



City of San Antonio

TRANSPORTATION AND CAPITAL IMPROVEMENTS

ADDENDUM No. 2

FORMAL INVITATION FOR BIDS (IFB)

PROJECT NAME: COLLINS GARDEN BRANCH LIBRARY – ID NO.:35-00040

DATE: March 31, 2014

This addendum is separated into sections for convenience; however, all contractors, subcontractors, material men, and other parties shall be responsible for reading the entire addendum. The failure to list an item or items in all affected sections of this addendum does not relieve any party affected from performing as per instructions, providing that the information is set forth one time any place in this addendum. These documents shall be attached to and become part of the Contract Documents for this project. The contractor shall be required to sign an acknowledgement of the receipt of this addendum and submit with their proposal package.

GENERAL:

1. The following changes and/or additions to the Contract Documents shall apply to proposals made for and to the execution of the various parts of the work affected thereby.
2. Careful note of the Addendum shall be taken by all interested parties and all trades affected shall be fully advised in their performance of the work involved.

TO THE GENERAL CONDITIONS 10.2 SAFETY OF PERSONS AND PROPERTY:

Replace 10.2.1.3 with the following:

10.2.1.3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures, utilities and contents of building not designated for removal, relocation or replacement in the course of Construction.

TO THE DRAWINGS:

Architectural Sheets:

See attachment drawings – Total of 17 Sheets.

MEP Drawing Sheets:

Sheet M-1 Add the following:

1. Keep existing AHU-4 serving new Council Office C102 and new Council Rm. C101, modify/extend existing ducts as shown on mechanical drawings. Delete AHU-1 and AC-1.

2. Provide and install Remote Sensor in Council C100 wired to Thermostat for new RTU1 as required. Verify exact location in field.
3. Provide and install two 4ft linear diffusers at front Greeter 101 space instead of 2ft square diffuser. Verify exact location in field.
4. **Alternate 7:** Provide and install new Mini-Split unit 1.5 – 2 Ton as required to supplement Staff work/lounge area. Note: Provide and install all required/associated piping, wiring, mechanical devices, etc.

Sheet P-1 Add the following:

1. **Alternate 8:** Remove and replace existing boiler, Manuf. by: AJAX, Model No. WN6450, Serial No. 47821, or approved equal. Note: Shall be equal replacement including all required/associated piping, wiring, mechanical devices, etc.
Performance criteria:
Input 450,000 BTUH (max.) – 225,000 BTUH (min.)
Output 360,000 BTUH (max.) - 180,000 BTUH (min.)

TO GENERAL INFORMATION OF ADDENDUM NO. 1:

Replace:

Contractor to provide temporary perimeter construction fence around the building and parking lot with controlled access.

With the following:

Contractor to provide temporary perimeter construction fence around the parking lot and around construction areas only with controlled access.

END OF ADDENDUM No. 2





City of San Antonio
TRANSPORTATION AND CAPITAL IMPROVEMENTS

RECEIPT OF ADDENDUM NUMBER(S) 2 IS HEREBY ACKNOWLEDGED FOR PLANS AND SPECIFICATIONS FOR **COLLINS GARDEN LIBRARY PROJECT** FOR WHICH BIDS WILL BE OPENED ON April 7, 2015.

THIS ACKNOWLEDGEMENT MUST BE SIGNED AND RETURNED WITH THE BID PACKAGE.

Company Name: _____

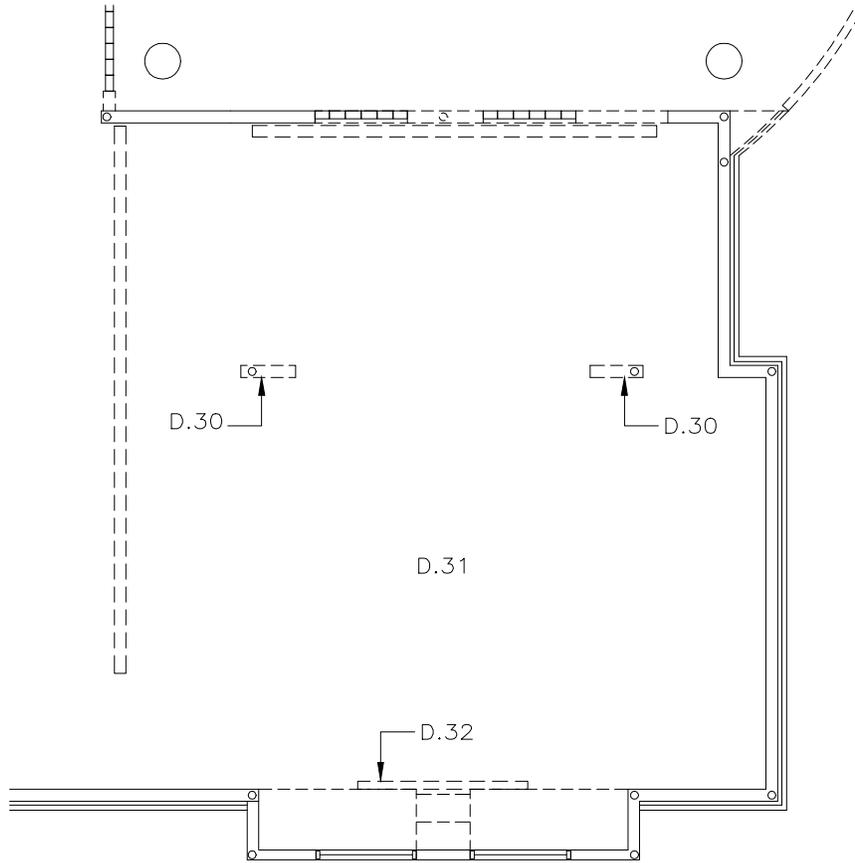
Address: _____

City/State/Zip Code: _____

Date: _____

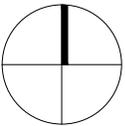
Signature

Print Name/Title



DEMOLITION KEYED NOTES

- D.30 FURR-OUT WALL
- D.31 PORTION OF CEILING TO ACCOMMODATE NEW DUCTS + LIGHT FIXTURES AS REQUIRED, TYP.
- D.32 PORTION OF CEILING TO ACCOMMODATE NEW RECESSED CEILING PROJECTOR, COORDINATE EXACT LOCATION W/ OWNER/ ARCHITECT.



DEMOLITION PLAN

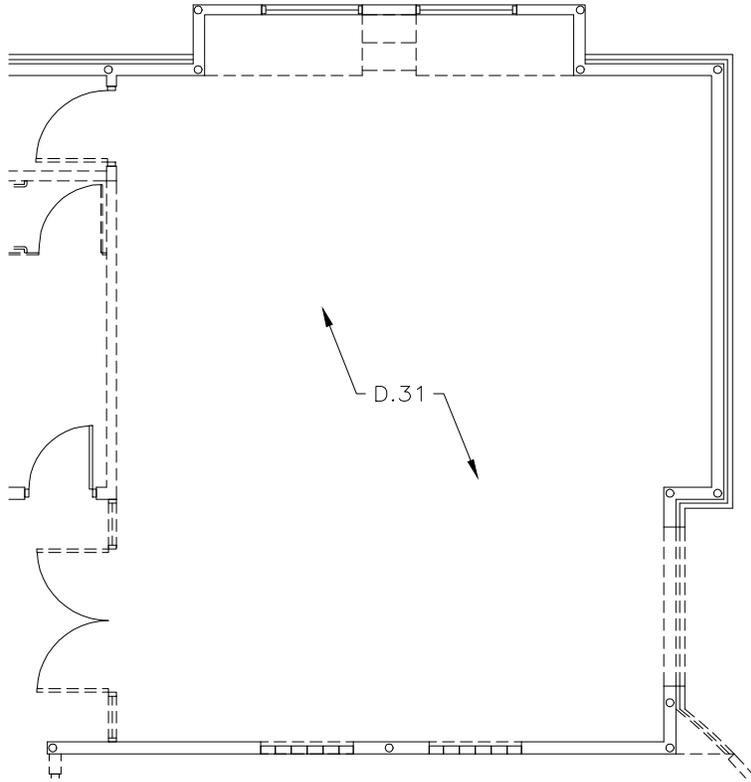
SCALE: 1/8" = 1'-0"

REFERENCE SHEET D1.1

ATTACHMENT - A
Addendum No.2

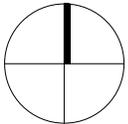
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ALVIDREZ
architecture inc.



DEMOLITION KEYED NOTES

D.31 PORTION OF CEILING TO ACCOMMODATE NEW DUCTS
+ LIGHT FIXTURES AS REQUIRED, TYP.



DEMOLITION PLAN

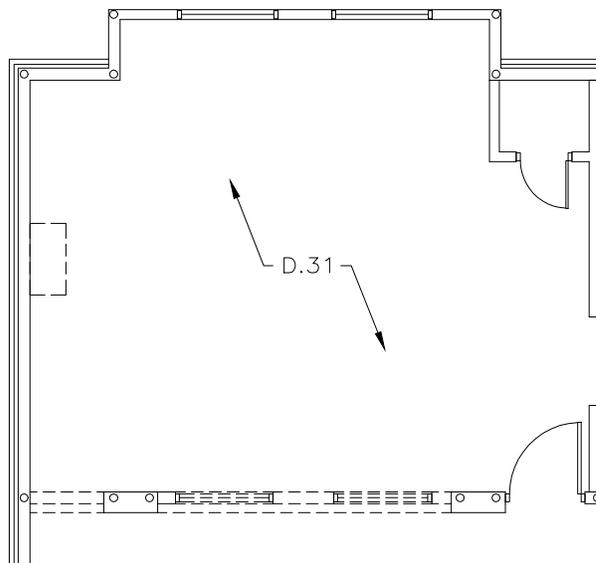
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REFERENCE SHEET D1.1

ATTACHMENT - A
Addendum No.2

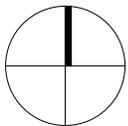
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DEMOLITION KEYED NOTES

D.31 PORTION OF CEILING TO ACCOMMODATE NEW DUCTS
+ LIGHT FIXTURES AS REQUIRED, TYP.



