

# **CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT**

## **VOLUME II of II**

**Contract No. BE21-177**

File No. 2112



**ENGINEERING DEPARTMENT**

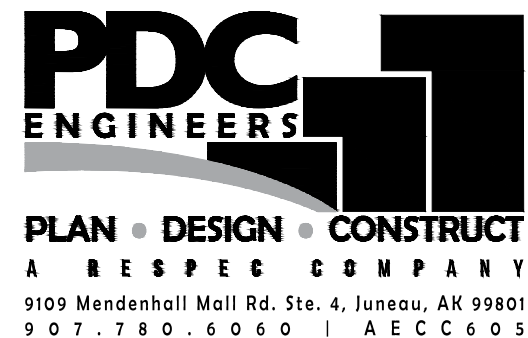
# CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT CBJ CONTRACT NO. BE21-177 CONSTRUCTION DOCUMENTS JANUARY 28, 2021

**FOR:**

**CITY AND BOROUGH OF JUNEAU  
JUNEAU, ALASKA**

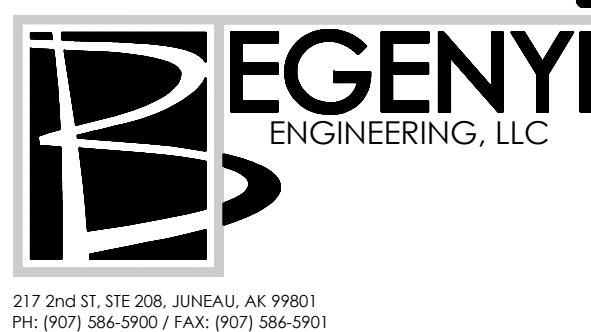
**PREPARED BY:**

**MECHANICAL:**



**PDC**  
ENGINEERS  
PLAN • DESIGN • CONSTRUCT  
A RESPEC COMPANY  
9109 Mendenhall Mall Rd. Ste. 4, Juneau, AK 99801  
907.780.6060 | AECC605

**ELECTRICAL:**



**EGENYI**  
ENGINEERING, LLC  
217 2nd ST, STE 208, JUNEAU, AK 99801  
PH: (907) 586-5900 / FAX: (907) 586-5901

**ARCHITECTURAL:**



Jensen  
Yorba  
Wall  
Inc.  
522 WEST 10TH STREET, JUNEAU, ALASKA 99801  
PH: (907) 586-1070

**MECHANICAL SHEET LIST**

NUMBER	TITLE
M001	SYMBOLS AND ABBREVIATIONS
M002	SCHEDULES
MD101	JUNEAU FIRE STATION VEHICLE EXHAUST PLAN - DEMO
MD102	DOUGLAS FIRE STATION VEHICLE EXHAUST PLAN - DEMO
MD103	GLACIER VALLEY FIRE STATION VEHICLE EXHAUST PLAN - DEMO
MD104	AUKE BAY FIRE STATION VEHICLE EXHAUST PLAN - DEMO
M101	JUNEAU FIRE STATION VEHICLE EXHAUST PLAN
M102	DOUGLAS FIRE STATION VEHICLE EXHAUST PLAN
M103	GLACIER VALLEY FIRE STATION VEHICLE EXHAUST PLAN
M104	AUKE BAY FIRE STATION VEHICLE EXHAUST PLAN
M201	JUNEAU FIRE STATION ROOF PLAN
M202	DOUGLAS FIRE STATION ROOF PLAN
M203	GLACIER VALLEY FIRE STATION ROOF PLAN
M204	AUKE BAY FIRE STATION ROOF PLAN
M301	MECHANICAL DETAILS AND DIAGRAMS

**ELECTRICAL SHEET LIST**

NUMBER	TITLE
E001	LEGEND AND MECHANICAL EQUIPMENT SCHEDULE
E101	JUNEAU FIRE STATION ELECTRICAL DEMOLITION PLAN
E102	DOUGLAS FIRE STATION ELECTRICAL DEMOLITION PLAN
E103	GLACIER FIRE STATION ELECTRICAL DEMOLITION PLAN
E104	AUKE BAY FIRE STATION ELECTRICAL DEMOLITION PLAN
E201	JUNEAU FIRE STATION ELECTRICAL PLAN
E202	DOUGLAS FIRE STATION ELECTRICAL PLAN
E203	GLACIER FIRE STATION ELECTRICAL PLAN
E204	AUKE BAY FIRE STATION ELECTRICAL PLAN
E301	SCHEDULES
E302	SCHEDULES
E401	DIAGRAMS
E402	DIAGRAMS

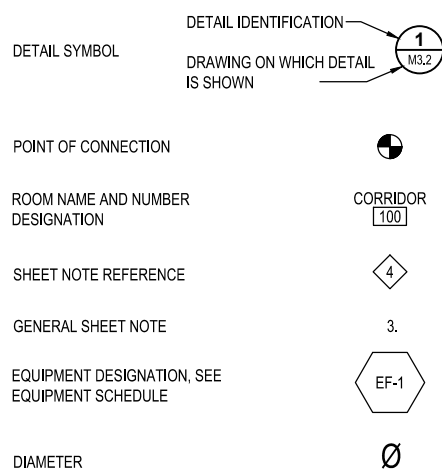
**ARCHITECTURAL SHEET LIST**

NUMBER	TITLE
A101	JUNEAU FIRE STATION FLOOR PLAN
A102	DOUGLAS FIRE STATION FLOOR PLAN
A103	GLACIER VALLEY FIRE STATION FLOOR PLAN
A104	AUKE BAY FIRE STATION FLOOR PLAN
A201	JUNEAU FIRE STATION ROOF PLAN
A202	DOUGLAS FIRE STATION ROOF PLAN
A203	GLACIER VALLEY FIRE STATION ROOF PLAN
A303	GLACIER VALLEY FIRE STATION EXTERIOR ELEVATION
A801	DETAILS

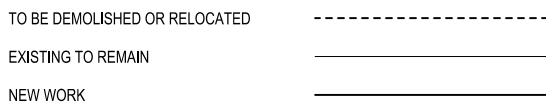
**STRUCTURAL SHEET LIST**

NUMBER	TITLE
S001	GENERAL NOTES & ABBREVIATIONS
S101	JUNEAU FIRE STATION PLAN
S102	DOUGLAS FIRE STATION PLAN
S103	GLACIER VALLEY FIRE STATION PLAN
S104	AUKE BAY FIRE STATION PLAN
S201	JUNEAU FIRE STATION DETAILS
S202	DOUGLAS FIRE STATION DETAILS
S203	GLACIER VALLEY FIRE STATION DETAILS
S204	AUKE BAY FIRE STATION DETAILS

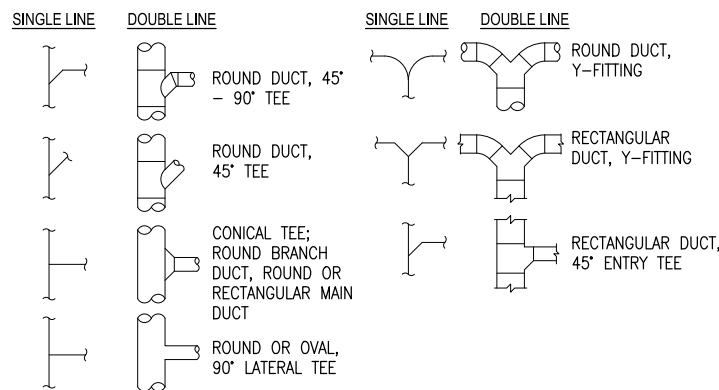
**GENERAL**



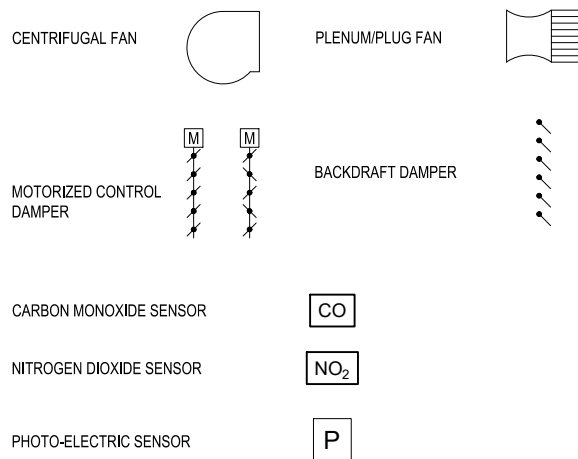
**CONSTRUCTION LINETYPES**



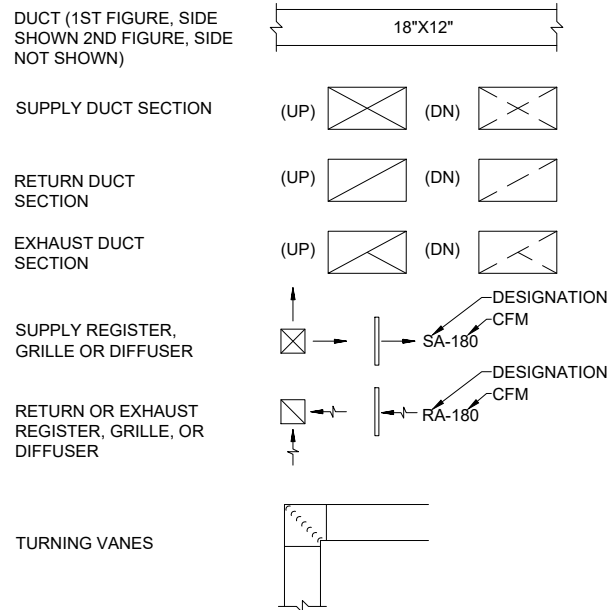
**DUCT SYMBOLS**



**VENTILATION EQUIPMENT SYMBOLS**



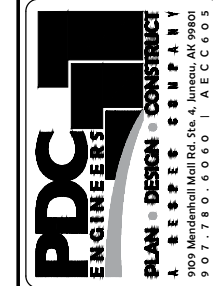
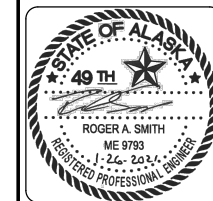
**VENTILATION**



**ABBREVIATIONS**

AFF	ABOVE FINISHED FLOOR
AFU	AIR FILTRATION UNIT
AHU	AIR HANDLING UNIT
BTU	BRITISH THERMAL UNIT
CFM	CUBIC FEET PER MINUTE
CO	CARBON MONOXIDE
CO2	CARBON DIOXIDE
CUH	CABINET UNIT HEATER
(D)	DEMO
DDC	DIRECT DIGITAL CONTROLS
DN	DOWN
(E)	EXISTING
EA	EXHAUST AIR
EAD	EXHAUST AIR DAMPER
EF	EXHAUST FAN
GPM	GALLONS PER MINUTE
HP	HORSE POWER
HZ	HERTZ
MAF	MAKE-UP AIR FAN
MBH	THOUSAND BTU'S PER HOUR
NC	NORMALLY CLOSED
NO	NORMALLY OPENED
OAD	OUTSIDE AIR DAMPER
OSA	OUTSIDE AIR
PD	PRESSURE DROP
PH	PHASE
PSI	POUNDS PER SQUARE INCH
RAD	RETURN AIR DAMPER
RD	ROOF DRAIN
RV	ROOF VENTILATOR
SA	SUPPLY AIR
SD	SMOKE DAMPER
SS	STAINLESS STEEL
TYP.	TYPICAL
UH	UNIT HEATER
VEF	VEHICLE EXHAUST FAN
VTR	VENT THROUGH ROOF
VU	VENTILATING UNIT
W.C.	WATER COLUMN

CONSULTANT :



PROJECT :  
**CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT**  
 CBJ CONTRACT NO. BE21-177  
 JUNEAU, ALASKA

SHEET TITLE :  
**SYMBOLS AND ABBREVIATIONS**

DESIGN	RS
DRAWN	DMC
CHECKED	RS
DATE	01/28/2021

PROJECT No.  
**19309.01JN**  
 SHEET NUMBER

**M001**

No.	Date	Item

1" IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION, AFFECTING ALL LABELED SCALES.

