

# KLING STUBBINS

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Seals:

JAMES R. LINDQUIST, PE NO 35044

General Notes:

## AUDIOVISUAL SYSTEMS SYMBOL LEGEND

SYMBOL	DESCRIPTION	BOX TYPE	MOUNTING LOCATION	ADDITIONAL NOTES
<b>AV JUNCTION BOX SYMBOLS</b>				
	AV CONNECTION PANEL J-BOX, TYPE 1	NEMA 8"x8"x4"	FLUSH MOUNT IN WALL ABOVE WORK SURFACE.	
	AV CONNECTION PANEL J-BOX, TYPE 2	NEMA 18"x18"x6"	FLUSH MOUNT IN WALL AT 18" A.F.F.	
	VIDEO WALL J-BOX	14-1/2"Wx15-1/2"Hx3-1/2"D METAL BOX, CHIEF MFG. "PAC 515" OR EQUAL	SEE ARCHITECTURAL DETAILS.	(9x) 46" LCD DISPLAY ARRAY
	FLAT PANEL DISPLAY J-BOX	NEMA 6"x6"x4"	FLUSH MOUNT IN WALL AT 60" A.F.F.	46" LCD DISPLAY
	CEILING LOUDSPEAKER, TYPE 1	CUSTOM 3 CU. FT. ENCLOSURE	FLUSH IN FINISHED CEILING.	12" FULL-RANGE COAXIAL LOUDSPEAKER W/ 200W XFMR, 90° x 90° HF HORN.
	NOT USED			
	CEILING LOUDSPEAKER, TYPE 3	CUSTOM 3 CU. FT. ENCLOSURE	PENDANT-MOUNTED FROM CEILING STRUCTURE @ 24' A.F.F.	12" FULL-RANGE COAXIAL LOUDSPEAKER W/ 200W XFMR, 90° x 90° HF HORN.
	CEILING LOUDSPEAKER, TYPE 4	CUSTOM 3 CU. FT. ENCLOSURE	FLUSH IN FINISHED CEILING.	12" FULL-RANGE COAXIAL LOUDSPEAKER, 60° x 60° HF HORN.
<b>AV JUNCTION BOX SYMBOLS (SHOWN FOR COORDINATION ONLY)</b>				
	EXISTING CEILING SPEAKER			
	MATCH POINT			USED IN CONJUNCTION WITH MATCH LINE
	DIGITAL SIGNAGE DISPLAY BACK BOX, TYPE 1	14-1/2"Wx15-1/2"Hx3-1/2"D METAL BOX, CHIEF MFG. "PAC 515" OR EQUAL	FLUSH IN WALL. SEE ARCHITECTURAL DETAILS.	46" LCD DISPLAY W/ MEDIA PLAYER, MOUNT POWER AND TELECOM J-BOXES WITHIN ENCLOSURE.
	DIGITAL SIGNAGE DISPLAY BACK BOX, TYPE 2	14-1/2"Wx15-1/2"Hx3-1/2"D METAL BOX, CHIEF MFG. "PAC 515" OR EQUAL	FLUSH IN WALL. SEE ARCHITECTURAL DETAILS.	46" LCD DISPLAY W/ MEDIA PLAYER, MOUNT POWER AND TELECOM J-BOXES WITHIN ENCLOSURE.
	DIGITAL SIGNAGE TRUSS, MEDIUM		SEE ARCHITECTURAL DETAILS.	(2x) 46" LCD DISPLAY W/ MEDIA PLAYERS.
	DIGITAL SIGNAGE TRUSS, LARGE		SEE ARCHITECTURAL DETAILS.	(4x) 46" LCD DISPLAY W/ MEDIA PLAYERS.
	MULTIMEDIA CONNECTION PANEL	6-GANG, 2-1/2" DEEP METAL BOX	FLUSH MOUNT IN BASEBOARD TRIM. SEE ARCHITECTURAL DETAILS.	COORDINATE W/ TELECOM DRAWINGS.
	MULTI-SERVICE FLOOR BOX	3-GANG W/ HINGED COVERS, HUBBELL "B433361" OR EQUAL	FLUSH IN FLOOR. SEE ARCHITECTURAL DETAILS.	COORDINATE W/ TELECOM DRAWINGS.

