

# PORTAGE PUBLIC SCHOOLS

## PORTAGE, MI

### CENTRAL MIDDLE SCHOOL CLASSROOM AUDIO/VIDEO



PORTAGE CENTRAL MIDDLE SCHOOL  
 8305 S. WESTNEDGE AVE.  
 PORTAGE, MI 49002  
 269.323.5600

**DRAWING LIST:**

- TC301 AUDIO/VIDEO LEGENDS, SCHEDULES & DETAILS
- TC302 CLASSROOM AUDIO/VIDEO CONNECTIVITY DIAGRAM
- TC303 CLASSROOM AUDIO/VIDEO CONNECTIVITY DIAGRAM
- TC304 CLASSROOM AUDIO/VIDEO CONNECTIVITY DIAGRAM
- TC401B CENTRAL MIDDLE SCHOOL FIRST FLOOR AUDIO/VIDEO PLAN - AREA B
- TC401C CENTRAL MIDDLE SCHOOL FIRST FLOOR AUDIO/VIDEO PLAN - AREA C
- TC402B CENTRAL MIDDLE SCHOOL SECOND FLOOR AUDIO/VIDEO PLAN - AREA B
- TC402C CENTRAL MIDDLE SCHOOL SECOND FLOOR AUDIO/VIDEO PLAN - AREA C
- TC403C CENTRAL MIDDLE SCHOOL THIRD FLOOR AUDIO/VIDEO PLAN - AREA C

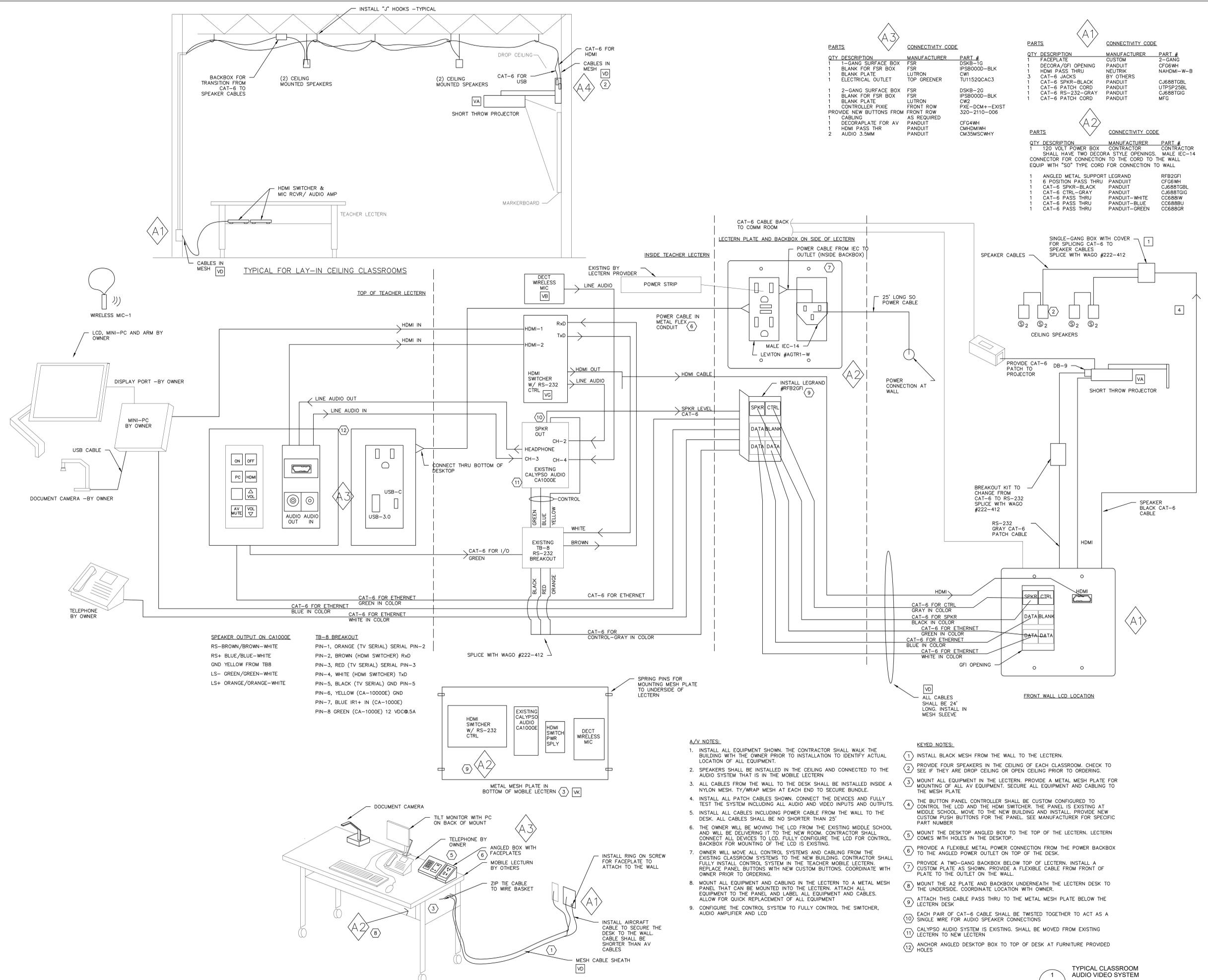
Mark	Revision	Description
	1	ISSUED FOR BID 10/25/19

