                                                               |                                             |                                   |                                 |
|                                                               |                                             |                                   |                                 |
|                                                               |                                             |                                   |                                 |

I hereby certify that this Subcontractor Utilization Form is being submitted in good faith. I certify that each subcontractor has been notified that it has been listed on this Form and that each subcontractor has consented, in writing, to its name being submitted for this contract. Additionally, I certify that I shall notify each subcontractor listed on this Form, in writing, if the award is granted to my firm, and shall make all documentation available to OAKVIEW VENUE GROUP upon request.

I further certify that all information contained in this Form is true and correct and I acknowledge that OAKVIEW VENUE GROUP will rely on the truth of the information in awarding the contract.

\_\_\_\_\_  
Authorized signatory for Bidder

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

**Exhibit E**  
**GOODS, PROFESSIONAL SERVICES AND GENERAL SERVICE CONTRACTS**

**MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE**  
**N.J.S.A. 10:5-31 et seq., N.J.A.C. 17:27**

During the performance of this contract, the contractor agrees as follows:

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation or sex. Except with respect to affectional or sexual orientation, the contractor will take affirmative action to ensure that such applicants are recruited and employed, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation or sex. Such action shall include, but not limited to the following: employment, upgrading, promotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation or sex.

The contractor or subcontractor, where applicable, will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer advising the labor union or workers' representative of the contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to **N.J.S.A. 10:5-31 et seq.** as amended and supplemented from time to time and the Americans with Disabilities Act.

The contractor or subcontractor agrees to make good faith efforts to employ minority and women workers consistent with the applicable county employment goals established in accordance with **N.J.A.C. 17:27-5.2**, or a binding determination of the applicable county employment goals determined by the Division, pursuant to **N.J.A.C. 17:27-5.2**.

The contractor or subcontractor agrees to inform in writing its appropriate recruitment agencies including, but not limited to, employment agencies, placement bureaus, colleges, universities, labor unions, that it does not discriminate on the basis of age, creed, color, national origin, ancestry, marital status, affectional or sexual orientation or sex, and that it will discontinue the use of any recruitment agency which engages in direct or indirect discriminatory practices.

The contractor or subcontractor agrees to revise any of its testing procedures, if necessary, to assure that all personal testing conforms with the principles of job-related testing, as established by the statutes and court decisions of the State of New Jersey and as established by applicable Federal law and applicable Federal court decisions.

In conforming with the applicable employment goals, the contractor or subcontractor agrees to review all procedures relating to transfer, upgrading, downgrading and layoff to ensure that all such actions are taken without regard to age, creed, color, national origin, ancestry, marital status, affectional or sexual orientation or sex, consistent with the statutes and court decisions of the State of New Jersey, and applicable Federal law and applicable Federal court decisions.

The contractor shall submit to the public agency, after notification of award but prior to execution of a goods and services contract, one of the following three documents: Letter of Federal Affirmative Action Plan Approval; Certificate of Employee Information Report; or Employee Information Report Form AA302.

The contractor and its subcontractor shall furnish such reports or other documents to the Division of Contract Compliance & EEO as may be requested by the Division from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Division of Contract Compliance & EEO for conducting a compliance investigation pursuant to **Subchapter 10 of the Administrative Code at N.J.A.C.17:27**.

**PLEASE CHECK THE APPROPRIATE BOX:**

- ☐ **I HAVE A CURRENT NJ AFFIRMATIVE ACTION  
CERTIFICATE (PLEASE ATTACH A COPY TO YOUR BID)**
- ☐ **I HAVE A VALID FEDERAL AFFIRMATIVE ACTION PLAN  
APPROVAL LETTER (PLEASE ATTACH A COPY TO YOUR  
BID)**
- ☐ **I HAVE COMPLETED AND ENCLOSED THE FORM AA201  
INITIAL PROJECT WORKFORCE REPORT**

## Exhibit F

### PUBLIC LAW 2005, CHAPTER 51 AND EXECUTIVE ORDER 117 (2008)

Chapter 51 Instr. - Rev. 4/17/15

Page 1 of 4

#### INFORMATION AND INSTRUCTIONS For Completing the “Two-Year Vendor Certification and Disclosure of Political Contributions” Form

##### Background Information

On September 22, 2004, then-Governor James E. McGreevey issued E.O. 134, the purpose of which was to insulate the negotiation and award of State contracts from political contributions that posed a risk of improper influence, purchase of access or the appearance thereof. To this end, E.O. 134 prohibited State departments, agencies and authorities from entering into contracts exceeding \$17,500 with individuals or entities that made certain political contributions. E.O. 134 was superseded by Public Law 2005, c. 51, signed into law on March 22, 2005 (“Chapter 51”). On September 24, 2008, then-Governor Jon S. Corzine issued E.O. 117 which is designed to enhance New Jersey’s efforts to protect the integrity of procurement decisions and increase the public’s confidence in government. The Executive Order builds upon the provisions of Chapter 51.

##### Two-Year Certification Process

Upon approval by the State Chapter 51 Review Unit, the Certification and Disclosure of Political Contributions form is valid for a two (2) year period. Thus, if a vendor receives approval on January 1, 2014, the certification expiration date would be December 31, 2015. Any change in the vendor’s ownership status and/or political contributions during the two-year period will require the submission of new Chapter 51/Executive Order 117 forms to the State Review Unit. **Please note that it is the vendor’s responsibility to file new forms with the State should these changes occur.**

**State Agency Instructions:** Prior to the awarding of a contract, the State Agency should first send an e-mail to CD134@treas.nj.gov to verify the certification status of the vendor. If the response is that the vendor is NOT within an approved two-year period, then forms must be obtained from the vendor and forwarded for review. If the response is that the vendor is within an approved two-year period, then the response so stating should be placed with the bid/contract documentation for the subject project.

##### Instructions for Completing the Form

**NOTE:** Please refer to pages 3 and 4 “USEFUL DEFINITIONS for the purposes of Chapter 51 and Executive Order 117” for guidance when completing the form.

##### Part 1: BUSINESS ENTITY INFORMATION

**Business Name** – Enter the full legal name of the vendor, including trade name if applicable.

**Address, City, State, Zip and Phone Number** -- Enter the vendor's street address, city, state, zip code and telephone number.

**Vendor Email** – Enter the vendor’s primary email address.

**Vendor FEIN** – Please enter the vendor’s Federal Employment Identification Number.

**Business Type** - Check the appropriate box that represents the vendor's type of business formation.

**Listing of officers, shareholders, partners or members** - Based on the box checked for the business type, provide the corresponding information. (A complete list must be provided.)

Public Law 2005, Chapter 51 and Executive Order 117 (2008)  
Chapter 51 Instr. - Rev. 4/17/15

Page 2 of 4

## **Part 2: DISCLOSURE OF CONTRIBUTIONS**

Read the three types of political contributions that require disclosure and, if applicable, provide the recipient's information. The definition of "Business Entity/Vendor" and "Contribution" can be found on pages 3 and 4 of this form.

**Name of Recipient** – Enter the full legal name of the recipient.

**Address of Recipient** – Enter the recipient's street address.

**Date of Contribution** - Indicate the date the contribution was given.

**Amount of Contribution** - Enter the dollar amount of the contribution.

**Type of Contribution** – Select the type of contribution from the examples given.

**Contributor's Name** - Enter the full name of the contributor.

**Relationship of the Contributor to the Vendor** - Indicate the relationship of the contributor to the vendor. (e.g. officer or shareholder of the company, partner, member, parent company of the vendor, subsidiary of the vendor, etc.)

**NOTE:** If form is being completed electronically, click "Add a Contribution" to enter additional contributions. Otherwise, please attach additional pages as necessary. Check the box under the recipient information if no reportable contributions have been solicited or made by the business entity. **This box must be checked if there are no contributions to report.**

## **Part 3: CERTIFICATION**

Check Box A if the representative completing the Certification and Disclosure form is doing so on behalf of the business entity and all individuals and/or entities whose contributions are attributable to the business entity.

**(No additional Certification and Disclosure forms are required if BOX A is checked.)**

Check Box B if the representative completing the Certification and Disclosure form is doing so on behalf of the business entity and all individuals and/or entities whose contributions are attributable to the business entity with the exception of those individuals and/or entities that submit their own separate form. For example, the representative is not signing on behalf of the vice president of a corporation, but all others. The vice president completes a separate Certification and Disclosure form. **(Additional Certification and Disclosure forms are required from those individuals and/or entities that the representative is not signing on behalf of and are included with the business entity's submittal.)**

Check Box C if the representative completing the Certification and Disclosure form is doing so on behalf of the business entity only. **(Additional Certification and Disclosure forms are required from all individuals and/or entities whose contributions are attributable to the business entity and must be included with the business entity submittal.)**

Check Box D when a sole proprietor is completing the Certification and Disclosure form or when an individual or entity whose contributions are attributable to the business entity is completing a separate Certification and Disclosure form.

### **Read the five statements of certification prior to signing.**

The representative authorized to complete the Certification and Disclosure form must sign and print her/his name, title or position and enter the date.

**Public Law 2005, Chapter 51 and Executive Order 117 (2008)**  
**Chapter 51 Instr. - Rev. 4/17/15**

*Page 3 of 4*

### **State Agency Procedure for Submitting Form(s)**

The State Agency should submit the completed and signed Two-Year Vendor Certification and Disclosure forms either electronically to: [cd134@treas.nj.gov](mailto:cd134@treas.nj.gov) or regular mail at: Chapter 51 Review Unit, P.O. Box 230, 33 West State Street, Trenton, NJ 08625-0230. Original forms should remain with the State Agency and copies should be sent to the Chapter 51 Review Unit.

## **Business Entity Procedure for Submitting Form(s)**

The business entity should return this form to the contracting State Agency.

The business entity can submit the Certification and Disclosure form directly to the Chapter 51 Review Unit only when:

- The business entity is approaching its two-year certification expiration date and is seeking certification renewal;
- The business entity had a change in its ownership structure; OR
- The business entity made any contributions during the period in which its last two-year certification was in effect, or during the term of a contract with a State Agency.

### **Questions & Information**

Questions regarding the interpretation or application of Public Law 2005, Chapter 51 (N.J.S.A. 19:44A-20.13) or E.O. 117 (2008) may be submitted electronically through the Division of Purchase and Property website at:

<https://www.state.nj.us/treas/purchase/eo134questions.shtml>

Reference materials and forms are posted on the Political Contributions Compliance website at:

<http://www.state.nj.us/treasury/purchase/execorder134.shtml>

### **USEFUL DEFINITIONS for the purposes of Chapter 51 and Executive Order 117**

- **“Business Entity/Vendor”** means any natural or legal person, business corporation, professional services corporation, limited liability company, partnership, limited partnership, business trust, association or any other legal commercial entity organized under the laws of New Jersey or any other state or foreign jurisdiction. The definition also includes (i) if a business entity is a for-profit corporation, any officer of the corporation and any other person or business entity that owns or controls 10% or more of the stock of the corporation; (ii) if a business entity is a professional corporation, any shareholder or officer; (iii) if a business entity is a general partnership, limited partnership or limited liability partnership, any partner; (iv) if a business entity is a sole proprietorship, the proprietor; (v) if the business entity is any other form of entity organized under the laws of New Jersey or any other state or foreign jurisdiction, any principal, officer or partner thereof; (vi) any subsidiaries directly or indirectly controlled by the business entity; (vii) any political organization organized under 26 U.S.C.A. § 527 that is directly or indirectly controlled by the business entity, other than a candidate committee, election fund, or political party committee; and (viii) with respect to an individual who is included within the definition of “business entity,” that individual's civil union partner and any child residing with that person. **1**
- **“Officer”** means a president, vice president with senior management responsibility, secretary, treasurer, chief executive officer or chief financial officer of a corporation or any person routinely performing such functions for a corporation. Please note that officers of non-profit entities are excluded from this definition.
- **“Partner”** means one of two or more natural persons or other entities, including a corporation, who or which are joint owners of and carry on a business for profit, and which business is organized under the laws of this State or any other state or foreign jurisdiction, as a general partnership, limited partnership, limited liability partnership, limited liability company, limited partnership association, or other such form of business organization.

**1**Contributions made by a spouse, civil union partner or resident child to a candidate for whom the contributor is eligible to vote or to a political party committee within whose jurisdiction the contributor resides are permitted.

**Public Law 2005, Chapter 51 and Executive Order 117 (2008)**

**Chapter 51 Instr. - Rev. 4/17/15**

**Page 4 of 4**

### **USEFUL DEFINITIONS for the purposes of Chapter 51 and Executive Order 117**

- **“Contribution”** is a contribution, including an in-kind contribution, in excess of \$300.00 in the aggregate per election made to or received by a candidate committee, joint candidates committee, or political committee; or per calendar year made to or received by a political party committee, legislative leadership committee, or continuing political committee or a currency contribution in any amount.
- **“In-kind Contribution”** means a contribution of goods or services received by a candidate committee, joint candidates committee, political committee, continuing political committee, political party committee, or legislative leadership committee, which

contribution is paid for by a person or entity other than the recipient committee, but does not include services provided without compensation by an individual volunteering a part of or all of his or her time on behalf of a candidate or committee.

- **“Continuing Political Committee”** includes any group of two or more persons acting jointly, or any corporation, partnership, or any other incorporated or unincorporated association, including a political club, political action committee, civic association or other organization, which in any calendar year contributes or expects to contribute at least \$4,300 to aid or promote the candidacy of an individual, or the candidacies of individuals, for elective public office, or the passage or defeat of a public questions, and which may be expected to make contributions toward such aid or promotion or passage or defeat during a subsequent election, provided that the group, corporation, partnership, association or other organization has been determined by the Commission to be a continuing political committee in accordance with N.J.S.A. 19:44A-8(b).
- **“Candidate Committee”** means a committee established by a candidate pursuant to N.J.S.A. 19:44A-9(a), for the purpose of receiving contributions and making expenditures.
- **“State Political Party Committee”** means a committee organized pursuant to N.J.S.A. 19:5-4.
- **“County Political Party Committee”** means a committee organized pursuant to N.J.S.A. 19:5-3.
- **“Municipal Political Party Committee”** means a committee organized pursuant to N.J.S.A. 19:5-2.
- **“Legislative Leadership Committee”** means a committee established, authorized to be established, or designated by the President of the Senate, the Minority Leader of the Senate, the Speaker of the General Assembly, or the Minority Leader of the General Assembly pursuant to N.J.S.A. 19:44A-10.1 for the purpose of receiving contributions and making expenditures.
- **“Political Party Committee”** means:
  1. The State committee of a political party, as organized pursuant to N.J.S.A. 19:5-4;
  2. Any county committee of a political party, as organized pursuant to N.J.S.A. 19:5-3; or
  3. Any municipal committee of a political party, as organized pursuant to N.J.S.A. 19:5-2



State of New Jersey  
Department of the Treasury  
**Division of Purchase and Property**  
Two-Year Chapter 51/Executive Order 117 Vendor Certification and  
Disclosure of Political Contributions

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Page 1 of 3

**FOR STATE AGENCY USE ONLY**

Solicitation, RFP, or Contract No. \_\_\_\_\_ Award Amount \_\_\_\_\_

Description of Services \_\_\_\_\_

State Agency Name \_\_\_\_\_ Contact Person \_\_\_\_\_

Phone Number \_\_\_\_\_ Contact Email \_\_\_\_\_

☐ Check if the Contract / Agreement is Being Funded Using FHWA Funds

Please check if requesting  
recertification ☐

**Part 1: Business Entity Information**

Full Legal Business Name \_\_\_\_\_  
(Including trade name if applicable)

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ Phone \_\_\_\_\_

Vendor Email \_\_\_\_\_ Vendor FEIN (SS# if sole proprietor/natural person) \_\_\_\_\_

Check off the business type and list below the required information for the type of business selected.  
**MUST BE COMPLETED IN FULL**

- ☐ Corporation: LIST ALL OFFICERS and any 10% and greater shareholder
- ☐ Professional Corporation: LIST ALL OFFICERS and ALL SHAREHOLDERS
- ☐ Partnership: LIST ALL PARTNERS with any equity interest
- ☐ Limited Liability Company: LIST ALL MEMBERS with any equity interest
- ☐ Sole Proprietor

Note: "Officers" means President, Vice President with senior management responsibility, Secretary, Treasurer, Chief Executive Officer or Chief Financial Officer of a corporation, or any person routinely performing such functions for a corporation.

**All Officers of a Corporation or PC**

**10% and greater shareholders of a corporation  
or all shareholder of a PC**

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**All Equity partners of a Partnership**

**All Equity members of a LLC**

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If you need additional space for listing of Officers, Shareholders, Partners or Members, please attach separate page.

**IMPORTANT NOTE:** You must review the definition of "contribution" and "business entity" on the Information and Instructions form prior to completing Part 2 and Part 3. The Information and Instructions form is available at: <http://www.state.nj.us/treasury/purchase/forms.shtml#eo134>

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Page 2 of 3

**Part 2: Disclosure of Contributions by the business entity or any person or entity whose contributions are attributable to the business entity.**

**1. Report below all contributions solicited or made during the 4 years immediately preceding the commencement of negotiations or submission of a proposal to any:**

Political organization organized under Section 527 of the Internal Revenue Code and which also meets the definition of a continuing political committee as defined in N.J.S.A. (See **Information and Instructions form.**)

**2. Report below all contributions solicited or made during the 5 ½ years immediately preceding the commencement of negotiations or submission of a proposal to any:**

Candidate Committee for or Election Fund of any Gubernatorial or Lieutenant Gubernatorial candidate  
State Political Party Committee  
County Political Party Committee

**3. Report below all contributions solicited or made during the 18 months immediately preceding the commencement of negotiations or submission of a proposal to any:**

Municipal Political Party Committee  
Legislative Leadership Committee

|                                                                                                                                                                                       |                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Full Legal Name of Recipient                                                                                                                                                          |                        |
| Address of Recipient                                                                                                                                                                  |                        |
| Date of Contribution                                                                                                                                                                  | Amount of Contribution |
| Type of Contribution (i.e. currency, check, loan, in-kind)                                                                                                                            |                        |
| Contributor Name                                                                                                                                                                      |                        |
| Relationship of Contributor to the Vendor                                                                                                                                             |                        |
| If this form is not being completed electronically, please attach additional contributions on separate page.<br>Click the "Add a Contribution" tab to enter additional contributions. |                        |

☐ Check this box only if no political contributions have been solicited or made by the business entity or any person or entity whose contributions are attributable to the business entity.

**Part 3: Certification**

- i. ☐ I am certifying on behalf of the business entity and all individuals and/or entities whose contributions are attributable to the business entity as listed on Page 1 under **Part 1: Vendor Information**.
- ii. ☐ I am certifying on behalf of the business entity and all individuals and/or entities whose contributions are attributable to the business entity as listed on Page 1 under **Part 1: Vendor Information**, except for the individuals and/or entities who are submitting separate Certification and Disclosure forms which are included with this submittal.
- (C) ☐ I am certifying on behalf of the business entity only; any remaining persons or entities whose contributions are attributable to the business entity (as listed on Page 1) have completed separate Certification and Disclosure forms which are included with this submittal.
- (D) ☐ I am certifying as an individual or entity whose contributions are attributable to the business entity.

I hereby certify as follows:

- I have read the Information and Instructions accompanying this form prior to completing the certification on behalf of the business entity.**
- All reportable contributions made by or attributable to the business entity have been listed above.**

1. **The business entity has not knowingly solicited or made any contribution of money, pledge of contribution, including in-kind contributions, that would bar the award of a contract to the business entity unless otherwise disclosed above:**
  - a) Within the 18 months immediately preceding the commencement of negotiations or submission of a proposal for the contract or agreement to:
    - (i) A candidate committee or election fund of any candidate for the public office of Governor or Lieutenant Governor or to a campaign committee or election fund of holder of public office of Governor or Lieutenant Governor; **OR**
    - (ii) Any State, County or Municipal political party committee; **OR**
    - (iii) Any Legislative Leadership committee.
  - b) During the term of office of the current Governor or Lieutenant Governor to:
    - (i) A candidate committee or election fund of a holder of the public office of Governor or Lieutenant Governor; **OR**
    - (ii) Any State or County political party committee of the political party that nominated the sitting Governor or Lieutenant Governor in the last gubernatorial election.
  - c) Within the 18 months immediately preceding the last day of the sitting Governor or Lieutenant Governor's first term of office to:
    - (i) A candidate committee or election fund of the incumbent Governor or Lieutenant Governor; **OR**
    - (ii) Any State or County political party committee of the political party that nominated the sitting Governor or Lieutenant Governor in the last gubernatorial election.
4. **During the term of the contract/agreement the business entity has a continuing responsibility to report, by submitting a new Certification and Disclosure form, any contribution it solicits or makes to:**
  - (a) Any candidate committee or election fund of any candidate or holder of the public office of Governor or Lieutenant Governor; **OR**
  - (b) Any State, County or Municipal political party committee; **OR**
  - (c) Any Legislative Leadership committee.

The business entity further acknowledges that contributions solicited or made during the term of the contract/agreement may be determined to be a material breach of the contract/agreement.

5. **During the two-year certification period the business entity will report any changes in its ownership structure (including the appointment of an officer within a corporation) by submitting a new Certification and Disclosure form indicating the new owner(s) and reporting said owner(s) contributions.**

I certify that the foregoing statements in Parts 1, 2 and 3 are true. I am aware that if any of the statements are willfully false, I may be subject to punishment.

Signed Name \_\_\_\_\_ Print Name \_\_\_\_\_

Title/Position \_\_\_\_\_ Date \_\_\_\_\_

#### **Procedure for Submitting Form(s)**

**The contracting State Agency should submit this form to the Chapter 51 Review Unit** when it has been required as part of a contracting process. The contracting State Agency should submit a copy of the completed and signed form(s), to the Chapter 51 Unit and retain the original for their records.

**The business entity should return this form to the contracting State Agency.** The business entity can submit this form directly to the Chapter 51 Review Unit only when it –

- Is approaching its two-year certification expiration date and wishes to renew certification;
- Had a change in its ownership structure; **OR**
- Made any contributions during the period in which its last two-year certification was in effect, or during the term of a contract with a State Agency.

**Forms should be submitted either electronically to: [cd134@treas.nj.gov](mailto:cd134@treas.nj.gov) , or regular mail at:  
Chapter 51 Review Unit, P.O. Box 230, 33 West State Street, Trenton, NJ 08625.**

**Exhibit G**  
*Schedule of Estimated Quantities, Unit Prices, and Lump Sum Items*

| Item | Description                                         | Unit | Amount |
|------|-----------------------------------------------------|------|--------|
| 1    | Permits                                             | L.S. |        |
| 2    | Protection                                          | L.S. |        |
|      |                                                     | L.S. |        |
| 3    | Demolition                                          | L.S. |        |
| 4    | Electrical – Material                               |      |        |
|      | Electrical - Labor for Installation                 | L.S. |        |
| 5    | Carpentry – Material and Labor for                  | L.S. |        |
| 6    | Installation                                        |      |        |
| 7    | Drywall – Material and Labor for Installation Areas | L.S. |        |
| 8    | Video Displays – Material                           | L.S. |        |
| 9    | Video Displays – Labor for installation             | L.S. |        |
| 10   | General Conditions                                  | L.S. |        |
|      | <b>TOTAL</b>                                        |      |        |

**TOTAL LUMP SUM CONTRACT PRICE (Numerically) Line Item 1 through 10**

\_\_\_\_\_

**TOTAL LUMP SUM CONTRACT (In words) Line Items 1 through 10** \_\_\_\_\_

\_\_\_\_\_ **Dollars**

ADDENDA: The Bidder acknowledges receipt of the following Addenda:

\_\_\_\_\_ Dated \_\_\_\_\_

\_\_\_\_\_ Dated \_\_\_\_\_

\_\_\_\_\_ Dated \_\_\_\_\_

Bidder Name: \_\_\_\_\_

Date: \_\_\_\_\_

By (print): \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

**Exhibit H**  
**NON-COLLUSION AFFIDAVIT**

STATE OF \_\_\_\_\_)

: SS:

COUNTY OF \_\_\_\_\_)

I, \_\_\_\_\_,

of the City of \_\_\_\_\_,

in the County of \_\_\_\_\_,

and the State of \_\_\_\_\_,

of full age, being duly sworn according to law on my oath depose and say that:

I am (Title) \_\_\_\_\_

of (Bidder's name), \_\_\_\_\_,

Making a bid in response to OAKVIEW VENUE GROUP's Solicitation of Bids for **LOBBY AUDIO VIDEO MODIFICATION PROJECT**, and that I executed the said bid with full authority so to do; that the said Bidder has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action, in restraint of free competition, in connection with said bid; and that all statements contained in the said bid and in this Affidavit are true and correct, and made with full knowledge that **OAKVIEW VENUE GROUP** relies upon the truth of the statements contained in the said bid, in this Affidavit and in any statements requested by **OAKVIEW VENUE GROUP** showing evidence of qualifications in awarding a contract based upon said bid.

I further warrant that no person or selling agency has been employed or retained to solicit or secure said bid upon an agreement or understanding for a commission, percentage, brokerage or contingent fee, except bona fide employees or bona fide established commercial or selling agencies maintained by the Bidder.

\_\_\_\_\_  
Authorized Signature

SWORN and SUBSCRIBED to me this  
\_\_\_\_\_ day of \_\_\_\_\_, 2026

\_\_\_\_\_  
NOTARY PUBLIC

\_\_\_\_\_  
COMMISSION EXPIRES

**Exhibit I**

**CONTRACT AND SPECIFICATIONS FOR GENERAL  
CONSTRUCTION**

**PROJECT OWNER:**

OAKVIEW VENUE GROUP as operator of Jim Whelan Boardwalk Hall and the Atlantic City  
Convention Center, as managing agent for Casino Reinvestment Development Authority  
2301 Boardwalk  
Atlantic City, New Jersey 08401  
Phone: 609-348-7026

(FEBRUARY 6, 2026)

## Article I. 00500 Agreement

[INSERT FULL CONTRACTOR NAME AND ADDRESS BELOW:]

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(hereinafter referred to as the “Contractor”)

THIS AGREEMENT (the “Agreement”) is made as of this \_\_\_\_ day of \_\_\_\_\_, 2026, by and between the OAKVIEW VENUE GROUP, as agent on behalf of CASINO REINVESTMENT DEVELOPMENT AUTHORITY (“CRDA”), a public body corporate and politic constituting an instrumentality of the State of New Jersey, and the Contractor identified above.

### Recitals

A. Pursuant to a solicitation of bids issued \_\_\_\_\_ of 2026 (the “Solicitation”) and the Contractor’s response thereto dated \_\_\_\_\_, 2026 (the “Bid”), OAKVIEW VENUE GROUP has selected the Contractor to provide construction services, as more fully described in this Contract.

B. OAKVIEW VENUE GROUP desires to engage and the Contractor desires to accept the engagement to perform the Work (as hereinafter defined).

**IN CONSIDERATION** of the foregoing recitals, the mutual promises and agreements set forth herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. All capitalized terms not otherwise defined, shall have the meaning ascribed to them in Section 00700.2 herein.
2. The Contractor will commence and complete the Project, and all other necessary and desirable work as approved in accordance with the terms and conditions of the Contract Documents.
3. The Contractor will furnish all of the material, supplies, tools, equipment, labor and other services necessary and desirable for the completion of the Project.
4. The Contractor will commence the work required by the Contract Documents within thirty (30) calendar days after the date of the Notice to Proceed and will substantially complete the same within (9 ) **work weeks** pending lead time for all critical material, of the date of the Notice to Proceed.
5. The Contractor agrees to perform all of the Work described in the Contract Documents and comply with the terms and conditions herein and therein for the Total Contract Price.
6. The term “Contract Documents” means and includes the following:
  - a. Contract
  - b. General Conditions
  - c. Payment Bond

- d. Performance Bond
- e. Payment Application (as set forth in Attachment "A")
- f. Notice to Proceed (as set forth in Attachment "B")
- g. Change Orders (as set forth in Attachment "C")
- h. Construction Change Directive
- i. Progress Schedule (as amended)
- j. Supplementary Agreements
- k. Drawings prepared by the Engineer
- l. Specifications prepared by the Engineer
- m. Written Addenda or Amendments as executed by the Owner and Contractor
- n. Any other written instructions or interpretations by the Engineer or Owner
- o. Owner's Bid Documents
- p. Contractor's bid dated \_\_\_\_\_, except for any provisions inconsistent with the Contract Documents, unless such inconsistency is accepted or waived, in writing, by the Owner.

- 7. In the event of a conflict between the Division 1 and Division 2 terms and conditions set forth in this contract and the Division 1 and Division 2 terms and conditions set forth on the Architect drawings, the Division 1 and Division 2 terms and conditions set forth in this contract shall prevail.
- 8. The Owner will pay to the Contractor in the manner and at such times as set forth in the General Conditions such amounts as required by the Contract Documents.
- 9. This Contract shall be binding upon all parties hereto and their respective successors and permitted assigns.

**IN WITNESS WHEREOF**, the parties hereto have executed, or caused to be executed by their duly authorized representatives, this Contract in four (4) copies each, any of which shall be deemed an original, on the date first above written.

**[SIGNATURES APPEAR ON NEXT PAGE]**

**Witness:**

**OAKVIEW VENUE GROUP**

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Name:

Title: \_\_\_\_\_

Title:

**[CONTRACTOR MUST FILL IN AND SIGN BELOW:]**

**Witness:**

\_\_\_\_\_

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

**ACKNOWLEDGEMENT AS TO CONTRACTOR**

STATE OF \_\_\_\_\_:

COUNTY OF \_\_\_\_\_:

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 2026, by \_\_\_\_\_, as the \_\_\_\_\_ of \_\_\_\_\_, a \_\_\_\_\_ company, organized under the laws of \_\_\_\_\_, who I am satisfied, is the person who, as such authorized person, signed, sealed and delivered the within instrument made by said company, and he did acknowledge that he/she, as such authorized person, signed and delivered the same on behalf of said company for the uses and purposes therein set forth, and that said instrument is the voluntary act and deed of said company duly authorized by a proper resolution of its governing body.

\_\_\_\_\_  
Name:

Notary Public of \_\_\_\_\_

(NOTARY SEAL)

My Commission Expires:

**ACKNOWLEDGMENT AS TO OAKVIEW VENUE GROUP**

**STATE OF NEW JERSEY:**  
**COUNTY OF ATLANTIC:**

On this \_\_\_\_ day of \_\_\_\_\_, 2026 in the County and State aforesaid, before me, the subscriber, a Notary Public authorized to take acknowledgments and proofs in said County and State, personally appeared \_\_\_\_\_, the \_\_\_\_\_ of Global Spectrum, L.P., a Delaware limited partnership, as operator of Jim Whelan Boardwalk Hall and the Atlantic City Convention Center, as managing agent for the Casino Reinvestment Development Authority, who I am satisfied, in the person who, a such officer of said entity, signed, sealed and delivered the within instrument made by said entity, and he did acknowledge that he, as such officer, signed and delivered the same on behalf of said entity for the uses and purposes therein set forth, and that said instrument is the voluntary act and deed of said entity duly authorized by a proper resolution of the entity.

\_\_\_\_\_  
Name:  
Notary Public  
My Commission Expires:

(NOTARY SEAL)

**Attachment "A" Application for Payment (Or Equivalent Owner Approved AIA G702)**

NO. \_\_\_\_\_

To: \_\_\_\_\_ (OWNER)

From: \_\_\_\_\_ (CONTRACTOR)

Contract: \_\_\_\_\_

Project: \_\_\_\_\_

Contract No. \_\_\_\_\_.

For Work accomplished through the date of: \_\_\_\_\_.

- |    |                                                                |          |
|----|----------------------------------------------------------------|----------|
| 1. | Original Contract Price:                                       | \$ _____ |
| 2. | Net change by Change Orders and Written Amendments (+ or -):   | \$ _____ |
| 3. | Current Contract Price (1 plus 2):                             | \$ _____ |
| 4. | Total completed and stored to date (See Invoice Summary):      | \$ _____ |
| 5. | Retainage (per Contract):                                      |          |
|    | _____ % of completed Work:                                     | \$ _____ |
|    | _____ % of stored material:                                    | \$ _____ |
|    | Total Retainage:                                               | \$ _____ |
| 6. | Total completed and stored to date less retainage (4 minus 5): | \$ _____ |
| 7. | Less previous Application for Payments:                        | \$ _____ |
| 8. | <b>DUE THIS APPLICATION (6 MINUS 7):</b>                       | \$ _____ |

**CONTRACTOR'S CERTIFICATION:**

**THE UNDERSIGNED CONTRACTOR CERTIFIES THAT (1) ALL PREVIOUS PROGRESS PAYMENTS RECEIVED FROM OWNER ON ACCOUNT OF WORK DONE UNDER THE CONTRACT REFERRED TO ABOVE HAVE BEEN APPLIED ON ACCOUNT TO DISCHARGE CONTRACTOR'S LEGITIMATE OBLIGATIONS INCURRED IN CONNECTION WITH WORK COVERED BY PRIOR APPLICATIONS FOR PAYMENT NUMBERED 1 THROUGH \_\_\_\_\_ INCLUSIVE; AND (2) ALL WORK COVERED BY THIS APPLICATION FOR PAYMENT IS IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND NOT DEFECTIVE.**

Accompanying this Application for Payment is the duly executed Contractor's Partial Release and Waiver of Liens, the duly executed Partial Release and Waiver of Liens of each of the Contractor's subcontractors and/or suppliers, and all documentation of measurement of unit price Pay Items as required by the Contract Documents and the Engineer.

Dated \_\_\_\_\_ By: \_\_\_\_\_ Contractor

State of \_\_\_\_\_

County of \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_  
day of \_\_\_\_\_, 2026

\_\_\_\_\_  
Notary Public

My Commission expires: \_\_\_\_\_

***Attachment "A" - Continued (Or Equivalent Owner Approved AIA G703)***

**Invoice Summary**

***Section 1.01***

| Pay<br>Item                 | Description | Original<br>Lump<br>Sum | Change<br>Orders | Revised<br>Lump<br>Sum | Percent<br>Completed | Previously<br>Billed | Current<br>Billing | Total<br>Billing |
|-----------------------------|-------------|-------------------------|------------------|------------------------|----------------------|----------------------|--------------------|------------------|
| 1.                          |             |                         |                  |                        |                      |                      |                    |                  |
| 2.                          |             |                         |                  |                        |                      |                      |                    |                  |
| 3.                          |             |                         |                  |                        |                      |                      |                    |                  |
| 4.                          |             |                         |                  |                        |                      |                      |                    |                  |
| 5.                          |             |                         |                  |                        |                      |                      |                    |                  |
| 6.                          |             |                         |                  |                        |                      |                      |                    |                  |
| 7.                          |             |                         |                  |                        |                      |                      |                    |                  |
| 8.                          |             |                         |                  |                        |                      |                      |                    |                  |
| 9.                          |             |                         |                  |                        |                      |                      |                    |                  |
| 10.                         |             |                         |                  |                        |                      |                      |                    |                  |
| SUBTOTAL - Unit Price Items |             |                         |                  |                        |                      | _____                | _____              | _____            |
| SUBTOTAL – Lump Sum Items   |             |                         |                  |                        |                      | _____                | _____              | _____            |
| TOTAL – All Items           |             |                         |                  |                        |                      | _____                | _____              | _____            |

***Attachment "B" Notice to Proceed***

Dated: \_\_\_\_\_

TO: \_\_\_\_\_  
(Contractor)

ADDRESS: \_\_\_\_\_

Contract: DATED AS OF \_\_\_\_\_

Project: \_\_\_\_\_

You are notified that the Contract Time under the above contract will commence to run on this date. You are now authorized to enter upon the Project site and start performing your obligations under the Contract Documents. The date of Substantial Completion is:

Before you may start any Work at the Site, Section 00620 of this Contract provides that you must deliver to the Owner (with copies to Engineer and other identified additional insureds) certificates of insurance along with the declaration pages, which are required to be purchased and maintained in accordance with the Contract Documents.

**OAKVIEW VENUE GROUP**

By: \_\_\_\_\_

Name: Clark Hughes

Title: Director Capital Projects Procurement

Copy:

### Attachment "C" Change Order

No. \_\_\_\_\_

DATE OF ISSUANCE \_\_\_\_\_

EFFECTIVE DATE \_\_\_\_\_

OWNER \_\_\_\_\_

CONTRACTOR \_\_\_\_\_

Contract: \_\_\_\_\_

Project: \_\_\_\_\_

Contract No. \_\_\_\_\_

ENGINEER \_\_\_\_\_

You are directed to make the following changes in the Contract Documents:

Description:

Reason for Change Order:

Attachments: (List documents supporting change)

| CHANGE IN CONTRACT PRICE:                                                            |
|--------------------------------------------------------------------------------------|
| Original Contract Price<br>\$ _____                                                  |
| Net Increase (Decrease) from previous Change Orders<br>No. ____ to ____:<br>\$ _____ |
| Contract Price prior to this Change Order:<br>\$ _____                               |
| Net increase (decrease) of this Change Order:<br>\$ _____                            |
| Contract Price with all approved Change Orders:<br>\$ _____                          |

| CHANGE IN CONTRACT TIMES:                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------|
| Original Contract Times:<br>Substantial Completion: _____<br>Ready for final payment: _____<br>(days or dates)                               |
| Net change from previous Change Orders No. ____ to<br>No. ____:<br>Substantial Completion: _____<br>Ready for final payment: _____<br>(days) |
| Contract Times prior to this Change Order:<br>Substantial Completion: _____<br>Ready for final payment: _____<br>(days or dates)             |
| Net increase (decrease) this Change Order:<br>Substantial Completion: _____<br>Ready for final payment: _____<br>(days)                      |
| Contract Times with all approved Change Orders:<br>Substantial Completion: _____<br>Ready for final payment: _____<br>(days or dates)        |

RECOMMENDED:

APPROVED:

ACCEPTED:

By: \_\_\_\_\_  
ENGINEER (Authorized Signature)

By: \_\_\_\_\_  
OWNER (Authorized Signature)

By: \_\_\_\_\_  
CONTRACTOR (Authorized Signature)

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

*Attachment "C" - Continued*

**Partial Release and Waiver of Liens**

WHEREAS the undersigned is the Contractor furnishing work, services, materials or equipment upon real estate operated by OAKVIEW VENUE GROUP, as operator of Jim Whelan Boardwalk Hall and the Atlantic City Convention Center, as managing agent for the Casino Reinvestment Development Authority in furtherance of that certain **LOBBY AUDIO VIDEO MODIFICATION PROJECT** hereinafter referred to as "Owner").

Receipt is acknowledged of \$ \_\_\_\_\_, which represents partial payment, bringing the total paid to date against our Contract to \$ \_\_\_\_\_ for work, services, materials and/or equipment furnished and installed by us at the above referenced project, the undersigned does hereby waive, release and relinquish the Owner and the Building/Land from any and all claims and/or construction liens pursuant to N.J.S.A. 2A:44A-1 *et seq.* relating to this Project, to the extent of \$ \_\_\_\_\_.

We do not waive or release any future lien rights for additional labor and/or materials furnished hereafter in performance of the project.

We agree to hold the Owner and the Building/Land harmless against any claim made or lien filed by any of our material suppliers and subcontractors who performed work or supplied materials for the Project to-date.