DEMOLITION PLAN

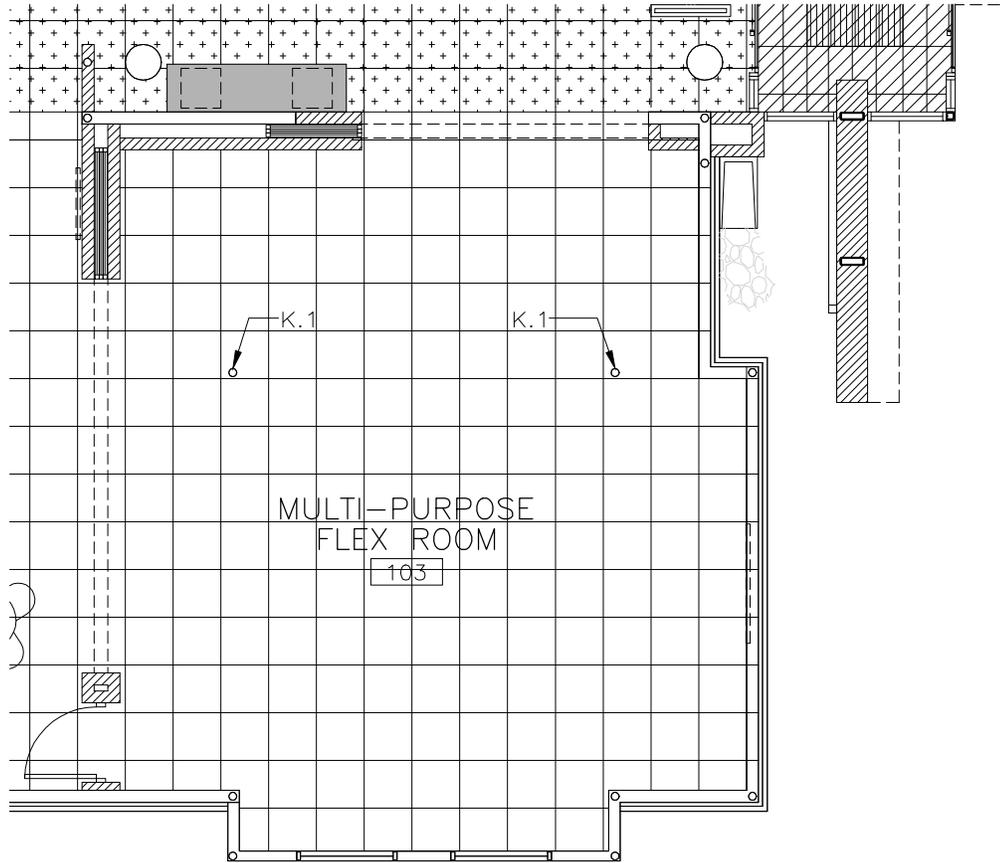
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REFERENCE SHEET D1.1

ATTACHMENT - A
Addendum No.2

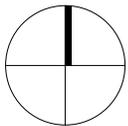
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KEYED NOTES

K.1 PAINT COLUMNS IN P-2, TYPICAL.



FINISH FLOOR PLAN

SCALE: 1/8" = 1'-0"

REFERENCE SHEET A1.3

ATTACHMENT - B
Addendum No.2

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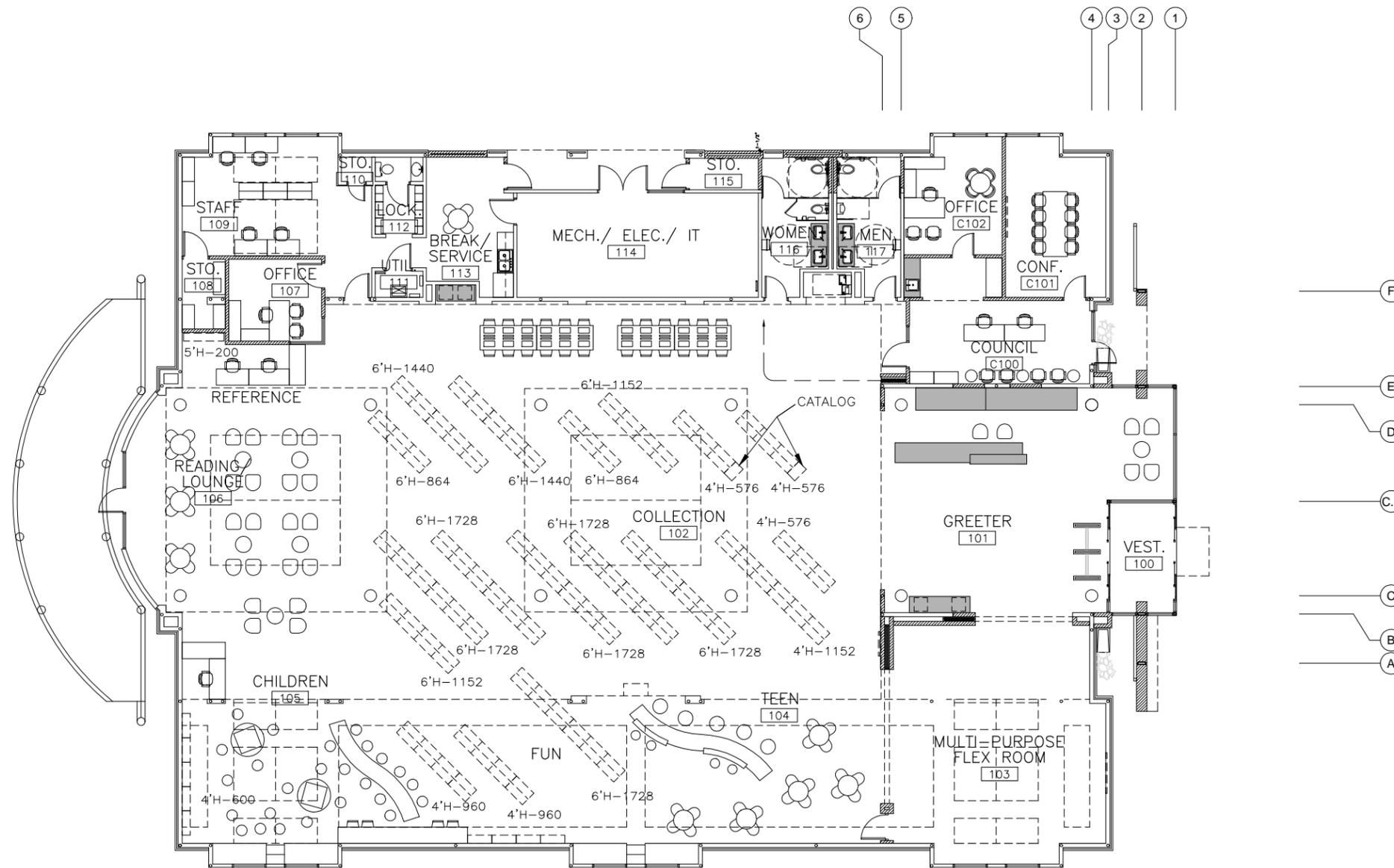


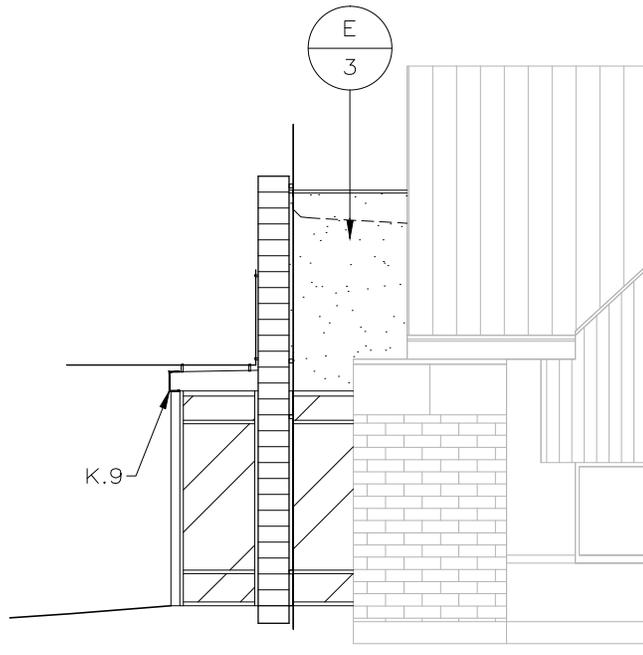
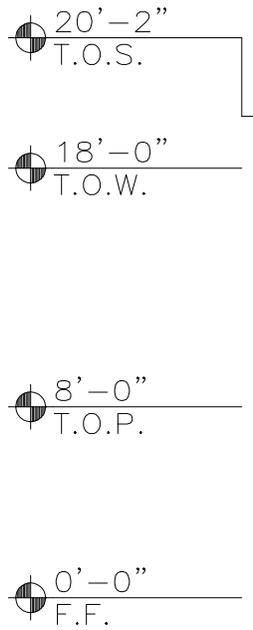
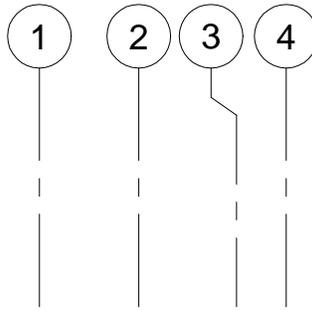
NOTES

- PULL ALL EXISTING ELECTRICAL + DATA BOXES FORWARD TO NEW WALL/CEILING SURFACE WHERE REQUIRED.

