

MULVEY & BANANI

AUDIO VISUAL

AUDIO VISUAL ADDENDUM

AVA01

project name / location	UNIVERSITY OF TORONTO CQIQC SUITE & QIS LAB - P078-24-109 255 HURON ST, TORONTO, ON M5S 1A7
project no.	251016
to	MCCALLUMSATHER
attention	MARWA REFAAT
date issued	JANUARY 7, 2026

Amend the Contract Documents and Specifications for the above project as follows:

1. DRAWINGS
 - 1.1 AV001 AND AV003
2. SPECIFICATIONS
 - 2.1 None.
3. DESCRIPTION
 - 3.1 AV001 - AUDIO VISUAL LEGEND AND GENERAL NOTES
 - 3.1.1 Revise drawing as shown.
 - 3.2 AV003 - AUDIO VISUAL SPECIFICATIONS - 27 41 01 - AV GENERAL REQ.
 - 3.2.1 Revise drawing as shown.
4. ENCLOSURES
 - 4.1 Drawings: AV001 AND AV003
 - 4.2 Specifications: None.
 - 4.3 Sketches: None.

MULVEY & BANANI AUDIO VISUAL INC.



ABHIMANYU THAKUR
AUDIO VISUAL SYSTEM DESIGNER

University of Toronto CQIQC
Suite and QIS Lab -
P078-24-109

AUDIO VISUAL DRAWING SET

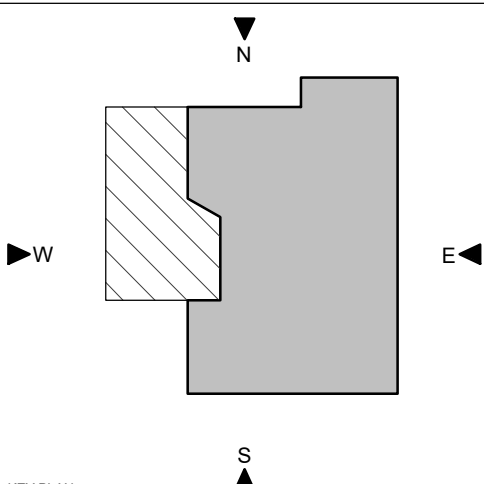
AUDIO VISUAL DRAWING LIST	
SHEET NUMBER	SHEET NAME
AV001	AUDIO VISUAL LEGEND & GENERAL NOTES
AV002	AUDIO VISUAL DIVISION OF RESPONSIBILITY
AV003	AUDIO VISUAL SPECIFICATIONS - 27 4101 - AV GENERAL REQ.
AV004	AUDIO VISUAL SPECIFICATIONS - 27 4101 - AV SYSTEMS
AV301	LEVEL 3 - AUDIO VISUAL FLOOR PLAN / 1
AV401	AUDIO VISUAL FUNCTIONAL DIAGRAM
AV402	AUDIO VISUAL FUNCTIONAL DIAGRAM
AV501	AUDIO VISUAL RISER DIAGRAMS
AV601	AUDIO VISUAL ELEVATION DIAGRAMS
AV701	AUDIO VISUAL RACK DETAIL

GENERAL NOTES	
NUMBER	NOTE
1	GENERAL NOTES
1.1	AUDIO VISUAL CONTRACTOR SHALL INSPECT ALL DRAWINGS AND NOTIFY THE CONSULTANT SHOULD ANY DISCREPANCIES ARISE.
1.2	PROVIDE IR EMITTERS FOR ALL EQUIPMENT SHOWN WITH IR CONTROL.
1.3	AV CONTRACTOR SHALL COORDINATE EXACT POWER, DATA AND BACK BOX LOCATIONS FOR DISPLAY MONITOR AND MOUNT CONFLICTS.
2	REFERENCE DOCUMENTS
2.1	REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS.
2.2	REFER TO ELECTRICAL DRAWINGS FOR POWER LOCATIONS AND DETAILS.
2.3	REFER TO ELECTRICAL/COMMUNICATIONS DRAWINGS FOR DATA LOCATIONS AND DRAWINGS.

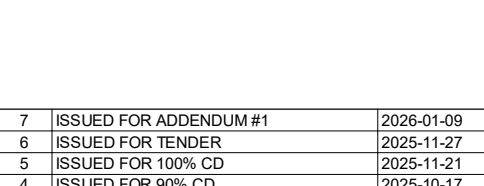
CABLE SCHEDULE				
TYPE	SYSTEM	DESCRIPTION	PRODUCT	O.D.
C6A	CATEGORY 6A UTP	4X 23/2C UTP	4X 23/2C UTP	0.300"
SERIAL	SERIAL COMMUNICATIONS	SHIELDED 2PR-22C SHDL	BELDEN 9535	0.189"

AUDIO VISUAL LEGEND	
SYMBOL	DESCRIPTION
	EQUIPMENT RACK "X" DENOTES RACK TYPE "Y" DENOTES RACK FINISH
	ROTATING EQUIPMENT RACK "X" DENOTES RACK TYPE "Y" DENOTES RACK FINISH
	DESK/TABLE/ELECTERN MOUNT INPUT/OUTPUT DEVICE LOCATION "X" DENOTES AV PLATE ID
	WALL MOUNT INPUT/OUTPUT DEVICE LOCATION "X" DENOTES AV PLATE ID
	CEILING MOUNT INPUT/OUTPUT DEVICE LOCATION "X" DENOTES AV PLATE ID
	FLOOR MOUNT DISPLAY MONITOR "X" DENOTES DISPLAY TYPE "Y" DENOTES DISPLAY MOUNT TYPE
	FLOOR BOX "X" DENOTES FLOOR BOX TYPE "Y" DENOTES FLOOR BOX CONFIGURATION
	DESK/TABLE/ELECTERN MOUNT MICROPHONE "X" DENOTES MICROPHONE TYPE "Y" DENOTES MICROPHONE MOUNT
	TABLE BOX "X" DENOTES TABLE BOX TYPE "Y" DENOTES TABLE BOX CONFIGURATION
	WALL MOUNT DISPLAY MONITOR "X" DENOTES DISPLAY TYPE "Y" DENOTES DISPLAY MOUNT TYPE
	CEILING MOUNT MICROPHONE "X" DENOTES MICROPHONE TYPE "Y" DENOTES MICROPHONE MOUNT
	DESK/TABLE/ELECTERN MOUNT USER INTERFACE "X" DENOTES AV CONTROL PANEL TYPE
	WALL MOUNT USER INTERFACE "X" DENOTES AV CONTROL PANEL TYPE
	STATIC CAMERA "X" DENOTES CAMERA TYPE "Y" DENOTES MOUNT TYPE
	PTZ CAMERA "X" DENOTES CAMERA TYPE "Y" DENOTES MOUNT TYPE
ADDITIONAL GENERAL NOMENCLATURE	
M	MICROPHONE
LS	LOUDSPEAKER
DM	DISPLAY MONITOR
PS	PARTITION SENSOR
TB	TABLE BOX (SQUARE ONLY)
FB	FLOOR BOX (SQUARE ONLY)
ES	ELECTRIC SCREEN
MS	MANUAL SCREEN
MP	MANUFACTURER PLATE
VB	VIDEO BAR
OFCI	OWNER SUPPLIED FURNISHING, CONTRACTOR INSTALLED
OFOI	OWNER SUPPLIED FURNISHING, OWNER INSTALLED
Pxx	PROFESSIONAL SERIES DISPLAY MONTIER WITH SIZE
MP01	MANUFACTURER PLATE - HDMI
TPxx	TOUCH PANEL WITH SIZE

PROJECT LOGO



KEY PLAN



NO.	DESCRIPTION	DATE
7	ISSUED FOR ADDENDUM #1	2026-01-09
6	ISSUED FOR TENDER	2025-11-27
5	ISSUED FOR 100% CD	2025-11-21
4	ISSUED FOR 90% CD	2025-09-17
3	ISSUED FOR 100% DO R1	2025-06-19
2	ISSUED FOR 100% DO	2025-07-10
1	ISSUED FOR 50% DO	2025-06-18

REVISIONS:

DISCREPANCIES MUST BE REPORTED IMMEDIATELY TO THE ARCHITECT / ENGINEER BEFORE PROCEEDING.
ONLY FIGURED DIMENSIONS MUST BE USED.
THE CONTRACTOR MUST CHECK THE DIMENSIONS ON SITE.
THE DRAWING IS PROTECTED BY COPYRIGHT.
ALL DIMENSIONS ARE SHOWN IN MILLIMETERS.
DO NOT SCALE THE DRAWINGS.