In addition, the undersigned warrants: (a) that any claims for payment for work, services, materials and/or equipment furnished in the construction or repair of the aforesaid real estate and improvements have not been assigned and will not be assigned; (b) that all laborers, subcontractors and suppliers of the undersigned who have or will have furnished work, services, materials and/or equipment in the construction or repair of the aforesaid real estate and improvements have been or will be fully paid and that none of such laborers, subcontractors or suppliers have or will have any claim, demand or lien against the aforesaid real estate and improvements; and (c) that no financing statement, chattel mortgage, security interest, conditional bill of sale or retention of title agreement has been given or executed or will be given or executed for or in connection with any materials, appliances, machinery, fixtures or furnishings placed upon or installed, or to be placed upon or installed, in the aforesaid real estate and improvements by the undersigned.

IN WITNESS WHEREOF, the undersigned has executed and sealed this Partial Release and Waiver of Liens this \_\_\_\_\_ day of \_\_\_\_\_, 2026.

Paid to date: \$ \_\_\_\_\_

**NAME OF CONTRACTOR:** \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

**WITNESS:** \_\_\_\_\_

## **00550      Notice to Proceed**

Upon execution of the Contract by the Owner, a fully executed copy, together with a Notice to Proceed in the form attached hereto as Attachment “B”, will be provided to the Contractor, provided however, that such Notice shall only be issued after Owner’s receipt of all required approvals. Receipt of the executed Contract and Notice to Proceed shall constitute the Contractor’s authority to enter upon the Project site, provided the Contractor has submitted to the Owner, and the Owner has accepted, the insurance certificates and declaration pages required under Subsection 00620 and a preconstruction conference has been held pursuant to Subsection 01310.5(1). Construction operations shall not begin until the Contractor has supplied, and the Engineer and/or Owner has accepted, Insurance Certificates, the Progress Schedule, bonds and certifications, forms, schedules, and any other reasonable request by the Global Spectrum or submittals required by the Contract Documents.

Construction operations shall begin within thirty (30) calendar days of the Notice to Proceed. The Notice to Proceed is the first day of the Contract Time. Failure of the Contractor to begin operations within thirty (30) calendar days for any reason shall constitute a Contractor delay. Failure to begin operations within forty-five (45) calendar days shall constitute a default for which the Owner may take whatever action deemed appropriate under the Contract, in the Owner’s sole and absolute discretion.

The Contractor is not entitled to additional compensation or extension of Contract Time for any delay, hindrance, or interference caused by or attributable to commencement of Work before the twentieth day following the Notice to Proceed.

The Contractor shall give the Engineer at least 72 hours advance notice in writing of its intention to start operations.

## **00600 Bonds, Insurance and Representations**

### ***00610      Performance Bond and Payment Bond***

Within ten (10) business days of the date of the Notice of Proceed, the Contractor shall complete and deliver a Performance Bond and a Payment Bond satisfactory to the Owner.

Each bond shall be the sum of not less than the Total Contract Price less the lump sum bid for the Pay Item “Performance Bond and Payment Bond” and shall be maintained by the Contractor until Acceptance. In the event of the insolvency of the surety or if the Performance Bond and Payment Bond have not been properly authorized or issued by the Surety company, the Contractor shall furnish and maintain, as above provided, other surety satisfactory to the Owner.

All alterations, extensions of Contract Time, extra and additional work, and other changes authorized by the Contract Documents may be made without securing the consent of the surety or sureties of the bonds.

The surety corporation bonds shall be furnished by only those sureties listed in the US Treasury Department Circular 570 and authorized to do business in the State of New Jersey. The bonds shall be accompanied by a certification as to authorization of the attorney-in-fact to commit the surety company and a true and correct statement of the financial condition of said surety company.

Payment for the Performance Bond and the Payment Bond will be made upon commencement of work on the basis of Pay Item No. 1 as set forth in The Fee Schedule or the actual cost (gross premium), whichever is less, upon submission of a paid bill and the report of execution issued by the Surety showing the gross premium of the bonds and the broker’s fee. Upon Completion, the Owner’s payment for the Performance

and Payment Bond will be adjusted to reflect any increase or decrease in the actual cost of the bonds. Any increase will be based upon the rate schedule certified by the Surety and submitted by the Contractor at the beginning of the Project. If the certified schedule and the paid bill are not submitted at the beginning of the Project, no adjustment will be made. Any increase or decrease in the actual cost of the bonds of less than one hundred dollars will be disregarded. The adjustment will be calculated on whichever of the following methods results in the lowest adjustment:

1. The difference between the actual cost paid by the Contractor before the commencement of work and the paid final bill submitted by the surety company or agent.
2. The difference between the actual cost paid by the Contractor before the commencement of work and the final amount as calculated by using the certified schedule submitted at the beginning of the Project.

If the amount of this final bill reflects an increase in the cost of the Performance and Payment Bonds, the Owner will pay the Contractor the amount as determined above in the final payment to be made to the Contractor after Acceptance. If the amount of the final bill reflects a decrease in the cost of the Payment and Performance Bonds, the Owner will deduct that amount from the final payment made to the Contractor after Acceptance.

Payment will be made under:

| <i>Pay Item</i>                   | <i>Pay Unit</i> |
|-----------------------------------|-----------------|
| PERFORMANCE BOND AND PAYMENT BOND | LUMP SUM        |

#### **00620 Insurance**

The Contractor shall procure and maintain, until Acceptance and at all times thereafter when the Contractor may be correcting, removing, or replacing defective work, insurance for liability for damages imposed by law and assumed under the Contract, of the kinds and in the amounts hereinafter provided, with insurance companies authorized to do business in the State of New Jersey. Within five (5) business days of the Notice of Award, the Contractor shall furnish to the Owner a certificate or certificates of insurance together with declaration pages, in a form satisfactory to the Owner, showing that the Contractor has complied with this Subsection. Insurance binders are not acceptable as a form of insurance certificate. All of the policies of insurance required to be purchased and maintained and the certificates, declaration pages, or other evidence thereof shall contain a provision or endorsement that the coverage afforded is not to be canceled, materially changed, or renewal refused until at least 30 days prior written notice has been given to the Engineer and Owner by certified mail. All certificates, notices, or declaration pages shall be submitted to the Engineer Attention: [BRAULIO ROSSY](mailto:BRAULIO ROSSY)

[<BROSSY@NETTAARCHITECTS.COM>](mailto:BROSSY@NETTAARCHITECTS.COM)

and Owner Attention: **Clark Hughes, OAKVIEW VENUE GROUP Venue Management, 2301 Boardwalk, Atlantic City, NJ 08401**. Within five (5) days of commencing Work, the Contractor shall furnish the Owner with a certified copy of each policy of insurance, including the provisions establishing premiums.

Contractor shall obtain and maintain the types of insurance and minimum limits of liability as follows:

1. **Comprehensive General Liability Insurance.** The minimum limit of liability shall be \$5,000,000 per occurrence as a combined single limit for bodily injury and property. Any excess or umbrella policy obtained by the Contractor so that the minimum limit of liability is provided shall contain a clause stating that it takes effect (drops down) in the event the primary coverage is impaired or exhausted.

The above-required Comprehensive General Liability policy shall name the Owner, its officers, and employees, Casino Reinvestment Development Authority, its officers and employees, and the Casino Licensees and the City of Atlantic City, New Jersey, and their respective governing bodies, as additional insureds.

The coverage to be provided under this policy shall be at least as broad as that provided by the standard basic, unamended, and unendorsed comprehensive general liability coverage forms currently in use in the State of New Jersey, which shall not be circumscribed by an endorsement limiting the breadth of coverage. Moreover, such policy shall be endorsed so as to delete any exclusions applying to property damage liability arising from explosions or arising from damage to underground utilities and collapse of foundations.

The insurance policy shall be endorsed to include contractual liability coverage, premises/operations coverage, products/completed operations coverage, broad form property damage coverage, independent contractor's coverage, and personal injury coverage.

The Contractor shall provide documentation from the insurance company that indicates the cost, if any, of naming the Owner, its members, officers, employees, and other parties as additional insureds.

2. **Comprehensive Automobile Liability Insurance.** The policy shall cover owned, non-owned, and hired vehicles with minimum limits of liability in the amount of \$1,000,000 per occurrence as a combined single limit for bodily injury and property damage, together with excess coverage or umbrella coverage with the same terms and conditions as the primary underlying coverage (following form) in an amount such that the primary and excess coverage or primary and umbrella coverage together equals or is greater than \$5,000,000. Said excess or umbrella policy shall contain a clause stating that it takes effect (drops down) in the event the primary coverage is impaired or exhausted.
3. **Owner's and Contractor's Protective Liability Insurance.** The Contractor shall provide a separate Owner's and Contractor's Protective Liability Insurance Policy. The minimum limit of liability shall be \$5,000,000 per occurrence as a combined single limit for bodily injury and property damage. The policy is to be written for the benefit of the Owner, its members, directors, officers and employees, and they are to be named as the insured. The Casino Licensees and the City of Atlantic City, New Jersey are to be additional insureds.
4. **Workers Compensation and Employer's Liability Insurance.** Workers Compensation Insurance shall be provided according to the requirements of the laws of the State of New Jersey, and shall include an all states endorsement to extend coverage to any State that may be interpreted to have legal jurisdiction. Employer's Liability Insurance shall be provided with the following minimum limits:
  - a. \$100,000 each accident
  - b. \$100,000 Disease each employee
  - c. \$500,000 Disease aggregate limit

Insurance coverage in the minimum amounts set forth herein shall not be construed to relieve the Contractor for liability in excess of such coverage, nor does it preclude the Owner from taking such other actions as are available to it under any other provisions of this Contract or otherwise at law.

All proof of insurance submitted to the Owner shall clearly set forth all exclusions and deductible clauses. Standard exclusions will be allowed provided they are not inconsistent with the requirements of this Subsection. Allowance of any additional exclusions is at the discretion of the Owner. Regardless of the allowance of exclusions or deductions, the Contractor shall be responsible for the deductible limit of the policy and all exclusions consistent with the risks it assumes under this Contract and as imposed by law.

In the event that the Contractor provides evidence of insurance in the form of certificates of insurance, valid for a period of time less than the period during which the Contractor is required by the terms of the Contract to maintain insurance, said certificates are acceptable, but the Contractor shall be obligated to renew its insurance policies as necessary and to provide new certificates of insurance so that the Owner is continuously in possession of evidence of the Contractor's insurance according to the foregoing provisions.

In the event the Contractor fails or refuses to renew its insurance policy, or the policy is canceled, terminated, or modified so that the insurance does not meet the requirements of this Subsection, the Owner may refuse to make payment of any further monies due under this Contract or refuse to make payment of monies due or coming due under other contracts between the Contractor and the Owner. The Owner may use monies retained under this paragraph to renew the Contractor's insurance for the periods and amounts referred to above. Alternately, the Owner may default the Contractor and direct the Surety to complete the Project. During any period when the required insurance is not in effect, the Engineer may suspend performance of the Contract. If the Contract is so suspended, additional compensation or extension of Contract Time is not due on account thereof.

Payment for any of the required insurance for this Project is included in the Total Contract Price, and Contractor shall not be entitled to any further or additional compensation in regard to fulfilling the requirements of this Subsection.

### **00630      *Representations***

#### **00630.1 RESERVED**

#### **00630.2 Summary of Work.**

The Project consists of the MODIFICATION OF THE JIM WHELAN LOBBY AUDIO VIDEO DISPLAYS.

#### **00630.4 Permits.**

The Contractor shall secure and pay for all permits, approvals, government fees, licenses, and inspections necessary for the proper execution and performance of the Work. Contractor shall deliver to the Engineer all original licenses, permits and approvals obtained by the Contractor in connection with the Work prior to the final payment or upon termination of the Contract, whichever is earlier. (Permits are filed through the New Jersey Department of Community Affairs)

#### **00630.5 Examination of Contract Documents and Site of Project**

The Contractor has examined carefully the site of the proposed Project and the Contract Documents before execution of the Contract. The execution of this Contract is conclusive evidence that the Contractor has made such examination and is fully aware of the conditions to be encountered in performing the Work and is fully aware of the requirements of the Contract Documents and has considered the following:

1. **Investigation of subsurface and Surface Conditions.** Where the Owner has made investigations of subsurface conditions in areas where Work is to be performed under the Contract, or in other areas, some of which may constitute possible local material sources, such investigations are made only for the purpose of study, estimating and design. Where such investigations have been made, the records of the Owner as to such investigations have been made available to the Contractor, subject to and upon the conditions set forth

herein. In the event the Contractor's site examination reveals that site conditions are inconsistent with the Contract Documents, the Contractor shall immediately notify the Engineer.

2. **Project Areas and Access Location Availability.** The Contractor shall consider the effect on its work schedule of any delays in Project Area and access availability. The execution of this Contract shall be considered conclusive evidence that the Contractor has considered such delays and made allowance for them in the Progress Schedule.
3. **Utilities.** The Contractor shall consider the effect on its work schedule the existence and requirement to avoid or temporarily relocate utilities. The Contractor shall consider, in its fee schedule submission, the implementation of temporary utilities and permanent utilities required for performance of the Work.
4. **Other Contractors.** The Contractor shall examine the Project site and adjacent areas so as to be fully aware of other contractors working on or adjacent to the site. The Contractor shall become fully aware of the operations of such contractors and how their operations may affect Contractor's progress. The Contractor shall also consider and allow for the right of the Owner at any time to contract for and perform other or additional work in, on or near the Project Area.
5. **Existing Structures.** The Contractor shall be familiar with existing structures located within the Project Area. However, all structures, as identified by the Engineer as "not to be disturbed," shall be avoided and protected by the Contractor in order to complete the Work. The Contractor must cooperate with the Owner of the structure to minimize conflict with the operation of the building. The Contractor must avoid disruption of utility service and life safety systems to the occupants of the building. The Contractor must also protect the owners and patrons of the retail operations within the building from injury resulting from construction operations, equipment installation and demolition activities.

## **00700 General Conditions**

### **00700.1 General**

The titles and headings of the Section, Subsections, and Subparts herein are intended for convenience of reference and shall not be considered as having bearing on their interpretation.

Working titles that have a masculine gender, such as "workman," "foreman," "materialman," and "flagman" are used in the Contract Documents for the sake of brevity, and are intended to refer to persons of either sex.

When a publication is specified, it refers to the most recent date of issue, including interim publications, before the date of the receipt of proposals for the Project unless the issue as of a specific date or year is provided for.

Whenever a slope is indicated in the Specifications, it is given in horizontal to vertical dimensions. The horizontal will be indicated with an "H" and the vertical will be indicated with a "V."

### **00700.2 Terms**

When the following terms are used in the Contract Documents, the intent and meaning shall be as follows:

ACCEPTANCE. The term “Acceptance” means the formal written acceptance, by the Owner, of the Project that has been completed in all respects according to the Contract Documents.

ACCEPTANCE TESTING. Testing conducted by the Engineer to measure the degree of compliance to the Contract Documents.

ENGINEER. The term “Engineer” means PS&S Architects, the Owner’s professional Architect acting directly or through the Engineers’s duly authorized representatives, such representatives acting within the scope of the particular duties delegated to them.

To avoid repetition, unless otherwise stated, whenever the following words are used, it shall be understood as if they were followed by the words “to the Engineer” or “by the Engineer”: “acceptable, accepted, added, allowed, applied, approved, assumed, authorized, awarded, calculated, charged, checked, classified, computed, condemned, conducted, considered, considered necessary, contemplated, converted, deducted, deemed, deemed necessary, deleted, designated, determined, directed, disapproved, divided, documented, established, evaluated, examined, excluded, furnished, given, granted, included, incorporated, increased, indicated, inspected, insufficient, issued, made, marked, measured, modified, monitored, notified, observed, obtained, opened, ordered, paid, paid for, performed, permitted, provided, received, recorded, reduced, re-evaluated, rejected, removed, required, reserved, retested, returned, sampled, satisfactory, scheduled, specified, stopped, submitted, sufficient, suitable, supplied, suspended, taken, tested, unacceptable, unsatisfactory, unsuitable, or used.”

BY OTHERS. The term “by others” refers to a person, firm, or corporation other than the Contractor or its surety or persons, firms, or corporations in a contractual relationship with the Contractor or the surety, such as a subcontractor, supplier, fabricator, or consultant at any tier.

CALENDAR DAY. Each and every day shown on the calendar.

CASINO LICENSEE. The term “Casino Licensee” shall mean all casino licensees that contribute funding to the CRDA, and their respective directors, officers and employees.

CHANGE ORDER. The term “Change Order” means a written order issued by the Engineer and the Global Spectrum to the Contractor after execution of the Contract as set forth in Attachment “C” authorizing one or more of the following:

1. Changes in the Work.
2. Adjustments in the basis of payment for the Work affected by the changes.
3. Adjustments in the Contract Time.
4. Adjustments to the Scope of Work

CITY. The term “City” shall mean the City of Atlantic City, New Jersey.

COMPLETION. The term “Completion” means Completion of the Work. Completion shall occur when:

1. the Work has been satisfactorily completed in all respects according to the Contract Documents and punch list items are finalized and complete;
2. the Contractor has satisfactorily executed and delivered to the Engineer and/or Owner all documents, certificates, and proofs of compliance required by the Contract Documents, it being understood that the satisfactory execution and delivery of said documents, certificates, and proofs of compliance is a requirement of the Contract.

**CONSTRUCTION CHANGE DIRECTIVE.** A construction change directive is a written order prepared by the Engineer and signed by the Owner and Engineer, directing a change in the Work prior to the issuance of a Change Order.

**CONSTRUCTION OPERATIONS.** Construction operations shall include mobilization, movement or installation of utilities, construction, punch list and final clean up of the site.

**CONTRACT.** The term “Contract” means the entire and integrated agreement between the parties there-under and supersedes all prior negotiations, representations, or agreements, either written or oral. The Contract Documents form the Contract between the Owner and the Contractor setting forth the obligations of the parties there-under, including, but not limited to, the performance of the Work and the basis of payment.

**CONTRACT DOCUMENTS.** The term “Contract Documents” consist of the Contract between Owner and Contractor, Conditions of the Contract, Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Contract and Modifications issued after execution of the Contract.

**CONTRACT TIME.** The term “Contract Time” means the number of Calendar Days including authorized adjustments allowed for Completion. This Calendar Day Contract shall be completed on or before the day indicated even when that date is a Saturday, Sunday, or holiday.

**CONTRACTOR.** The term “Contractor” means the individual, firm, partnership, corporation, or any acceptable combination thereof contracting with the Owner for performance of the prescribed Work. Throughout the Contract Documents, the Contractor is referred to as if singular in number. The term “Contractor” means the Contractor or the Contractor’s authorized representative.

**COUNTY.** The term County means the County of Atlantic, New Jersey.

**CRDA.** The term “CRDA” shall mean the Casino Reinvestment Development Authority.

**CURRENT CONTROLLING OPERATION OR OPERATIONS.** The current controlling operation or operations is to be construed to include any feature of the Work, which, if delayed at the time in question, delays the overall time of Completion.

**DAYS.** Unless otherwise designated, days, as used in the Contract Documents, means Calendar Days.

**DISPUTE.** The term dispute is defined as a disagreement between the Owner and the Contractor with regard to the Work or Contract Documents.

**DRAWINGS.** The Drawings are the graphic and pictorial portions of the Contract Documents prepared by the Engineer and Architect, showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules and diagrams.

**EQUIPMENT.** Equipment means all machinery and equipment, together with the necessary supplies for upkeep and maintenance, and also tools and apparatus necessary for the proper construction of the Work.

**EXTRA WORK.** The term “Extra Work” means new and unforeseen work found essential to the satisfactory completion of the Project, as determined by the Engineer, and not covered by any of the various Pay Items set forth in Exhibit “G”. In the event portions of such work are determined by the Engineer to be covered by one of the various Pay Items set forth in Exhibit “G” or combinations of such items, the remaining portion of such work will be designated as Extra Work. Extra Work also includes work specifically designated as Extra Work in the Contract Documents.

**EXTREME WEATHER CONDITIONS.** When, solely as a result of adverse weather, the Contractor is not able to work, the Contractor is entitled to claim that progress of the Work has been affected by extreme weather conditions and may seek an extension of Contract Time consistent with the provisions of Subsection 01310.11A.

**HOLIDAYS.** The following days shall be considered holidays for use in determination of Working or Business Days:

|                  |                  |
|------------------|------------------|
| New Year’s Day   | Thanksgiving Day |
| Memorial Day     | Christmas Day    |
| Independence Day | President’s Day  |
| Labor Day        |                  |

**INSPECTOR.** The Engineer’s authorized representative assigned to inspect contract performance, methods, and materials related to the Work both on and off the site of the Project.

**ITS OWN ORGANIZATION.** The term “Its Own Organization” shall be construed to include only workers customarily employed and paid directly by the Contractor and equipment owned or rented by the Contractor, with or without operators.

**MAJOR PAY ITEM.** The term “Major Pay Item” means the following categories of the Work: payment and performance bond, site-work, general construction work, roofing and flashing, masonry, tile work, mechanical and electrical work.

**MATERIALS.** Any substances specified, and approved, for use in the performance of the Project.

**MINOR PAY ITEM.** The term “Minor Pay Item” includes all categories of the Work that are not defined as a Major Pay Item.

**MODIFICATION.** A modification is (1) a written amendment to the Contract signed by both parties; (2) a Change Order; (3) a Construction Change Directive or (4) a written order for a minor change in the Work issued by the Engineer.

**NOTICE TO PROCEED.** The term “Notice to Proceed” means the written notice to the Contractor to begin Work, as set forth in Attachment “B”.

**NIC.** The term “NIC” means work that is not included in the contract. The work will be furnished and installed by the Owner.

**OWNER.** The term “Owner” means the Global Spectrum L.P. as operator of Boardwalk Hall and the Atlantic City Convention Center, as managing agent for the CRDA, acting directly or through

duly authorized representatives, such representatives acting within the scope of the particular duties delegated to them.

**PAY ITEM.** The term “Pay Item” means a specifically described item of Work for which there is a per unit or lump sum price, as set forth in Exhibit “G”.

**PERFORMANCE BOND AND PAYMENT BOND.** The term “Performance Bond and Payment Bond” means the approved form of security, executed by the Contractor and its surety or sureties, guaranteeing complete performance of the Contract in conformity with the Contract Documents and the payment of all legal debts pertaining to the construction of the Project.

**PLANS.** The approved plans, profiles, typical sections, cross-sections, working drawings, and supplemental drawings, or exact reproductions thereof, which show the location, character, dimensions, quantities, and details of the Work to be done.

**POLICE.** The term “police” shall mean a person authorized to enforce the laws of the State of New Jersey and its political subdivisions, who has jurisdiction at the Project site or elsewhere.

**PRECONSTRUCTION MEETING AND PROJECT MEETINGS.** The initial Project and on-going meetings conducted by the Engineer, held before the start of Work, and during the conduct of the Work, from time to time, as called for.

**PROGRESS SCHEDULE.** The term “Progress Schedule” means the schedule or timeline prepared by the Contractor to conduct the Work, and which details the periods and milestones for completing the Work, as amended and as approved as provided in the Contract.

**PROJECT.** The term “Project” means the construction of the Skylight Gutter Renovations Atlantic City Convention Center and all other necessary and desirable work as approved in accordance with the terms and conditions of the Contract.

**PROJECT AREA.** {Atlantic City Convention Center Atrium Roof}. The Project may include work by others under other contracts.

**PROJECT ACCESS LOCATION(S).** The specific access points or locations identified on the Project Plans for ingress and egress to the Project Area.

**PROPERTY.** The specific block and lot identified and as otherwise further delineated in the Specifications and Project Plans.

**RETAINAGE.** The term, “Retainage” means from the total amounts ascertained as payable in accordance with the Contract, an amount equivalent to ten percent (10%) of the amount due under Contractor’s invoice and Application for Payment deducted and retained by the Owner pending Final Payment.

**RIGHT-OF-WAY (ROW).** A general term denoting all of the land, property, or interest therein, usually in a strip, acquired for or devoted to transportation purposes or construction of a public improvement.

**ROADWAY.** The portion of the highway, street, or road within the City that is used by the Contractor to haul, transport materials and equipment to/from the Project Area.

**SHALL.** Designates an obligation of the Contractor, unless otherwise indicated.

**SHOP DRAWINGS.** The drawings, diagrams, schedules and other data specifically prepared for the Work by the Contractor or a subcontractor, sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

**SPECIFICATIONS.** The compilation of provisions and requirements for the performance of prescribed work , or other information giving interpretations or revisions to them, any and all Supplementary Agreements, and whether expressly incorporated by reference or not, all applicable regulatory requirements, and best manufacturing practice standards.

**STANDARD WORKING HOURS.** The term “Standard Working Hours” means Monday through Friday and times of 7:00 am to 5:00 pm eastern prevailing time.

**STATE.** The “State” means the State of New Jersey.

**SUBCONTRACTOR.** Subcontractor means an individual, firm, partnership, corporation, or any acceptable combination thereof, to which the Contractor subcontracts part of the Work.

**SUBMITALS.** The documents required to be provided to the Engineer and/or Owner prior to and during the performance of the Work.

**SUBSTANTIAL COMPLETION.** The term “Substantial Completion” means the point at which the performance of all Work on the Project has been completed but excluding final cleanup and repair of unacceptable Work, and provided the Owner and Engineer have solely determined that:

- (i). the Project is safe and convenient for use by the public, and
- (ii). failure to complete the Work and repairs excepted above does not result in the deterioration of other completed Work.

**SUPPLEMENTARY AGREEMENT.** The term “Supplementary Agreement” means a bilateral agreement between the Owner and the Contractor, executed on a Change Order form, setting forth the negotiated terms and conditions whereunder changes are to be accomplished, including negotiated adjustments in compensation and time of Completion. The Supplementary Agreement shall be conclusive as to all questions of compensation and extensions of Contract Time relative to the subject of the agreement excepting only those instances wherein the agreement recites specific exceptions.

**SURETY.** The corporate body bound with and for the Contractor for the full and complete performance of the Contract and for the payment of all debts and obligations pertaining to the Work.

**TOTAL ADJUSTED CONTRACT PRICE.** The term “Total Adjusted Contract Price” means the Total Contract Price as it is adjusted through the issuance of Change Orders and Construction change directives and the calculation of as-built quantities, if applicable.

**TOTAL CONTRACT PRICE.** The term “Total Contract Price” means the correctly determined summation of lump sum amounts and products of all quantities of unit price Pay Items multiplied by the unit prices set forth in Exhibit “G.”

**TOWN, TOWNSHIP, CITY.** A subdivision of the County used to designate or identify the location of the Project.

**TRAVELED WAY.** The portion of the roadway for the movement of vehicles exclusive of shoulders and auxiliary lanes.

**UTILITY.** A publicly, privately, or cooperatively owned agency or agencies operated by one or more persons or corporations for public service.

**WILL.** Designates an action to be taken by the Owner, the Engineer, or any authorized representative, unless otherwise indicated.

**WORK.** The term “Work” means the furnishing of any and all labor, services, materials, equipment, tools, transportation, supplies, and other incidentals necessary or convenient for the successful completion by the Contractor of the construction described in the Contract Documents and the carrying out of any and all duties and obligations imposed by the Contract Documents on the Contractor.

**WORKING OR BUSINESS DAY.** Any Calendar Day, exclusive of:

1. Saturdays, Sundays, and holidays;
2. Days on which the Contractor is specifically required by the Contract Documents to suspend construction operations; and
3. Days on which the Contractor is prevented by inclement weather or conditions resulting immediately therefrom adverse to the current controlling operation or operations, as determined by the Engineer, from proceeding with at least 75 percent of the normal labor and equipment force engaged on such operation or operations for at least 60 percent of the total daily time being currently spent on the controlling operation or operations.

Should the Contractor prepare to begin work at the regular starting time in the morning of any day on which inclement weather, or the conditions resulting from the weather, prevent the work from beginning at the usual starting time, and the crew is dismissed as a result thereof, and the Contractor does not proceed with at least 75 percent of the normal labor and equipment force engaged in the current controlling operation or operations for at least 60 percent of the total daily time being currently spent on the controlling operations or operations, the Contractor will not be charged for a Working Day whether or not conditions should change thereafter during said day and the major portion of the day could be considered to be suitable for such construction operations.

### **00700.3 Intent**

The intent of the Contract Documents is to describe a functionally complete and aesthetically acceptable Project to be constructed and completed by the Contractor in every detail according to the Contract Documents. Any Work that may be reasonably inferred from the Contract Documents as being required to produce the intended result shall be supplied whether or not specifically called for. Where the Contract Documents describe portions of the Work in general terms, but not in complete detail, it is understood that only the best construction practice is to prevail and only materials and workmanship of the first quality are to be used. Only where the Contract Documents specifically describe a portion of the Project as being performed by others is the Work deemed not to constitute construction of the entire Project.

### **00700.4 Changes**

The Owner, through the Engineer, reserves the right to make, in writing, at any time during the Work, such changes in quantities and such alterations in the Work as are necessary to satisfactorily complete the Project. Such changes in quantities and alterations do not invalidate the Contract nor release the surety, and the Contractor agrees to perform the work as altered.

If the alterations or changes in quantities significantly change the character of the Work under the Contract, whether such alterations or changes are in themselves significant changes to the character of the Work or,

by affecting other work, cause such other work to become significantly different in character, an adjustment, excluding loss of anticipated profits, will be made to the Contract.

The adjustment to the cost resulting from a change in Work shall be determined by the lesser of:

1. By unit prices stated in the Contract Documents; or
2. By cost, defined below, properly itemized and supported by sufficient substantiating documentation to permit evaluation, plus a profit or no more than five percent (5%) of items 'a' through 'e' described below. Such costs shall be itemized by crafts as defined in the schedule of values and limited to the following items directly allocable to the change in the Work:
  - a. Costs of materials, including cost of delivery;
  - b. Fully-burdened cost of labor, including but not limited to, payroll taxes, social security, old age and unemployment insurance, vacation, fringe benefits required by agreement or routinely paid by Contractor, and worker's or workman's compensation insurance;
  - c. Contractor Supervision/Overhead allowance not to exceed ten percent (10%) of 'a' plus 'b'; the parties agree that this mark-up shall fully cover all Contractor overhead;
  - d. Rental value of equipment and machinery to be established by rental receipts and not to exceed reasonable and customary rates for the locale of the Work. For owned equipment, Contractor must prove reasonable rental rate pursuant to actual ownership costs.
  - e. Cost of any subcontracted work subject to the above requirements and limitations.
  - f. Insurance and bond premiums not to exceed a total of 1% of the change order amount.

Any dispute regarding the cost of the change, as calculated above, shall not relieve the Contractor from proceeding with the change as directed by the Owner or Engineer.

If the alterations or changes in quantities do not significantly change the character of the Work to be performed under the Contract, the altered work will be paid for as provided elsewhere in the Contract.

The term "significant change" shall be construed to apply only to the following circumstances:

1. When the character of the Work as altered differs materially in kind or nature from that involved or included in the original proposed construction, or
2. When the as-built quantity of a Major Pay Item, as defined herein, that is based on unit price is in excess of 120 percent or below 80 percent of the original Contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 120 percent of original Contract item quantity, or in case of a decrease below 80 percent, to the actual amount of work performed.

Changes that solely involve the increase or decrease in the quantity of Pay Items (not involving unit price adjustments pursuant to Subsection 00700.7), the elimination of Pay Items, the adjustment of the estimated quantities which are set forth in Attachment "A" as the result of as-built calculations, or minor changes in the Work as provided in 00700.5, may be affected by a Construction change directive or by a Change Order (in the form set forth in Attachment "C"), as determined by the Engineer. All other changes will be included in a Change Order that specifies, in addition to the Work to be done, an adjustment of Contract Time, if any, and the basis of compensation for such Work. A Change Order does not become effective until the Owner has approved the proposed Change Order submitted by the Engineer.

Upon receipt of a Construction change directive or Change Order, the Contractor shall proceed with the ordered Work. Where the changes involved require a Change Order, and a Change Order has not yet been

issued, the Owner may direct, by Construction change directive, that the Contractor proceed with the desired Work, and the Contractor shall comply. In such cases, the Owner will, as soon as practicable, issue a Change Order for such Work.

When the compensation for an item of Work is subject to adjustment under the provisions of Subsections 00700.5 through 00700.11 the Contractor shall furnish the Engineer with adequate detailed cost data for such item of Work.

In addition to Construction change directives and Change Orders, the terms and conditions relating to changes may be negotiated with the Contractor. If the Contractor signifies acceptance of such terms and conditions by executing a Supplementary Agreement, and if such Supplementary Agreement is approved by the Owner and issued to the Contractor, payment according to the terms and conditions as to compensation and adjustments in the Contract Time therein set forth constitutes full compensation and a mutually acceptable adjustment of Contract Time for all Work included therein or required thereby. The Contractor agrees that a proposed Supplementary Agreement that is not approved by the Owner or that is rejected by the Contractor shall have no effect and that neither may attempt to use it in any litigation that may result from the Contract.

The Contractor acknowledges and agrees that no claim for additional compensation shall be made because of any alteration, deviation, addition to, or omission from the Work required by the Contract, by reason of any variation between the approximate quantities as set forth in Exhibit "G" and subsequent owner approved schedule of values and the quantities of Work as done, by reason of Extra Work, by reason of elimination of Pay Items, or by reason of changes in the character of Work, except as allowed in this Section.

The Contractor acknowledges and agrees that no claim for additional compensation or extension of Contract Time within the scope of this Section will be allowed if asserted after Acceptance.

#### **00700.5 Minor Changes in the Work.**

The Engineer has the authority to order minor changes in the Work not involving an adjustment to the unit or lump sum prices, or an adjustment to Pay Items, or an extension of Contract Time, and not inconsistent with the intent of the Contract Documents. Such changes may be effected by Construction change directive and are binding on the Owner and the Contractor. Additional compensation or extension of Contract Time will not be allowed.

#### **00700.6 Procedure and Protest.**

A Construction change directive or Change Order may be issued at any time. Should the Contractor disagree with any terms or conditions set forth in a Construction change directive or a Change Order, the Contractor shall submit a written protest to the Engineer within 5 days after the receipt of such Construction change directive or Change Order on forms furnished by the Engineer as directed by the Owner. The protest shall state the points of disagreement, and, if possible, the specification references, quantities, and costs involved. The protest shall be a specific, detailed statement of the points of disagreement, and the Owner reserves the right to reject general protests. Rejected general protests that are not cured by the submission of a specific, detailed statement within five days of such rejection will not be considered. If a written protest is not submitted, payment will be made as set forth in the Construction change directive or Change Order and such payment constitutes full compensation for all Work included therein or required thereby and also is conclusive as to any Contract Time adjustments provided for therein or in establishing that no Contract Time adjustment was warranted.

Protests related to Work ordered by Construction change directive, but as to which a Change Order is required, shall be made within 5 days after receipt of the Construction change directive. Subsequent issuance of the Change Order shall not be the basis for a protest except to the extent that the Change Order differs materially from the Construction change directive.

Where the protest concerning a Construction change directive or a Change Order relates to compensation, the compensation payable for all Work specified or required by said Construction change directive or Change Order to which such protest relates, if later deemed appropriate by the Owner, will be determined as provided in Subsection 01450.5 through 01450.8. The Contractor shall keep full and complete records of the cost of such Work and shall permit the Owner and Engineer to have such access thereto consistent with Subsection 01290.9, as may be necessary to assist in the determination of the compensation payable for such Work.

Where the protest concerning a Change Order relates to the adjustment of Contract Time, the time to be allowed, if later deemed appropriate, will be determined as provided in Subsection 01310.11 (Extensions and Reductions of Contract Time).

#### **00700.7 Increased or Decreased Quantities.**

Increases or decreases in the quantity of a Pay Item will be determined by comparing the partial or total as-built quantity of such item of Work, as applicable, with the quantity set forth in Exhibit "G" and subsequent owner approved schedule of values or the Project Plans, as applicable. In making such a comparison, quantities that are the subject of Supplementary Agreements or Change Orders for Extra Work will not be considered.

Minor Pay Items are not eligible for any adjustment in unit price regardless of how much the total as-built quantity varies from the quantity set forth in Exhibit "G" and subsequent owner approved schedule of values unless eligible for adjustment pursuant to Subsection 00700.9.

#### **00700.8 Eliminated Items.**

Should any Pay Item set forth in Exhibit "G" and subsequent owner approved schedule of values be found unnecessary for the proper completion of the Work, the Engineer may, upon written order to the Contractor, eliminate such item from the Contract. In such case compensation, if any is appropriate, will be made as provided in this Subsection.

If acceptable material is ordered by the Contractor for the eliminated item before the date of notification of such elimination and if orders for such material cannot be canceled, it will be paid for at the actual cost to the Contractor. In such case, the material paid for becomes the property of the Owner, and the actual cost of any further handling will be paid for. If the material is returnable to the vendor and if the Engineer so directs, the material shall be returned, and the Contractor will be paid for the actual cost or charges made by the vendor for returning the material. The actual costs of handling returned material will be paid for.

A reduction in the Contract Time may be made by the Engineer as a result of an eliminated item, if appropriate.

#### **00700.9 Changes in Character of Work.**

If the Owner determines that an ordered change in the work materially changes the character of the work of a Pay Item, or a portion thereof, and if the change substantially increases or decreases the actual cost of such changed item as compared to the actual or estimated cost of performing the work of said item according to the Contract Documents originally applicable thereto, in the absence of a Supplementary Agreement or un-protested Change Order specifying the compensation payable, an adjustment in compensation will be made according to the following:

1. The basis of such adjustment in compensation will be the difference between the actual cost to perform the work of said item or portion thereof involved in the change as originally planned or estimated and the actual cost of performing the work of said item or portion thereof involved in the change, as changed. Any such adjustment is to apply only to the portion of the work of said item actually changed in character.

2. If the compensation for an item of Work is adjusted under this Subsection, the costs recognized in determining such adjustment and quantity involved will be excluded from consideration in making an adjustment for such item of Work under the provision in Subsection 00700.7.

Failure of the Owner to recognize a change in character of the Work at the time a Construction change directive or Change Order is issued does not relieve the Contractor of the duty and responsibility of filing a written protest within the five-day limit as provided in Subsection 00700.6.

#### **00700.10 Extra Work.**

The Owner reserves the right to require Extra Work as needed for the satisfactory completion of the Project. Such Work will be designated as Extra Work when it is determined by the Engineer that such Work is not required according to the Contract Documents originally applicable thereto. In the event portions of such Work are determined to be required according to the Contract Documents originally applicable thereto, the remaining portion of such Work will be designated as Extra Work. Extra Work also includes Work specifically designated as Extra Work in the Contract Documents.

The Contractor shall do such Extra Work and furnish labor, material, and equipment therefor upon receipt of a Change Order, Construction change directive, or Supplementary Agreement. In the absence of such, the Contractor shall not perform, nor be entitled to payment for, such Extra Work.

If the Contractor and the Owner cannot agree on a Supplementary Agreement for Extra Work and the Engineer deems it inadvisable to have such Work completed by the Contractor, the Owner may elect to have such Work completed by others, and the Contractor shall not interfere therewith nor have any claim for additional compensation as the result of such election.