**FAN SCHEDULE**

MARK	STATION	MANUFACTURER	MODEL	AIR VOLUME CFM (LOW)	AIR VOLUME CFM (HIGH)	TSP @ HIGH SPEED IN H2O	HIGH SPEED RPM	ELECTRICAL DATA			GAS DETECTION CONTROL PANEL		COMMENTS
								HP	VOLTS	PHASE	NORMAL OPERATION	GAS ALARM OR OVERRIDE	
A-EF-1A	JUNEAU	GREENHECK	SQ-160-VG	0	3200	1.00	1425	2.0	208	1	EF - OFF. MAKE-UP DAMPER CLOSED.	EF - ON. MAKE-UP DAMPER OPEN. MAF - ON.	DIRECT DRIVE CENTRIFUGAL INLINE CABINET FAN. GALVANIZED STEEL HOUSING WITH DUCT COLLARS. CENTRIFUGAL BACKWARD INCLINED ALUMINUM WHEEL. VARIGREEN MOTOR MOUNTED SPEED DIAL WITH AIRFLOW AS INDICATED. BACKDRAFT DAMPER. HUNG FROM STRUCTURE WITH SEISMIC VIBRATION ISOLATORS. INTEGRATE WITH GAS DETECTION SYSTEM CONTROL PANEL.
A-EF-1B	JUNEAU	GREENHECK	SQ-120-VG	325	1300	0.75	1550	0.5	208	1	EF - LOW SPEED.	EF - HIGH SPEED.	DIRECT DRIVE CENTRIFUGAL INLINE CABINET FAN. GALVANIZED STEEL HOUSING WITH DUCT COLLARS. CENTRIFUGAL BACKWARD INCLINED ALUMINUM WHEEL. VARIGREEN TYPE TWO SPEED FAN UNIT WITH HIGH AND LOW AIRFLOW AS INDICATED. BACKDRAFT DAMPER. HUNG FROM STRUCTURE WITH SEISMIC VIBRATION ISOLATORS. INTEGRATE WITH GAS DETECTION SYSTEM CONTROL PANEL.
A-EF-2	DOUGLAS	GREENHECK	G-163-VG	360	2400	0.50	1050	1.0	208	1	EF - LOW SPEED.	EF - HIGH SPEED.	DIRECT DRIVE CENTRIFUGAL ROOF MOUNTED DOWNBLAST TYPE. ALUMINUM HOUSING WITH CENTRIFUGAL BACKWARD INCLINED ALUMINUM WHEEL. VARIGREEN TYPE TWO SPEED FAN UNIT WITH HIGH AND LOW AIRFLOW AS INDICATED. BACKDRAFT DAMPER. PROTECTIVE COATING. INSTALL ON 18-INCH HIGH ROOF CURB. INTEGRATE WITH GAS DETECTION SYSTEM CONTROL PANEL.
A-EF-3	AUKE BAY	GREENHECK	SQ-140-VG	300	2000	0.875	1450	0.75	208	1	EF - LOW SPEED.	EF - HIGH SPEED.	DIRECT DRIVE CENTRIFUGAL INLINE CABINET FAN. GALVANIZED STEEL HOUSING WITH DUCT COLLARS. CENTRIFUGAL BACKWARD INCLINED ALUMINUM WHEEL. VARIGREEN TYPE TWO SPEED FAN UNIT WITH HIGH AND LOW AIRFLOW AS INDICATED. BACKDRAFT DAMPER. HUNG FROM STRUCTURE WITH SEISMIC VIBRATION ISOLATORS. INTEGRATE WITH GAS DETECTION SYSTEM CONTROL PANEL.
A-EF-4A	GLACIER STRUCTURAL	GREENHECK	SQ-160-VG	0	2800	1.00	1325	2.0	208	1	EF - OFF. MAKE-UP DAMPER CLOSED.	EF - ON. MAKE-UP DAMPER OPEN.	DIRECT DRIVE CENTRIFUGAL INLINE CABINET FAN. GALVANIZED STEEL HOUSING WITH DUCT COLLARS. CENTRIFUGAL BACKWARD INCLINED ALUMINUM WHEEL. VARIGREEN MOTOR MOUNTED SPEED DIAL WITH AIRFLOW AS INDICATED. BACKDRAFT DAMPER. HUNG FROM STRUCTURE WITH SEISMIC VIBRATION ISOLATORS. INTEGRATE WITH GAS DETECTION SYSTEM CONTROL PANEL.
A-EF-4B	GLACIER STRUCTURAL	GREENHECK	SQ-120-VG	300	1000	0.75	1500	0.5	208	1	EF - LOW SPEED.	EF - HIGH SPEED.	DIRECT DRIVE CENTRIFUGAL INLINE CABINET FAN. GALVANIZED STEEL HOUSING WITH DUCT COLLARS. CENTRIFUGAL BACKWARD INCLINED ALUMINUM WHEEL. VARIGREEN TYPE TWO SPEED FAN UNIT WITH HIGH AND LOW AIRFLOW AS INDICATED. BACKDRAFT DAMPER. HUNG FROM STRUCTURE WITH SEISMIC VIBRATION ISOLATORS. INTEGRATE WITH GAS DETECTION SYSTEM CONTROL PANEL.
A-EF-5	GLACIER AMBULANCE	GREENHECK	SQ-100-VG	150	950	0.75	1675	0.25	115	1	EF - LOW SPEED.	EF - HIGH SPEED.	DIRECT DRIVE CENTRIFUGAL INLINE CABINET FAN. GALVANIZED STEEL HOUSING WITH DUCT COLLARS. CENTRIFUGAL BACKWARD INCLINED ALUMINUM WHEEL. VARIGREEN TYPE TWO SPEED FAN UNIT WITH HIGH AND LOW AIRFLOW AS INDICATED. BACKDRAFT DAMPER. HUNG FROM STRUCTURE WITH SEISMIC VIBRATION ISOLATORS. INTEGRATE WITH GAS DETECTION SYSTEM CONTROL PANEL.
MAF-1	JUNEAU	GREENHECK	RSFP-120	0	3000	0.5	750	1.5	208	1	MAF OFF	EF - ON. MAKE-UP DAMPER OPEN. MAF - ON.	ROOF MOUNTED, NON-TEMPERED, FILTERED MAKE-UP AIR UNIT. DOUBLE WIDTH, DOUBLE INLET FORWARD CURVED FAN. BELT DRIVE. EXTRUDED ALUMINUM INLET LOUVERS. INSULATED, HINGED, ALUMINUM COVER, PROTECTIVE COATING, FACTORY DISCONNECT. 18-INCH HIGH PRE-INSULATED CURB. INTEGRATE WITH GAS DETECTION SYSTEM CONTROL PANEL. MAKE-UP AIR DAMPER TO OPEN ON FAN ACTIVATION.

**AIR FILTER SCHEDULE**

MARK	TYPE	MANUFACTURER	MODEL	ELECTRICAL DATA			COMMENTS
				HP	VOLTS	PHASE	
AFU	AIR FILTRATION UNIT	AIR VACUUM CORP	AIRVAC 911	0.75	115	1	ENGINE EMISSION 4-STAGE AIR FILTRATION SYSTEM. COMPLETE WITH PRE-FILTER, HEPA 3000 FILTER, AND GAS PHASE EXTRACTOR MULTISORB 3000 FILTERS. FILTER GAUGE. 3/4 HP 115 VOLT FAN MOTOR. 8 FOOT ELECTRICAL CORD. UNIT SUSPENDED WHERE SHOWN WITH BOTTOM OF UNIT AT 10" AFF TO 13" AFF. CONTROL PANEL WITH MANUAL PUSH BUTTON AND REMOTE MAGNETIC DOOR SWITCHES AND PHOTOELECTRIC SENSORS FOR ACTIVATION. UL LISTED AND SHALL MEET NFPA 1500 AND OSHA STANDARDS. 16 GAUGE STEEL CABINET WITH BAKED POWDER COAT FINISH.

**GAS DETECTION SYSTEM SCHEDULE**

MARK	TYPE	MANUFACTURER	MODEL	ELECTRICAL DATA			COMMENTS
				HP	VOLTS	PHASE	
GAS DETECTION CONTROL PANEL	GAS DETECTION AND FAN ACTIVATION	TOXALERT	GVU-3 AND GVU-6	1 AMP	115	1	GAS DETECTION SYSTEM AND CONTROL. COMPLETE WITH CONTROL PANEL, NO2 SENSORS, CO SENSORS, AND CONTROL RELAYS AND SIGNALS FOR FAN ACTIVATION AND DAMPER CONTROL. CONTROL PANEL SHALL INCLUDE PILOT LIGHTS, LOW VOLTAGE TRANSFORMER, AND HAVE MANUAL OVERRIDE TOGGLE SWITCH AND REMOTE GAS SENSORS FOR ACTIVATION. SHALL INCLUDE LOW STAGE RELAY, HIGH STAGE RELAY, AND ALARM STAGE RELAY. AUDIBLE AND VISUAL ALARM AT ALARM STAGE LEVEL. UL LISTED. INTEGRATE WITH EXHAUST FAN OPERATION.

**LOUVER SCHEDULE**

MARK	DESCRIPTION	FLOW (CFM)	HEIGHT (IN)	WIDTH (IN)	MANUFACTURER	MODEL	COMMENTS
LV-1	GLACIER STATION MAKE-UP AIR	3800	36	48	RUSKIN	ELF6375DXH	STANDARD FRAME. HEAVY DUTY, DRAINABLE. 70% KYNAR FINISH. CUSTOM COLOR BY ARCHITECT.

**DIFFUSER / GRILLE SCHEDULE**

MARK	TYPE	MANUFACTURER	MODEL	SIZE	COLOR	DESCRIPTION
EG-1	DUCT MOUNT	TITUS	S301FL	SEE DRAWINGS	WHITE	ALUMINUM SPIRAL DUCT MOUNTED GRILLE. 3/4-INCH BLADE SPACING. SINGLE DEFLECTION.
SG-1	DUCT MOUNT	TITUS	S300FL	SEE DRAWINGS	WHITE	ALUMINUM SPIRAL DUCT MOUNTED GRILLE. 3/4-INCH BLADE SPACING. DOUBLE DEFLECTION.

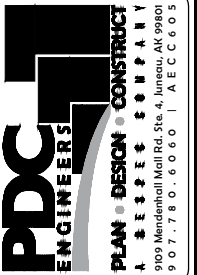
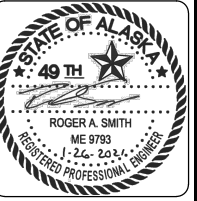
**SHEET NOTES**

- ALTERNATE #1 - AUKE BAY STATION: ALL WORK RELATED TO THE AUKE BAY STATION IS IN ALTERNATE #1.
- ALTERNATE #2 - DOUGLAS STATION: ALL WORK RELATED TO DOUGLAS STATION IS IN ALTERNATE #2.

**CODE NOTES**

- ALL WORK SHALL BE INSTALLED IN CONFORMANCE WITH APPLICABLE BUILDING CODES INCLUDING 2012 INTERNATIONAL BUILDING CODES, 2012 INTERNATIONAL MECHANICAL CODE, 2017 NATIONAL ELECTRICAL CODE, STATE OF ALASKA AND CITY AND BOROUGH OF JUNEAU REQUIREMENTS.
- ALL DUCT CONSTRUCTION SHALL CONFORM TO SMACNA STANDARDS.

CONSULTANT :



PROJECT :  
**CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT**  
**CBJ CONTRACT NO. BE21-177**  
 JUNEAU, ALASKA

SHEET TITLE :  
**SCHEDULES**

DESIGN	RS
DRAWN	DMC
CHECKED	RS
DATE	01/28/2021

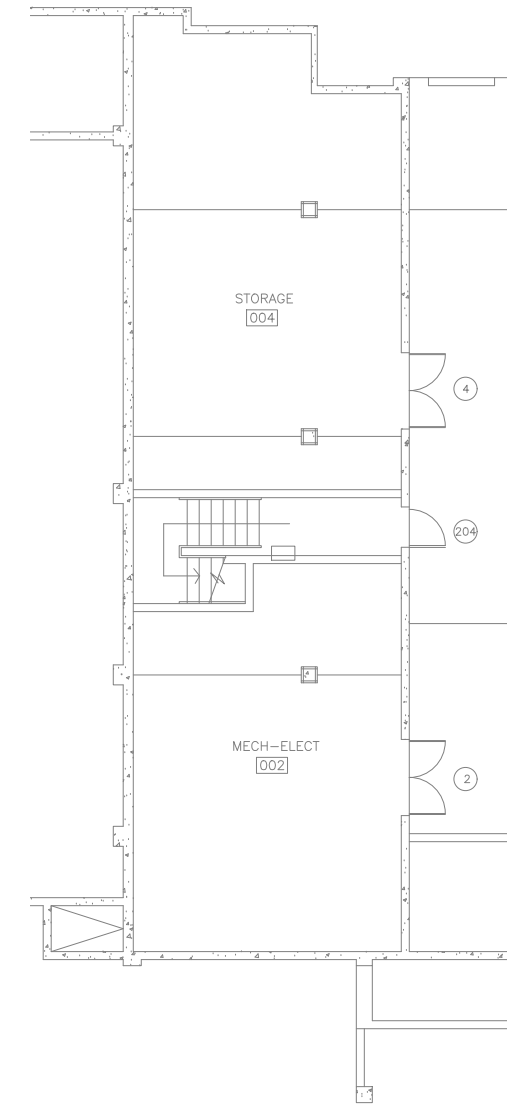
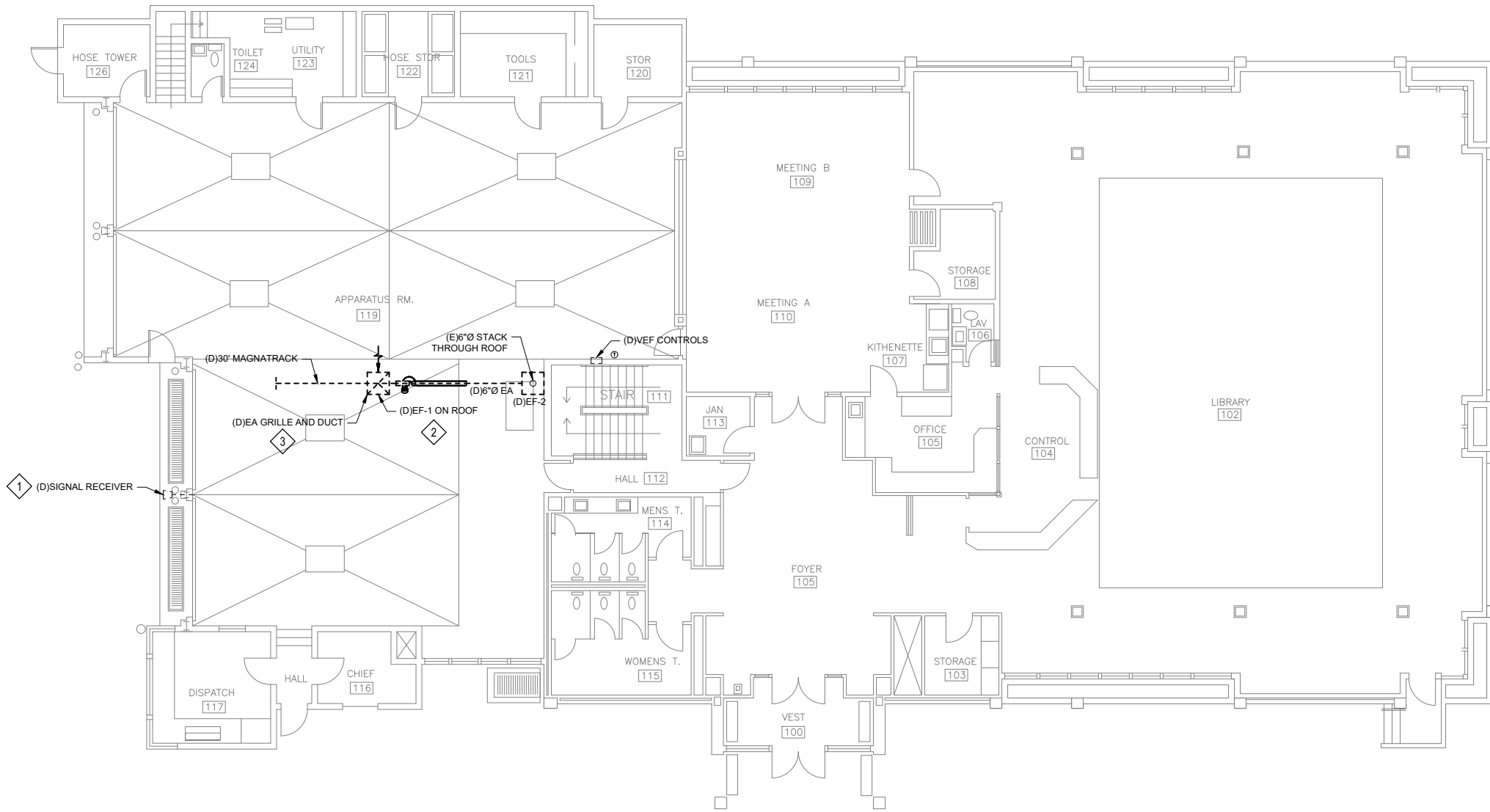
PROJECT No.  
**19309.01JN**  
SHEET NUMBER

**M002**

No.	Date	Item

P:\2019\19309.01\IN-CBJ\_CCFR\19309.01\IN-CBJ\_M002 SCHEDULES - Jn. 28, 2021 - 4:05 PM





**1 DOUGLAS FIRE STATION MAIN FLOOR PLAN - DEMO - ALTERNATE #2**  
 MD102 SCALE: 1/8" = 1'  
 8 4 0 8 16 24  
 SCALE IN FEET



**2 PARTIAL LOWER FLOOR PLAN - DEMO - ALTERNATE #2**  
 MD102 SCALE: 1/8" = 1'

**SHEET KEYNOTES**

- 1 DEMOLISH CONTROL TO VEF PANEL. ABANDON ELECTRICAL J-BOX IN PLACE.
- 2 DEMOLISH FAN. PREPARE FOR NEW FAN AND DUCT INSTALLATION.
- 3 EXISTING EA GRILLE AND EA DUCT TO REMAIN. MODIFY AS NEEDED FOR NEW EXHAUST FAN INSTALLATION.