COLLECTION DATA:

COLLECTION	=	18,432
REFERENCE	=	200
FUN	=	3,000
KIDS	=	1,728
TOTAL	=	23,360





KEYED NOTES

K.9 WRAP METAL FASCIA TO UNDERSIDE ABOVE ALUM. STOREFRONT FRAME, TYP. (CORNERS SHALL BE SINGLE 90° PIECE)

3.A2.1 NORTH ELEVATION

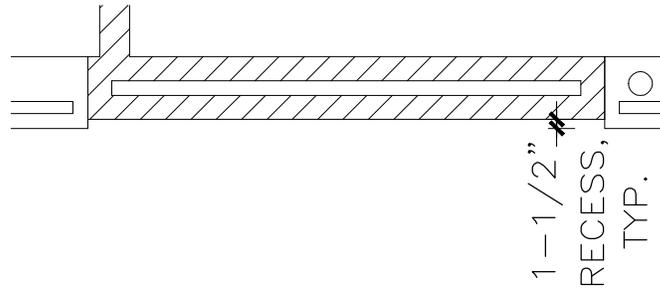
SCALE: 1/8" = 1'-0"

REFERENCE SHEET A2.1

ATTACHMENT - D
Addendum No.2

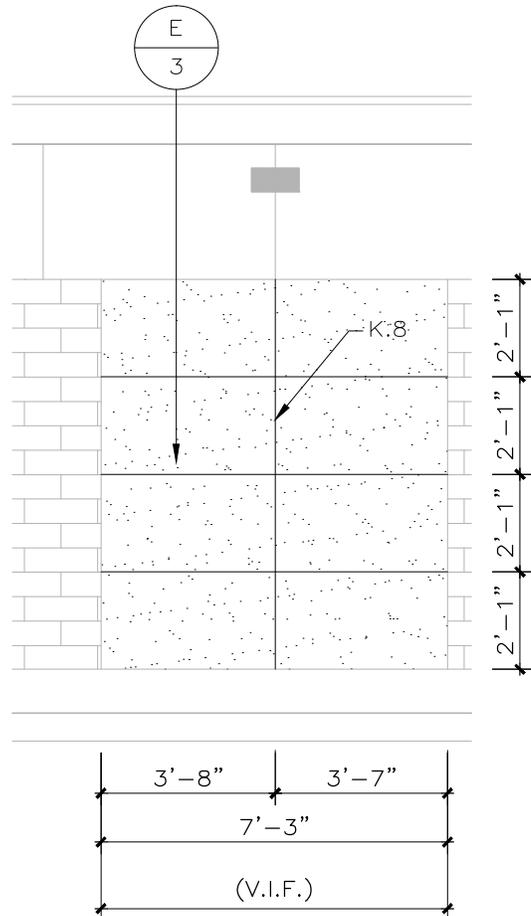
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PLAN VIEW

SCALE: 3/8" = 1'-0"



KEYED NOTES

K.8 CONTROL JOINTS TO MATCH EXISTING

NOTE: TYPICAL OF THREE LOCATIONS APPLICABLE AT EA. BID CONDITION.

3.A2.1 NORTH ELEVATION

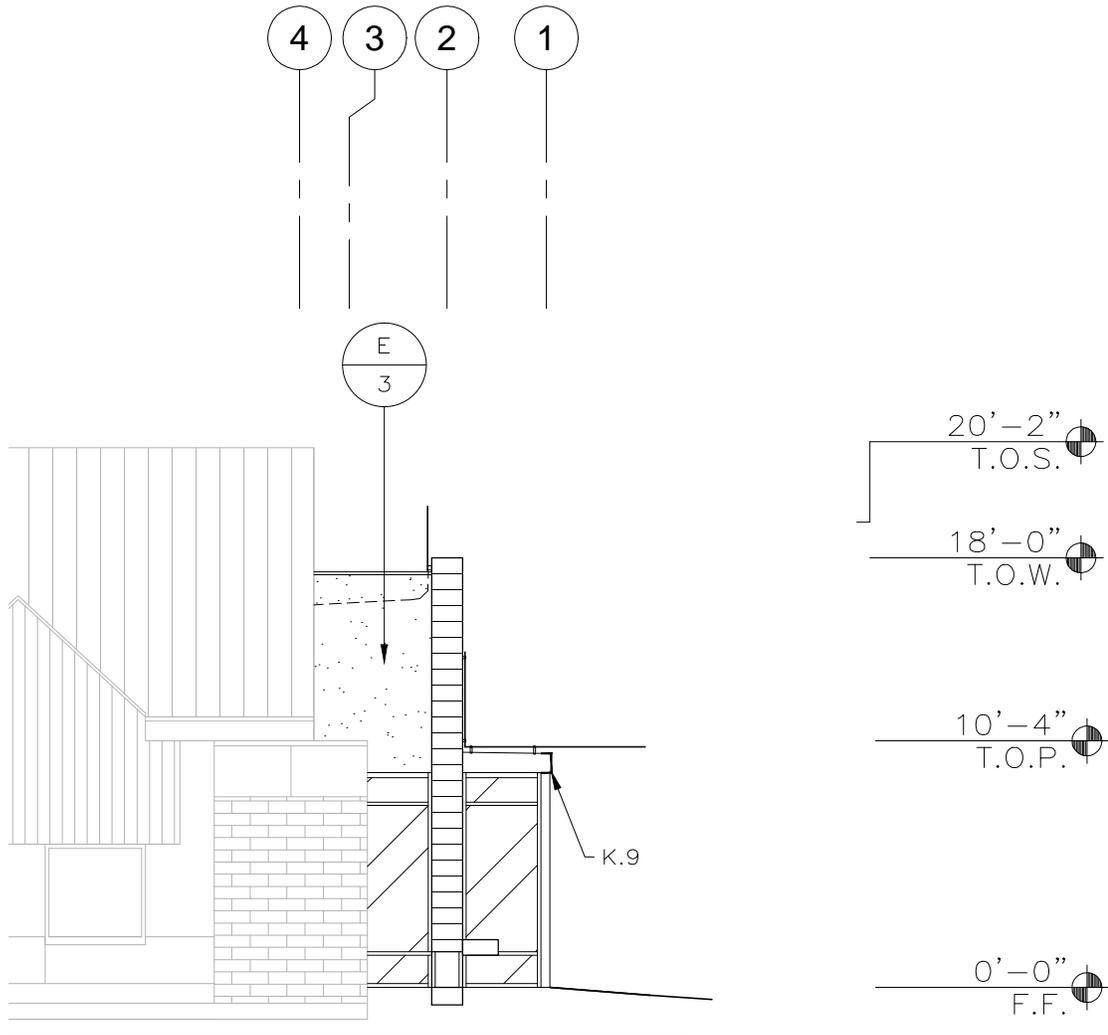
SCALE: 1/4" = 1'-0"

REFERENCE SHEET A2.1

ATTACHMENT - D
Addendum No.2

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KEYED NOTES

K.9 WRAP METAL FASCIA TO UNDERSIDE ABOVE ALUM. STOREFRONT FRAME, TYP. (CORNERS SHALL BE SINGLE 90° PIECE)

4.A2.1 SOUTH ELEVATION

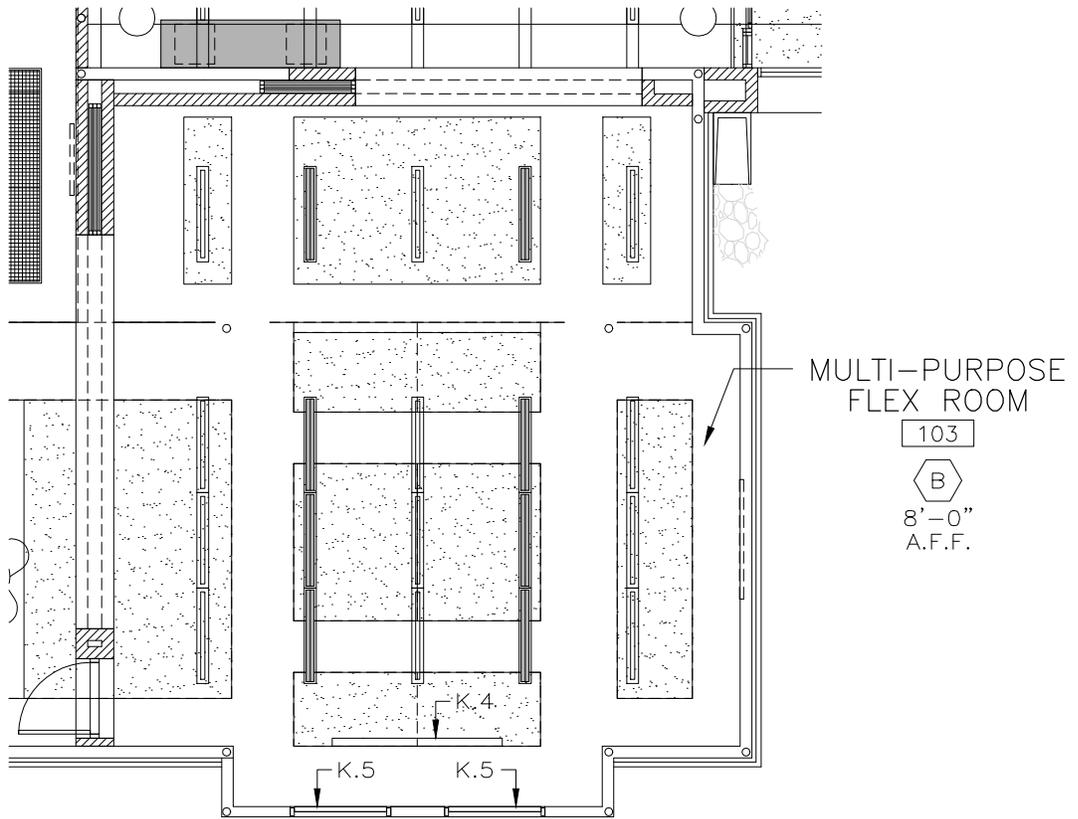
SCALE: 1/8" = 1'-0"

REFERENCE SHEET A2.1

ATTACHMENT - D
Addendum No.2

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KEYED NOTES

- K.4 10' WIDE 16:10 WIDE FORMAT CEILING RECESSED PROJECTION SCREEN, MOTORIZED. "ADVANTAGE DELUXE ELECTROL". AS MANUF. BY: DA-LITE, www.dalite.com, OR APPROVED EQUAL, PROVIDE ALL REQUIRED ELECT. POWER + DATA WIRING TO CONTROLS AS REQUIRED, COORDINATE EXACT LOCATION W/ OWNER/ ARCHITECT
- K.5 48" WIDE BY 48" TALL (V.I.F.) MOTORIZED BLACK-OUT SHADE SYSTEM AS MANUF. BY: MECO SYSTEMS, www.mechoshade.com, OR APPROVED EQUAL, PROVIDE ALL REQUIRED ELECT. POWER + DATA WIRING TO CONTROLS AS REQUIRED, COORDINATE EXACT LOCATION W/ OWNER/ ARCHITECT