#### **00700.11 Notification of Changes.**

The Contractor shall promptly report to the Engineer changes that the Contractor believes constitute a change to the Contract. Except for changes identified as such pursuant to Subsections 00700.4 and 00700.5 the Contractor shall promptly notify the Engineer in writing within five (5) days from the date that the Contractor identifies any Changes, which the Contractor regards as a change to the Contract terms and conditions. In no event shall the Contractor begin Work or incur any expenses with relation to the claimed change before giving notice.

The notice shall state the following on the basis of the most accurate information available to the Contractor:

1. The date, nature, and circumstances of the conduct or circumstances regarded as a change.
2. The name, function, and activity of each person involved in or knowledgeable about such conduct or circumstances.
3. The identification of any documents and the substance of any oral communication involved in such conduct or circumstances.
4. In the instance of alleged Extra Work, the basis for the Contractor's claim that the Work is extra.
5. The particular elements of Contract
  - a. What Pay Items have been or may be affected by the alleged change.
  - b. What labor or materials or both performance for which the Contractor may seek additional compensation under this Section including: have been or may be added, deleted, or wasted by the alleged change and equipment idled, added, or required for additional time.

- c. To the extent practicable, what delay and disruption in the manner and sequence of performance and effect on continued performance have been or may be caused by the alleged change.
- d. What adjustments to Contract price, delivery schedule, and other provisions affected by the alleged change are estimated.

Following submission of the notice, the Contractor shall diligently continue performance of the Contract to the maximum extent possible according to the Contract Documents, unless such notice results in a direction by the Engineer, in which event the Contractor shall continue performance in compliance therewith, provided, however, that if the Contractor regards such direction itself as a change, notice shall be given as provided above. All directions, orders, and similar actions of the Engineer will be reduced to writing and copies thereof furnished to the Contractor.

The Engineer will promptly and in any event within ten (10) days after receipt of notice, respond thereto in writing. In such response, the Engineer will do one of the following:

1. Confirm that the conduct or circumstance of which the Contractor gave notice constitutes a change, and when necessary direct the mode of further performance.
2. Revise or rescind any communication regarded as a change.
3. Deny that the conduct or circumstance of which the Contractor gave notice constitutes a change, and when necessary direct the mode of further performance; or
4. In the event the Contractor's notice information is inadequate to make a decision under Items 1, 2, or 3 of this paragraph, advise the Contractor as to what additional information is required, and establish the date by which it should be furnished and the date thereafter by which the Owner will respond.

If the Engineer confirms that conduct or circumstances effected a change as alleged by the Contractor, and such conduct or circumstances causes an increase or decrease in the cost of, or the time required for performance of any part of the Work under the Contract, an adjustment in compensation will be made according to the provisions of this Section, and the Contract will be modified in writing accordingly. In the case of drawings, designs, or specifications that are defective and for which the Owner is responsible, the adjustment will be made to include the cost and extension of Contract Time for delay reasonably incurred by the Contractor in attempting to comply with such defective drawings, designs, or specifications before the Contractor identified, or reasonably should have identified, such defect. When the cost of materials made obsolete or excess as a result of a change confirmed by the Engineer pursuant to this Subsection is included in the adjustment in compensation, the Engineer has the right to prescribe the manner of disposition of such materials. Adjustments will not be made that include increased costs or extensions of Contract Time for delay resulting from the Contractor's failure to provide adequate notice or to continue performance as provided above. Any adjustments of Contract Time will be made pursuant to Subsection 01310.11.

The failure of the Contractor to give notice pursuant to the provisions of this Subsection shall constitute a waiver of any and all claims and damages that could have been avoided or mitigated had such timely notice been given. Moreover, no action or inaction of any person shall constitute a waiver of the Owner's absolute right to receive written notice of an alleged claim pursuant to this Subsection.

# **DIVISION 1 - GENERAL REQUIREMENTS**

## **01100 Summary**

### **01110 *Summary of Work***

The Project consists of the construction of the **LOBBY AUDIO VIDEO MODIFICATION PROJECT**.

### **01140 *Work Restrictions***

#### **01140.1 PROPERTY OWNER OCCUPANCY**

- A. The Property Owner(s) intend to occupy the Project during the construction period for the conduct of normal operations.
- B. Cooperate with Property Owner to minimize conflict, and to facilitate Property Owner's operations.
- C. Protect the building and patrons of the establishment involved/affected by the construction operations from injury resulting from all construction operations, equipment, installations or demolition.
- D. Schedule the Work to accommodate building occupancy and operation.

#### **1140.2 RESERVED**

#### **01140.3 Work Time.**

The Contractor is limited to working the Standard Working Hours. However, if the Contractor so requests, the Owner may consider seeking approval for the Contractor to work outside of the Standard Working Hours. No work is to be progressed outside of Standard Working Hours unless approved in writing by the Owner.

#### **01140.4 Consideration and Safety of, and Coordination with Global Spectrum Operation.**

The Contractor is aware that the Project Area is a Convention Center which may result in the public being attracted to the construction activity. As such, the Contractor shall take care and be cognizant at all times of pedestrians within right-of-ways and persons that may be attracted to the Work activities. At all times, the Contractor must take all necessary and desirable measures to protect equipment and materials used in performance of the Work from accessibility by third parties. The Contractor shall not be entitled to additional compensation or an extension of time in the Contract due to such pedestrian traffic conditions.

If in the opinion of the Owner, in consultation with the Engineer, the Contractor is not abiding by applicable public safety laws and regulations, or determines that the Project Area has not been secured after work hours to prevent the injury to third parties, the Owner will instruct the Engineer to halt the Project in accordance with Subsection 01310.14 (Temporary Suspension of Work) and contract with the local authorities or take whatever measures necessary and desirable to protect public safety. The Owner will be

entitled to reimbursement of all reasonable costs and expenses from the Contractor associated with such determination, in accordance with Subsection 01360.14 (Recovery of Monies by the Owner).

#### **01140.5 Damage to Property.**

The Contractor shall protect all local roadways, and private property from damage. Any damage caused by the Contractor shall be considered part of the Contractor's risk and included as part of the Contractor's costs for the Project. The Contractor's obligation in this Subsection is in addition to other similar obligations of the Contract, including those set forth in Sections and Subsections 00630.5 (Examination of Contract Documents and Site of Project), 11020 (Site Restoration and Final Cleanup), 01450.16 (Load Restrictions), 01450.17 (Maintenance During Construction), 01450.18 (Failure to Maintain Project Area, Surroundings and Roadway). A failure by the Contractor to repair any of the above mentioned items in a prompt and timely manner, as determined by the Owner, in its sole discretion, shall be cause for the Owner to contract with a separate contractor to repair the damage and be reimbursed by the Contractor in accordance with Subsection 01360.14 (Recovery of Monies by the Owner). An exception to requiring immediate repair may be approved by the Owner, if the damage is expected to be repetitive due to the nature of the vehicle traffic, is not a danger to the public, and not required by the owner of the right-of-way or other public property, or the private landowner impacted. However, all such approvals must be issued in writing by the Owner and the City. The Contractor shall also be responsible for repairing the damage allowed to remain until Substantial Completion at the Contractor's cost or reimburse the Owner in accordance with Subsection 01360.14 (Recovery of Monies by the Owner).

#### **01140.6 Use of Site.**

The use of the Project Area is limited to the construction needed for the completion of the Project. The Project Area shall not be used to store equipment or materials other than that to perform the Work called for under the Contract. In addition, at the end of the work day, unless in a location that would prove difficult logistically to move equipment, all machinery and purchased materials shall be stored outside of the Project Area.

### **01200 Price and Payment Procedures**

#### ***01210 Allowances***

Allowance shall include cost to Contractor of specific products and materials ordered by Owner under allowance and shall include taxes, freight, and delivery to Project site.

Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by Owner under allowance shall be included as part of the Contract Sum and not part of the allowance. All other costs will be reimbursed at actual with supporting documentation.

#### ***01270 Measurement of Quantities***

Measurements will be made according to the United States customary English units.

The method of measurement and computations to be used in determination of quantities of Work performed under the Contract are those methods generally recognized as conforming to good Engineering practice. The method of measurement chosen must be consistent and unchanging through the life of the Project.

The term “lump sum” when used as a basis of payment means complete payment for the Work of that item, and that item will not be measured.

When the unit price Pay Items set forth in Exhibit “G” and subsequent owner approved schedule of values are specified to be the pay quantity, either the Engineer or the Contractor may request that the quantity be measured. If the Contractor makes such a request, it shall be accompanied by drawings, calculations, or other information indicating that the quantity in Exhibit “G” and subsequent owner approved schedule of values is not correct.

## **01290      *Payment Procedures***

### **01290.1    Scope of Payment.**

The Contractor shall receive and accept the compensation provided for in the Contract as full payment for furnishing all labor, materials, tools, equipment, and incidentals necessary to complete the Work, and for performing all Work contemplated and embraced under the Contract in a complete and acceptable manner. Except where specifically provided elsewhere in the Contract Documents, compensation shall encompass full payment for all risk, loss, damage, or expense of whatever character arising out of the nature of the Work or the prosecution thereof, or for the action of the elements, or for any unforeseen difficulties that may be encountered during the prosecution of the Work until Acceptance.

The payment for the various Pay Items set forth in Exhibit “G” and subsequent owner approved schedule of values encompasses all compensation for work essential to each Pay Item. Work essential to each Pay Item will not be measured or paid for under any other Pay Item in the Contract Documents.

### **01290.2    Payment for Contractor’s Expenses During Delays.**

The Contractor is expected to be familiar with the type of work being progressed under this Contract. Therefore, no delays due to, for example, weather, flooding, coordination with subcontractors, and adjacent work by others will be compensated by the Owner. The Contractor shall take any and all necessary and desirable steps to be familiar with all aspects of the Project, including, without limitation, the Project Area, the contemplated Work, and the Project Plans and Specifications.

### **01290.3    Partial Payments.**

The Owner will make monthly estimated payments to the Contractor based on the approximate quantities of Work satisfactorily performed according to the Contract Documents during the preceding month. Partial payments on account of such monthly estimate will be made based on the prices set forth in Exhibit “G” and subsequent owner approved schedule of values or as provided by Construction change directive, Change Order, or Supplementary Agreement. The Owner will also pay the Contractor for materials delivered according to Subsection 01290.4.

Before the issuance of each monthly payment before Substantial Completion, the Contractor shall present an invoice along with a fully completed Application for Payment in the form set forth in Attachment “A.” The Application for Payment shall include a Partial Release and Waiver of Liens executed by the Contractor and by any subcontractor or supplier who has provided work, services, material or equipment to the Project and is requesting payment for any of the Work encompassed by the Application for Payment, waiving the Contractor’s, subcontractor’s and/or supplier’s right to assert a construction lien in regard to the Project pursuant to N.J.S.A. 2A:44A-1 to the extent of payments actually received for work, services, materials or equipment provided or to be provided.

Pay Items that are on a lump sum basis will not be measured. However, payment for such items will be included in partial payments consistent with the provisions of the Subsection describing the Work under the lump sum Pay Item. Where the method of payment is not described under the Subsection describing the Work of the lump sum Pay Item, partial payment will be made based on an approximation of the proportionate value of the Work satisfactorily performed to date.

When an Application for Payment includes an application for payment of any unit price pay item, the Application shall include a certification by the Contractor of the quantity of units applied for, along with all necessary documentation, as determined by the Engineer, of the measurement of the quantity of unit price items.

From the total amounts ascertained as payable, Owner will retain the Retainage in accordance with the Contract.

Such estimate or payment will not be made when, in the judgment of the Engineer, the Work is not proceeding according to the Contract Documents or following the Owner giving the Contractor and surety notice of delay, neglect, or default under Subsection 01310.16 (Default and Termination of Contractor's Right to Proceed).

Such estimate or payment shall not be construed to be an approval of any defective or improper Work. The Engineer upon determining that any payment under a previous monthly estimate was improper or unwarranted for any reason may deduct the amount of such payment from the subsequent monthly estimate and partial payments made to the Contractor.

The Owner will deduct from any monthly estimate and payment and/or the final payment such amounts as are required to be deducted pursuant to provisions of the Contract Documents.

#### **01290.4 Materials Payments.**

Before including payments for Items that include materials, the Engineer must be satisfied that:

1. The materials have been properly stored, insured and protected along or upon the Project Area or have been stored at locations owned or leased by the Contractor or the Owner; and
2. The materials have been inspected and appear to be acceptable based upon available supplier's certification and/or materials test reports; and
3. The Contractor has provided the Engineer with proof of good credit standing with the material supply company; and
4. The materials, if stored on property not belonging to the Owner, are fenced in with access limited to the Owner, Engineer and the Contractor, and the fenced-in materials are clearly identified in large letters as being without encumbrances and for use solely on the Project.

The Contractor assumes full responsibility for the safe storage and protection of the materials and nothing in this Subsection alters the provisions of Subsections 01360.12 (Risks Assumed by the Contractor) and 00620 (Insurance). If materials paid for under this Subsection are damaged, stolen, or prove to be unacceptable, the payment made therefor shall be deducted from subsequent estimates and payments.

Payment for materials as provided in this Subsection shall not be deemed to be an approval of such materials, and the Contractor shall be responsible for and must deliver to the Project Area and properly incorporate in the Work only those materials that comply with the Contract Documents.

The Contractor shall pay any and all costs of handling and delivering materials to and from the place of storage to the Project Area, as well as any storage rental. Any taxes levied by any government against the materials shall be borne by the Contractor.

#### **01290.5 Payments Following Substantial Completion.**

Following Substantial Completion of the Contract according to Subsections 00700.3 (Intent) and 01450.20 (Substantial Completion) payments to the Contractor will be made only upon certification by the Contractor to the Engineer and Owner that:

1. Each subcontractor or supplier has been paid all amounts due from all previous progress payments and shall be paid all amounts due from the current progress payment; or
2. There exists a valid basis under the terms of the subcontractor's or supplier's contract to withhold payment from the subcontractor or supplier, and therefore payment is withheld.

The Owner shall not be responsible for any interest payment to material suppliers, no matter what circumstance arises; either through delays in payment by the Owner or delays in payment by the Contractor.

All monies retained subsequent to Substantial Completion shall be released at final payment. Ninety-five percent of the Retainage shall be paid at final payment, with the balance retained in an interest bearing account by the Owner until such time as the Contractor satisfies its obligations under this Contract after which time, such balance will be paid to the Contractor.

#### **01290.6 Payment Following Acceptance.**

After Acceptance as provided in Subsection 01450.21 (Completion and Acceptance), the Engineer will make an estimate of the total amount of Work done under the Contract and the Owner will make a final monthly payment. The Owner will pay the balance found to be due after deduction of all previous payments and such further amounts as the Engineer determines to be necessary and proper under the Contract (including those required under Subsection 01290.5) pending issuance of the Final Certificate and payment. Retainage is released with this estimate except where the Engineer determines to continue to retain them under the provisions of Subsections 01290.5 and 01290.7.

#### **01290.7 As-Built Quantities.**

Following Substantial Completion, the Engineer will finalize as-built quantities for all unit price Pay Items and for Extra Work that has been authorized and incorporated into the Project. The Contractor shall assume the positive obligation of assisting the Engineer in the preparation of such as-built quantities at no extra cost. If the Contractor disagrees with the final as-built quantities, the Contractor must submit, together with a notice of disagreement, the proposed changes and supporting calculations within five (5) days. Where the Contractor fails to respond or fails to provide supporting calculations, together with a notice of disagreement, within the aforesaid 5-day period, such failure will be construed to be acceptance of the as-built quantities. However, the Engineer will review supporting calculations properly received from the Contractor according to this Subsection, within five (5) days, and will accept or reject, in part or in whole, the proposed changes to the as-built quantities. The Engineer has the discretion to extend the Contractor's 5-day response period, but only upon receipt of a written request from the Contractor, submitted within the aforesaid 5-day period. After the Contractor's acceptance, expiration of the aforesaid 5-day period and any properly granted extensions, or after review of any properly submitted proposed changes; final as-built quantities will be incorporated into a proposed Final Certificate. A claim based upon proposed changes to the as-built quantities that have not been accepted by the Engineer, but which were supported by calculations and submitted within the aforesaid 5-day period, may be reserved by the Contractor according to Subsection 01290.8. In addition, the provision of Section 01270 (Measurement of Quantities) shall also govern.

The Engineer may from time to time, before Completion, prepare as-built quantities and incorporate these quantities into monthly estimate certificates through an appropriate Field Order or Change Order. Such interim as-built quantities are subject to recalculation following Completion. However, nothing contained in the Contract Documents shall be construed to place on the Engineer the obligation of providing the Contractor with as-built quantities for the Work performed before the issuance of the proposed Final

Certificate, nor to provide more than rough, approximate quantities of the Work done for use in the preparation of monthly estimates.

Should it appear to the Engineer at the time of Acceptance that the calculation of as-built quantities might result in the Contractor being obliged to return money to the Owner, the Engineer may refuse to release Retainage pending issuance of the proposed Final Certificate. Where the estimate reveals that an overpayment has been made, the Contractor shall immediately return the amount of the overpayment. If the Contractor fails to remit the overpayment, the Owner will avail itself of other funds held against the Retainage, and then if necessary proceed against the Contractor or its surety. Where the proposed Final Certificate reveals that no overpayment has been made, the Contractor shall be entitled to payment thereunder and the release of Retainage in accordance with the Contract, but the Contractor shall have no claim of any kind for additional compensation as a result of the Engineer's decision to withhold Retainage or other monies pending issuance of the proposed Final Certificate.

### **01290.8 Final Payment.**

The Final Certificate shows the total amount payable to the Contractor, including therein an itemization of said amount segregated as to Pay Item quantities, Extra Work, and any other basis for payment, and also shows therein all deductions made or to be made for prior payments and as required pursuant to the provisions of the Contract Documents. All prior estimates and payments are subject to correction in the Final Certificate.

Within 30 days after said Final Certificate has been issued to the Contractor, the Contractor shall either submit to the Engineer a written acceptance of the Final Certificate without exception or a written acceptance of the Final Certificate with exception or reservation. The Contractor's failure to submit any written acceptance within said 30 days will be construed as an acceptance of the Final Certificate without exception or reservation. Final payment will be made to the Contractor in the amount set forth in the Final Certificate, and the Contract will be complete as of the date on which such payment is issued. Failure of the Contractor to accept the tendered Final Payment shall not affect completion of the Contract.

If the Contractor submits to the Engineer its written acceptance of the Final Certificate without exception or reservation, the acceptance shall contain a release signed by the Contractor in a form satisfactory to the Owner.

Upon receipt of such written approval and release, the Owner will pay the entire sum due and owing hereunder, and the Contract will be complete as of the date on which that payment is issued, subject to the provisions of 01290.5 (Payments Following Substantial Completion).

Any claims the Contractor may have that cannot be resolved with the Engineer or Owner at Final Payment will be submitted to non-binding mediation in accordance with Subsection 01360.2 (Process for the Resolution of Contract Disputes). No action of any kind arising under this Contract shall be brought before the matter at issue is submitted to non-binding mediation in accordance with Subsection 01360.2.

### **01290.9 Audits.**

All claims filed under non-binding mediation are subject to audit at any time following the filing of such claim. The audit may be performed by the Owner or by an auditor under contract with the Owner. The audit may begin on ten (10) days notice to the Contractor or its subcontractor. The Contractor, subcontractor, or supplier shall provide adequate facilities that are acceptable for such audit during normal business hours. The Contractor, subcontractor, or supplier shall make a good faith effort to cooperate with the auditors. Failure of the Contractor, subcontractor, or supplier to maintain and retain sufficient records to allow the Owner's auditor to verify all or a portion of such claim to the books and records of the Contractor, subcontractor, or supplier shall constitute a waiver of such claim and shall bar any recovery thereunder.

At a minimum, the auditors shall have available to them the following documents:

1. Daily time sheets and foreman's daily reports.
2. Insurance, welfare, and benefits records.
3. Payroll registers.
4. Earnings records.
5. Payroll tax forms.
6. Material invoices and/or requisitions.
7. Material cost distribution worksheet.
8. Equipment records (list of company equipment and rates).
9. Vendors', rental agencies', and subcontractors' contracts and invoices.
10. Subcontractors' payment certificates.
11. Canceled checks (payroll and vendors).
12. Job cost report.
13. Job payroll ledger.
14. General ledger.
15. Cash disbursements journal.
16. Financial statements for all years reflecting the operations on the Project.
17. Income tax returns for all years reflecting the operations on the Project.
18. Depreciation records on all company equipment whether such records are maintained by the company involved, or its accountant, or others.
19. If a source other than depreciation records is used to develop costs for the Contractor's internal purposes in establishing the actual cost of owning and operating equipment, all such other source documents.
20. All documents which reflect the Contractor's actual profit and overhead during the years the Project was being performed and for each of the five years before the commencement of the Project.
21. All documents related to the preparation of the Contractor's Bid including the final calculations on which the bid was based.
22. All documents that relate to each and every claim together with all documents which support the amount of damages as to each claim.
23. Worksheets used to prepare the claim establishing the cost components for items of the claim including, but not limited to, labor, benefits and insurance, materials, equipment, subcontractors, and all documents which establish the time periods, individuals involved, and the hours and rates for these individuals.

#### **01290.10 Warranty Against Defective Work.**

In addition to any other rights or remedies the Owner may have against the Contractor, its officers, employees, agents, subcontractors, fabricators, and suppliers under other provisions of the Contract Documents or as are otherwise allowed in law or equity, the following rights, remedies, and obligations are imposed by this Subsection:

1. On all Projects, all subcontractors', manufacturers', fabricators', and suppliers' warranties, express or implied, respecting any work or materials shall, at the direction of the Engineer, be enforced by the Contractor for the benefit of the Owner. The Contractor shall obtain any warranties that subcontractors, manufacturers, fabricators, and suppliers would give in normal commercial practice. If directed, the Contractor shall require any such warranty to be executed in writing to the Engineer. The Engineer may direct the Contractor to undertake litigation to enforce any warranty. Litigation directed to be brought during the life of the Contract and until three year following Acceptance (whether actually instituted within this period or not) shall be at the Contractor's expense.

2. The Contractor warrants that work performed conforms to the Contract requirements and is free of any defect of equipment, material or design furnished, or workmanship performed by the Contractor or any of its subcontractors, fabricators, or suppliers at any tier. Such warranty shall continue for a period of one year following Acceptance. Under this warranty, the Contractor shall remedy at its own expense any such failure to conform or any such defect. In addition, the Contractor shall remedy at its own expense any damage to Owner or Property Owner owned or controlled real or personal property, when that damage is the result of the Contractor's failure to conform to Contract requirements or any such defect of equipment, material, workmanship, or design. The Contractor shall also restore any work damaged in fulfilling the terms of this clause. The Contractor's warranty with respect to work repaired or replaced hereunder shall run for the greater of: (i) the balance of the original three year term or (ii) one year from the date of such repair or replacement.

The Engineer will notify the Contractor in writing of the discovery of any failure, defect, or damage. Should the Contractor fail to remedy any failure, defect, or damage described in the paragraph above, within 45 days after receipt of notice thereof, the Engineer, on the Owner's behalf, will have the right to replace, repair, or otherwise remedy such failure, defect, or damage at the Contractor's expense.

3. Notwithstanding any other provision of this Subsection, the Contractor shall not be liable, hereunder, to the extent of any defects of material or design furnished by the Owner nor for the repair of any damage that results from any such defect in Owner furnished material or design.

## **01300      Administrative Requirements**

### **01310      *Project Management and Coordination***

#### **01310.1    Assignment.**

The performance of the Contract may not be assigned, except upon the written consent of the Owner. Consent will not be granted to any proposed assignment that would relieve the original Contractor or its surety of their responsibilities under the Contract nor will the Owner consent to any assignment of a part of the Work under the Contract.

#### **01310.2    Subcontracting.**

The Contractor shall make application to the Owner, through the Engineer, of the names of persons or entities, not listed on the subcontractor utilization form, that the Contractor proposes to engage as subcontractors under this contract. The Owner will reply to the Contractor in writing promptly with any objections to the proposed person or entity. The contractor shall not contract with anyone that the Owner has made timely and reasonable objection. It is understood, however, that any consent of the Owner for the subcontracting of any Work of the Contract in no way relieves the Contractor from its full obligations for all Work under the Contract, nor the surety of its obligations under the bond. The Contractor shall at all times give its personal attention to the fulfillment of the Contract and shall keep the Work under control. The Contractor shall be responsible for all work of subcontractors which work shall conform to the provisions of the Contract Documents. The consent to the subcontracting of any part of the Work shall not be construed as an approval of the said subcontract or of any of its terms, but is to operate only as an approval of the Contractor's request for the making of a subcontract between the Contractor and its chosen subcontractor.

Application for subcontracting any part of the Work shall be made by the Contractor in writing to the Owner. The Contractor shall attach to that application a certified copy of the proposed subcontract between the Contractor and the subcontractor. After review of the application, the consent of or rejection by the Owner of the subcontracting will be provided to the Contractor in writing. Before the receipt of the written consent from the Owner, Work shall not be performed on the Project under the subcontract.

The subcontractor shall look only to the Contractor for the payment of any claims of any nature whatsoever arising out of the subcontract. Nothing contained in this Contract shall create any contractual relationship between any subcontractor and the Owner. The Contractor shall insert appropriate clauses in all subcontracts to bind subcontractors to the terms and conditions of this contract insofar as they are applicable to the work of subcontractors.

The Owner will not consent to the making of any subcontract unless the proposed subcontractor furnishes a statement to the effect that the subcontractor is acquainted with and expressly understands all of the provisions of the Contract.

### **01310.3 Commencement of Work.**

Upon execution of the Contract by the Owner, a fully executed copy together with a Notice to Proceed will be provided to the Contractor. Receipt of the executed Contract and Notice to Proceed shall constitute the Contractor's authority to enter upon the Project Area, provided the Contractor has submitted to the Owner, and the Owner has accepted and approved, the insurance certificates required under Subsection 00620 and a preconstruction conference has been held. Construction operations shall not begin until the Contractor has supplied, and the Engineer has accepted, the Progress Schedule and other certifications, forms, schedules, and any other Submittals required by the Contract Documents.

The Contractor is not entitled to additional compensation or extension of Contract Time for any delay, hindrance, or interference caused by or attributable to commencement of Work within 30 days following the Notice to Proceed.

The Contractor shall give the Engineer at least 72 hours advance notice in writing of its intention to start construction operations.

### **01310.4 Progress Schedule and Prosecution of the Work.**

Upon bid award, the Contractor should furnish a proposed Progress Schedule showing the order in which the Contractor proposes to prosecute the Work; the dates on which the various work stages, operations, and principal items of Work including procurement of materials will begin; the quantity and kinds of equipment and character of the labor force; and the contemplated dates for completing the same.

Construction operations shall not begin until the Progress Schedule has been approved. Five Working Days will be required for review and approval of progress. Once the Progress Schedule has been approved, the Contractor shall not deviate from it without first notifying the Engineer in writing.

In scheduling and executing the Work, the following shall be considered:

- 1. Mobilization and Staging.** The Contractor shall schedule the Work using such procedures and staging as may be specified in the Contract Documents. The Contractor is responsible for obtaining a construction trailer, if needed, and a site location for the trailer. The contractor shall also obtain facilities for storage of materials and equipment.
- 2. Prosecution of the Work.** The Contractor shall provide sufficient materials, equipment, and labor to guarantee the completion of the Project according to the Contract Documents and within the time set forth under Subsection 01310.10 (Time of Completion).

If the Contractor falls ten percent or more of the total project time behind the submitted schedule, the Contractor shall submit a revised schedule for approval.

Should the Contractor discontinue the prosecution of the Work for any reason, it shall notify the Engineer, in writing, before discontinuing work and at least 24 hours before resuming operations.

The Contractor shall arrange and prosecute the Work so that each successive construction operation at each location shall follow the preceding operation as closely as the requirements of the various types of construction permit to facilitate the efficient and effective completion of the Project in accordance with the Progress Schedule.

Compensation for additional expense to the Contractor and allowance of additional time for completion of the Work shall be as set forth in a Change Order or Supplementary Agreement or according to Subsection 01310.11 (Extensions and Reductions of Contract Time).

3. **Intent, Responsibility and Time.** Scheduling of construction is the responsibility of the Contractor. Therefore, it is the Contractor's responsibility to determine the most feasible order of Work commensurate with the Contractor's abilities and the Contract Documents. The requirement for the Progress Schedule is included to ensure adequate planning and execution of the Work, to assist the Engineer in appraising the Contractor's compliance with the Contract Documents, and to evaluate progress of the Work. The Progress Schedule will be used for determining extensions or reductions of Contract Time pursuant to Subsection 01310.11.

It is not intended that the Engineer, by approving the Progress Schedule, agrees that it is reasonable in all respects or that following the Progress Schedule can result in timely completion of the Project. Only the approved Progress Schedule is a part of the Contract.

If, in the preparation of the Progress Schedule, the Contractor projects a completion date that is different than that specified under Subsection 01310.10, this in no way voids the date set therein. The date as specified in that Subsection governs. Where the Progress Schedule reflects a completion date that is earlier than that specified as the Contract Time, the Engineer may approve the schedule with the Contractor specifically understanding that no claim for additional Contract Time or compensation shall be brought against the Owner as the result of failure to complete the Work by the earlier date shown on the Progress Schedule.

4. **Acceleration and Default.** If, in the opinion of the Engineer, the Contractor falls behind its Progress Schedule, and cannot complete the Work within the time prescribed under Subsection 01310.10, as modified pursuant to Subsection 01310.11, the Contractor shall take such steps as may be necessary to improve its progress. The Engineer may require the Contractor to increase the number of shifts, begin overtime operations, work extra days including weekends and holidays, or supplement its equipment and materials, and to submit for approval such supplementary schedule or schedules, as may be deemed necessary to demonstrate the manner in which the agreed rate of progress shall be regained, all at no cost to the Owner.

Failure of the Contractor to comply with the requirements of the Engineer under this Subpart is grounds for the determination that the Contractor is not prosecuting the Work with such diligence as to ensure Completion within the time specified. Upon such determination, the Engineer may terminate the Contractor's right to proceed with the Work or any separable part thereof according to Subsection 01310.14 (Temporary Suspension of Work).

5. **Types of Progress Schedules.** All Progress Schedules shall comply with the foregoing provisions of this Subsection. Regardless of the type of progress schedule used, the Contractor shall supply the Engineer with a weekly work schedule indicating the Contractor's planned work, the subcontractors' planned work, and the dates when materials are to be delivered.
6. **Cost Savings Opportunities.** During the prosecution of the Work, Contractor shall identify and present to the Engineer and Owner cost saving opportunities, if any, to reduce the Total Contract Price. To incent Contractor to diligently work to identify such opportunities, if Owner agrees to implement such opportunities, the savings actually realized by the Owner shall be shared equally by and between the Owner and Contractor, and the Total Contract Price shall be reduced accordingly. If during the prosecution of the Work, Owner identifies cost savings opportunities,

the savings actually realized from the execution thereof shall be shared by the Owner and Contractor, as the parties mutually agree, with such sharing agreement to account solely for the direct costs that Contractor has incurred and paid that the Contractor cannot receive credit, obtain reimbursement or otherwise avoid. Contractor's claim for cost sharing under this subpart shall be accompanied by sufficient documentation so that the Engineer can validate the request. Prior to Owner's execution of the Contract, Owner may identify cost saving opportunities that reduce or eliminate costs, and the Owner shall not be responsible to the Contractor for any costs and shall receive one-hundred percent of the benefit of all such pre-execution opportunities that Owner identifies, and the Total Contract Price shall be reduced accordingly.

## **01310.5 Project Meetings.**

### **1. Pre-Construction Meeting at Owner's Office**

Prior to the issuance of the Notice to Proceed, a pre-construction meeting will be coordinated by the Engineer. In attendance shall be an authorized representative of the Owner, the Engineer, and the Contractor's Project Manager. The agenda of the meeting will include without limitation, the following topics:

- Introductions;
- The Engineer's role on the Project and respective duties to the Owner and Contractor;
- Mobilization, Staging Areas, and Equipment Storage;
- Responsibility for the safety of the public;
- Working Hours;
- Coordination between contractors (if applicable);
- Discussion of structure buffers within the Project Area (if applicable);
- Notification procedures in emergencies. Preparation of list of contacts and telephone numbers for notification during emergencies;
- Municipal approvals, if any;
- Project Access Locations, and visits to each such location;
- Project schedule and procedures for written correspondence to alert of delays due to weather or other impacts outside of the Contractors controls;
- Identification of the Project Team and meeting frequency.

### **2. Weekly to Bi-Weekly Project Meetings**

During the execution of the Work, project meetings shall be held every other week with the Project Team to discuss the Project's progress. Specifically, these meetings will address the progress of the Work, with an emphasis on ensuring that the Work is consistent with the Project Plans, discussions of the Progress Schedule and any adjustments that may need to be made to the preliminary schedule prepared as part of these Specifications, Change Orders, unforeseen conditions, discussions regarding payment schedule and any other issues of concern. As the Work progresses and at the discretion of the Owner, these meetings may be extended to bi-weekly meetings. This meeting will be held at the Owner's Office or at such location as the Owner may agree.

### **3. Minutes of Meetings**

The Contractor is required to attend all meetings outlined in the Contract, or as reasonably requested by the Engineer. The Engineer shall record and maintain the Minutes of all meetings outlined in the Contract, and provide copies thereof to the parties in attendance prior to the next scheduled meeting.

#### **01310.6            Limitation of Operations.**

The Contractor shall conduct the Work at all times in such a manner and in such sequence that shall ensure the least interference with the surrounding community, pedestrian traffic, and other contractors, if any. The Contractor shall conduct Work during Standard Working Hours. If the Contractor is expecting to work hours greater than this specified time period, written permission from the Owner must be obtained prior to commencement of such work

#### **01310.7            Character of Workers, Methods, and Equipment.**

The Contractor shall at all time employ sufficient labor and equipment for prosecuting the Work to full completion in the manner and time required by the Contract Documents.

All workers shall have sufficient skill and experience to properly perform the work assigned to them. Workers engaged in special work or skilled work shall have sufficient experience in that work and in the operation of the equipment required to perform the Work satisfactorily, in accordance with the best practices in the industry.

Any person employed by the Contractor or by any subcontractor who, in the opinion of the Engineer, does not perform Work in a proper and skillful manner or is intemperate or disorderly shall, at the written request of the Engineer, be promptly removed by the Contractor or subcontractor employing the person and shall not be again employed in any portion of the Work without approval. Should the Contractor fail to remove such person or persons as required, or fail to furnish suitable and sufficient personnel for the proper prosecution of the Work, the Engineer may suspend the Work by written notice until compliance with such orders, and if so suspended and in the absence of such compliance, the Owner shall have all its rights and remedies as outlined in the Contract.

All equipment that is proposed to be used on the Work shall be of sufficient size and in such mechanical condition as to meet the requirements of the Work and to produce a satisfactory quality of Work, in accordance with best practices in the industry. Equipment used on any portion of the Project shall not cause damage to, adjacent property or the ROW for which the Contractor shall be solely responsible.

When the methods and equipment to be used by the Contractor in accomplishing the construction are not specified, the Contractor is free to use any methods or equipment that accomplishes the Work. When the use of certain methods and equipment is specified, the specified methods and equipment shall be used unless otherwise authorized according to Subsection 01451.12 (Substitutes or "Or Equal" Items).

#### **01310.8            Working Site.**

Except as otherwise provided, any space that the Contractor may require for plant, equipment, storage, or other purposes in addition to that available at the Project Area, shall be procured by the Contractor, and the cost thereof shall be borne by the Contractor with no increase to the Total Contract Price. In the event of default as set forth in Subsection 01310.16, the Owner has the right to take over and occupy such space, or cause it to be occupied, for the purpose of completing the Project, at the Contractor's expense.

#### **01310.9            Unusual Site Conditions.**

During the progress of the Work, if latent physical conditions are encountered at the Project Area differing materially from those indicated in the Contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the Contract are encountered at the site, the party discovering such conditions shall promptly notify the Engineer in writing of the specific differing conditions before they are disturbed and before the affected work is performed.

Upon written notification, the Engineer will investigate the conditions, and if the Engineer determines that the conditions materially differ and could not have been discovered by the Contractor pursuant to Subsection 00630.5 (Examination of Contract Documents and Site of Project) and if they cause an increase or decrease in the cost or time required for the performance of any work under the Contract, an adjustment, excluding loss of anticipated profits, will be made and the Contract modified in writing accordingly. The Engineer will notify the Contractor of the Engineer's determination whether or not an adjustment of the Contract is warranted. Adjustments in Contract Time will be made pursuant to Subsection 01310.11. Adjustments in compensation will be made pursuant to Subsections 00700.4, 00700.5, 00700.7, 00700.8, and 00700.10.

No Contract adjustment that results in a benefit to the Contractor will be allowed unless the Contractor has provided the required written notice herein. No Contract adjustment will be allowed under this clause for any effects caused on unchanged work.

### **01310.10 Time of Completion.**

The Contractor shall complete all or any portion of the Project called for under the Contract in all parts and requirements within the time or times for completion outlined in the Specification. Time is of the essence as to all time frames stated in the Contract Documents; therefore, all time frames shall be strictly enforced.

Contract Time is Calendar Days counting from the date of the Notice to Proceed, including all Saturdays, Sundays, holidays, and non-work days.

### **01310.11 Extensions and Reductions of Contract Time.**

- A. Basis for Extension.** Where appropriate under the provisions of this Subsection, extensions or reductions to the Contract Time may be provided by Change Order, however, such extensions or reductions will be allowed only to the extent that, the increase or decrease in the Work, or delays of the types indicated below affect current controlling operations and the overall Completion. Increases or decreases in Work or such delays that do not affect the overall Completion are not to be the basis for reduction or extension of Contract Time. Extensions of Contract Time will not be granted under this Subsection where it is determined that the Contractor could have avoided the circumstances that caused the request for extension.

If the Contractor is delayed in completion of the Work by reason of changes made under Subsection 00700.4 (Changes), or by failure of the Owner to acquire easements, permits or other approvals, or by any act of other contractors consistent with Subsection 01450.10 (Cooperation Between Contractors), or the discovery of hazardous substances, or by any act of the Engineer or of the Owner not contemplated by the Contract, an extension of Contract Time commensurate with the delay in overall completion of the Contract thus caused will be granted, and the Contractor is relieved from any claim for liquidated damages or the Engineer and inspection charges.

Additionally, the Contractor may be granted an extension of Contract Time and not be assessed liquidated damages or the costs of the Engineer and inspection for any portion of the delay in overall completion of the Work beyond the time provided in Subsection 01310.10 caused by the following reasons:

1. acts of civil or military authorities, war, or riot;
2. fire;
3. floods, tidal waves, earthquakes, cyclones, tornadoes, hurricanes, or other cataclysmic natural phenomenon;
4. extreme weather conditions;

5. epidemics or quarantine restrictions;
6. strikes or labor disputes beyond the control of the Contractor which prevent work on the construction operations which are critical to the completion of the Project;
7. shortages of materials [Subpart 01310.11(B)(1)] or freight embargoes;
8. acts of the State in its sovereign capacity;
9. failure of the Engineer to furnish interpretations of the Contract Documents [Subpart 01310.11(B)(2)].