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SEAL

CONSULTANTS

MULVEY & BANANI
AUDIO VISUAL

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PROJECT:

University of Toronto
CQIQC Suite and QIS Lab

University of Toronto,
27 King's College Cir,
Toronto, ON M5S 1A1

DRAWING TITLE:

**AUDIO VISUAL LEGEND &
GENERAL NOTES**

SHEET SIZE:

SCALE:

PROJECT NO:

251016

DRAWING NO.:

AV001

UNIVERSITY OF TORONTO CQIQC SUITE AND QIS LAB AND CQIQC SUITE AND QIS LAB
PROJECT NO. 251016
DRAWING NO. AV001
DATE 2026-01-09
SCALE 1:1
SHEET 1 OF 1

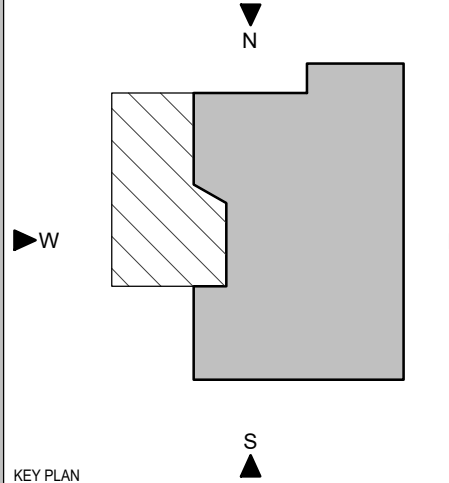
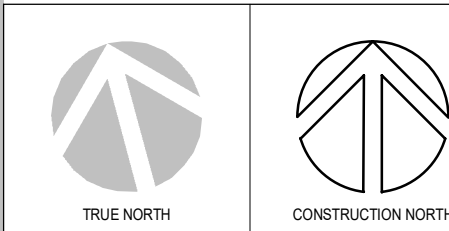
AUDIO VISUAL SPECIFICATION SECTION 27 41 01