SYMBOL	DESCRIPTION	BOX TYPE	MOUNTING LOCATION	ADDITIONAL NOTES
<b>AV ELECTRICAL SYMBOLS (COORDINATION ONLY)</b>				
	DUPLEX AC RECEPTACLE 120V 20 AMP	1-GANG METAL BOX	FLUSH MOUNT IN WALL U.O.N.	
	DOUBLE DUPLEX AC RECEPTACLE 120V 20 AMP	2-GANG METAL BOX	FLUSH MOUNT IN WALL U.O.N.	
	DUPLEX AC RECEPTACLE 120V 20 AMP	1-GANG METAL BOX	FLUSH MOUNT IN FLOOR AS INDICATED	
<b>AV TEL/DATA SYMBOLS (COORDINATION ONLY)</b>				
	TEL/DATA DROP	1-GANG METAL BOX	FLUSH MOUNT IN WALL	REFER TO TELECOM DRAWINGS
	FLOOR BOX COMPONENT	1-GANG METAL BOX	FLUSH IN FLOOR AS INDICATED	REFER TO TELECOM DRAWINGS
	LADDER RACK			
	CABLE TRAY			
<b>AV CONDUIT LEGEND</b>				
	WIRING IN CONDUIT. TERMINATED WITH PLASTIC BUSHINGS			
	WIRING EXPOSED, PROVIDE PLENUM CABLE.			

## NOTES FOR RACKS, PLATES AND PANELS

- LAYOUT OF EQUIPMENT RACKS, RECEPTACLE PLATES, AND PANELS ARE DIAGRAMMATIC. ACTUAL LAYOUTS SHOULD BE SUBMITTED TO THE OWNER AND THE CONSULTANT.
- PROVIDE SHAFT LOCKS OR SECURITY COVERS FOR AMPLIFIERS VOLUME CONTROLS.
- EQUIPMENT RACK WIRING MUST MEET INDUSTRY STANDARDS FOR NEATNESS AND SEPARATION OF SIGNAL TYPES (MIC, LINE, VIDEO, LOUDSPEAKER, AND AC POWER).
- PROVIDE ENGRAVED LABELS ON EQUIPMENT RACKS THAT CLEARLY INDICATE THE EQUIPMENT TYPE AND FUNCTION. SECURE LABELS BELOW EQUIPMENT ON VENT OR BLANK PANELS.
- LAYOUT OF CONDUIT BOXES IS DIAGRAMMATIC. ACTUAL LAYOUT SHOULD BE COORDINATED WITH THE OWNER AND THE CONSULTANT.
- ALL CONNECTION PANELS AND FLOOR BOX PANELS ARE FINISHED 1/8" ALUMINUM ANODIZED WITH ENGRAVED LETTERING FILLED WITH ENAMEL PAINT. COORDINATE FINISH WITH ARCHITECT AND CONSULTANT PRIOR TO FABRICATION AND INSTALLATION OF PANELS.
- RACK PANELS ARE FINISHED 1/8" ALUMINUM ANODIZED BLACK WITH ENGRAVED LETTERING FILLED WITH WHITE ENAMEL PAINT. COORDINATE FINISH WITH ARCHITECT AND CONSULTANT PRIOR TO FABRICATION AND INSTALLATION OF PANELS.
- USE INSULATED JACKS ON RACK PANELS, CONNECTION PANELS, AND WALL PLATES.
- CLEARLY LABEL ALL FLOOR BOX RECEPTACLES AND PANEL RECEPTACLES. SUBMIT LABELING SCHEDULE AND SAMPLE TO OWNER AND CONSULTANT PRIOR TO FABRICATING LABELS.
- SUBMIT FINISHES TO ARCHITECT AND CONSULTANT PRIOR TO FABRICATION.