**B. Criteria for Evaluation.** Extension of Contract Time for the reasons set forth in this Subsection will not be granted unless the Contractor has notified the Engineer in writing of the causes of delay within 5 days from the beginning of any such delay. The Engineer will evaluate the facts and the extent of the delay, and upon approval, will extend the Contract Time one day for each approved day of delay.

1. Extensions of Contract Time will not be granted for a delay caused by a shortage of materials unless the Contractor furnishes:
  - a. documentary proof that it has diligently made every effort to obtain such materials from all known sources within reasonable distance from the Work, and
  - b. further proof in the form of a supplementary Progress Schedule, as required in Subsection 01310.4, showing that the inability to obtain such materials when originally planned, did, in fact, cause a delay in completion of the Contract which could not be compensated for by revising the sequence of the Contractor's operations. The term "shortage of materials" applies only to raw and fabricated materials, articles, parts, and equipment that are standard items and does not apply to materials, parts, articles, or equipment, which are processed, made, constructed, fabricated, or manufactured to meet the specific requirements of the Contract. Only the physical shortage of materials and not the cost of materials will be considered.
2. Extensions of Contract Time will not be granted for failure of the Engineer to furnish interpretations of the Contract Documents until 10 days after receipt of such demand in writing as required by Subsection 00700.9 (Changes in Character of Work), and not then unless such request for an interpretation of the Contract Documents is reasonable and made in good faith, and the failure to respond was unwarranted.

Except where specifically provided in the Contract Documents, the Contractor shall not make any claim for damages or additional compensation for any delay in or hindrance to the performance of the Contract occasioned by any act or omission to act by the Owner or any of its representatives, or for any of the reasons enumerated in this Subsection, and agrees that any such claim shall be fully compensated for by an extension of Contract Time to complete performance of the Work.

Extensions of Contract Time will not be granted due to delays caused by, or in any way related to, the financial condition of the Contractor, subcontractors, sub-subcontractors, materialmen, fabricators, or suppliers. The Contractor and its surety assume full responsibility for ensuring that the financial condition of any of the above does not delay completion of the Contract.

If, as a result of modifications made under Subsection 00700.4, 00700.7, 00700.8, or 01310.9, the Work required is reduced or altered so that the time required for Completion is reduced, the Engineer may reduce the Contract Time provided under Subsection 01310.10. The Engineer will evaluate the facts and the extent of the reduction. The Engineer's findings thereon will be final and conclusive.

The Contractor and surety are not relieved of liability for liquidated damages or the Engineer and inspection charges for any period of delay in Completion in excess of that expressly provided for in this Subsection.

#### **01310.12 RESERVED**

#### **01310.13 Suspension of Work for Convenience of the Owner.**

The Engineer may order the Contractor, in writing, to suspend, delay, or interrupt all or any part of the Work for such period of time as the Engineer may determine to be appropriate for the convenience of the Owner.

If the performance of all or any portion of the Work is suspended, delayed, or interrupted by the Engineer in writing for an unreasonable period of time (not originally anticipated, customary, or inherent to the construction industry) and the Contractor believes that additional compensation or Contract Time or both are due as a result of such suspension, delay, or interruption, the Contractor shall submit to the Engineer in writing a request for adjustment within five (5) Calendar Days of receipt of the notice to resume Work. The request shall set forth the reasons and support for such adjustment.

Upon receipt, the Engineer will evaluate the Contractor's request. If the Engineer agrees that the cost or time or both required for the performance of the Contract have increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of the Contractor, its suppliers, or subcontractors, and not caused by weather, the Engineer will make an adjustment (excluding profit) and prepare the written modification of the Contract accordingly. The Engineer will determine and notify the Contractor whether or not an adjustment of the Contract is warranted. Adjustments in Contract Time will be made pursuant to 01310.11.

Adjustments in compensation will be made pursuant to 00700.4, 00700.5, 00700.7, 00700.8, and 00700.10.

No Contract adjustment will be considered unless the Contractor has submitted the request for adjustment within the time prescribed.

No Contract adjustment will be allowed under this clause to the extent that performance would have been suspended, delayed, or interrupted by any other cause, or for which an adjustment is provided for or excluded under any other term or condition of the Contract.

The failure of the Engineer to consider the Work suspended and to allow for an adjustment in the compensation or in the Contract Time will not bar recovery under the foregoing provisions, provided the Contractor gives written notice to the Engineer within ten (10) days of the start of the alleged suspension. The failure of the Contractor to give such notice pursuant to the provisions of this Subsection shall constitute a waiver of any and all claims and damages which would have been avoided or mitigated had such timely notice been given.

#### **01310.14 Temporary Suspension of Work.**

The Engineer has the authority to suspend the Work, wholly or in part, for such period as deemed necessary due to unsuitable weather, or for such time as deemed necessary due to the failure on the part of the Contractor to carry out orders given or to perform any provision of the Contract. The Contractor shall promptly comply with the written order of the Engineer to suspend the Work wholly or in part. The suspended work shall be resumed when conditions are favorable and methods are corrected, as ordered or approved in writing.

In the event that a suspension of Work is ordered as provided above, and should such suspension be ordered by reason of the failure of the Contractor to carry out orders or to perform any provision of the Contract; or by reason of weather conditions being unsuitable for performing any item or items of Work, which work, in the sole opinion of the Engineer, could have been performed before the occurrence of such unsuitable

weather conditions had the Contractor diligently prosecuted the Work when weather conditions were suitable; the Contractor, at its expense, shall do all the work necessary to provide a safe, smooth, and unobstructed passageway through the construction area for use by public traffic during the period of such suspension. In the event that the Contractor fails to perform the work above specified, the Owner will perform such work and the cost thereof will be deducted from any monies due or that may become due the Contractor. In the event that a suspension of Work is ordered by the Engineer due to unsuitable weather conditions and, in the sole opinion of the Engineer, the Contractor has prosecuted the Work with energy and diligence before the time that operations were suspended, the cost of providing a smooth and unobstructed passageway through the Work will be paid for as Extra Work, or, at the option of the Engineer, such work will be performed by the Owner or different Contractor working for the Owner at no cost to the Contractor.

If the Engineer orders a suspension of all of the Work or a portion of the Work, which is the current controlling operation or operations, due to unsuitable weather, the days on which the suspension is in effect are not considered Working Days on Working Day contracts. If a portion of Work at the time of such suspension is not a current controlling operation or operations, but subsequently does become the current controlling operation or operations, the determination of Working Days will be made on the basis of the then current controlling operation or operations. Similarly, on Calendar Day and specified completion date contracts, extensions of Contract Time will be granted only if the suspension affects the overall completion of the Contract and the other requirements of Subsection 01310.11 are satisfied.

If a suspension of Work is ordered by the Engineer due to the failure on the part of the Contractor to carry out orders given or to perform any provision of the Contract, the days on which the suspension order is in effect are to be considered Working Days if such days are Working Days within the meaning of the definition set forth in Subsection 00700.2 (Terms). On Calendar Day and specified completion date contracts, extensions of Contract Time will not be granted due to such suspension.

The Contractor shall have no claim for additional compensation as a result of suspension ordered for the reasons set forth in this Subsection.

#### **01310.15 Failure to Complete on Time.**

The Contractor and the Owner recognize that delay in Completion results in damages to the Owner in terms of the effect of the delay on the use of the Project, upon the convenience of the Property Owners, and also results in additional costs to the Owner for Engineer, inspection, and administration of the Contract. Because it is difficult or impossible to accurately estimate the damages incurred, and not intended as a penalty or fine but rather as an agreed-upon estimate of actual damages, the parties agree that if the Contractor fails to complete the Contract within the time stated in the Specification, or within such further time as may have been granted according to the provisions of the Contract, the Contractor shall pay the Owner liquidated damages in the amount of \$1,000 per day for each day beginning on the first day after the approved date of Completion. Such liquidated damages shall be paid for each and every day, as hereafter, defined that the Contractor is in default to complete the Contract.

#### **01310.16 Events of default.**

The following shall constitute events of default under this Agreement:

1. Contractor fails to begin the Work under the Contract within the time specified in Subsection 01310.3 (Commencement of Work); or
2. Contractor fails to perform the Work with sufficient workers and equipment or with sufficient materials to ensure its completion within the Contract Time specified, or any extension thereof; or
3. Contractor fails to complete the Contract within the Contract Time specified, as extended; or
4. Contractor performs the Work unsuitably or neglects or refuses to remove materials or to again perform such Work as may be rejected as unacceptable and unsuitable; or

5. Contractor discontinues the prosecution of the Work; or
6. Contractor fails to resume Work which has been discontinued within a reasonable time after notice to do so; or
7. Contractor becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency; or
8. Contractor allows any final judgment to stand against it unsatisfied for a period of ten (10) days; or
9. Contractor makes an assignment for the benefit of creditors; or
10. Contractor fails to acquire or maintain the required insurance; or
11. Contractor fails to comply with applicable laws and regulations governing its conduct of business in the State of New Jersey and under this Contract; or
12. Contractor is a party to fraud; or
13. Contractor for any other cause whatsoever, fails to carry out the Work in an acceptable manner;

#### **01310.17 OWNER REMEDIES UPON EVENT OF DEFAULT.**

The Engineer will give written notice to the Contractor of Event of Default under Section 01310.16 and demanding the immediate elimination of such event of default. The Contractor, shall correct said event of default within a period of ten (10) days after such notice. If the contractor fails to cure said event of default the Owner shall, in its sole discretion, have the following remedies:

- a. Issue a Notice of Default to the Contractor and Surety.
- b. Appropriate any or all materials and equipment on the site as may be suitable and acceptable and may direct the Surety to complete the Contract.
- c. Appropriate any or all materials and equipment on the site as may be suitable and acceptable and enter into an agreement for the completion of the Contract according to the terms and provisions thereof with another contractor
- d. Use such other methods required for the completion of the Contract, including completion of the Work by the Owner.

The Contractor and Surety are not relieved of the assessment of liquidated damages under Subsection 01310.15 because of the Contractor's default.

All costs and charges incurred by the Owner, together with the cost of completing the Work, will be deducted from any monies due or that may become due the Contractor and Surety. If such expense exceeds the sum that would be available from such monies, then the Contractor and the Surety shall be liable and shall pay to the Owner the amount of such excess.

The rights and remedies of the Owner herein are in addition to any other rights and remedies provided by law or under the Contract and the Bonds.

If, after notice of default under the provisions of this Subsection, it is determined for any reason that the Contractor was not in default or that the delay was excusable, the rights and obligations of the parties are the same as if the notice of termination for convenience had been issued pursuant to Subsection 01310.18.

Where the Owner's default of the Contractor pursuant to the provisions of this Subsection is found by a court to be legally improper, the Contract will be treated as if terminated for convenience pursuant to Subsection 01310.18 and such termination is to be compensated for according to provisions of Subsection 01310.18.

#### **01310.18 Termination of Contract for convenience of Owner.**

The Owner may, by written order, terminate the Contract or any portion thereof for convenience after determining that for reasons beyond the Contractor's control, the Contractor is unable to proceed with or complete the Work as contracted for, or that termination is in the Owner's interest.

Upon receipt of an Order of Termination for convenience, the Contractor shall not proceed with any item of Work that is not specified in the Order of Termination. The Contractor shall complete all items of Work specified in the termination order. Such Work shall include punch list items and all Work necessary to ensure the safety of the public, to properly secure existing work already constructed or partially constructed, and to secure the Project Area. This work so ordered shall be performed according to the Contract Documents and may include items of work not in the original Contract. The Contract shall be considered substantially complete upon completion and acceptance of all items of Work specified in the Order of Termination, except punch list items. After completion of the punch list items and all documents required by the Contract, the Contract shall terminate upon issuance of a Final Certificate and payment. The Owner reserves the right to declare in default a Contractor who fails to carry out the conditions set forth in an Order of Termination for convenience.

When the Owner orders termination of the Contract for convenience, all completed items of Work as of that date will be paid for based on the number of units completed and the Contract unit price, or for items of work performed on a lump sum basis, based on the percentage of the lump sum item of work performed. Items that are eliminated in their entirety by such termination will not be paid for.

Materials obtained by the Contractor for the Work but which have not been incorporated therein may, at the option of the Engineer, be purchased from the Contractor at actual cost delivered to a prescribed location or otherwise disposed of as mutually agreed.

Within 45 days of the effective termination date, the Contractor shall submit claims for additional costs actually incurred not covered above or elsewhere in the Specifications. Such claims may only include 1) reasonable mobilization efforts, 2) subcontractor costs not otherwise paid for, and 3) guaranteed payments for private land usage as part of the original Contract. Claims shall not include lost profits or expectation profits from work eliminated by the termination for convenience.

In terminating a Contract pursuant to this Subsection:

1. The Contractor shall make cost records available to the extent necessary to determine the validity and amount of each item for which it seeks compensation.
2. The Contractor shall not be relieved of contractual responsibilities for the Work completed, nor shall the surety be relieved of its obligations for and concerning any just claim arising out of the Work performed.
3. The Contractor shall, if so directed by the Engineer, remove promptly any or all of its equipment and supplies from the Project Area or other property of the Owner. If the Contractor fails to remove the equipment and supplies as directed, the Engineer may remove such equipment and supplies at the expense of the Contractor.

#### **01310.19 TERMINATION OF CONTRACT FOR CAUSE.**

The Owner may also, by written order, terminate the Contract or any portion thereof for cause after determining that reasons for default as stated in Subsection 01310.16 exist. The decision whether to terminate for cause or declare the Contractor in default will be made in the sole discretion of the Owner acting in its own best interest. Before the issuance of an Order of Termination for cause, the Engineer will give written notice to the Contractor and Surety of the causes for the proposed termination. The notice will demand the elimination of such causes.

If the Contractor or Surety, within a period of ten days after such notice, does not proceed in accordance therewith, the Owner may terminate the Contract for cause.

The Order of Termination for cause will terminate the Contractor's right to proceed with any items of Work except as specified in the termination order. Such work will include punch list items and all work necessary to ensure the safety of the public, to properly secure existing work already constructed or partially constructed, and to secure the Project Area. This work so ordered shall be performed according to the Contract Documents and may include such items of Work not in the original Contract. Substantial Completion shall occur when all Work specified in the termination order, except for punch list items, is complete and accepted by the Engineer. After the completion of all punch list items and all documents required by the Contract, the Contract shall terminate upon issuance of a Final Certificate and payment.

When the Owner terminates the Contract for cause, all completed items of Work as of that date will be paid for at the Contract price. Payment for partially completed work will be made based on the unit prices or portion thereof provided that such payment does not exceed the Contract price of the Pay Item under which the Work was performed. Items that are eliminated in their entirety by such termination will not be paid for. No other costs will be allowed to the Contractor.

In terminating a Contract for cause, the Owner does not waive its right to sue the Contractor for any costs incurred by the Owner as a result of the termination, including the additional costs of completing the Project. The Owner reserves the right to declare in default a Contractor who fails to carry out the conditions set forth in an Order of Termination for cause.

Where the Owner's termination of the Contract for cause pursuant to the provisions of this Subsection is found by a court to be legally improper, the termination of the Contract for cause will be treated as if it had been a termination for convenience, and such termination is to be compensated for according to the provisions of this Subsection governing terminations for convenience.

In terminating a Contract pursuant to this Subsection:

1. The Contractor shall make cost records available to the extent necessary to determine the validity and amount of each item for which it seeks compensation.
2. The Contractor shall not be relieved of contractual responsibilities for the Work completed, nor shall the surety be relieved of its obligations for and concerning any just claim arising out of the Work performed.
3. The Contractor shall, if so directed by the Engineer, remove promptly any or all of its equipment and supplies from the Project Area or other property of the Owner. If the Contractor fails to remove the equipment and supplies as directed, the Engineer may remove such equipment and supplies at the expense of the Contractor.

## **01330 Submittals RESERVED**

### **01360     *Additional Legal Provisions***

#### **01360.1   Legal Jurisdiction and Governing Law.**

Any action or proceeding arising hereunder shall be brought in the Courts of the State of New Jersey; provided, that if any such action or proceeding arises under the Constitution, the laws or treaties of the United States of America, or if there is a diversity of citizenship between the parties hereto, so that it is to be brought in a United States District Court, it shall be brought in the United States District Court for the District of New Jersey or any successor court thereto.

This Contract shall be governed by the laws of the State of New Jersey.

### **01360.2 Process for the Resolution of Contract Disputes.**

In an effort to resolve any conflicts that arise during the construction of the Project or following the completion of the Project, before any action or proceeding is commenced, the Contractor and Owner agree that all disputes between them arising out of or relating to this Contract or the Project shall be submitted to nonbinding mediation unless the parties mutually agree otherwise. The parties agree to use a professional mediator from the American Arbitration Association, the International Institute for Conflict Prevention and Resolution (CPR Institute), or like organization selected by agreement or, absent agreement, through selection procedures administered by the CPR Institute. Within a period of forty-five (45) days after the request for mediation, the parties agree to convene with the Mediator, with business representatives present, for at least one session to attempt to resolve the dispute. In no event shall mediation delay commencement of an action or proceeding for more than 70 days, absent agreement of the parties, or interfere with the availability of emergency relief.

The Contractor and Owner further agree to include a similar mediation provision in all agreements with independent contractors and consultants retained for the Project and to require all independent contractors and consultants also to include a similar mediation provision in all agreements with their subcontractors, sub-consultants, suppliers and fabricators, thereby providing for mediation as the primary method for dispute resolution between the parties to all those agreements. All parties agree that they can be joined as a party in any mediation proceedings conducted pursuant to this Subsection.

### **01360.3 Laws to be Observed.**

The Contractor shall keep fully informed of all Federal, State, and local laws, ordinances, and regulations, and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on the Work, or which in any way affect the conduct of the Work. The Contractor shall at all times observe and comply with, and shall cause its agents and employees to observe and comply with, all such laws, ordinances, regulations, orders, and decrees and shall defend, protect, indemnify and save harmless the Owner, the Casino Licensee, and their respective members, directors, officers, and employees against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by the Contractor or the Contractor's agents or employees, subcontractors of any tier, suppliers, or materialmen. If any discrepancy or inconsistency is discovered between the Contract Documents and any such law, ordinance, regulation, order, or decree, the Contractor shall immediately report the same to the Engineer in writing.

### **01360.4 Permits, Licenses, and Taxes.**

The Contractor shall procure all permits, grants, and licenses, pay all charges, fees, and taxes, and give all notices necessary and incidental to the due and lawful prosecution of the Work except where the Owner has procured such permits, grants, or licenses for temporary or permanent construction. The Contractor shall advise the issuing agency or party of its proposed operations and obtain their cooperation and such supplemental permission as may be necessary. Before submitting its bid, the Contractor should obtain from the Owner all available information on the permits, grants, and licenses the Owner has obtained. Charges incurred by the Contractor for permits, grants, and licenses in connection with the Work shall be paid by the Contractor and shall be included in the Total Contract Price.

### **01360.5 Patented Devices, Materials, and Processes.**

If any design, device, material or process covered by letters of patent or copyright is used in the Work, the Contractor shall provide for such use by suitable legal agreement with the patentee or owner. The Contractor shall assume all costs arising from the use of patented materials, equipment, devices, or processes used on or incorporated in the Work. The Contractor shall defend, indemnify, and save harmless the Owner, the Casino Licensee, any affected third party, or political subdivision (the "Indemnitees") from any and all claims for infringement by reason of the use of any such patented design, device, material, or process, or any trademark or copyright, and shall indemnify the Indemnitees for any costs, expenses, and

damages which it may be obliged to pay by reason of an infringement, at any time during the performance of the Work or after Acceptance.

#### **01360.6 Public Convenience and Safety.**

The Contractor shall at all times conduct the Work to ensure the least possible obstruction to traffic in right-of-ways. The safety and convenience of the general public along the Project Area, and the protection of persons and property shall be provided for as specified under applicable laws and regulations.

The Contractor shall exercise precaution at all times for the protection of persons and property. The safety provisions of applicable laws, OSHA regulations, international building and construction codes, and the rules and regulations of the New Jersey Department of Labor shall be observed at all times.

#### **01360.7 Barricades and Warning Signs.**

In public right-of-ways, the Contractor shall provide, erect, and maintain all necessary barricades, suitable and sufficient lights, danger signals, signs, and other devices according to applicable laws and regulations, and shall take all necessary precautions for the protection of the Work and safety of the public. Within the Project Area, the Contractor shall take all necessary precautions to mitigate public access during non-working hours.

#### **01360.8 RESERVED**

#### **01360.9 Independent Contractor.**

The relationship of the Contractor to the Owner is that of an independent contractor, and Contractor, according to its status as an independent contractor, covenants and agrees that it shall conduct itself consistent with such status, that it shall neither hold itself out as nor claim to be an officer or employee of the Owner by reason hereof. The Contractor shall not, by reason hereof, make any claim, demand, or application to or for any right or privilege applicable to an officer or employee of the Owner, including, but not limited to, workers compensation coverage, unemployment insurance benefits, social security coverage, or retirement membership or credit.

#### **01360.10 Third Party Beneficiary Clause.**

It is specifically agreed between the parties executing the Contract that no provision of the Contract is intended to make the public or any member thereof a third party beneficiary hereunder, or to authorize anyone not a party to the Contract to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of the Contract.

It is the further intent of the Owner and the Contractor in executing the Contract that no individual, firm, corporation, or any combination thereof, that supplies materials, labor, services, or equipment to the Contractor for the performance of the Work becomes thereby a third party beneficiary of the Contract.

#### **01360.11 Assignment of Contract Funds and Claims.**

The Contractor shall not transfer or assign to any party any contract funds, due or to become due, or claims of any nature it has against the Owner, without the written approval of the Owner having first been obtained.

#### **01360.12 Risks Assumed by the Contractor.**

The Contractor assumes the following distinct and several risks, whether they arise from acts or omissions, whether negligent or not, of itself, its subcontractors, suppliers, materialmen, employees, agents, and all others working for the Contractor on the Project, and whether such risks are within or beyond the control of the Contractor as described in Subparts 1 through 4 below. The risks are as follows:

1. **Risks of Loss or Damage to the Permanent Construction.** Until Acceptance, and within the limits of the Project Area, the Contractor shall bear the risk of all loss or damage to all permanent construction and temporary construction performed under this Contract and to materials, whether or not it has received payment for such construction or materials. The Contractor shall take every precaution, as allowed by the Contract against injury or damage to any part of the construction or to materials and equipment by the action of the elements, the traveling public, vandalism, or from any other cause, whether arising from the execution or the non-execution of the Work. The Contractor shall promptly repair, replace, and make good any such damage or loss without cost to the Owner. The Contractor shall not bear such risk of loss or damage, which arises from acts of war or floods, tidal waves, earthquakes, cyclones, tornadoes, hurricanes, or other cataclysmic natural phenomenon unless such loss or damage is covered by insurance.

The Contractor shall, in furtherance of the above paragraph, but not by way of limitation, at the Contractor's expense, erect such temporary structures where necessary to protect the Work from damage. The Contractor shall assume the risks for failure to take such actions.

In case of suspension of the Work from any cause whatever, the Contractor shall continue to be responsible for the Project as provided above and shall take such precautions as may be necessary to prevent damage to the Project, and shall erect any necessary temporary structures, signs, or other facilities. If ordered by the Engineer, the Contractor shall properly store, during such suspension of the Work, materials which have been partially paid for or furnished by the Owner. The Owner will be entitled to the possession of such materials, and the Contractor shall promptly return the same to the Project site when requested. The Contractor shall not dispose of any of the materials so stored except on written authorization. The Contractor shall be responsible for the loss of or damage to such materials.

2. **Risks of Claims on Account of Injury, Loss, or Damage.** The Contractor shall bear the risk of claims, just or unjust, by third persons, including, without limitation, the Property Owners, made against the Contractor or the Owner, on account of injuries (including wrongful death), loss, or damage of any kind whatsoever arising or alleged to arise out of or in connection with the performance of the Work, except if the injury, loss or damages is caused by or results from the sole negligence of the Owner. The risk of claims, whether or not actually caused by or resulting from the performance of the Work or out of or in connection with the Contractor's operations or presence at or in the vicinity of the Project Area or Owner premises, whether such claims are made and whether such injuries, loss, and damages are sustained, applies at any time both before and after Acceptance.
3. **Risks of Loss to Property of Those Performing the Work.** The Contractor shall bear the risk of loss or damage to any property of the Contractor, and of claims made against the Contractor or the Owner for loss or damage to any property of subcontractors, materialmen, workers, and others performing the Work, and to Property Owners or Tenants. Said risk occurs at any time before completion of removal of such property from the Project Area or the Owner's premises, or the vicinity thereof.
4. **Risks of Claims Related to the Contractor's Safety and Health Program.** The Contractor shall bear the risk of any action from or alleged to arise from the Contractor's Safety and Health Program.

The Contractor shall indemnify and save harmless the Owner from any and all claims or alleged claims described in Subsections 2, 3, and 4 herein-above, and for all expense incurred by the Owner in the defense, including legal and related costs, settlement, or satisfaction thereof. If so directed, the Contractor shall at its own expense defend against such claims, in which event it shall not, without obtaining express advance

permission from the Owner, raise any defense involving in any way jurisdiction of the tribunal, immunity of the Owner, or the provisions of any statutes respecting suits against the Owner.

The provisions of this Subsection are also for the benefit of the Casino Licensee, and all officers, agents, and employees of the Owner and Casino Licensee so that they have all the rights which they would have under this Subsection if they were named at each place under this Subsection at which the Owner is named, including a direct right of action against the Contractor to enforce the foregoing indemnity.

Neither Acceptance nor the making of final payment releases the Contractor from its obligations under this Subsection. Moreover, neither the enumeration in this Subsection nor the enumeration elsewhere in this Contract of particular risks assumed by the Contractor or of particular claims for which it is responsible shall be deemed:

1. To limit the effect of the provisions of this Subsection or of any other provision of the Contract relating to such risks or claims, or
2. To imply that the Contractor assumes or is responsible for risks or claims only of the type enumerated in this Subsection or in any Contract, or
3. To limit the risks that the Contractor would assume or the claims for which the Contractor would be responsible in the absence of such enumerations.

The Contractor expressly understands and agrees that any insurance protection required by the Contract, or otherwise provided by the Contractor, in no way limits the Contractor's responsibility to defend, indemnify, and save harmless the Owner as herein provided. Such insurance requirements are designed to provide greater assurance to the Owner that the Contractor is financially able to discharge its obligations under this Subsection and as to the risks assumed elsewhere in the Contract, and are not in any way construed as a limitation on the nature and extent of such obligations.

#### **01360.13 Personal Liability of Officers, Members and Agents of Owner.**

As between the Contractor and Owner, there shall be no liability upon the members, directors, officers, employees, and any other designated agent or representative, either personally or as officials of the Owner in carrying out any of the provisions of the Contract nor in exercising any power or authority granted to them by or within the scope of the Contract, it being understood that in all such matters they act solely as agents and representatives of the Owner.

#### **01360.14 Recovery of Monies by the Owner.**

Whenever it is provided in the Contract Documents that the Owner or Engineer is to withhold or deduct money from any monies due or that may become due the Contractor, or that the Contractor is to pay or return monies for any reason, or that the Owner or Engineer can charge against the Contractor certain costs or assessments, or that the Owner or Engineer can recover any sum for any reason from the Contractor, it is understood that the Owner has available to it any monies due or that may become due the Contractor under the Contract and on other contracts between the Contractor and the Owner. Such other contracts shall include joint ventures in which the Contractor is a participant but only to the extent of its participation. The right to recover against the Contractor as herein provided is in addition to and does not affect the right of the Owner to seek recovery against the Contractor or Surety under the Contract, bonds, or as otherwise allowed by law. The Engineer shall provide the Contractor with sufficient documentation to reasonably outline the basis for such withholding or deduction prior to the Owner withholding or deducting any such sums, as provided under the Contract.

#### **01360.15 No Waiver of Legal Rights.**

Notwithstanding any other provision of the Contract and provided that the Owner has conducted a diligent review of Contractor invoices during the prosecution of the Project, for a period of six months after Acceptance, all estimates and payments made pursuant to Section 01200, including the Final Certificates and Final Payment, are subject to correction and adjustment for clerical or other errors in the calculations

involved in the determination of quantities and payments. The Contractor and the Owner agree to pay to the other any sum due under the provisions of this Subsection, provided, however, if the total sum to be paid is less than \$100, payment will not be made.

A waiver on the part of the Owner of any breach of any part of the Contract is not to be held as a waiver of any other or subsequent breach.

The Contractor, without prejudice to the terms of the Contract, shall be liable to the Owner at any time both before and after Acceptance for latent defects, fraud, such gross mistakes as may amount to fraud, or actions affecting the Owner's rights under any warranty or guarantee.

#### **01360.16 Limitations of Liability.**

In any event, whether under the provisions of the Contract, as a result of breach of contract, tort (including negligence), or otherwise, the Owner and the Contractor will not be liable to each other for any special, consequential, incidental, or penal damages including, but not limited to, loss of profit or revenues, loss of rental value for contractor-owned equipment, damages to associated equipment, cost of capital, or interest of any nature, loss of use, loss of business, loss of reputation, loss of management or employee productivity or of the services of such persons, principal office expense including the compensation of personnel stationed there, and loss of financing. Nothing in this Subsection shall be deemed to preclude an award of liquidated direct damages, when applicable, in accordance with the requirements of the Contract Documents. Nothing in this Subsection shall be deemed to preclude or limit in any way the Contractor's liability for direct or indirect claims for injury, loss or damages of any kind whatsoever asserted by third party owners of property adjacent to or in the Project Area, including, without limitation the Property Owners, except if the claimed injury, loss or damage is caused by or results from the sole negligence of the Owner.

#### **01360.17 RESERVED**

### **01400 Quality Requirements**

#### ***01420 References***

All materials, products and work methods shall meet industry best practice standards and applicable regulatory requirements of contractors performing similar work in the State of the New Jersey.

#### ***01450 Quality Control - Work***

##### **01450.1 Authority of the Engineer.**

The Engineer will decide all questions that may arise as to the quality and acceptability of the Work and as to the rate of progress of the Work, all questions that may arise as to the interpretation of the Contract Documents, all questions as to the acceptable fulfillment of the Contract on the part of the Contractor, and all questions as to compensation. All questions as to the interpretation of the Contract Documents shall be submitted to the Engineer in writing.

The Engineer has the authority to suspend the Work wholly or in part pursuant to 01310.13 or 01310.14 and to suspend partial payments under Subsection 01290.3 due to the failure of the Contractor to correct conditions unsafe for the workers or the general public, for failure to carry out provisions of the Contract, or for failure to carry out orders. The Engineer may also suspend the Work wholly or in part for such periods as deemed necessary due to unsuitable weather, for conditions considered unsuitable for the prosecution of the Work, or for any other condition or reason deemed to be in the Owner's interest.

##### **01450.2 Communications.**

Unless otherwise directed, all communications with the Owner shall be sent to the Engineer. Where communications are directed to persons other than the Engineer, a clear copy shall be sent to the Engineer.

### **01450.3 Plans and Specifications.**

The Plans consist of general drawings and show such details as are necessary to give a comprehensive idea of the construction contemplated. The Contractor shall keep one set of Plans available on the Project site at all times. All alterations affecting the requirements and information given on the Plans will be authorized in writing.

Omissions from the Plans or Specifications of details of Work which are manifestly necessary to carry out the intent of the Contract Documents, or which are customarily included, shall not relieve the Contractor from including such omitted details of Work, but they shall be included as if fully and correctly set forth and described.

The Contractor will receive two (2) copy of the latest Project Manual and three (3) sets of Drawings.

### **01450.4 Reserved.**

### **01450.5 Conformity with Contract Documents.**

In the event the Engineer finds the Work not in conformance with the Contract Documents but that reasonably acceptable Work has been produced, the Engineer will determine if the Work is to be accepted and remain in place. In this event, the Engineer will document the basis of the acceptability of the Work and provide for an appropriate adjustment in the contract price for such Work as deemed necessary. If an appropriate adjustment cannot be negotiated, the Work shall be removed and replaced or otherwise corrected at no cost to the Owner.

In the event the Engineer finds the Work not in conformance with the Contract Documents, resulting in an inferior or unsatisfactory product, the Work shall be removed and replaced or otherwise corrected at no cost to the Owner.

Neither the observations of the Engineer in the administration of the Contract, nor inspections, tests, or approvals by persons other than the Contractor relieve the Contractor from its obligation to perform the Work according to the Contract Documents.

### **01450.6 Special Inspection, Testing, or Approval.**

Whenever the Engineer considers it necessary or advisable to ensure the proper implementation of the Contract Documents, the Engineer has authority to require special inspection or testing of the Work in addition to that required elsewhere in the Contract Documents, whether or not such Work is then fabricated, installed, or completed. However, neither the Engineer's authority to act under this Subsection, nor any decision made by the Engineer either to exercise or not to exercise such authority, creates a duty or responsibility of the Engineer to the Contractor, any subcontractor, or any of their agents or employees performing any of the Work.

If after commencement of the Work the Engineer determines that any Work requires special inspection, testing, or approval not provided for elsewhere in the Contract Documents, the Engineer will perform such inspection, testing, or approval using Owner facilities, by contracting with others for such services, or by instructing the Contractor by Construction change directive to order special inspection, testing, or approval.

If such special inspection or testing reveals a failure of the Work to comply with the requirements of the Contract Documents or, with respect to the performance of the Work, with laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction, the Contractor shall bear all costs thereof, including the Engineer's additional services made necessary by such failure. If tests reveal no such failure, the Owner will bear such costs, and a Supplementary Agreement will be negotiated.

#### **01450.7 Coordination of Contract Documents.**

The Contract Documents are essential parts of the Contract, and a requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a functionally complete Project.

In case of discrepancy, calculated dimensions will govern over scaled dimensions; Specifications will govern over Plans. Division 1 and Division 2 terms and conditions in the Contract will prevail over conflicting Division 1 and Division 2 terms and conditions contained in the Plans.

As the Work progresses, it is anticipated that the Contractor shall frequently request information from the Engineer relative to the interpretation and coordination of the Contract Documents. Such applications shall be in writing. Should it appear that the Work to be done or any of the matters relative thereto are not sufficiently detailed or explained in the Contract Documents, the Contractor shall request from the Engineer such further explanations as may be necessary and shall conform to them as part of the Contract.

Both parties realize that in performing the Work, field conditions may require modifications in the Plans and quantities of Work involved. Work under all Pay Items must be carried out to meet these field conditions to the satisfaction of the Engineer and according to its directions and the Contract Documents.

The Contractor shall not take advantage of any apparent error or omission in the Contract Documents. In the event the Contractor discovers any discrepancy, error, or omission in the Plans, Specifications, or other Contract Documents, or if there is any doubt or question as to the intent or meaning of the Plans, Specifications, or other Contract Documents, the Contractor shall immediately notify the Engineer in writing. The Engineer will promptly make, in writing, such corrections and interpretations as deemed necessary.

#### **01450.8 Cooperation by Contractor.**

The Contractor shall give the Work the constant attention necessary to facilitate the progress thereof, and shall cooperate with the Engineer, the Engineer's inspectors, and other contractors in every way possible.

When the Contractor is comprised of two or more persons, firms, partnerships, or corporations functioning on a joint venture basis, said Contractor shall designate in writing, before starting Work, the name of one individual who shall have the authority to represent and act for the joint venture.

The Contractor shall designate in writing before starting Work, a competent, English-speaking superintendent capable of reading and thoroughly understanding the Contract Documents, and thoroughly experienced in the type of construction being performed. The superintendent shall have the authority to represent and act for the Contractor. An alternate to the superintendent, with equal authority and qualifications, may also be designated.

The superintendent or the alternate shall be present at the site of the Project at all times while Work is actually in progress on the Contract irrespective of the amount of Work subcontracted. The superintendent or the alternate shall have full authority to execute orders or direction from the Engineer, without delay, and to promptly supply such materials, equipment, tools, labor, and incidentals as may be required. When Work is not in progress and during periods when Work is suspended, arrangements acceptable to the Engineer shall be made for any emergency Work that may be required.

Whenever the superintendent or the alternate is not present on the site or at the location of any particular part of the Work where it may be desired to give direction, the Engineer may suspend all of the Work or

the particular Work in reference until the superintendent or the alternate is present. Such suspension shall not be the basis of any claim against the Owner.

**01450.9            RESERVED.**

**01450.10 Cooperation Between Contractors.**

The Owner reserves the right at any time to contract for and perform other or additional work in, on or near the Project Area.

When separate contracts are let within the limits of the Project Area, or in areas adjacent thereto, the Contractor shall conduct its Work so as not to interfere with or hinder the progress or completion of the work being performed by other contractors. Moreover, the Contractor assumes the positive obligation of cooperating with such other contractors and coordinating its activities with theirs. If there is a difference of opinion as to the respective rights of the Contractor and others doing work within the limits of or adjacent to the Project Area, the Engineer will decide as to the respective rights of the various parties involved in order to secure the completion of the Owner's Work in general harmony and in a satisfactory manner. The decision of the Engineer is final and binding and is not cause for claims by the Contractor for additional compensation.

The Contractor shall assume all liability, financial or otherwise, in connection with its Contract, and, provided that Owner affords reasonable access to the Project Area during the Contract Time, hereby waives any and all claims against the Owner for additional compensation that may arise because of inconvenience, delay, or loss experienced by it because of the presence and operations of other contractors working within the limits of or adjacent to the Project Area.

The Contractor shall arrange its Work and shall place and dispose of the materials being used so as not to interfere with the operation of the other contractors within the limits of the Project Area or adjacent thereto. The Contractor shall join its Work with that of the others in an acceptable manner and shall perform it in proper sequence to that of the others.

The Contractor is not responsible for damage to Work performed on the Contract or on other contracts within or adjacent to the site of the Project that may be caused by or on account of the work of other contractors. The Contractor is responsible for any damage done or caused by its Work or forces to the work performed by other contractors within or adjacent to the site of the Project, and the Contractor shall repair or make good any such damage in a manner satisfactory to the Engineer and at no cost to the Owner.

The provisions of this Subsection also apply to utilities and their contractors working in the Project Area or adjacent thereto.

**01450.11            RESERVED.**

**01450.12 Authority and Duties of the Engineer.**

As the direct representative of the Owner, the Engineer has immediate charge of the technical details of the Project. The Engineer is responsible for the administration of the Contract. This responsibility includes the authority to reject defective material and to suspend any or all of the Work according to Subsection 01310.13 and 01310.14.

**01450.13 Duties of the Inspector.**

Inspectors employed by the Engineer are authorized to inspect all Work. Such inspection may extend to all or any part of the Work and to the preparation, fabrication, or manufacture of the materials to be used. The inspector is not authorized to alter or waive the provisions of the Contract. The inspector is not authorized to issue instructions contrary to the Contract Documents or to act as foreman for the Contractor; however, the inspector has the authority to reject Work subject to confirmation by the Engineer.