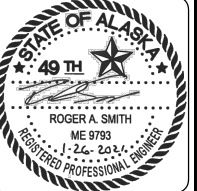
**SHEET NOTES**

- 1. DEMOLISH VEHICLE EXHAUST SYSTEM, INCLUDING ALL ACCESSORIES, SUPPORTS, AND CONTROLS.
- 2. ALTERNATE #2 - DOUGLAS STATION: ALL WORK RELATED TO THE DOUGLAS STATION IS IN ALTERNATE #2.

No.	Date	Item

DESIGN	RS
DRAWN	DMC
CHECKED	RS
DATE	01/28/2021
PROJECT No.	19309.01JN
SHEET NUMBER	MD102

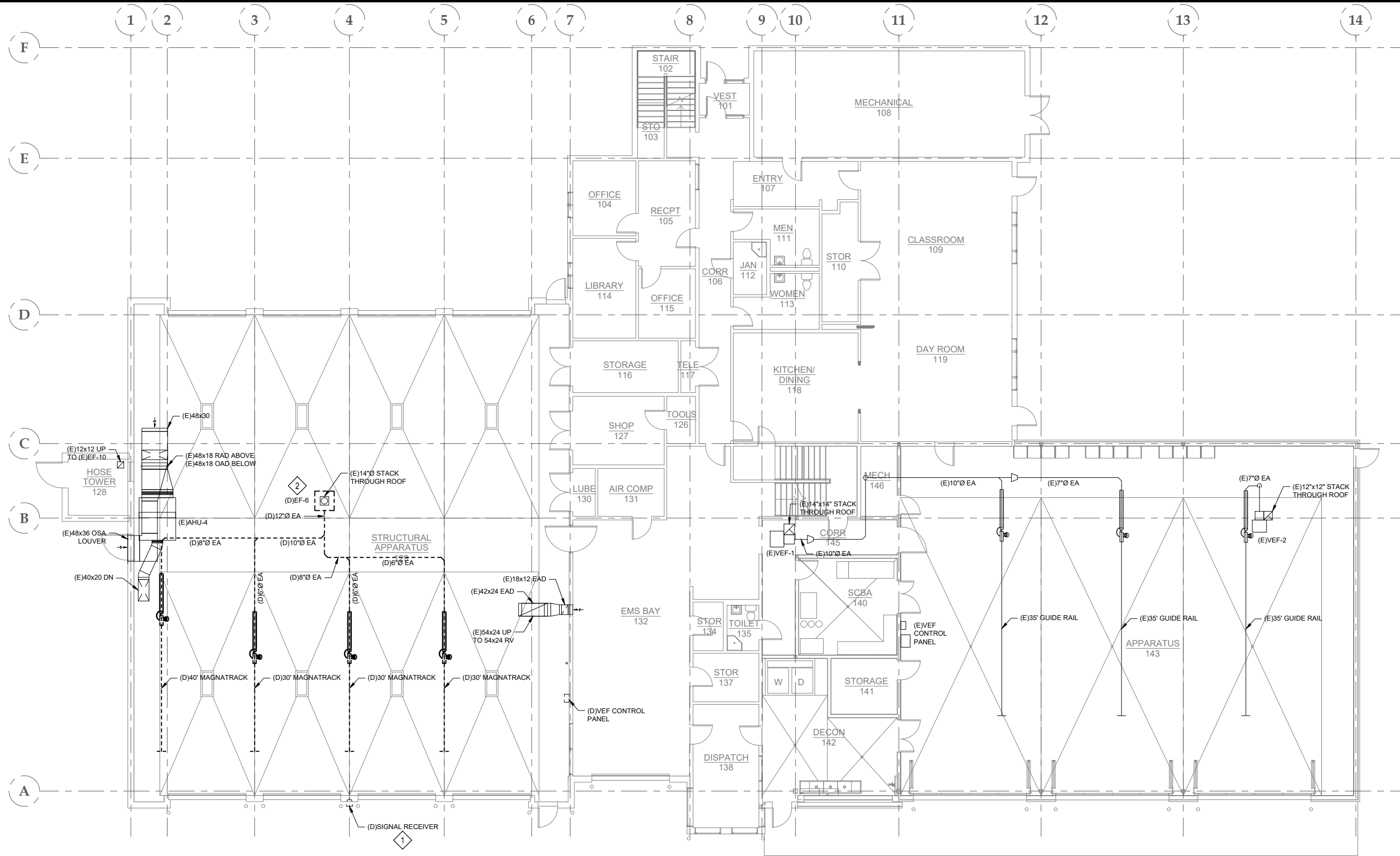
CONSULTANT :



PROJECT :  
**CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT**  
**CBJ CONTRACT NO. BE21-177**  
 JUNEAU, ALASKA

SHEET TITLE :  
**DOUGLAS FIRE STATION VEHICLE EXHAUST PLAN - DEMO**

1" IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION, AFFECTING ALL LABELED SCALES



**1** GLACIER VALLEY FIRE STATION PLAN - DEMO  
 MD103  
 SCALE: 1/8" = 1'  
 8 4 0 8 16 24  
 SCALE IN FEET

- SHEET KEYNOTES**
- 1 DEMOLISH CONTROL TO VEF PANEL. ABANDON ELECTRICAL J-BOX IN PLACE.
  - 2 DEMOLISH FAN. PREPARE FOR NEW FAN AND DUCT INSTALLATION.

- SHEET NOTES**
1. DEMOLISH VEHICLE EXHAUST SYSTEM, INCLUDING ALL ACCESSORIES, SUPPORTS, AND CONTROLS.
  2. VEHICLE EXHAUST SYSTEM IN ARFF APPARATUS 143 TO REMAIN AS SHOWN.



No.	Date	Item

CONSULTANT:

PROJECT: CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT CBJ CONTRACT NO. BE21-177 JUNEAU, ALASKA

SHEET TITLE: GLACIER VALLEY FIRE STATION VEHICLE EXHAUST PLAN - DEMO

DESIGN RS  
 DRAWN DMC  
 CHECKED RS  
 DATE 01/28/2021

PROJECT No. 19309.01JN  
 SHEET NUMBER

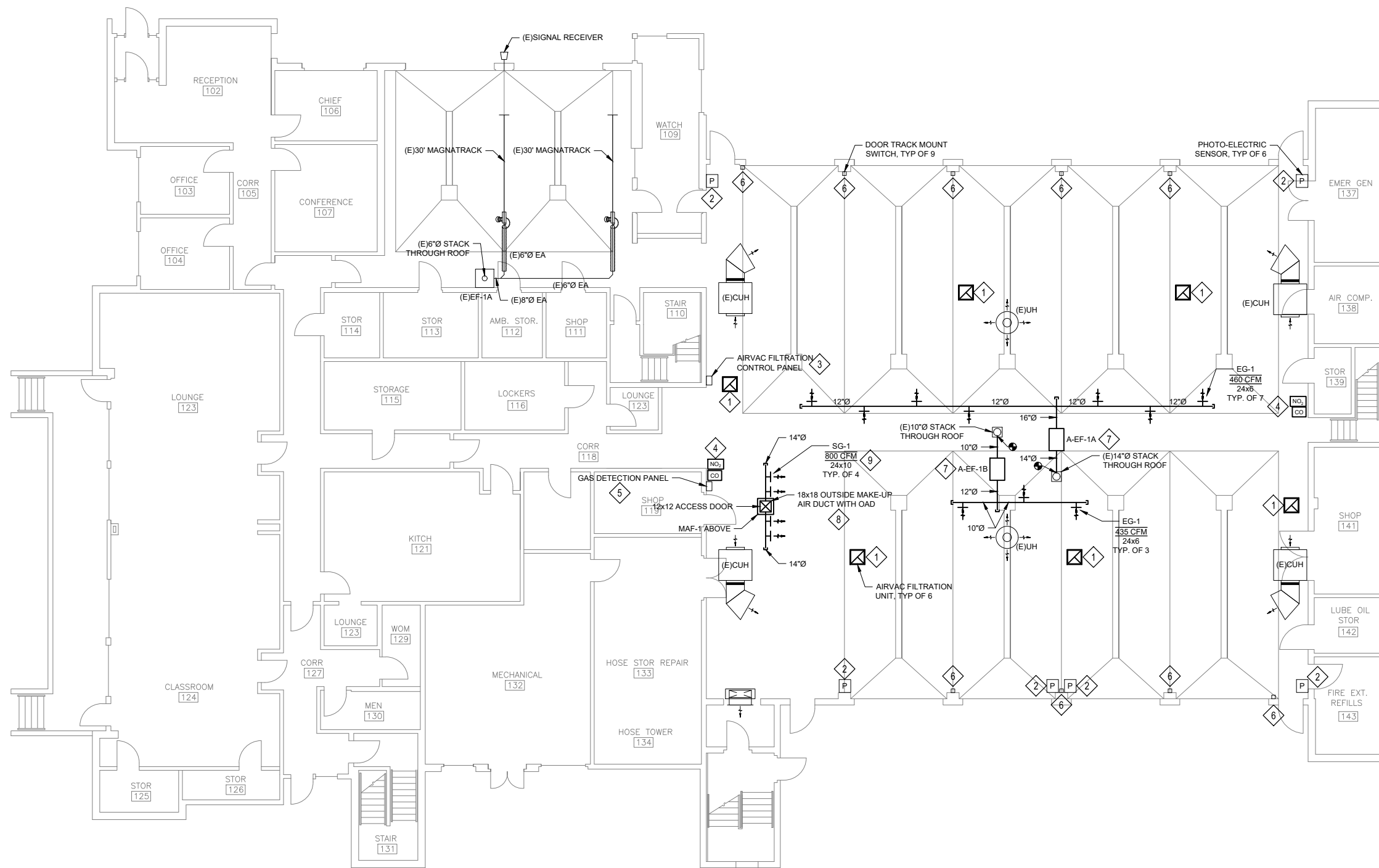
**MD103**





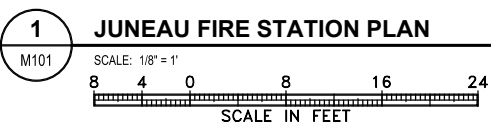
IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION, AFFECTING ALL LABELED SCALES

P:\2019\19309.01\JUN-CBU\_CGFSM\M101\JUN-CBU\_CGFSM\M101\_JUNEAU FIRE STATION VEHICLE EXHAUST PLAN Jan 28, 2021 4:06 PM



**SHEET NOTES**

1. INSTALL ALL EQUIPMENT, SENSORS, AND CONTROLS PER MANUFACTURER'S REQUIREMENTS.
2. COORDINATE FINAL LOCATION OF ALL EQUIPMENT, SENSORS, PANELS, AND DUCTWORK WITH EXISTING STRUCTURE, LIGHTING, PIPING, EQUIPMENT, AND OTHER OBSTRUCTIONS. VERIFY ALL EXISTING CONDITIONS ON SITE.