These drawings are the Property of the Designer and are not to be copied or reproduced without the designer's permission.  
 CommTech Design

Date	10/25/2019
Project	1253_01
Sheet	<b>COVER</b>







**PARTS**

QTY	DESCRIPTION	MANUFACTURER	PART #
1	1-GANG SURFACE BOX	FSR	DSKB-1G
1	BLANK FOR FSR BOX	FSR	IPSB000D-BLK
1	BLANK PLATE	LUTRON	CW1
1	ELECTRICAL OUTLET	TOP GREENER	TU1152QCAC3
1	2-GANG SURFACE BOX	FSR	DSKB-2G
1	BLANK FOR FSR BOX	FSR	IPSB000D-BLK
1	BLANK PLATE	LUTRON	CW2
1	CONTROLLER PIXIE	FRONT ROW	PXE-DCM4-EXIST
1	PROVIDE NEW BUTTONS FROM	FRONT ROW	320-2110-008
1	CABLING	AS REQUIRED	
1	DECORAPLATE FOR AV	PANDUIT	CFG4WH
1	HDMI PASS THRU	PANDUIT	CM35MSCWHY
2	AUDIO 3.5MM		

**PARTS**

QTY	DESCRIPTION	MANUFACTURER	PART #
1	FACEPLATE	CUSTOM	2-GANG
1	DECORA/GFI OPENING	PANDUIT	CF66WH
1	HDMI PASS THRU	NEUTRIK	NAHDMI-W-B
3	CAT-6 JACKS	BY OTHERS	
1	CAT-6 SPKR-BLACK	PANDUIT	CJ688TGBL
1	CAT-6 PATCH CORD	PANDUIT	UTPSP25BL
1	CAT-6 RS-232-GRAY	PANDUIT	CJ688TIGG
1	CAT-6 PATCH CORD	PANDUIT	MFG

**PARTS**

QTY	DESCRIPTION	MANUFACTURER	PART #
1	120 VOLT POWER BOX	CONTRACTOR	
1	SHALL HAVE TWO DECORA STYLE OPENINGS	MALE IEC-14	
1	CONNECTOR FOR CONNECTION TO THE CORD TO THE WALL		
1	EQUIP. WITH "SO" TYPE CORD FOR CONNECTION TO WALL		
1	ANGLED METAL SUPPORT	LEGRAND	RFB2GFI
1	6 POSITION PASS THRU	PANDUIT	CF66WH
1	CAT-6 SPKR-BLACK	PANDUIT	CJ688TGBL
1	CAT-6 CTRL-GRAY	PANDUIT	CJ688TIGG
1	CAT-6 PASS THRU	PANDUIT-WHITE	CC688IW
1	CAT-6 PASS THRU	PANDUIT-BLUE	CC688BU
1	CAT-6 PASS THRU	PANDUIT-GREEN	CC688GR

- A/V NOTES:**
- INSTALL ALL EQUIPMENT SHOWN. THE CONTRACTOR SHALL WALK THE BUILDING WITH THE OWNER PRIOR TO INSTALLATION TO IDENTIFY ACTUAL LOCATION OF ALL EQUIPMENT.
  - SPEAKERS SHALL BE INSTALLED IN THE CEILING AND CONNECTED TO THE AUDIO SYSTEM THAT IS IN THE MOBILE LECTERN.
  - ALL CABLES FROM THE WALL TO THE DESK SHALL BE INSTALLED INSIDE A NYLON MESH, TY/WRAP MESH AT EACH END TO SECURE BUNDLE.
  - INSTALL ALL PATCH CABLES SHOWN. CONNECT THE DEVICES AND FULLY TEST THE SYSTEM INCLUDING ALL AUDIO AND VIDEO INPUTS AND OUTPUTS.
  - INSTALL ALL CABLES INCLUDING POWER CABLE FROM THE WALL TO THE DESK. ALL CABLES SHALL BE NO SHORTER THAN 25'
  - THE OWNER WILL BE MOVING THE LCD FROM THE EXISTING MIDDLE SCHOOL AND WILL BE DELIVERING IT TO THE NEW ROOM. CONTRACTOR SHALL FULLY INSTALL CONTROL SYSTEM IN THE TEACHER MOBILE LECTERN. REPLACE PANEL BUTTONS WITH NEW CUSTOM BUTTONS. COORDINATE WITH OWNER PRIOR TO ORDERING.
  - MOUNT ALL EQUIPMENT AND CABLING IN THE LECTERN TO A METAL MESH PANEL THAT CAN BE MOUNTED INTO THE LECTERN. ATTACH ALL EQUIPMENT TO THE PANEL AND LABEL ALL EQUIPMENT AND CABLES. ALLOW FOR QUICK REPLACEMENT OF ALL EQUIPMENT
  - CONFIGURE THE CONTROL SYSTEM TO FULLY CONTROL THE SWITCHER, AUDIO AMPLIFIER AND LCD

- KEYED NOTES:**
- INSTALL BLACK MESH FROM THE WALL TO THE LECTERN.
  - PROVIDE FOUR SPEAKERS IN THE CEILING OF EACH CLASSROOM. CHECK TO SEE IF THEY ARE DROP CEILING OR OPEN CEILING PRIOR TO ORDERING.
  - MOUNT ALL EQUIPMENT IN THE LECTERN. PROVIDE A METAL MESH PLATE FOR MOUNTING OF ALL AV EQUIPMENT. SECURE ALL EQUIPMENT AND CABLING TO THE MESH PLATE
  - THE BUTTON PANEL CONTROLLER SHALL BE CUSTOM CONFIGURED TO CONTROL THE LCD AND THE HDMI SWITCHER. THE PANEL IS EXISTING AT MIDDLE SCHOOL. MOVE TO THE NEW BUILDING AND INSTALL. PROVIDE NEW CUSTOM PUSH BUTTONS FOR THE PANEL. SEE MANUFACTURER FOR SPECIFIC PART NUMBER
  - MOUNT THE DESKTOP ANGLED BOX TO THE TOP OF THE LECTERN. LECTERN COMES WITH HOLES IN THE DESKTOP.
  - PROVIDE A FLEXIBLE METAL POWER CONNECTION FROM THE POWER BACKBOX TO THE ANGLED POWER OUTLET ON TOP OF THE DESK.
  - PROVIDE A TWO-GANG BACKBOX BELOW TOP OF LECTERN. INSTALL A CUSTOM PLATE AS SHOWN. PROVIDE A FLEXIBLE CABLE FROM FRONT OF PLATE TO THE OUTLET ON THE WALL.
  - MOUNT THE A2 PLATE AND BACKBOX UNDERNEATH THE LECTERN DESK TO THE UNDERSIDE. COORDINATE LOCATION WITH OWNER.
  - ATTACH THIS CABLE PASS THRU TO THE METAL MESH PLATE BELOW THE LECTERN DESK
  - EACH PAIR OF CAT-6 CABLE SHALL BE TWISTED TOGETHER TO ACT AS A SINGLE WIRE FOR AUDIO SPEAKER CONNECTIONS
  - CALYPSO AUDIO SYSTEM IS EXISTING. SHALL BE MOVED FROM EXISTING LECTERN TO NEW LECTERN
  - ANCHOR ANGLED DESKTOP BOX TO TOP OF DESK AT FURNITURE PROVIDED HOLES

- SPEAKER OUTPUT ON CA1000E**
- RS- BROWN/BROWN-WHITE
  - RS+ BLUE/BLUE-WHITE
  - GND YELLOW FROM TB8
  - LS- GREEN/GREEN-WHITE
  - LS+ ORANGE/ORANGE-WHITE
- TB-8 BREAKOUT**
- PIN-1, ORANGE (TV SERIAL) SERIAL PIN-2
  - PIN-2, BROWN (HDMI SWITCHER) RxD
  - PIN-3, RED (TV SERIAL) SERIAL PIN-3
  - PIN-4, WHITE (HDMI SWITCHER) TxD
  - PIN-5, BLACK (TV SERIAL) GND PIN-5
  - PIN-6, YELLOW (CA-1000E) GND
  - PIN-7, BLUE IR1+ IN (CA-1000E)
  - PIN-8 GREEN (CA-1000E) 12 VDC@.5A

Mark	Revision	Description
	ISSUED FOR BID	10/25/19

**PORTAGE PUBLIC SCHOOLS**  
**CENTRAL MIDDLE SCHOOL**  
**CLASSROOM AUDIO/VIDEO**  
 PORTAGE, MICHIGAN

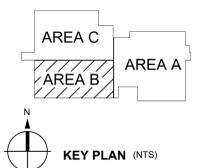
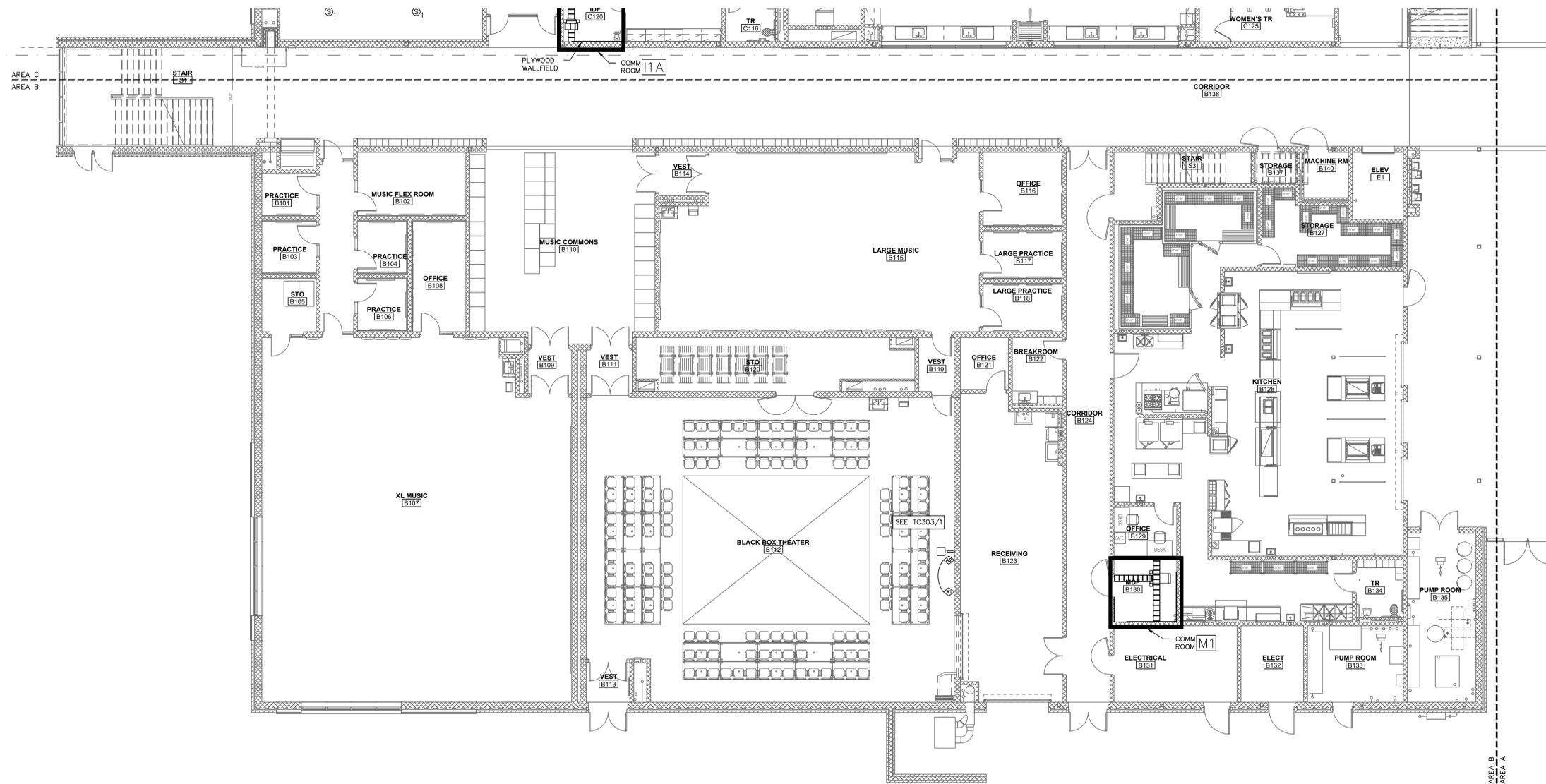
These drawings are the Property of the Designer and are not to be reused or reproduced without the Designer's permission.  
 CommTech Design

Date	10/25/2019
Project	1253_01
Sheet	<b>TC303</b> CLASSROOM AV CONNECTIVITY DIAGRAM



**GENERAL AV NOTES**

1. AV CONTRACTOR SHALL INSTALL ANY PASS-THRU'S REQUIRED FOR ROUTING CABLES AROUND THE BUILDING. FIRESTOP ALL PASS-THRU'S TO MEET APPLICABLE CODES.
2. CONTRACTOR SHALL COMPLETE A WALK-THRU OF THE SITE DURING CONSTRUCTION AND SHALL VERIFY ALL RACEWAYS ARE AS NOTED.
3. ALL CABLES SHALL BE SUPPORTED ABOVE THE DROP CEILING BY U-HOOKS. HOOKS SHALL BE LOCATED NO LESS THAN EVERY 5 FEET.
4. COORDINATE SPEAKERS TYPES WITH CEILINGS IN EACH ROOM.



KEY PLAN (NTS)



CENTRAL MIDDLE SCHOOL FIRST FLOOR AUDIO/VIDEO PLAN - AREA B  
 1  
 TC401B 1/8"=1'-0" 0 1'

**Commtech Design**  
 6561 BELLING RD. NE. STE. 101  
 ROCKFORD, MICHIGAN 49341  
 WWW.COMMTECHDESIGN.COM

Mark	Revision	Description
	ISSUED FOR BID	10/25/19

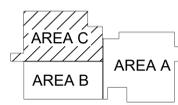
**PORTAGE PUBLIC SCHOOLS**  
**CENTRAL MIDDLE SCHOOL**  
**CLASSROOM AUDIO/VIDEO**  
 PORTAGE, MICHIGAN

These drawings are the Property of the Designer and are not to be reused or reproduced without the designer's permission.  
 CommTech Design

Date	10/25/2019
Project	1253_01
Sheet	<b>TC401B</b> CENTRAL MIDDLE SCHOOL FIRST FLOOR AV PLAN - AREA B

**GENERAL AV NOTES**

1. AV CONTRACTOR SHALL INSTALL ANY PASS-THRU'S REQUIRED FOR ROUTING CABLES AROUND THE BUILDING. FIRESTOP ALL PASS-THRU'S TO MEET APPLICABLE CODES.
2. CONTRACTOR SHALL COMPLETE A WALK-THRU OF THE SITE DURING CONSTRUCTION AND SHALL VERIFY ALL RACEWAYS ARE AS NOTED.
3. ALL CABLES SHALL BE SUPPORTED ABOVE THE DROP CEILING BY U-HOOKS. HOOKS SHALL BE LOCATED NO LESS THAN EVERY 5 FEET.
4. COORDINATE SPEAKERS TYPES WITH CEILINGS IN EACH ROOM.



KEY PLAN (NTS)

1  
CENTRAL MIDDLE SCHOOL FIRST FLOOR  
AUDIO/VIDEO PLAN - AREA C  
1/8"=1'-0" 0 1'

**Commtech Design**  
6561 BELLING RD. NE. STE. 101  
ROCKFORD, MICHIGAN 49341  
WWW.COMMTECHDESIGN.COM

Mark	Revision	Description
	ISSUED FOR BID	10/25/19

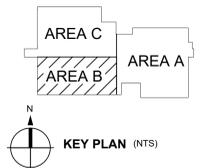
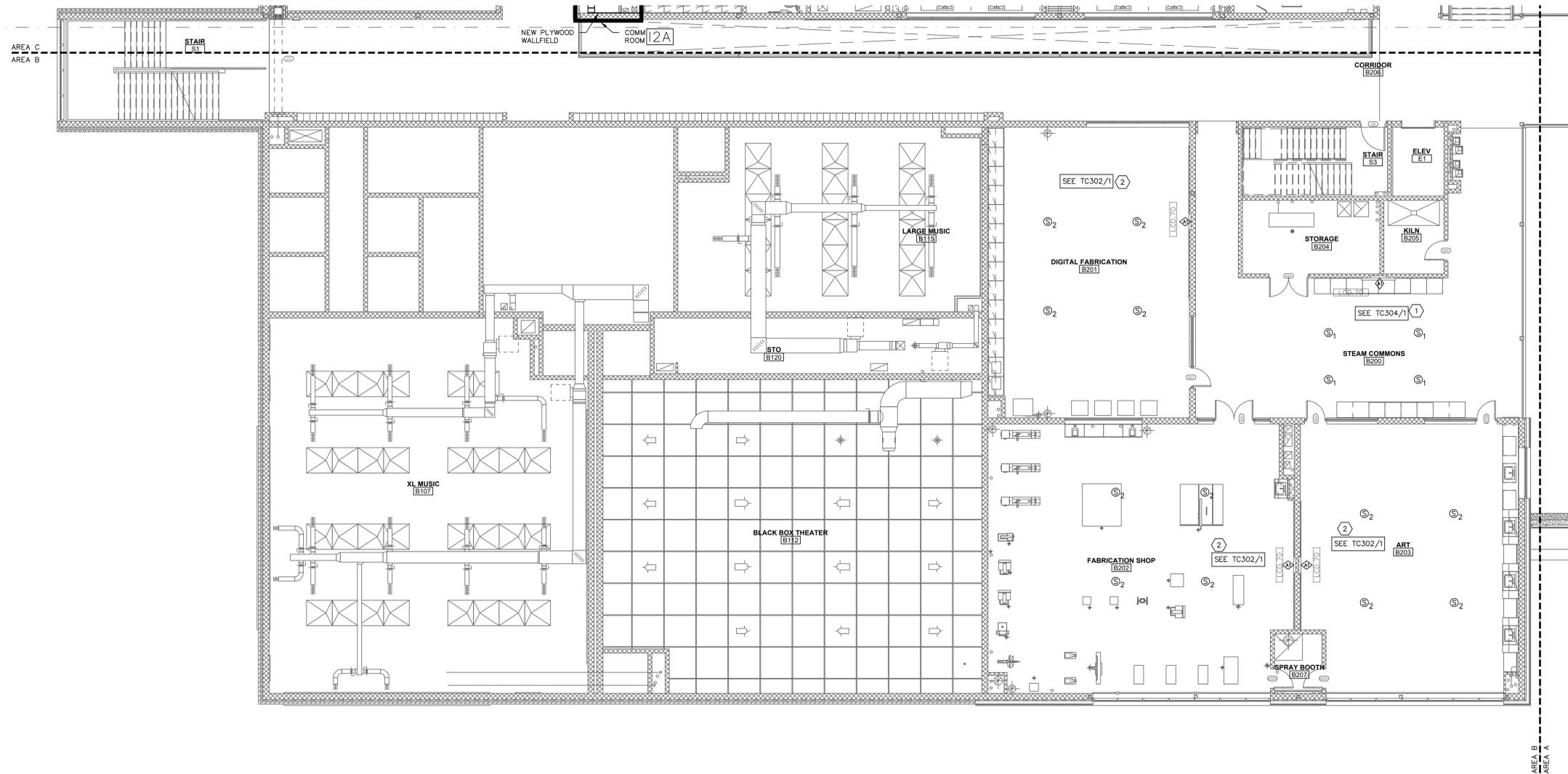
**PORTAGE PUBLIC SCHOOLS**  
**CENTRAL MIDDLE SCHOOL**  
**CLASSROOM AUDIO/VIDEO**  
PORTAGE, MICHIGAN

These drawings are the Property of the Designer and are not to be reused or reproduced without the Designer's permission.  
CommTech Design

Date	10/25/2019
Project	1253_01
Sheet	<b>TC401C</b> CENTRAL MIDDLE SCHOOL FIRST FLOOR AV PLAN - AREA C

**GENERAL AV NOTES**

1. AV CONTRACTOR SHALL INSTALL ANY PASS-THRU'S REQUIRED FOR ROUTING CABLES AROUND THE BUILDING. FIRESTOP ALL PASS-THRU'S TO MEET APPLICABLE CODES.
2. CONTRACTOR SHALL COMPLETE A WALK-THRU OF THE SITE DURING CONSTRUCTION AND SHALL VERIFY ALL RACEWAYS ARE AS NOTED.
3. ALL CABLES SHALL BE SUPPORTED ABOVE THE DROP CEILING BY U-HOOKS. HOOKS SHALL BE LOCATED NO LESS THAN EVERY 5 FEET.
4. COORDINATE SPEAKERS TYPES WITH CEILINGS IN EACH ROOM.



1  
CENTRAL MIDDLE SCHOOL SECOND FLOOR  
AUDIO/VIDEO PLAN - AREA B  
TC402B 1/8"=1'-0" 0 1'

**Commtech Design**  
6561 BELDING RD. NE. STE 101  
ROCKFORD, MICHIGAN 49341  
WWW.COMMTECHDESIGN.COM

Mark	Revision	Description
	ISSUED FOR BID	10/25/19

**PORTAGE PUBLIC SCHOOLS**  
**CENTRAL MIDDLE SCHOOL**  
**CLASSROOM AUDIO/VIDEO**  
PORTAGE, MICHIGAN

These drawings are the Property of the Designer and are not to be reused or reproduced without the designer's permission. CommTech Design

Date	10/25/2019
Project	1253_01
Sheet	<b>TC402B</b> CENTRAL MIDDLE SCHOOL SECOND FLOOR AV PLAN AREA - B

**GENERAL AV NOTES**

1. AV CONTRACTOR SHALL INSTALL ANY PASS-THRU'S REQUIRED FOR ROUTING CABLES AROUND THE BUILDING. FIRESTOP ALL PASS-THRU'S TO MEET APPLICABLE CODES.
2. CONTRACTOR SHALL COMPLETE A WALK-THRU OF THE SITE DURING CONSTRUCTION AND SHALL VERIFY ALL RACEWAYS ARE AS NOTED.
3. ALL CABLES SHALL BE SUPPORTED ABOVE THE DROP CEILING BY U-HOOKS. HOOKS SHALL BE LOCATED NO LESS THAN EVERY 5 FEET.
4. COORDINATE SPEAKERS TYPES WITH CEILINGS IN EACH ROOM.

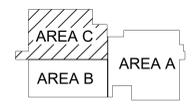


Mark	Revision	Description
	1	ISSUED FOR BID 10/25/19

**PORTAGE PUBLIC SCHOOLS**  
**CENTRAL MIDDLE SCHOOL**  
**CLASSROOM AUDIO/VIDEO**  
 PORTAGE, MICHIGAN

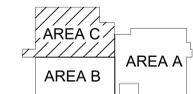
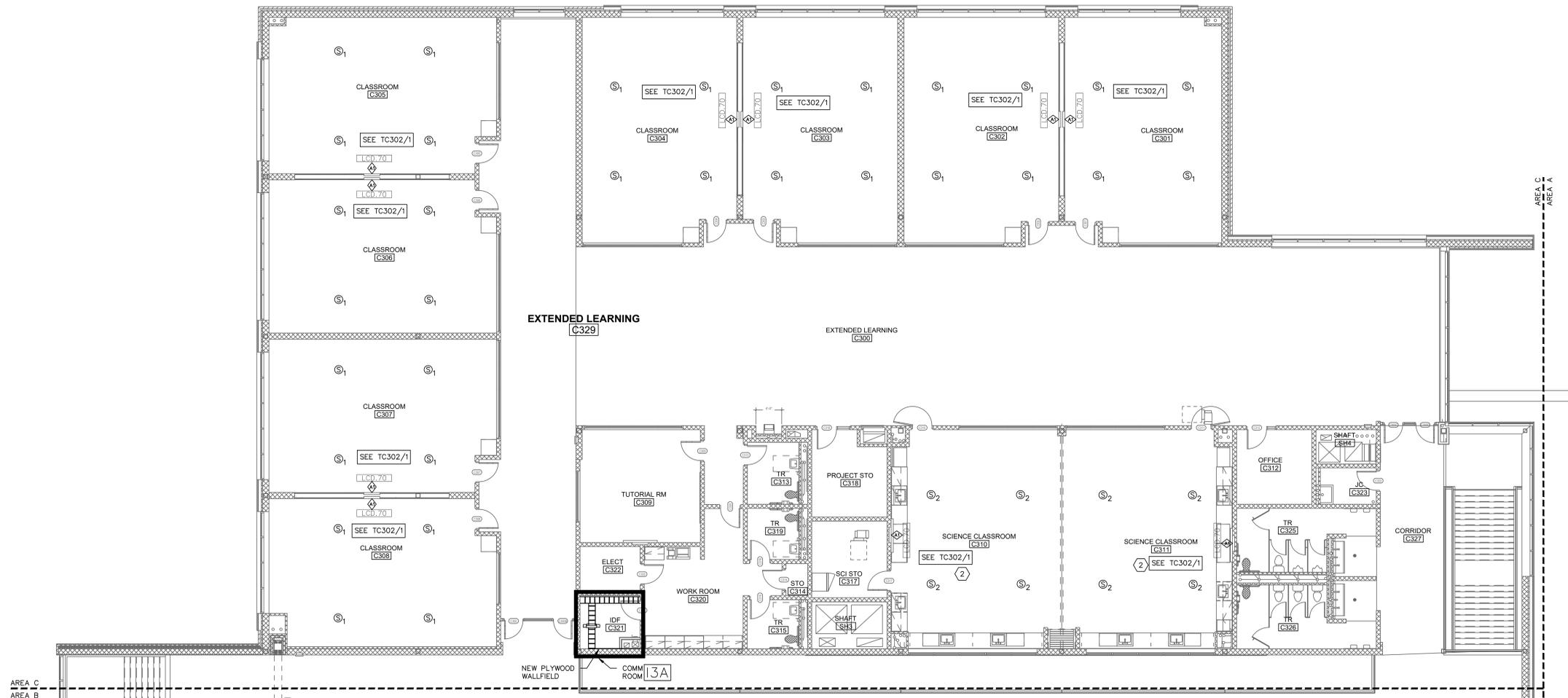
These drawings are the Property of the Designer and are not to be reused or reproduced without the designer's permission.  
 CommTech Design

Date	10/25/2019
Project	1253_01
Sheet	<b>TC402C</b>
	CENTRAL MIDDLE SCHOOL SECOND FLOOR AV PLAN AREA - C



**GENERAL AV NOTES**

1. AV CONTRACTOR SHALL INSTALL ANY PASS-THRU'S REQUIRED FOR ROUTING CABLES AROUND THE BUILDING. FIRESTOP ALL PASS-THRU'S TO MEET APPLICABLE CODES.
2. CONTRACTOR SHALL COMPLETE A WALK-THRU OF THE SITE DURING CONSTRUCTION AND SHALL VERIFY ALL RACEWAYS ARE AS NOTED.
3. ALL CABLES SHALL BE SUPPORTED ABOVE THE DROP CEILING BY U-HOOKS. HOOKS SHALL BE LOCATED NO LESS THAN EVERY 5 FEET.
4. COORDINATE SPEAKERS TYPES WITH CEILINGS IN EACH ROOM.



KEY PLAN (NTS)

1  
CENTRAL MIDDLE SCHOOL THIRD FLOOR  
AUDIO/VIDEO PLAN - AREA C  
TC403C 1/8"=1'-0" 0 1'

**Commtech Design**  
6561 BELLING RD. NE. STE. 101  
ROCKFORD, MICHIGAN 49341  
WWW.COMMTECHDESIGN.COM

Mark	Revision	Description
	1	ISSUED FOR BID 10/25/19

**PORTAGE PUBLIC SCHOOLS**  
**CENTRAL MIDDLE SCHOOL**  
**CLASSROOM AUDIO/VIDEO**  
PORTAGE, MICHIGAN

These drawings are the Property of the Designer and are not to be reused or reproduced without the Designer's permission.  
CommTech Design

Date	10/25/2019
Project	1253_01
Sheet	<b>TC403C</b> CENTRAL MIDDLE SCHOOL THIRD FLOOR AV PLAN AREA - C