**01450.14 Inspection of Work.**

Each part or detail of the Work is subject to inspection by the Engineer. The Engineer shall be allowed access to all parts of the Work and shall be furnished with such information and assistance by the Contractor as is required to make a complete and detailed inspection. When the Engineer is in or about the site of the Work in the course of its duties, the Engineer is deemed conclusively to be an invitee of the Contractor. If the Contractor is not the owner of the place where fabrication, preparation, or manufacture is in progress, the owner thereof shall be deemed to be the agent of the Contractor with respect to the obligation assumed hereunder. The Contractor or its agent shall be responsible for the payment of claims for injuries to the Engineer due to negligence on the part of the Contractor or its agent.

At the direction of the Engineer, the Contractor, at any time before Acceptance, shall remove or uncover specified portions of the finished Work that the Engineer had previously inspected. After examination, the Contractor shall restore said portions of the Work to the standard required by the Contract Documents. Should the Work so exposed or examined prove acceptable, the uncovering, or removing, and the replacing of the covering, or making good of the parts removed, will be paid for as Extra Work; however, should the Work so exposed or examined prove unacceptable, the uncovering, or removing, and the replacing of the covering, or making good of the parts removed, will be at no cost to the Owner.

The Engineer may order any Work done without the Engineer's inspection to be removed and replaced at the Contractor's expense. Payment for the Work will be made and the uncovering, or removing, and the replacing of the covering, or making good of the parts removed, of the un-inspected Work will be paid for as Extra Work only if all of the following conditions are met:

1. The Work removed, uncovered, and/or replaced proves to have been acceptable according to the Contract Documents; and
2. The Contractor gave reasonable notice in writing to the Owner that the un-inspected work was to be performed; and
3. The Contractor, in performing the un-inspected work, did not do so in the face of a directive from the Owner that such work not be performed.

The Contractor is responsible for carrying out the provisions of the Contract at all times and for control of the quality of the Work regardless of whether an authorized inspector is present or not. This obligation to perform the Work according to the Contract Documents is not relieved by the observations of the Engineer in the administration of the Contract, nor by inspections, tests, or approvals by others. Work not meeting the Contract requirements shall be made good, and unsuitable Work may be rejected, notwithstanding that such Work had been previously inspected and approved by the Engineer or that payment therefor has been included in a monthly estimate certificate.

#### **01450.15 Removal of Unacceptable and Unauthorized Work.**

All Work that does not conform to the requirements of the Contract is unacceptable unless otherwise determined acceptable under the provisions in Subsection 01450.5 (Conformity with Contract Documents). Unacceptable Work, from any cause, found to exist before Acceptance, shall be remedied in an acceptable manner at no cost to the Owner

Work done contrary to the instructions of the Engineer, or any Extra Work done without authority is considered as unauthorized and will not be paid for under the provisions of the Contract. Work so done may be ordered remedied at no cost to the Owner.

If the Contractor fails to comply promptly with any order of the Engineer made under the provisions of this Subsection, the Engineer will have authority to cause unacceptable Work to be remedied by others and to deduct the costs thereof from any monies due or that may become due the Contractor.

#### **01450.16 Load Restrictions.**

Within or on Roadways used for transportation of Equipment the operation of Equipment of such weight or so loaded as to cause damage to structures or the Roadway or to any other type of construction will not be permitted. In no case shall legal load limits be exceeded when Equipment is used for hauling to and from the Project Area unless permitted in writing by the appropriate governmental authorities. The Contractor shall be responsible for all damage done by it or its subcontractors' hauling Equipment.

Without limiting any other obligation set forth in the Contract, the Contractor shall be solely responsible for complying with legal load limits.

If the Engineer becomes aware of repeated violations of roadway load limits, the Engineer may suspend operations until the condition is remedied to the satisfaction of the Engineer. The Owner may not make payment for any Materials in excess of the legal truck load limit.

#### **01450.17 Maintenance During Construction.**

Except as provided for below, the Contractor shall be responsible for maintenance within the Project Area until Acceptance. This maintenance shall consist of continuous and effective work prosecuted day by day, with adequate Equipment and forces to the end that the Project Area, surroundings, Roadways, shall be kept in satisfactory condition at all times.

On any section of haul route used on paved or unpaved roadways, whether provided for in the Contract Documents or opened as directed, any damage to the roadways due to the Contractor's operations shall be repaired at no cost to the Owner. Nothing in this Subsection shall be construed to limit or change the risks assumed by the Contractor pursuant to 01360.12.

#### **01450.18 Failure to Maintain Project Area and Surroundings.**

If the Contractor at any time fails to comply with the provisions of Subsection 01450.17, the Engineer will immediately notify the Contractor of such noncompliance. If the Contractor fails to remedy unsatisfactory maintenance within 24 hours after receipt of such notice, the Engineer may proceed to maintain the Project and deduct the entire cost of this maintenance from any monies due or that may become due the Contractor.

#### **01450.19 Partial Acceptance.**

If at any time during the prosecution of the Project the Contractor completes a unit or portion of the Project, the Contractor may request the Engineer to make final inspection of that unit. If the Engineer finds upon inspection that the unit has been satisfactorily completed in compliance with the Contract, the Engineer may accept that unit as being completed, and the Contractor may be relieved of the responsibility of doing further Work on or maintaining that unit or portion of the Project. The Engineer reserves the right to reject the request made by the Contractor, if the Engineer determines that the unit or portion of the Project should not be the subject of a partial acceptance. Such partial acceptance shall in no way void or alter any of the terms of the Contract, including Subsections 01360.12 (Risks Assumed by the Contractor) and Subsection 00620 (Insurance), nor shall it be construed as relieving the Contractor of full responsibility for making good defective work or materials found at any time before Acceptance pursuant to Subsection 01450.21 (Completion and Acceptance).

#### **01450.20 Substantial Completion.**

When the Contractor determines that the Work is substantially complete, the Contractor shall prepare a written notice thereof for submission to the Engineer listing the items remaining to be completed or corrected. The failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work according to the Contract Documents. If the Engineer determines that the Work is substantially complete, the Engineer will then prepare a letter which states the date of Substantial Completion and establishes a reasonable time within which the Contractor shall perform the final cleanup and repair unacceptable Work, which time may be before Contract Time as modified. The letter will be submitted to the Contractor for its prompt compliance therewith.

If, however, the inspection discloses that the Work is not substantially completed to the Engineer's satisfaction, the Engineer will give the Contractor the necessary instructions for completion and correction of same, and the Contractor shall immediately comply with and execute such instructions. Upon completion and correction of the Work, the Contractor shall re-notify the Engineer and another inspection will be made.

#### **01450.21 Completion and Acceptance.**

Upon receipt by the Engineer of written notice from the Contractor that the Work has reached Completion and is ready for final inspection and Acceptance, the Engineer will promptly make such inspection. When such inspection indicates that the Work is in compliance with the Contract, the Engineer will promptly begin the process to issue a Certificate of Completion stating that, to the best of the Engineer's knowledge, information, and belief, and on the basis of observations and inspections, the Work has been completed according to the terms and conditions of the Contract. If, however, the final inspection discloses that the Work has not reached Completion, the Engineer will give the Contractor the necessary instructions for the correction of deficiencies, and the Contractor shall immediately comply with and execute such instructions. Upon correction of the deficiencies, the Contractor shall re-notify the Engineer, and another inspection will be made. This procedure is to be repeated until a Certificate of Completion is issued.

At the request of the Contractor, the Engineer may issue a Certificate of Completion without receiving all required documents, certificates, or proofs of compliance. The Contractor's request must satisfactorily establish that the Contractor could not reasonably and in good faith provide some of the required documents, certificates, or proofs of compliance at a time contemporaneous with Completion and with the Project being ready for use by the Property Owners to the degree contemplated by the Contract. In such instances where a Certificate of Completion is issued, the Contractor shall expeditiously attempt to provide the exempted document, certificate, or proofs of compliance. Final payment will not be made, however, until all such documents, certificates, and proofs of compliance have been satisfactorily executed and delivered to the Engineer.

The Certificate of Completion is issued establishing Completion as of the date of the notice or re-notice from the Contractor. If the Owner concurs in the Certificate of Completion, the Contractor will be notified of Acceptance and the date thereof.

After Acceptance, the Contractor is relieved of the duty of maintaining and protecting the Work as a whole, and is not required to perform any further Work thereon. In addition, the Contractor is relieved of its responsibility for damage to the Work that may occur after Acceptance. However, nothing herein shall be construed to limit the provisions of 01360.12 (Risks Assumed by the Contractor), 00620 (Insurance), 01360.15 (No Waiver of Legal Rights), and 01290.10 Warranty Against Defective Work).

#### **01451      *Quality Control - Materials***

##### **01451.1 Source of Supply and Quality Requirements.**

All Materials for the Project shall be furnished by the Contractor and shall be new, unless otherwise specifically prescribed in the Contract Documents. The Materials shall conform to the requirements of the Contract Documents and shall be from approved sources. Only Materials that have been approved by the Engineer shall be used.

Within 12 hours after receiving a shipment of Materials, the Engineer shall be notified of the kind, size, quantity, and location thereof.

In any item of construction, the sources, brands, or types of Materials shall not be changed without the consent of the Engineer. Request for such changes shall be filed with the Engineer the number of days in advance of such changes as required above. The request shall state the name and address of the owner, the location of the proposed source, the method of shipment, and the intended use of the Material.

The foregoing provisions shall apply with regard to requests by subcontractors for the sources of the Materials they propose to use, such requests to be submitted through the Contractor.

The notice provisions of this Subsection shall not be so construed as to relieve the Contractor of its obligation to ensure that all Materials required for the construction of the Project shall be available at the time and place necessary for their incorporation into the Work in order that the completion date set forth in Subsection 01310.10 is met. If any doubt exists as to the timely availability of any material, the Engineer shall be immediately informed, in writing, of the potential problem and of the action to be taken to guarantee the availability of such material. Stockpiles of materials whose availability is or may be problematical shall be established at an early date.

#### **01451.2 RESERVED**

#### **01451.3 Materials, Inspections, Tests, and Samples.**

All Materials will be inspected, tested (where applicable), and approved before incorporation in the Work. Unapproved Materials may be used only with written permission of the Engineer. In the absence of such written permission, unapproved materials will not be paid for and shall be removed at no cost to the Owner.

All Materials being used are subject to inspection, testing, or rejection at any time before Acceptance.

Nothing in this Subsection shall be construed to limit the right of the Engineer to order special inspection or tests as provided in Section 01450.6.

Except as otherwise provided, all Materials will be tested at the expense of the Contractor.

Certain materials as specified will be accepted on the basis of Certifications of Compliance according to 01451.4.

Samples shall be required whenever, in the opinion of the Engineer, additional tests are required to determine the quality and suitability of Materials for their respective uses.

#### **01451.4 Certification of Compliance.**

Materials will be accepted on the basis of Certificates of Compliance stating that such materials fully comply with the requirements of the Contract. The Engineer must approve the form of Certificates of Compliance.

Materials used on the basis of Certificates of Compliance may be sampled and tested at any time. Materials, if found not to be in conformance with Contract requirements, will be rejected whether in place or not. The Contractor shall require the manufacturer or supplier to furnish two copies of Certificates of Compliance with each delivery of Materials and manufactured items that are acceptable by certification. One copy shall be furnished to the Engineer and one copy shall be retained by the Contractor.

Certificates of Compliance shall contain the following information:

1. Project to which the material is consigned.
2. Name of the Contractor to which the material is supplied.
3. Kind of material supplied.
4. Quantity of material represented by the certificate.
5. Means of identifying the consignment, such as label marking, seal number, etc.
6. Date and method of shipment.
7. Statement that the material has been tested and found in conformity with the pertinent Contract requirements stated in the certificate.
8. Signature of a person having legal authority to bind the supplier.
9. Signature attested to by a notary public or other properly authorized person.

Payments will not be made for Materials specified to be accepted on the basis of Certificates of Compliance until the Engineer has received the required Certificate of Compliance.

#### **01451.5 Product requirements.**

##### **01451.5.1 PRODUCTS**

Products: Means new material, machinery, components, equipment, fixtures, and systems forming the Work, but does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components specifically identified for reuse.

Do not use materials and equipment removed from existing premises, except as specifically identified or allowed by the Contract Documents.

Provide interchangeable components of the same manufacture for components being replaced.

##### **01451.5.2 PRODUCT OPTIONS**

Products Specified by Reference Standards or by Description Only: Any Product meeting those standards or description.

Products Specified by Naming One or More Manufacturers: Products of manufacturers named and meeting specifications, no options or substitutions allowed.

Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

##### **01451.5.3 PRODUCT DELIVERY, STORAGE AND HANDLING REQUIREMENTS**

Transport, handle, store, and protect Products in accordance with manufacturer's instructions.

#### **01451.6 RESERVED.**

#### **01451.7 RESERVED.**

#### **01451.8 RESERVED.**

#### **01451.9 Storage and Handling of Materials.**

Materials shall be stored to ensure the preservation of their quality and fitness. Stored Materials, even though approved before storage, may again be inspected before their use on the Project. Stored Materials shall be located so as to facilitate their prompt inspection. The Contractor shall be responsible for obtaining locations for storage of equipment and materials. Materials shall be handled to ensure the preservation of their quality and fitness.

#### **01451.10 Unacceptable Materials.**

All Materials, whether in place or not, which do not conform to the requirements of the Contract Documents shall be considered as unacceptable, and such materials will be rejected and shall be removed immediately

from the site of the Work unless otherwise directed. Rejected material, the defects of which have been corrected, shall not be used until approval has been given.

#### **01451.11 RESERVED.**

#### **01451.12 Substitutes or “Or Equal” Items.**

Whenever Materials or Equipment are specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular supplier, the naming of the item is intended to establish the type, function, and quality required. Unless the name is followed by words indicating that no substitution is permitted, materials or equipment of other suppliers may be accepted if sufficient information is submitted by the Contractor to allow the Engineer to determine that the material or equipment proposed is equivalent or equal to that named. Requests for review of substitute items of material or equipment will not be accepted from anyone other than the Contractor. If the Contractor wishes to furnish or use a substitute item of material or equipment, the Contractor shall make written application to the Engineer for approval thereof, certifying that the proposed substitute performs adequately the functions and achieves the results called for by the general design, is similar and of equal substance to that specified, and is suited to the same use as that specified. The application shall state that the evaluation and approval of the proposed substitute does not prejudice the Contractor’s achievement of Completion on time. It shall also state whether or not approval of the proposed substitute for use in the Work requires a change in any of the Contract Documents (or in the provisions of any other direct Contract with the Owner for Work on the Project) to adapt the design to the proposed substitute, and whether or not incorporation or use of the substitute in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute from that specified shall be identified in the application, and available maintenance, repair, and replacement service shall be indicated, as applicable. The application shall also contain an itemized estimate of all costs that result directly or indirectly from approval of such substitute, including costs of redesign, all of which will be considered in evaluating the proposed substitute. The Engineer may require the Contractor to furnish additional data about the proposed substitute.

If a specific means, method, technique, sequence, or procedure of construction is indicated in or required by the Contract Documents, the Contractor may furnish or use a substitute means, method, technique, sequence, or procedure of construction which is acceptable, if the Contractor submits sufficient information to allow the Engineer to determine that the substitute proposed is equivalent to that indicated or required by the Contract Documents. The procedure for review by the Engineer is to be similar to that described in the previous paragraph.

The Engineer is to be allowed a reasonable time within which to evaluate each proposed substitute. The Engineer will be the sole judge of acceptability, and no substitute shall be ordered, installed, or used without an approved cut sheet from the manufacturer. If approval is given, it is on the condition that the Contractor is fully responsible for producing Work in conformity with Contract requirements.

The Contract Sum shall be reduced by Change Order to compensate the Owner for the Cost of the Engineer and his consultants review the merits of the proposed substitution as well as for time to redesign the lighting, power distribution, mounting, and control systems, if required, to accommodate it. The substitution request should also include the cost of any new or extra power or control equipment, or any change in the mounting hardware or any custom-built mounting brackets required to accommodate the proposed substitute.

If, after trial use of the substituted materials, equipment, means, method, technique, sequence, or procedure of construction, the Engineer determines that the Work produced does not meet Contract requirements, the Contractor shall discontinue the use of the substitute and shall complete the remaining Work with the specified materials, equipment, means, method, technique, sequence, or procedure of construction. The Contractor shall remove the deficient Work and replace it as specified, or take such other corrective action as the Engineer may direct. Changes will not be made in the basis of payment for the Pay Items involved,

nor in the Contract Time as a result of authorized substitutes. The Engineer may require the Contractor to furnish at no cost to the Owner a special performance guarantee or other surety with respect to any substitute. When the Contract Documents permit the use of more than one type of material, equipment, or product, only one type is to be used throughout the Project.

## **01500 TEMPORARY FACILITIES AND CONTROLS**

### ***01510 Temporary Utilities***

The Contractor shall be solely responsible for the installation, removal and approvals for any temporary utility that the Contractor should require for Project related activities, including but not limited to electric powered generators or pumps (any phase type) and lighting. The costs for purchasing, installing, protecting and obtaining approvals are not to be charged to the Owner and shall be included in the Total Contract Price.

### ***01520 Construction Facilities***

Temporary Sanitary facilities: Provide and maintain chemical type toilet facilities and enclosures. Do not use Owner's existing facilities. Maintain in clean and sanitary condition.

### ***01550 Vehicular Access and Parking***

During the course of the Project, the Contractor shall ensure that all employees' and subcontractors' automobiles are parked in a manner that does not interfere with local traffic, block pedestrian traffic or cause an unsafe situation.

The following provisions augment the requirements of this Subsection: Subsections 01140 (Work Restrictions), 01360 (Additional Legal Provisions), 01450.8 (Cooperation by the Contractor), and 01450.10 (Cooperation between Contractors).

### ***01560 Temporary Security***

If the Contractor requires security from theft or vandalism or to protect the public, such security measures shall be at the Contractors expense. The Contractor acknowledges and agrees that the Owner is not responsible for the damage or theft of any equipment, or injury to the public as a result of the breach or lack of security measures implemented by the Contractor.

### ***01560 Barriers***

The Contractor shall provide barriers to prevent unauthorized entry to construction areas to allow for residents and retail owners and patrons use of the site and to protect existing facilities and adjacent properties from damage from construction operations and demolition. The Contractor will provide barricades and covered walkways required by governing authorities for public rights-of-way.

## **01600 EXECUTION AND CLOSEOUT REQUIREMENTS**

### **01600.1 EXAMINATION**

Verify that existing site conditions and substrate surfaces are acceptable for subsequent Work.

Beginning new Work means acceptance of existing conditions.

Verify that services are available, of the correct characteristics and in the correct location.

#### **01600.2 PREPARATION**

Clean substrate surfaces prior to applying next material or substance.

Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

#### **01600.3 FIELD ENGINEERING**

Employ an experienced instrument technician to locate a reference datum and protect survey control and reference points.

Establish elevations, lines, and levels and certify that elevations and locations of the Work conform to the Contract Documents.

Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.

#### **01600.4 EXECUTION - CUTTING AND PATCHING**

Employ a skilled and experienced installer to perform cutting and patching new Work; restore Work with new Products.

Submit written request in advance of cutting or altering structural or building enclosure elements.

Execute cutting, fitting, and patching including excavation and fill, to complete Work, and to: Fit the several parts together, to integrate with other Work.

Uncover Work to install or correct ill-timed Work.

Remove and replace defective and nonconforming Work.

Remove samples of installed Work for testing.

Provide openings in elements of Work for penetrations of mechanical and electrical Work.

Cut masonry and concrete materials using masonry saw or core drill. Restore Work with new Products in accordance with requirements of Contract Documents.

Fit Work tight to adjacent elements. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.

Fit Work tight to pipes, sleeves, ducts, conduit, and other surface penetrations.

Refinish surfaces to match adjacent finishes.

## **01600.5 CLEANING AND WASTE MANAGEMENT**

### **01600.5.1 PROGRESS CLEANING AND WASTE REMOVAL**

Maintain site in a clean and orderly condition. Dispose of all waste in accordance with all governing Federal, State, and Local regulations.

Collect and maintain areas free of waste materials, debris, and rubbish on a daily basis.

### **01600.5.2 FINAL CLEANING**

Execute final cleaning prior to final inspection.

Clean interior and exterior surfaces exposed to view. Vacuum carpeted and soft surfaces.

Clean debris from site, roofs, gutters, downspouts, and drainage systems.

Replace filters of operating equipment.

Remove waste and surplus materials, rubbish, and construction facilities from the site.

## **01600.6 STARTING AND ADJUSTING**

### **01600.6.1 STARTING SYSTEMS**

Provide seven days notification prior to startup of each item.

Ensure that each piece of equipment or system is ready for operation.

Execute start up under supervision of responsible persons in accordance with manufacturers' instructions.

Submit a written report that equipment or system has been properly installed and is functioning correctly.

### **01600.6.2 ADJUSTING**

Adjust operating Products and equipment to ensure smooth and unhindered operation.

## **01600.7 PROTECTING INSTALLED CONSTRUCTION**

### **01600.7.1 PROTECTION OF INSTALLED WORK**

Protect installed Work and provide special protection where specified in individual specification sections.

Prohibit traffic or storage upon waterproofed or roofed surfaces.

## **01600.8 CLOSEOUT SUBMITTALS**

### **01600.8.1 PROJECT RECORD DOCUMENTS**

Maintain on site one set of Contract Documents to be utilized for record documents.

Record actual revisions to the Work. Record information concurrent with construction progress.

Specifications: Legibly mark and record at each Product section a description of actual Products installed.

Record Documents and Shop Drawings: Legibly mark each item to record actual construction.

Submit documents to Engineer/Engineer with final Application for Payment.

## **01600.9 OPERATION AND MAINTENANCE DATA**

Submit two sets prior to final inspection, bound in 8-1/2 x 11 inch text pages, three D side ring binders with durable covers.

Cover: Prepare binder cover with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS" and title of project.

Organization: Internally subdivide binder contents with permanent page dividers, logically organized, with tab titles clearly printed under reinforced laminated plastic tabs.

Contents:

Part 1: Directory, List names, addresses, and telephone numbers of Engineer/Engineer, Contractor, Subcontractors, and major equipment suppliers.

Part 2: Operation and maintenance instructions, arranged by system.

Part 3: Project documents and certificates.

## **01600.10 SPARE PARTS AND MAINTENANCE MATERIALS**

Provide Products, spare parts, maintenance and extra materials in quantities specified in individual specification sections.

Deliver to Project site and place in location as directed; obtain receipt prior to final payment.

**01600.11     WARRANTIES**

Provide duplicate notarized copies.

Execute and assemble transferable warranty documents from Subcontractors, suppliers, and manufacturers. Place in operations and maintenance binder (see I. Above).

Submit prior to final Application for Payment.

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# JIM WHELAN BOARDWALK HALL

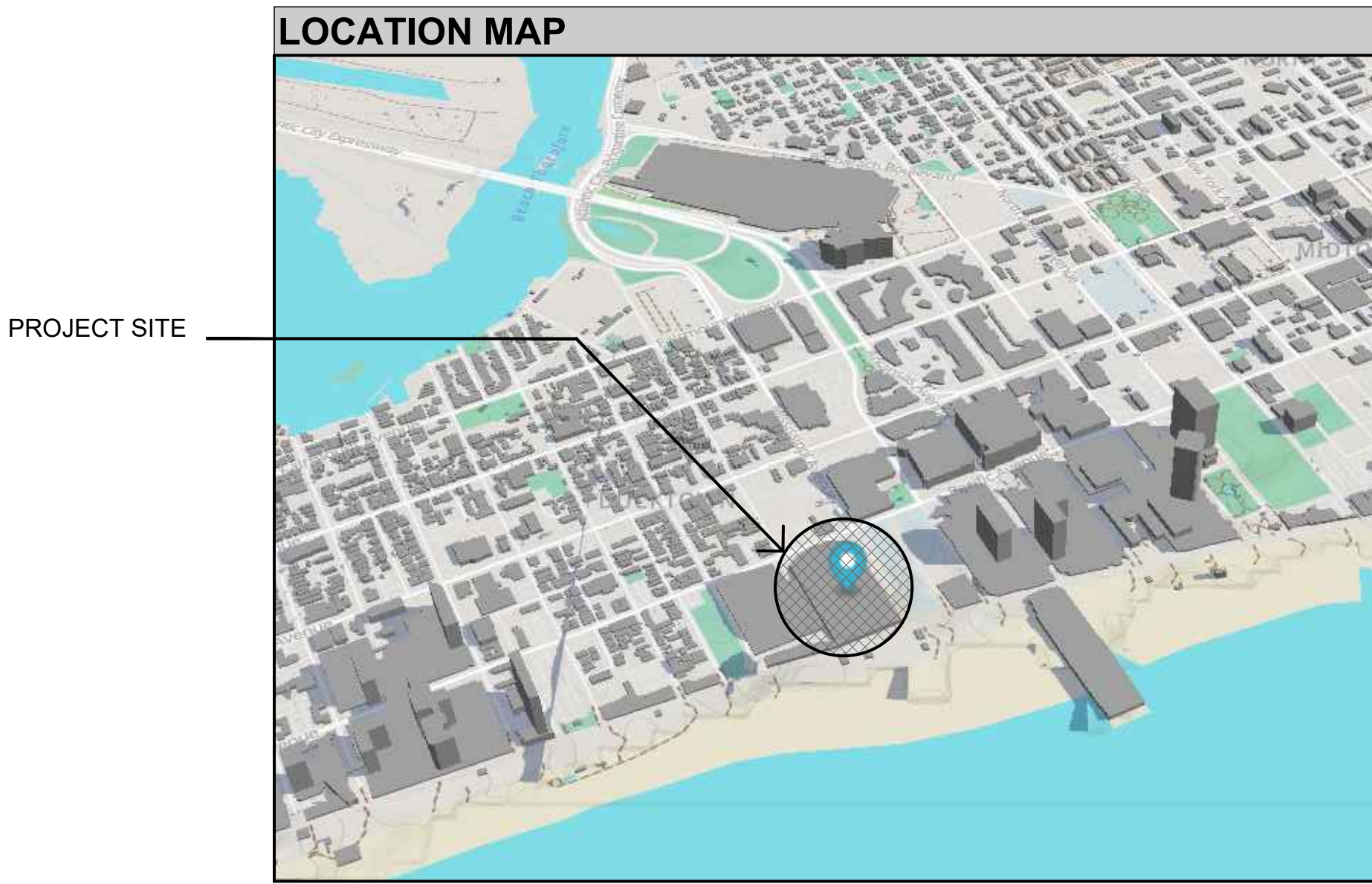
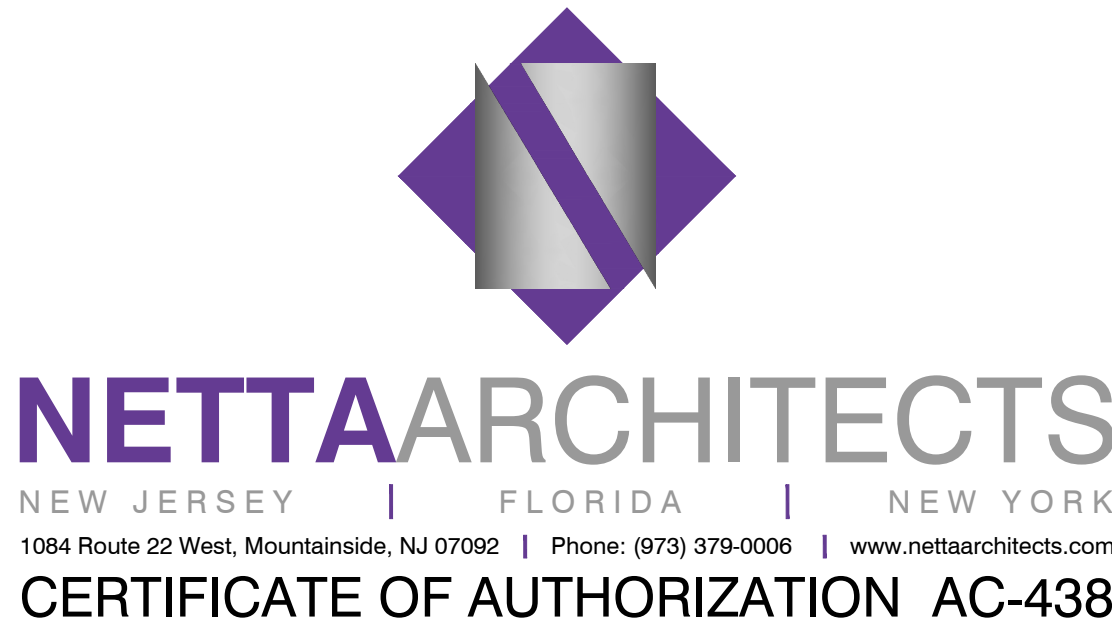
## ATLANTIC CITY, NEW JERSEY

### LOBBY A/V MODIFICATION PROJECT

2301 BOARDWALK ATLANTIC CITY, NEW JERSEY 08401

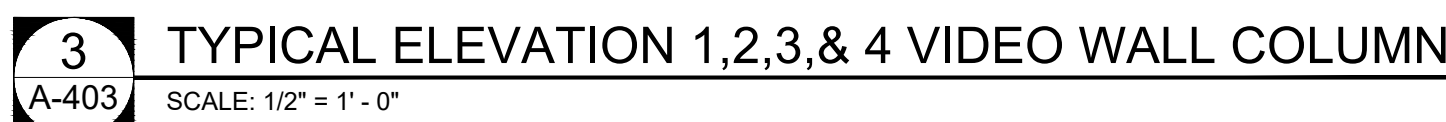
|                                 |                                        |
|---------------------------------|----------------------------------------|
| <b>ARCHITECTS:</b>              | Contact: Nicholas J. Netta, AIA, NCARB |
| <b>NETTA ARCHITECTS</b>         | Tel: 973.379.0006                      |
| 1084 Route 22 West              | Fax: 973.379.1061                      |
| Mountainside, NJ 07092          | Email: nnetta@nettaarchitects.com      |
| <b>AV CONSULTING ENGINEERS:</b> |                                        |
| <b>AUDIO - VISUAL:</b>          | Contact: Paul Sabella                  |
| tmt technology                  | Tel: d 973.805.1166                    |
| 112 Main Street, FL2            | m 973.261.0369                         |
| Madison, NJ 07940               | Email: PSabella@tmttechpartners.com    |

| DRAWING INDEX |                                     |
|---------------|-------------------------------------|
| A-000         | COVER SHEET                         |
| ARCHITECTURAL |                                     |
| A-101         | OVERALL EXISTING EVENT FLOOR PLAN   |
| A-402         | ENLARGED FLOOR PLANS AND ELEVATIONS |
| A-403         | ENLARGED FLOOR PLANS AND ELEVATIONS |









These drawings, or parts thereof, may not be reproduced in any form, by any method, for any purpose, without the prior written consent from NICHOLAS J. NETTA, ARCHITECT.

These drawings shall be used for the specific project location indicated within the Title Block, and shall not be used at any other location without prior consent from the ARCHITECT.

SHEET CONTENTS:

## ENLARGED FLOOR PLANS AND ELEVATIONS

PROJECT TITLE:

**JIM WHELAN  
BOARDWALK HALL  
LOBBY A/V  
MODIFICATION PROJECT**  
12301 BOARDWALK  
ATLANTIC CITY, NJ 0840

SUBMISSION:

[illegible]

|            |            |
|------------|------------|
| Date       | 07.17.2025 |
| Scale      | INDICATED  |
| Drawn by   | JT         |
| Checked by | GAA        |
| Job No.    | 225038     |

Drawing No.

A-403

2301 BOARDWALK  
ATLANTIC CITY, NJ 08401

## AUDIOVISUAL DESIGN

ISSUED FOR CONSTRUCTION, 10/29/2025

CATV

**AUDIOVISUAL - ELECTRICAL GENERAL NOTES**

1. THESE DRAWINGS ARE INTENDED ONLY AS DESIGN INPUT TO THE ARCHITECT AND ELECTRICAL ENGINEER, AND ARE NOT INTENDED FOR FIELD ISSUE.

## RECOMMENDED LIGHTING AND FINISH GUIDELINES FOR VIDEO CONFERENCING

2301 BOARDWALK  
ATLANTIC, NJ 08401

**tmt** technology | **CMTA**  
A **LEONARDO** Company  
122 Main Street, 2nd Floor | Madison, NJ 07940  
973.377.7702 | [tmttechpartners.com](http://tmttechpartners.com)

SECTION 27 41 16 - AUDIO/VISUAL SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes Audiovisual equipment/systems and related control systems & programming.

1.2 GENERAL CONDITIONS

A. The General Conditions, Requirements, and Special Provisions, if any larger body of specifications, of which this Specification may be a part, are hereby made a part of this Specification. In the event that any clauses or provisions of the larger body of specification conflict with the letter or intent of this Specification, the Contractor shall immediately notify the Consultant for clarification and direction.

1.3 THE SPECIFICATION

A. The "Specification" is defined as the body of documentation provided to the Contractor with the Request for Quotation, as well as all addenda to said documentation. Throughout this document, words such as "herein" refer to the entire Specification, and not just this written document.

- The Specification includes, but is not limited to:
  - This written specification document.
  - All drawings, as listed in the List of Drawings.
  - Additions and/or modifications as detailed in written addenda.
  - Additions and/or modifications as detailed in drawing addendums or reissues.

B. Definition of Term

1. Within this section of the specification, the following definitions shall apply:

- The term "Owner" is used to indicate: Jim Whelan Boardwalk Hall/Overview Group
- The term "Architect" is used to indicate: Netta Architects
- The term "Consultant" is used to indicate: TM Technology Partners
- The term "Bidder" is used to indicate that entity generating the bid response.
- The term "Contractor" is used to indicate the successful Bidder to whom the Owner has awarded the contract.

The term "Furnish" is used to indicate the responsibility to procure and ship or deliver the item to the job site, freight prepaid, for receipt, staging and installation by others.

The term "Install" or "Installation" is used to indicate the responsibility of receiving the item at the job site, assuring adequate storage, unpacking or uncrating the item, physically securing the item or otherwise making ready the item for its intended use by following the instructions and approved methods of the manufacturer and those contained herein.

The term "Provide" is used to indicate the responsibility to both "Furnish" and "Install".

The term "Provided by Others" shall refer to material and work, which is related to this contract, but has been provided by parties other than the AV Contractor. An example might be in reference to a projection screen installed during building construction but requiring interface to the AV control system.

The terms "NIC" and "Not In Contract" are equivalent to "Provided by Others".

The term "OFC" (Owner Furnished Contractor Installed) shall refer to equipment that will be furnished by the Owner for installation by the Contractor. The Contractor shall be responsible for installing and integrating this equipment as detailed herein.

The term "Installation Materials" shall reference installed cable, loose cable, terminations, cable management, voice/data/video patch cords, adapters, I/O panels, cable cassettes, wiring bars, copper bus bars, labels, rack shelves, rack mounts, power strips/distribution and other materials as needed to install the systems defined herein.

The term "shall" is mandatory; the term "will" is informative; and the term "should" is advisory.

1.4 BIDDER QUALIFICATIONS

A. Contractor Qualification Requirements: Bidder shall submit evidence of higher qualifications to perform the work specified. Contractor qualifications shall be the most current information available but not more than one year old. Submit one copy of documentation to both Owner and Consultant for review and approval. Materials shall include:

- Corporate Profile
- Location of Corporate Headquarters
- Number of offices and locations
- Location of office assigned to this project
- Corporate History
- How Many years in this business?
- Under what former names have your organization operated
- Date(s) of incorporation
- State of incorporation
- Offices names and addresses

B. Litigation Experiences Within the Last 5 Years

- Project Related:
  - Nature of Litigation
  - Plaintiff or Defendant
  - Outcome

C. Number and Type of Full-Time Staff

- Total number of employees
- Number of design staff
- Number of installation staff
- Number of project management staff
- Number of software programming staff

D. Identify key personnel that will be assigned to this project including:

- Project Executive
- Project Manager
- Systems Designer
- Crew Chief/Supervisor/Lead Technician
- Systems Programmer
- Commissioning Agent

E. For each individual listed above provide a resume that includes:

- Office Location
- Percentage of individual's time that will be allocated to this project
- Work History
- Previous Project Experience
- Length of Employment

Certifications: CTS, CTS-D, CTS-I, RCDD, PMP, Certified Control System Programmer, Certified DSP Programmer, other.

Due to the potential complexity of the control system, a manufacturer certified software programmer shall be required to author the programming component of this project. The Contractor shall include in the Bid Response, the name of the manufacturer certified person or entity that will provide programming for the remote control system. The resume shall include a listing of years of experience and include a statement of manufacturer

authorization, certification type, date of certification and the certificate number.

F. Resources

- A manufacturer's line card for products in which the Contractor is an authorized Distributor or Dealer. Include date initially authorized.
- A list of any manufacturers' specialized technical certifications or designations held by the Contractor.
- A list of manufacturers for whom the Contractor is an authorized new name center.
- A list of computer software and/or systems owned by the Contractor, which will be used to communicate, measure, draw, and/or document the project.
- A list of system test equipment owned and used by the Contractor, including manufacturer, model number and, where applicable, latest software revision.

G. References

- Include three projects of:
  - Similar scope and scale.
  - Similar technology applications
  - Provide Project cost for each
- Include three project references, including:
  - Contact name
  - Institution name
  - Phone number
  - E-mail address
- List any past projects where Contractor has worked with the Owner, Consultant, Architects, or Construction Manager who are part of this project team

1.5 SITE CONDITIONS

A. Labor and Physical Access

- The Bidder shall be responsible for investigating any potential conflicts with site-related or union-related issues regarding use of personnel, scheduling, access to the site, storage of tools and equipment on-site, and other areas of potential conflict. If these issues impact the Bidder's Bid Response, the impacts on cost and schedule should be clearly noted in the Bid Response
- Providing a minimum one (1)-year warranty service on all equipment.

C. Refuse

- The Contractor shall keep the site and building free of all debris and clutter, to the satisfaction of the Owner or site manager. On a daily basis, the Contractor shall remove refuse and rubbish related to the specified work from the site and shall leave the relevant areas and equipment clean and in an operational state. The Contractor shall be responsible for repairing any damage caused to the premises by the Contractor's installation activities, at no cost to the Owner.

1.6 SCOPE OF WORK

A. The Contractor shall provide complete, turnkey multimedia systems performing all of the services and functions as described herein, together with all other apparatus, cable, materials, labor, tools, transportation, and any other resources necessary to provide complete systems.

B. Specifically, the work shall include, but is not limited to:

- Communicating and coordinating with the Owner, Consultant, Architect, and other trades complying with all requirements as defined under this Scope of Work and elsewhere, to fulfill all requirements of this specification
- Generating and submitting Shop Drawings as required for approvals and As-Built drawings as specified herein
- Providing all cable and pull strings in conduits for the specified systems.
- Furnishing and/or installing all equipment as specified.
- Installing Owner furnished equipment as specified.

C. Coordinating with the digital audio-visual capture and scenario management system provider for any installation and/or integration services required, including, but not limited, to control system programming.

D. Furnishing all lifts, ladders, scaffolding or other resources as needed for proper safe installation. Coordinating with other trades as needed.

E. Interconnecting all components, both internal and external to rack cabinets.

F. Providing station cables for connection of IP-enabled audiovisual equipment to associated data network outlets, including but not limited to instructor's computers, production computers, laptop connections, control system processors, codecs, and projectors. This applies to all equipment installed by the Contractor, including Owner-Furnished (OFC) items. Coordinate station cable requirements with the greater building-wide structured cabling system.