1.A3.1 REFLECTED CEILING PLAN

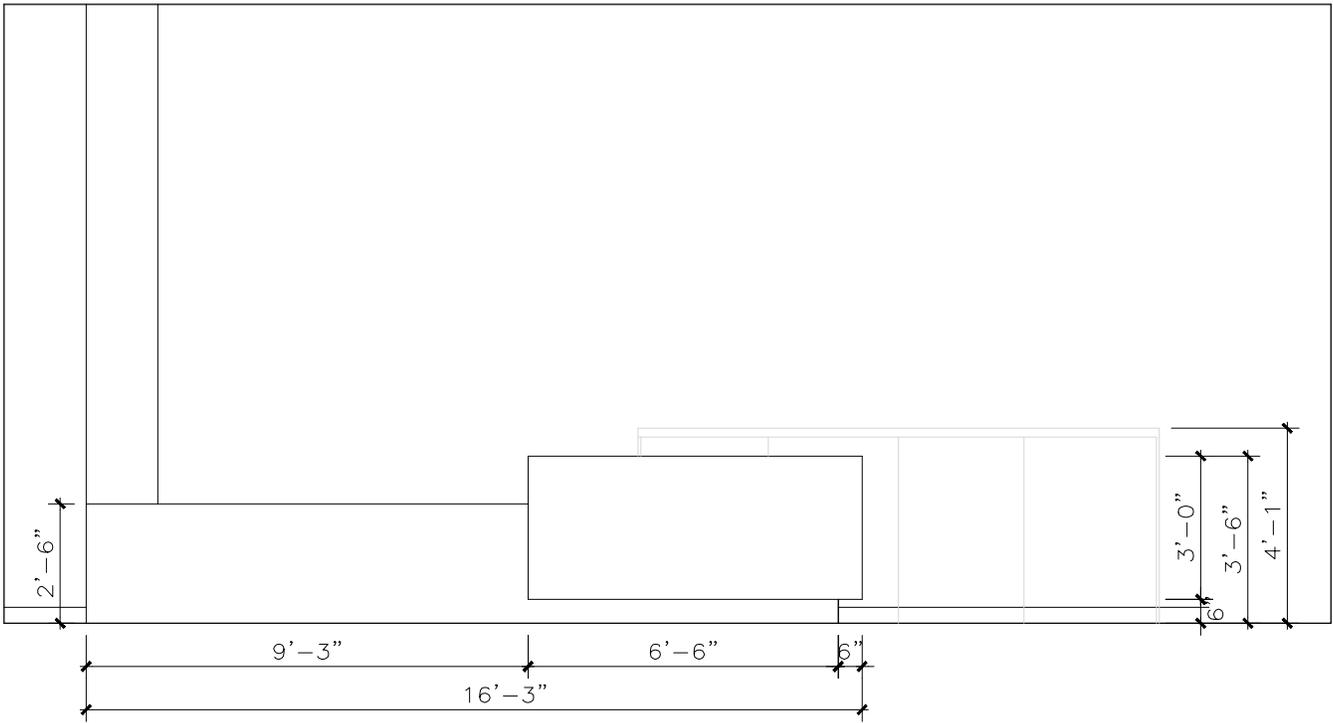
SCALE: 1/8" = 1'-0"

REFERENCE SHEET A3.1

ATTACHMENT - E
Addendum No.2

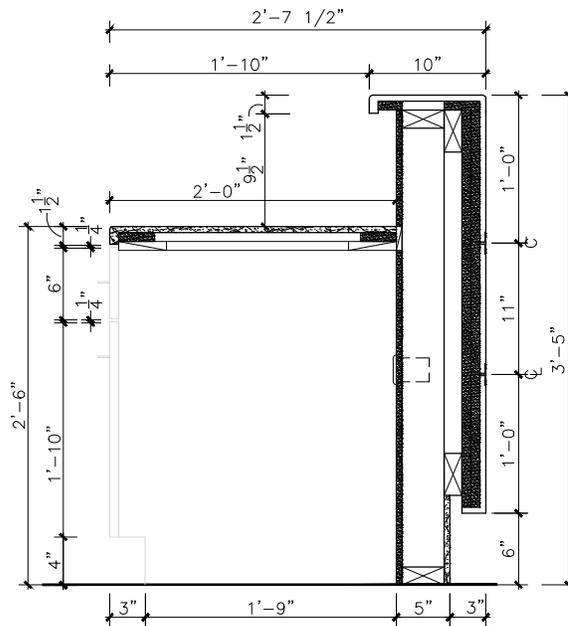
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2.D6.2 GREETER 101

SCALE: 1/4" = 1'-0"



6.D6.2 GREETER 101

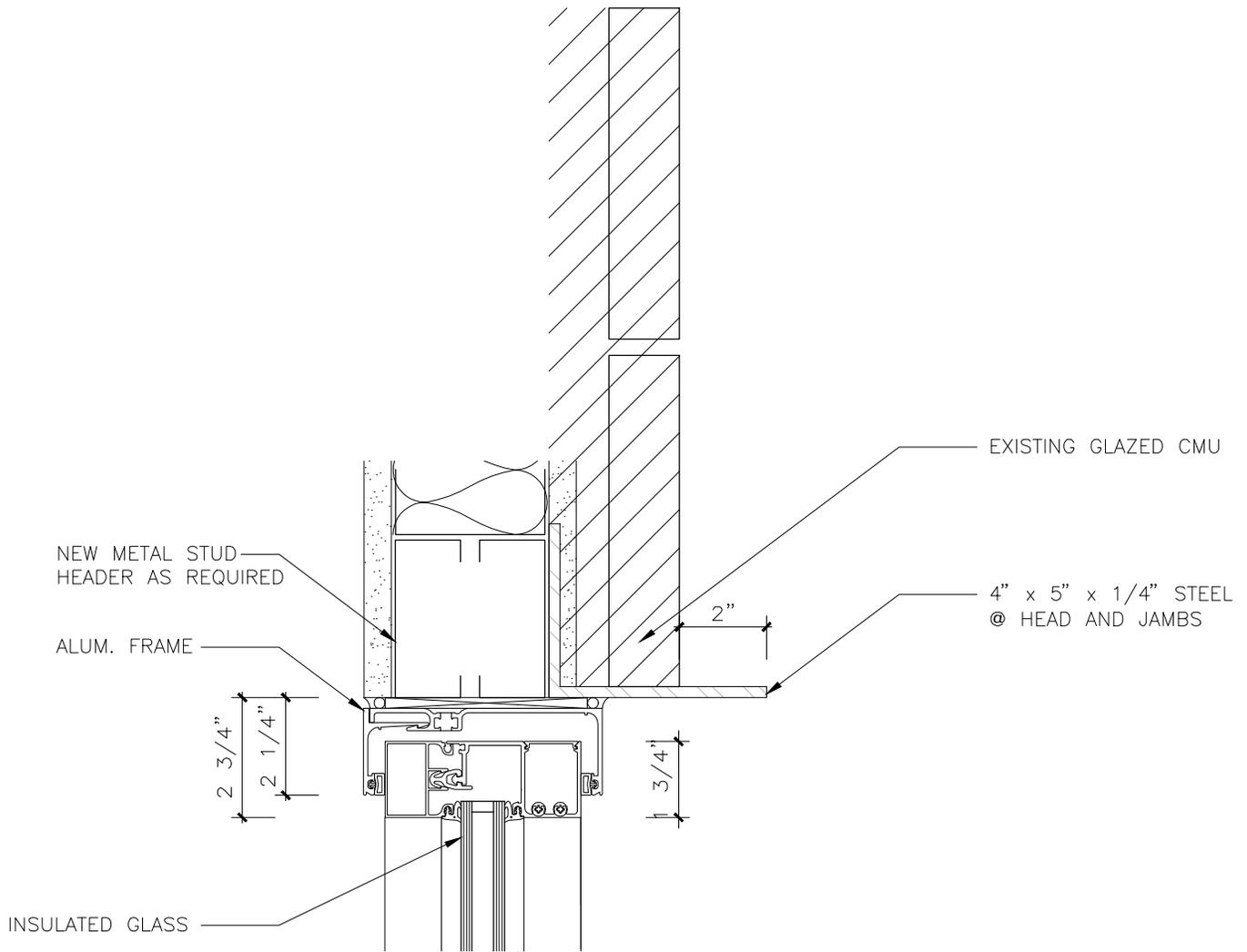
SCALE: 3/4" = 1'-0"

REFERENCE SHEET D6.2

ATTACHMENT - F
Addendum No.2

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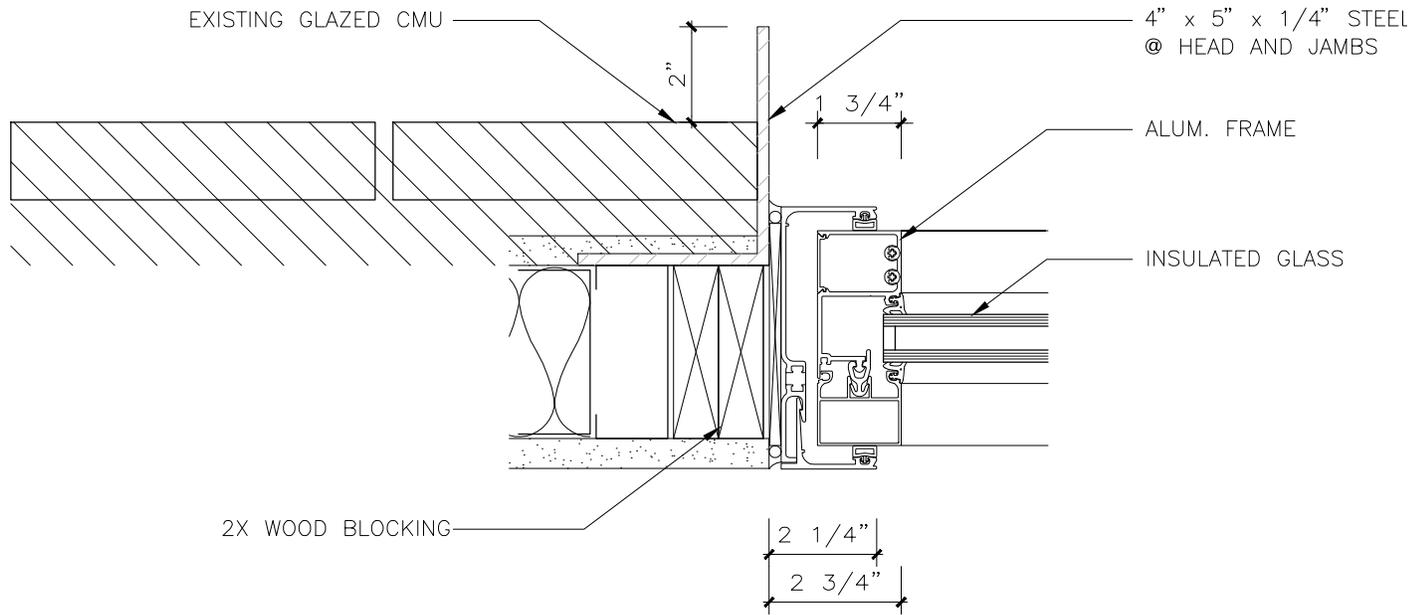
8.D8.1 STOREFRONT HEAD @ COUNCIL DOOR