1. REFERENCE
- 1.1. THIS SECTION SUPPLEMENTS "THE GENERAL CONDITIONS" AND ANY OTHER DOCUMENTS INCLUDED IN THE "TENDER, AND FORMS PART OF EVERY SECTION OF DIVISION 27
2. RELATED SECTIONS
- 2.1. COMPLY WITH RELEVANT SECTIONS OF THIS AND OTHER DIVISIONS OF THIS SPECIFICATION
3. CLEANING
- 3.1. THE AV CONTRACTOR SHALL PROVIDE TEMPORARY PROTECTIVE COVERING ON ALL ELECTRICAL AND SENSITIVE COMPONENTS EXPOSED TO CONSTRUCTION DUST. PROTECT ALL COMPONENTS WHERE REQUIRED DURING CONSTRUCTION PROCESS.
- 3.2. UPON COMPLETION, CLEAN ALL PROJECTORS AND LENSES, SPEAKERS, COMPONENTS AND OTHER SURFACES, AS PER MANUFACTURER'S RECOMMENDATIONS THAT HAVE BEEN EXPOSED TO CONSTRUCTION DUST AND DIRT.
- 3.3. CLEAN THE INSIDES AND OUTSIDES OF JUNCTION BOXES, PULL BOXES, EQUIPMENT RACKS AND OTHER AUDIO VISUAL EQUIPMENT, AND COMPLETELY REMOVE ALL DEBRIS AND TOOLS FROM THE PROJECT
- 3.4. INCLUDED IN THE WORK UNDER THIS CONTRACT, THE AV CONTRACTOR SHALL KEEP ALL WORK AREAS TIDY AND COLLECT ALL DEBRIS AND RECYCLABLE MATERIALS. THE AV CONTRACTOR SHALL COMPLY WITH THE OWNERS WASTE POLICIES AND PROCEDURES.
4. CODES AND STANDARDS
- 4.1. COMPLETE THE INSTALLATION OF THE WORK IN ACCORDANCE WITH LATEST EDITIONS OF THE ONTARIO BUILDING CODE, ONTARIO ELECTRICAL SAFETY CODE, C.S.A., U.L.C., N.F.P.A., O.S.H.A. OR OTHER CODES, AS REQUIRED
- 4.2. COMPLY WITH O.E.S.C. ELECTRICAL AND BUILDING CODE(S) BULLETINS IN FORCE AT TIME OF BID SUBMISSION. WHILE NOT IDENTIFIED AND SPECIFIED BY NUMBERS IN THIS DIVISION, THEY ARE TO BE CONSIDERED AS FORMING PART OF RELATED STANDARDS.
- 4.3. ABBREVIATIONS FOR ELECTRICAL TERMS ARE AS PER C.S.A. Z86.
- 4.4. LEED® CANADA REFERENCE GUIDE FOR GREEN BUILDING DESIGN AND CONSTRUCTION 2009.
5. COMPLETION OF CONTRACT
- 5.1. ALL THE EQUIPMENT MUST BE CLEANED AND TESTED, BEFORE FINAL ACCEPTANCE BY THE CONSULTANT.
- 5.2. FROM THE DATE OF ISSUANCE OF A "CERTIFICATE OF SUBSTANTIAL PERFORMANCE", ALL EQUIPMENT, MATERIALS AND WORKMANSHIP, OTHER THAN LAMPS, MUST BE UNCONDITIONALLY WARRANTED FOR NOT LESS THAN 3 (THREE) YEARS INCLUDING, MAINTENANCE AND REPLACEMENT FOR ALL DEVICES.
- 5.3. REPLACEMENT AT NO COST, ALL PROJECTOR LAMPS/LIGHT ENGINES BURNED OUT DURING THE FIRST 90 (NINETY) DAYS AFTER DATE OF THE SUBSTANTIAL PERFORMANCE OF THE WORK.
- 5.4. DEFECTS AND DEFICIENCIES WHICH ORIGINATE OR BECOME EVIDENT DURING THE WARRANTY PERIOD MUST BE REPAIRED OR REPLACED, AT NO COST.
- 5.5. IF, DURING THE WARRANTY PERIOD, NOISE AND VIBRATION PRODUCING EQUIPMENT ARE CONSIDERED BY THE CONSULTANT TO EXCEED ACCEPTABLE STANDARDS, THEN THESE MUST BE REPLACED WITHOUT DELAY OR ADDITIONAL COST TO THE OWNER. ALL WORK RELATING TO THE REPLACEMENT OF DEFECTIVE ITEMS MUST BE CARRIED OUT AFTER NORMAL WORKING HOURS AND AT A TIME WHICH IS ACCEPTABLE TO THE OWNER.
- 5.6. ON OR ABOUT TIME OF ACCEPTANCE OF THE SYSTEM, THE AV CONTRACTOR SHALL PRESENT TO THE OWNER AVAILABLE EXTENDED WARRANTIES AND/OR PREVENTATIVE MAINTENANCE PROGRAMS OFFERED BY MANUFACTURERS AND/OR BY THE AV CONTRACTOR. THE OWNER SHALL RESERVE THEIR RIGHT TO EVALUATE THE MERITS OF THE EXTENDED WARRANTIES AND/OR PREVENTATIVE MAINTENANCE PROGRAMS. THE OWNER AT THEIR DISCRETION RESERVES THEIR RIGHTS TO ACCEPT OR REJECT THE EXTENDED WARRANTIES AND/OR PREVENTATIVE MAINTENANCE PROGRAMS.
6. COMPONENT FINAL LOCATIONS
- 6.1. THE OWNER AND CONSULTANT RESERVE RIGHT TO RELOCATE AUDIO VISUAL COMPONENTS SUCH AS SPEAKERS, INPUTS, OUTPUTS, DISPLAYS, PROJECTORS, TOUCH PANELS, ETC. AT A LATER DATE, BUT PRIOR TO INSTALLATION, WITHOUT ADDITIONAL COST TO THE OWNER. IF RELOCATION PER COMPONENTS DO NOT EXCEED 3M (10') FROM ORIGINAL LOCATION, NO CREDITS WILL BE ANTICIPATED WHERE RELOCATION PER COMPONENTS OF UP TO AND INCLUDING 3M (10') REDUCES MATERIALS, PRODUCTS AND LABOUR.
- 6.2. SHOULD RELOCATIONS EXCEED 3M (10') FROM ORIGINAL LOCATION, ADJUST THE CONTRACT PRICE FOR THAT PORTION BEYOND 3M (10') IN ACCORDANCE WITH PROVISIONS FOR CHANGES IN CONTRACT DOCUMENTS.
7. CONTRACT DRAWINGS
- 7.1. THE DRAWINGS FOR THE AUDIO VISUAL WORK ARE DIAGRAMMATIC PERFORMANCE DRAWINGS ONLY, INTENDED TO CONVEY THE SCOPE OF WORK AND INDICATE THE GENERAL ARRANGEMENT AND APPROXIMATE LOCATION OF EQUIPMENT, AND THE APPROXIMATE SIZES AND LOCATIONS OF EQUIPMENT AND DEVICES. THE DRAWINGS DO NOT INTEND TO SHOW ARCHITECTURAL, MECHANICAL OR STRUCTURAL DETAILS.
- 7.2. DO NOT SCALE OR MEASURE THE DRAWINGS TO OBTAIN INFORMATION REGARDING ACCURATE DIMENSIONS, FROM THE DIMENSIONS SHOWN ON THE ARCHITECTURAL DRAWINGS, OR BY SITE MEASUREMENTS. FOLLOW THE AUDIO VISUAL DRAWINGS FOR LAYING OUT THE WORK.
- 7.3. REFER TO OTHER SECTIONS COORDINATION DRAWINGS, TO BECOME FAMILIAR WITH ALL CONDITIONS AFFECTING THE WORK, AND VERIFY SUITABLE SPACES EXIST, IN WHICH THE EQUIPMENT WILL BE INSTALLED.
- 7.4. MAKE, AT NO ADDITIONAL COST, ANY CHANGES OR ADDITIONS TO MATERIALS AND EQUIPMENT NECESSARY TO ACCOMMODATE STRUCTURAL CONDITIONS (OFFSETS AROUND BEAMS, COLUMNS, ETC.).
- 7.5. ALTER, AT NO ADDITIONAL COST, THE LOCATION OF MATERIALS AND/OR EQUIPMENT AS DIRECTED, PROVIDED THAT THE CHANGES ARE MADE BEFORE INSTALLATION, AND DO NOT NECESSITATE ADDITIONAL MATERIALS.
- 7.6. INSTALL CEILING MOUNTED COMPONENTS (SUCH AS, PROJECTORS, LOUDSPEAKERS, ANTENNAS ETC.) IN ACCORDANCE WITH DIMENSIONED REFLECTED CEILING DRAWINGS, PREPARED BY THE (ARCHITECTURAL) CONSULTANT.
- 7.7. LEAVE SPACE CLEAR, AND INSTALL EQUIPMENT TO ACCOMMODATE FUTURE MATERIALS AND/OR EQUIPMENT AS INDICATED OR SPECIFIED IN THE CONTRACT DOCUMENTS, OR TO ACCOMMODATE EQUIPMENT AND/OR MATERIALS SUPPLIED UNDER THE WORK OF OTHER SPECIFICATION SECTIONS.
- 7.8. VERIFY THAT THE SPACES IN WHICH THE EQUIPMENT IS TO BE INSTALLED IS SUFFICIENT AND INSTALL ALL EQUIPMENT TO MAINTAIN HEAD ROOM AND CLEARANCES, TO CONSERVE SPACE, COORDINATE WITH ADJACENT AREAS, AND TO PROVIDE ADEQUATE SPACE FOR FUTURE SERVICES.
- 7.9. CONFIRM AT THE SITE, THE EXACT LOCATION OF EQUIPMENT, OUTLETS AND FIXTURES, AND THE LOCATION OF OUTLETS FOR EQUIPMENT SUPPLIED UNDER THE WORK OF OTHER SECTIONS, BEFORE INSTALLATION.