**SHEET KEYNOTES**

- |   |   |  |
|---|---|--|
| <ul style="list-style-type: none"> <li>1 SUSPEND AIRVAC AIR FILTRATION UNIT (AFU) WITH BOTTOM INSTALLED AT BETWEEN 11' AND 13' AFF. SEE STRUCTURAL DRAWINGS FOR SUPPORT AND BRACING REQUIREMENTS. POWER AND CONTROL ACTIVATION FROM AIRVAC FILTRATION CONTROL PANEL. OFFSET UNIT FROM STRUCTURAL BEAM. HANG UNITS FROM SIDE OF BEAM TO ALLOW FOR AIR FLOW BELOW BEAM.</li> <li>2 AIR FILTRATION PHOTO-ELECTRIC SENSOR. LOCATE AT 7' TO 8' AFF AND ACCORDING TO MANUFACTURER'S INSTALLATION REQUIREMENTS. ROUTE SENSOR CONTROL WIRING TO AIRVAC FILTRATION CONTROL PANEL FOR ACTIVATION OF AIR FILTRATION UNITS. AIR FILTRATION UNITS SHALL ACTIVATE ON MOVEMENT OF VEHICLES AND ENGINES WHEN EXITING OR ENTERING BUILDING.</li> <li>3 INSTALL AIRVAC FILTRATION CONTROL PANEL WHERE SHOWN. PROVIDE 120/1 RECEPTACLE AT UNIT POWERED THROUGH AIRVAC FILTRATION CONTROL PANEL FOR FILTRATION UNIT POWER CORD. EACH UNIT SHALL HAVE SEPARATE POWER SUPPLY FROM ELECTRICAL PANEL WITH CIRCUIT BREAKER.</li> <li>4 NITROGEN DIOXIDE AND CARBON MONOXIDE SENSORS FOR GAS DETECTION SYSTEM. LOCATE WHERE SHOWN. CONNECT TO GAS DETECTION CONTROL PANEL FOR ACTIVATION OF EXHAUST FANS. EXHAUST FANS SHALL ACTIVATE HIGH SPEED ON DETECTION OF CO AND NO2 ABOVE SETPOINTS.</li> </ul> | <ul style="list-style-type: none"> <li>5 INSTALL GAS DETECTION CONTROL PANEL WHERE SHOWN.</li> <li>6 DOOR TRACK MOUNT SWITCH. INSTALL ON BAY DOOR RAILS ACCORDING TO MANUFACTURER'S INSTALLATION REQUIREMENTS. ROUTE SENSOR CONTROL WIRING TO AIRVAC FILTRATION CONTROL PANEL FOR ACTIVATION OF AIR FILTRATION UNITS. AIR FILTRATION UNITS SHALL ACTIVATE ON DETECTION OF DOOR TRACK SWITCH.</li> <li>7 SUSPEND FAN UNIT WHERE SHOWN WITH BOTTOM ABOVE 11' AFF. DUCTWORK SHALL BE INSTALLED AS HIGH AS POSSIBLE BELOW STRUCTURE. SEE STRUCTURAL DRAWINGS FOR SUPPORT AND BRACING REQUIREMENTS. PROVIDE DISCONNECT AT UNIT. CONTROL POWER FOR ACTIVATION FROM GAS DETECTION CONTROL PANEL.</li> <li>8 INSTALL MAKE-UP AIR FAN ON ROOF AND OUTDOOR AIR DAMPER. EXTEND MAKE-UP AIR DUCT 6 FEET BELOW BOTTOM OF ROOF. DISCHARGE SHALL BE BELOW AND AWAY FROM ADJACENT SPRINKLER PIPING. CUT/PATCH ROOF AS REQUIRED. SEE ARCHITECTURAL. MAF-1 FAN SHALL ACTIVATE AND DAMPER SHALL OPEN ON COMMAND FROM GAS DETECTION CONTROL PANEL AND ACTIVATION OF EXHAUST FAN HIGH SPEED MODE. DAMPER SHALL REMAIN CLOSED AND MAF-1 SHALL REMAIN OFF WHEN EF IS IN NORMAL LOW SPEED MODE AND WHEN EF IS OFF.</li> </ul> | <ul style="list-style-type: none"> <li>9 ANGLE SG-1 DIFFUSERS DOWN AT 60° BELOW HORIZONTAL.</li> </ul> |
|---|---|--|

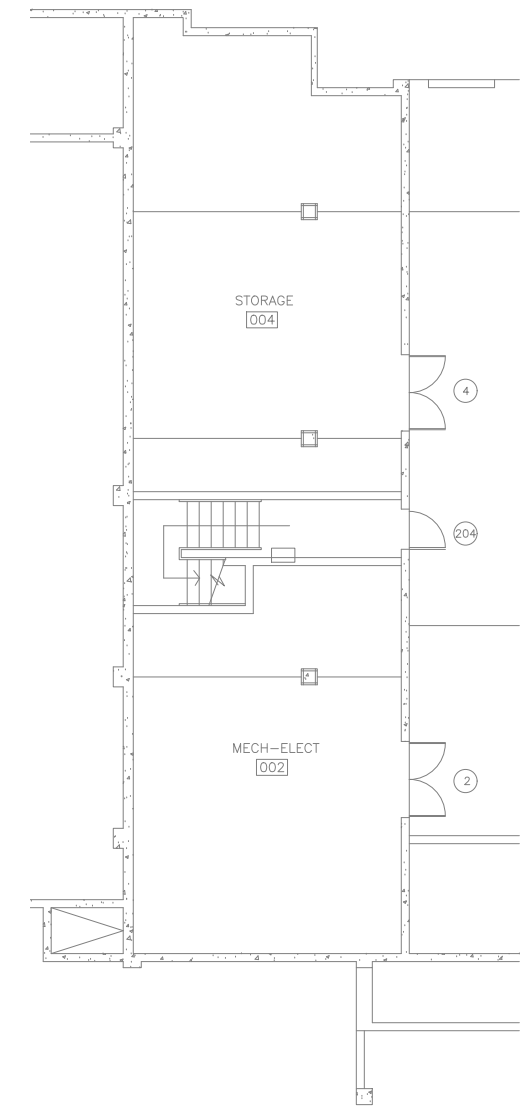
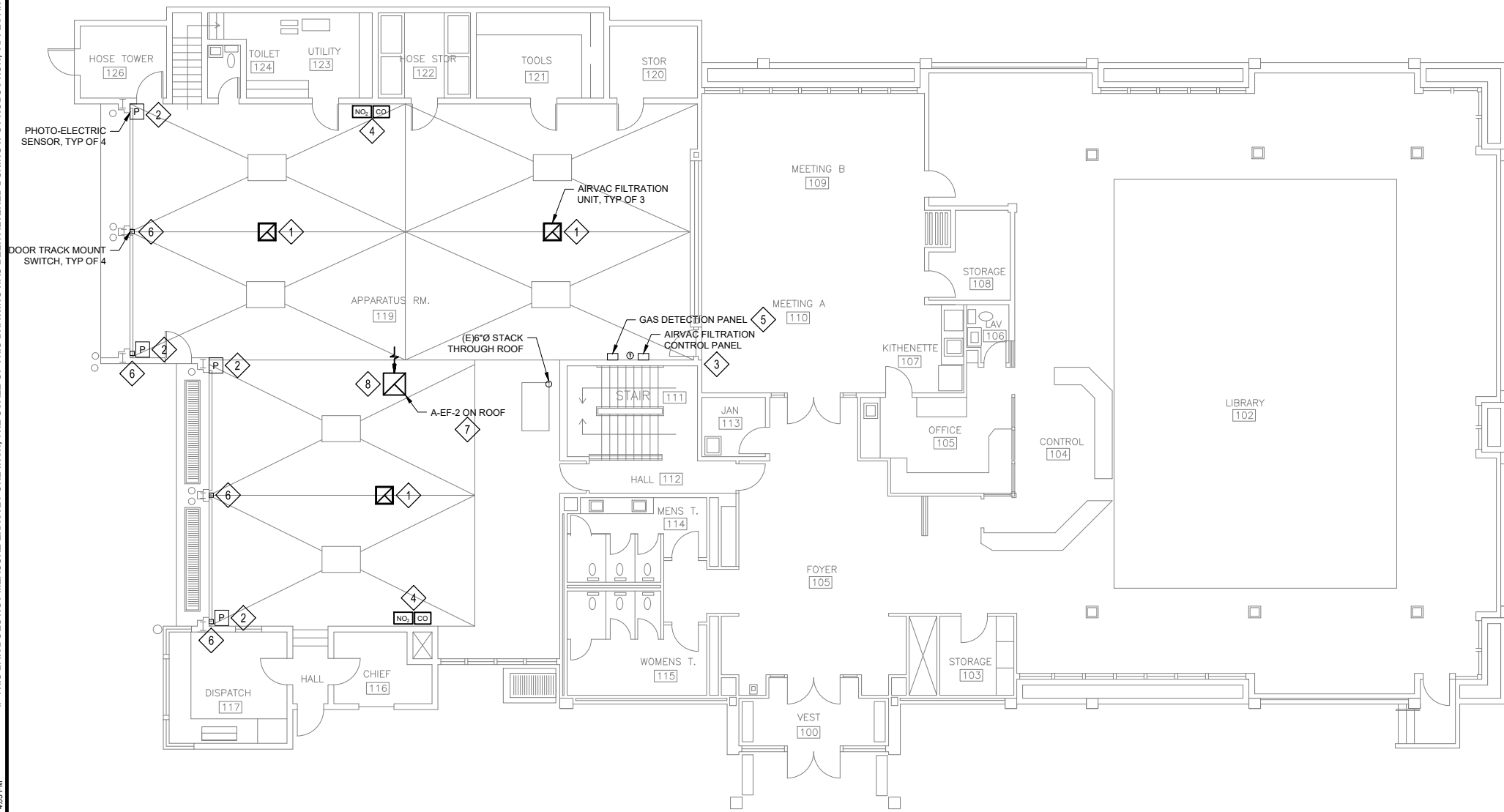
DESIGN	RS	
DRAWN	DMC	
CHECKED	RS	
DATE	01/28/2021	
PROJECT No. <b>19309.01JN</b>		
SHEET NUMBER <b>M101</b>		
No.	Date	Item
REVISIONS		

CONSULTANT:

**PDC**  
**ENGINEERS**  
**PLAN - DESIGN - CONSTRUCT**  
 A E S P E C I A L I S T C O M P A N Y  
 9909 Mendonhall Mall Rd. Ste. 4, Juneau, AK 99801  
 907.780.6060 | A E C C 605

PROJECT:  
**CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT**  
**CBJ CONTRACT NO. BE21-177**  
**JUNEAU, ALASKA**

SHEET TITLE:  
**JUNEAU FIRE STATION VEHICLE EXHAUST PLAN**



**1 DOUGLAS FIRE STATION MAIN FLOOR PLAN - ALTERNATE #2**  
 M102 SCALE: 1/8" = 1'  
 8 4 0 8 16 24  
 SCALE IN FEET



**2 PARTIAL LOWER FLOOR PLAN - ALTERNATE #2**  
 M102 SCALE: 1/8" = 1'

**SHEET KEYNOTES**

- 1 SUSPEND AIRVAC AIR FILTRATION UNIT (AFU) WITH BOTTOM INSTALLED AT BETWEEN 10' AND 13' AFF. SEE STRUCTURAL DRAWINGS FOR SUPPORT AND BRACING REQUIREMENTS. POWER AND CONTROL ACTIVATION FROM AIRVAC FILTRATION CONTROL PANEL.
- 2 AIR FILTRATION PHOTO-ELECTRIC SENSOR. LOCATE AT 7' TO 8' AFF AND ACCORDING TO MANUFACTURER'S INSTALLATION REQUIREMENTS. ROUTE SENSOR CONTROL WIRING TO AIRVAC FILTRATION CONTROL PANEL FOR ACTIVATION OF AIR FILTRATION UNITS. AIR FILTRATION UNITS SHALL ACTIVATE ON MOVEMENT OF VEHICLES AND ENGINES WHEN EXITING OR ENTERING BUILDING.
- 3 INSTALL AIRVAC FILTRATION CONTROL PANEL WHERE SHOWN. PROVIDE 120/1 RECEPTACLE AT UNIT POWERED THROUGH AIRVAC FILTRATION CONTROL PANEL FOR FILTRATION UNIT POWER CORD. EACH UNIT SHALL HAVE SEPARATE POWER SUPPLY FROM ELECTRICAL PANEL WITH CIRCUIT BREAKER.
- 4 NITROGEN DIOXIDE AND CARBON MONOXIDE SENSORS FOR GAS DETECTION SYSTEM. LOCATE WHERE SHOWN. CONNECT TO GAS DETECTION CONTROL PANEL FOR ACTIVATION OF EXHAUST FANS. EXHAUST FANS SHALL ACTIVATE HIGH SPEED ON DETECTION OF CO AND NO<sub>2</sub> ABOVE SETPOINTS.
- 5 INSTALL GAS DETECTION CONTROL PANEL WHERE SHOWN.
- 6 DOOR TRACK MOUNT SWITCH. INSTALL ON BAY DOOR RAILS ACCORDING TO MANUFACTURER'S INSTALLATION REQUIREMENTS. ROUTE SENSOR CONTROL WIRING TO AIRVAC FILTRATION CONTROL PANEL FOR ACTIVATION OF AIR FILTRATION UNITS. AIR FILTRATION UNITS SHALL ACTIVATE ON DETECTION OF DOOR TRACK SWITCH.

- 7 INSTALL A-EF-2 FAN UNIT IN PLACE OF EXISTING FAN ON ROOF ABOVE. PROVIDE DISCONNECT AT UNIT. CONTROL POWER FOR ACTIVATION FROM GAS DETECTION CONTROL PANEL. CONNECT TO EXISTING DUCTWORK AND EXHAUST AIR GRILLE. CUT/PATCH CEILING AS NEEDED FOR ACCESS TO DUCT IN CEILING SPACE.
- 8 EXISTING EA GRILLE AND EA DUCT UP TO ROOF EF UNIT. MODIFY EXISTING DUCT AS NEEDED FOR FAN REPLACEMENT. VERIFY EXISTING DUCT SIZES ON SITE.

**SHEET NOTES**

- 1. INSTALL ALL EQUIPMENT, SENSORS, AND CONTROLS PER MANUFACTURER'S REQUIREMENTS.
- 2. COORDINATE FINAL LOCATION OF ALL EQUIPMENT, SENSORS, PANELS, AND DUCTWORK WITH EXISTING STRUCTURE, LIGHTING, PIPING, EQUIPMENT, AND OTHER OBSTRUCTIONS. VERIFY ALL EXISTING CONDITIONS ON SITE.
- 3. ALTERNATE #2 - DOUGLAS STATION: ALL WORK RELATED TO DOUGLAS STATION IS IN ALTERNATE #2.

No.	Date	Item

CONSULTANT:

**PPDC ENGINEERS**  
 PLAN - DESIGN - CONSTRUCTION  
 A E S P E C I A L I S E D  
 9909 Mendonhall Mall Rd. Ste. 4, Juneau, AK 99801  
 907.780.6060 | A E C C 6 0 5

PROJECT: **CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT**  
**CBJ CONTRACT NO. BE21-177**  
**JUNEAU, ALASKA**

SHEET TITLE: **DOUGLAS FIRE STATION VEHICLE EXHAUST PLAN**

DESIGN	RS
DRAWN	DMC
CHECKED	RS
DATE	01/28/2021

PROJECT No. **19309.01JN**  
 SHEET NUMBER **M102**

1" IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION, AFFECTING ALL LABELED SCALES.