G. Ensuring that all cabling, equipment, and terminations are installed in accordance with accepted industry standards, approved shop drawings, manufacturer's recommendations and as stipulated herein.

H. Coordinating and providing cable labels as stipulated by the owner and/or specified herein.

I. Providing cable management hardware as required including: that required internal to rack cabinets, that required between pieces of equipment not housed in rack cabinets, and that required to extend cabling from rack cabinets and equipment to the greater facility cabling infrastructure.

J. Providing custom cover plates, wall plates, I/O connection plates, floor box insert plates as required, including AV intended work boxes not used Cover plates shall be stainless steel. Final selection of finishes shall be coordinated with the Architect and/or Owner.

K. Coordinating with the Consultant, Architect and Owner on the final selection of all technical furniture including design details (make/model), available options, dimensions, cable management needs, color, finish, and the like.

L. Coordinating with local entities as necessary (manufacturer, Owner, SBE, FCC, etc.) to determine final channel selection for all wireless devices and resolve conflicts where they may occur.

M. Ensuring that all equipment, with the exception of portable equipment, is firmly fastened or attached in place. A safety factor of at least four shall be utilized for all brackets, fasteners and attachments. Provide safety retention cables for overhead equipment such as loudspeakers, projectors, etc.

N. Coordinating with the Architect and Owner on final color selection, and/or the painting of any exposed loudspeakers and any/all exposed system components to match the room's aesthetics and finishes.

O. Providing Control System design submittals and up to two Control System design revisions.

P. Developing and installing all custom control programming code as required and/or as specified herein.

Q. Providing centralized media control systems including GUI (Graphical User Interface) and code development in order to satisfy the guidelines outlined herein.

R. Secure, from the Owner, private IP addresses for use by Ethernet equipped control system processors.

S. Providing low voltage control system interfaces to facility lighting where specified.

Providing the executable (uncompiled) programming control code as defined herein.

T. If network-based devices will be utilized, the Contractor shall coordinate and secure, from the Owner, the IP configuration parameters such as DHCP, IP addresses, subnet information, VLAN setup & authorization, and the like to use by Ethernet equipped system components. The Audiovisual Contractor shall coordinate the installation and configuration of these devices with the Owner's IT department and/or designated representative.

U. Generating and Submitting "Progress Reports" as defined herein.

V. Ensuring that all individual components function as intended by this Specification.

W. Ensuring that the entire multimedia systems function as intended by this Specification.

X. Providing any/all patching, cabling, fire stopping, and painting required to restore damaged finishes during installation.

Y. Providing to the owner, upon completion, all accessories and ancillary items included with the manufacturer's equipment but not used for the physical installation of the device. This shall include all user manuals, remote controls, batteries, tools, installation hardware, carrying cases, protective covers, etc.

Z. Testing, adjusting, and fine-tuning the completed systems and components.

AA. Coordinating and conducting an acceptance walk-through and sign-off session with the Owner and/or Consultant.

AB. Documenting the completed installed systems as defined herein.

AC. Conducting training in systems operation for the Owner's designated representative(s).

AD. Providing "sign-off" documents for each space and/or space type as defined herein.

AE. Verifying required cable lengths for all bulk cable or manufactured cable assemblies prior to ordering as outlined in "Installation Practices".

AF. Verifying the accuracy of Master Quote or other quotation numbers prior to ordering. Where given, Master Quote numbers or other quotation numbers have been provided for bidding purposes only.

AG. Providing a single page instruction (quick start guide) that summarizes how to use the AV system. Provide single page instruction per room. The single page instruction shall be laminated to protect the instruction.

AH. Providing a minimum one (1)-year warranty service on all equipment.

AI. Costs of all shipping to the site, and of all unusual storage requirements, shall be borne by the Contractor. It shall be the responsibility of the Contractor to make appropriate arrangements, and to coordinate with the authorized personnel at the site, for the proper acceptance, handling, protection, and storage of equipment so delivered.

AJ. The Contractor shall keep the site and building free of all debris and clutter, to the satisfaction of the Owner or site manager. On a daily basis, the Contractor shall remove refuse and rubbish related to the specified work from the site and shall leave the relevant areas and equipment clean and in an operational state. The Contractor shall be responsible for repairing any damage caused to the premises by the Contractor's installation activities, at no cost to the Owner.

AK. The Contractor shall provide complete, turnkey multimedia systems performing all of the services and functions as described herein, together with all other apparatus, cable, materials, labor, tools, transportation, and any other resources necessary to provide complete systems.

AL. Specifically, the work shall include, but is not limited to:

- Communicating and coordinating with the Owner, Consultant, Architect, and other trades complying with all requirements as defined under this Scope of Work and elsewhere, to fulfill all requirements of this specification
- Generating and submitting Shop Drawings as required for approvals and As-Built drawings as specified herein
- Providing all cable and pull strings in conduits for the specified systems.
- Furnishing and/or installing all equipment as specified.
- Installing Owner furnished equipment as specified.

AM. Coordinating with the digital audio-visual capture and scenario management system provider for any installation and/or integration services required, including, but not limited, to control system programming.

AN. Furnishing all lifts, ladders, scaffolding or other resources as needed for proper safe installation. Coordinating with other trades as needed.

AO. Interconnecting all components, both internal and external to rack cabinets.

AP. Providing station cables for connection of IP-enabled audiovisual equipment to associated data network outlets, including but not limited to instructor's computers, production computers, laptop connections, control system processors, codecs, and projectors. This applies to all equipment installed by the Contractor, including Owner-Furnished (OFC) items. Coordinate station cable requirements with the greater building-wide structured cabling system.

AQ. Ensuring that all cabling, equipment, and terminations are installed in accordance with accepted industry standards, approved shop drawings, manufacturer's recommendations and as stipulated herein.

AR. Coordinating and providing cable labels as stipulated by the owner and/or specified herein.

AS. Providing cable management hardware as required including: that required internal to rack cabinets, that required between pieces of equipment not housed in rack cabinets, and that required to extend cabling from rack cabinets and equipment to the greater facility cabling infrastructure.

AT. Providing custom cover plates, wall plates, I/O connection plates, floor box insert plates as required, including AV intended work boxes not used Cover plates shall be stainless steel. Final selection of finishes shall be coordinated with the Architect and/or Owner.

AU. Coordinating with the Consultant, Architect and Owner on the final selection of all technical furniture including design details (make/model), available options, dimensions, cable management needs, color, finish, and the like.

AV. Coordinating with local entities as necessary (manufacturer, Owner, SBE, FCC, etc.) to determine final channel selection for all wireless devices and resolve conflicts where they may occur.

AW. Ensuring that all equipment, with the exception of portable equipment, is firmly fastened or attached in place. A safety factor of at least four shall be utilized for all brackets, fasteners and attachments. Provide safety retention cables for overhead equipment such as loudspeakers, projectors, etc.

AX. Coordinating with the Architect and Owner on final color selection, and/or the painting of any exposed loudspeakers and any/all exposed system components to match the room's aesthetics and finishes.

AY. Providing Control System design submittals and up to two Control System design revisions.

AZ. Developing and installing all custom control programming code as required and/or as specified herein.

BA. Providing centralized media control systems including GUI (Graphical User Interface) and code development in order to satisfy the guidelines outlined herein.

BB. Secure, from the Owner, private IP addresses for use by Ethernet equipped control system processors.

BC. Providing low voltage control system interfaces to facility lighting where specified.

BD. Providing the executable (uncompiled) programming control code as defined herein.

BE. If network-based devices will be utilized, the Contractor shall coordinate and secure, from the Owner, the IP configuration parameters such as DHCP, IP addresses, subnet information, VLAN setup & authorization, and the like to use by Ethernet equipped system components. The Audiovisual Contractor shall coordinate the installation and configuration of these devices with the Owner's IT department and/or designated representative.

BF. Generating and Submitting "Progress Reports" as defined herein.

BG. Ensuring that all individual components function as intended by this Specification.

BH. Ensuring that the entire multimedia systems function as intended by this Specification.

BI. Providing any/all patching, cabling, fire stopping, and painting required to restore damaged finishes during installation.

BJ. Providing to the owner, upon completion, all accessories and ancillary items included with the manufacturer's equipment but not used for the physical installation of the device. This shall include all user manuals, remote controls, batteries, tools, installation hardware, carrying cases, protective covers, etc.

BK. Testing, adjusting, and fine-tuning the completed systems and components.

BL. Coordinating and conducting an acceptance walk-through and sign-off session with the Owner and/or Consultant.

BM. Documenting the completed installed systems as defined herein.

BN. Conducting training in systems operation for the Owner's designated representative(s).

BO. Providing "sign-off" documents for each space and/or space type as defined herein.

BP. Verifying required cable lengths for all bulk cable or manufactured cable assemblies prior to ordering as outlined in "Installation Practices".

BQ. Verifying the accuracy of Master Quote or other quotation numbers prior to ordering. Where given, Master Quote numbers or other quotation numbers have been provided for bidding purposes only.

BR. Providing a single page instruction (quick start guide) that summarizes how to use the AV system. Provide single page instruction per room. The single page instruction shall be laminated to protect the instruction.

BS. Providing a minimum one (1)-year warranty service on all equipment.

BT. Costs of all shipping to the site, and of all unusual storage requirements, shall be borne by the Contractor. It shall be the responsibility of the Contractor to make appropriate arrangements, and to coordinate with the authorized personnel at the site, for the proper acceptance, handling, protection, and storage of equipment so delivered.

BU. The Contractor shall keep the site and building free of all debris and clutter, to the satisfaction of the Owner or site manager. On a daily basis, the Contractor shall remove refuse and rubbish related to the specified work from the site and shall leave the relevant areas and equipment clean and in an operational state. The Contractor shall be responsible for repairing any damage caused to the premises by the Contractor's installation activities, at no cost to the Owner.

BV. The Contractor shall provide complete, turnkey multimedia systems performing all of the services and functions as described herein, together with all other apparatus, cable, materials, labor, tools, transportation, and any other resources necessary to provide complete systems.

BV. Specifically, the work shall include, but is not limited to:

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CG. Coordinating with the digital audio-visual capture and scenario management system provider for any installation and/or integration services required, including, but not limited, to control system programming.

CH. Furnishing all lifts, ladders, scaffolding or other resources as needed for proper safe installation. Coordinating with other trades as needed.

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CQ. Ensuring that all equipment, with the exception of portable equipment, is firmly fastened or attached in place. A safety factor of at least four shall be utilized for all brackets, fasteners and attachments. Provide safety retention cables for overhead equipment such as loudspeakers, projectors, etc.

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CS. Providing Control System design submittals and up to two Control System design revisions.

CT. Developing and installing all custom control programming code as required and/or as specified herein.

CU. Providing centralized media control systems including GUI (Graphical User Interface) and code development in order to satisfy the guidelines outlined herein.

CV. Secure, from the Owner, private IP addresses for use by Ethernet equipped control system processors.

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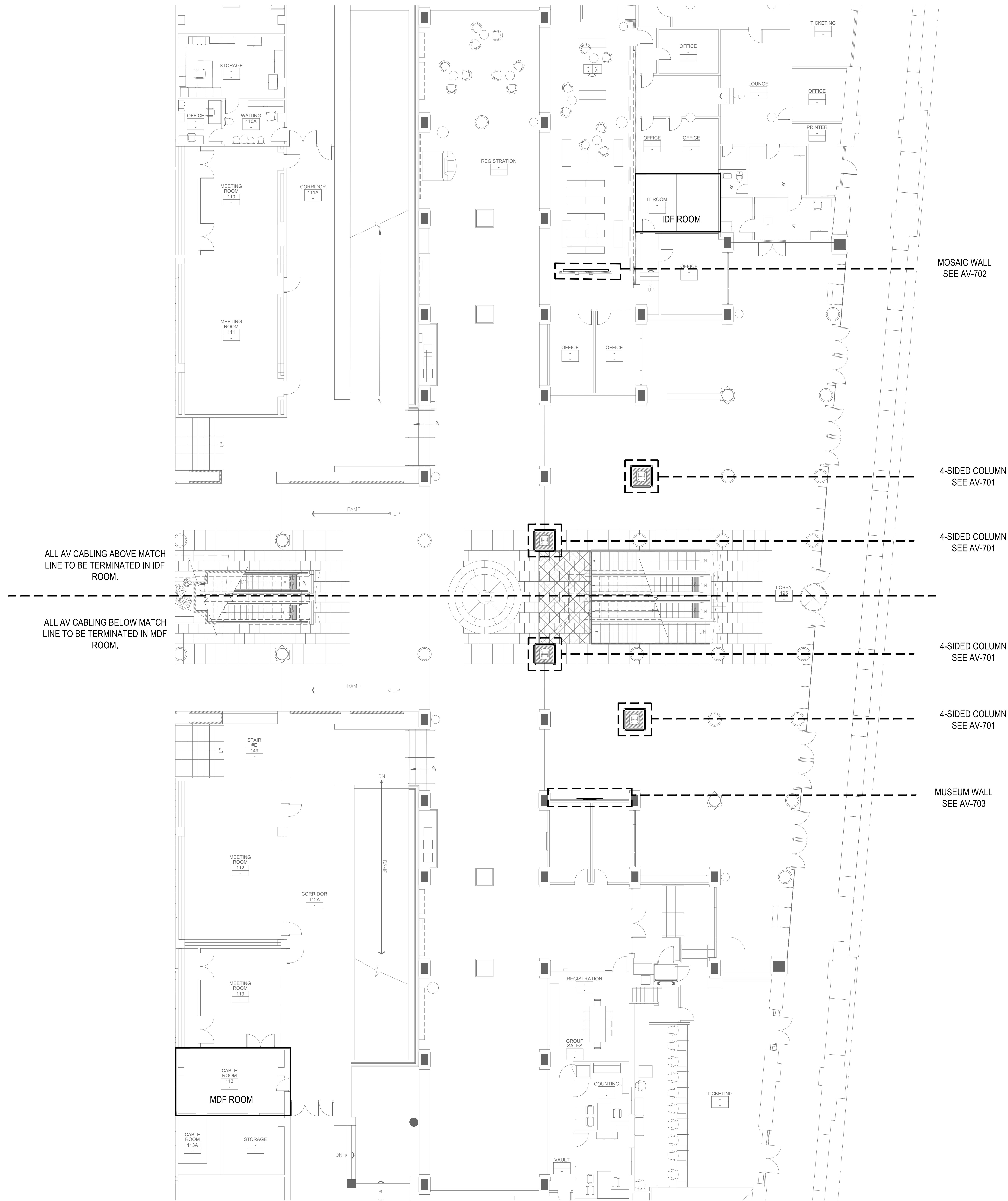
CA. Generating and Submitting "Progress Reports" as defined herein.

CB. Ensuring that all individual components function as intended by this Specification.

Jim Whelan  
Boardwalk Hall  
Lobby Upgrades

2301 BOARDWALK  
ATLANTIC, NJ 08401

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | The system shall provide a music signal in the audience seating area that meets or exceeds the following requirements:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | ground to determine that no short circuits or paths to ground exist in the line. The Contractor shall connect the speaker to the cable and measure the impedance of each speaker line using a 1,000Hz signal applied to the line. The Contractor shall submit a list, to the Consultant, by cable number, of the impedance of each speaker line. This test shall be performed with the amplifier disconnected from the speaker line and the speaker connected to the speaker line.                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |
| b.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Frequency response within +/- 3 dB from 200 Hz to 17,000 Hz.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  | 2) A listing of each supplied item with manufacturer, model number and serial number.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| c.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Overall SPL variance of +/- 3 dB.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | 3) Operator's manuals for each piece of equipment supplied by the Contractor.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
| d.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Maximum average SPL of 90 dB (flat), with 10 dB of unlistened headroom available.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | 4) A complete set of as-built drawings. The as-built drawings must reflect all changes to the system(s) made after the original bid documentation. The size of the as-built drawings shall be identical to the original drawings provided to Contractor, folded and inserted into the binders in plastic sleeves. Alternative formats may be acceptable upon prior approval by the Consultant and/or Owner.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |
| B. NTSC Video                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| 1. Interconnection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| a.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | At the points of interconnection, the input and output impedance of each link shall be unbalanced to ground, nominally 75 Ohms 0.5% resistive. The nominal signal amplitude shall be 1.0 volt peak-to-peak (140 IRE units). The polarity of the signal shall be "positive," i.e., such that black-to-white transitions are positive going.                                                                                                                                                                                                                                                                                                                                    |  | c. Verify all loudspeakers are working.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |
| 2. Electronic Signals                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| a.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | The Contractor shall test the video system to ensure sure that it meets the NAB Engineering Standards of NTSC RS-170A as defined below. Videotape machines are exempt from these requirements.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | c. Verify that the system meets all Performance Standards as outlined in 'Performance Standards'.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| b.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | NTSC RS-170A Performance Standards:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | e. Verify that all equipment, panels, and cables are labeled correctly.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |
| c.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Frequency Response: +0.1dB to 5.5MHzZ -0.5dB at 8 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | f. Verify each item of equipment is functioning as intended.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| d.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Crosstalk: -60dB at 3.58 MHz.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | g. Verify the installation is the same as specified.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |
| e.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | S/N Ratio: 75dB RMS below 1 volt p-p                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | 3. Video                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| f.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Hum: <10mV peak to peak.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | a. To establish that the facility cabling and terminations meet the specifications defined in 'Performance Standards', a video test signal shall be applied to each input cable and passed through the system switching and distribution networks with the results measured at each system output.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |
| g.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Line and Field Tilt: .5% with 60 Hz. square wave.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | b. The composite video test signal shall consist of a line bar, a 27 pulse, a chrominance pulse, and a five-riser staircase signal. The combination test signal shall consist of a white flag, a multi-burst, and a three-level chrominance signal. The test signal waveforms are illustrated below.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |
| h.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Differential Gain: 1% at 3.58 MHz 10 - 90% APL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | c. In addition, the Contractor shall:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| i.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Differential Phase: 1% a 3.58 MHz 10 - 90% APL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | 1) Verify each item of equipment is functioning as intended.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| j.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Envelope Delay: 0.1 microseconds, 0.2 to 2.1 MHz, 0.5 MHz, microseconds at 3.58 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | 2) Verify the installation is the same as specified.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |
| k.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Color Production: Primary and Complementary Color (R, G, B, Cy, Y1, Mg) at 75% saturation within inner 50% of inner boxes. 2.5 when viewed on a videoscope.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | 4. Computer Video Display Devices                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| l.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Switching Transients: <30 mV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  | a. The Contractor shall use a computer-video test generator to establish that computer-video capable displays such as CRT, flat panel, and projection devices are in good working order and optimally adjusted. The computer-video test generator shall be capable of outputting test signals on 5 BNC connectors, 9-pin DVI connector, 15-pin HD VGA connector, or 15-pin D15 Macintosh connector. The computer-video test generator shall meet or exceed the following specifications and offer the following test patterns:                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
| m.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Chrominance / Luminance Delay: <10 ns                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | b. Specifications                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| n.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | NTSC RS-170A Video Levels:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | 1) Bandwidth: 450 MHz (+3db)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| o.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | White is 100 IRE, +0, -2 IRE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | 2) Dot clock: 230 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| p.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Black is 7.5 IRE, 2.3 IRE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | 3) Pixel clock accuracy: 0.02MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| q.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Sync is 40 IRE, 2 IRE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | 4) Scan rate accuracy: 2%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| r.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Burst is 40 IRE, 2 IRE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | 5) Frequency range: 15KHz to 127 kHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |
| s.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Burst Pedestal not to exceed 2 IRE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | 6) Rise/fall time: <1.2ns                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| t.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Burst frequency shall be 3.579545 MHz 10 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | 7) Signal types: RGBHV, RGBS, RGB, RaGBs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| u.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Breezeaway, burst, color back porch, and sync to burst end are nominal as shown in detail below.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | 8) Maximum level: 1V p-p                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| v.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Burst end are nominal as shown in detail below.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 9) Impedance: 75 ohms                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| 3. Digital Video (1.5 Gb/s Signal/Data Serial Interface - SMPTE 292)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| a.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Signal Levels and Specifications                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | 10) Return loss: -30db @ 5MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
| b.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | These specifications are defined for measurement of the serial output of a source derived from a parallel domain signal.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | 11) DC offset: 5mV maximum                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |
| c.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | The output of the generator shall be measured across a 75-ohm resistive load connected through a 1-M coaxial cable. The figure below depicts the measurement dimensions for amplitude, rise-time and overshoot.                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | c. Test Patterns                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| d.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | The generator shall have an unbalanced output circuit with a source impedance of 75 ohms and a return loss of at least 15 dB over a frequency range of 5 MHz to the clock frequency of the signal being transmitted.                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | 1) Dots 12x16, Alternating pixels                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| e.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | The peak-to-peak signal amplitude shall be 800 mV ± 10% measured across a 75-ohm resistive load connected through a 1-M coaxial cable.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | 2) Vertical/Horizontal Crosshair                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| f.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | The DC offset, as defined by the mid-amplitude point of the signal, shall be nominally 0.0 V ± 0.5 V.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | 3) Crosshatch 12x16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
| g.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | The rise and fall times, determined between the 20% and 80% amplitude points shall be no greater than 270ps and shall not differ by more than 100 ps.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | 4) Crosshatch 24x24                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
| h.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Overshoot of the rising and falling edges of the waveform shall not exceed 10% of the amplitude                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 5) Flat Field                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
| i.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Output amplitude excursions due to signals with a significant DC component during for a horizontal line (pathological signals) shall not exceed 50 mV above or below the average peak-to-peak signal envelope. Note this specification defines a minimum output coupling time constant.                                                                                                                                                                                                                                                                                                                                                                                       |  | 6) Checkerboard 100% (IRE) White                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| j.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | The jitter in the timing of the transitions of the data signal shall be measured in accordance with SMPTE RP 184. Measurement parameters are defined in SMPTE RP 184 and shall have the values shown in the table below for compliance with this standard.                                                                                                                                                                                                                                                                                                                                                                                                                    |  | 7) Checkerboard 56% (IRE) White                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| k.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | The receiver of the serial interface signal shall present an impedance of 75 ohms with a return loss of at least 15 dB over a frequency range of 5 MHz to the clock frequency of the signal being transmitted.                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | 8) Checkerboard 14% (IRE) White                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| l.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Receivers operating with input cable losses in the range of up to 20 dB at one-half the clock frequency are nominal; however, receivers designed to work with greater or lesser signal attenuation are acceptable.                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | 9) 8 Level Split Gray Scale                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |
| m.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | When connected to a line driver operating at the lower limit of voltage, the receiver must sense correctly the binary data in the presence of the superimposed interfering signal at the following levels:                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | 10) 8 Vertical Color Bar                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 1) DC ± 2.5V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  | 11) 16 Color Bar                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 2) Below 5 kHz <2.5V p-p                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | 12) SMPTE and PLUGE Color Bar                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 3) 5 kHz to 27 MHz <100 mV p-p                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 4) Above 27 MHz <40 mV p-p                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| n. Jitter Specifications Table                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 1) B1 10 Hz Timing jitter lower band edge                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  | 5. Control                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 2) B2 100 KHz Alignment jitter lower band edge                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | a. Upon completion of installation, the Contractor shall test each function of each control station, push-button panel, touch screen panel, computer control interface, and all components connected to or interfaced to the Control System to verify proper operation and that each switch and indicator operates as intended.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 3) B3 >1/10 the clock rate Upper band edge                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | 3.6 FINAL TESTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 4) A1 0.2 UI Timing Jitter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | A. Upon approval of the Contractor's test report, and at a time that is mutually agreeable to the Contractor and Consultant, the Contractor shall assist the Consultant in final system tests and adjustments. The Contractor shall allow three (3) days to perform the tests. The Contractor's representatives attending the performance of these tests shall be thoroughly familiar with the details of the system and shall include the field supervisor responsible for installing the system.                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 5) A2 0.2 UI Alignment jitter (UI = unit interval)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | B. To demonstrate the good working order of all playback devices in the system, the Contractor shall make available high quality source materials for all audio and video media types represented in the system. To demonstrate the good working order of all computer-video displays the Contractor shall make available the computer-video signal generator described in 'Performance Standards - Preliminary Tests and Submittals - Computer Video Display Devices'. In addition, the Contractor shall make available a computer graphics signal generator or portable computer with the ability to output 800x600, 1024x768, and 1280x1024, 1400X1050, 1600x1200 and 1920x1204 graphics test signals with at least 15bit color depth. The portable computer shall be capable of displaying spreadsheets, graphs, charts, pictures and text of varying sizes and fonts to effectively demonstrate the systems computer display imaging capabilities. |  |
| 6) Test Signal Color bar test signal (See note)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | Note: Color bars are chosen as a non-stressing test signal for jitter measurements. Use of a stressing signal with long runs of zeros may give misleading results.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | C. The Contractor shall:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| p.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Connector and cable types                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  | 1. Load source material into all input sources and the laptop computer.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 1) The male and female connectors shall be 75-ohm BNC as defined in IEC 61169-2, Part 8, Annex A.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | 1. Switch randomly between all sources and demonstrate that all functions of the control system are working properly and tracking correctly.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 2) Application of this standard does not require a particular type of coaxial cable. It is necessary for the frequency response of the coaxial cable loss, in decibels, to be approximately proportional to 1/√f from 1 MHz to the clock frequency of the signal being transmitted to ensure correct operation of automatic cable equalizers over moderate to maximum lengths.                                                                                                                                                                                                                                                                                                |  | 2. Demonstrate that the displays have been optimized for all sources.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 3) Return loss of the correctly terminated transmission line shall be greater than 15 dB over a frequency range of 5 MHz to the clock frequency of the signal being transmitted.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | 3. Demonstrate that the system meets the criteria as outlined in 'Performance Standards'.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| 4. Digital Signal Distribution System                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| a.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | The digital signal distribution systems shall deliver high-definition AV signal routing, low-latency switching, lossless distribution of HDMI and other signals, and shall support a complete range of analog and digital signal types.                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | 3.7 FINAL DOCUMENTATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |
| b.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | The digital signal distribution system shall distribute                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | A. Upon completion of the work, the Contractor shall condense the Master Set along with any Shop Drawings into a single AS-Built document set. Any markings or deviations, which cannot be made clear on drawings, shall be accompanied by attached documentation, photos, or written addenda.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 1) An HDMI "pass-thru" output shall be provided on every input card to allow the inputs of up to 5 digital signal switchers to be daisy-chained, enabling the configuration of large distribution systems with multiple digital signal and HDMI outputs.                                                                                                                                                                                                                                                                                                                                                                                                                      |  | B. All documents and drawings must also be submitted electronically in the PDF format. Further, ALL PDF drawings must be submitted at their native scale. For example, a PDF created from a drawing whose native format was standard "E" size (42-inch x 30-inch) shall be created at 42-inch x 30-inch size to ensure that there be no loss of resolution should the file be viewed or printed at a later date by the Owner.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 2) Expansion, per the drawings, can be accomplished with additional input and output hardware with connectivity to the base switchers via copper cable or fiber.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | C. Final submission of digital AS-Built drawings files, which were obtained by the Contractor from the Consultant under separate agreement, shall be subject to review and approval by the Contractor as defined under said agreement.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 3) Simultaneous distribution of multi-channel surround sound and two-channel stereo signals from the same HDMI source is possible. Equipped with appropriate input cards, onboard DSP processing can derive a stereo down-mix from the original multi-channel signal. Both signals can be routed separately or simultaneously from any of the switcher's, allowing either signal to be selected for output at the receiver location.                                                                                                                                                                                                                                          |  | 1. Preliminary Final Documentation Submittal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 4) The digital stereo signal is also converted to analog to enable sharing with every other multi-room audio distribution system. Busy surround sound processors and amplifiers can be located centrally instead of at the display location via optional local HDMI outputs.                                                                                                                                                                                                                                                                                                                                                                                                  |  | a. Prior to Final Tests and project punch-listing, the Contractor shall prepare and submit one (1) copy of the documentation listed below to the Consultant for review. The package shall include all drawings and written documentation listed below and be in the exact form and format intended for delivery to the Owner.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | g. Video Signal Compatibility:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 1) The digital signal distribution hardware shall support all available HDTV formats supported by HDMI, as well as the distribution of DVI, DisplayPort Multimode and RGB computer signals. The digital signal distribution hardware shall be fully compatible with DVI computer monitors up to 1920 x 1200 WUXGA.                                                                                                                                                                                                                                                                                                                                                            |  | b. The documentation shall be in the form of a CD-ROM containing PDF file format copies and organized as follows:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | h. Built-in Ethernet Switch:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  | 1) A cover and spine listing the Owner, Consultant, and Contractor.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 1) The digital signal distribution hardware shall carry 10/100 Ethernet to each room controller, supporting streaming signal for multimedia devices, and providing LAN connectivity for any room device that requires Ethernet or Internet access. Gigabit Ethernet connection to the external LAN shall maximize bandwidth for each network port. Ethernet shall also be utilized internally by the hardware to manage all of the distribution specific devices in the system and provide display control in each room.                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | i. USB HID Switch:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 1) The digital signal distribution hardware shall centralize all HD sources. Built-in USB HID (Human Interface Device) signal routing allows USB HID compatible keyboards, mice, and other devices to be connected at a remote display location, conference table or presentation lectern, extending their signals through to the centralized equipment via USB HID ports provided on select switcher input cards.                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | j. EDID (Extended Display Identification Data) Format Management:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 1) The digital signal distribution hardware shall provide full EDID management. Not every system device will support all of the same HDMI video and audio formats. HDMI resolves this using EDID (Extended Display Identification Data). When two HDMI devices are connected together, the receiving device (a display or surround sound processor) uses EDID to announce its format capabilities to the source device, which in turn configures itself to output the most effective format that both devices can support.                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | k. HDCP Key Management:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 1) Digital signal distribution hardware shall include HDCP Key Management. Display of digital signal uses "keys" to manage the handshaking that occurs between any two devices. Every HDMI source device has a limit to how many downstream devices it can support, determined by the number of HDCP keys it has available. The limit is not typically published by the manufacturer or service provider, so exceeding the limit of displays or processors will stop the output of a signal without warning. The digital signal system shall test the HDCP limits of each HDMI source and allow the Contractor and Consultant to configure the system around any limitations. |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | l. CEC Embedded Device Control:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 1) The digital signal system shall harness the CEC (Consumer Electronics Control) signal embedded in HDMI. Through its connection to the control system, the digital signal system shall provide a gateway for controlling many devices through their HDMI connections, potentially eliminating the need for any dedicated control cables or infrared probes. Proper CEC signal management allows control of each device.                                                                                                                                                                                                                                                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | C. Optical                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 1. All video projection systems shall meet the following performance standards:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | a. The total averaged light output from a video projector, in ANSI lumens, shall be tested by the Contractor and certified to be within 15% of that specified by the projector manufacturer.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| 3.5 SYSTEM SETUP AND TUNING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| A. Optimization                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| 1. The Contractor shall install, configure, adjust, program, and calibrate all components in order to optimize the performance of all individual subsystems and the system as a whole.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| B. Preliminary Tests and Submittals                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| 1. General                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| a. Once the system is installed, the Contractor shall complete the following preliminary tests and prepare a written test report for the Consultant. The test report will list the results of each of the tests described in this section and certify that the installation is complete                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| 2. Audio                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| a. The Contractor shall perform the following tests:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| b. Prior to the termination of audio amplifiers to speakers, the Contractor shall measure the resistance of the speaker line with reference to                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1) An HDMI "pass-thru" output shall be provided on every input card to allow the inputs of up to 5 digital signal switchers to be daisy-chained, enabling the configuration of large distribution systems with multiple digital signal and HDMI outputs.                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 2) Expansion, per the drawings, can be accomplished with additional input and output hardware with connectivity to the base switchers via copper cable or fiber.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 3) Simultaneous distribution of multi-channel surround sound and two-channel stereo signals from the same HDMI source is possible. Equipped with appropriate input cards, onboard DSP processing can derive a stereo down-mix from the original multi-channel signal. Both signals can be routed separately or simultaneously from any of the switcher's, allowing either signal to be selected for output at the receiver location.                                                                                                                                                                                                                                          |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 4) The digital stereo signal is also converted to analog to enable sharing with every other multi-room audio distribution system. Busy surround sound processors and amplifiers can be located centrally instead of at the display location via optional local HDMI outputs.                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| g. Video Signal Compatibility:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1) The digital signal distribution hardware shall support all available HDTV formats supported by HDMI, as well as the distribution of DVI, DisplayPort Multimode and RGB computer signals. The digital signal distribution hardware shall be fully compatible with DVI computer monitors up to 1920 x 1200 WUXGA.                                                                                                                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| h. Built-in Ethernet Switch:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1) The digital signal distribution hardware shall carry 10/100 Ethernet to each room controller, supporting streaming signal for multimedia devices, and providing LAN connectivity for any room device that requires Ethernet or Internet access. Gigabit Ethernet connection to the external LAN shall maximize bandwidth for each network port. Ethernet shall also be utilized internally by the hardware to manage all of the distribution specific devices in the system and provide display control in each room.                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| i. USB HID Switch:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1) The digital signal distribution hardware shall centralize all HD sources. Built-in USB HID (Human Interface Device) signal routing allows USB HID compatible keyboards, mice, and other devices to be connected at a remote display location, conference table or presentation lectern, extending their signals through to the centralized equipment via USB HID ports provided on select switcher input cards.                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| j. EDID (Extended Display Identification Data) Format Management:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1) The digital signal distribution hardware shall provide full EDID management. Not every system device will support all of the same HDMI video and audio formats. HDMI resolves this using EDID (Extended Display Identification Data). When two HDMI devices are connected together, the receiving device (a display or surround sound processor) uses EDID to announce its format capabilities to the source device, which in turn configures itself to output the most effective format that both devices can support.                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| k. HDCP Key Management:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1) Digital signal distribution hardware shall include HDCP Key Management. Display of digital signal uses "keys" to manage the handshaking that occurs between any two devices. Every HDMI source device has a limit to how many downstream devices it can support, determined by the number of HDCP keys it has available. The limit is not typically published by the manufacturer or service provider, so exceeding the limit of displays or processors will stop the output of a signal without warning. The digital signal system shall test the HDCP limits of each HDMI source and allow the Contractor and Consultant to configure the system around any limitations. |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| l. CEC Embedded Device Control:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1) The digital signal system shall harness the CEC (Consumer Electronics Control) signal embedded in HDMI. Through its connection to the control system, the digital signal system shall provide a gateway for controlling many devices through their HDMI connections, potentially eliminating the need for any dedicated control cables or infrared probes. Proper CEC signal management allows control of each device.                                                                                                                                                                                                                                                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| C. Optical                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1. All video projection systems shall meet the following performance standards:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| a. The total averaged light output from a video projector, in ANSI lumens, shall be tested by the Contractor and certified to be within 15% of that specified by the projector manufacturer.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 3.5 SYSTEM SETUP AND TUNING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| A. Optimization                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1. The Contractor shall install, configure, adjust, program, and calibrate all components in order to optimize the performance of all individual subsystems and the system as a whole.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| B. Preliminary Tests and Submittals                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1. General                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| a. Once the system is installed, the Contractor shall complete the following preliminary tests and prepare a written test report for the Consultant. The test report will list the results of each of the tests described in this section and certify that the installation is complete                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 2. Audio                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| a. The Contractor shall perform the following tests:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| b. Prior to the termination of audio amplifiers to speakers, the Contractor shall measure the resistance of the speaker line with reference to                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1) An HDMI "pass-thru" output shall be provided on every input card to allow the inputs of up to 5 digital signal switchers to be daisy-chained, enabling the configuration of large distribution systems with multiple digital signal and HDMI outputs.                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 2) Expansion, per the drawings, can be accomplished with additional input and output hardware with connectivity to the base switchers via copper cable or fiber.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 3) Simultaneous distribution of multi-channel surround sound and two-channel stereo signals from the same HDMI source is possible. Equipped with appropriate input cards, onboard DSP processing can derive a stereo down-mix from the original multi-channel signal. Both signals can be routed separately or simultaneously from any of the switcher's, allowing either signal to be selected for output at the receiver location.                                                                                                                                                                                                                                          |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 4) The digital stereo signal is also converted to analog to enable sharing with every other multi-room audio distribution system. Busy surround sound processors and amplifiers can be located centrally instead of at the display location via optional local HDMI outputs.                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| g. Video Signal Compatibility:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1) The digital signal distribution hardware shall support all available HDTV formats supported by HDMI, as well as the distribution of DVI, DisplayPort Multimode and RGB computer signals. The digital signal distribution hardware shall be fully compatible with DVI computer monitors up to 1920 x 1200 WUXGA.                                                                                                                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| h. Built-in Ethernet Switch:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1) The digital signal distribution hardware shall carry 10/100 Ethernet to each room controller, supporting streaming signal for multimedia devices, and providing LAN connectivity for any room device that requires Ethernet or Internet access. Gigabit Ethernet connection to the external LAN shall maximize bandwidth for each network port. Ethernet shall also be utilized internally by the hardware to manage all of the distribution specific devices in the system and provide display control in each room.                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| i. USB HID Switch:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1) The digital signal distribution hardware shall centralize all HD sources. Built-in USB HID (Human Interface Device) signal routing allows USB HID compatible keyboards, mice, and other devices to be connected at a remote display location, conference table or presentation lectern, extending their signals through to the centralized equipment via USB HID ports provided on select switcher input cards.                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| j. EDID (Extended Display Identification Data) Format Management:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1) The digital signal distribution hardware shall provide full EDID management. Not every system device will support all of the same HDMI video and audio formats. HDMI resolves this using EDID (Extended Display Identification Data). When two HDMI devices are connected together, the receiving device (a display or surround sound processor) uses EDID to announce its format capabilities to the source device, which in turn configures itself to output the most effective format that both devices can support.                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| k. HDCP Key Management:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1) Digital signal distribution hardware shall include HDCP Key Management. Display of digital signal uses "keys" to manage the handshaking that occurs between any two devices. Every HDMI source device has a limit to how many downstream devices it can support, determined by the number of HDCP keys it has available. The limit is not typically published by the manufacturer or service provider, so exceeding the limit of displays or processors will stop the output of a signal without warning. The digital signal system shall test the HDCP limits of each HDMI source and allow the Contractor and Consultant to configure the system around any limitations. |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| l. CEC Embedded Device Control:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1) The digital signal system shall harness the CEC (Consumer Electronics Control) signal embedded in HDMI. Through its connection to the control system, the digital signal system shall provide a gateway for controlling many devices through their HDMI connections, potentially eliminating the need for any dedicated control cables or infrared probes. Proper CEC signal management allows control of each device.                                                                                                                                                                                                                                                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| C. Optical                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1. All video projection systems shall meet the following performance standards:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| a. The total averaged light output from a video projector, in ANSI lumens, shall be tested by the Contractor and certified to be within 15% of that specified by the projector manufacturer.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 3.5 SYSTEM SETUP AND TUNING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| A. Optimization                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1. The Contractor shall install, configure, adjust, program, and calibrate all components in order to optimize the performance of all individual subsystems and the system as a whole.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| B. Preliminary Tests and Submittals                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1. General                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| a. Once the system is installed, the Contractor shall complete the following preliminary tests and prepare a written test report for the Consultant. The test report will list the results of each of the tests described in this section and certify that the installation is complete                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 2. Audio                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| a. The Contractor shall perform the following tests:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| b. Prior to the termination of audio amplifiers to speakers, the Contractor shall measure the resistance of the speaker line with reference to                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1) An HDMI "pass-thru" output shall be provided on every input card to allow the inputs of up to 5 digital signal switchers to be daisy-chained, enabling the configuration of large distribution systems with multiple digital signal and HDMI outputs.                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 2) Expansion, per the drawings, can be accomplished with additional input and output hardware with connectivity to the base switchers via copper cable or fiber.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 3) Simultaneous distribution of multi-channel surround sound and two-channel stereo signals from the same HDMI source is possible. Equipped with appropriate input cards, onboard DSP processing can derive a stereo down-mix from the original multi-channel signal. Both signals can be routed separately or simultaneously from any of the switcher's, allowing either signal to be selected for output at the receiver location.                                                                                                                                                                                                                                          |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 4) The digital stereo signal is also converted to analog to enable sharing with every other multi-room audio distribution system. Busy surround sound processors and amplifiers can be located centrally instead of at the display location via optional local HDMI outputs.                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| g. Video Signal Compatibility:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1) The digital signal distribution hardware shall support all available HDTV formats supported by HDMI, as well as the distribution of DVI, DisplayPort Multimode and RGB computer signals. The digital signal distribution hardware shall be fully compatible with DVI computer monitors up to 1920 x 1200 WUXGA.                                                                                                                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| h. Built-in Ethernet Switch:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1) The digital signal distribution hardware shall carry 10/100 Ethernet to each room controller, supporting streaming signal for multimedia devices, and providing LAN connectivity for any room device that requires Ethernet or Internet access. Gigabit Ethernet connection to the external LAN shall maximize bandwidth for each network port. Ethernet shall also be utilized internally by the hardware to manage all of the distribution specific devices in the system and provide display control in each room.                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| i. USB HID Switch:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1) The digital signal distribution hardware shall centralize all HD sources. Built-in USB HID (Human Interface Device) signal routing allows USB HID compatible keyboards, mice, and other devices to be connected at a remote display location, conference table or presentation lectern, extending their signals through to the centralized equipment via USB HID ports provided on select switcher input cards.                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| j. EDID (Extended Display Identification Data) Format Management:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1) The digital signal distribution hardware shall provide full EDID management. Not every system device will support all of the same HDMI video and audio formats. HDMI resolves this using EDID (Extended Display Identification Data). When two HDMI devices are connected together, the receiving device (a display or surround sound processor) uses EDID to announce its format capabilities to the source device, which in turn configures itself to output the most effective format that both devices can support.                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| k. HDCP Key Management:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1) Digital signal distribution hardware shall include HDCP Key Management. Display of digital signal uses "keys" to manage the handshaking that occurs between any two devices. Every HDMI source device has a limit to how many downstream devices it can support, determined by the number of HDCP keys it has available. The limit is not typically published by the manufacturer or service provider, so exceeding the limit of displays or processors will stop the output of a signal without warning. The digital signal system shall test the HDCP limits of each HDMI source and allow the Contractor and Consultant to configure the system around any limitations. |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| l. CEC Embedded Device Control:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1) The digital signal system shall harness the CEC (Consumer Electronics Control) signal embedded in HDMI. Through its connection to the control system, the digital signal system shall provide a gateway for controlling many devices through their HDMI connections, potentially eliminating the need for any dedicated control cables or infrared probes. Proper CEC signal management allows control of each device.                                                                                                                                                                                                                                                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| C. Optical                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1. All video projection systems shall meet the following performance standards:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| a. The total averaged light output from a video projector, in ANSI lumens, shall be tested by the Contractor and certified to be within 15% of that specified by the projector manufacturer.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 3.5 SYSTEM SETUP AND TUNING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| A. Optimization                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1. The Contractor shall install, configure, adjust, program, and calibrate all components in order to optimize the performance of all individual subsystems and the system as a whole.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| B. Preliminary Tests and Submittals                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1. General                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| a. Once the system is installed, the Contractor shall complete the following preliminary tests and prepare a written test report for the Consultant. The test report will list the results of each of the tests described in this section and certify that the installation is complete                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 2. Audio                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| a. The Contractor shall perform the following tests:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| b. Prior to the termination of audio amplifiers to speakers, the Contractor shall measure the resistance of the speaker line with reference to                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1) An HDMI "pass-thru" output shall be provided on every input card to allow the inputs of up to 5 digital signal switchers to be daisy-chained, enabling the configuration of large distribution systems with multiple digital signal and HDMI outputs.                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 2) Expansion, per the drawings, can be accomplished with additional input and output hardware with connectivity to the base switchers via copper cable or fiber.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 3) Simultaneous distribution of multi-channel surround sound and two-channel stereo signals from the same HDMI source is possible. Equipped with appropriate input cards, onboard DSP processing can derive a stereo down-mix from the original multi-channel signal. Both signals can be routed separately or simultaneously from any of the switcher's, allowing either signal to be selected for output at the receiver location.                                                                                                                                                                                                                                          |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 4) The digital stereo signal is also converted to analog to enable sharing with every other multi-room audio distribution system. Busy surround sound processors and amplifiers can be located centrally instead of at the display location via optional local HDMI outputs.                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| g. Video Signal Compatibility:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1) The digital signal distribution hardware shall support all available HDTV formats supported by HDMI, as well as the distribution of DVI, DisplayPort Multimode and RGB computer signals. The digital signal distribution hardware shall be fully compatible with DVI computer monitors up to 1920 x 1200 WUXGA.                                                                                                                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| h. Built-in Ethernet Switch:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1) The digital signal distribution hardware shall carry 10/100 Ethernet to each room controller, supporting streaming signal for multimedia devices, and providing LAN connectivity for any room device that requires Ethernet or Internet access. Gigabit Ethernet connection to the external LAN shall maximize bandwidth for each network port. Ethernet shall also be utilized internally by the hardware to manage all of the distribution specific devices in the system and provide display control in each room.                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| i. USB HID Switch:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| 1) The digital signal distribution hardware shall centralize all HD sources. Built-in USB HID (Human Interface Device) signal routing allows USB HID compatible keyboards, mice, and other devices to be connected at a remote display location, conference table or presentation lectern, extending their signals through to the centralized equipment via USB HID ports provided on select switcher input cards.                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| j. EDID (Extended Display Identification Data) Format Management:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| 1) The digital signal distribution hardware shall provide full EDID management. Not every system device will support all of the same HDMI video and audio formats. HDMI resolves this using EDID (Extended Display Identification Data). When two HDMI devices are connected together, the receiving device (a display or surround sound processor) uses EDID to announce its format capabilities to the source device, which in turn configures itself to output the most effective format that both devices can support.                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| k. HDCP Key Management:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |



Seal

10/29/2025 ISSUE FOR CONSTRUCTION

Date Issued Revision No.

**tmt technology** **CMTA**  
A Latham & Company  
122 Main Street, 2nd Floor | Madison, NJ 07940  
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Drawing Title:  
AUDIOVISUAL  
OVERALL FACILITY PLAN

|                        |                           |
|------------------------|---------------------------|
| Scale:<br>1/8" = 1'-0" | Issue Date:<br>10/29/2025 |
| Proj. Manager:<br>PS   | Proj. Engineer:           |

TMT/CMTA Project No.:  
8,468,0001

Drawing No.:  
AV-301



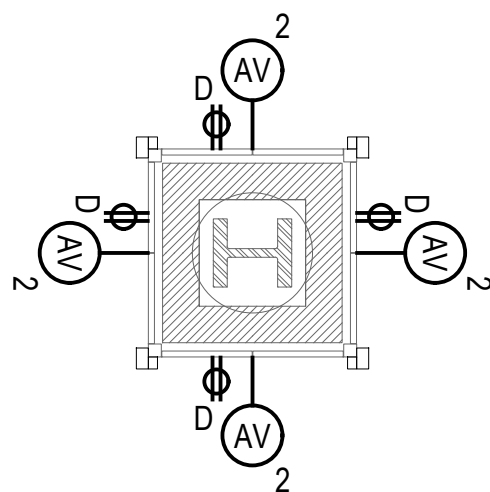
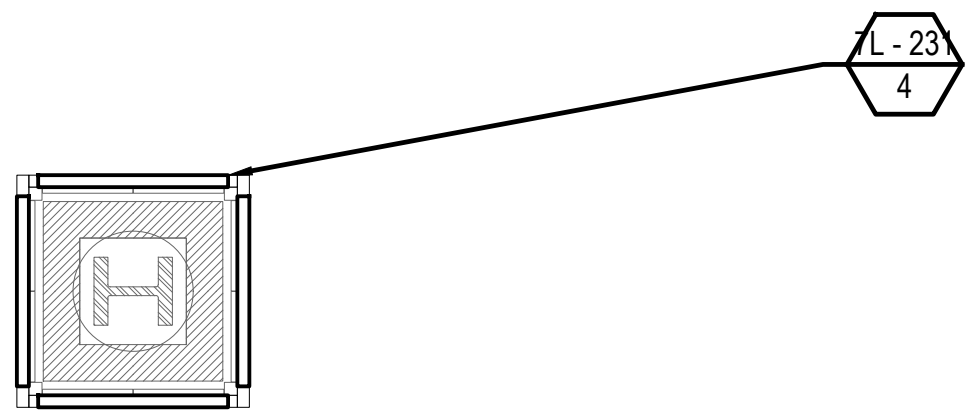
AUDIOVISUAL - KEYNOTE LEGEND

| EQUIPMENT RACK: |                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 - # QTY       | 1-1 FREE STANDING<br>1-2 CREDEZZA (FLOOR)<br>1-3 CREDEZZA (FLOATING)<br>1-4 CLOSET (SLIDING RACK)                                                                                                                                                                                                                                                                                                                                      |
| 2 - # QTY       | CONNECTIVITY:<br>2-1 FLOOR BOX<br>2-2 TABLE HATCH<br>2-3 WALL PLATE                                                                                                                                                                                                                                                                                                                                                                    |
| 3 - # QTY       | CONTROL:<br>3-1 TABLE TOP TOUCH PANEL<br>3-2 WIRELESS TOUCH PANEL<br>3-3 WALL MOUNTED TOUCH PANEL<br>3-4 ROOM SCHEDULER                                                                                                                                                                                                                                                                                                                |
| 4 - # QTY       | AUDIO INPUT:<br>4-1 CEILING ARRAY MICROPHONE (FIXED COVERAGE)<br>4-2 CEILING ARRAY MICROPHONE (TRACKING)<br>4-3 TABLETOP AUDIO CONFERENCEING UNIT<br>4-4 TABLETOP EXTENSION MICROPHONE<br>4-5 WIRELESS MICROPHONE ANTENNA                                                                                                                                                                                                              |
| 5 - # QTY       | AUDIO OUTPUT:<br>5-1 CEILING RECESSED LOUDSPEAKER<br>5-2 CEILING PENDANT LOUDSPEAKER                                                                                                                                                                                                                                                                                                                                                   |
| 6 - # QTY       | VIDEO SOURCE:<br>6-1 WALL MOUNTED 180 DEGREE VIDEO SOUNDBAR<br>6-2 WALL MOUNTED VIDEO SOUNDBAR<br>6-3 WALL MOUNTED PTZ CAMERA<br>6-4 CEILING POLE MOUNTED CAMERA                                                                                                                                                                                                                                                                       |
| 7 - # QTY       | DISPLAY DEVICE (TYPE I):<br>7W - 50 (50") FLAT PANEL DISPLAY; WALL MOUNTED<br>7W - 55 (55") FLAT PANEL DISPLAY; WALL MOUNTED<br>7W - 65 (65") FLAT PANEL DISPLAY; WALL MOUNTED<br>7W - 75 (75") FLAT PANEL DISPLAY; WALL MOUNTED<br>7W - 85 (85") FLAT PANEL DISPLAY; WALL MOUNTED<br>7W - 98 (98") FLAT PANEL DISPLAY; WALL MOUNTED<br>7R - 65 (65") FLAT PANEL DISPLAY; ROTATING DISPLAY<br>7L - XXX (XXX") VIDEO WALL; WALL MOUNTED |
| 8 - # QTY       |                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 9 - # QTY       |                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 10 - # QTY      |                                                                                                                                                                                                                                                                                                                                                                                                                                        |

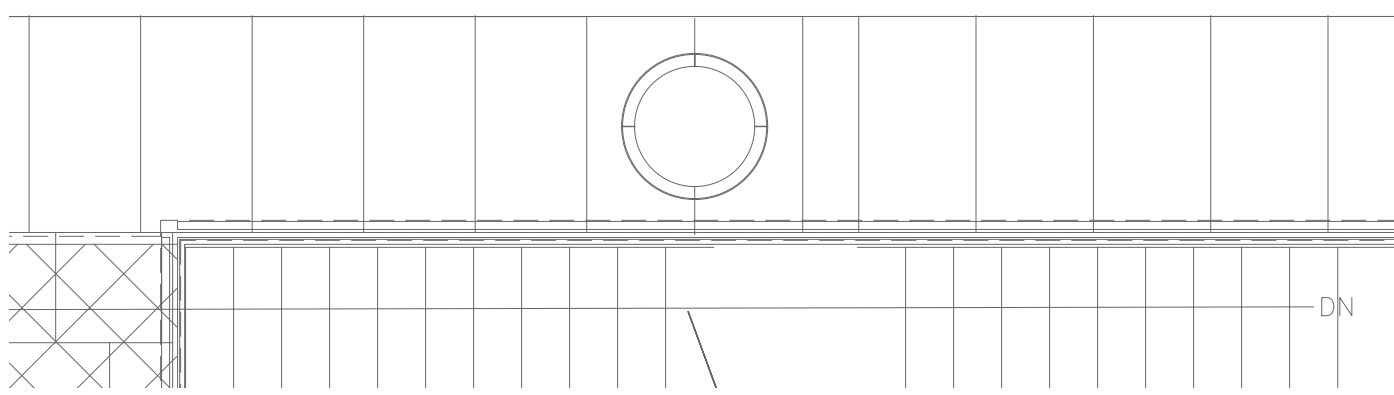
AUDIOVISUAL - ELECTRICAL LEGEND

| FLOOR MOUNTED   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AV              | MULTI-DISCIPLINE FLOOR BOX, WITH HINGED COVER PLATE AND FLANGE, WITH DIVIDED COMPARTMENTS FOR SHARED ACCESS WITH AV, DATA, AND QUAD 120V AC POWER. FLUSH MOUNT IN FLOOR UNLESS OTHERWISE INDICATED. MINIMUM 4" DEEP FLOOR BOX WITH MINIMUM 4-GANG OPENING REQUIRED FOR AV. FSR FL-500P FOR CONCRETE OR FL-540P FOR RAISED ACCESS FLOOR APPLICATIONS RECOMMENDED. CONFIRM AND COORDINATE MODEL WITH ELECTRICAL ENGINEER PRIOR TO PURCHASING FOR ADDITIONAL SPECIFICATIONS.                                                                                                                                                                                                                                    |
| AV              | 8" DIAMETER MULTI-DISCIPLINE RECESSED POKE-THRU DEVICE WITH DIVIDED COMPARTMENTS FOR SHARED ACCESS WITH AV, DATA, AND 120V AC POWER. FLUSH MOUNT IN FLOOR UNLESS OTHERWISE INDICATED. CONFIRM AND COORDINATE MODEL WITH ELECTRICAL ENGINEER PRIOR TO PURCHASING FOR ADDITIONAL SPECIFICATIONS.                                                                                                                                                                                                                                                                                                                                                                                                               |
| AV              | CONDUIT STUB-UP LOCATION AT CONFERENCE TABLE FOR AV CABLING. PROVIDE QUAD ELECTRICAL OUTLET. PROVIDE DATA OUTLET. QUANTITY AND TYPE OF CABLE AS PER PROJECT STANDARD. DIMENSIONED LOCATION BY ARCHITECT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| WALL MOUNTED    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| AV              | IN-WALL MULTI-DISCIPLINE BACK BOX (CHIEF PACS26FC), WITH FLANGE AND COVER, TO BE LOCATED BEHIND WALL MOUNTED DISPLAYS, FOR SHARED ACCESS WITH AV, DATA, AND 120V AC POWER. CONFIRM COLOR OPTION WITH ARCHITECT AND MOUNT FLUSH WITH FINISHED WALL TREATMENT BEHIND DISPLAY. QUANTITY OF TWO (2) DUPLEX ELECTRICAL OUTLETS TO BE MOUNTED TO THE IN-WALL BOX. QUANTITY OF TWO (2) DATA PORTS TO BE MOUNTED TO THE IN-WALL BOX. (#) DENOTE INDICATES REQUIRED NUMBER OF DATA PORTS. IF MORE THAN 2 DATA PORTS ARE REQUIRED. SEE TO DRAWINGS FOR DATA CABLE TYPES AND DETAILS. SEE AV ELEVATION AND RISER DIAGRAM FOR MOUNTING HEIGHT OF IN-WALL BOX. IN-WALL BACK BOX TO BE FURNISHED AND INSTALLED BY GC / EC. |
| AV              | GANGABLE WALL BOX, 4-11/16"H X 2-1/2"D, WITH CONDUIT KNOCK OUTS AND BLANK COVER PLATE; FOR AV CONNECTIVITY. MOUNT FLUSH WITH FINISHED WALL TREATMENT. (#) DENOTE INDICATES NUMBER OF GANGS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| CAM             | GANGABLE WALL BOX, 4-11/16"H X 2-1/2"D, WITH CONDUIT KNOCK OUTS AND BLANK COVER PLATE; FOR CAMERA CONNECTIVITY. MOUNT FLUSH WITH FINISHED WALL TREATMENT. (#) DENOTE INDICATES NUMBER OF GANGS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| CT              | SCREW COVER JUNCTION BOX FOR AUDIOVISUAL. CONDUIT TERMINATION. SIZED BY ELECTRICAL CONTRACTOR. ALL CONDUITS TERMINATE AT THIS BOX UNLESS OTHERWISE INDICATED.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| TP              | GANGABLE WALL BOX, 4-11/16"H X 2-1/2"D, WITH CONDUIT KNOCK OUTS AND BLANK COVER PLATE; FOR TOUCH PANEL CONNECTIVITY. MOUNT FLUSH WITH FINISHED WALL TREATMENT. (#) DENOTE INDICATES NUMBER OF GANGS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| TV              | CATV WALL JACK WITH 1-GANG BOX JUNCTION BOX, FACE PLATE WITH TERMINATED F CONNECTOR, AND COAX CABLE TO CATV HEADEND. SEE TELECOMMUNICATION DRAWINGS FOR DETAILS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| \$              | SINGLE GANG WALL BOX FOR WALL SWITCH FOR PROJECTION SCREEN, RAISE / STOP / LOWER; SUPPLIED WITH EQUIPMENT, IF NOT PROVIDED BY AV CONTRACTOR. MOUNT FLUSH WITH FINISHED WALL TREATMENT AT BASE BUILDING ELECTRICAL SWITCH HEIGHT, COORDINATE WITH ARCHITECT.                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Φ               | DUPLEX, NEMA 5-20R STRAIGHT-BLADE POWER RECEPTACLE, 120V AC, 20AMP. SUBSCRIPT "D" INDICATES DEDICATED BRANCH CIRCUIT PER RECEPTACLE. ALL CIRCUITS SUPPORTING AV EQUIPMENT TO BE ON THE SAME PHASE AND GROUND.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Φ               | QUAD, NEMA 5-20R STRAIGHT-BLADE POWER RECEPTACLE, 120V AC, 20AMP. SUBSCRIPT "D" INDICATES DEDICATED BRANCH CIRCUIT PER RECEPTACLE. ALL CIRCUITS SUPPORTING AV EQUIPMENT TO BE ON THE SAME PHASE AND GROUND.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| (#)             | WALL MOUNTED TELECOM DATA OUTLET. QUANTITY OF DATA PORTS AT EACH LOCATION AND TYPE OF CABLE AS PER PROJECT STANDARD, UNLESS OTHERWISE INDICATED BY SUBSCRIPT (#). SUBSCRIPT DENOTES REQUIRED QUANTITY OF PORTS. SEE TELECOM DRAWINGS FOR DETAILS.                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| RS              | WALL MOUNTED TELECOM DATA OUTLET FOR ROOM SCHEDULING TOUCH PANEL. QUANTITY OF 1 DATA CABLE, TYPE OF CABLE AS PER PROJECT STANDARD.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| CEILING MOUNTED |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| ANT             | CEILING MOUNTED WIRELESS MICROPHONE TRANSCIEVER. MOUNT TO FINISHED CEILING SURFACE. TERMINATE CABLES DIRECTLY INTO DEVICE. PROVIDE CUTOUT IN CEILING AS REQUIRED.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| CAM             | 2-GANG JUNCTION BOX, 4-11/16"H X 2-1/2"D, WITH CONDUIT KNOCK OUTS AND BLANK COVER PLATE; FOR CAMERA CONNECTIVITY SURFACE MOUNT ABOVE FINISHED CEILING TREATMENT. PROVIDE CUTOUT IN CEILING AS REQUIRED.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| CS              | CEILING SPEAKER, BACK BOX, GRILL, AND TILE BRIDGE. MOUNT FLUSH WITH FINISHED CEILING. COORDINATE WITH OTHER CEILING DEVICES. CONFIRM STRUCTURAL INTEGRITY OF CEILING AND SUPPORT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| MIC             | 2-GANG JUNCTION BOX, 4-11/16"H X 2-1/2"D, WITH CONDUIT KNOCK OUTS AND BLANK COVER PLATE; FOR MICROPHONE CONNECTIVITY. SURFACE MOUNT ABOVE FINISHED CEILING TREATMENT. PROVIDE CUTOUT IN CEILING AS REQUIRED.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| PS              | SUSPENDED PENDANT SPEAKER. MOUNT SUSPENSION CABLE TO STRUCTURAL CEILING SLAB. PROVIDE GANGABLE JUNCTION BOX, WITH CONDUIT KNOCK OUTS TO UNDER SIDE OF SLAB. COORDINATE WITH OTHER CEILING DEVICES. CONFIRM STRUCTURAL INTEGRITY OF CEILING AND SUPPORT.                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

NOTE: QUANTITY OF 4 COLUMNS

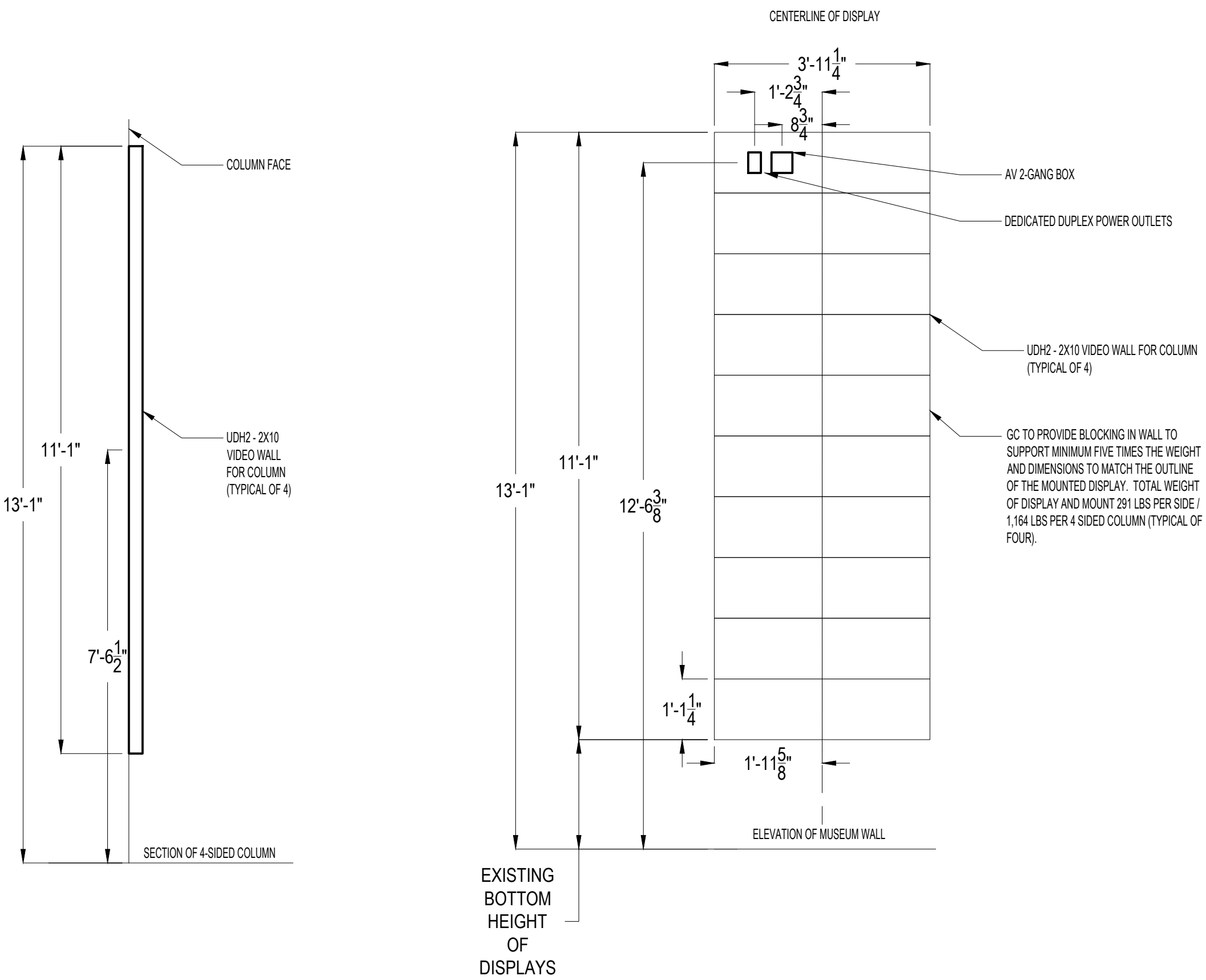


NOTE: MINIMUM (12) CAT-6 CABLES



AUDIOVISUAL FACILITY PLAN  
4-SIDED COLUMN (TYPICAL OF 4)  
SCALE: 1/4"=1'-0"

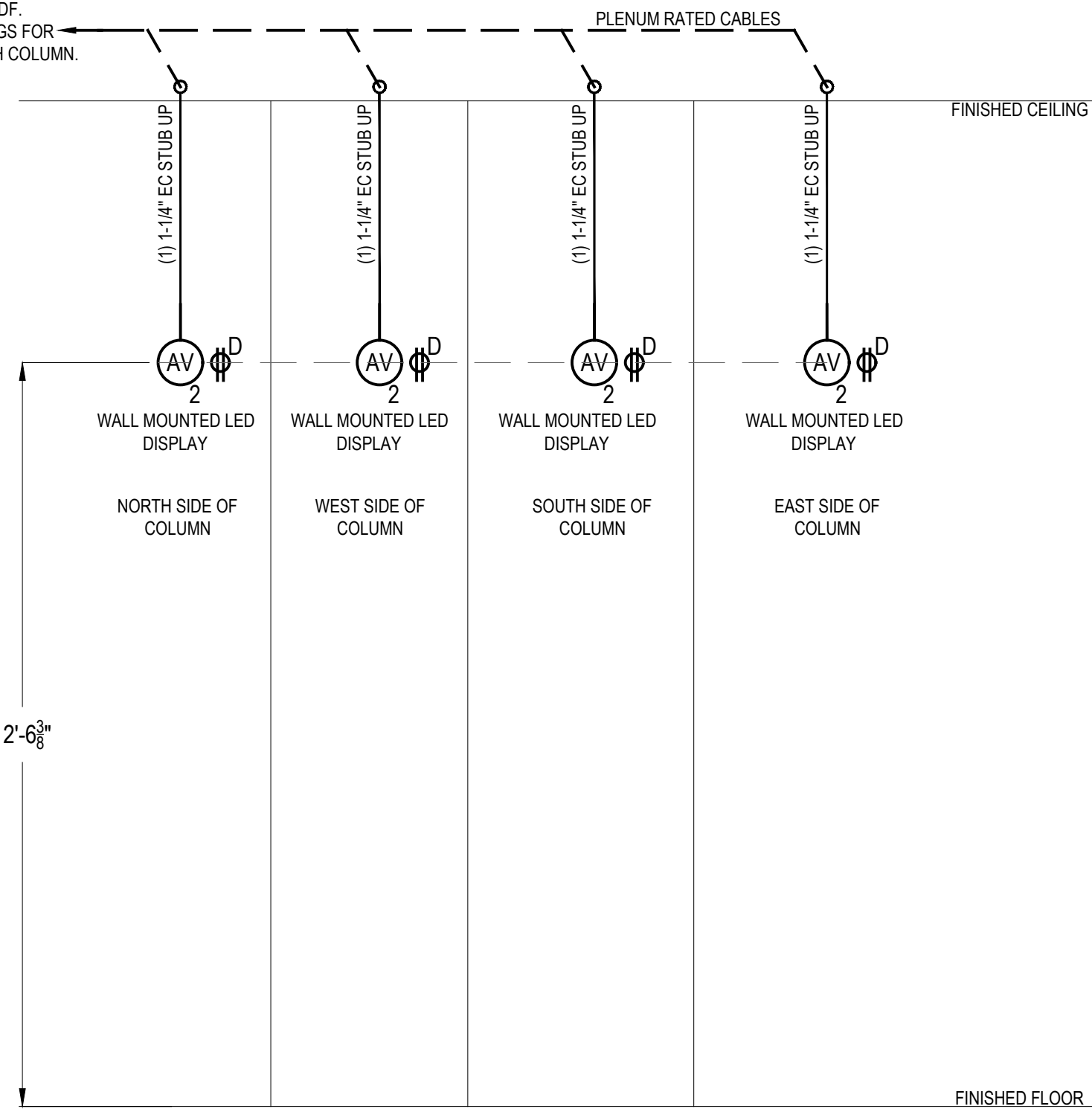
AUDIOVISUAL INFRASTRUCTURE PLAN  
4-SIDED COLUMN (TYPICAL OF 4)  
SCALE: 1/4"=1'-0"

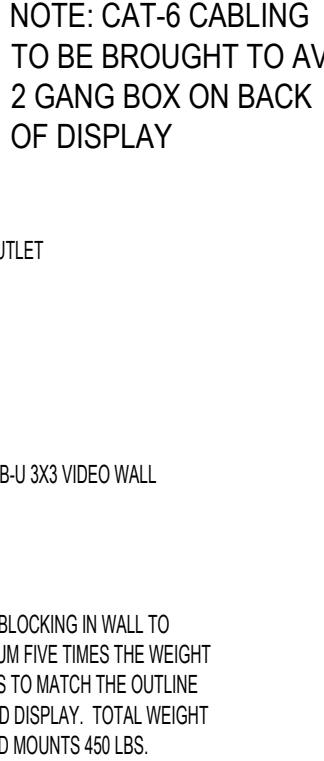


NOTE: CAT-6 CABLING TO BE BROUGHT TO AV 2 GANG BOX ON BACK OF DISPLAY

AUDIOVISUAL SECTION & ELEVATION  
4-SIDED COLUMN (TYPICAL OF 4)  
SCALE: 1/2"=1'-0"

AUDIOVISUAL CONDUIT RISER DIAGRAM  
4-SIDED COLUMN (TYPICAL OF 4)  
SCALE: 1/2"=1'-0"





| AUDIOVISUAL - ELECTRICAL LEGEND                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FLOOR MOUNTED                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|  | MULTI-DISCIPLE FLOOR BOX, WITH HINGED COVER PLATE AND FLANGE; WITH DIVIDED COMPARTMENTS FOR SHARED ACCESS WITH AV, DATA, AND QUAD 120V AC POWER. FLUSH MOUNT IN FLOOR UNLESS OTHERWISE INDICATED. MINIMUM 4" DEEP FLOOR BOX WITH MINIMUM 4-CANAL OPENING REQUIRED FOR AV, FSR FL-500P FOR CONCRETE OR FL-540P FOR RAISED ACCESS FLOOR APPLICATIONS RECOMMENDED. CONFIRM AND COORDINATE MOUNT WITH ELECTRICAL ENGINEER PRIOR TO PURCHASING FOR ADDITIONAL SPECIFICATIONS. |
|  | 8" DIAMETER MULTI-DISCIPLE RECESSED POKE-THRU DEVICE WITH DIVIDED COMPARTMENTS FOR SHARED ACCESS WITH AV, DATA, AND 120V AC POWER. FLUSH MOUNT IN FLOOR UNLESS OTHERWISE INDICATED. CONFIRM AND COORDINATE MOUNT WITH ELECTRICAL ENGINEER PRIOR TO PURCHASING FOR ADDITIONAL SPECIFICATIONS.                                                                                                                                                                             |
|  | CONDUIT STUD-UP LOCATION AT CONFERENCE TABLE FOR AV CABLE PROVIDE QUAD ELECTRICAL OUTLET. PROVIDE DATA OUTLET, QUANTITY AND TYPE OF CABLE AS PER PROJECT STANDARD. DIMENSIONED LOCATION BY ARCHITECT.                                                                                                                                                                                                                                                                    |

| CEILING MOUNTED |                                                                                                                                                                                                                                                         |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (ANT)           | CEILING MOUNTED WIRELESS MICROPHONE TRANSDUCER. MOUNT TO FINISHED CEILING SURFACE. TERMINATE CABLES DIRECTLY INTO DEVICE. PROVIDE MOUNT IN CEILING AS REQUIRED.                                                                                         |
| (CAM)           | 2-GANG JUNCTION BOX. 4-11/16" H X 2-1/2" D, WITH CONDUIT KNOCK OUTS AND BLANK COVER PLATE. FOR CAMERA CONNECTIVITY SURFACE MOUNT ABOVE FINISHED CEILING TREATMENT. PROVIDE CEILING MOUNT IN CEILING AS REQUIRED.                                        |
| (CS)            | CEILING SPEAKER, BACK BOX, GRILL, AND TILE BRIDGE. MOUNT FLUSH WITH FINISHED CEILING. COORDINATE WITH OTHER CEILING DEVICES. CONFIRM STRUCTURAL INTEGRITY OF CEILING AND SUPPORT.                                                                       |
| (MIC)           | 2-GANG JUNCTION BOX. 4-11/16" H X 2-1/2" D, WITH CONDUIT KNOCK OUTS AND BLANK COVER PLATE. FOR MICROPHONE CONNECTIVITY. SURFACE MOUNT ABOVE FINISHED CEILING TREATMENT. PROVIDE CEILING MOUNT IN CEILING AS REQUIRED.                                   |
| (PS)            | SUSPENDED PENDANT SPEAKER. MOUNT SUSPENSION CABLE TO STRUCTURAL CEILING SLAB. PROVIDE GANGABLE JUNCTION BOX, WITH CONDUIT KNOCK OUTS TO UNDER SIDE OF SLAB. COORDINATE WITH OTHER CEILING DEVICES. CONFIRM STRUCTURAL INTEGRITY OF CEILING AND SUPPORT. |

2301 BOARDWALK  
ATLANTIC, NJ 08401

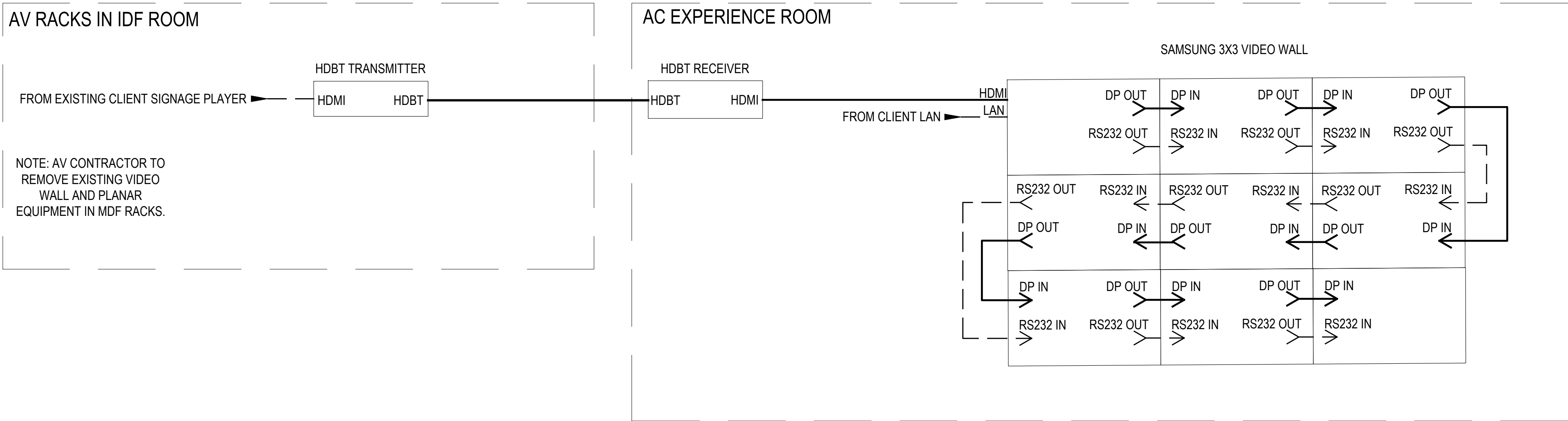


3 AUDIOVISUAL SECTION & ELEVATION  
ATLANTIC COUNTY WOMEN'S HOF  
SCALE: 1/2"=1'-0"



Jim Whelan  
Boardwalk Hall  
Lobby Upgrades

| 10/29/2025 ISSUE FOR CONSTRUCTION |        |              |
|-----------------------------------|--------|--------------|
| Date                              | Issued | Revision No. |



ATLANTIC COUNTY WOMEN'S HALL OF FAME WALL



The diagram shows a rectangular box labeled "FLAT PANEL DISPLAY". To its left, there are two horizontal lines representing connections. The top line is labeled "USB" and has an arrow pointing from the text "FROM CLIENT PROVIDED DRIVE" to the display. The bottom line is labeled "LAN" and has an arrow pointing from the text "FROM CLIENT LAN" to the display.