8. COORDINATION DRAWINGS
- 8.1. ALL DRAWINGS SHALL BE PREPARED IN AMPLIE TIME FOR REVIEW AND IMPLEMENTATION. FAILURE TO DO SO, AND ANY PROBLEMS THAT ARISE, WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 8.2. SHOULD THE CONTRACTOR NEGLECT OR OTHERWISE FAIL TO PROVIDE CO-ORDINATION DRAWINGS, IT SHALL ASSUME THE COST OF ANY AND ALL RELOCATION WORK THAT COULD HAVE BEEN AVOIDED THROUGH THE SUBMISSION OF CO-ORDINATION DRAWINGS.
9. COORDINATION OF INFRASTRUCTURE, POWER AND DATA
- 9.1. THE AV CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE POWER, DATA AND INFRASTRUCTURE REQUIREMENTS WITH THE CLIENT AND/OR THEIR RELATED SUB-CONTRACTOR(S) FOR EACH SPACE.
10. CUTTING AND PATCHING
- 10.1. ALL CUTTING AND PATCHING REQUIRED FOR THE INSTALLATION OF NEW EQUIPMENT AND FOR SURFACE RESTORATION AFTER THE REMOVAL OF EXISTING EQUIPMENT SHALL BE BY THE CLIENT.
- 10.2. IN EXISTING WORK, AND WORK ALREADY FINISHED, CUTTING AND PATCHING WILL BE CARRIED OUT BY THE CLIENT AT THEIR EXPENSE.
- 10.3. BE AWARE OF FIRE RATED PARTITIONS, MINIMIZE THE AREA AFFECTED BY THE WORK, AND RETURN ALL SURFACE TO A CONDITION ENCOUNTERED BEFORE THE WORK. ACCEPTANCE OF THE FINISHED WORK IS AT THE SOLE DISCRETION OF THE CONSULTANT.
- 10.4. PAINTING OF FINISHED SURFACES WILL BE BY THE CLIENT TO MATCH ADJACENT SURFACES.
11. DISCONTINUED EQUIPMENT AND PRODUCTS
- 11.1. PRODUCTS DISCONTINUED BETWEEN BID AWARD AND FINAL INSTALLATION SHALL BE REPLACED WITH CURRENT MODEL AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING AND NEGOTIATING THIS WITH THE RESPECTIVE MANUFACTURER.
- 11.2. SHOULD THE MANUFACTURER NOT MAKE A REPLACEMENT PRODUCT, THE CONTRACTOR SHALL SUGGEST APPROPRIATE PRODUCTS WITH PREFERENCE GIVEN TO COST NEUTRAL SUBSTITUTIONS FROM REPUTABLE MANUFACTURERS.
- 11.3. ALL REPLACEMENTS WILL BE FORMALLY ACCEPTED BY THE WAY OF SITE INSTRUCTION OR CHANGE NOTICE ACCORDINGLY.
12. DEFINITIONS
- 12.1. WHEREVER THE WORDS "EQUAL", "APPROVED", OR "APPROVED EQUIVALENT" ARE USED, IT SHALL BE UNDERSTOOD TO MEAN "EQUAL", "APPROVED", OR "APPROVED EQUIVALENT" IN THE OPINION OF THE CONSULTANT ONLY.
- 12.2. WHEREVER THE WORDS "INSTALL", "PROVIDE", OR "SUPPLY AND INSTALL", ARE USED, IT SHALL BE UNDERSTOOD TO MEAN "PROVIDE AND INSTALL, INCLUSIVE OF ALL LABOUR, MATERIALS, INSTALLATION, TESTING, AND CONNECTIONS" FOR THE ITEM TO WHICH REFERRED.
- 12.3. "CONCEALED" IS DEFINED AS "OUT OF SIGHT" IN "NORMAL" VIEWING CONDITIONS, AND INCLUDES BURIED IN CONCRETE, ABOVE ACOUSTIC TILE OR GYPSUM BOARD CEILINGS, WITHIN MASONRY OR GYPSUM BOARD CONSTRUCTED WALLS, WITHIN CABLE TRAYS OR BELOW RAISED ACCESS FLOORS.
- 12.4. "CFO" IS DEFINED AS "OWNER FURNISHED, CONTRACTOR INSTALLED" AND SHALL INCLUDE COORDINATION BETWEEN CONTRACTOR AND OWNER FOR DELIVERY AND RECEIPT OF EQUIPMENT. ONCE RECEIVED, THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR SAID EQUIPMENT INCLUDING BUT NOT LIMITED TO THEFT OR DAMAGE.
- 12.5. "CFO" IS DEFINED AS "OWNER FURNISHED, OWNER INSTALLED" AND SHALL INCLUDE COORDINATION BETWEEN CONTRACTOR AND OWNER AS REQUIRED FOR SUCCESSFUL INSTALLATION AND IMPLEMENTATION.
- 12.6. "CFO" IS DEFINED AS "CONTRACTOR FURNISHED, OWNER INSTALLED" AND SHALL INCLUDE COORDINATION BETWEEN CONTRACTOR AND OWNER FOR DELIVERY AND RECEIPT OF EQUIPMENT. ONCE RECEIVED, THE CONTRACTOR SHALL CONTINUE COORDINATION AS REQUIRED FOR SUCCESSFUL INSTALLATION AND IMPLEMENTATION BY THE OWNER.
13. ELECTRONIC DRAWINGS
- 13.1. ELECTRONIC COPIES (AUTOCAD FORMAT RELEASE 2022) OF ALL DRAWINGS WILL BE MADE AVAILABLE TO THE ELECTRICAL CONTRACTOR BY THE CONSULTANT AT A COST AS OUTLINED IN THE "DRAWING REQUEST FORM" FOUND AT THE END OF SECTION 27 41 01. REFER TO THE "DRAWING REQUEST FORM" FOR TERMS AND CONDITIONS OF USE.
14. EXISTING CONDITIONS
- 14.1. VISIT THE SITE AND EXAMINE THE EXISTING CONDITIONS AFFECTING THE WORK OF THIS DIVISION.
- 14.2. NO CLAIM FOR EXTRA PAYMENT SHALL BE MADE FOR EXTRA WORK MADE NECESSARY BY CIRCUMSTANCES ENCOUNTERED DUE TO CONDITIONS WHICH WERE VISIBLE UPON, OR REASONABLY INFERRABLE FROM AN EXAMINATION OF THE SITE PRIOR TO SUBMISSION OF THE BID.
15. EXPEDITING
- 15.1. CONTINUOUSLY CHECK AND EXPEDITE DELIVERY OF ALL MATERIALS AND EQUIPMENT REQUIRED FOR THE SUCCESSFUL EXECUTION OF THE WORK.
- 15.2. IF REQUESTED BY THE CONSULTANT, INSPECT AT THE SOURCE OF MANUFACTURE, TO CONFIRM STATUS, AND SUBMIT AN ITEMIZED FLOW CHART OF EQUIPMENT ORDER AND DELIVERY DATES.
- 15.3. CONTINUOUSLY CHECK AND ENSURE THAT THE NECESSARY INFORMATION IS COMMUNICATED TO ALL PARTIES INVOLVED.
16. FIELD INSTALLATION DRAWINGS
- 16.1. UTILIZE AUTOCAD FORMAT DRAWINGS FOR FIELD INSTALLATION DRAWINGS. OBTAIN THEM AS NOTED IN ELECTRONIC DRAWINGS ARTICLE OF THIS SPECIFICATION SECTION. PREPARE A COMPLETE AND SEPARATE SET OF WHITE PRINTS TO KEEP ON THE SITE AT ALL TIMES.
- 16.2. THESE PRINTS SHALL BE MARKED UP TO RECORD CLEARLY, NEATLY, ACCURATELY AND PROMPTLY, ALL LOCATIONS OF THE AUDIO VISUAL WORK, DEVIATIONS FROM AND CHANGES TO THE "ISSUED FOR CONSTRUCTION" DOCUMENTS.
- 16.3. THE ACCURATE LOCATIONS, DEPTH, SIZE AND TYPE OF EACH UNDERGROUND UTILITY AND SERVICE LINE SHALL BE RECORDED BEFORE CONCEALMENT, TO ENSURE ACCURATE AND FUTURE DIRECT ACCESS TO THESE BURIED SERVICES.
- 16.4. THE FIELD INSTALLATION DRAWINGS WILL BE REVIEWED AT REGULAR INTERVALS BY THE CONSULTANT, AND WILL BE TAKEN INTO CONSIDERATION WHEN REVIEWING THE MONTHLY APPLICATIONS FOR PROGRESS PAYMENT.
- 16.5. AFTER THE DATE OF THE SUBSTANTIAL PERFORMANCE OF THE WORK, INCORPORATE ALL CHANGES MADE TO THE BUILDING THROUGH CHANGE ORDERS AND THE CONSULTANT'S INSTRUCTIONS. UTILIZE NORMAL RECOGNISED DRAFTING PROCEDURES THAT MATCH THE ORIGINAL DRAFTING METHODOLOGY, WHETHER CAD OR HAND DRAWN. TRANSFER ALL RECORDINGS FROM THE FIELD INSTALLATION DRAWINGS TO THE DISCS, AND SUBMIT 3 (THREE) SETS OF PRINTS TOGETHER WITH THE ORIGINALS IN DISC FORMAT, TO THE CONSULTANT FOR REVIEW AND PRESENTATION TO THE OWNER.