**SHEET KEYNOTES**

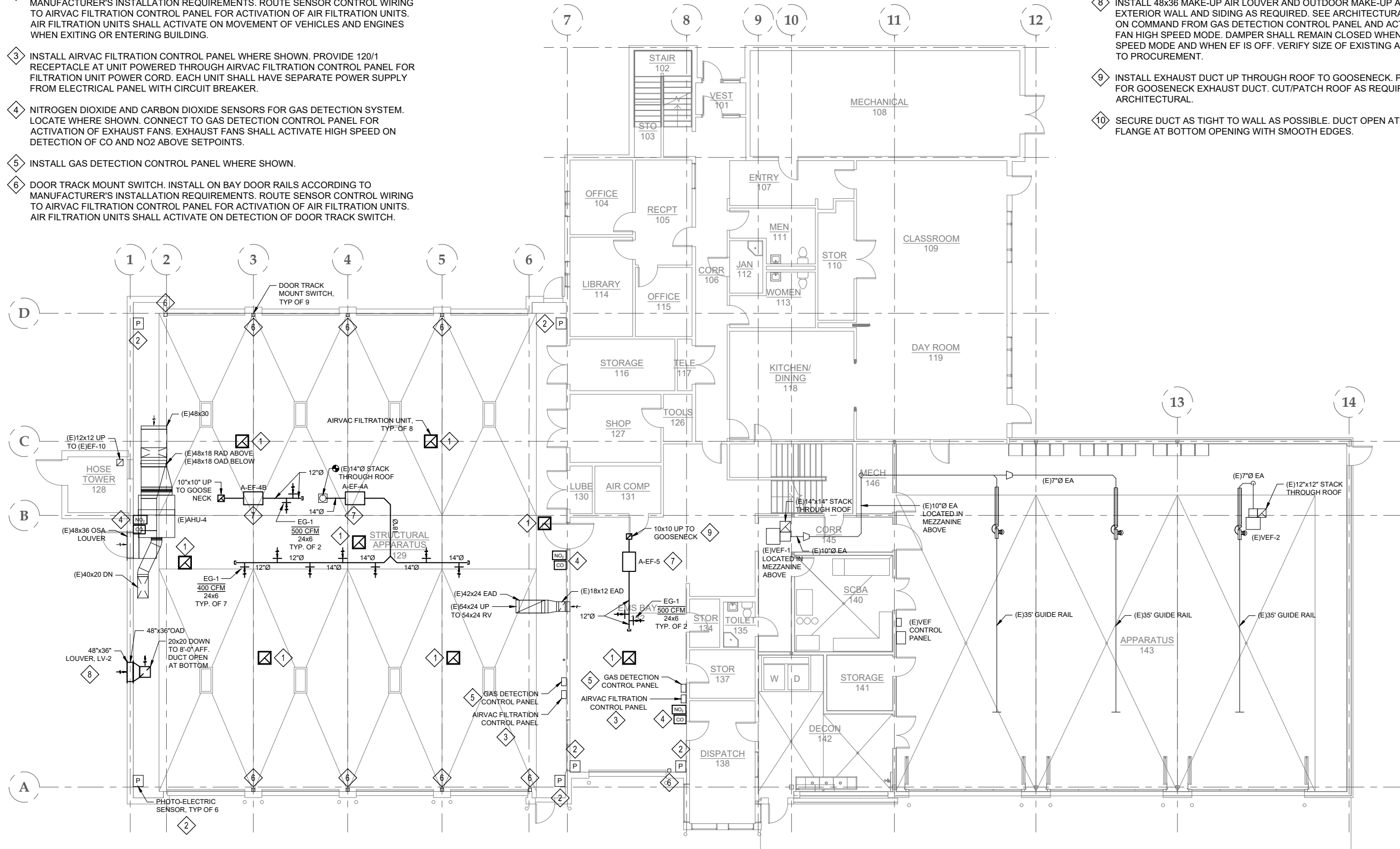
- 1 SUSPEND AIRVAC AIR FILTRATION UNIT (AFU) WITH BOTTOM INSTALLED AT BETWEEN 11' AND 13' AFF. SEE STRUCTURAL DRAWINGS FOR SUPPORT AND BRACING REQUIREMENTS. POWER AND CONTROL ACTIVATION FROM AIRVAC FILTRATION CONTROL PANEL. OFFSET UNIT FROM STRUCTURAL BEAM. HANG UNITS FROM SIDE OF BEAM TO ALLOW FOR AIR FLOW BELOW BEAM.
- 2 AIR FILTRATION PHOTO-ELECTRIC SENSOR. LOCATE AT 7' TO 8' AFF AND ACCORDING TO MANUFACTURER'S INSTALLATION REQUIREMENTS. ROUTE SENSOR CONTROL WIRING TO AIRVAC FILTRATION CONTROL PANEL FOR ACTIVATION OF AIR FILTRATION UNITS. AIR FILTRATION UNITS SHALL ACTIVATE ON MOVEMENT OF VEHICLES AND ENGINES WHEN EXITING OR ENTERING BUILDING.
- 3 INSTALL AIRVAC FILTRATION CONTROL PANEL WHERE SHOWN. PROVIDE 120/1 RECEPTACLE AT UNIT POWERED THROUGH AIRVAC FILTRATION CONTROL PANEL FOR FILTRATION UNIT POWER CORD. EACH UNIT SHALL HAVE SEPARATE POWER SUPPLY FROM ELECTRICAL PANEL WITH CIRCUIT BREAKER.
- 4 NITROGEN DIOXIDE AND CARBON DIOXIDE SENSORS FOR GAS DETECTION SYSTEM. LOCATE WHERE SHOWN. CONNECT TO GAS DETECTION CONTROL PANEL FOR ACTIVATION OF EXHAUST FANS. EXHAUST FANS SHALL ACTIVATE HIGH SPEED ON DETECTION OF CO AND NO2 ABOVE SETPOINTS.
- 5 INSTALL GAS DETECTION CONTROL PANEL WHERE SHOWN.
- 6 DOOR TRACK MOUNT SWITCH. INSTALL ON BAY DOOR RAILS ACCORDING TO MANUFACTURER'S INSTALLATION REQUIREMENTS. ROUTE SENSOR CONTROL WIRING TO AIRVAC FILTRATION CONTROL PANEL FOR ACTIVATION OF AIR FILTRATION UNITS. AIR FILTRATION UNITS SHALL ACTIVATE ON DETECTION OF DOOR TRACK SWITCH.

**SHEET NOTES**

- 1. INSTALL ALL EQUIPMENT, SENSORS, AND CONTROLS PER MANUFACTURER'S REQUIREMENTS.
- 2. COORDINATE FINAL LOCATION OF ALL EQUIPMENT, SENSORS, PANELS, AND DUCTWORK WITH EXISTING STRUCTURE LIGHTING, PIPING, EQUIPMENT, AND OTHER OBSTRUCTIONS. VERIFY ALL EXISTING CONDITIONS ON SITE.

**SHEET KEYNOTES**

- 7 SUSPEND FAN UNIT WHERE SHOWN WITH BOTTOM ABOVE 11' AFF. DUCTWORK SHALL BE INSTALLED AS HIGH AS POSSIBLE BELOW STRUCTURE. SEE STRUCTURAL DRAWINGS FOR SUPPORT AND BRACING REQUIREMENTS. PROVIDE DISCONNECT AT UNIT. CONTROL POWER FOR ACTIVATION FROM GAS DETECTION CONTROL PANEL. CUT AND PATCH CEILING AS REQUIRED FOR STRUCTURAL WORK - SEE ARCHITECTURAL FOR DETAILS.
- 8 INSTALL 48x36 MAKE-UP AIR LOUVER AND OUTDOOR MAKE-UP AIR DAMPER. CUT/PATCH EXTERIOR WALL AND SIDING AS REQUIRED. SEE ARCHITECTURAL. DAMPER SHALL OPEN ON COMMAND FROM GAS DETECTION CONTROL PANEL AND ACTIVATION OF EXHAUST FAN HIGH SPEED MODE. DAMPER SHALL REMAIN CLOSED WHEN EF IS IN NORMAL LOW SPEED MODE AND WHEN EF IS OFF. VERIFY SIZE OF EXISTING ADJACENT LOUVER PRIOR TO PROCUREMENT.
- 9 INSTALL EXHAUST DUCT UP THROUGH ROOF TO GOOSENECK. PROVIDE ROOF CURB FOR GOOSENECK EXHAUST DUCT. CUT/PATCH ROOF AS REQUIRED. SEE ARCHITECTURAL.
- 10 SECURE DUCT AS TIGHT TO WALL AS POSSIBLE. DUCT OPEN AT BOTTOM. PROVIDE FLANGE AT BOTTOM OPENING WITH SMOOTH EDGES.



**1 GLACIER VALLEY FIRE STATION PLAN**  
M103  
SCALE: 1/8" = 1'  
8 4 0 8 16 24  
SCALE IN FEET



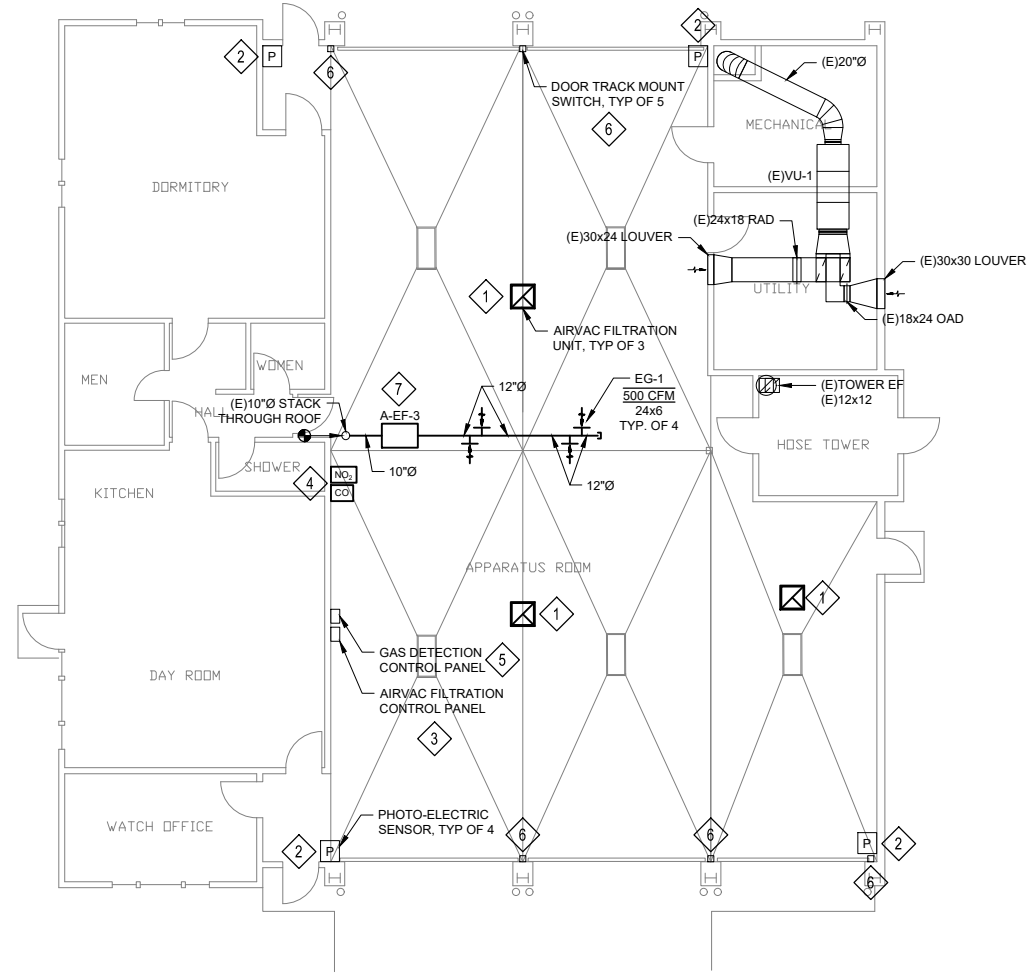
DESIGN	RS	
DRAWN	DMC	
CHECKED	RS	
DATE	01/28/2021	
PROJECT No. 19309.01JN		
SHEET NUMBER		
<b>M103</b>		
No.	Date	Item
REVISIONS		

CONSULTANT:

**PDC**  
**ENGINEERS**  
**PLAN - DESIGN - CONSTRUCT**  
 A E S P E C I A L I S T C O M P A N Y  
 9909 Mendonhall Hall Rd. Ste. 4, Juneau, AK 99801  
 907.780.6060 | A E C C 6 0 5

PROJECT:  
**CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT**  
**CBJ CONTRACT NO. BE21-177**  
 JUNEAU, ALASKA

SHEET TITLE:  
**GLACIER VALLEY FIRE STATION VEHICLE EXHAUST PLAN**



**1 AUKE BAY FIRE STATION PLAN - ALTERNATE #1**  
 M104 SCALE: 1/8" = 1'  
 8 4 0 8 16 24  
 SCALE IN FEET



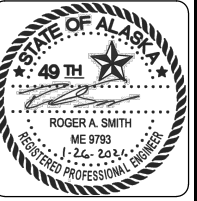
**SHEET KEYNOTES**

- 1 SUSPEND AIRVAC AIR FILTRATION UNIT (AFU) WITH BOTTOM INSTALLED AT BETWEEN 10' AND 13' AFF. SEE STRUCTURAL DRAWINGS FOR SUPPORT AND BRACING REQUIREMENTS. POWER AND CONTROL ACTIVATION FROM AIRVAC FILTRATION CONTROL PANEL.
- 2 AIR FILTRATION PHOTO-ELECTRIC SENSOR. LOCATE AT 7' TO 8' AFF AND ACCORDING TO MANUFACTURER'S INSTALLATION REQUIREMENTS. ROUTE SENSOR CONTROL WIRING TO AIRVAC FILTRATION CONTROL PANEL FOR ACTIVATION OF AIR FILTRATION UNITS. AIR FILTRATION UNITS SHALL ACTIVATE ON MOVEMENT OF VEHICLES AND ENGINES WHEN EXITING OR ENTERING BUILDING.
- 3 INSTALL AIRVAC FILTRATION CONTROL PANEL WHERE SHOWN. PROVIDE 120/1 RECEPTACLE AT UNIT POWERED THROUGH AIRVAC FILTRATION CONTROL PANEL FOR FILTRATION UNIT POWER CORD. EACH UNIT SHALL HAVE SEPARATE POWER SUPPLY FROM ELECTRICAL PANEL WITH CIRCUIT BREAKER.
- 4 NITROGEN DIOXIDE AND CARBON MONOXIDE SENSORS FOR GAS DETECTION SYSTEM. LOCATE WHERE SHOWN. CONNECT TO GAS DETECTION CONTROL PANEL FOR ACTIVATION OF EXHAUST FANS. EXHAUST FANS SHALL ACTIVATE HIGH SPEED ON DETECTION OF CO AND NO2 ABOVE SETPOINTS.
- 5 INSTALL GAS DETECTION CONTROL PANEL WHERE SHOWN.
- 6 DOOR TRACK MOUNT SWITCH. INSTALL ON BAY DOOR RAILS ACCORDING TO MANUFACTURER'S INSTALLATION REQUIREMENTS. ROUTE SENSOR CONTROL WIRING TO AIRVAC FILTRATION CONTROL PANEL FOR ACTIVATION OF AIR FILTRATION UNITS. AIR FILTRATION UNITS SHALL ACTIVATE ON DETECTION OF DOOR TRACK SWITCH.
- 7 SUSPEND FAN UNIT WHERE SHOWN WITH BOTTOM ABOVE 10' AFF. SEE STRUCTURAL DRAWINGS FOR SUPPORT AND BRACING REQUIREMENTS. PROVIDE DISCONNECT AT UNIT. CONTROL POWER FOR ACTIVATION FROM GAS DETECTION CONTROL PANEL.

