

ABBREVIATIONS		ABBREVIATIONS		TELECOMMUNICATIONS SYMBOLS		GENERAL NOTES		INDUSTRY STANDARDS		DRAWING LIST		
A/E	ARCHITECT/ENGINEER	TV	TELEVISION	<u>VIEW REFERENCE CALLOUTS</u>		1. ALL WALL MOUNTED OUTLETS ARE TO BE MOUNTED 18" AFF UNLESS OTHERWISE NOTED.		AUDIOVISUAL INSTALLATION SHALL COMPLY WITH THE MOST CURRENT VERSION OF THE FOLLOWING STANDARDS:		SHEET NO.	SHEET NAME	REV
AAP	ALARM ANNUNCIATOR PANEL	TP	TOUCH PANEL		SINGLE WALL ELEVATION CALLOUT	2. REFER TO DIVISIONS 26, 27, 28 AND 33 SPECIFICATIONS FOR TELECOMMUNICATION SYSTEM ITEMS.		AMERICANS WITH DISABILITIES ACT, 2010		TT-001	TELECOM SYMBOLS & NOTES	2
ADA	AMERICANS WITH DISABILITIES ACT	UL	UNDERWRITERS LABORATORY		MULTI-WALL ELEVATION CALLOUT	3. MOUNT DEVICES AND EQUIPMENT PER SPECIFICATIONS UNLESS OTHERWISE NOTED.		ANSI/ASA S12.60; ACOUSTICAL PERFORMANCE CRITERIA, DESIGN REQUIREMENTS, AND GUIDELINES FOR SCHOOLS		TT-100	TELECOM BASEMENT FLOOR PLAN	
AFC	ABOVE FINISHED CEILING	UON	UNLESS OTHERWISE NOTED		ROOM SECTION CALLOUT	4. MOUNTING HEIGHTS, UNLESS OTHERWISE NOTED, ARE TO CENTER LINE OF DEVICE.		ANSI/INFOCOMM 2M-2010, STANDARD GUIDE FOR AUDIOVISUAL SYSTEMS DESIGN AND COORDINATION PROCESS (PROJECT MANAGEMENT PROCESS)		TT-101	TELECOM FIRST FLOOR PLAN	
AFF	ABOVE FINISHED FLOOR	UPS	UNINTERRUPTIBLE POWER SUPPLY		ENLARGED PLAN CALLOUT	5. THE CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF RACEWAYS.		ANSI/INFOCOMM 3M-2011 PROJECTED IMAGE SYSTEM CONTRAST RATIO		TT-102	TELECOM SECOND FLOOR PLAN	
AFG	ABOVE FINISHED GRADE	UTIL	UTILITY		RISER DETAIL CALLOUT	6. THE CONTRACTOR SHALL COORDINATE ALL RACEWAY PENETRATIONS AND PROVIDE FIREPROOFING AS APPLICABLE.		ANSI/INFOCOMM 4: 2012 AUDIOVISUAL SYSTEMS ENERGY MANAGEMENT		TT-103	TELECOM THIRD FLOOR PLAN	2
AHJ	AUTHORITY HAVING JURISDICTION	WP	WEATHERPROOF	<b>TELECOMMUNICATIONS SYMBOLS</b>		7. THE MAXIMUM PERMANENT HORIZONTAL LINK DISTANCE SHALL NOT EXCEED 295' AND THE MAXIMUM HORIZONTAL CHANNEL (LINK PLUS WORKSTATION CABLES AND PATCH CORDS) SHALL BE 328'.		ANSI/INFOCOMM V202.01:2016, DISPLAY IMAGE SIZE FOR 2D CONTENT IN AUDIOVISUAL SYSTEMS		TT-301	TELECOM ENLARGED PLANS	
ARCH	ARCHITECT	WAP	WIRELESS ACCESS POINT	<u>CEILING MOUNTED DEVICES</u>		8. ALL HORIZONTAL AND BACKBONE CABLING SHALL BE PLENUM RATED WITH THE EXCEPTION OF CABLING INSTALLED IN UNDERGROUND CONDUITS. SEE NOTE 20 FOR CABLES INSTALLED IN UNDERGROUND CONDUITS.		AV DESIGN REFERENCE MANUAL, FROM INFOCOMM INTERNATIONAL		TT-501	TELECOM RISER DIAGRAM	
AV	AUDIOVISUAL			<u>FLOOR MOUNTED DEVICES</u>		9. PROVIDE CABLE INSTALLED IN UNDERGROUND CONDUITS LISTED FOR USE IN WET LOCATIONS. PLENUM RATED CABLE SHALL NOT BE INSTALLED IN ANY UNDERGROUND CONDUIT.		AV 9000:2012 QUALITY MANAGEMENT SYSTEM CONDUIT, PATHWAY, AND DEDICATED EQUIPMENT ROOM CONSIDERATIONS		TT-601	TELECOM DETAILS	1