SCALE: 3" = 1'-0"

REFERENCE SHEET D8.1

ATTACHMENT - G
Addendum No.1

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8.D8.1 STOREFRONT JAMB @ COUNCIL DOOR

SCALE: 3" = 1'-0"

REFERENCE SHEET D8.1

ATTACHMENT - G
Addendum No.1

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TELECOM SYMBOL LEGEND

VOICE & DATA SYMBOLS

	WALL PHONE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +48" A.F.F. UNLESS NOTED OTHERWISE. ONE (1) CABLE RUN PER LOCATION.
	WIRELESS ACCESS POINT (WAP), CEILING OUTLET, CABLE TYPE AS SPECIFIED. TWO (2) DATA CABLES RUNS PER LOCATION UNLESS OTHERWISE NOTED.
	DATA OUTLET, CABLE TYPE AS SPECIFIED. Y INDICATES MOUNTING HEIGHT. X-NUMBER OF CABLE RUNS PER LOCATION.
	DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18" A.F.F. UNLESS NOTED OTHERWISE. X-NUMBER OF CABLE RUNS PER LOCATION.
	IP SECURITY CAMERA OUTLET (CAM), WALL OUTLET. X INDICATES MOUNTING HEIGHT. TYPICALLY, TWO (2) DATA CABLES RUNS PER LOCATION.
	SECURITY CAMERA (CAM), CEILING OUTLET, CABLE TYPE AS SPECIFIED. TWO (2) DATA CABLES RUNS PER LOCATION UNLESS OTHERWISE NOTED.
	DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED IN A FLOOR BOX. X-NUMBER OF CABLE RUNS PER LOCATION.

GENERAL NOTES

- THE GENERAL CONDITIONS, SUPPLEMENTARY GENERAL CONDITIONS AND OTHER REQUIREMENTS OF DIVISION 1 THE ELECTRICAL, AUDIO VISUAL, AND SECURITY PLANS AND SPECIFICATIONS, MAY APPLY TO THE WORK SPECIFIED.
- COMMUNICATION CABLEING INTEGRATOR HERE AFTER REFERRED TO, AS "CONTRACTOR" SHALL PROVIDE ALL MATERIALS, COMPONENTS, TOOLS, AND LABOR TO COMPLETE A TELECOMMUNICATIONS INFRASTRUCTURE AS SET FORTH IN THE STRUCTURED CABLEING SYSTEM DOCUMENTS, CONTRACTS AND DRAWINGS. REF. DIVISION 27, T DRAWINGS AND E DRAWINGS.
- THE CONTRACTOR SHALL CAREFULLY EXAMINE THE SITE TO DETERMINE THE EXTENT OF WORK AND CONDITION UNDER WHICH IT WILL BE DONE. REVIEW AND VERIFY CONTRACT DOCUMENTS IN RELATION TO FIELD CONDITIONS TO VERIFY ACCURACY, CONFIRMING WITH OWNER, OR THEIR DESIGNATED REPRESENTATIVE, THAT THE WORK HAS BEEN COMPLETED PRIOR TO PROCEEDING WITH INSTALLATION. REGARDING ANY PROJECT RELATED QUESTIONS, THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING CLARIFICATION FROM OWNER, OR THEIR DESIGNATED REPRESENTATIVE, PRIOR TO PROCEEDING WITH THE WORK OR RELATED WORK IN QUESTION.
- DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS MUST BE BROUGHT TO THE IMMEDIATE ATTENTION OF OWNER, OR THEIR DESIGNATED REPRESENTATIVE, FOR CLARIFICATION.
- REFER TO TECHNOLOGY, AUDIO VISUAL AND SECURITY CONTRACT DOCUMENTS, DRAWINGS AND SPECIFICATIONS AS A UNIT AND IN WHOLE IN THE BIDDING AND INSTALLATION OF THIS PROJECT.
- ELECTRICAL CONTRACTOR SHALL READ IN THEIR ENTIRETY ALL SECTIONS OF THE COMMUNICATIONS CABLEING SYSTEM DOCUMENTS AND APPLY THEM AS APPROPRIATE FOR WORK IN THIS SECTION. REF DIVISION 27 AND T DRAWINGS.
- ELECTRICAL CONTRACTOR SHALL PROVIDE MATERIALS, COMPONENTS, TOOLS, AND LABOR TO COMPLETE COMMUNICATIONS CABLEING PATHWAY, ELECTRICAL POWER DISTRIBUTION AND GROUNDING SYSTEM AS SET FORTH IN THE COMMUNICATIONS CABLEING SYSTEM DOCUMENTS AND THE ELECTRICAL DOCUMENTS, SPECIFICATIONS AND DRAWINGS.
- CONTRACTOR SHALL NOTE AND REPORT TO GC COMMUNICATION SYSTEM WORK PERFORMED OR NOT PERFORMED BY ELECTRICAL CONTRACTOR WHICH DOES NOT COMPLY WITH COMMUNICATIONS SPECIFICATIONS AND DRAWINGS AND ARE INTENDED FOR THE COMMUNICATION SYSTEMS COMPONENTS.
- CONTRACTOR SHALL TAKE NECESSARY MEANS TO ASSURE COMMUNICATION SYSTEM COMPONENTS ARE PROTECTED FROM MECHANICAL DAMAGE BEFORE, DURING AND AFTER CONSTRUCTION.
- CONTRACTOR IS REQUIRED TO REFERENCE DIVISION 27 SPECIFICATIONS FOR ITEMIZED PRICING REQUIREMENTS.
- ALL COMPONENTS AND DEVICES SHOWN ON THESE DRAWINGS ARE FOR APPROXIMATE LOCATION AND POSITIONING ONLY. VERIFY EXACT LOCATIONS WITH THE OWNER OR G.C. PRIOR TO INSTALLATION.
- CONTRACTOR SHALL ADHERE TO ALL TELECOMMUNICATIONS CABLEING STANDARDS SET FORTH IN THE ANSI/TIA 568-C STANDARDS & UNIVERSITY OF HOUSTON INFORMATION TECHNOLOGY TELECOMMUNICATION INFRASTRUCTURE STANDARDS REVISION 1.20 DATED 04/01/2013.

ELECTRICAL

- FOR SPECIFIC POWER AND RECEPTACLE REQUIREMENTS IN THE PROJECT REFERENCE ELECTRICAL SPECIFICATIONS AND DRAWINGS AND VERIFY WITH COMMUNICATION SPECIFICATIONS AND DRAWINGS. REPORT TO GC DISCREPANCIES PRIOR TO PURCHASE OR INSTALLATION.
- PROVIDE A MINIMUM OF ONE (1) DUPLEX RECEPTACLE FOR EACH INFORMATION OUTLET (IO) INSTALLED THAT IS NOT LOCATED WITHIN 3' OF A DUPLEX ELECTRICAL OUTLET.
- PROVIDE DEDICATED RECEPTACLE CIRCUITS LOCATED ON OR NEAR EACH EQUIPMENT RACK LOCATED IN THE COMMUNICATIONS ROOMS. SEE DRAWINGS FOR APPROXIMATE LOCATIONS. REFER TO ELECTRICAL DOCUMENTS FOR SPECIFICS.
- ELECTRICAL CONTRACTOR SHALL INSTALL NORMAL AND GENERATOR BACK-UP POWER AS REQUIRED.

TELECOM NOTES

COMMUNICATIONS PATHWAYS

- INSTALL CABLE TRAY WITH MINIMAL 12" CLEARANCE ABOVE AND ON ONE SIDE OF TRAY. TRAY SHALL HAVE A MINIMAL 3" CLEARANCE BELOW WHEN PLACED ABOVE LIGHT FIXTURES OR ABOVE ACCESSIBLE CEILING SPACE.
- CONTRACTOR SHALL VERIFY CABLE TRAY PATHWAY ROUTING PRIOR TO INSTALLATION OF HORIZONTAL CABLES TO INSURE CABLE PATHWAY DOES NOT CAUSE CABLE LENGTHS TO EXCEED MAXIMUM DISTANCE.
- OUTLET FACEPLATES MUST BE LABELED WITH THE JACK NUMBERS OR PATCH PANEL PORTS PER ANSI/TIA-607B STANDARDS & UNIVERSITY OF HOUSTON INFORMATION TECHNOLOGY TELECOMMUNICATION INFRASTRUCTURE STANDARDS REVISION 1.20 DATED 04/01/2013.
- BACK BOXES INSTALLED FOR COMMUNICATIONS DATA AND VOICE WIRING TERMINATION SHALL BE A MINIMUM OF 4" X 4" X 2.5" DEEP DOUBLE-GANG OUTLET BOX TO ALLOW FOR THE REQUIRED WORKING CLEARANCE OF THE CAT6 UTP CABLE. THESE BOXES SHALL BE SEPARATE FROM ELECTRICAL JUNCTION BOXES AND BE EXCLUSIVELY FOR DATA AND VOICE COMMUNICATIONS.
- SINGLE-GANG REDUCER MUD-RINGS SHALL BE INSTALLED ON ALL COMMUNICATIONS WALL BOXES.
- CONDUITS TO COMMUNICATIONS WALL BOXES SHALL BE MINIMUM OF ONE IN. (1") IN DIAMETER AND SHALL BE COMPLETE WITH NYLON PULL STRING. OUTLETS HAVING MORE THEN TWO CABLES REQUIRE AN ADDITIONAL (1") CONDUIT PER WALL BOX.
- CONTRACTOR SHALL PROVIDE CONDUIT SERVICING END USER OUTLET AND STUB UP TO ABOVE CEILING, THEN ROUTE TO THE NEAREST CORRIDOR/HALLWAY TELECOMMUNICATIONS HORIZONTAL PATHWAY. LEASING TO THE TELECOMMUNICATIONS ROOM. CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR ON CABLE PATHS PRIOR TO INSTALLATION OF CABLEING. ANY CHANGES TO DRAWINGS FOR VALUE ENGINEERING PURPOSES TO CABLE SADDLES FROM BASKET TRAY SHALL REQUIRE THE CONTRACTOR TO PROVIDE CABLE SADDLE CAPACITY EQUIVALENT TO THE BASKET TRAY AS SHOWN ON CONSTRUCTION DOCUMENTS.
- THE NUMBER OF HORIZONTAL CABLES PLACED IN A CABLE SUPPORT OR PATHWAY SHALL BE LIMITED TO A NUMBER OF CABLES THAT WILL NOT CAUSE A GEOMETRIC SHAPE OF THE CABLES TO BE ALTERED. UNDER NO CIRCUMSTANCES SHOULD CABLES IN THE HORIZONTAL PATHWAY BE BUNDLED. THIS IS TO MINIMIZE "ALIEN" CROSS TALK.
- SUPPLY SOLUTIONS AND SHOP DRAWINGS SUBMITTALS FOR CONDUIT SEALING MATERIALS AND SYSTEMS FOR WRITTEN APPROVAL OF MATERIAL/SYSTEMS PRIOR TO PURCHASE AND INSTALLATION. MATERIALS AND SYSTEMS SHALL BE COMPLETE UPON INSTALLATION.
- PRIOR TO SUBSTANTIAL COMPLETION, ALL TELECOM PATHWAY CONDUITS AND UNUSED "TELECOM INTENDED USE CONDUITS" SHALL BE PROPERLY FIRE STOPPED.
- CONDUIT RUNS SHALL BE INSTALLED WITH NO MORE THAN TWO (2) 90 DEG. BENDS AND NOT EXCEED 100 FEET. IF THESE CONDITIONS CAN NOT BE MET. A J-BOX MUST BE PLACED IN THE RUN, WITH THE ABILITY TO ACCESS BOX THROUGH THE CEILING.
- CONDUITS SHALL HAVE CONNECTORS, PROTECTIVE BUSHINGS, AND PULL STRINGS AND SHALL BE GROUNDED.
- ELECTRICAL CONTRACTOR SHALL COORDINATE WITH ARCHITECT AND TELECOMMUNICATIONS CONSULTANT ON ENTRY, PATHWAYS AND OUTLET BOX PLACEMENT IN MODULAR FURNITURE AND CUSTOM MILLWORK.