**SHEET NOTES**

- 1. INSTALL ALL EQUIPMENT, SENSORS, AND CONTROLS PER MANUFACTURER'S REQUIREMENTS.
- 2. COORDINATE FINAL LOCATION OF ALL EQUIPMENT, SENSORS, PANELS, AND DUCTWORK WITH EXISTING STRUCTURE LIGHTING, PIPING, EQUIPMENT, AND OTHER OBSTRUCTIONS. VERIFY ALL EXISTING CONDITIONS ON SITE.
- 3. ALTERNATE #1 - AUKE BAY STATION: ALL WORK RELATED TO THE AUKE BAY STATION IS IN ALTERNATE #1.

CONSULTANT:



PROJECT:  
**CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT**  
**CBJ CONTRACT NO. BE21-177**  
 JUNEAU, ALASKA

SHEET TITLE:  
**AUKE BAY FIRE STATION VEHICLE EXHAUST PLAN**

DESIGN	RS
DRAWN	DMC
CHECKED	RS
DATE	01/28/2021

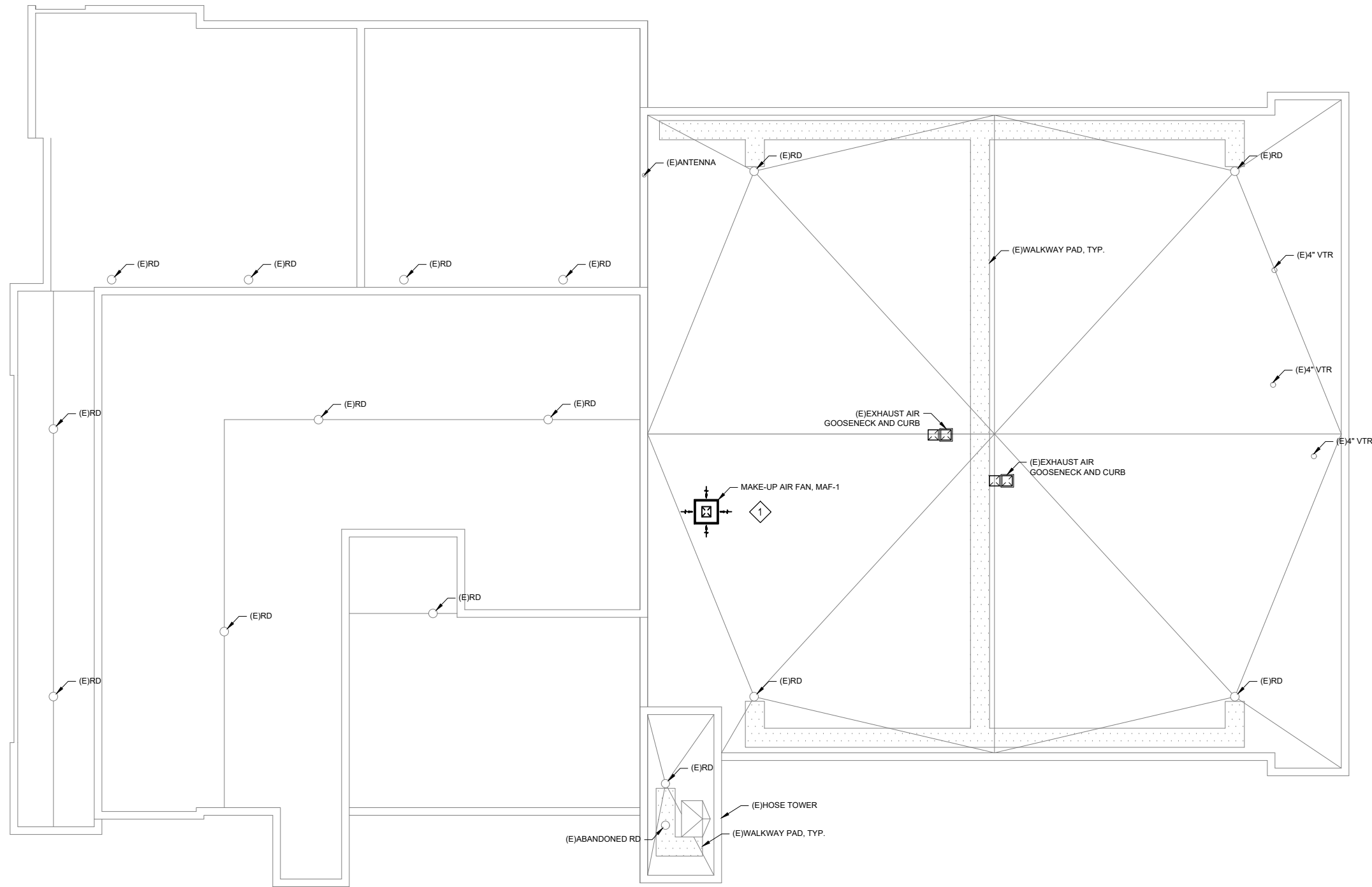
PROJECT No.  
**19309.01JN**  
 SHEET NUMBER

**M104**

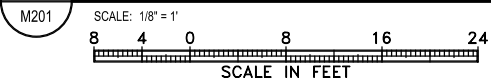
No.	Date	Item

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION, AFFECTING ALL LABELED SCALES

P:\2019\19309.01\JUN-FIRE-ROOF-PLAN-M201\JUN-FIRE-ROOF-PLAN-M201.dwg, 01/28/2021 4:08 PM



**1 JUNEAU FIRE STATION ROOF PLAN**



**SHEET KEYNOTES**

- 1 INSTALL MAKE-UP AIR FAN AND 18-INCH HIGH PRE-INSULATED ROOF CURB. CUT/PATCH ROOF AS REQUIRED. SEE ARCHITECTURAL.

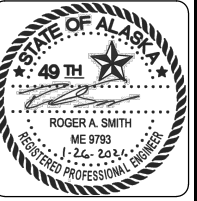
No.	Date	Item

DESIGN	RS
DRAWN	DMC
CHECKED	RS
DATE	01/28/2021

PROJECT No.  
**19309.01JN**  
SHEET NUMBER

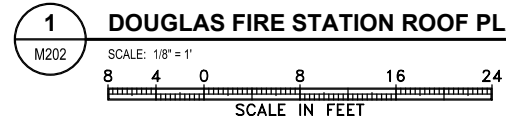
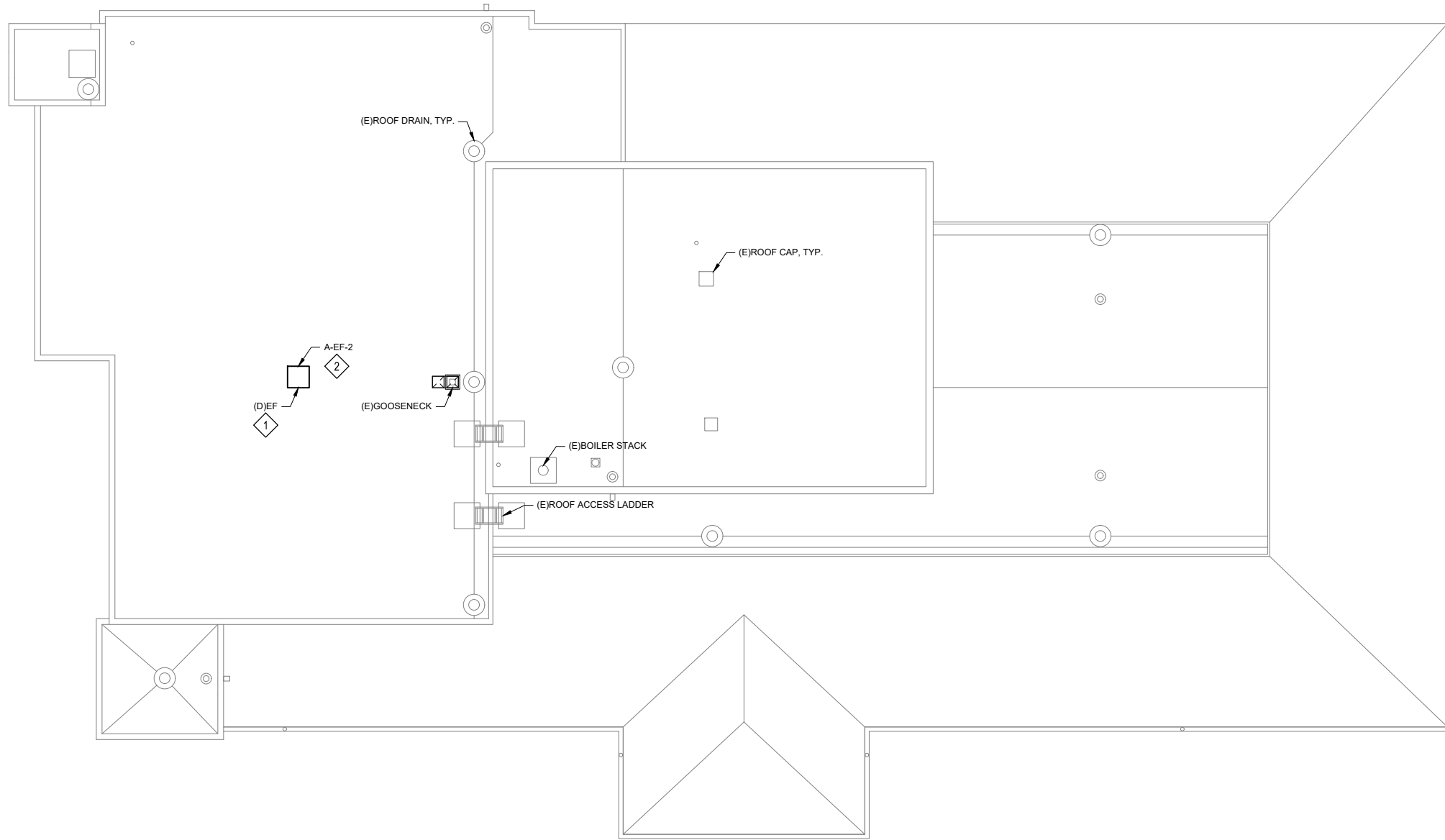
**M201**

CONSULTANT :



PROJECT :  
**CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT**  
CBJ CONTRACT NO. BE21-177  
JUNEAU, ALASKA

SHEET TITLE :  
**JUNEAU FIRE STATION ROOF PLAN**



**SHEET KEYNOTES**

- 1 DEMOLISH EXHAUST FAN AND ROOF CURB. PREPARE FOR INSTALLATION OF THE NEW A-EF-2 FAN UNIT. CUT/PATCH ROOF AS REQUIRED. SEE ARCHITECTURAL.
- 2 INSTALL A-EF-2 EXHAUST FAN AND 12-INCH HIGH PRE-INSULATED CURB IN PLACE OF EXISTING ROOFTOP FAN. PROVIDE HIGH WIND TIE DOWN CABLES. CUT/PATCH ROOF AS REQUIRED. SEE ARCHITECTURAL.

**SHEET NOTES**

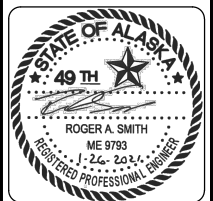
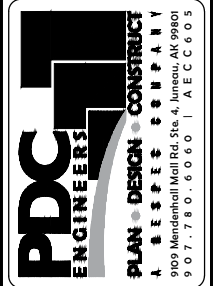
- 1. ALTERNATE #2 - DOUGLAS STATION: ALL WORK RELATED TO THE DOUGLAS STATION IS IN ALTERNATE #2.