AVC	AUDIOVISUAL CONTRACTOR			<u>WALL MOUNTED DEVICES</u>		10. CATEGORY CABLING SHALL BE TERMINATED ON 8-PIN, 8-CONDUCTOR (RJ-45) CONNECTORS USING PIN/PAIR ASSIGNMENTS IN ACCORDANCE WITH T568B PIN-OUT SEQUENCE.		AUDIOVISUAL SYSTEM DESIGN AND COORDINATION COMPONENTS, FROM INFOCOMM INTERNATIONAL		TT-602	TELECOM DETAILS	
AWG	AMERICAN WIRE GAUGE					11. PROVIDE CATEGORY CABLING, 8-PIN, 8-CONDUCTOR MODULAR TO 8-PIN, 8-CONDUCTOR MODULAR, PATCH CABLES IN QUANTITIES AND LENGTHS SUCH THAT ALL WORKSTATION CABLES ARE CONNECTED.		ANSI/TIA-568.0-E - GENERIC TELECOMMUNICATIONS CABLING FOR CUSTOMER PREMISES, 2015				
BAS	BUILDING AUTOMATION SYSTEM					12. THE USE OF J-HOOKS SHALL BE LIMITED. WHEN USED, J-HOOKS SHALL BE CATEGORY 6 RATED AND SPACES AT INTERVALS NOT TO EXCEED 5'. J-HOOKS SHALL NOT EXCEED 24 CABLES OR 50% FILL, WHICHEVER IS LESS.		ANSI/TIA-568.1-E - COMMERCIAL BUILDING TELECOMMUNICATIONS CABLING STANDARD, 2015				
BCT	BONDING CONDUCTOR FOR TELECOMMUNICATIONS					13. ALL TELECOMMUNICATIONS RACKS AND SUPPORTING STRUCTURES (CABLE TRAYS, LADDER RACKS, CONDUITS, AND BASKETS) WITHIN A TELECOMMUNICATIONS ROOM MUST BE BONDED TO THE TELECOMMUNICATIONS ROOM SIGNAL GROUND RING OR BUS BAR (TGB OR TMGB) AS DEFINED IN ANSI/TIA-569-E AND IN ANSI/TIA-607-D.		ANSI/TIA-568.2-D - BALANCED TWISTED-PAIR TELECOMMUNICATIONS CABLING AND COMPONENTS STANDARD, 2009				
BFF	BELOW FINISH FLOOR					14. CABLE TRAY SHALL BE WALL MOUNTED (PREFERABLE) OR TRAPEZE MOUNTED. CENTER HUNG CABLE TRAY IS NOT ALLOWED. CABLE TRAY SHALL NOT BE USED TO SUPPORT OTHER ITEMS, CONDUIT, CABLE TRAY, PIPING OF UTILITIES. CABLE TRAY SUPPORTS SHALL BE PER NEMA STANDARDS PUBLICATION VE 2 - METAL CABLE TRAY INSTALLATION GUIDELINES.		ANSI/TIA-568.3-D - OPTICAL FIBER CABLING COMPONENTS STANDARD, 2016				
BICSI	BUILDING INDUSTRY CONSULTING SERVICE INTERNATIONAL					15. PROVIDE TAMPER RESISTANT ACCESS PANELS IN NON LAY-IN CEILINGS SUCH THAT NO POINT IN THE CABLE TRAY SYSTEM IS MORE THAN 20' FROM AN ACCESS POINT.		ANSI/TIA-568.4-D - BROADBAND COAXIAL CABLING AND COMPONENTS STANDARD, 2017				
C	CAMERA					16. PROVIDE A MINIMUM OF 12" OF CLEARANCE ABOVE THE TOP OF CABLE TRAYS AND A MINIMUM OF 3" CLEARANCE BELOW CABLE TRAYS.		ANSI/TIA-569-E - TELECOMMUNICATIONS PATHWAYS AND SPACES, 2015				
CAT	CATEGORY					17. COMPLY WITH ANSI/TIA-569-D TELECOMMUNICATION PATHWAYS AND SPACES.		ANSI/TIA/EIA-598-D - OPTICAL FIBER CABLE COLOR CODING, 2014				
CATV	CABLE TELEVISION					18. USE ONLY COPPER CONDUCTORS FOR GROUND CONNECTIONS. THE USE OF ALUMINUM CONDUCTORS IS NOT ALLOWED.		ANSI/TIA-606-D - ADMINISTRATION STANDARD FOR COMMERCIAL TELECOMMUNICATIONS INFRASTRUCTURE, 2012				
CCTV	CLOSED CIRCUIT TELEVISION					19. LABEL ALL CABLE TERMINATIONS AND BOTH ENDS OF ALL CABLES IN ACCORDANCE WITH ANSI/TIA-606-B.		ANSI/TIA-607-D - COMMERCIAL BUILDING GROUNDING (EARTHING) AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS, 2015				
CD	CONSTRUCTION DOCUMENTS					20. ANY MOTOR, TRANSFORMER, OR OTHER ELECTRICAL DEVICE GREATER THAN 5 KVA SHALL HAVE A MINIMUM OF A 4' BUFFER FROM ANY WALL OF A TELECOMMUNICATIONS ROOM.		DAVIS AND DAVIS, 1987 "SOUND SYSTEM ENGINEERING"				
CL	CENTERLINE					21. ALL DEVICE PLATES, JUNCTION BOX COVERS AND OTHER SECURING SCREWS MUST BE TAMPER RESISTANT TYPE.		GIDDINGS, 1990, "AUDIO SYSTEMS DESIGN AND INSTALLATION				
CLG	CEILING							INFOCOMM, AV/IT INFRASTRUCTURE GUIDELINES FOR HIGHER EDUCATION				
CONTR	CONTRACTOR							NFPA 70 - NATIONAL ELECTRICAL CODE (NEC)				
CT	CABLE TRAY							NFPA 72 - NATIONAL FIRE ALARM AND SIGNALING CODE				
DEMO	DEMOLITION							NFPA 75 - STANDARD FOR THE PROTECTION OF INFORMATION TECHNOLOGY EQUIPMENT				
DIA	DIAGRAM							NFPA 76 - STANDARD FOR THE FIRE PROTECTION OF TELECOMMUNICATIONS FACILITIES				
EC	ELECTRICAL CONTRACTOR											
EQ	EQUAL DIMENSION											
ELEC	ELECTRICAL											
EMER	EMERGENCY											
ENCL	ENCLOSURE											
FT	FEET											
FP	FIRE PROTECTION											
GND	GROUND											
GC	GENERAL CONTRACTOR											
HT	HEIGHT											
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING											
IDS	INTRUSION DETECTION SYSTEM											
IN	INCHES											
I/O	AUDIOVISUAL I/O PANEL											
J-BOX	JUNCTION BOX											
LAN	LOCAL AREA NETWORK											
LV	LOW VOLTAGE											
KP	KEYPAD											
M	MICROPHONE											
MAX	MAXIMUM											
MECH	MECHANICAL											
MIN	MINIMUM											
NEC	NATIONAL ELECTRICAL CODE											
NTS	NOT TO SCALE											
PB	PULL BOX											
PS	PROJECTION SCREEN SWITCH											
PST	PROJECTION SCREEN TYPE											
PT	POKE THRU											
PTZ	PAN / TILT / ZOOM											
PWR	POWER											
QTY	QUANTITY											
RCDD	REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER											
RCP	REFLECTED CEILING PLAN											
RECPT	RECEPTACLE											
REQD	REQUIRED											
RM	ROOM											
RS	ROOM SCHEDULER											
RU	RACK UNIT											
S	SPEAKER											
SB	SPECIALTY BACK BOX											
TB	TELECOMMUNICATIONS BACKBOARD											
TBB	TELECOMMUNICATIONS BONDING BACKBONE											
TE	TELECOMMUNICATIONS ENCLOSURE											
TC	TELECOMMUNICATIONS CONTRACTOR											
TGB	TELECOMMUNICATIONS GROUNDING BUSBAR											
TMGB	TELECOMMUNICATIONS MAIN GROUNDING BUSBAR											



**VERIFY SCALE**

BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:

0 1

IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY

CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

RECORD REVISIONS

PROFESSIONAL'S SIGNATURE DATE

**UpStreet** ARCHITECTS, INC.  
 541 PHILADELPHIA ST. INDIANA, PA 15701 911 MENOHER BLVD. JOHNSTOWN, PA 15905

COMMONWEALTH OF PENNSYLVANIA  
 DEPARTMENT OF GENERAL SERVICES  
 HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. **C-0588-0015 PHASE 1**

**LOYSVILLE YOUTH DEVELOPMENT CENTER- RENOVATIONS TO ZIMMERMAN-BINGAMAN (ZB) COTTAGE**  
 DEPARTMENT OF HUMAN SERVICES  
 LOYSVILLE, TYRONE TOWNSHIP, PERRY COUNTY, PA

**TELECOM SYMBOLS & NOTES**

DRAWN BY CF	DATE 27 JUNE 2023	SHEET No. <b>TT-001</b>
CHECKED BY DV	SCALE NTS	