GROUNDING AND BONDING

- ALL METAL RACKS, FRAMES, CABINETS AND MISCELLANEOUS EQUIPMENT ENCLOSURES SHALL BE BONDED TOGETHER USING GREEN INSULATED COPPER WIRE SO THAT ALL EQUIPMENT, STRUCTURED CABLE RACKS ARE AT THE SAME GROUND POTENTIAL. A VOLT-O-METER (VOM) MEASUREMENT BETWEEN ANY TWO POINTS ON METAL RACKS AND EQUIPMENT ENCLOSURES IN THE TELECOMMUNICATIONS ROOMS SHALL BE LESS THAN 1.25 VOLTS DC OR AC POTENTIAL.
- ALL GROUNDS USED SHALL BE BONDED TOGETHER TO FORM A SINGLE GROUNDING ELECTRODE SYSTEM AS REQUIRED IN ARTICLE 250 OF NFPA 70 - NATIONAL ELECTRICAL CODE.
- SURFACES SHALL BE PREPARED TO PROVIDE A PROPER PATH TO GROUND. ANY SURFACE TO BE GROUNDED MUST BE FREE OF PAINT OR OTHER COATINGS THAT MIGHT PREVENT AN EFFECTIVE GROUND. PAINT SHOULD BE SCRAPED AWAY UNTIL METALLIC SURFACE HAS BEEN EXPOSED BEFORE THE ATTACHMENT OF GROUNDING OR BONDING WIRE.
- CONTRACTOR TO INSTALL MANUFACTURER PROVIDED STAR WASHERS PER PANEL INSTALLED IN ORDER FOR PANELS TO BE BONDED TO RACK. ONLY ONE (1) STAR WASHER IS REQUIRED PER PANEL.
- CONTRACTOR TO PROVIDE CPI "L" BRACKETS 18" APART ON CABLE RUNWAY IN MDF/DPS. "L" BRACKETS TO HANG BENEATH CABLE RUNWAY AND SUPPORT GROUNDING WIRE AROUND TRAY TO RACKS AND WALL FIELDS. ATTACH GROUND WIRE TO "L" BRACKETS WITH VELCRO.
- NO GROUND WIRE SHALL BE RUN IN CABLE RUNWAY WITH HORIZONTAL CABLEING OR ATTACHED TO THE OUTSIDE OF THE RACEWAY. "L" BRACKETS ARE REQUIRED.
- CONTRACTOR TO VERIFY EXISTING GROUNDING SYSTEM IN TELECOM ROOMS AND ADHERE TO ALL GROUNDING AND BONDING REQUIREMENTS SET FORTH IN THE ANSI-J-STD-607-A COMMERCIAL GROUNDING AND BONDING STANDARDS.
- ALL OSP COPPER CABLEING SHALL TERMINATE ON PROTECTION BLOCKS WITH SOLID STATE MODULES. VOICE CABLEING SHALL BE CROSS CONNECTED TO WALL MOUNTED 110 BLOCKS.
- CONTRACTOR TO BOND ALL INTERLOCKING ARMORED FIBER OPTIC CABLE TO EQUIPMENT RACK. REFER TO ARMORED FIBER TERMINATION BONDING DETAIL.

PROJECT NOTES

COMMUNICATIONS CABLE

- CABLEING CONTRACTOR MUST BE A UNIPRISE CERTIFIED NETWORK INSTALLER AND ABLE TO PROVIDE MANUFACTURER WARRANTY.
- CONTRACTOR SHALL TERMINATE ALL CATEGORY 6 8P8C JACK INSERTS TO 568-B WIRING SCHEME.
- CONTRACTOR SHALL PROVIDE AND INSTALL HORIZONTAL COPPER DATA CABLES.
- HORIZONTAL DATA CABLEING SHALL CONSIST 24 AWG PLENUM CAT6 4PR UTP CABLES TO EACH DATA OUTLET.
- WIRELESS OUTLET LOCATIONS SHALL CONSIST OF TWO (2) 24 AWG PLENUM CAT6 4PR UTP CABLE TO EACH ACCESS POINT. PROVIDE 20' CABLE SLACK AT DEVICE END.
- NO HORIZONTAL CABLE SHALL BE LONGER THAN 295 FEET. IF THE CONTRACTOR BELIEVES ANY STATION CABLE WILL EXCEED THE 295 FEET LIMIT WRITTEN APPROVAL FROM THE OWNER'S ARCHITECT/ENGINEER WILL BE REQUIRED PRIOR TO INSTALLATION.
- PROVIDE CATEGORY 6 CABLEING FROM EACH WORKSTATION OUTLET LOCATION TO THE APPROPRIATE TELECOM ROOM LOCATED ON EACH FLOOR.
- CONTRACTOR TO PROVIDE LACING BARS TO RESTRAIN CABLES AND TO PREVENT STRAINING CONNECTIONS.
- COMMUNICATIONS CABLE SHALL NOT BE PAINTED.
- PROVIDE ALL NECESSARY MEANS TO PROTECT ALL DATA VOICE/FIBER CABLEING AND JACKS/PORTS FROM MECHANICAL DAMAGE AND DUST DURING CONSTRUCTION.
- CONTRACTOR TO PROVIDE SELF-ADHESIVE VINYL OR VINYL-CLOTH WRAP AROUND TAPE MARKERS, MACHINE PRINTED WITH ALPHANUMERIC CABLE DESIGNATIONS PER UNIVERSITY OF HOUSTON INFORMATION TECHNOLOGY TELECOMMUNICATION INFRASTRUCTURE STANDARDS REVISION 1.20 DATED 04/01/2013.
- CONTRACTOR TO PROVIDE PROPER RATED CABLE TYPE PER INSTALLATION TYPE OSP, RISER OR PLENUM.
- ALL CABLEING INSTALLED UNDERGROUND IN CONCRETE SLABS, IN DIRECT CONTACT WITH THE EARTH, LOCATIONS SUBJECT TO SATURATION WITH LIQUIDS AND UNPROTECTED LOCATIONS EXPOSED TO WEATHER SHALL BE CONSTRUCTED WITH APPROPRIATE WEATHER PROOFING COMPOUNDS AND SHEATHING.

COMMUNICATION ROOMS

- PRIOR TO THE COMMENCEMENT OF ANY BUILD-OUT OF THE TELECOMMUNICATION ROOMS THE CONTRACTOR SHALL SCHEDULE A MEETING WITH THE TELECOMMUNICATIONS DEPARTMENT TO VERIFY EXACT EQUIPMENT PLACEMENT AND CABLE ROUTING DETAILS.
- CONTRACTOR SHALL PROVIDE IDENTIFICATION/LABELING SCHEME ON ALL PASSIVE OSP AND RISER PANELS, CABLEING AND EQUIPMENT RACKS IN ACCORDANCE WITH THE LATEST EDITION UH TELECOMMUNICATION INFRASTRUCTURE STANDARDS. PRIOR TO COMMENCING, CONTRACTOR SHALL COORDINATE WITH OWNER AND OBTAIN LATEST STANDARD AND OBTAIN SIGN-OFF APPROVAL.
- TELECOM ROOM LAYOUTS AND EQUIPMENT ARE SHOWN FOR COORDINATION AND INFORMATIONAL PURPOSES ONLY.
- 8" X 4" W X 3/2" GRADE ACX PAINTED PLYWOOD SHALL BE PLACED ON DESIGNATED WALLS OF THE TELECOM ROOMS. PLYWOOD SHALL BE PAINTED TWO COATS OF FIRE RETARDANT WHITE PAINT.
- PLYWOOD BACKBOARDS SHALL EXTEND FROM 24" ABOVE THE TELECOMMUNICATION ROOMS FLOOR TO THE BUILDING STRUCTURE OR SLAB ABOVE.
- GRAPHIC REPRESENTATION OF PATCH PANELS AND TERMINAL BLOCKS DO NOT REPRESENT EXACT QUANTITIES. CONTRACTOR SHALL PROVIDE SUFFICIENT QUANTITIES FOR ALL CABLEING, PLUS 20%.
- FURNISH AND INSTALL VELCRO CABLE SUPPORT, CABLE MANAGEMENT AND ASSOCIATED HARDWARE WITHIN TELECOMMUNICATIONS ROOMS.
- CONTRACTOR TO PROVIDE AUTOCAD FLOOR PLAN AS-BUILT ON "D" SIZE PAPER, LAMINATED WITH PLASTIC AND MOUNTED BEHIND CUT PLEXI-GLASS ON THE WALL IN EACH TELECOM ROOM. REFERENCE TELECOM ROOM ELEVATIONS FOR AS-BUILT PLACEMENT.