Send \_\_\_\_\_

10/29/2025 ISSUE FOR CONSTRUCTION



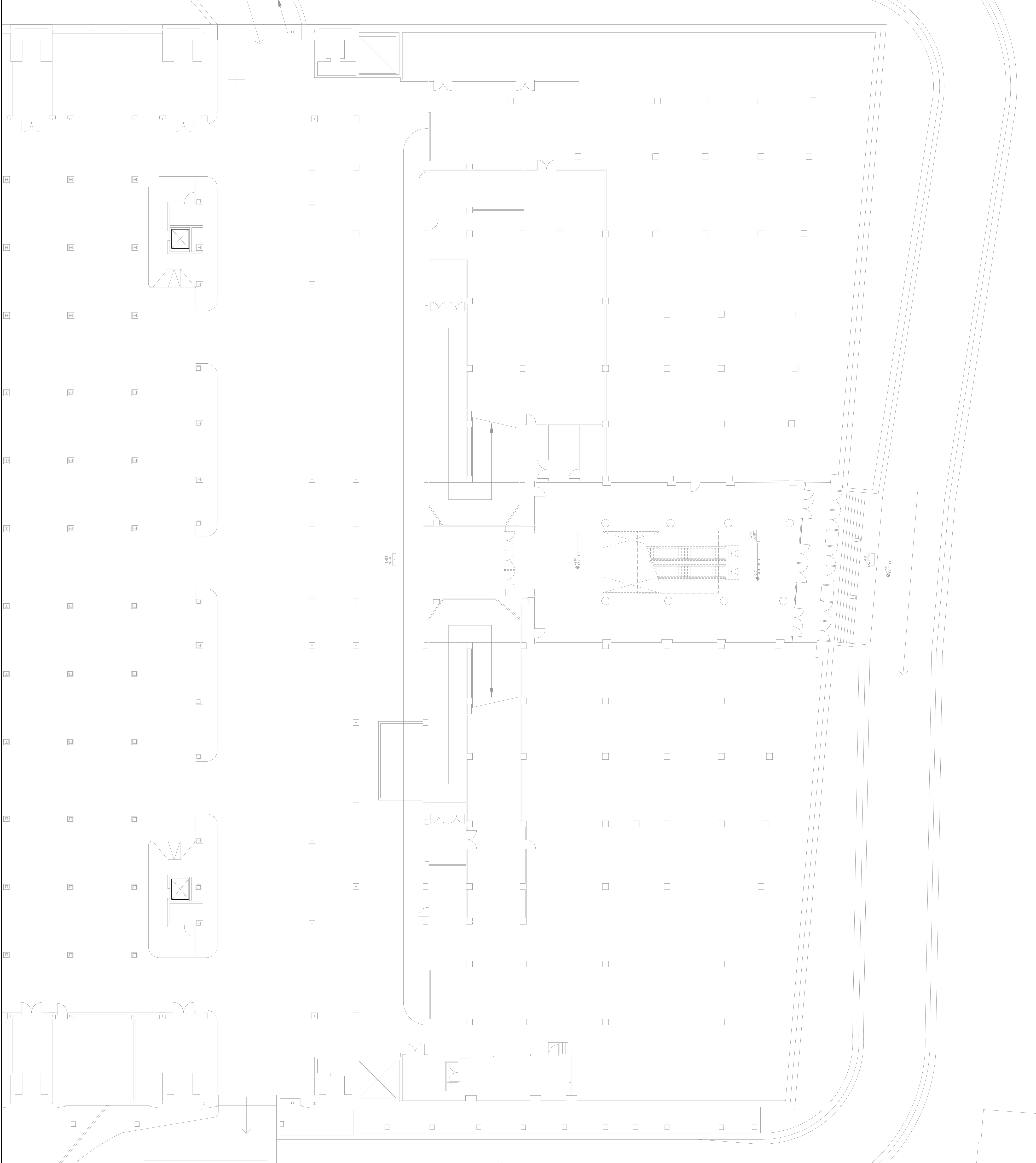
Drawing Title:  
AUDIOVISUAL  
SYSTEM FLOW DIAGRAM

TMTICMTA Project No.:  
8J4680001

Drawing No:  
AV-901



[illegible]



NOTES

ELECTRICAL PRE-DEMOLITION NOTES

1. PRIOR TO COMMENCEMENT OF DEMOLITION WORK, CONTRACTOR SHALL UNDERTAKE ELECTRICAL SURVEY TO TRACE ALL EXISTING BRANCH CIRCUITS/FEEDERS. CONTRACTOR SHALL CLEARLY IDENTIFY ALL CIRCUITS/FEEDERS THAT ARE BEING EXISTING TO REMAIN AND DISCONNECTED. THE ACTIVE CIRCUITS/FEEDERS SHALL BE IDENTIFIED BY THE CONTRACTOR AND THE DEMOLITION WORK SHALL BE COMPLETED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEMOLITION WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEMOLITION WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEMOLITION WORK.
2. EXISTING TO REMAIN CIRCUITS WILL BE CLEARLY IDENTIFIED AT THE RESPECTIVE ELECTRICAL PANELS AS TO REMAIN WITH THE LOAD BEING EXISTING. A SCHEDULE OF THE PANELS, THE ACTIVE CIRCUITS/FEEDERS, TO REMAIN, THE DEMOLITION WORK SHALL BE COMPLETED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEMOLITION WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEMOLITION WORK.
3. THE ASSOCIATED CONDUIT FOR EXISTING TO REMAIN ACTIVE CIRCUITS SHALL BE CLEARLY IDENTIFIED IN THE ELECTRICAL CLOSET AND FROM A MINIMUM OF 2' OUTSIDE THE ELECTRICAL CLOSET PRIOR TO ANY DEMOLITION WORK. AFTER CEILING DEMO, THE ENTIRE LENGTH OF THE CIRCUIT CONDUIT SHALL BE CLEARLY MARKED.
4. THE METHOD OF INDICATING EXISTING TO REMAIN DEVICES/CIRCUITS/WIRING, ETC. SHALL BE AGREED BETWEEN CLIENT/ENGINEER AND DEMOLITION CONTRACTOR PRIOR TO COMMENCEMENT OF DEMO.
5. THE EC SHALL BE RESPONSIBLE TO INDICATE ALL CIRCUITS TO REMAIN ON AN EXISTING FLOOR PLAN, PROVIDED BY ARCHITECT/CLIENT. THE MARK-UP SHALL INDICATE POINT OF ORIGIN, ITS PANEL, CONDUIT ROUTE AND LOAD SERVED.

ELECTRICAL DEMOLITION NOTES

1. PRIOR TO SUBMISSION OF BID, THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS TO DETERMINE THEIR IMPACT IN THE EXECUTION OF THIS CONTRACT WORK. SUBMISSION OF PROPOSAL WILL BE CONSIDERED AS SUCH AS EXAMINATION AND A LATER CLAIMING WILL NOT BE RECOGNIZED FOR DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN DURING SUCH EXAMINATION. GC TO COORDINATE ALL AFTER-HOUR WORK WITH TENANT AND LANDLORDS.
2. ALL ELECTRICAL POWER MUST BE DISCONNECTED PRIOR TO COMMENCEMENT OF DEMOLITION.
3. DEMOLITION WORK SHALL INCLUDE, BUT NOT BE LIMITED TO, ANY & ALL MATERIALS, CONNECTIONS, EXTENSIONS, CUTTING, REMOVAL AND CORRESPONDING WORK, TEMPORARY OR PERMANENT, THAT MAY BE REQUIRED TO MAINTAIN SERVICE THROUGHOUT THE COMPLETION OF THIS PROJECT. COORDINATE THE EXTENT OF THE DEMOLITION WORK WITH THE ARCHITECT.
4. TEMPORARY LIGHTING AND POWER MUST BE PROVIDED FOR ALL TRADES. COMPRESSION FITTINGS OR SOLDERING SHALL NOT BE USED WHERE STREAMERS ARE SPliced.
5. EXISTING FEEDERS AND BRANCH CIRCUITS PASSING THROUGH THE AREA OF DEMOLITION AND SERVING OCCUPIED ADJACENT AREAS AND INTERFERING WITH THE NEW WORK SHALL BE TRACED AND RELOCATED BY THE CONTRACTOR. ALL NECESSARY SAFETY MEASURES REQUIRED TO PROTECT THIS WORK SHALL BE COORDINATED WITH THE BUILDING MANAGEMENT. SHUT DOWN WILL NOT BE PERFORMED WITHOUT PRIOR APPROVAL.
6. WIRING, CONDUIT, AND SUPPORTS FOR FEEDERS AND BRANCH CIRCUITS SHALL BE RELOCATED BACK TO THEIR PANELS OF ORIGIN WITH WIRE DISCONNECTED FROM INSIDE THE PROTECTIVE DEVICE. COORDINATE REMOVALS WITH ARCHITECT. FINAL DOCUMENTS REMAIN THE SITE. ALL REMOVALS, REPAIRS AND MATERIALS REMOVALS ARE NOT TO BE REUSED IN CERTAIN CASES, EQUIPMENT OR MATERIALS DESIGNATED FOR REMOVAL SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE TURNED OVER AT LOCATIONS AS DIRECTED BY THE OWNER. THESE ITEMS SHALL INCLUDE, BUT ARE NOT LIMITED TO ALL SECURITY DEVICES, EQUIPMENT RACKS, WIRELESS ACCESS POINTS, ETC.
7. MAINTAIN THE CONTINUITY OF EXISTING BRANCH CIRCUITS SERVING REMAINING ELECTRICAL DEVICES OUTSIDE THE SCOPE OF WORK WHERE PORTIONS OF EXISTING BRANCH CIRCUITS ARE BEING REMOVED. MAINTAIN CONTINUITY OF ALL EXISTING FEEDERS AND BRANCH CIRCUITS TO EXISTING AREAS NOT BEING AFFECTED BY THE DEMOLITION. ALL WORK TO BE DONE AS APPROVED BY THE ARCHITECT.
8. WHERE EXISTING PANELS ARE INDICATED TO BE REMOVED, REMOVE PANEL, ASSOCIATED WIRE, WAYS, AND MAIN FEEDER. RELOCATE BRANCH CIRCUITS SERVING DEVICES EXISTING TO REMAIN.
9. IDENTIFY AS SPARE ANY PROTECTIVE DEVICE IN EXISTING PANELS THAT ARE MADE SPARE DUE TO DEMOLITION. PANEL DIRECTORIES SHALL BE UPDATED ACCORDINGLY. WITHIN 10 BUSINESS DAYS IN ACCORDANCE WITH ELECTRICAL CODE SECTION 408.4.
10. ELECTRICAL CONTRACTOR SHALL VISIT AND EXAMINE CAREFULLY THE EXISTING AREAS AFFECTED BY THIS WORK TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND WITH DIFFICULTIES THAT WILL AFFECT THE EXECUTION OF THE WORK. CONTRACTOR SHALL PERFORM THIS PRIOR TO SUBMITTING HIS PROPOSAL.
11. DEVICES INDICATED AS EXISTING TO REMAIN SHALL MAINTAIN CIRCUIT CONNECTIVITY. RESTORE ALL CIRCUITING INTERRUPTED BY DEMOLITION WORK FOR EXISTING DEVICES TO REMAIN.
12. ELECTRICAL CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF ALL OTHER TRADES, AND CONFER WITH THE ARCHITECT.
13. ELECTRICAL PANEL COVERS ARE NOT TO BE LEFT OFF ANY TIME, UNLESS PERSONNEL ARE WORKING ON THEM.
14. ALL ABANDONED TELECOMMUNICATIONS WIRING AND WIREWAYS IN THE CEILING OR MADE REDUNDANT BY THE DEMOLITION SHALL BE REMOVED. SEE ONLY AFTER-DEMOLITION 2D CONCRETE TELECOM CROSS-SECTION.
15. REFER TO ARCHITECTURAL PLANS FOR LIGHTING FIXTURES, RECEPTACLES, OUTLETS, ETC. TO REMAIN AND TO BE DEMOLISHED.

DEMOLITION KEY SCOPE NOTES

- 1. MECHANICAL EQUIPMENT REFER TO MECHANICAL DEMO PLAN. EQUIPMENT SHALL BE REMOVED BY OTHERS. ELECTRICAL CONTRACTOR SHALL DISCONNECT AND REMOVE POWER AND SWITCHES.
- 2. CONTRACTOR SHALL USE IN THE REMOVAL OF ALL EXISTING LIGHT FIXTURES, SWITCHES, RECEPTACLES, LOW VOLTAGE OUTLETS, FLOORBOARDS, WIREWAYS, INCLUDING ALL CONDUIT AND WIRE BACK TO SOURCE OR NEXT DEVICE TO REMAIN.
- 3. BUILDING FIRE ALARM SYSTEM INTEGRITY SHALL BE MAINTAINED AT ALL TIMES. BEFORE, DURING AND AFTER DEMOLITION, CONTRACTOR TO ENSURE ALL DEVICES ARE PROTECTED. PROVIDE APPROVED FIRE WATCHMEN. MAINTAIN THE EXISTING FIRE ALARM SYSTEM. TEMPORARILY COVERED. PROVIDE FIRE LANS. LANS WITH A LIGHT TIE TO BE SUBMITTED NOT LATER THAN 10 BUSINESS DAYS BEFORE THE START OF ANY WORK. EXISTING FIRE ALARM DEVICES TO REMAIN SHALL BE PROTECTED DURING DEMOLITION. DEVICES SHALL REMAIN OPERATIONAL. DURING DEMOLITION, ALL DEVICES TO BE REMOVED SHALL BE IDENTIFIED BY THE CONTRACTOR. EXISTING DEVICES TO BE REMOVED SHALL BE IDENTIFIED BY THE CONTRACTOR. EXISTING DEVICES TO BE REMOVED SHALL BE IDENTIFIED BY THE CONTRACTOR. EXISTING DEVICES TO BE REMOVED SHALL BE IDENTIFIED BY THE CONTRACTOR.
- 4. CONTRACTOR TO REMAIN BLANK TO DETERMINE CONDUIT ROUTING IN BLANKS FOR DAMAGED FLOORBOARDS FOR PROPER REMOVAL OF FLOORBOARDS AND ALL ASSOCIATED CONDUIT AND WIRE IN FLOOR. PATCHES/REPAIR/REPROOF ALL BLANKS OPENINGS LEFT AFTER REMOVAL.
- 5. WIRE THROUGH FLOORBOARDS TO BE REMOVED INCLUDING ALL CONDUIT AND WIRE FROM THE FLOOR BELOW. PATCHES/REPAIR/REPROOF ALL BLANK OPENINGS LEFT AFTER REMOVAL.

Jim Whelan  
Boardwalk Hall  
Lobby Upgrades

2301 BOARDWALK  
ATLANTIC, NJ 08401

Seal

10/29/25 ISSUED FOR CONSTRUCTION

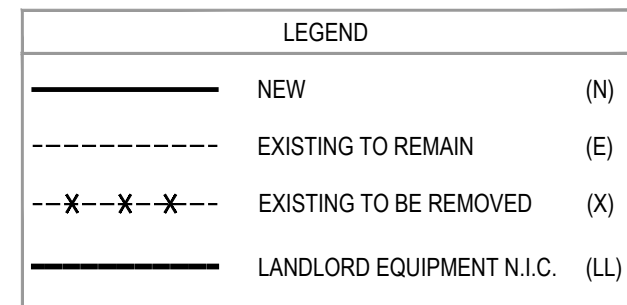
Date Issued Revision No.

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Drawing Title:  
ELECTRICAL  
DEMOLITION  
PLAN  
Scale:  
3/32"=1'-0"  
Proj. Manager:  
RK  
Issue Date:  
10/29/2025  
Proj. Engineer:  
BY  
AWAC/MTA Project No:  
J039-01-001  
Drawing No:

E-201



3. COORDINATE ANY REQUIRED SHIFTDOWNS AND SERVICE CONNECTION POINTS WITH BUILDING MANAGEMENT IN ACCORDANCE WITH BUILDING RULES AND REGULATIONS TO AVOID ANY BUSINESS DAYS NOTICE PRIOR TO ANY WORK, WHICHEVER IS MORE STRINGENT.
4. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH OWNER AND PROVIDING THE FOLLOWING DIMENSIONAL DRAWING, BOYES, ETC. AS DIRECTED (AND AS REQUIRED) FOR A COMPLETE INSTALLATION.
5. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT ELECTRICAL EQUIPMENT DIMENSIONS TO BE INSTALLED WITH FIELD CONDITIONS PRIOR TO INSTALLATION OF EQUIPMENT. CONTRACTOR SHALL PROVIDE DIMENSIONAL DRAWING OF ALL EXISTING CLOSETS AS SHOWING DRAINABILITY, WITH FIELD MEASUREMENT OF ALL EXISTING CONDITIONS AND PROPOSED NEW EQUIPMENT WITH DIMENSIONS TO BE INSTALLED. CONTRACTOR SHALL PROVIDE DIMENSIONAL DRAWING OF ALL EXISTING AND ADVISE ENGINEER OF ANY CLOSET, OR CLEARANCE CONFLICTS THAT ARISE FROM CONFLICTS WITH EXISTING CONDITIONS.
6. COORDINATE ELECTRICAL WIRING WITH EQUIPMENT REQUIREMENTS FOR OTHER TRADES AS REQUIRED.
7. WHERE THE EXISTING TRANSFORMERS, PANELBOARDS AND DISCONNECT SWITCHES TO BE RE-USED, THE CONTRACTOR SHALL CLEAN EQUIPMENT, REPLACE ANY AND ALL DEFECTIVE AND TEST EQUIPMENT TO BE RE-USED. ALL ELECTRICAL CONNECTIONS OF ALL EXISTING WIRING SHALL BE CHECKED AND TIGHTENED. BONDING OF ALL TRANSFORMERS TO THE BUILDING STEEL SHALL BE CHECKED.
8. ALL PANELS, FEEDERS, WIREWAYS, ETC. ARE EXISTING U.S.A. SEE DRAWING E-400 FOR DETAILS.
9. TRANSFORMERS, WHERE HUNG FROM STRUCTURAL STEEL, SHALL INCLUDE SEISMIC BRACING.
10. EQUIPMENT COSTS FOR ALL EXISTING ELECTRICAL SUBMITTERS TO BE INSPECTED AND REEQUIPATED BY THE BUILDING MANAGEMENT.
11. GENERAL CONTRACTOR SHALL CLEAN UP AND VACUUM ALL DUST AND DEBRIS FROM ELECTRICAL LOCATIONS, INCLUDING THE OUTSIDE OF ALL ELECTRICAL EQUIPMENT. REMOVE ALL ELECTRICAL PANELS AND EQUIPMENT FROM HALLS, FLOORS, ETC. PRIOR TO THE COMMENCEMENT OF WORK AND AT THE END OF EACH DAY.
12. CONTRACTOR SHALL OBTAIN SHORT CIRCUIT, ARC FLASH AND COORDINATION STUDY, INCLUDING IN-POURING FOR CONTRACTOR TO OBTAIN SERVICE TO PERFORM CALCULATIONS, COORDINATE WITH LOCALITY FIRE AUTHORITY FOR FAULT CURRENT AND SHORT CIRCUIT STUDY. CONTRACTOR SHALL OBTAIN ALL RECOMMENDATIONS ON FAULT CURRENT, BRACING RATINGS, COORDINATE PROTECTIVE DEVICE TRIP POINTS, AND COORDINATION STUDY. CONTRACTOR SHALL SUBMIT ALL INFORMATION TO SUBMISSION OF ANY ELECTRICAL EQUIPMENT FOR FABRICATION, PANELBOARDS AND EQUIPMENT SHALL NOT BE APPROVED WITHOUT THIS INFORMATION AND REPORT.

2. ALL PANELS SHALL BE DOWN IN DOOR CONNECTION.
3. WHERE SPACES ARE INDICATED, PROVIDE BLANKING PANELS WHERE COVER IS MISSING.
4. PROVIDE LAMINATED ENGRAVED (OR DESIGNATING PANEL, PER SCHEDULES INCLUDING PANEL NAME, VOLTAGE, AND SOURCE PANEL, IF APPLICABLE) FOR ALL EXISTING PANELS. INDICATED UNDER THE CONTRACT, REFER TO JET'S SHEET FOR ADDITIONAL SIGNAGE REQUIREMENTS.
5. ALL CIRCUIT BREAKERS SERVING CIRCUITS, NIGHT LIGHT, EMERGENCY LIGHT, ETC. SHALL BE FITTED WITH A LOCKING TAB.
6. ALL CIRCUIT BREAKERS ARE SINGLE (1) POLE, 0.0 N.
7. ELECTRICAL CONTRACTOR SHALL PROVIDE NEW, UPDATED TYPED/PRINTED PANEL SCHEDULES IN COMPLIANCE WITH NEC ARTICLE 404.4 FOR ALL PANELS THAT ARE BEING REWIRING OR RECONFIGURED. THE NEW PANEL IDENTIFICATION SHALL INCLUDE AN APPROVED DESIGN OF THAT LABEL THAT ALLOWS EACH CIRCUIT TO BE IDENTIFIED BY THE LOCATION, UTILITY, ROOM NUMBERS, WORKSTATION NUMBERS, COLUMN GRID LOCATIONS, ETC. SUBMIT SCHEDULES TO ENGINEER FOR REVIEW PRIOR TO INSTALLATION.
8. ALL BREAKERS SERVING AN EXISTING FEED TO BE REMOVED DURING DEMOLITION SHALL BE LABELED AS SPARE AND TURNED OFF. DISCONNECT AND REMOVE ALL WIRING BACK TO SOURCE. UPDATE TYPED/PRINTED PANEL SCHEDULE AS NEEDED.
9. CONTRACTOR SHALL MAKE MAXIMUM USE OF EXISTING CIRCUIT BREAKERS, THIS INCLUDES THE CIRCUIT BREAKER IDENTIFICATION LABELING. IF THE EXISTING LABELS DO NOT MEET THE REQUIREMENTS OF THE PANEL IDENTIFICATION LABELING, THE CONTRACTOR SHALL PROVIDE THE REQUIRED LAYOUT, WHERE EXISTING CIRCUIT BREAKERS ARE RE-USED.
10. CONTRACTOR SHALL CONFIRM CORRECT OPERATION AND CHECK FOR PROPERLY IDENTIFIED NEW CIRCUITS, SAYING "NO OPERATING CONDITIONS."

| AVP-2                   |  |                        |  |             |  |                                 |  |            |  | Ground Bus: IG Bus |  | X                |  | Cover: Mounting: Panel Status:                  |  | Door in Door Surface Existing |  |              |  |            |  |       |  |                     |  |                                                             |  |
|-------------------------|--|------------------------|--|-------------|--|---------------------------------|--|------------|--|--------------------|--|------------------|--|-------------------------------------------------|--|-------------------------------|--|--------------|--|------------|--|-------|--|---------------------|--|-------------------------------------------------------------|--|
| Voltage 120 / 208       |  | Main Breaker Lugs Only |  | X           |  | Phase Wire Service 200% Neutral |  | 3          |  | 4                  |  | Sub-feed Breaker |  |                                                 |  |                               |  |              |  |            |  |       |  |                     |  |                                                             |  |
| Bus Rating 225A         |  | Feed 1 Thru Lugs       |  |             |  |                                 |  |            |  |                    |  |                  |  |                                                 |  |                               |  |              |  |            |  |       |  |                     |  |                                                             |  |
| AC Rating 22K           |  |                        |  |             |  |                                 |  |            |  |                    |  |                  |  |                                                 |  |                               |  |              |  |            |  |       |  |                     |  |                                                             |  |
| Circuit Description     |  | Lighting               |  | Receptacles |  | Other Motors                    |  | Appliances |  | Other              |  | Circuit Breaker  |  | Lighting                                        |  | Receptacles                   |  | Other Motors |  | Appliances |  | Other |  | Circuit Description |  |                                                             |  |
|                         |  | A                      |  | B           |  | C                               |  | D          |  | E                  |  | F                |  | G                                               |  | H                             |  | I            |  | J          |  | K     |  | L                   |  |                                                             |  |
| AV/Rack 2A              |  | 1                      |  | ~           |  | 2                               |  |            |  |                    |  |                  |  |                                                 |  |                               |  |              |  |            |  |       |  | AV/Rack 2A          |  |                                                             |  |
| AV/Rack 2A              |  | 3                      |  | ~           |  | 4                               |  |            |  |                    |  |                  |  |                                                 |  |                               |  |              |  |            |  |       |  | AV/Rack 2A          |  |                                                             |  |
| AV/Rack 2A              |  | 5                      |  | ~           |  | 6                               |  |            |  |                    |  |                  |  |                                                 |  |                               |  |              |  |            |  |       |  | AV/Rack 2A          |  |                                                             |  |
| AV/Rack 2A              |  | 7                      |  | ~           |  | 8                               |  |            |  |                    |  |                  |  |                                                 |  |                               |  |              |  |            |  |       |  | AV/Rack 2A          |  |                                                             |  |
| AV/Rack 2A              |  | 9                      |  | ~           |  | 10                              |  |            |  |                    |  |                  |  |                                                 |  |                               |  |              |  |            |  |       |  | AV/Rack 2A          |  |                                                             |  |
| AV/Rack 2A              |  | 11                     |  | ~           |  | 12                              |  |            |  |                    |  |                  |  |                                                 |  |                               |  |              |  |            |  |       |  | AV/Rack 2A          |  |                                                             |  |
| AV/Rack 2B              |  | 13                     |  | ~           |  | 14                              |  |            |  |                    |  |                  |  |                                                 |  |                               |  |              |  |            |  |       |  | AV/Rack 2B          |  |                                                             |  |
| AV/Rack 2B              |  | 15                     |  | ~           |  | 16                              |  |            |  |                    |  |                  |  |                                                 |  |                               |  |              |  |            |  |       |  | Column Display      |  |                                                             |  |
| Video Wall              |  | 750                    |  | ~           |  | 17                              |  | 18         |  |                    |  |                  |  |                                                 |  |                               |  |              |  |            |  |       |  | Column Display      |  |                                                             |  |
| Video Wall              |  | 375                    |  | ~           |  | 19                              |  | 20         |  |                    |  |                  |  |                                                 |  |                               |  |              |  |            |  |       |  | Kiosk Edge Prefu    |  |                                                             |  |
| Spare                   |  |                        |  |             |  | 21                              |  | 22         |  |                    |  |                  |  |                                                 |  |                               |  |              |  |            |  |       |  | FCU                 |  |                                                             |  |
| Spare                   |  |                        |  |             |  | 23                              |  | 24         |  |                    |  |                  |  |                                                 |  |                               |  |              |  |            |  |       |  | Spare               |  |                                                             |  |
| Spare                   |  |                        |  |             |  | 25                              |  | 26         |  |                    |  |                  |  |                                                 |  |                               |  |              |  |            |  |       |  | Spare               |  |                                                             |  |
| Spare                   |  |                        |  |             |  | 27                              |  | 28         |  |                    |  |                  |  |                                                 |  |                               |  |              |  |            |  |       |  | Spare               |  |                                                             |  |
| Spare                   |  |                        |  |             |  | 29                              |  | 30         |  |                    |  |                  |  |                                                 |  |                               |  |              |  |            |  |       |  | Spare               |  |                                                             |  |
| Spare                   |  |                        |  |             |  | 31                              |  | 32         |  |                    |  |                  |  |                                                 |  |                               |  |              |  |            |  |       |  | Spare               |  |                                                             |  |
| Spare                   |  |                        |  |             |  | 33                              |  | 34         |  |                    |  |                  |  |                                                 |  |                               |  |              |  |            |  |       |  | Spare               |  |                                                             |  |
| Spare                   |  |                        |  |             |  | 35                              |  | 36         |  |                    |  |                  |  |                                                 |  |                               |  |              |  |            |  |       |  | Spare               |  |                                                             |  |
| Spare                   |  |                        |  |             |  | 37                              |  | 38         |  |                    |  |                  |  |                                                 |  |                               |  |              |  |            |  |       |  | Spare               |  |                                                             |  |
| Spare                   |  |                        |  |             |  | 39                              |  | 40         |  |                    |  |                  |  |                                                 |  |                               |  |              |  |            |  |       |  | Spare               |  |                                                             |  |
| Spare                   |  |                        |  |             |  | 41                              |  | 42         |  |                    |  |                  |  |                                                 |  |                               |  |              |  |            |  |       |  | Spare               |  |                                                             |  |
| Total                   |  | 0                      |  | 0           |  | 0                               |  | 0          |  | 9                  |  | 1125             |  | Volts-Amperes                                   |  | 0                             |  | 0            |  | 0          |  | 0     |  | 0                   |  | Total                                                       |  |
| Lighting                |  | 0.00                   |  | KVA         |  | 1.00                            |  | 0.00       |  | KVA                |  |                  |  | Notes                                           |  |                               |  |              |  |            |  |       |  |                     |  | Panel Load Summary                                          |  |
| Receptacle (First 10KW) |  | 0.00                   |  | KVA         |  | 1.00                            |  | 0.00       |  | KVA                |  |                  |  | 1) "New breaker to match existing type;"        |  |                               |  |              |  |            |  |       |  |                     |  | Load Summary 1.13 KVA                                       |  |
| Receptacle (Remainder)  |  | 0.00                   |  | KVA         |  | 0.50                            |  | 0.00       |  | KVA                |  |                  |  | 2) New work derated in by type.                 |  |                               |  |              |  |            |  |       |  |                     |  | Design Load: 28.80 KVA                                      |  |
| Heating                 |  | 0.00                   |  | KVA         |  | 0.90                            |  | 0.00       |  | KVA                |  |                  |  | 3) New work derated in by type.                 |  |                               |  |              |  |            |  |       |  |                     |  | Demand Load: 1.13 KVA                                       |  |
| Spare                   |  | 0.00                   |  | KVA         |  | 0.75                            |  | 0.00       |  | KVA                |  |                  |  | 4) See symbols.                                 |  |                               |  |              |  |            |  |       |  |                     |  | Spare Capacity: 27.68 KVA                                   |  |
| Appliances              |  | 0.00                   |  | KVA         |  | 1.00                            |  | 0.00       |  | KVA                |  |                  |  | Per NEC Section 210.4(B).                       |  |                               |  |              |  |            |  |       |  |                     |  | Demand Load Summary per Phase                               |  |
| Other                   |  | 1.13                   |  | KVA         |  | 1.00                            |  | 1.13       |  | KVA                |  |                  |  | ~ Provide tie bar between single pole breakers; |  |                               |  |              |  |            |  |       |  |                     |  | Phase A: 0.58 KVA                                           |  |
| Sub-feed                |  | KVA                    |  | 1.00        |  | 0.00                            |  | KVA        |  |                    |  |                  |  | ~ (2) single pole breakers with tie bar.        |  |                               |  |              |  |            |  |       |  |                     |  | Phase B: 0.00 KVA                                           |  |
| Feed thru               |  | KVA                    |  | 1.00        |  | 0.00                            |  | KVA        |  |                    |  |                  |  |                                                 |  |                               |  |              |  |            |  |       |  |                     |  | Phase C: 0.75 KVA                                           |  |
| Total Load (KVA)        |  | 1.13                   |  | KVA         |  | 1.13                            |  | KVA        |  |                    |  |                  |  | ~ Provide tie bar between single pole breakers; |  |                               |  |              |  |            |  |       |  |                     |  | All Circuit Breakers Are 20A, 1-Pole Unless Otherwise Noted |  |
| Total Load (Amps)       |  | 3                      |  | AMP         |  | 3                               |  | AMP        |  |                    |  |                  |  | (3) single pole breakers with tie bar.          |  |                               |  |              |  |            |  |       |  |                     |  | D.F.: NEC Demand Factor                                     |  |
| Design Load (Amps)      |  |                        |  |             |  | 80                              |  | AMP        |  |                    |  |                  |  |                                                 |  |                               |  |              |  |            |  |       |  |                     |  |                                                             |  |
| Spare (Amps)            |  |                        |  |             |  | 17                              |  | AMP        |  |                    |  |                  |  |                                                 |  |                               |  |              |  |            |  |       |  |                     |  |                                                             |  |

APP-3

|                                                                                       |  |                        |              |         |              |              |                                                |         |                  |          |             |              |       |                                      |  |  |  |  |  |
|---------------------------------------------------------------------------------------|--|------------------------|--------------|---------|--------------|--------------|------------------------------------------------|---------|------------------|----------|-------------|--------------|-------|--------------------------------------|--|--|--|--|--|
| APP-3                                                                                 |  |                        |              |         |              |              |                                                |         |                  |          |             |              |       |                                      |  |  |  |  |  |
| Voltage                                                                               |  | 120 / 208              | Main Breaker |         | 175A         | Phase        |                                                | 3       | Ground Bus       |          | X           | Cover        |       | Door in Door                         |  |  |  |  |  |
| Bus Rating                                                                            |  | 225A                   | Main Breaker |         | Lugs Only    | Wire Section |                                                | 4       | IG Bus           |          |             | Mounting     |       | Surface                              |  |  |  |  |  |
| A/C Rating                                                                            |  | 22K                    | Feet         |         | Thru Lugs    | 200% Neutral |                                                |         | Sub-feed Breaker |          |             | Panel Status |       | New                                  |  |  |  |  |  |
|  |  |                        |              |         |              |              |                                                |         |                  |          |             |              |       |                                      |  |  |  |  |  |
| Circuit Description                                                                   |  | Lighting               | Receptacles  | Heating | Other Motors | Appliances   | Other                                          | General | Panel Rating     | Lighting | Receptacles | Heating      | Other | Circuit Description                  |  |  |  |  |  |
|                                                                                       |  | A B C                  |              |         |              |              |                                                |         |                  |          |             |              |       |                                      |  |  |  |  |  |
| Column Receptacles                                                                    |  | 1000                   | 1            | ~       | 2            |              |                                                |         |                  |          |             |              |       | Spares                               |  |  |  |  |  |
| Column Receptacles                                                                    |  | 1000                   | 3            | ~       | 4            |              |                                                |         |                  |          |             |              |       | Spares                               |  |  |  |  |  |
| Column Receptacles                                                                    |  | 1000                   | 5            | ~       | 6            |              |                                                |         |                  |          |             |              |       | Spares                               |  |  |  |  |  |
| Column Receptacles                                                                    |  | 1000                   | 7            | ~       | 8            |              |                                                |         |                  |          |             |              |       | Spares                               |  |  |  |  |  |
| Column Receptacles                                                                    |  | 1000                   | 9            | ~       | 10           |              |                                                |         |                  |          |             |              |       | Spares                               |  |  |  |  |  |
| Column Receptacles                                                                    |  | 1000                   | 11           | ~       | 12           |              |                                                |         |                  |          |             |              |       | Spares                               |  |  |  |  |  |
| Column Receptacles                                                                    |  | 1000                   | 13           | ~       | 14           |              |                                                |         |                  |          |             |              |       | Spares                               |  |  |  |  |  |
| Column Receptacles                                                                    |  | 1000                   | 15           | ~       | 16           |              |                                                |         |                  |          |             |              |       | Spares                               |  |  |  |  |  |
| Column Receptacles                                                                    |  | 1000                   | 17           | ~       | 18           |              |                                                |         |                  |          |             |              |       | Spares                               |  |  |  |  |  |
| Column Receptacles                                                                    |  | 1000                   | 19           | ~       | 20           |              |                                                |         |                  |          |             |              |       | Spares                               |  |  |  |  |  |
| Column Receptacles                                                                    |  | 1000                   | 21           | ~       | 22           |              |                                                |         |                  |          |             |              |       | Spares                               |  |  |  |  |  |
| Column Receptacles                                                                    |  | 1000                   | 23           | ~       | 24           |              |                                                |         |                  |          |             |              |       | Spares                               |  |  |  |  |  |
| Column Receptacles                                                                    |  | 1000                   | 25           | ~       | 26           |              |                                                |         |                  |          |             |              |       | Spares                               |  |  |  |  |  |
| Column Receptacles                                                                    |  | 1000                   | 27           | ~       | 28           |              |                                                |         |                  |          |             |              |       | Spares                               |  |  |  |  |  |
| Column Receptacles                                                                    |  | 1000                   | 29           | ~       | 30           |              |                                                |         |                  |          |             |              |       | Spares                               |  |  |  |  |  |
| Column Receptacles                                                                    |  | 1000                   | 31           | ~       | 32           |              |                                                |         |                  |          |             |              |       | Spares                               |  |  |  |  |  |
| Museum Display                                                                        |  | 1250                   | 33           | ~       | 34           |              |                                                |         |                  |          |             |              |       | Spares                               |  |  |  |  |  |
| Spares                                                                                |  |                        | 35           | ~       | 36           |              |                                                |         |                  |          |             |              |       | Spares                               |  |  |  |  |  |
| Spares                                                                                |  |                        | 37           | ~       | 38           |              |                                                |         |                  |          |             |              |       | Spares                               |  |  |  |  |  |
| Spares                                                                                |  |                        | 39           | ~       | 40           |              |                                                |         |                  |          |             |              |       | Spares                               |  |  |  |  |  |
| Spares                                                                                |  |                        | 41           | ~       | 42           |              |                                                |         |                  |          |             |              |       | Spares                               |  |  |  |  |  |
| Total                                                                                 |  | 0                      | 0            | 0       | 0            | 0            | 9                                              | 1837A   | Volt-Amperes     |          |             |              |       | Total                                |  |  |  |  |  |
|                                                                                       |  | Connected Load Summary |              | D.F.    | Demand Load  |              | Notes:                                         |         |                  |          |             |              |       | Panel Load Summary                   |  |  |  |  |  |
| Lighting                                                                              |  | 0.00                   | KVA          | 1.00    | 0.00         | KVA          | 1) "New breakers to match existing type;"      |         |                  |          |             |              |       | Load Summary: 18.58 KVA              |  |  |  |  |  |
| Receptacles (First 100%)                                                              |  | 0.00                   | KVA          | 1.00    | 0.00         | KVA          | 2) New work defined in bold.                   |         |                  |          |             |              |       | Design Load: 50.40 KVA               |  |  |  |  |  |
| Receptacles (Remainder)                                                               |  | 0.00                   | KVA          | 0.50    | 0.00         | KVA          |                                                |         |                  |          |             |              |       | Design Load: 18.58 KVA               |  |  |  |  |  |
| Heating                                                                               |  | 0.00                   | KVA          | 0.00    | 0.00         | KVA          |                                                |         |                  |          |             |              |       | Spare Capacity: 51.82 KVA            |  |  |  |  |  |
| Motor                                                                                 |  | 0.00                   | KVA          | 0.75    | 0.00         | KVA          | 1= bar symbols.                                |         |                  |          |             |              |       | Demand Load Summary per Phase        |  |  |  |  |  |
| Appliances                                                                            |  | 0.00                   | KVA          | 1.00    | 0.00         | KVA          | Per NEC Section 210.4(B).                      |         |                  |          |             |              |       | Phase A: 6.48 KVA                    |  |  |  |  |  |
| Other                                                                                 |  | 18.58                  | KVA          | 1.00    | 18.58        | KVA          | ~ Provide 1= bar between single pole breakers; |         |                  |          |             |              |       | Phase B: 6.70 KVA                    |  |  |  |  |  |
| Sub-feed                                                                              |  | 0.00                   | KVA          | 1.00    | 0.00         | KVA          | ~ (2) single pole breakers with 1= bar.        |         |                  |          |             |              |       | Phase C: 5.40 KVA                    |  |  |  |  |  |
| Feed thru                                                                             |  | 0.00                   | KVA          | 1.00    | 0.00         | KVA          |                                                |         |                  |          |             |              |       |                                      |  |  |  |  |  |
| Total Load (KVA)                                                                      |  | 18.58                  | KVA          |         | 18.58        | KVA          | ~ Provide 1= bar between single pole breakers; |         |                  |          |             |              |       | All Circuit Breakers Are 20A, 1-Pole |  |  |  |  |  |
| Total Load (Amps)                                                                     |  | 52                     | AMP          |         | 52           | AMP          | ~ (2) single pole breakers with 1= bar.        |         |                  |          |             |              |       | Unless Otherwise Noted               |  |  |  |  |  |
| Design Load (Amps)                                                                    |  |                        |              |         | 140          | AMP          |                                                |         |                  |          |             |              |       | D.F.: NEC Demand Factor              |  |  |  |  |  |
| Spares (Amps)                                                                         |  |                        |              |         | 88           | AMP          |                                                |         |                  |          |             |              |       |                                      |  |  |  |  |  |

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