No.	Date	Item

DESIGN	RS
DRAWN	DMC
CHECKED	RS
DATE	01/28/2021
PROJECT No. <b>19309.01JN</b>	
SHEET NUMBER <b>M202</b>	

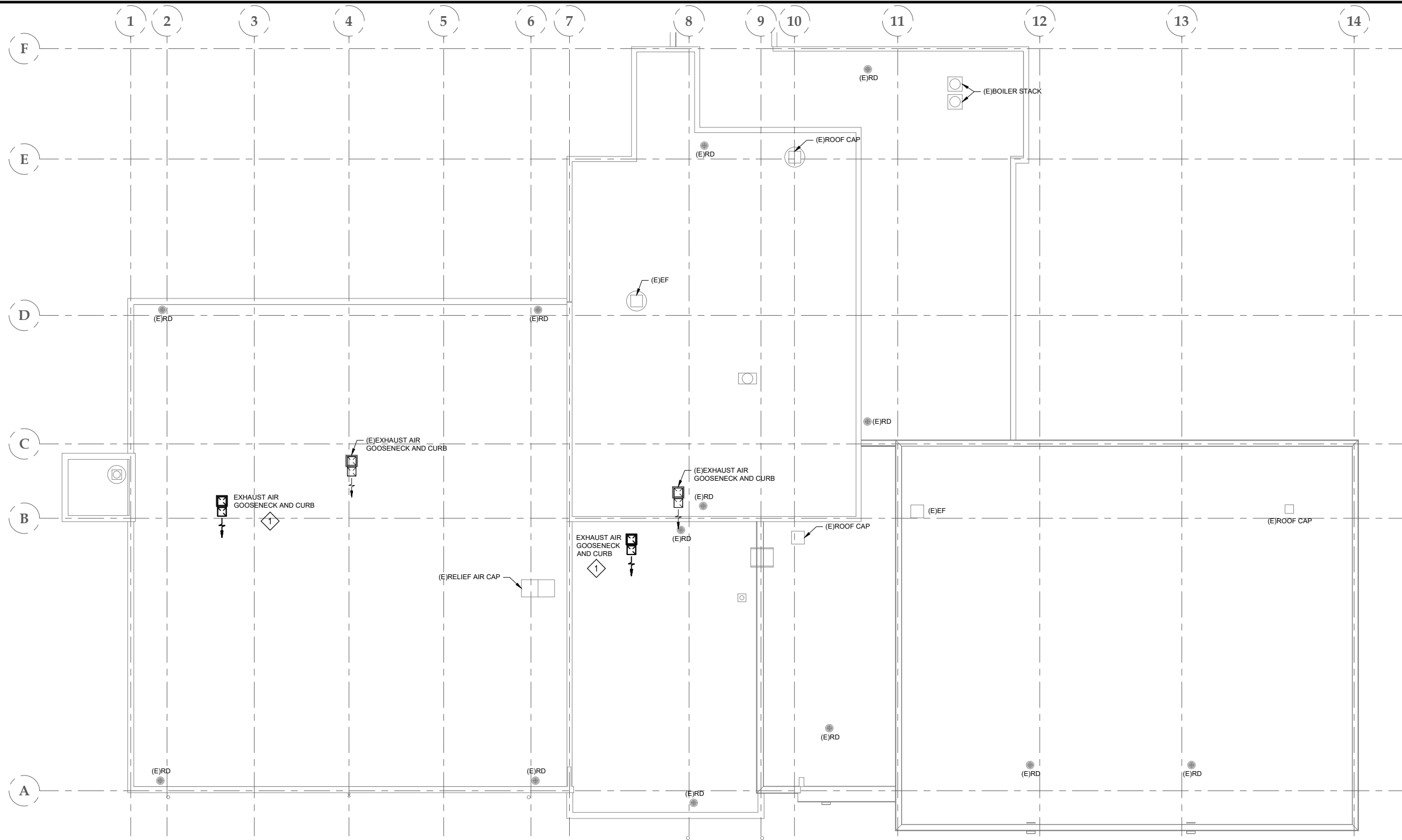
SHEET TITLE : DOUGLAS FIRE STATION ROOF PLAN

PROJECT : CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT  
CBJ CONTRACT NO. BE21-177  
JUNEAU, ALASKA



CONSULTANT :

1" IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION, AFFECTING ALL LABELED SCALES



**1 GLACIER VALLEY FIRE STATION ROOF PLAN**  
SCALE: 1/8" = 1'  
8 4 0 8 16 24  
SCALE IN FEET



**SHEET KEYNOTES**

- ① INSTALL GOOSENECK EXHAUST OUTLET DUCT AND PRE-INSULATED ROOF CURB. CUT/PATCH ROOF AS REQUIRED. SEE ARCHITECTURAL.

No.	Date	Item

REVISIONS

CONSULTANT:

**PDC**  
ENGINEERS  
PLAN - DESIGN - CONSTRUCT  
A E S P E COMPANY  
9909 Mendenhall Mall Rd. Ste. 4, Juneau, AK 99801  
907.780.6060 | A E C C 6 0 5

PROJECT:  
**CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT  
CBJ CONTRACT NO. BE21-177  
JUNEAU, ALASKA**

SHEET TITLE:  
**GLACIER VALLEY FIRE STATION  
ROOF PLAN**

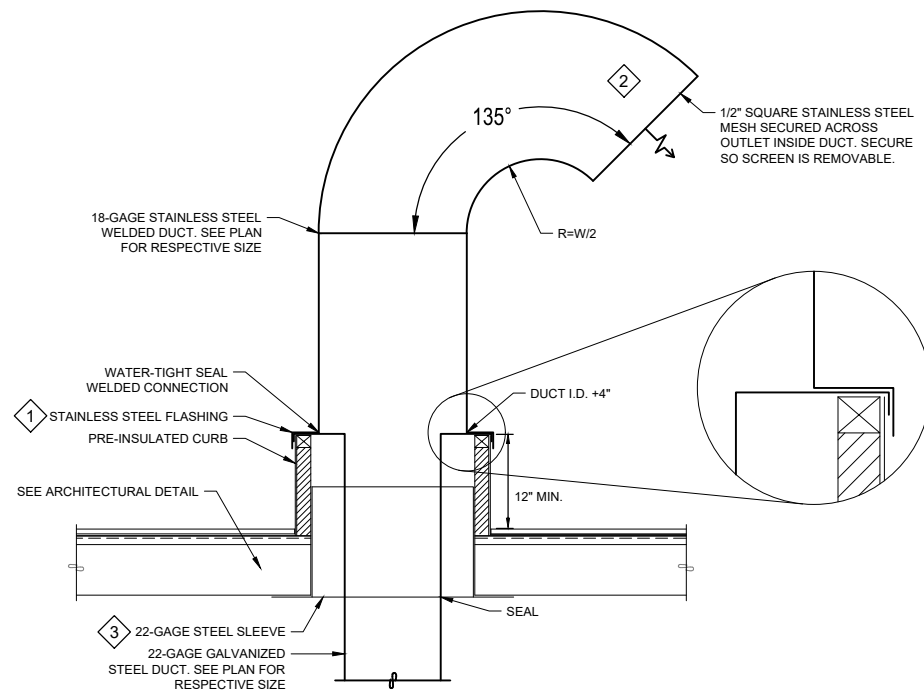
DESIGN	RS
DRAWN	DMC
CHECKED	RS
DATE	01/28/2021
PROJECT No. <b>19309.01JN</b>	
SHEET NUMBER <b>M203</b>	



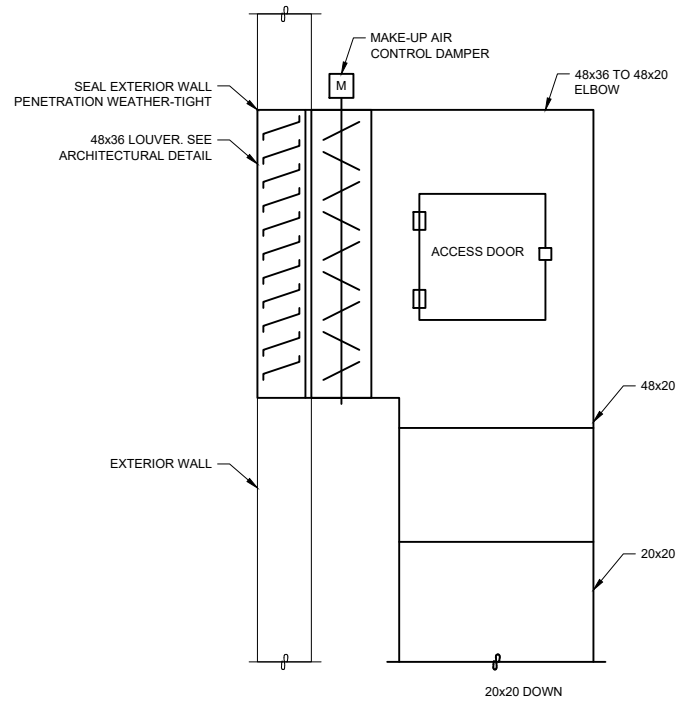


IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION, AFFECTING ALL LABELED SCALES

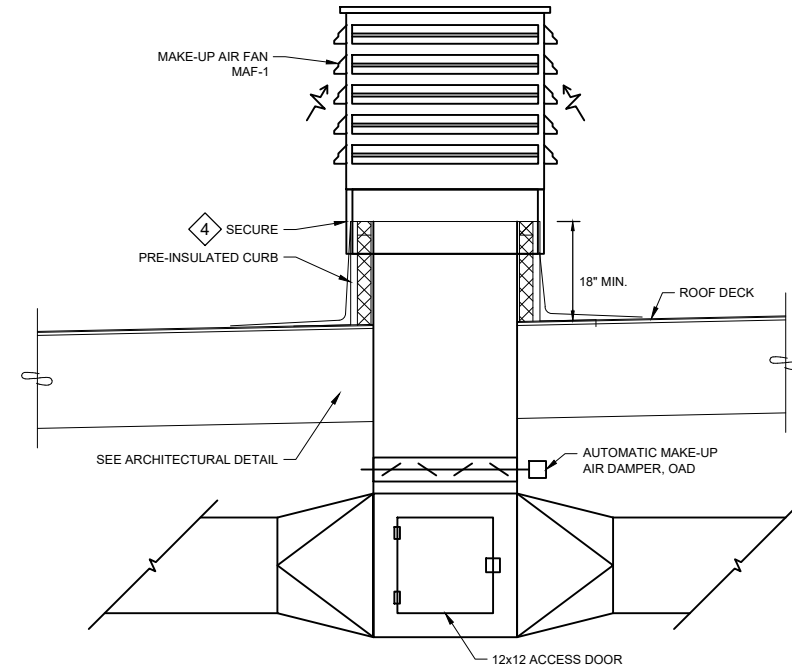
P:\2019\19309.01\IN-CBU\_CCS\SM\401\DET\19309.01\IN-CBU\_MECHANICAL DETAILS AND DIAGRAMS - Jan 28, 2021 - 4:08 PM



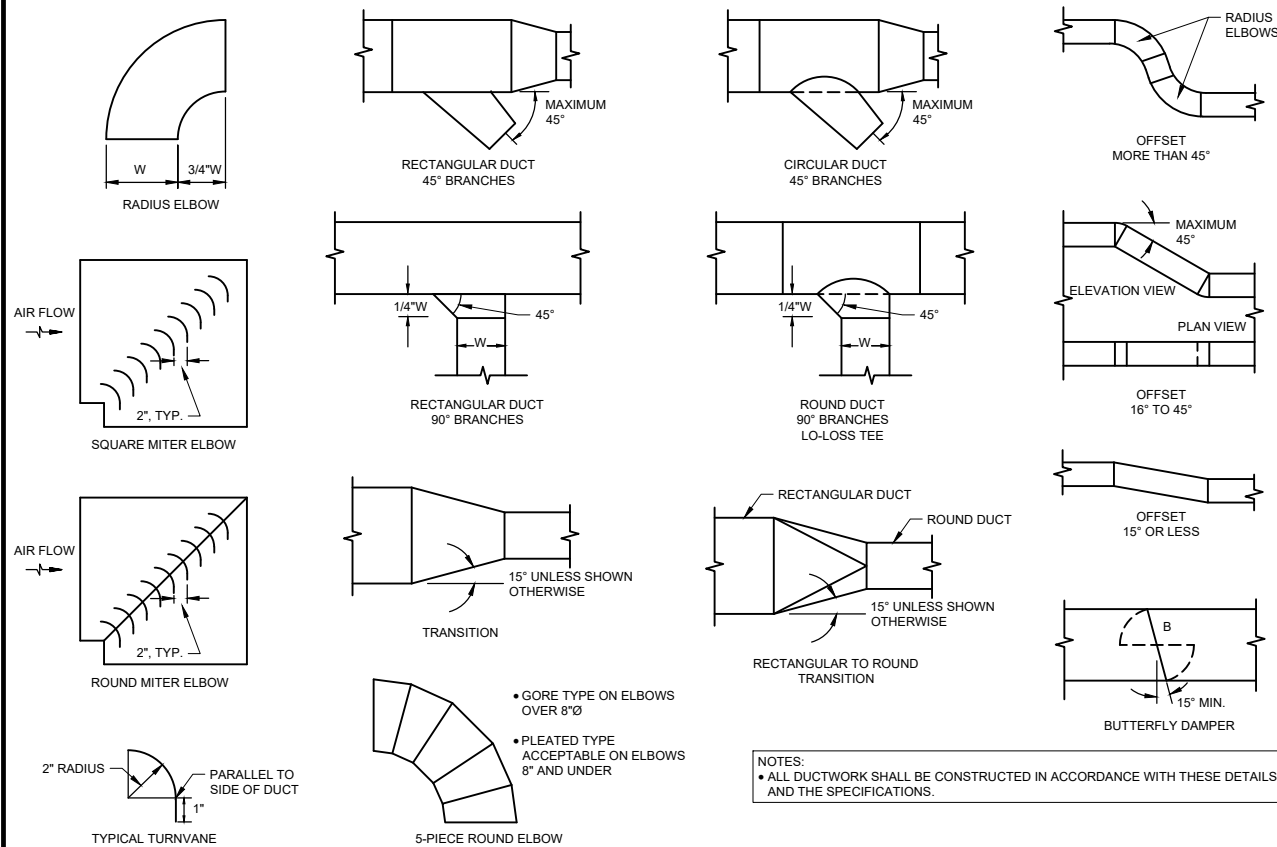
**1 ROOF EXHAUST GOOSENECK DETAIL**  
M401 SCALE: NO SCALE



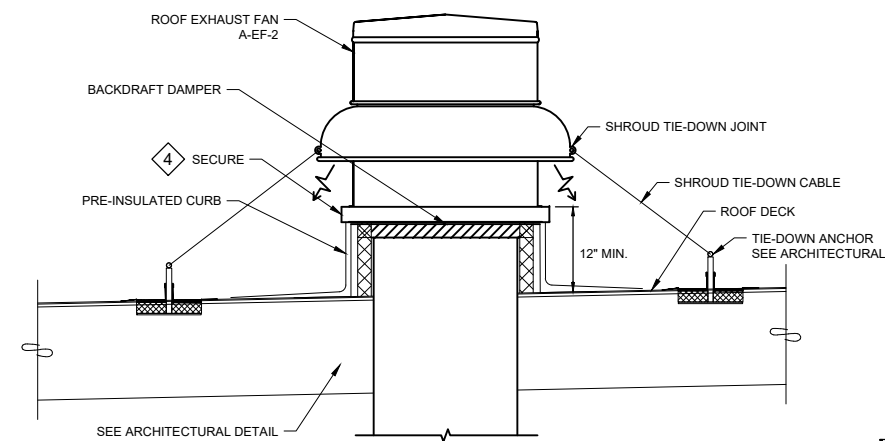
**2 OUTSIDE AIR INTAKE DETAIL**  
M401 SCALE: NO SCALE



**3 ROOF MAKE-UP AIR FAN DETAIL**  
M401 SCALE: NO SCALE



**4 DUCT CONSTRUCTION DETAILS**  
M401 SCALE: NO SCALE



**5 ROOF EXHAUST FAN DETAIL**  
M401 SCALE: NO SCALE

**SHEET KEYNOTES**

- 1 FLASHING FIELD FIT AND MODIFIED TO OVERLAP CURB A MINIMUM OF 1-1/2". FLASHING SECURED TO SIDE OF NAILER AND CURB WITH STAINLESS STEEL FASTENERS AT 3" O.C.
- 2 THE EXHAUST DUCT OUTLET SHOULD BE A MINIMUM OF 3 FEET ABOVE THE FINISHED ROOF. WITH DISCHARGE POINTED GENERALLY IN NORTHWEST DIRECTION, AWAY FROM PREVAILING WINDS, AND AWAY FROM BUILDING OPENINGS.
- 3 22-GAGE STEEL SLEEVE MOUNTED AS SHOWN AND SECURED TO UNDERSIDE OF CEILING WITH STAINLESS STEEL FASTENERS AT 6" O.C.
- 4 SECURE FAN TO CURB WITH STAINLESS STEEL FASTENERS AT 3" O.C.