ABBREVIATIONS

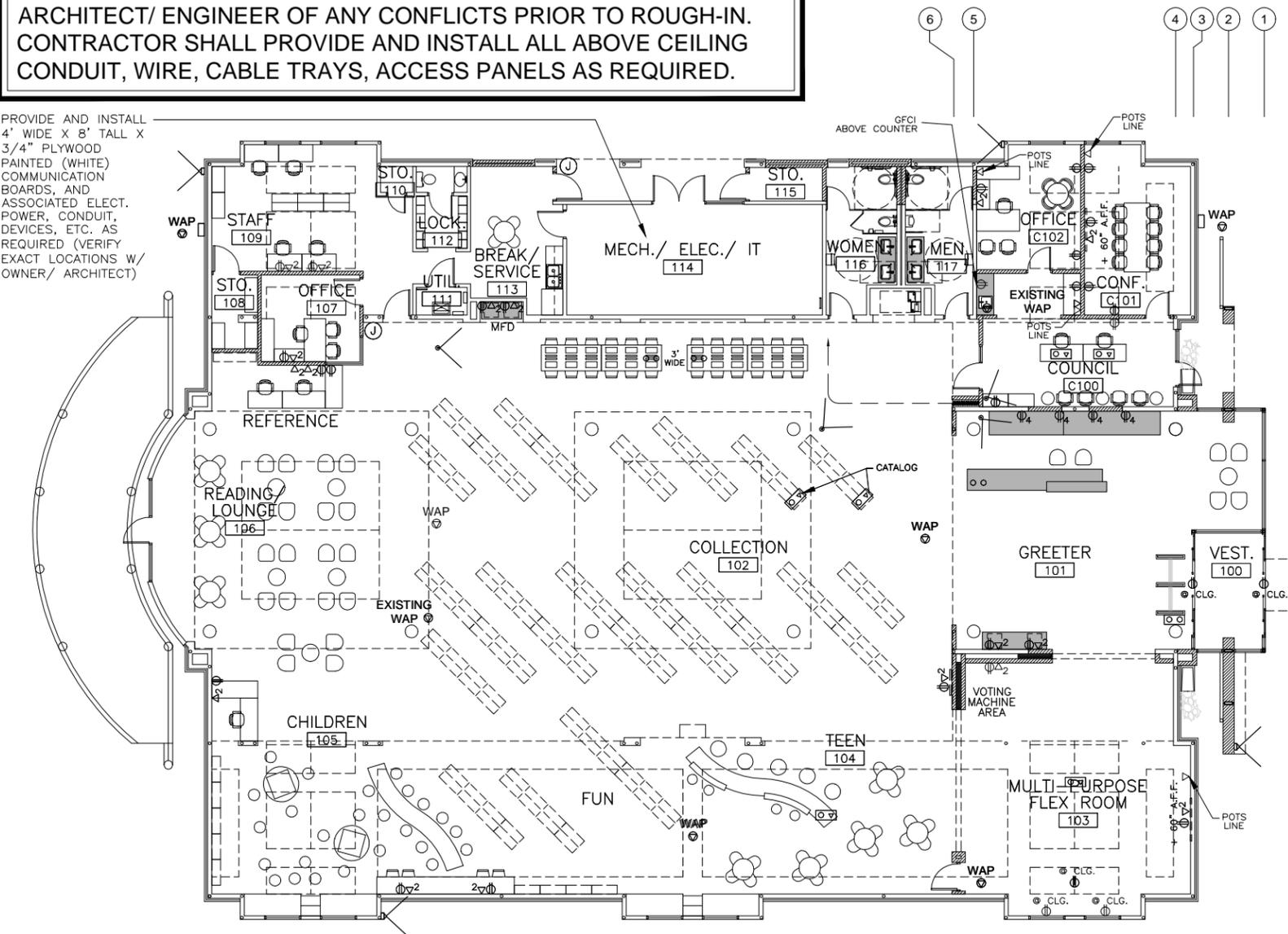
AFF	ABOVE FINISHED FLOOR
AV	AUDIO VISUAL
AWG	AMERICAN WIRE GAUGE
BDF	BUILDING DISTRIBUTION FRAME
CATV	COMMUNITY ANTENNA TELEVISION
DB	DECIBEL
DEMARC	DEMARICATION POINT
CON	CONDUCTOR
EMT	ELECTRIC METALLIC TUBING
ER	EQUIPMENT ROOM
ELECT	ELECTRICAL CONTRACTOR
EXIST	EXISTING
HH	HANDHOLE
IDF	INTERMEDIATE DISTRIBUTION FRAME
IO	INFORMATION OUTLET
IRC	INTERMEDIATE RIGID CONDUIT
ISP	INSIDE CABLE PLANT
LAN	LOCAL AREA NETWORK
MDF	MAIN DISTRIBUTION FRAME
MH	MAINTENANCE HOLE
MM	MULTIMODE
OFOI	OWNER FURNISHED OWNER INSTALLED
OSP	OUTSIDE CABLE PLANT
OTDR	OPTICAL TIME DOMAIN REFLECTOMETER
PB	PULL BOX
PBX	PRIVATE BRANCH EXCHANGE
PR	PAIR
PVC	POLYVINYL CHLORIDE
RMC	RIGID METAL CONDUIT
RF	RADIO FREQUENCY
STD	STRANDED
SM	SINGLEMODE
SP	SERVICE PROVIDER
STP	SHIELDED TWISTED PAIR
TB	TERMINAL BLOCK
TBB	TELECOMMUNICATIONS BONDING BACKBONE
TBC	TELECOMMUNICATIONS BONDING CONDUCTOR
TGB	TELECOMMUNICATIONS GROUND BUS BAR
TMGB	TELECOMMUNICATIONS MAIN GROUNDING BUS BAR
TR	TELECOM ROOM
TS	TRADE SIZE
UPS	UNINTERRUPTIBLE POWER SUPPLY
UTP	UNSHIELDED TWISTED PAIR
WAP	WIRELESS ACCESS POINT
WP	WATER PROOF

INDEX OF DRAWINGS

T000	TELECOM LEGEND, NOTES AND INDEX
T100	TELECOM FLOOR PLAN LEVEL 1
T400	TELECOM ENLARGE PLAN
T500	TELECOM DETAILS

THE DRAWINGS ARE DIAGRAMMATICAL. CONTRACTOR SHALL VERIFY FIELD CONDITIONS AND DETERMINE CONDUIT ROUTING AND EXACT LOCATIONS OF EQUIPMENT AND DEVICES. NOTIFY THE ARCHITECT/ ENGINEER IF THE APPROXIMATE CONDUIT ROUTING SHOWN ON PLANS IS NOT FEASIBLE. CONTRACTOR SHALL NOTIFY ARCHITECT/ ENGINEER OF ANY CONFLICTS PRIOR TO ROUGH-IN. CONTRACTOR SHALL PROVIDE AND INSTALL ALL ABOVE CEILING CONDUIT, WIRE, CABLE TRAYS, ACCESS PANELS AS REQUIRED.

PROVIDE AND INSTALL 4' WIDE X 8' TALL X 3/4" PLYWOOD PAINTED (WHITE) COMMUNICATION BOARDS, AND ASSOCIATED ELECT. POWER, CONDUIT, DEVICES, ETC. AS REQUIRED (VERIFY EXACT LOCATIONS W/ OWNER/ ARCHITECT)



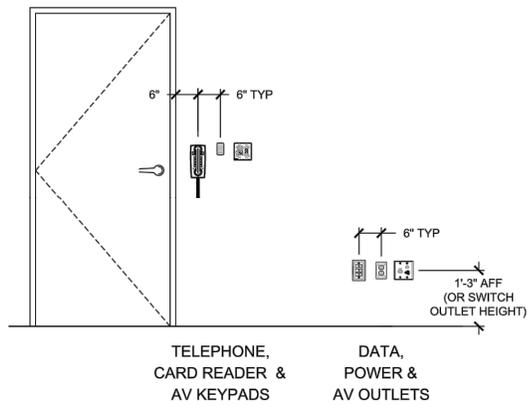
LEGEND:

- ⊕ DUPLEX RECEPTICLE
- ⊕₄ QUAD RECEPTICLE
- FLOOR POWER OUTLET
- ⊗ MULTI-CIRCUIT
- △₂ DATA, 2 CIRCUIT
- ○ POWER/ DATA STUB-OUT
- ▽ POWER/DATA FLOOR BOX 2 CIRCUIT EA.
- MFD MULTI-FUNCTION DEVICE
- WAP WIRELESS ACCESS POINT
- ⊙ PROX CARD READERS
- ⊗ CCTV CAMERA - WALL
- ⊙ CCTV CAMERA - CEILING

DATA/COMM REQUIREMENTS
IT IS THE INTENTION OF THE PROJECT TO HAVE A COMPLETE, OPERABLE, DATA/COMM SYSTEM COMPLETE WITH HARDWARE, WIRING RACKS, ETC. INSTALLATION IS TO COMPLY WITH CITY OF SAN ANTONIO INFORMATION TECHNOLOGY SERVICES STANDARDS.

FURNITURE, EQUIPMENT, POWER, DATA + SPECIAL SYSTEMS ARE INCLUDED FOR REFERENCE ONLY. INFORMATION IS INCLUDED TO ASSIST THE CONTRACTOR IN COORDINATING POWER REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ELECTRICAL AND OTHER AFFECTED TRADES.

