



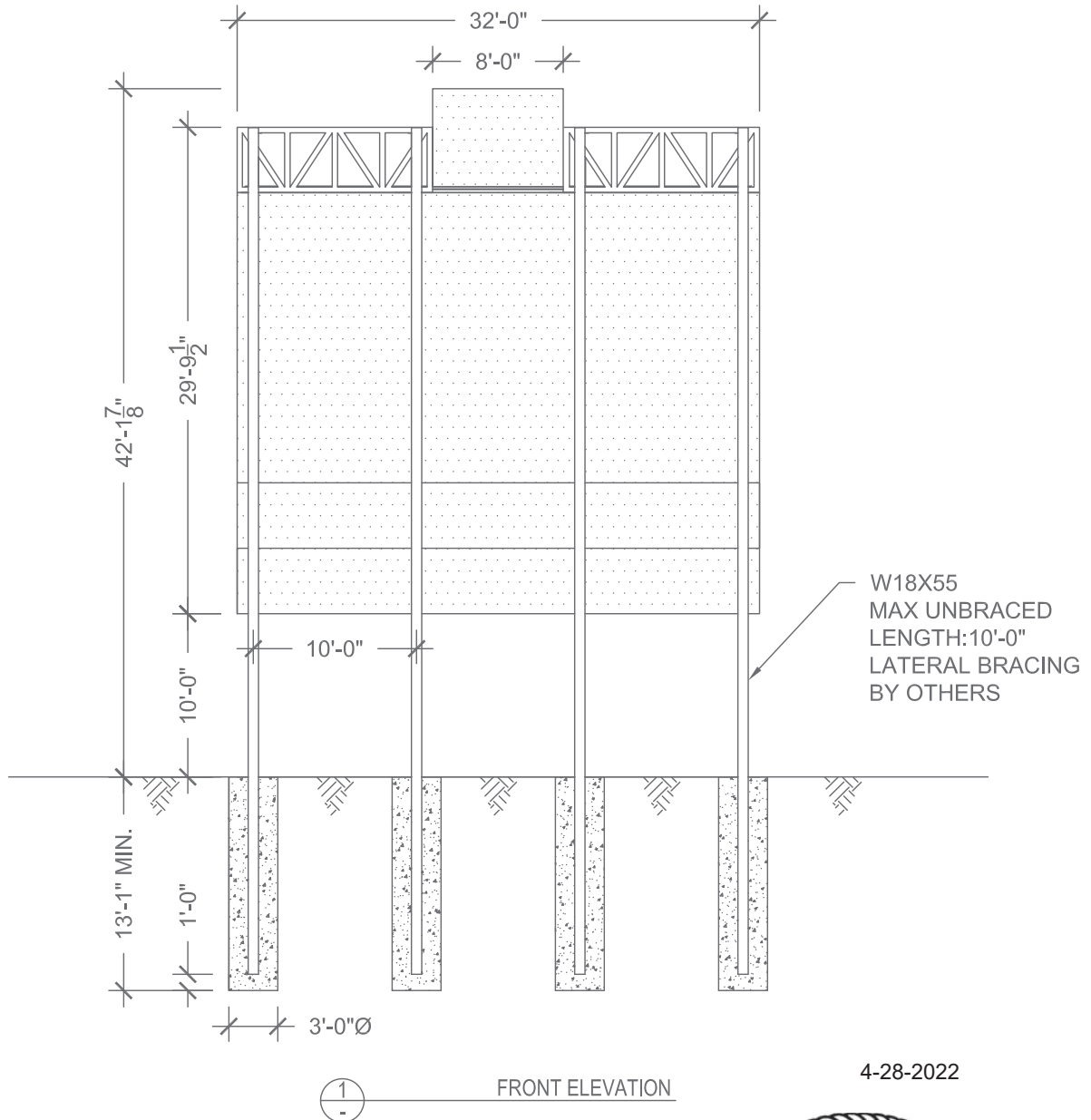
11545 W. BERNARDO COURT  
SUITE 201, SAN DIEGO, CA 92127

PROJECTMANAGER@SULLAWAYENG.COM

PHONE: 1-858-312-5150 FAX: 1-858-777-3534

PROJECT: LEE'S SUMMIT NORTH HIGH SCHOOL - 901 NE DOUGLAS STREET, LEE'S SUMMIT, MO  
PROJECT #: 34804  
CLIENT: NEVCO

DATE: 4/27/2022  
ENGINEER: AV  
LAST REVISED:

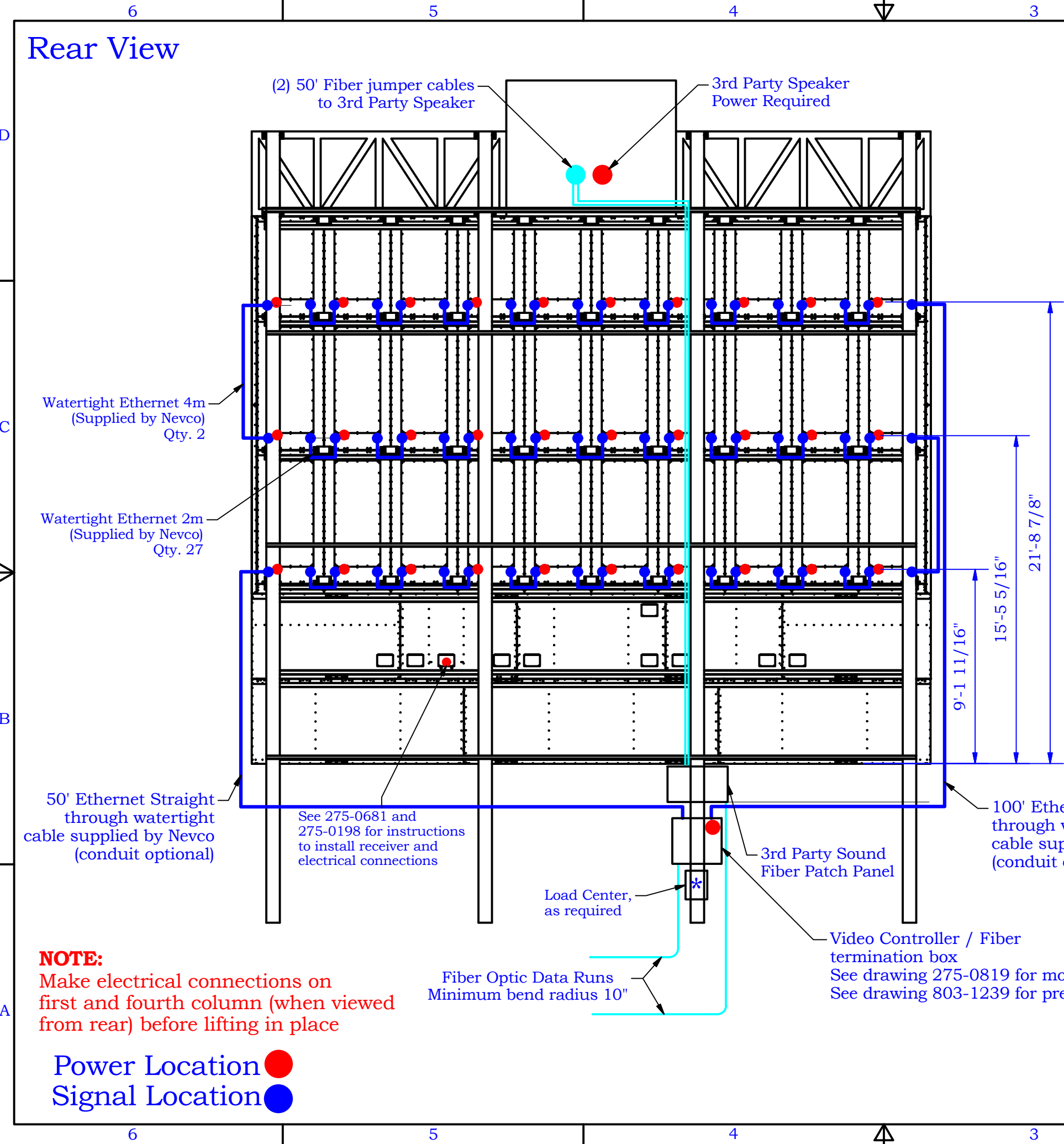


## GENERAL NOTES

1. DESIGN CODE: IBC 2018
2. DESIGN LOADS: ASCE 7-16
3. WIND VELOCITY: 110 MPH EXPOSURE C
4. CONCRETE 2500 PSI MIN.
5. WIDE FLANGE STEEL ASTM A992,  $F_y = 50$  KSI MIN.
6. PROVIDE 3" CONCRETE COVER MIN. ON ALL STEEL EMBEDDED IN CONCRETE WHEN CAST AGAINST SOIL
7. PROVIDE PROTECTION AGAINST DISSIMILAR METALS USING ANTI-CORROSIVE PAINT OR NEOPRENE GASKETS.
8. LATERAL SOIL BEARING PER IBC CLASS 4 (150 PSF/FT)
9. ALL DIMENSIONS TO BE VERIFIED PRIOR TO FABRICATION.



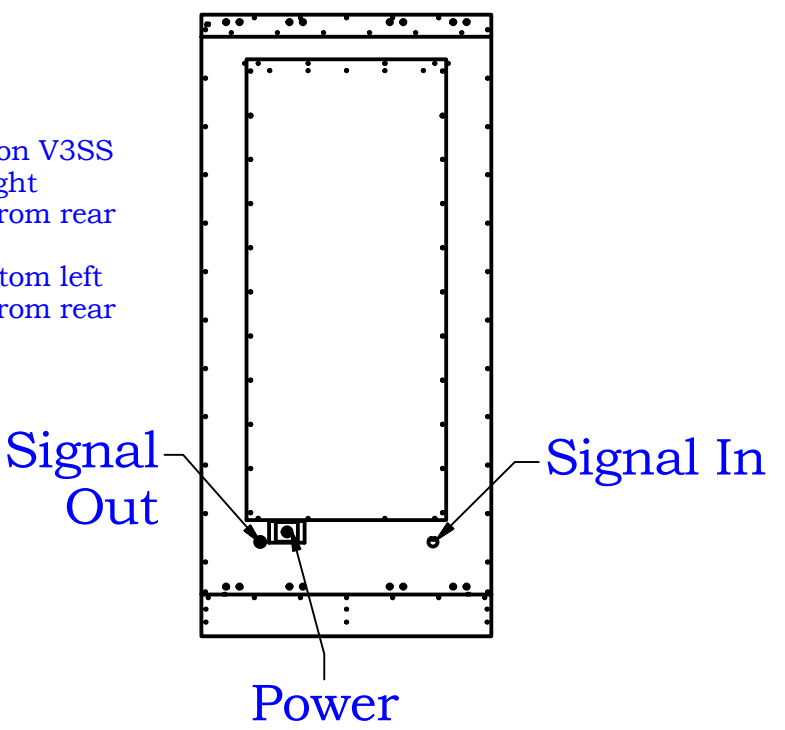
Rear View



Actual Full-Load Power Consumption (120-240VAC, 50/60Hz)				
Description	@120V	@208VAC	@240V	Quantity
Custom Scoreboard	5.0	2.9	2.5	1
16mm Video Module 6.30'x3.14'	6.7	3.8	3.3	20
16mm Video Module 4.72'x3.14'	5.0	2.9	2.5	10
3rd Party Sound System	N/A	12	N/A	1
Fiber Converters	0.1	N/A	N/A	2
MPC Receiver	0.2	N/A	N/A	1
Total + 30% Margin	277.2A	159.9 A	138.6A	

**Use high inrush current circuit breakers for video display.**  
\* National Electrical Code requires a disconnect switch within sight of sign or lockable within the building. If a subpanel is fed via a breaker from a main panel inside the building, ensure a lockable panel is installed.

Important. Read before Installation.  
This display is intended to be installed in accordance with the requirements of Article 600 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the sign. All personnel who work with electrical connections must be educated in the safe procedures for installing and repairing electrical connections before they are given the responsibility of performing such tasks.



**NOTE:**  
Make electrical connections on first and fourth column (when viewed from rear) before lifting in place

Power Location ●  
Signal Location ●

\* Load center, power wire, conduit and fittings are supplied by installer.


Lee's Summit High School  
Lee's Summit, MO  
Custom Video

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Panel Schedule						
	208 VAC-3Phase					
Description	ØA	ØB	ØC	breaker	trip	Loads
16mm Tall Modules	1.608			2-pole	20A	2 Tall
16mm Tall Modules		1.608				2 Tall
16mm Tall Modules			1.608	2-pole	20A	2 Tall
16mm Tall Modules	1.608					2 Tall
16mm Tall Modules		1.608		2-pole	20A	2 Tall
16mm Tall Modules			1.608			2 Tall
16mm Tall Modules	1.608			2-pole	20A	2 Tall
16mm Tall Modules		1.608				2 Tall
16mm Tall Modules			1.608	2-pole	20A	2 Tall
16mm Tall Modules	1.608					2 Tall
16mm Short Modules		1.8		2-pole	20A	3 Short
16mm Short Modules			1.2			2 Short
16mm Short Modules	1.8			2-pole	20A	3 Short
16mm Short Modules		1.2				2 Short
Sound System			1.248	2-pole	20A	Sound
Sound System	1.248					System
Scoreboard		1.04		1-pole	20A	120VAC
Fiber Adaptors			0.048	1-pole	20 A	120VAC
Total	9.48	8.864	7.32			
max KVA		9.48				
Max phase Line Current with 30% margin		102.50				

Lee's Summit  
High School  
Lee's Summit, MO  
Custom Video

  
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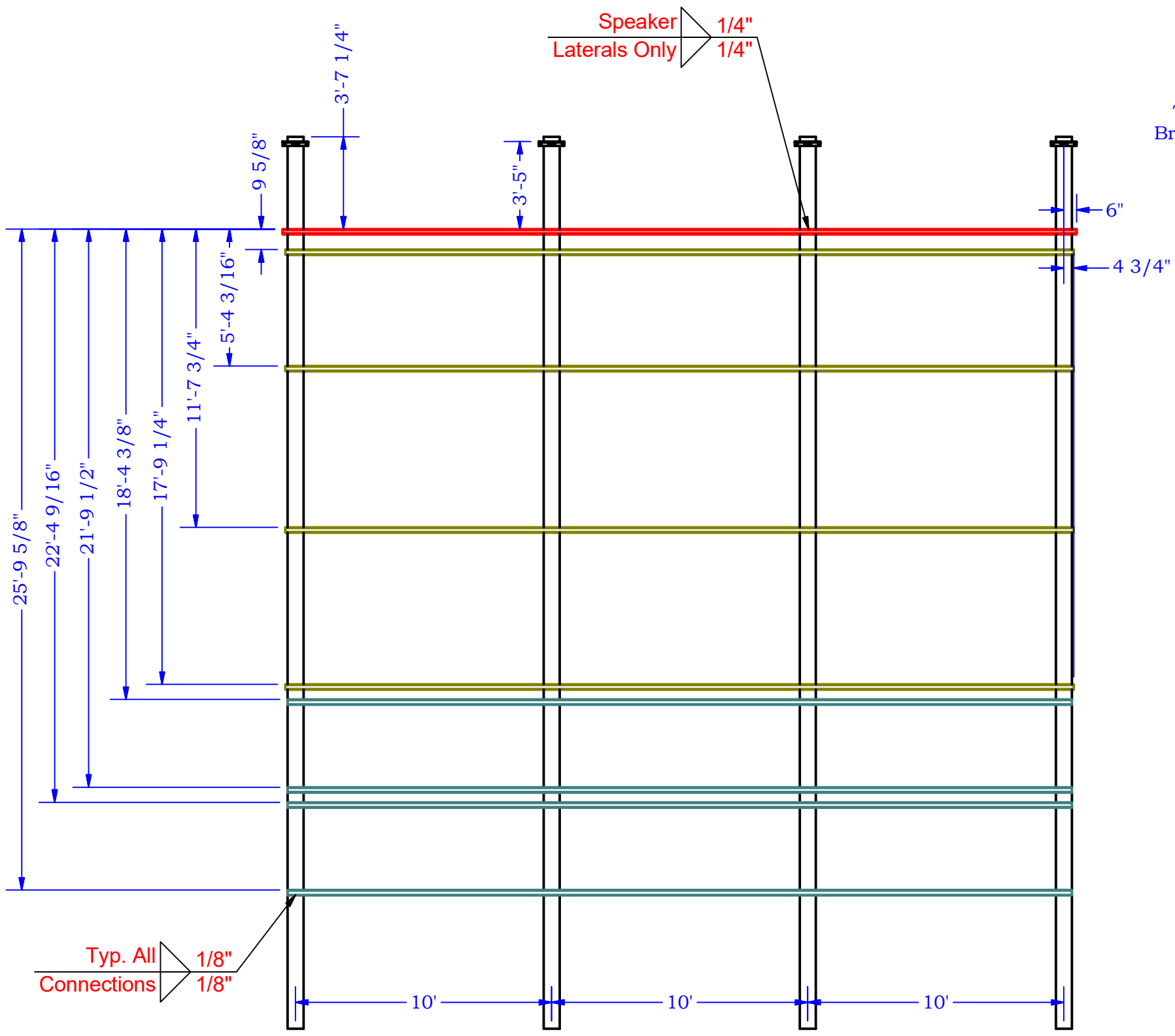
Quote 43548 Elec

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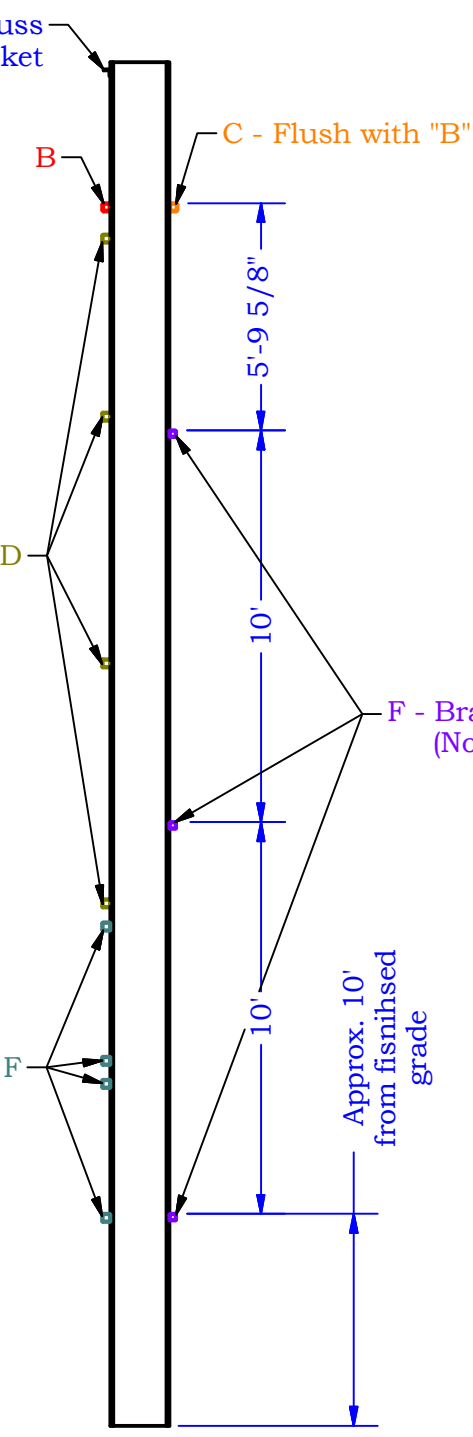
Display cabinets weight	7,889 lbs.
Lateral support bracing weight	1,676 lbs.
<u>Steel Columns weight</u>	<u>12,159 lbs.</u>
Total Weight	21,724 lbs.

Laterals and Brackets Installation

\* All Dimensions to TOP of laterals and brackets



Front View



Side View

Steel Supplied by Others				As Noted on Plans	Rev
Part	Description	Size	Length	Quantity	
A	Columns	W18 x 55	51' 10-1/4"	4	
B	Front Speaker Lateral	HSS 2-1/2" x 2-1/2" x 1/4"	31'	1	
C	Back Speaker Lateral	HSS 2-1/2" x 2-1/2" x 1/4"	30' 7-1/2"	1	
D	Video Laterals	HSS 2-1/2" x 2-1/2" x 1/8"	30' 9-7/16"	4	
E	Scoreboard/Sign Lateral	HSS 2-1/2" x 2-1/2" x 1/8"	30' 7-1/2"	4	
F	Bracing Laterals	HSS 2" x 2" x 1/8"	30' 7-1/2"	3	

- Notes:
- 1. Nevco provided hardware itemized on sheet with bolt/nut/screw bags.
  - 2. Mark shortest column, then level across to others.
  - 3. Provide a protective coating to minimize corrosion for all steel members exposed to weather, moisture, or soil.
  - 4. Trim outer columns after installation to match the shape of the arched truss.

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Lee's Summit, MO  
Custom Video  
Installation

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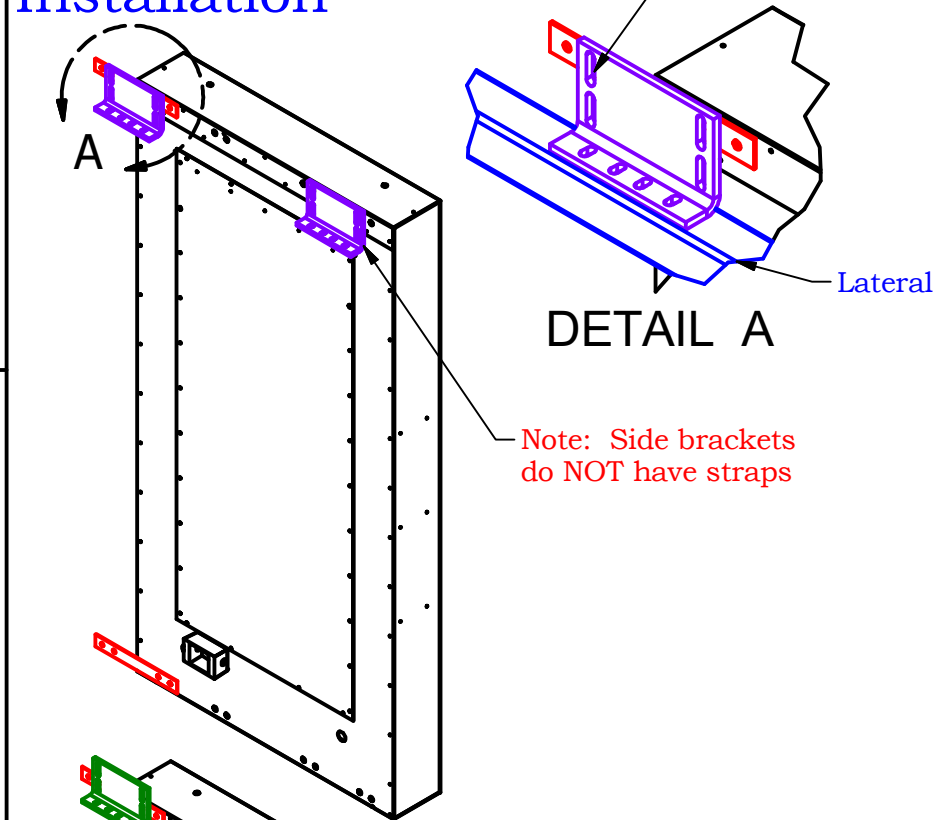
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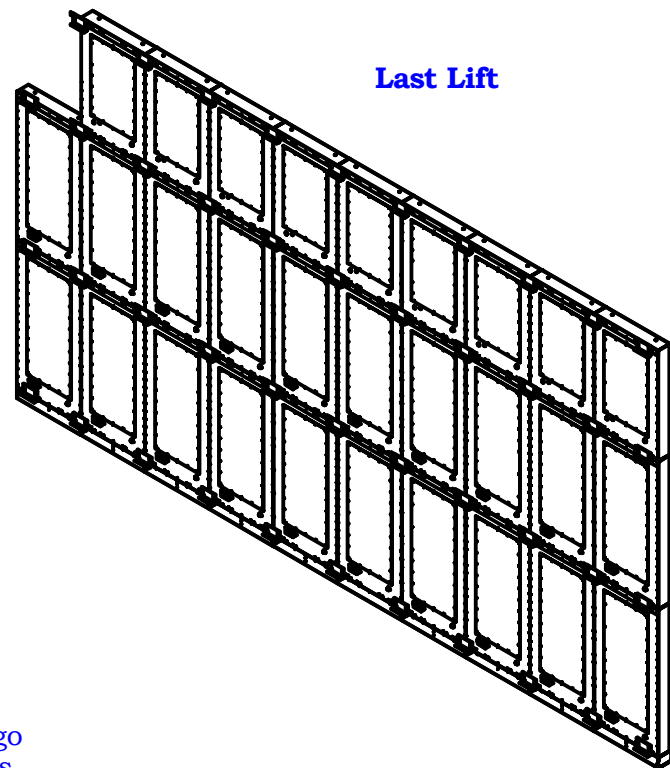
# Video Display Installation

Top row of video cabinets should use top slotted holes in bracket.

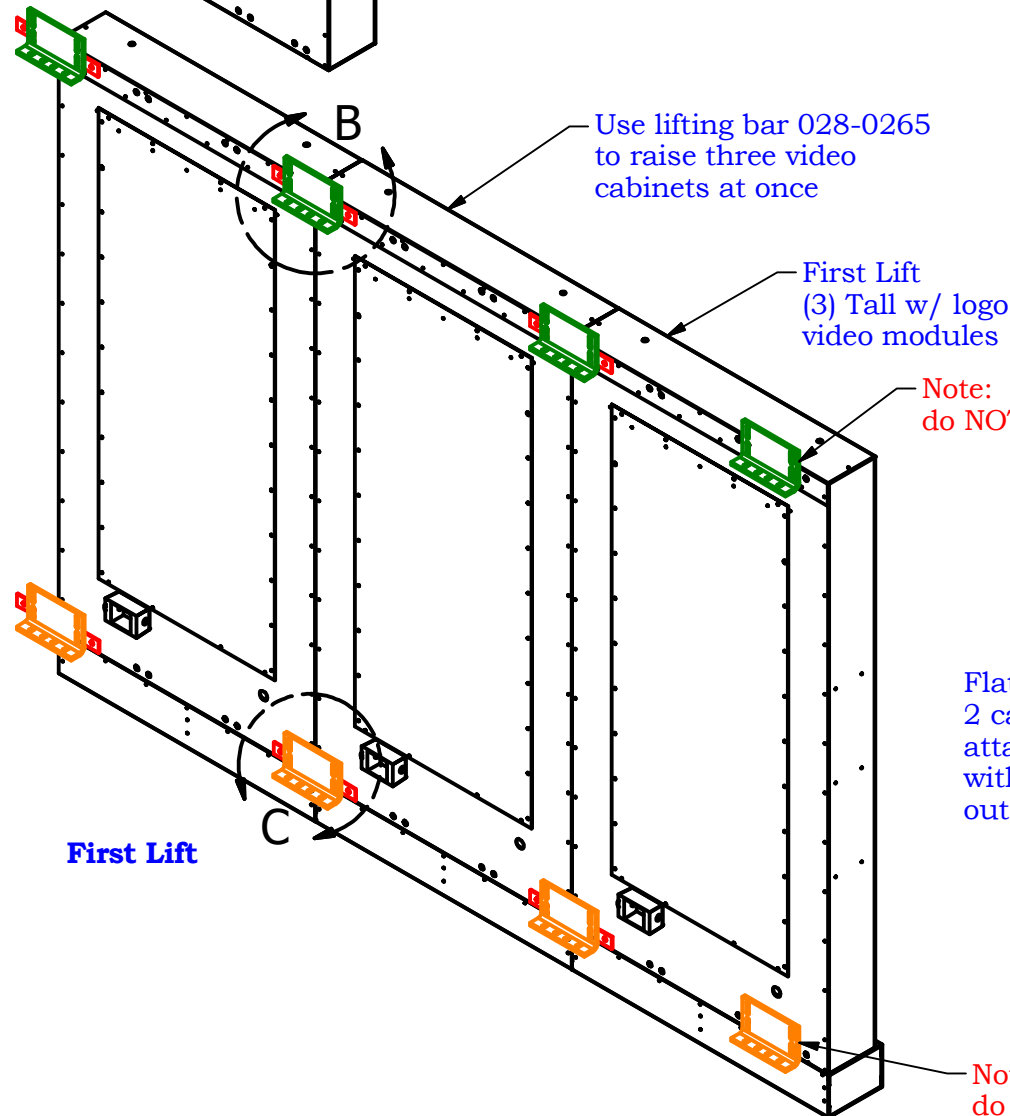


DETAIL A

Note: Side brackets do NOT have straps



Last Lift



First Lift

Note: Side brackets do NOT have straps

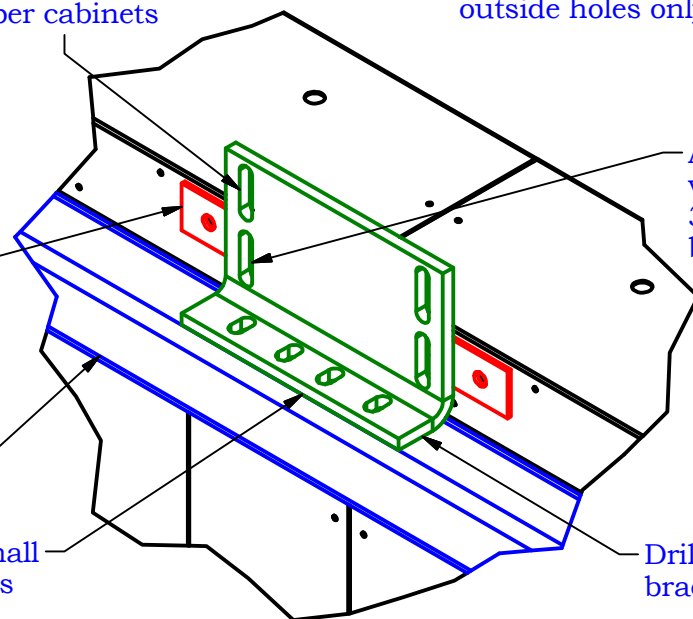
Top slots are for attachment of upper cabinets

Flat bracket shall span 2 cabinets and be attached to the cabinets with bolts on the outside holes only

Lateral

8" "Video" bracket shall face down on all rows

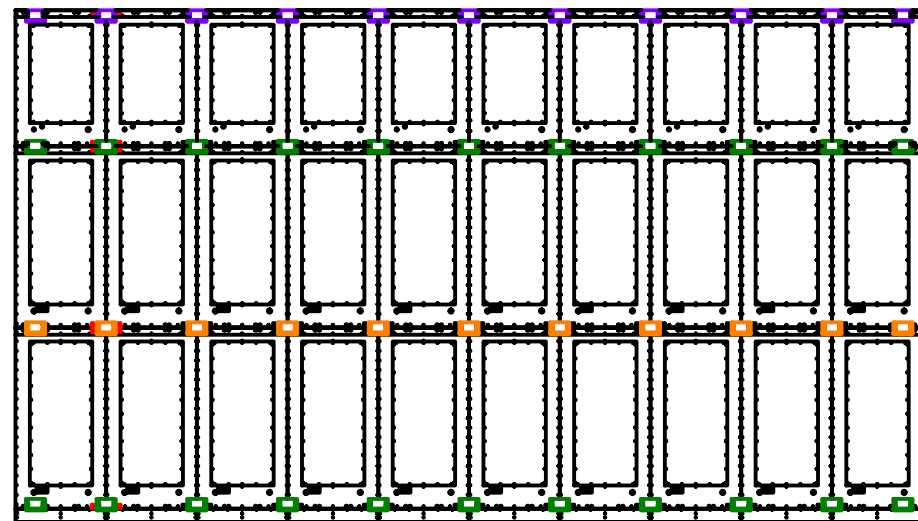
Note: Side brackets do NOT have straps



DETAIL B

\*Note: The brackets on the far left and right end of the display do not require straps.

## Order of video modules as seen from the rear



## Rear View

\*See page 1 for front view video block orientation.\*

Attach bracket to the video cabinet using 3/8" serrated flange bolts (provided by Nevco)

Flat bracket shall span 2 cabinets and be attached to the cabinets with bolts on the outside holes only

Lateral

Attach bracket to the video cabinet using 3/8" serrated flange bolts (provided by Nevco)

8" "Video" bracket shall face down on all rows

DETAIL C

Drill screw or weld bracket to lateral

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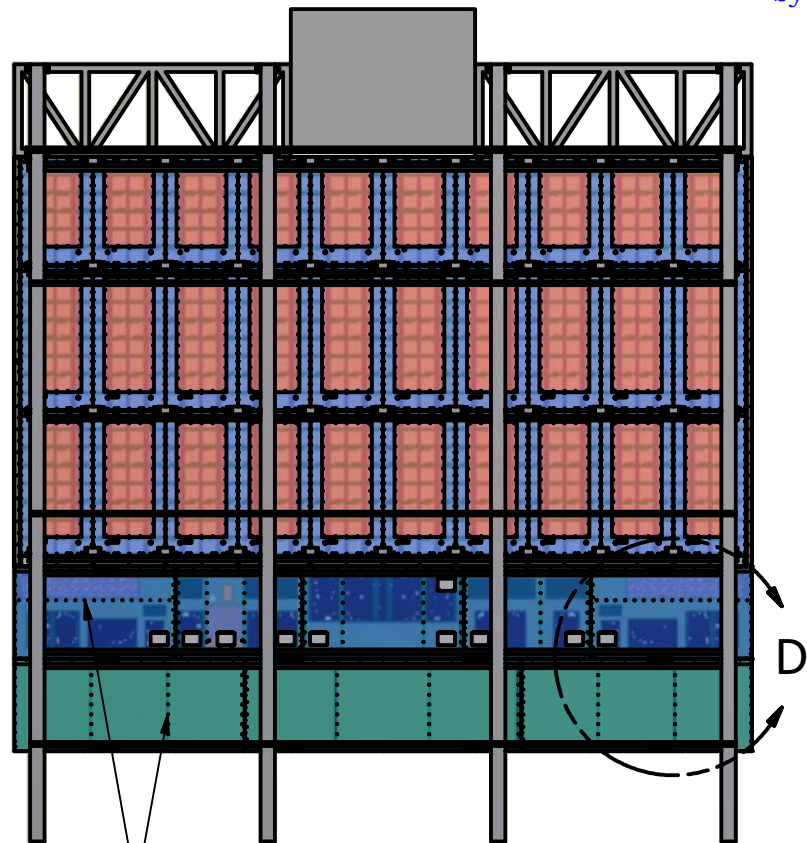
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# Filler Panel and Scoreboard Installation

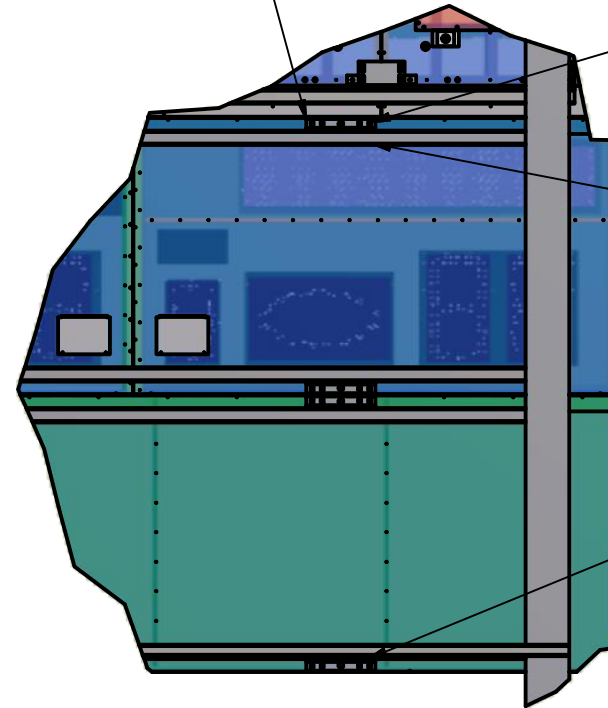
(See 241-0357 and 241-0365 for more details)



Scoreboard and sign use same connection method

Connect brackets to laterals using 3/8" bolts, washers, and nuts or by welding (Conenction by Others)

Mount 12" scoreboard brackets to back of cabinets using 3/8" serrated flange bolts (Provided by Nevco). Top brackets face down and bottom brackets face up.

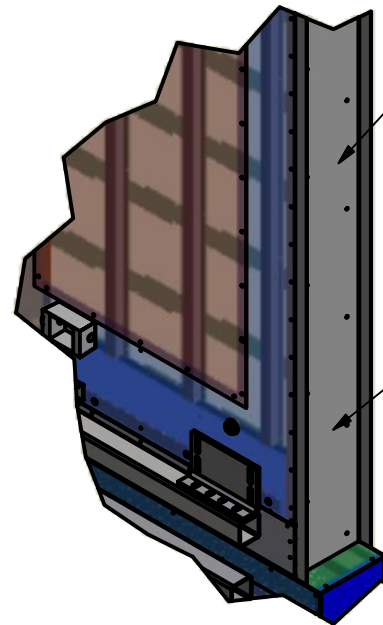
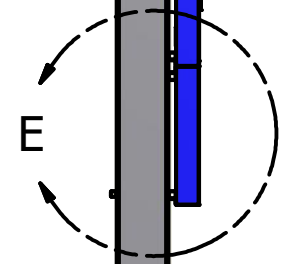
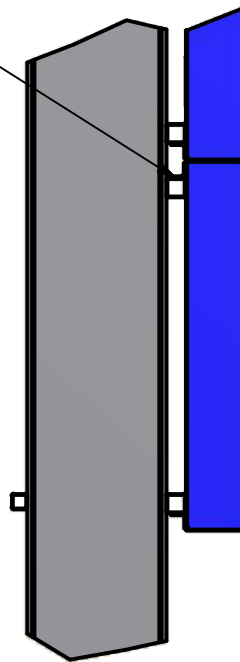


DETAIL D

Top bracket connects to top of lateral

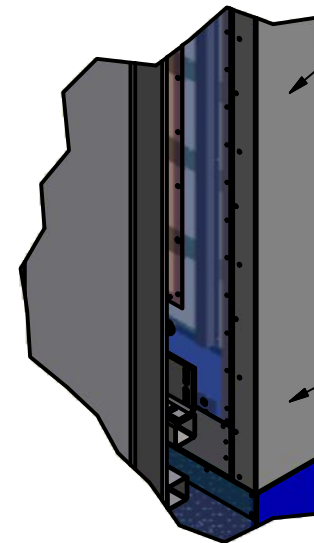
Bottom brackets connect to bottom of lateral

DETAIL E



Attach inner channel of filler panel to side of video cabinets using sheet metal screw (Provided by Nevco) in each pre-punched location

Center inner channel on side of video block



After inner channels have been installed, slide out channel over inner channel and attach channels together using drill screws in each pre-punched hole. Outer channel to be flush with outside of scoreboard. (Provided by Nevco)

Center channels in vertical and horizontal directions

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Lee's Summit, MO  
Custom Video  
Installation



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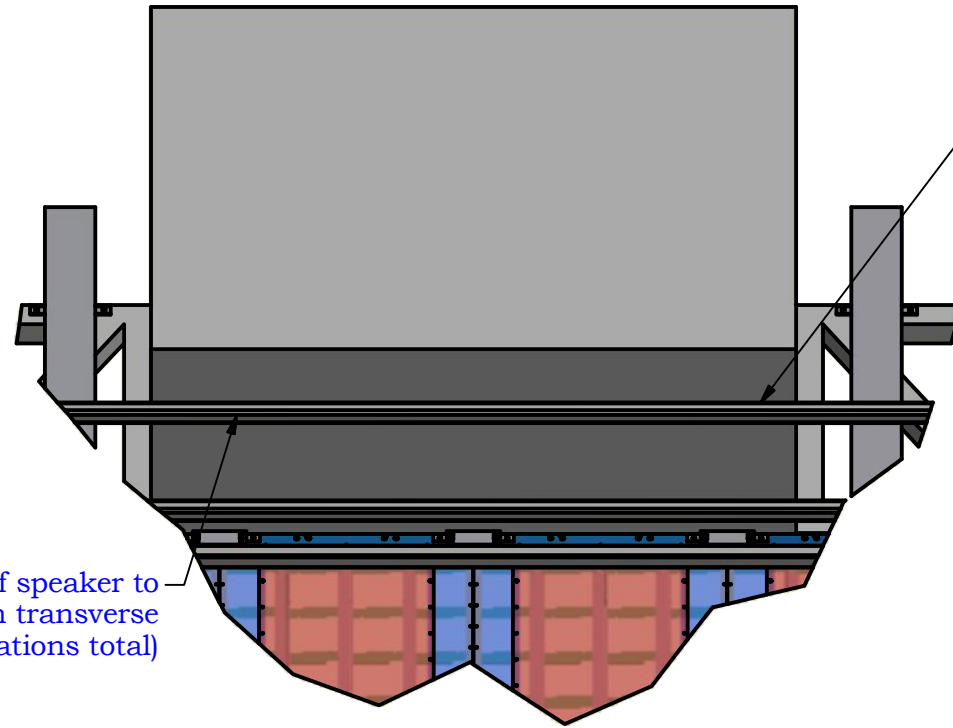
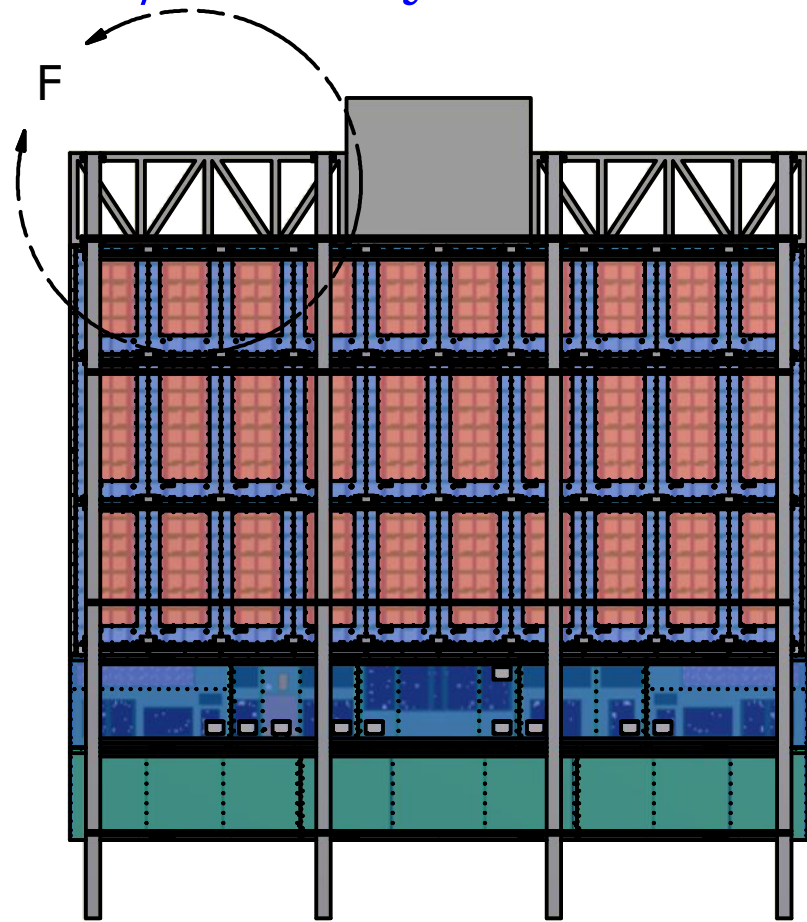
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RELEASED FOR  
CONSTRUCTION

As Noted on Plans Review

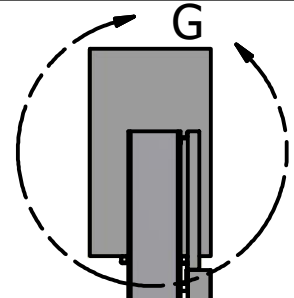
Development Services Department  
Lee's Summit, Missouri  
06/03/2022

# Truss/Sound System Installation



Speaker Mounting

(1/4)" 2" MIN  
TYPICAL ON ALL  
(6) LOCATIONS



Speaker Box

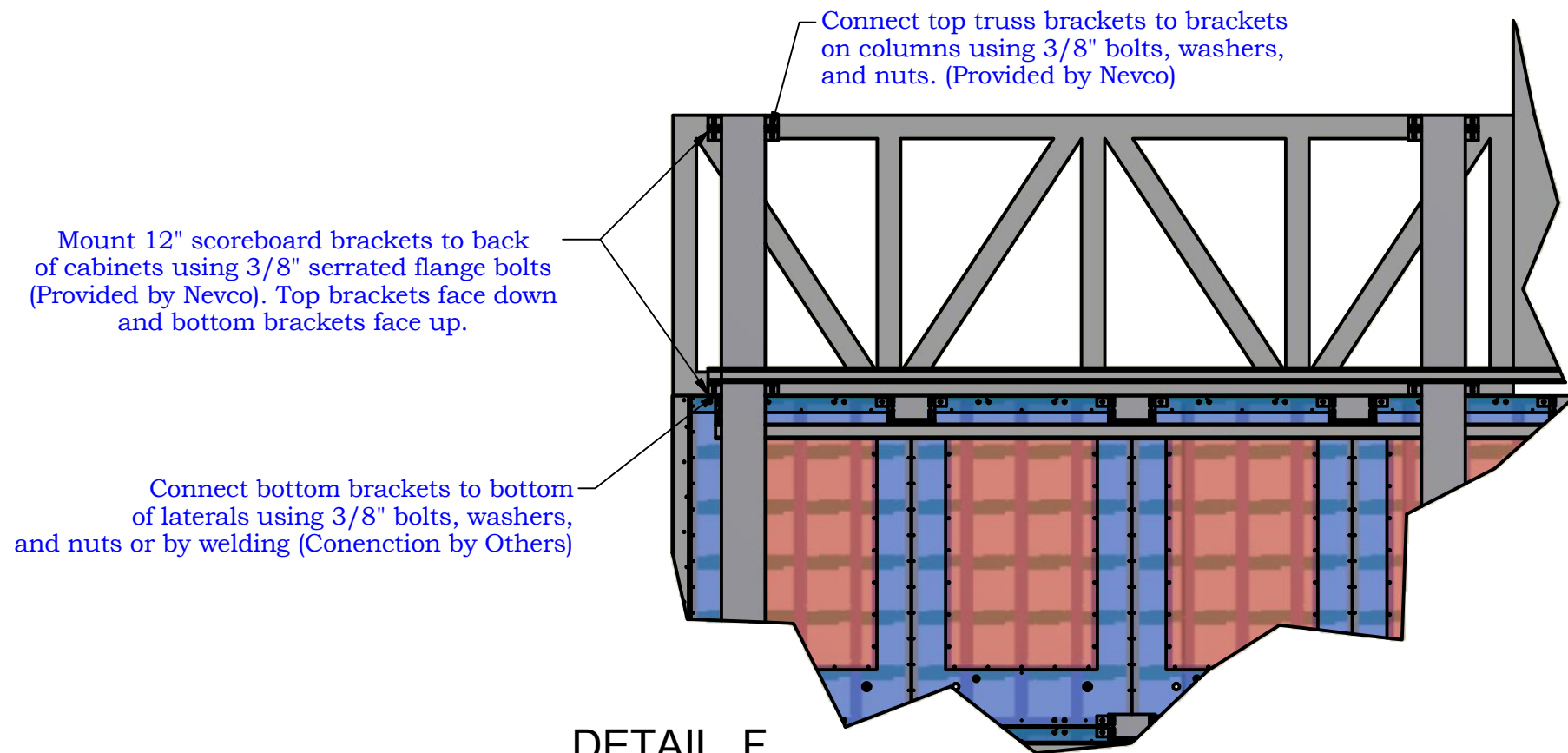
Truss

Column

12"

1'-4"  
MAX

DETAIL G



DETAIL F

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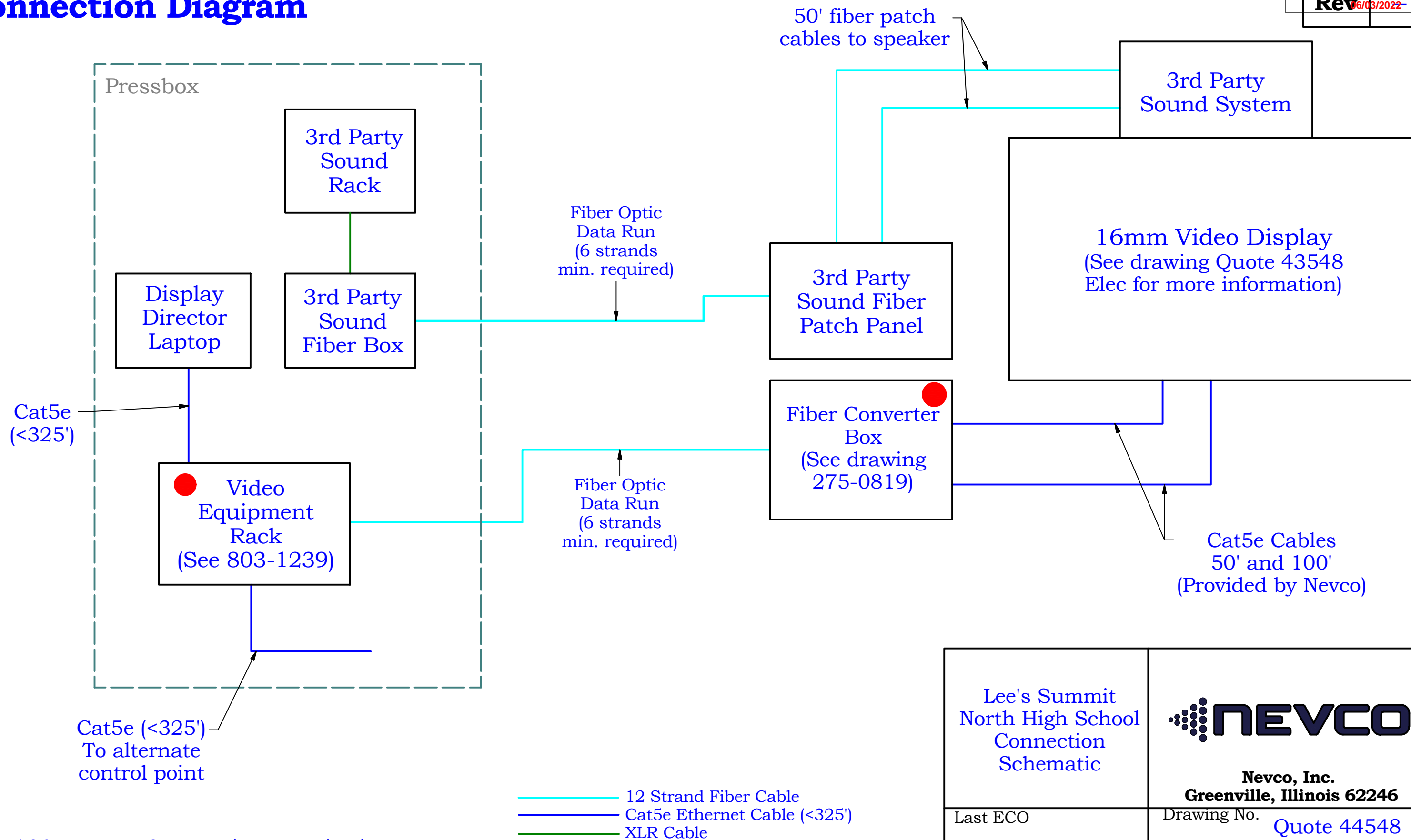
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## Connection Diagram



● 120V Power Connection Required

# Lee's Summit North High School Connection Schematic



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Drawing No.	Quote 44548
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