17. FIELD SUPERVISION AND WORKMANSHIP
- 17.1. THROUGHOUT THE CONSTRUCTION OF THE PROJECT, A PROPERLY QUALIFIED AUDIO VISUAL SUPERINTENDENT MUST BE AVAILABLE AT ALL TIMES. THE SUPERINTENDENT WHO STARTS THE WORK MUST NOT BE CHANGED UNLESS REQUESTED BY THE CONSULTANT, OR BY THE CONTRACTOR WITH WRITTEN PERMISSION FROM THE CONSULTANT.
- 17.2. IN ADDITION, PROVIDE PROPER OFFICE SUPERVISION OF THE WORK. THE PERSON RESPONSIBLE FOR OFFICE SUPERVISION MUST VISIT THE SITE AS OFTEN AS NECESSARY, TO ENSURE THE WORK IS PROPERLY PERFORMED, AND ATTEND MEETINGS WHEN SO REQUESTED.
- 17.3. SUBMIT RESUME OF PROPOSED SUPERVISION STAFF WHEN CALLED UPON TO DO SO BY THE CONSULTANT.
- 17.4. WORKMANSHIP THROUGHOUT THE CONSTRUCTION OF THE INSTALLATION INCORPORATING ALL CHANGES FROM THE RECORD DRAWINGS, IN THE FORM OF AUTOCAD RELEASE ON CD.
18. IDENTIFICATION
- 18.1. IDENTIFY ALL AUDIO VISUAL EQUIPMENT AND WIRING.
- 18.2. WORKING ON NAMEPLATES AND LABELS TO BE APPROVED BY THE CONSULTANT SHALL BE IN ENGLISH.
- 18.3. USE NAMEPLATES FOR:
- 18.3.1. AUDIO VISUAL EQUIPMENT RACKS (BACK OF HOUSE) AND MISCELLANEOUS SYSTEM AND OTHER EQUIPMENT, INDICATING SYSTEM.
- 18.4. NAMEPLATES SHALL BE LAMINATED, 3MM (1/8") THICK, WITH A FACE COLOUR TO MATCH THE COLOUR OF THE EQUIPMENT ON WHICH IT IS MOUNTED, AND A CONTRASTING (BLACK OR WHITE) CORE.
- 18.5. NAMEPLATES SHALL BE MECHANICALLY ATTACHED TO EQUIPMENT, BY MEANS OF RIVETS OR SELF-TAPPING SCREWS.
- 18.6. USE LABELS FOR CONDUITS, AUDIO VISUAL CABLES AND CONDUCTORS INDICATE THEIR FULL CIRCUIT NUMBER, AND FOR INDICATION OF EQUIPMENT CONNECTED TO UNINTERRUPTED POWER SUPPLIES (UPS).
- 18.7. LABELS SHALL BE OF THE MYLAR/CLOTH SELF-ADHESIVE TYPE, BLACK LETTERING ON WHITE BACKGROUND, FOR AUDIO VISUAL CONDUITS, CABLES AND EQUIPMENT AND EACH END OF THE RUN AND AT JUNCTION AND PULL BOXES AND RED LETTERING ON A WHITE BACKGROUND FOR EQUIPMENT ON UPS READING "CAUTION - DEVICE CONNECTED TO UNINTERRUPTED POWER SUPPLY".
- 18.7.1. AUDIO VISUAL LABELLING
- 18.7.2. IDENTIFY ALL AUDIO, VIDEO, CONTROL AND ASSOCIATED WIRING WITH APPROPRIATE COMPUTER GENERATED LABELLING SCHEM AS APPROVED BY THE CONSULTANT. LABELLING DEVICES THAT PRINT ON HEAT SHRINK SUCH AS BRADY AND RHINO LABEL MAKERS ARE PREFERRED. SHOULD A STANDARD LABEL MAKER BE USED, TRANSPARENT HEAT SHRINK SHALL EXTEND A MINIMUM OF 6MM (1/4") PAST THE LABEL AT EACH END.
- 18.7.3. LABELLING SCHEME SHALL BE LOGICAL AND CONSISTENT THROUGHOUT THE PROJECT WITH IDENTICAL IDENTIFIERS AT OPPOSING CONNECTION POINT. LABELS SHALL BE EQUALLY IDENTIFIED ON ALL AS-BUILT TECHNICAL DRAWINGS.
- 18.7.4. ALL WIRABLE CONTROL POINTS SHALL BE LOGICALLY IDENTIFIED AND LABELLED USING APPROPRIATE LABELLING METHODS. LABELLING SHALL BE EXECUTED IN A NEAT AND MEANINGFUL MANNER, SQUARED AND CENTRED WHEREVER POSSIBLE.
- 18.7.5. WHERE IT IS NOT POSSIBLE TO LABEL USER CONTROLS NEATLY WHILE MAINTAINING LEGIBILITY, LABELS MAY BE PLACED ON A BLANK RACK PANEL ABOVE DESIGNATED EQUIPMENT FOR PROPER PLACEMENT OF LABELS.
- 18.7.6. APPROPRIATE IDENTIFICATION TAGS AND CONVENTIONS SHALL BE APPLIED IN ALL SOFTWARE CONFIGURATION FILES.
- 18.7.7. THIS SHALL INCLUDE ALL INPUTS, OUTPUT AND CONTROL LOCATIONS.
19. INSERTS, HANGERS AND SLEEVES
- 19.1. PROVIDE HANGERS, INSERTS, SLEEVES AND SUPPORTS AS REQUIRED.
- 19.2. INSERTS ARE TO BE OF LEAD SHIELD TYPE.
- 19.3. HANGERS MUST NOT BE WELDED TO STRUCTURAL STEEL, MEMBERS AND BURNING OF HOLES IN STRUCTURAL STEEL IS PROHIBITED.
20. INTENT
- 20.1. TO THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS THAT THE CONTRACTOR PROVIDE COMPLETE AND OPERATIONAL SYSTEMS AS REQUIRED.
- 20.2. WHERE DIFFERENCES OCCUR, THE MAXIMUM CONDITION SHALL GOVERN.
- 20.3. ANY MISCELLANEOUS ITEMS, HANGWARE, DEVICES, WIRING, ETC., NOT SPECIFICALLY DESCRIBED, BUT REQUIRED FOR THE OPERATION OF THE SYSTEM, MUST BE PROVIDED AND INCLUDED AS PART OF THE CONTRACT PRICE.
21. LOCATION OF OUTLETS
- 21.1. CHANGE LOCATION OF DEVICES AT NO EXTRA COST OR CREDIT, PROVIDING DISTANCE DOES NOT EXCEED 3M (10 FT.) AND INFORMATION IS GIVEN BEFORE INSTALLATION.
- 21.2. WHERE DEVICES ARE LOCATED ADJACENT TO ONE ANOTHER IN PLAN BUT OCCUR AT DIFFERENT ELEVATIONS, THEY SHALL BE VERTICALLY ALIGNED.
22. MATERIALS AND EQUIPMENT
- 22.1. ALL MATERIALS AND EQUIPMENT SHALL BE NEW, C.S.A. CERTIFIED, AND MANUFACTURED TO THE STANDARDS SPECIFIED.
- 22.2. WHERE THERE IS NO ALTERNATIVE TO SUPPLYING EQUIPMENT WHICH IS NOT C.S.A. CERTIFIED, OBTAIN SPECIAL APPROVAL FROM THE ARCHITECTURAL DEPARTMENT.
- 22.3. INDICATE WHICH MANUFACTURER IN THE COLUMN TITLED "BASE AND APPROVED EQUIVALENT" IS CARRIED IN THE BID, ON THE SUPPLEMENTARY TENDER FORM. IF THIS IS NOT INDICATED, THE SPECIFIED "BASE" EQUIPMENT (THE FIRST NAME IN THE LIST) SHALL BE ASSIGNED TO HAVE BEEN CARRIED.
- 22.4. IF "SUBSTITUTE" MANUFACTURER'S EQUIPMENT IS SUBMITTED FOR APPROVAL/COST SAVINGS, THE CONSULTANT RESERVES THE RIGHT TO CHARGE A FAIR AND REASONABLE FEE TO REVIEW AT THE CONTRACTOR EXPENSE.
- 22.5. ACCEPTANCE OF "SUBSTITUTE" MANUFACTURER'S EQUIPMENT SHALL BE BASED UPON THE CONSULTANT'S REVIEW AND RECOMMENDATION. SHOULD SUCH EQUIPMENT NOT MEET THE DESIGN INTENT, THE CONSULTANT RESERVES THE RIGHT TO REJECT THIS EQUIPMENT.
- 22.6. "SUBSTITUTE" MANUFACTURER'S EQUIPMENT MUST BE EQUAL IN INTENT, CONSTRUCTION AND PERFORMANCE, IN EVERY RESPECT, AS DEFINED BY THE CONSULTANT, OR WILL BE REJECTED BY THE CONSULTANT AT THE TIME OF SHOP DRAWING SUBMITTAL, THE CONTRACTOR TO PROVIDE THE "BASE" EQUIPMENT AS SPECIFIED.
- 22.7. THE CONTRACTOR TO BE AWARE THAT ALL EQUIPMENT, WHETHER "BASE", "APPROVED EQUIVALENT" OR "SUBSTITUTE" MUST CONFORM TO THE ABOVE REQUIREMENT.
- 22.8. IF A SINGLE ITEM IS SPECIFIED, THE SPECIFIED ITEM SHALL FORM THE BASIS OF THE BID, WITH NO SUBSTITUTES ALLOWED. THE CONTRACTOR HOWEVER, SHALL HAVE THE OPTION OF OFFERING A "DEDUCTION" FROM THE BID, BY SUGGESTING A "SUBSTITUTION" IN THE SUPPLEMENTARY AUDIO VISUAL TENDER FORM.
- 22.9. IF A MANUFACTURER IS NOTED BY THE CONTRACTOR IN THE SUBSTITUTE COLUMN ONLY, THAT MANUFACTURER WILL BE CONSIDERED AS A SUBSTITUTE, AND A SAVINGS FROM THE BASE BID PRICE MUST BE SHOWN. THE BASE BID PRICE MUST INCLUDE THE BASE AND "APPROVED EQUIVALENT" MANUFACTURERS ONLY.
23. MEETING MINUTES
- 23.1. THE CONTRACTOR SHALL ATTEND ALL REQUIRED SITE MEETING AND/OR CONFERENCE CALLS AS REQUESTED BY THE OWNER AND/OR CONSULTANT.
- 23.2. AT A MINIMUM, THE CONTRACTOR SHALL ALLOW FOR WEEKLY SITE MEETINGS AND CONFERENCE CALLS DURING THE INSTALLATION PHASE OF WORK DEFINED BY THIS DIVISION.
24. MEETING MINUTES
- 24.1. THE CONTRACTOR SHALL MINUTE ALL MEETINGS.
- 24.2. DRAFT MINUTES SHALL BE CIRCULATED WITHIN 24 HOURS EXCLUDING WEEKENDS AND HOLIDAYS. FINAL MINUTES SHALL BE ISSUED WITHIN 48 HOURS OF MEETING.
- 24.3. MINUTES SHALL BE SENT TO ALL PRESENT AND ANY KEY STAKEHOLDER INCLUDING BUT NOT LIMITED TO THE CONSULTANT AND KEY OWNER STAKEHOLDERS.
25. MOUNTING HEIGHT
- 25.1. MOUNTING HEIGHT OF EQUIPMENT IS FROM FINISHED FLOOR TO CENTRE LINE OF EQUIPMENT UNLESS SPECIFIED OR INDICATED OTHERWIS.
- 25.2. MOUNTING HEIGHT OF EQUIPMENT IS NOT INDICATED, VERIFY WITH THE CONSULTANT BEFORE PROCEEDING WITH INSTALLATION.
26. NOISE AND VIBRATION
- 26.1. AUDIO VISUAL EQUIPMENT SHALL OPERATE WITHOUT OBJECTIONABLE NOISE OR VIBRATION. IF, IN THE OPINION OF THE CONSULTANT, THE EQUIPMENT OPERATES WITH EXCESSIVE NOISE OR VIBRATION, THEN THE EQUIPMENT MUST BE REPLACED OR NOISE OR VIBRATION ELIMINATED.
- 26.2. VIBRATION ISOLATORS SHALL BE PROVIDED WHERE REQUIRED. THIS INCLUDES TO MINIMIZE ANY BUILDING OR MECHANICAL VIBRATIONS THAT NEGATIVELY IMPACT THE AUDIO VISUAL EXPERIENCE. SUCH DEVICES THAT TYPICALLY REQUIRE ISOLATION INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWINGS:
- 26.2.1. CAMERAS AND DISPLAY ON OR NEAR CORE WALLS
- 26.2.2. PROJECTORS
- 26.2.3. EQUIPMENT LIFTS (CAMERA, PROJECTOR, ETC.)
27. OWNERS EQUIPMENT
- 27.1. WHERE SPECIFIED IN THE CONTRACT DOCUMENTS INSTALL ALL EQUIPMENT PROVIDED BY THE OWNER.
- 27.2. RECEIVE, STORE AND INSTALL EQUIPMENT, AND ACCEPT FULL RESPONSIBILITY FOR IT AND ITS CORRECT OPERATION.
28. OWNERS INSTRUCTION AND TRIAL USAGE
- 28.1. INSTRUCT THE OWNERS OPERATING PERSONNEL IN THE STARTUP, OPERATION, CARE AND MAINTENANCE OF ALL THE EQUIPMENT. ALL EQUIPMENT TO BE TESTED AND OPERATIONAL BEFORE INSTRUCTION. PROVIDE SHEETS FOR SIGNATURES OF THE OWNERS REPRESENTATIVE AND OPERATING PERSONNEL PRESENT AT EACH INSTRUCTION PERIOD.
- 28.2. PROVIDE THESE SERVICES FOR SUCH PERIOD, AND FOR AS MANY VISITS AS NECESSARY TO ENSURE THAT THE OWNERS OPERATING PERSONNEL ARE CONVERSANT WITH ALL ASPECTS OF ITS CARE AND OPERATION.
- 28.3. SINCE COMMISSIONING IS INCLUDED IN THE CONTRACT:
- 28.3.1. PRIOR TO ANY INSTRUCTION SESSIONS, COMMISSIONING COORDINATOR SHALL SUBMIT CHECK LISTS OF EACH SYSTEM OR EQUIPMENT INDICATING THEIR OPERATION STATUS FOR ACCEPTANCE BY THE OWNER.
- 28.3.2. COORDINATE ALL INSTRUCTION SESSIONS TO SUIT THE OWNERS OPERATION PERSONNEL SCHEDULE. SUBMIT PROPOSED INSTRUCTION SESSION SCHEDULE C/W TRAINING AGENDA (ONE) MONTH PRIOR TO SESSION START DATE TO THE OWNER FOR REVIEW.
- 28.3.3. UPON COMPLETION OF EACH TRAINING SESSION, SUBMIT RECORD OF INSTRUCTION INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
- 28.3.3.1. DATE/TIME OF SESSION.
- 28.3.3.2. DURATION.
- 28.3.3.3. TRAINING SESSION TITLE.
- 28.3.3.4. NAME AND ATTENDANCE LIST OF THE OWNERS REPRESENTATIVES, INSTRUCTOR(S) AND ALL OTHER PERSONNEL ATTENDING.
- 28.4. THE OWNERS OPERATING PERSONNEL MUST BE PERMITTED TO OPERATE THE SYSTEMS UNDER THE CONTRACTOR'S SUPERVISION FOR A REASONABLE PERIOD OF TIME PRIOR TO THE SUBSTANTIAL PERFORMANCE OF THE WORK. THIS USE SHALL NOT BE MISCONSTRUED AS ACCEPTANCE OF THE EQUIPMENT.
29. PERMITS AND FEES
- 29.1. THE CONTRACTOR SHALL INCLUDE IN THE CONTRACT PRICE ALL COSTS ASSOCIATED WITH ANY PERMITS, FEES AND ENVIRONMENTAL CHARGES AS REQUIRED.
- 29.2. THE CONSULTANT WILL PROVIDE UPON REQUEST, AT THE CONTRACTORS COST, THE REQUIRED QUANTITY OF DRAWINGS AND SPECIFICATIONS.
- 29.3. ARRANGE FOR THE TIMELY INSTALLATION OF THE PERMANENT ELECTRICAL SERVICE, AND COMPLY WITH ALL OF THE AUTHORITIES REQUIREMENTS.
- 29.4. PROVIDE CERTIFICATE(S) OF ACCEPTANCE FROM THE AUTHORITIES INSPECTION DEPARTMENT, UPON COMPLETION OF THE WORK.
30. PROGRESS PAYMENTS
- 30.1. SUBMIT A COMPLETE BREAKDOWN OF THE CONTRACT WITH EACH PROGRESS BILLING, INDICATING PERCENTAGE OF THE WORK COMPLETE, IN A FORM ACCEPTABLE TO THE OWNER/CONSULTANT.
31. PROJECT PHOTOGRAPHS AND REFERENCES
- 31.1. THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION FROM THE OWNER TO TAKE AND USE PHOTOGRAPHS FOR ANY PURPOSE.
- 31.2. THE CONTRACTOR SHALL NOT USE THE OWNER OR PROJECT TEAM AS REFERENCES WITHOUT PRIOR WRITTEN PERMISSION FROM THE RESPECTIVE PARTY.

32. PROTECTION
- 32.1. PROTECT EXPOSED LIVE EQUIPMENT DURING CONSTRUCTION FOR PERSONNEL SAFETY.
- 32.2. TAKE ALL REASONABLE STEPS TO PROTECT AUDIO VISUAL EQUIPMENT, TOOLS AND MATERIALS FROM DUST, DAMAGE AND THEFT INCLUDING BUT NOT LIMITED TO SECURE STORAGE, DUST COVERS, IMPACT PROTECTION, ETC.
- 32.3. THE GENERAL CONTRACTOR SHALL INSTALL DOORS FOR TEMPORARY STORAGE ROOMS CONTAINING THE CONTRACTORS NON-INSTALLED AUDIO VISUAL EQUIPMENT. KEEP THESE DOORS LOCKED, EXCEPT WHEN UNDER DIRECT SUPERVISION OF AN AUDIO VISUAL SUPERINTENDENT.
33. SUBMITTALS - AS-BUILT DRAWINGS - AUDIO VISUAL
- 33.1. PROVIDE AS-BUILT DRAWINGS OF THE INSTALLATION INCORPORATING ALL CHANGES FROM THE RECORD DRAWINGS, IN THE FORM OF AUTOCAD RELEASE ON CD.
- 33.2. PROVIDE PDF FORMAT DRAWINGS ON SOLID STATE MEDIA AND ONE (1) FULL SIZE HARD COPY SET FOR REVIEW.
- 33.3. AS PART OF THE AUDIO VISUAL OPERATION AND MAINTENANCE MANUALS, THE FOLLOWING AS-BUILT DRAWINGS SHALL BE PROVIDED FOR ALL AUDIO VISUAL SYSTEMS AS NOTED IN DIVISION 27 CONTRACT DOCUMENTS.
- 33.3.1. COVER PAGE INCLUDING LEGEND, NOTES AND ALL OTHER PERTINENT INFORMATION.
- 33.3.2. DEVICE PLANS INDICATING THE FINAL LAYOUT AND LOCATION OF ALL AUDIO VISUAL EQUIPMENT, DEVICES, INFRASTRUCTURE, ACCESS HATCHES, AND INSTALLED COMPONENTS.
<33.3.3. DEVICE CONNECTIVITY (WIRING DIAGRAMS) SHOWING THE FINAL CONNECTIONS BETWEEN EQUIPMENT, CABLE COLOUR CODING AND NUMBERING OF ALL EQUIPMENT ASSEMBLIES AND TERMINAL CABINETS.
- 33.3.4. DEVICE DETAILS FOR ALL MOUNTING CONFIGURATIONS INCLUDING ALL HARDWARE USED FOR MOUNTING TO STRUCTURE. TYPICAL DETAILS MAY BE USED TO DEMONSTRATE MOUNTING METHODS WHERE FIELD IMPLEMENTATION VARIES SLIGHTLY (IE. LCD MOUNT WHERE HEIGHTS AFF MAY VARY).
34. SUBMITTALS - SHOP DRAWINGS - AUDIO VISUAL
- 34.1. SUBMITTED SHOP DRAWINGS MUST INDICATE DETAILS OF CONSTRUCTION, DIMENSIONS, SCALE, CAPACITIES, WEIGHTS AND ELECTRICAL PERFORMANCE CHARACTERISTICS OF EQUIPMENT OR MATERIALS, AS WELL AS A REFERENCE TO SPECIFICATION SECTION NUMBER, AND PROJECT NAME.
- 34.2. SHOP DRAWINGS SHALL BE PROVIDED IN THE FORM OF 1 (ONE) ORIGINAL AND 3 (THREE) COPIES, WITH SUFFICIENT SPACE ON THE FRONT FOR ALL CONSULTANT'S AND CONTRACTOR'S REVIEW STAMPS.
- 34.3. WORK AFFECTED BY SUBMITTAL SHALL NOT PROCEED UNTIL REVIEW IS COMPLETE.
- 34.4. REVIEW SUBMITTALS PRIOR TO SUBMISSION TO THE CONSULTANT. THIS REVIEW REPRESENTS THAT NECESSARY REQUIREMENTS HAVE BEEN DETERMINED AND VERIFIED, OR WILL BE, AND THAT EACH SUBMITTAL HAS BEEN CHECKED AND COORDINATED WITH REQUIREMENTS OF THE WORK AND THE CONTRACT DOCUMENTS AND BEARS STAMP OF THE CONTRACTOR.
- 34.5. CHANGES MADE TO THE SHOP DRAWINGS BY THE CONSULTANT WILL NOT AFFECT THE CONTRACT PRICE.
- 34.6. COMPLETE AND COMPREHENSIVE BILL OF MATERIALS ON A PER ROOM BASIS.
- 34.7. DETAILED LINE DIAGRAM INDICATING EVERY PIECE OF EQUIPMENT LOCATION, ETC.
- 34.8. SPECIFICATION (CUT) SHEETS FOR ALL MATERIAL AND EQUIPMENT REFERRED TO IN CONTRACT DOCUMENT. CATALOG SHEETS ARE NOT ACCEPTABLE.
- 34.9. FINISH COORDINATION SCHEDULE (IF REQUIRED)
- 34.10. ALL CUSTOMIZABLE GRAPHICAL USER INTERFACES (GUI)
35. SUBMITTALS - OPERATION AND MAINTENANCE MANUALS - AUDIO VISUAL
- 35.1. PROVIDE THREE (3) SETS OF OPERATION AND MAINTENANCE MANUALS. PROVIDE SEPARATE BINDERS FOR EACH TRADE.
- 35.2. UPON SUBSTANTIAL COMPLETION, THE CONTRACTOR SHALL COMPLETE AND SUBMIT SYSTEM MANUALS TO THE CONSULTANT FOR REVIEW. UPON APPROVAL, MANUALS SHALL BE PRESENTED TO THE OWNER AT TIME OF TRAINING.
- 35.3. REVIEW INFORMATION PROVIDED IN THE MATERIAL INSTRUCTIONS AND MANUALS WITH THE OWNERS OPERATING PERSONNEL TO ENSURE A COMPLETE UNDERSTANDING OF ALL EQUIPMENT AND SYSTEMS AND THEIR OPERATION.
- 35.4. AS PART OF THE AUDIO VISUAL OPERATION AND MAINTENANCE MANUALS, THE FOLLOWING SHALL BE PROVIDED FOR ALL AUDIO VISUAL SYSTEMS AS NOTED IN DIVISION 27 CONTRACT DOCUMENTS:
- 35.4.1. COVER PAGE SHALL INCLUDE THE FOLLOWING:
- 35.4.1.1. OWNER NAME INCLUDING LOGO IF APPLICABLE
- 35.4.1.2. PROJECT NAME INCLUDING LOGO IF APPLICABLE
- 35.4.1.3. CONSULTANT'S CONTACT INFORMATION INCLUDING LOGO
- 35.4.1.4. CONTRACTORS' CONTACT INFORMATION INCLUDING LOGO IF APPLICABLE
- 35.4.1.5. DATE OF ISSUANCE
- 35.4.2. DETAILED INDEX OF THE CONTENTS OF THE OPERATION AND MAINTENANCE MANUALS
- 35.4.3. COMPLETE STEP BY STEP OPERATING INSTRUCTIONS
- 35.4.4. EQUIPMENT AND USER INTERFACES OPERATING INSTRUCTIONS AND MAINTENANCE MANUALS
- 35.4.5. LOUDSPEAKER TAP CONNECTIONS ON ALL TRANSFORMERS, IMPEDANCE OF ALL SPEAKER CIRCUITS AND DETAILS OF IMPEDANCE MATCHING NETWORKS (ON A SEPARATE SHEET).
- 35.4.6. DESIGNATIONS AND SETTINGS OF ALL SIGNAL PROCESSING EQUIPMENT, ZONE, GAIN AND OTHER CONTROLS (ON A SEPARATE SHEET).
- 35.4.7. CONNECTIONS TO ALL AMPLIFIERS AND THE OUTPUT VOLTAGE OF ALL AMPLIFIERS DURING NORMAL OPERATION (ON A SEPARATE SHEET).
- 35.4.8. PERFORMANCE DATA ON THE COMPLETED SYSTEM AS SPECIFIED UNDER PERFORMANCE TESTING.
- 35.4.9. WARRANTY CERTIFICATE AND STATEMENT
- 35.4.10. CERTIFICATES FROM INSPECTION AUTHORITIES (IF APPLICABLE).
- 35.4.11. LIST OF ORIGINAL EQUIPMENT MANUFACTURER (OEM) WARRANTIES
- 35.4.12. TROUBLESHOOTING GUIDE OF MOST COMMON SYSTEM FAILURES INCLUDING STEP BY STEP REMEDY PROCEDURES.
- 35.4.13. DETAILED STEP BY STEP PROCEDURES FOR PREVENTATIVE MAINTENANCE OF ALL USER MAINTAINABLE EQUIPMENT.
- 35.4.14. STATEMENT OF COMPLETION
- 35.4.15. LIST OF KEY CONTACTS FOR FURTHER SALES AND SERVICE RELATING SPECIFICALLY TO THE PROJECT AS OUTLINED HEREIN. CONTACT INFORMATION SHALL INCLUDE 24/7 CONTACT NUMBERS FOR SERVICE.
- 35.4.16. EACH OPERATION AND MAINTENANCE MANUALS SHALL INCLUDE A COMPLETE SOFT COPY ON EITHER CD OR DVD AS REQUIRED. DIGITAL MEDIA SHALL BE FORMATTED AS SUCH TO BE ACCESSIBLE ON BOTH WINDOWS® AND MACINTOSH® OPERATING SYSTEMS. ALL DOCUMENTS SHALL BE IN PDF FORMAT FOR UNIVERSAL VIEWING.
- 35.5. AS-BUILT DRAWINGS
- 35.6. SUGGESTED SAVINGS
- 36.1. COMPLETE, AS PART OF THE SUPPLEMENTARY TENDER FORM, A LIST OF POSSIBLE DEDUCTIONS FROM THE BID PRICE FULLY APPRECIATE THAT THE ACCEPTANCE OF THESE SAVINGS SHALL BE AT THE DISCRETION OF THE OWNER AND CONSULTANT.
37. TENDER FORM
- 37.1. ATTACHED AT THE FRONT OF THIS DOCUMENT IS THE AUDIO VISUAL TENDER FORM.
- 37.2. ENSURE ALL INFORMATION REQUESTED IS PROVIDED. INCOMPLETE INFORMATION MAY RENDER THIS BID AS NULL AND VOID.
38. TEMPORARY SERVICE
- 38.1. PROVIDE EXTENSION CORDS, EXTENSION LIGHTING AND EQUIPMENT REQUIRED FOR THE WORK OF THIS TRADE. THE COST OF THIS WORK SHALL BE INCLUDED IN THE BID PRICE.
39. VALUATION OF CHANGES
- 39.1. REFER TO AND CONFORM TO THE REQUIREMENTS SET OUT IN DIVISION 1 AND SUPPLEMENTARY AUDIO VISUAL TENDER FORM.
- 39.2. SUBMISSIONS WILL BE SORTED BY THE CONSULTANT AND THEREFORE REQUIRE COMPLETE DETAILED ITEMIZATION OF ALL MATERIAL, LABOUR, UNIT PRICES AND OVERHEAD AND PROFIT MARK-UPS.
- 39.2.1. LUMP SUM COSTS SUBMITTED FROM SUBCONTRACTORS WILL NOT BE ACCEPTED. ALL COSTS SHALL HAVE COMPLETE DETAILED ITEMIZATION AS DESCRIBED ABOVE.
40. WARNING SIGNS
- 40.1. PROVIDE WARNING SIGNS, AS SPECIFIED TO MEET REQUIREMENTS OF MINISTRY OF LABOUR SAFETY INSPECTION, INSPECTION DEPARTMENT, AUTHORITIES HAVING JURISDICTION AND THE CONSULTANT.
- 40.2. USE DECAL SIGNS, IN ENGLISH AS REQUIRED BY AUTHORITIES.
41. WIRE PULLING LUBRICANT
- 41.1. LUBRICANT TO BE NON-CORROSIVE AND CSA APPROVED FOR THE TYPE OF CABLE USED.
- 41.2. LUBRICANTS TO BE SOAP OR WAX BASED, DEPENDING UPON APPLICATION. USE SOAP BASED FOR SHORT RUNS AND FOR SEMI-CONDUCTING INSULATED WIRES, AND WAX BASED FOR LONG RUNS.
42. WORK IN RENOVATED AREAS
- 42.1. WHEN SELECTING WORKING MAKING SAFE EXISTING WORK, ENSURE THAT IT INCLUDES ALL UNNECESSARY WIRING.
- 42.2. ENSURE THAT ALL EXISTING EQUIPMENT WHICH IS TO BE REMOVED AND/OR RELOCATED IS THOROUGHLY INSPECTED AND REFURBISHED TO ENSURE CORRECT OPERATION WHEN PUT BACK INTO SERVICE AND TO MEET THE APPROVAL OF THE AUTHORITIES HAVING JURISDICTION.
- 42.3. ALL EXISTING AUDIO VISUAL EQUIPMENT WHICH IS NO LONGER REQUIRED SHALL BE REMOVED AND DISPOSED OF, OFF SITE.
- 42.4. BE RESPONSIBLE AND PAY FOR ANY DAMAGE TO THE BASE BUILDING INCURRED BY WORK OF THIS DIVISION, OR REPAIR TO THE SATISFACTION OF THE CONSULTANT.
- 42.5. CARRY OUT THE WORK WITH A MINIMUM OF NOISE, DUST AND DISTURBANCE.
- 42.6. PROVIDE TOOLS AND CLEAN UP EQUIPMENT. OBTAIN THE OWNERS PERMISSION FOR THE USE OF ELECTRICAL, PLUMBING OR DRAINAGE OUTLETS.
- 42.7. PROVIDE DAILY CLEAN-UP AND PROPER DISPOSAL OF DEBRIS GENERATED BY DAILY OPERATIONS. ON COMPLETION OF THE WORK, ALL TOOLS, SURPLUS MATERIALS AND WASTE MATERIALS SHALL BE REMOVED AND THE PREMISES LEFT IN A CLEAN, PERFECT CONDITION.

PROJECT LOGO



KEY PLAN

PRELIMINARY - NOT FOR CONSTRUCTION

7	ISSUED FOR ADDENDUM #1	2026-01-09
8	ISSUED FOR TENDER	2026-11-27
9	ISSUED FOR 10% CD	2026-11-21
10	ISSUED FOR 20% CD	2026-09-16
3	ISSUED FOR 10% DO R1	2026-09-19
2	ISSUED FOR 10% DO	2026-07-10
1	ISSUED FOR 10% DO	2026-06-18
No.	DESCRIPTION	DATE

DISCREPANCIES MUST BE REPORTED IMMEDIATELY TO THE ARCHITECT / ENGINEER BEFORE PROCEEDING.

ONLY FIGURED DIMENSIONS MUST BE USED.

THE CONTRACTOR MUST CHECK THE DIMENSIONS ON SITE.

THE DRAWING IS PROTECTED BY COPYRIGHT.

ALL DIMENSIONS ARE SHOWN IN MILLIMETERS.

DO NOT SCALE THE DRAWINGS.

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DRAWING TITLE:
AUDIO VISUAL
SPECIFICATIONS - 27 41 01
AV GENERAL REQ.

SHEET SIZE: ARCH D (840x114)

PROJECT NO: **251016**

DRAWING NO: **AV003**

PROJECT NO: 251016
DRAWING NO: AV003
DATE: 2026-01-09
BY: [Signature]
CHECKED: [Signature]
APPROVED: [Signature]