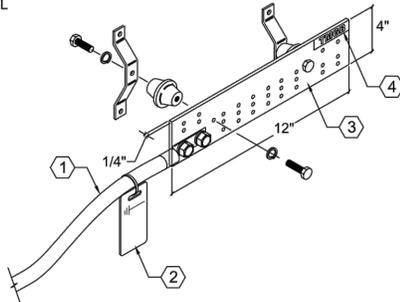
1.) COORDINATE NEW WORK WITH EXISTING AND ARCHITECT



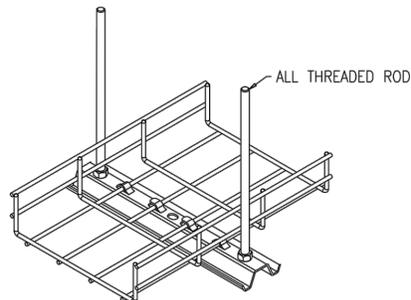
9 MOUNTING DETAILS
T12-01 SCALE: NTS

KEYED NOTES:

- ① BONDING BACKBONE
- ② GROUNDING TAG
- ③ BUSBAR
- ④ BUSBAR LABEL



5 MAIN - TELECOMMUNICATIONS MAIN GROUND BUSBAR DETAIL
T12-01 SCALE: NTS



1 TRAPEZE SUPPORT DETAIL
T12-01 SCALE: NTS

T12-01 TELECOM DETAILS

SECURITY SYMBOL LEGEND

	SECURITY SURVEILLANCE CAMERA
	CARD ACCESS READER

SECURITY NOTES

GENERAL NOTES

1. THE GENERAL CONDITIONS, SUPPLEMENTARY GENERAL CONDITIONS AND OTHER REQUIREMENTS OF DIVISION 1. THE ELECTRICAL, COMMUNICATION, AND SECURITY PLANS AND SPECIFICATIONS, MAY APPLY TO THE WORK SPECIFIED.
2. SECURITY AND COMMUNICATION CABLING INTEGRATOR HERE AFTER REFERRED TO, AS "CONTRACTOR" SHALL PROVIDE ALL MATERIALS, COMPONENTS, TOOLS, AND LABOR TO COMPLETE AN ACCESS CONTROL SYSTEM AS SET FORTH IN THE ELECTRONIC SAFETY AND SECURITY SYSTEM DOCUMENTS, CONTRACTS AND DRAWINGS. REF. DIVISION 27/28, TY DRAWINGS AND E DRAWINGS.
3. THE CONTRACTOR SHALL CAREFULLY EXAMINE THE SITE TO DETERMINE THE EXTENT OF WORK AND CONDITION UNDER WHICH IT WILL BE DONE. REVIEW AND VERIFY CONTRACT DOCUMENTS IN RELATION TO FIELD CONDITIONS TO VERIFY ACCURACY, CONFIRMING WITH OWNER, OR THEIR DESIGNATED REPRESENTATIVE, THAT THE WORK HAS BEEN COMPLETED PRIOR TO PROCEEDING WITH INSTALLATION. REGARDING ANY PROJECT RELATED QUESTIONS, THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING CLARIFICATION FROM OWNER, OR THEIR DESIGNATED REPRESENTATIVE, PRIOR TO PROCEEDING WITH THE WORK OR RELATED WORK IN QUESTION.
4. DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS MUST BE BROUGHT TO THE IMMEDIATE ATTENTION OF OWNER, OR THEIR DESIGNATED REPRESENTATIVE, FOR CLARIFICATION.
5. REFER TO SECURITY AND TECHNOLOGY CONTRACT DOCUMENTS, DRAWINGS AND SPECIFICATIONS AS A UNIT AND IN WHOLE IN THE BIDDING AND INSTALLATION OF THIS PROJECT.
6. ELECTRICAL CONTRACTOR SHALL READ IN THEIR ENTIRETY ALL SECTIONS OF THE ELECTRONIC SAFETY AND SECURITY SYSTEM DOCUMENTS AND APPLY THEM AS APPROPRIATE FOR WORK IN THIS SECTION. REF DIVISION 27/28 AND TY DRAWINGS.
7. ELECTRICAL CONTRACTOR SHALL PROVIDE MATERIALS, COMPONENTS, TOOLS, AND LABOR TO COMPLETE SECURITY CABLING PATHWAY, ELECTRICAL POWER DISTRIBUTION AND GROUNDING SYSTEM AS SET FORTH IN THE ELECTRONIC SAFETY AND SECURITY SYSTEM DOCUMENTS AND THE ELECTRICAL DOCUMENTS, SPECIFICATIONS AND DRAWINGS.
8. CONTRACTOR SHALL NOTE AND REPORT TO GC SECURITY SYSTEM WORK PERFORMED OR NOT PERFORMED BY ELECTRICAL CONTRACTOR WHICH DOES NOT COMPLY WITH ELECTRONIC SAFETY AND SECURITY SPECIFICATIONS AND DRAWINGS AND ARE INTENDED FOR THE SECURITY SYSTEMS COMPONENTS.
9. CONTRACTOR SHALL TAKE NECESSARY MEANS TO ASSURE SECURITY SYSTEM COMPONENTS ARE PROTECTED FROM MECHANICAL DAMAGE BEFORE, DURING AND AFTER CONSTRUCTION.

SECURITY PATHWAY

1. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL CONDUITS, PULL STRINGS, CORES, AND JUNCTION BOXES AS REQUIRED ON THE TY DRAWINGS.
2. CONDUIT RUNS SHALL BE INSTALLED WITH NO MORE THAN TWO (2) 90 DEG. RADIUS BENDS AND NOT EXCEED 100FT FOR INTERIOR CABLING.
3. PRIOR TO SUBSTANTIAL COMPLETION, ALL SECURITY PATHWAY CONDUITS AND UNUSED "SECURITY INTENDED USE CONDUITS" SHALL BE PROPERLY FIRESTOPPED AND LABELED.
4. CONDUIT SIZES INDICATED ON THE DRAWINGS AND HOME RUN SIZES SHOWN ON DETAIL SHEETS ARE TO BE CONSIDERED THE MINIMUM SIZE TO BE INSTALLED. PROVIDE LARGER OR ADDITIONAL CONDUIT IF REQUIRED. CONDUIT SIZES INDICATE DEDICATED HOME RUNS, BUT MAY BE COMBINED WITH OTHER LOCATIONS AS LONG AS NEC MAXIMUM FILL REQUIREMENTS ARE MAINTAINED.

ELECTRICAL

1. FOR SPECIFIC POWER AND RECEPTACLE REQUIREMENTS IN THE PROJECT REFERENCE ELECTRICAL SPECIFICATIONS AND DRAWINGS AND VERIFY WITH SECURITY SPECIFICATIONS AND DRAWINGS. REPORT TO GC DISCREPANCIES PRIOR TO PURCHASE OR INSTALLATION.
2. FOR SPECIFIC POWER REQUIREMENTS FOR ACCESS CONTROL, REFERENCE ELECTRICAL SPECIFICATIONS AND DRAWINGS AND VERIFY AGAINST SECURITY SPECIFICATIONS AND DRAWINGS. REPORT TO GC DISCREPANCIES PRIOR TO PURCHASE OR INSTALLATION.
3. ELECTRICAL CONTRACTOR SHALL INSTALL NORMAL AND GENERATOR BACK-UP POWER AS REQUIRED BY THE SECURITY SYSTEM AND COORDINATED BY THE SECURITY CONTRACTOR.

GROUNDING AND BONDING

1. CONTRACTOR SHALL ADHERE TO ALL GROUNDING AND BONDING REQUIREMENTS SET FORTH IN THE ANSI-J-STD-607-A COMMERCIAL GROUNDING AND BONDING STANDARDS.

SECURITY NOTES

ACCESS CONTROL

1. DOOR CONTRACTOR SHALL PROVIDE AND INSTALL ALL ELECTRIC LOCKS AS SHOWN ON DRAWINGS AND COMPLY WITH BUILDING HARDWARE SCHEDULE.
2. DOOR CONTRACTOR SHALL PROVIDE AND INSTALL EXTERIOR KEY-BYPASS OPTION ON ALL ELECTRIC LOCK DOORS TO ALLOW MANUAL ENTRY. LOCKS SHALL BE THE SAME MANUFACTURER AS REQUIRED BY BUILDING HARDWARE SCHEDULE.
3. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL CONDUIT, PULL STRINGS AND JUNCTION BOXES AS SHOWN ON THE TY DRAWINGS.
4. ELECTRICAL CONTRACTOR SHALL PROVIDE 120V AC FOR ELECTRIC LOCK POWER SUPPLIES AND SECURITY POWER SUPPLIES AS REQUIRED. SECURITY AND DOOR CONTRACTORS SHALL IDENTIFY LOCATIONS ON SUBMITTALS.
5. ELECTRICAL CONTRACTOR SHALL REFER TO SECURITY DRAWINGS TO VERIFY LOCATIONS OF SECURITY GANG BOXES AND CONDUIT AND PROVIDE THOSE COMPONENTS PRIOR TO THE SECURITY INSTALLATION.
6. SECURITY CONTRACTOR SHALL PROVIDE AND INSTALL THE FOLLOWING:
 - A. CARD READERS
 - B. DOOR CONTACTS
 - C. REX MOTION DETECTOR/BUTTONS
 - D. INTELLIGENT FIELD PANELS
 - E. DOOR RELEASE BUTTONS
 - F. PANIC / DURESS BUTTONS
 - G. LOW VOLTAGE POWER SUPPLIES AND BATTERY UNITS
 - H. LOW VOLTAGE CABLE AS REQUIRED
 - I. CONNECTION INTO BUILDING FIRE CONTROL PANEL FOR STAIRWELL DOORS TO RELEASE AND MAG-LOCK ENTRY DOORS TO RELEASE FROM ACCESS CONTROL PANEL PER LIFE SAFETY CODES.
 - J. PERMITS FOR MAG-LOCK ENTRY DOORS ON AS REQUIRED BY LOCAL AND STATE FIRE CODES.
 - K. PROJECT MANAGEMENT AND CUSTOMER TRAINING.

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AWG	AMERICAN WIRE GAUGE
CONN.	CONDUCTOR
I/O	INFORMATION OUTLET
IDR	INTERMEDIATE DISTRIBUTION ROOM
LAN	LOCAL AREA NETWORK
MDACC	MD ANDERSON CANCER CENTER
MC	MAIN CROSS CONNECT (MDR)
MDR	MAIN DISTRIBUTION ROOM
N/A	NOT APPLICABLE
NIC	NOT INCLUDED IN CONTRACT
PPF	PIXELS PER FOOT
RTE	REQUEST TO EXIT
TBB	TELECOMMUNICATIONS BONDING BACKBONE
TBC	TELECOMMUNICATIONS BONDING CONDUCTOR
TGB	TELECOMMUNICATIONS GROUND BUS BAR
TMBC	TELECOMMUNICATIONS MAIN BONDING CONDUCTOR
TMGB	TELECOMMUNICATIONS MAIN GROUNDING BUS BAR
TR	TELECOM ROOM
UTP	UNSHIELDED TWISTED PAIR
USB	UNIVERSAL SERIAL BUS
VGA	VIDEO GRAPHICS ARRAY
WP	WATER PROOF

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