## GENERAL CONDUIT AND BACK BOX NOTES

- PROVIDE A COMPLETE CONDUIT SYSTEM FOR THE AUDIOVISUAL SYSTEM.
- CONDUIT SYSTEM SHOWN IS BASED ON ELECTRICAL METALLIC TUBING (EMT) THROUGHOUT. ALTERNATE DESIGNS UTILIZING ARMORED CABLE (STRANDED, PAIRED MC-PFLP TYPE, COLOR CODED RED) FOR LOUDSPEAKER CABLING ONLY WILL BE ACCEPTABLE.
- CONDUIT QUANTITIES AND SIZES HAVE BEEN CHOSEN BASED UPON SYSTEM REQUIREMENTS. CONDUITS OF COMMON SIGNAL TYPES MAY BE COMBINED IF TOTAL WIRE CAPACITY IS MAINTAINED.
- INSULATE AUDIOVISUAL EQUIPMENT ENCLOSURES FROM INCOMING METAL CONDUITS WITH PVC TO EMT CONNECTOR IN TOP OF ENCLOSURE OR OTHER APPROVED MEANS.
- CONDUIT AND AC POWER ON AV DRAWINGS IS DIAGRAMMATIC AND PROVIDED FOR COORDINATION AND REFERENCE ONLY. AV DRAWINGS DO NOT SHOW ALL REQUIRED COMPONENTS FOR A COMPLETE SYSTEM (I.E. PULL BOXES, ETC.).
- AC CIRCUITS IN AUDIOVISUAL EQUIPMENT RACKS TERMINATE IN RECEPTACLES PROVIDED BY THE AUDIOVISUAL CONTRACTOR.
- PROVIDE A PULL BOX IN RUNS OVER 100 FEET OR THAT CONTAIN MORE THAN (2) CONSECUTIVE 90° BENDS.
- PROVIDE A PULL LINE IN THE AUDIOVISUAL SYSTEM CONDUITS.
- ALL CONDUITS SHALL BE FERROUS METALS, BONDED TO GROUND EVEN IN OR BELOW SLABS. CONDUITS IN OR BELOW SLABS SHALL BE RIGID METALLIC CONDUITS. SEAL ALL JOINTS TO PREVENT LEAKING.
- ALL CONDUITS TO BE 3/4" UNLESS OTHERWISE NOTED.
- ALL GANG BOXES ARE 2-1/2" DEEP WITH 13/16" GANG COVER FOR DRYWALL OR PLASTER WALL CONSTRUCTION OR 3-1/2" DEEP FOR MASONRY WALL CONSTRUCTION UNLESS OTHERWISE NOTED.
- ALL CONDUIT STUBS SHALL BE TERMINATED WITH PLASTIC BUSHINGS AND SHALL BE STUBBED INTO ACCESSIBLE LOCATIONS.

## SYSTEM NOTES

- VERIFY EXACT LOCATION OF AUDIOVISUAL EQUIPMENT WITH ARCHITECTURAL DRAWINGS.
- MAINTAIN SEPARATION OF AUDIOVISUAL SIGNAL TYPES IN CONDUIT AND WIREWAYS (MICROPHONE, LINE, LOUDSPEAKER, VIDEO, CONTROL, RF, AND AC).
- NO SPLICES SHALL BE PERMITTED. ALL CABLE RUNS SHALL BE CONTINUOUS FROM POINT OF ORIGIN TO TERMINATION POINT.
- WIRING ENTERING A PLENUM SPACE FROM A CONDUIT STUB SHALL BE PLENUM RATED IN ITS ENTIRETY.
- PROVIDE STRUCTURAL ATTACHMENT POINTS AND MOUNTING HARDWARE FOR MOUNTING AV EQUIPMENT AS REQUIRED.

Project Title:  
PENNSYLVANIA CONVENTION CENTER AUTHORITY  
ONE PENNSYLVANIA CONVENTION CENTER PLACE  
1101 ARCH STREET  
PHILADELPHIA, PA 19107

## EXPANSION AND RENOVATION TO THE PENNSYLVANIA CONVENTION CENTER PHILADELPHIA, PA 19107

Number	Description	Date
	CONTRACT 3 IFC	01-15-10
1	REVISION 1	02-15-10

Key Plan: Project North

Project No.: 87-5979-00  
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Scale: NTS  
Drawing Sheet Title:

## AUDIOVISUAL SYSTEM SYMBOLS & NOTES

Drawing Sheet Number:

# AV-001

Owner's Drawing Sheet No.: