

## William H Aross PAC Performance Rigging Scope of Work

Bid Pkg	Quant	Details	Notes
A.	21	Refurbish Single Purchase line sets, each W/:	
	1	New Single purchase upright Headblock	1 set grooved for 1" purchase line
	7	New 8" Upright Loft Block	Custom Clips - per drawing
	7	1/4 GAC Lift lines-	Length as Necessary
	AN	Cable end terminations, per spec	With Trim device at batten end
	1	New Purchase line-	Length as Necessary
	1	New Rope lock	
	AN	New Oak Top Stop Block Rail assembly.	Entire length of Guide wall- US TO DS
	AN	New Oak Bottom Stop Block Rail assembly.	Entire length of Guide wall- US TO DS
	2	New Truss Batten Assembly	as noted on dwgs
	Exist	Adjust Align existing Guide Channels	
	Exist	Existing Arbor, adjust and replace guide shoes as necessary	
	Exist	Tension Block assembly- Inspect and adjust as necessary	
	3	Sag Bar assemblies, grid mounted, Each With	
	3	Grid Mount Stanchion assembly with oak rail	
B.	4	Refurbish Performance Lighting line sets, single purchase each W/:	
	1	New Single purchase Headblock- 8 lines	
	8	New 8" Upright Loft Block	Custom Clips / 1 block for Cable Management
	8	1/4 GAC Lift lines-	Length as Necessary
	AN	Cable end terminations per spec	With Trim device at batten end
	1	New Purchase line	Length as Necessary
	1	New Rope Lock	
	AN	Cable Cradle for each SO Cable Drop	Provide Yolk assembly for Multiple Cradles
	Exist	Adjust Align existing Guide Channels	
	Exist	Existing Arbor, adjust and replace guide shoes as necessary	
	Exist	Tension Block assembly- Inspect and adjust as necessary	
	1	Performance Lighting Electrical Work	
	4	Relocate Existing Performance Electric Grid J-Box Offstage	See dwgs.
	Lot	New SO Cable for 4 Existing Electrics	Replace with similar gauge and Conductors
	Lot	Cable Strain Relief	Kellum's as noted on dwgs.
	Lot	Termination - each end of So Cable	
	4	Relocate Existing Drop Box J-Box Offstage Approx. 5 ft	See dwgs.
	Lot	Disconnect and reterminate Drop Box cable as necessary	
C.	5	Convert Double Purchase line set to single purchase, each W/:	
	1	7" arbor	
	1	Single Purchase loft block	
	1	New Single Purchase Headblock	
	7	New 8" Upright Loft Block	Custom Clips - per drawing
	7	1/4 GAC Lift lines-	Length as Necessary
	AN	Cable end terminations per spec	With Trim device at batten end
	1	New Purchase line	Length as Necessary
	1	New Rope lock	
	AN	J bar guide wall to extend existing to floor	W/ Battens and wall knees as necessary
	AN	New Oak Bottom Stop Rail assembly.	Set for high trim as shown in dwgs.
	Exist	Tension Block assembly-Relocate to floor Inspect and adjust as necessary	
D-Base	1	Fire Curtain repairs- Based Bid	
	AN	Adjust and repair curtain system as necessary to achieve full deployment	
	Lot	New release station SL and SR per drawings	
	Lot	Repair and align release line pullies as necessary	
	Lot	Replace all Stay/Safety chain and chain clamps to grid structure.	
	7	New 8" Loft block	
	1	New Head block	
	1	Guided Clue Assembly	
	Lot	New lift lines and connection.	
	Exist	Fire curtain, guides, smoke pocket.	
D-Alt	1	Replace existing manual FC winch with Motorized wall mount winch-	
	1	Motorized FC Hoist Assembly with Brake system and decent damper	Equal to JR Clancy 501P-2-W
	1	Wall mounted control station	
	Lot	New Electrical power feed for winch	From Scene shop panel or closer if possible
G	1	Smoke Hatch Release repairs and upgrades	As noted in drawings
X	1	Relocate air duct SL	Work in separate package. Listed here for coordination with other items
	AN	=As Necessary	
	EXIST	=Use Existing Item	

### KEYED NOTE SUMMARY ALL NOTES:

- A1- Provide 1" Synthetic purchase line and rope locks for main curtain line set
- A2- Reuse existing Floating Floor Tension blocks all sets - adjust and lubricate as necessary
- A3- Provide new rope locks and 3/4" Synthetic purchase line for each existing set at existing index rail per bid package scope and specifications
- A4- Add new hardwood Bottom stop block mount to existing stop angle
- A5- Reuse existing single purchase arbors- Inspect and replace all connection hardware, Add stickers to backbone to indicate proper spreader plate use location.
- A6- Provide New Truss batten for curtain line sets.
- A7- Add new hardwood upper arbor stop length of guide wall
- A8- Add new hardwood sag bar and support frames
- A9- Typical Head block- replace as noted per bid package scope and specifications
- A10- Typical Loft Block- replace as noted per bid package scope and specifications
- A11- Provide clips for ALL loft blocks to span interior of loft well. Grid plate configuration prevents traditional clipping to outside of loft well.
- A12- Replace existing lift lines, cable termination, and hardware for each set per bid package scope and specifications.
- A13- Provide short sag bar or cable roller assembly to prevent rubbing of lift lines on fire hose main just above grid.

- B1- Add additional loft block and cable lift line for SO cable management
- B2- Provide new Head block to accommodate 8 lift line per bid package scope and specifications.
- B3- Provide new Cable Cradles, 1 per SO Cable. Provide yoke assembly to secure and hang vertically stacked to single lift line if more than 1 cradle is required.
- B4- Provide High trim stop for each electric's arbor at high trim of cable cradle assembly

- C1- Convert 5 Double Purchase line sets to Single purchase per bid package scope, Relocate operation to floor level
- C2- Extend Existing J bar guides to floor for 5 Linesets. Wall batten, knees, J track as necessary per bid package scope
- C3- Provide new rope lock and purchase line at existing index rail for each relocated Linesets
- C4- Provide new 7" arbor with shoes per bid package scope and specifications for each relocated lineset.
- C5- Relocate existing tension blocks to floor level.
- C6- Demo existing rope locks. Index rail to remain
- C7- Demo existing double purchase arbors. Turn over to owner.
- C8- Typical Head block- replace as noted per bid package scope
- C9- Typical Loft Block- replace as noted per bid package scope and specifications

- D1- Test and Adjust fire curtain for correct operation - Adjust batten weight and winch tension as necessary to ensure full closure
- D2- Test and Adjust Existing Hand Crank winch. Adjust decent damper a necessary for correct operation ( Base Bid)
- D3- Existing Fire Curtain Fire Alarm Interface box- verify operation, replace battery
- D4- Fire Curtain head Block - replace as noted per bid package scope.
- D5- Typical FC Loft Block- Replace as noted per bid package scope.
- D6- Relocate Fire curtain release to this location, provide new pull station and signage. Coordinate exact location with existing services on wall
- D7- Provide power disconnect for motorized Fire Curtain Hoist Assembly. Run new 3 ph circuit to nearest panelboard with available space. Supply breaker if necessary
- D8- Clean and adjust existing fire curtain break release counterweighted stack. Install wire mesh at top of unit to prevent use as trash receptacle.
- D9- Inspect existing Fire Curtain release line. Adjust and repair as necessary and confirm Fusible links installed per code. Add link as necessary
- D10- Replace existing stay chains, Provide rated clamp connection to structure at grid.
- D11- Add spacer under fire curtain release line pulley and extend off wall to allow clear path for release cable.
- D12- Replace Existing Hand Crank Fire Curtain hoist assembly per bid package scope and specifications ( Add Alternate)

- E1- Replace all SO cables feeding Lighting Raceways. Length to allow full travel as shown in dwgs. Size per NEC w/ 1 hot & 1 neutral for each performance circuits + ground per code. Supply 1 eye grip Kellum for each SO Cable in addition to box grip Kellum's noted below.
- E2- Relocate Lighting Raceway Grid Junction box Offstage approx. 15' (Field Verify) Install each new SO cable with Box grip Kellum Reterminate new cable per existing raceway circuit layout
- E3- Remove existing SO Cable from Raceway. Install each new SO Cable with box grip Kellum. Reterminate per existing circuit layout and confirm address and operation of each circuit in raceway.
- E4- Relocate existing Drop Box Grid Junction Box offstage as shown. Disconnect and reterminate cable as necessary to relocated and re-feed drop cable through grid
- E5- Existing location of Lighting Raceway Grid Junction box- to be moved as noted above

- G1- Re wrap Smoke hatch cable on hand winch drum correctly with cable running below keeper and not binding.
- G2- Inspect Smoke hatch Release line rigging, adjust and modify as necessary.

- X1- Coordinate air duct relocation with HVAC Sub Contractor

- Ad1- Relocate existing J-bar Guide wall offstage to provide proper arbor spacing and alignment with stage Level Lock Rail. Provide new J-bar, wall batten and wall knees as necessary to ensure smooth operation of relocated sets.

### GENERAL RIGGING NOTES

- FIELD VERIFY ALL EXISTING DIMENSIONS AND LOCATIONS OF EQUIPMENT TO BE REPLACED.
- SEE SPECIFICATIONS FOR HARDWARE AND EQUIPMENT REQUIREMENTS
- DEMO AND REMOVE ALL EXISTING HARDWARE AND EQUIPMENT SCHEDULED FOR REPLACEMENT. RETAIN ANY EQUIPMENT AS DIRECTED BY OWNER, DISPOSE OF REMAINING ITEMS
- STORE ALL BATTENS FOR REUSE UNLESS SPECIFICALLY NOTED FOR REPLACEMENT.
- THIS CONTRACTOR TO SUPPLY ALL ELECTRICAL WIRING, CONDUIT, AND TERMINATIONS AS NECESSARY FOR THE INDICATED SCOPE OF WORK.
- REMOVE AND STORE ALL CURTAIN TRACKS AND HARDWARE FOR REUSE. REINSTALL AT COMPLETION OF PROJECT.

### PERFORMANCE LIGHTING CIRCUIT QUANTITY BY POSITION

- 1ST ELECTRIC -24 PERFORMANCE+ 1 WORKLIGHT
- 2ND ELECTRIC -16 PERFORMANCE + 1 WORKLIGHT
- 3RD ELECTRIC -16 PERFORMANCE + 1 WORKLIGHT
- 4TH ELECTRIC -17 PERFORMANCE + 1 WORKLIGHT
- DSL DROP BOX - 3 CIRCUITS
- USL DROP BOX - 3 CIRCUITS
- DSR DROP BOX - 3 CIRCUITS
- DSL DROP BOX - 3 CIRCUITS.

### WH AMOSS PAC STAGE EQUIPMENT UPGRADES

#### HARFORD COMMUNITY COLLEGE/ HARFORD TECHNICAL HS

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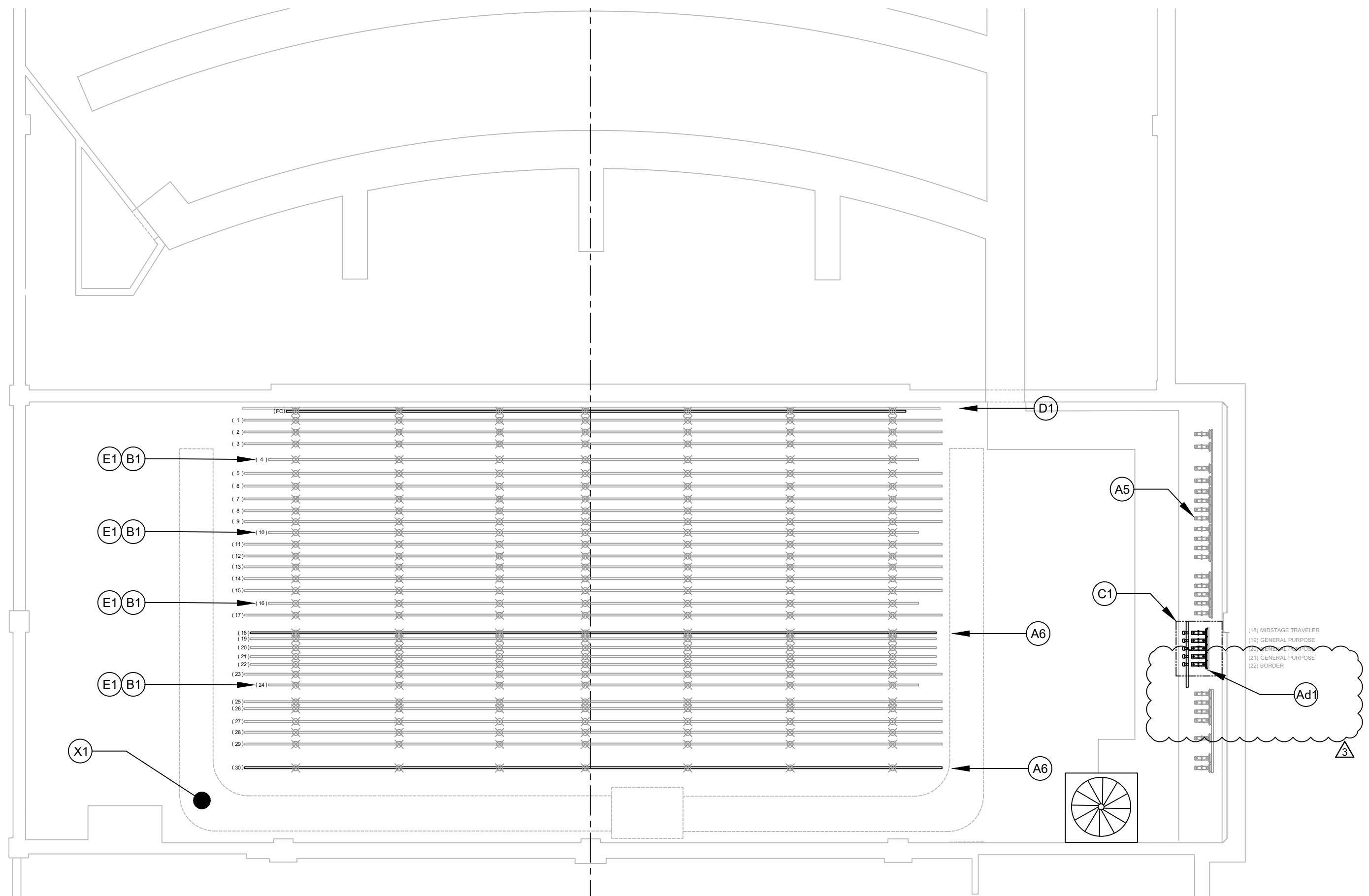
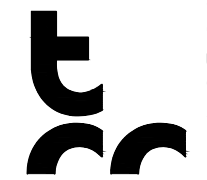
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PROJECT NUMBER: HARFORDTECH-19

SCALE: AS NOTED

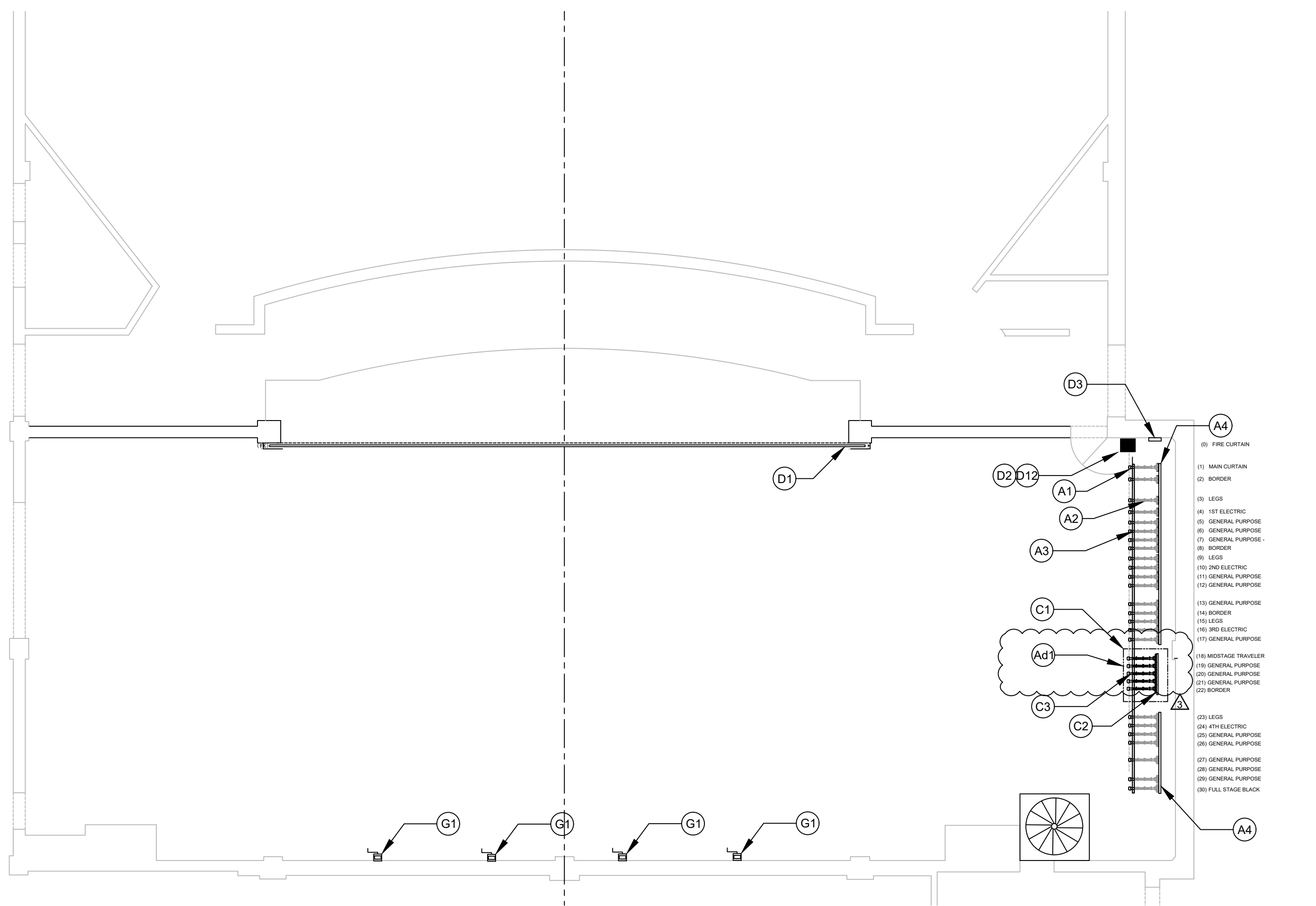
### PERFORMANCE RIGGING Schedules & Notes

# QT 0.10



3 Gallery Level Performance Rigging Layout  
SCALE: 1/8" = 1'-0"

- KEYED NOTES:**
- A1- Provide 1" Synthetic purchase line and rope locks for main curtain line set
  - A2- Reuse existing Floating Floor Tension blocks all sets - adjust and lubricate as necessary
  - A3- Provide new rope locks and 3/4" Synthetic purchase line for each existing set at existing index rail per bid package scope and specifications
  - A4- Add new hardwood Bottom stop block mount to existing stop angle
  - A5- Reuse existing single purchase arbors - Inspect and replace all connection hardware, Add stickers to backbone to indicate proper spreader plate use location.
  - A6- Provide New Truss batten for curtain line sets.
  - B1- Add additional loft block and cable lift line for SO cable management
  - C1- Convert 5 Double Purchase line sets to Single purchase per bid package scope, Relocate operation to floor level
  - C2- Extend Existing J bar guides to floor for 5 lineset. Wall batten, knees, J track as necessary per bid package scope
  - C3- Provide new rope lock and purchase line at existing index rail for each relocated lineset
  - D1- Test and Adjust fire curtain for correct operation - Adjust batten weight and winch tension as necessary to ensure full closure
  - D2- Test and Adjust Existing Hand Crank winch. Adjust decent damper a necessary for correct operation ( Base Bid)
  - D3- Existing Fire Curtain Fire Alarm Interface box- verify operation, replace battery
  - D12- Replace Existing Hand Crank Fire Curtain hoist assembly per bid package scope and specifications ( Add Alternate)
  - E1- Replace all SO cables feeding Lighting Raceways. Length to allow full travel as shown in dwgs. Size per NEC w/ 1 hot & 1 neutral for each performance circuits + ground per code. Supply 1 eye grip Kellum for each SO Cable in addition to box grip Kellum's noted below.
  - G1- Re wrap Smoke hatch cable on hand winch drum correctly with cable running below keeper and not binding.
  - X1- Coordinate air duct relocation with HVAC Sub Contractor
- Ad1- Relocate existing J-bar Guide wall offstage to provide proper arbor spacing and alignment with stage Level Lock Rail. Provide new Jbar, wall batten and wall knees as necessary to ensure smooth operation of relocated sets.



2 Stage Level Performance Rigging Layout  
SCALE: 1/8" = 1'-0"

SET	BATTEN TO DATUM	ROPE LOCKS - TO DATUM	DESCRIPTION	OPERATION- EXISTING	OPERATION- REFINISHED	BATTEN LENGTH	BATTEN TYPE	ARBOR LENGTH	LIFT LINES	LIVE CAPACITY	NOTES	COMMENTS
FC	47'-2"	N/A	Fire Curtain	Manual Winch	Motorized Hoist	A/R	Single Pipe	N/A	A/R	A/R		D, J
1	1'-0"	2'-1 3/4"	Main Drape	Single Pchs Cwt	Single Pchs Cwt	59'-0"	Single Pipe	5'-0"	7	1200#		A, J
2	2'-0"	3'-2 1/2"	Border	Single Pchs Cwt	Single Pchs Cwt	59'-0"	Single Pipe	5'-0"	7	1200#		A, J
3	3'-0"	5'-0 1/2"	Legs	Single Pchs Cwt	Single Pchs Cwt	59'-0"	Single Pipe	5'-0"	7	1200#		A, J
4	4'-4"	6'-1"	1st Electric	Single Pchs Cwt	Single Pchs Cwt	55'-0"	Double Pipe	5'-0"	7+1	1500#		B, E, J
5	5'-0"	7'-0"	Utility	Single Pchs Cwt	Single Pchs Cwt	59'-0"	Single Pipe	5'-0"	7	1200#		A, J
6	6'-7"	7'-9 3/8"	Utility	Single Pchs Cwt	Single Pchs Cwt	59'-0"	Single Pipe	5'-0"	7	1200#		A, J
7	7'-8"	8'-6 1/2"	Utility	Single Pchs Cwt	Single Pchs Cwt	59'-0"	Single Pipe	5'-0"	7	1200#		A, J
8	8'-8"	9'-3 1/4"	Border	Single Pchs Cwt	Single Pchs Cwt	59'-0"	Single Pipe	5'-0"	7	1200#		A, J
9	9'-7"	10'-2"	Legs	Single Pchs Cwt	Single Pchs Cwt	59'-0"	Single Pipe	5'-0"	7	1200#		A, J
10	10'-6"	11'-0"	2nd Electric	Single Pchs Cwt	Single Pchs Cwt	55'-0"	Double Pipe	5'-0"	7+1	1500#		B, E, J
11	11'-6"	11'-9 1/2"	Utility	Single Pchs Cwt	Single Pchs Cwt	59'-0"	Single Pipe	5'-0"	7	1200#		A, J
12	12'-4"	12'-6 1/2"	Utility	Single Pchs Cwt	Single Pchs Cwt	59'-0"	Single Pipe	5'-0"	7	1200#		A, J
13	13'-5"	14'-2"	Utility	Single Pchs Cwt	Single Pchs Cwt	59'-0"	Single Pipe	5'-0"	7	1200#		A, J
14	14'-5"	15'-0"	Border	Single Pchs Cwt	Single Pchs Cwt	59'-0"	Single Pipe	5'-0"	7	1200#		A, J
15	15'-5"	15'-8 1/2"	Legs	Single Pchs Cwt	Single Pchs Cwt	59'-0"	Single Pipe	5'-0"	7	1200#		A, J
16	16'-6"	16'-8 1/2"	3rd Electric	Single Pchs Cwt	Single Pchs Cwt	55'-0"	Double Pipe	5'-0"	7+1	1500#		B, E, J
17	17'-6"	17'-3 1/2"	Utility	Single Pchs Cwt	Single Pchs Cwt	59'-0"	Single Pipe	5'-0"	7	1200#		A, J
18	19'-0"	19'-0"	Traveller Mid Stage	Double Pchs Cwt	Double Pchs Cwt	59'-0"	Single Pipe	5'-0"	7	1200#		C, J
19	19'-6"	19'-6"	Utility	Double Pchs Cwt	Double Pchs Cwt	59'-0"	Single Pipe	5'-0"	7	1200#		C, J
20	20'-3"	20'-3"	Utility	Double Pchs Cwt	Single Pchs Cwt	58'-0"	Single Pipe	5'-0"	7	1200#		C, J
21	21'-0"	21'-0"	Utility	Double Pchs Cwt	Single Pchs Cwt	58'-0"	Single Pipe	5'-0"	7	1200#		C, J
22	21'-8"	21'-8"	Border	Double Pchs Cwt	Single Pchs Cwt	59'-0"	Single Pipe	5'-0"	7	1200#		C, J
23	22'-6"	24'-1 1/2"	Legs	Single Pchs Cwt	Single Pchs Cwt	59'-0"	Single Pipe	5'-0"	7	1200#		A, J
24	23'-5"	24'-10 1/2"	4th Electric	Single Pchs Cwt	Single Pchs Cwt	55'-0"	Double Pipe	5'-0"	7+1	1500#		B, E, J
25	24'-10"	25'-7 1/2"	Utility	Single Pchs Cwt	Single Pchs Cwt	59'-0"	Single Pipe	5'-0"	7	1200#		A, J
26	25'-5"	26'-4 1/2"	Utility	Single Pchs Cwt	Single Pchs Cwt	59'-0"	Single Pipe	5'-0"	7	1200#		A, J
27	26'-8"	27'-10 1/2"	Utility	Single Pchs Cwt	Single Pchs Cwt	59'-0"	Single Pipe	5'-0"	7	1200#		A, J
28	27'-5"	29'-10"	Utility	Single Pchs Cwt	Single Pchs Cwt	59'-0"	Single Pipe	5'-0"	7	1200#		A, J
29	28'-5"	29'-7"	Utility	Single Pchs Cwt	Single Pchs Cwt	59'-0"	Single Pipe	5'-0"	7	1200#		A, J
30	30'-5"	30'-5"	Full Stage Black	Single Pchs Cwt	Single Pchs Cwt	59'-0"	Single Pipe	5'-0"	7	1200#		A, J

**Notes:**

- A. Refurbish Single Purchase line set per rigging scope.
- B. Refurbish Performance Lighting Line Set per rigging scope. Provide new lift line and cable cradles per scope.
- C. Refurbish DP set, convert to Single purchase per Rig Scope. Move lock to stage level, add additional J bar, wall Batten, and knees as necessary.
- D. Upgrade/Refurbish Fire Curtain Rigging per Rigging Scope.
- E. Replace Existing power and control cable feed to Raceways per rigging scope.
- F. Not Used
- G. Not Used
- H. Not Used
- I. Not Used
- J. Field Verify all dimensions prior to removal of existing equipment

1 Lineset Schedule  
SCALE: NTS

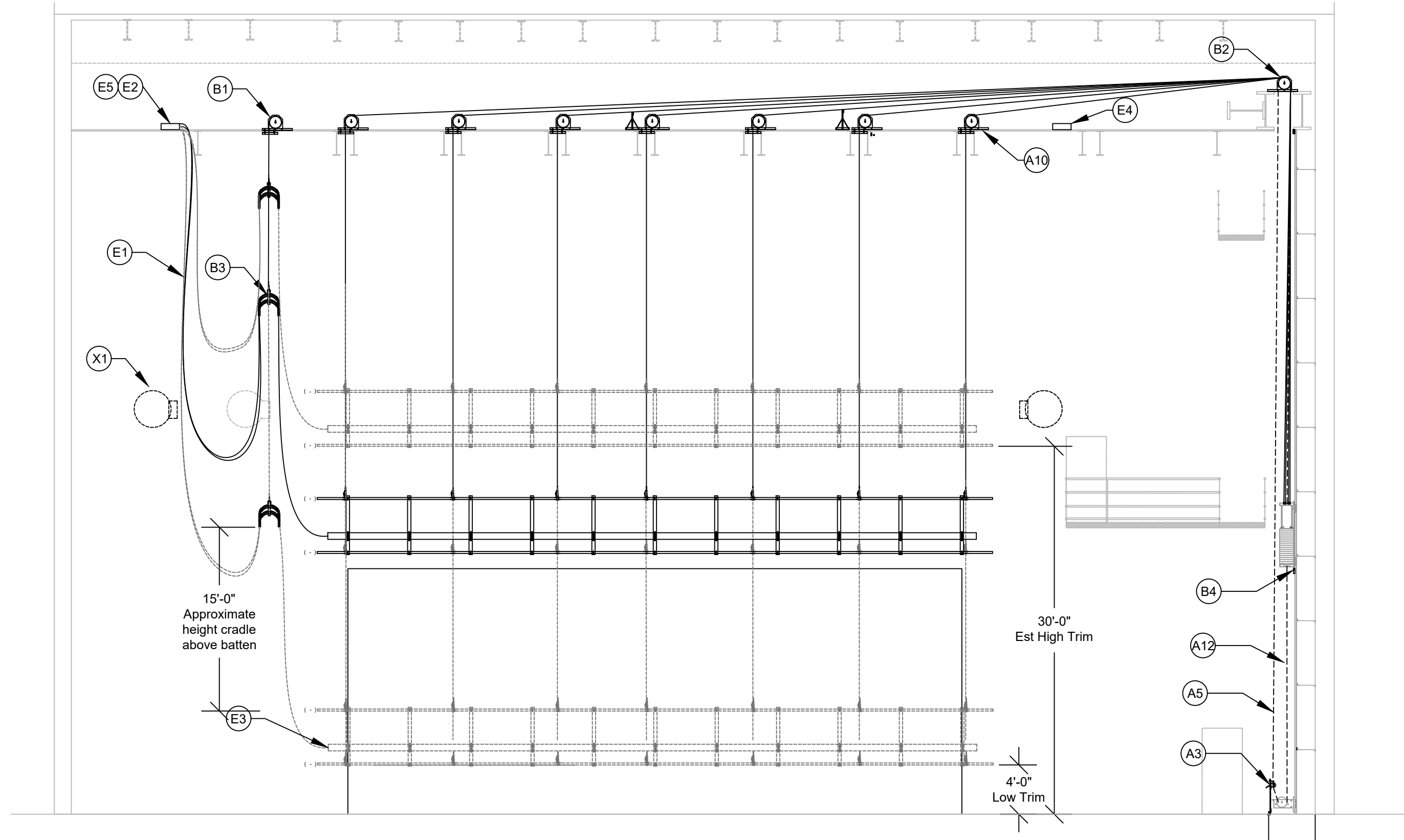
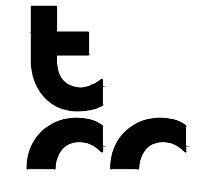
**WH AMOSS PAC  
STAGE EQUIPMENT UPGRADES**

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SCALE: AS NOTED

**Performance Rigging  
Layouts**

**QT 1.10**



2 Typical Single Purchase CW Performance Lighting Line Set  
SCALE: 1/8" = 1'-0"

**KEYED NOTES:**

- A1- Provide 1" Synthetic purchase line and rope locks for main curtain line set
- A2- Reuse existing Floating Floor Tension blocks all sets - adjust and lubricate as necessary
- A3- Provide new rope locks and 3/4" Synthetic purchase line for each existing set at existing index rail per bid package scope and specifications
- A4- Add new hardwood Bottom stop block mount to existing stop angle
- A5- Reuse existing single purchase arbors- Inspect and replace all connection hardware, Add stickers to backbone to indicate proper spreader plate use location.
- A7- Add new hardwood upper arbor stop length of guide wall
- A8- Add new hardwood sag bar and support frames
- A9- Typical Head block- replace as noted per bid package scope and specifications
- A10- Typical Loft block- replace as noted per bid package scope and specifications
- A11- Provide clips for ALL loft blocks to span interior of loft well. Grid plate configuration prevents traditional clipping to outside of loft well.
- A12- Replace existing lift lines, cable termination, and hardware for each set per bid package scope and specifications.

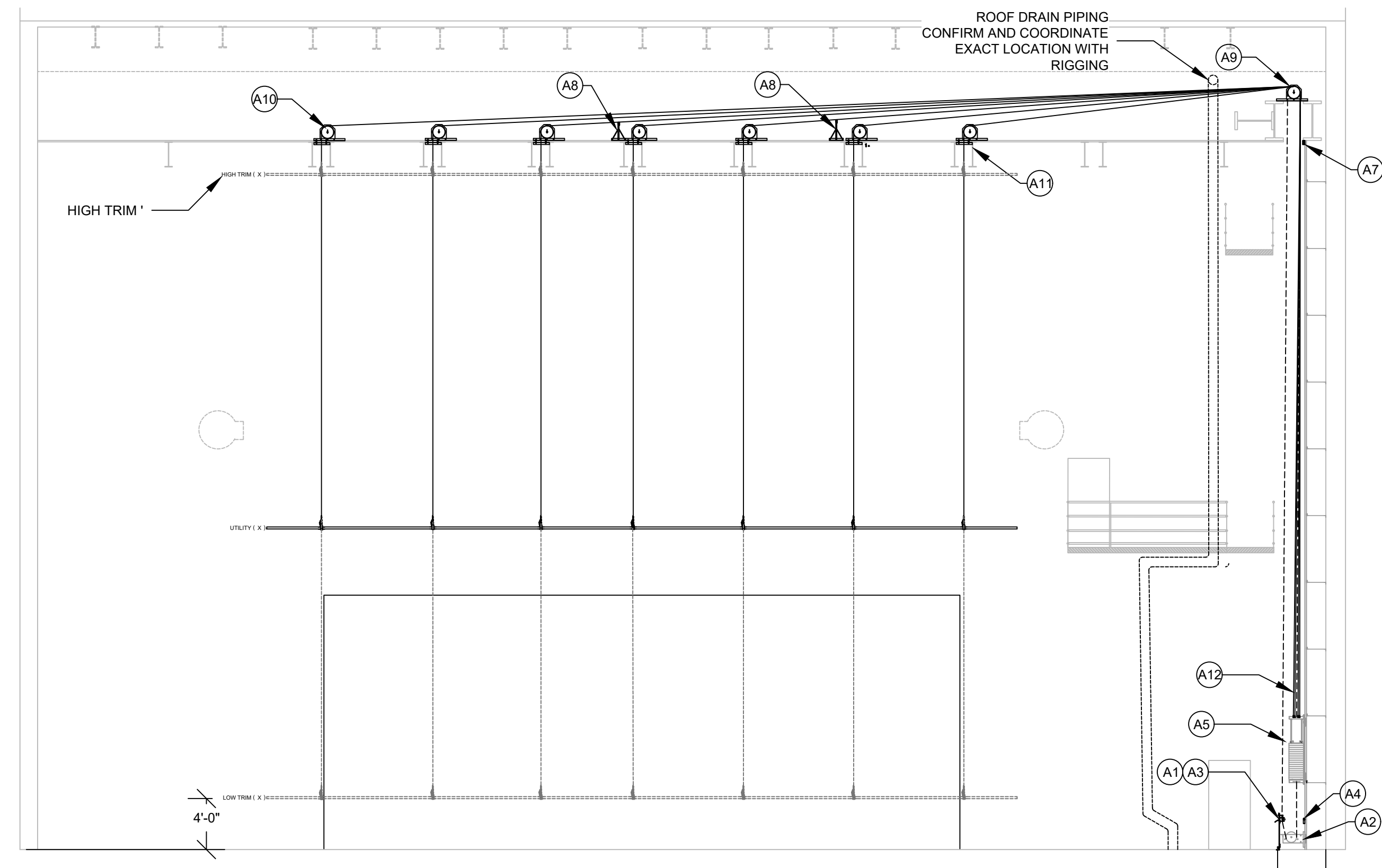
- B1- Add additional loft block and cable lift line for SO cable management
- B2- Provide new Head block to accommodate 8 lift line per bid package scope and specifications.
- B3- Provide new Cable Cradles, 1 per SO Cable. Provide yoke assembly to secure and hang vertically stacked to single lift line if more than 1 cradle is required.
- B4- Provide High trim stop for each electric's arbor at high trim of cable cradle assembly

- C2- Extend Existing J bar guides to floor for 5 lineset. Wall batten, knees, J track as necessary per bid package scope
- C3- Provide new rope lock and purchase line at existing index rail for each relocated lineset
- C4- Provide new 7" arbor with shoes per bid package scope and specifications for each relocated lineset.
- C5- Relocate existing tension blocks to floor level.
- C6- Demo existing rope locks. Index rail to remain
- C7- Demo existing double purchase arbors. Turn over to owner.
- C8- Typical Head block- replace as noted per bid package scope
- C9- Typical Loft Block- replace as noted per bid package scope and specifications

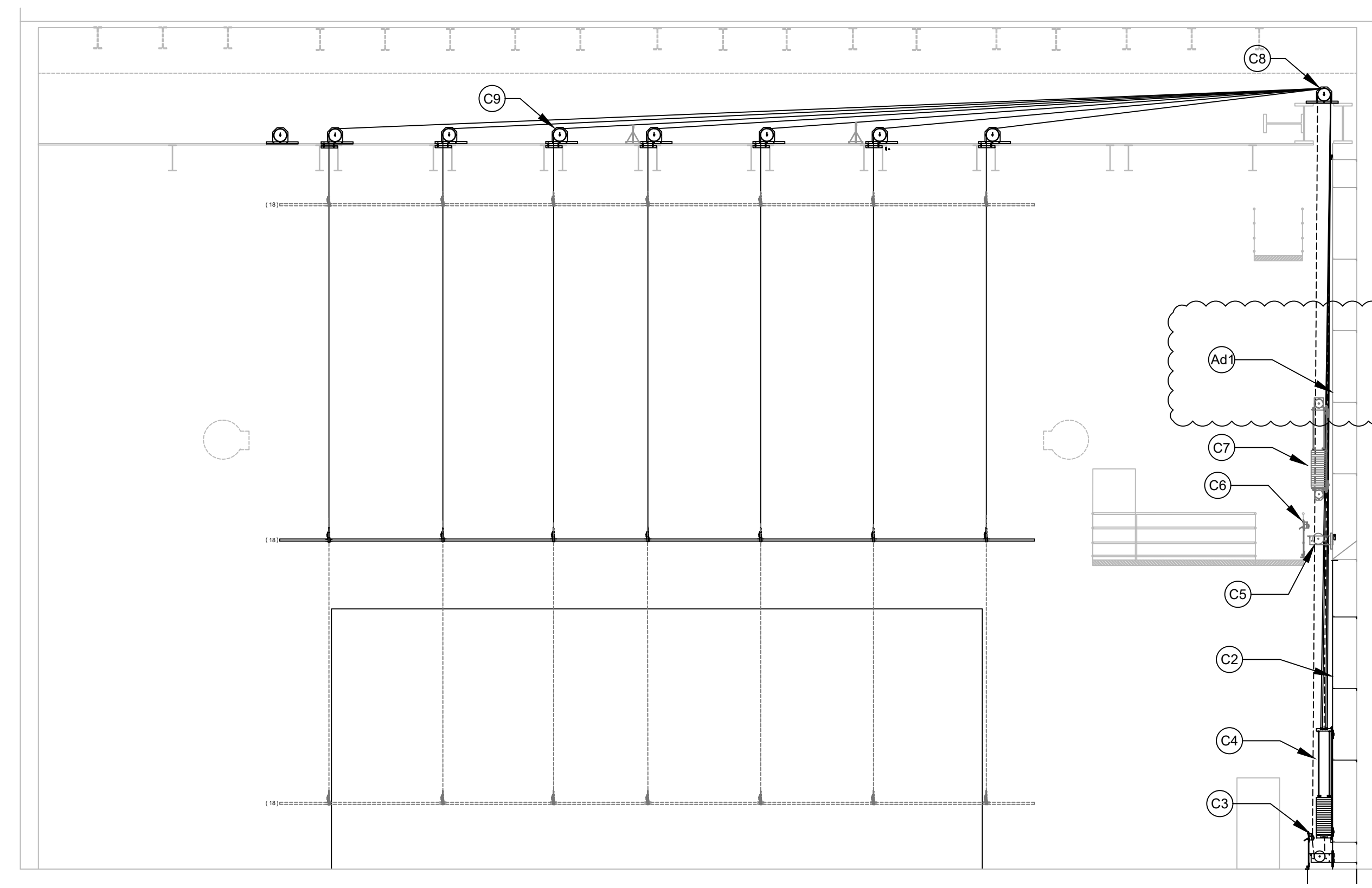
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- E2- Relocate Lighting Raceway Grid Junction box Offstage approx. 15' (Field Verify) Install each new SO cable with Box grip Kellum Rerterminate new cable per existing raceway circuit layout
- E3- Remove existing SO Cable from Raceway. Install each new SO Cable with box grip Kellum. Rerterminate per existing circuit layout and confirm address and operation of each circuit in raceway.
- E4- Relocate existing Drop Box Grid Junction Box offstage as shown. Disconnect and rerterminate cable as necessary to relocated and re-feed drop cable through grid
- E5- Existing location of Lighting Raceway Grid Junction box- to be moved as noted above

- X1- Coordinate air duct relocation with HVAC Sub Contractor

- Ad1- Relocate existing J-bar Guide wall offstage to provide proper arbor spacing and alignment with stage Level Lock Rail. Provide new Jbar, wall batten and wall knees as necessary to ensure smooth operation of relocated sets.



1 Typical Single Purchase CW Utility Line Set  
SCALE: 1/8" = 1'-0"



3 Double Purchase CW Utility Line Set Conversion to Single Purchase- Typ  
SCALE: 1/8" = 1'-0"

**WH AMOSS PAC  
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**Performance Rigging  
Elevations**