CONSULTANT :



PROJECT :  
**CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT**  
CBJ CONTRACT NO. BE21-177  
JUNEAU, ALASKA

SHEET TITLE :  
**MECHANICAL DETAILS AND DIAGRAMS**

DESIGN RS  
DRAWN DMC  
CHECKED RS  
DATE 01/28/2021

PROJECT No.  
**19309.01JN**  
SHEET NUMBER

**M301**

No.	Date	Item

**DISTRIBUTION**

- BRANCH CIRCUIT PANELBOARD
- MOTOR CONNECTION
- DISCONNECT SWITCH
- COMBINATION STARTER
- CONTROLLER
- DUCT MOUNTED SMOKE DETECTOR

**WIRING**

- JUNCTION BOX
- ST THERMAL OVERLOAD SWITCH
- CONDUIT CONCEALED IN CEILING OR WALL
- CONDUIT CONCEALED IN FLOOR OR UNDER SLAB
- HOT CONDUCTOR
- NEUTRAL CONDUCTOR
- GROUND CONDUCTOR
- HOMERUN TO INDICATED DESTINATION
- FLEXIBLE CONDUIT CONNECTION

NOTE: WIRING NOT SHOWN WHERE ONLY A HOT, NEUTRAL, AND GROUND ARE REQUIRED.

**DIAGRAMS**

- 20/1 CIRCUIT BREAKER
- NORMALLY OPEN PUSHBUTTON
- NORMALLY CLOSED PUSHBUTTON
- 1 2 3 3-POSITION SELECTOR SWITCH
- SWITCH
- OVERLOAD
- NORMALLY OPEN CONTACTS
- NORMALLY CLOSED CONTACTS
- CONTACTOR COIL
- FUSE
- TRANSFORMER

**SIGNAL**

- CARBON MONOXIDE SENSOR
- NITROGEN DIOXIDE SENSOR
- DOOR SWITCH
- PHOTO BEAM TRANSMITTER
- PHOTO BEAM RECEIVER

**REFERENCE SYMBOLS**

- SHEET NOTE REFERENCE
- DETAIL REFERENCE
- (E) EXISTING
- (X) DEMOLISH
- (P) REPLACE

**ABBREVIATIONS**

- C CONDUIT
- G GROUND
- HP HORSEPOWER
- KW KILOWATTS
- KVA KILOVOLT-AMPERES
- N NEUTRAL (GROUNDED CONDUCTOR)
- NEC NATIONAL ELECTRICAL CODE
- TYP TYPICAL
- UON UNLESS OTHERWISE NOTED
- V VOLTS
- VFD VARIABLE FREQUENCY DRIVE
- W WATT

- GENERAL NOTES:**
- ALTERNATE #1 – AUKE BAY STATION: ALL WORK RELATED TO THE AUKE BAY STATION IS IN ALTERNATE #1.
  - ALTERNATE #2 – DOUGLAS STATION: ALL WORK RELATED TO DOUGLAS STATION IS IN ALTERNATE #2.
  - PHOTO BEAM AND DOOR SWITCH WIRING: #18 AWG TWISTED SHIELDED PAIR. VERIFY WITH MANUFACTURER.
  - CARBON MONOXIDE AND NITROGEN DIOXIDE SENSOR WIRING: 4 CONDUCTOR #18 SHIELDED. VERIFY WITH MANUFACTURER.

**ELECTRICAL DRAWING LIST**

E001	LEGEND AND MECHANICAL EQUIPMENT SCHEDULE
E101	JUNEAU FIRE STATION ELECTRICAL DEMOLITION PLAN
E102	DOUGLAS FIRE STATION ELECTRICAL DEMOLITION PLAN
E103	GLACIER FIRE STATION ELECTRICAL DEMOLITION PLAN
E104	AUKE BAY FIRE STATION ELECTRICAL DEMOLITION PLAN
E201	JUNEAU FIRE STATION ELECTRICAL PLAN
E202	DOUGLAS FIRE STATION ELECTRICAL PLAN
E203	GLACIER FIRE STATION ELECTRICAL PLAN
E204	AUKE BAY FIRE STATION ELECTRICAL PLAN
E301	SCHEDULES
E302	SCHEDULES
E401	DIAGRAMS
E402	DIAGRAMS

**MECHANICAL EQUIPMENT SCHEDULE (VERIFY)**

TAG	DESCRIPTION	HP	KW	AMPS	VOLTS	PHASE	TOTAL KVA	WIRING	DISCONNECT	FUSE	CONTROL	STARTER SIZE	REMARKS
A-EF-1A	EXHAUST FAN	2			208	1	2.9	2#10, 1#10G	30/2				CONTROLLER BY MECHANICAL
A-EF-1B	EXHAUST FAN	1/2			208	1	1.2	2#12, 1#12G	30/2				CONTROLLER BY MECHANICAL
A-EF-2	EXHAUST FAN	1			208	1	1.9	2#12, 1#12G	30/2				CONTROLLER BY MECHANICAL
A-EF-3	EXHAUST FAN	3/4			208	1	1.7	2#12, 1#12G	30/2				CONTROLLER BY MECHANICAL
A-EF-4A	EXHAUST FAN	2			208	1	2.9	2#10, 1#10G	30/2				CONTROLLER BY MECHANICAL
A-EF-4B	EXHAUST FAN	1/2			208	1	1.2	2#12, 1#12G	30/2				CONTROLLER BY MECHANICAL
A-EF-5	EXHAUST FAN	1/4			120	1	0.7	2#12, 1#12G	30/2				CONTROLLER BY MECHANICAL
AFU	AIR FILTRATION UNIT	3/4			120	1	1.7	2#10, 1#10G					REFER TO PLAN DRAWINGS FOR QUANTITY
MAF-1	MAKE UP AIR FAN	1-1/2			208	1	2.4	2#12, 1#12G	30/2		H-O-A	0	

CONSULTANT:

EGENI ENGINEERING, LLC  
217 2nd ST, STE 208, JUNEAU, AK 99801  
PH: (907) 586-5900 / FAX: (907) 586-5901

1911  
Douglas  
Professional Engineer  
E 10453  
JANUARY 27, 2021

PDC ENGINEERS  
PLAN - DESIGN - CONSTRUCT  
A. B. E. E. E. S. M. P. A. N. Y.  
9109 Mendocino Mall Rd. Ste. 4, Juneau, AK 99801  
907.780.6060 | A E C C 6 0 5

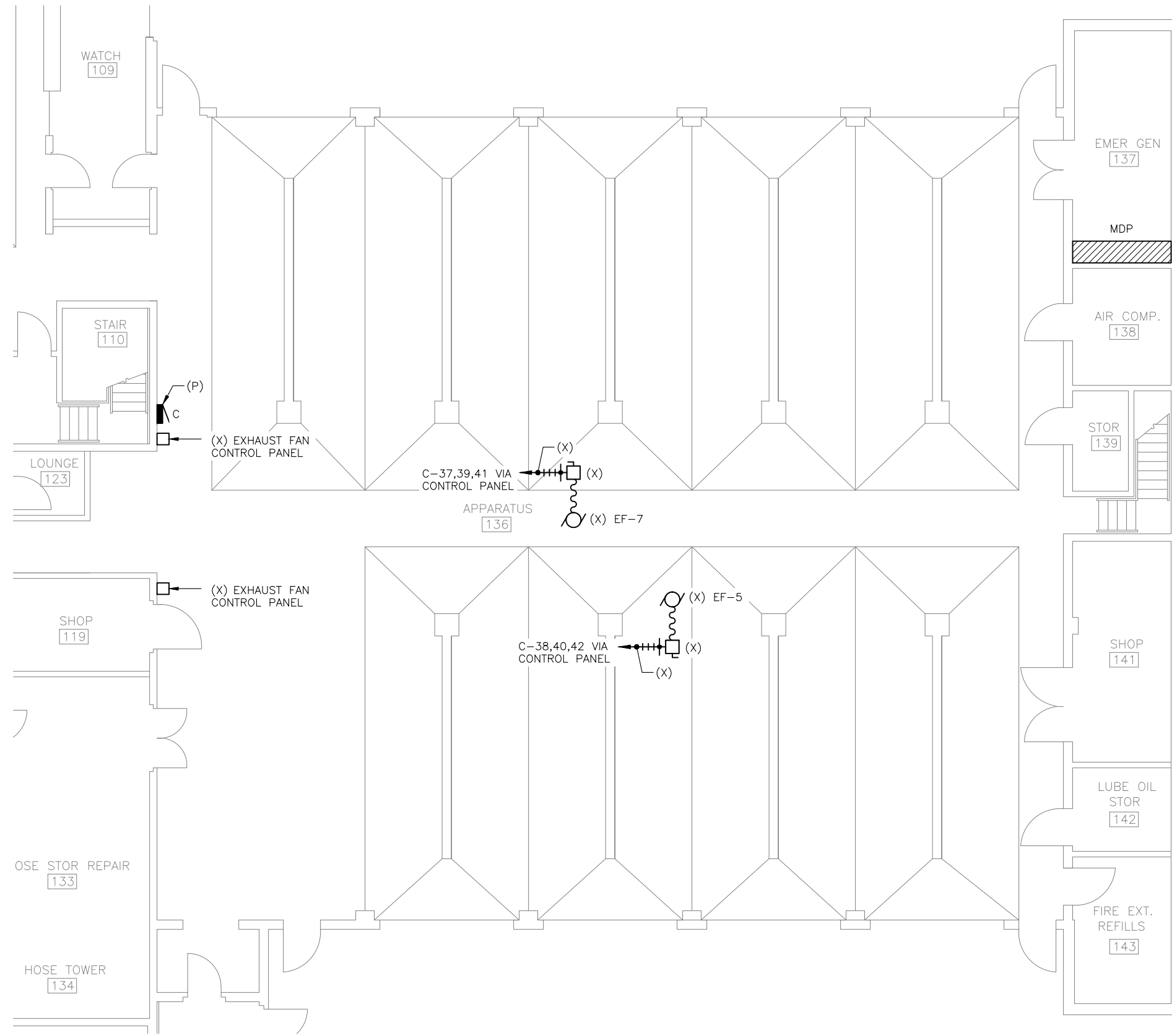
PROJECT:  
CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT  
CBJ CONTRACT NO. BE21-177  
JUNEAU, ALASKA

SHEET TITLE:  
LEGEND AND MECHANICAL EQUIPMENT SCHEDULE

DESIGN	BJB
DRAWN	BJB
CHECKED	BJB
DATE	01/27/2021
PROJECT No. <b>19309.01JN</b>	
SHEET NUMBER <b>E001</b>	

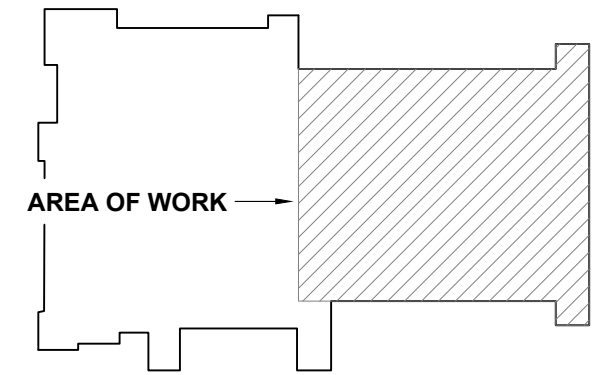
No.	Date	Item

REVISIONS



NOTES:

1. THE BUS CAPACITY OF PANELBOARD C INCREASES WITH THIS PROJECT. DEMOLISH THE EXISTING FEEDER: 1-1/2" C, 4#4. CUT THE EXISTING FEEDER CONDUIT AT THE SLAB BELOW PANELBOARD C AND CAP. PROVIDE NEW FEEDER: 2" C, 4#1/0, 1#6G. PROVIDE NEW 150/3 CIRCUIT BREAKER IN THE EXISTING MAIN DISTRIBUTION PANEL (MDP). THE MDP WAS MANUFACTURED BY CUTLER HAMMER, TYPE MP2DB.



KEYPLAN



1 JUNEAU FIRE STATION ELECTRICAL DEMOLITION PLAN

DESIGN	BJB	
DRAWN	BJB	
CHECKED	BJB	
DATE	01/27/2021	
PROJECT No. 19309.01JN		
SHEET NUMBER E101		
No.	Date	Item
REVISIONS		

CONSULTANT:

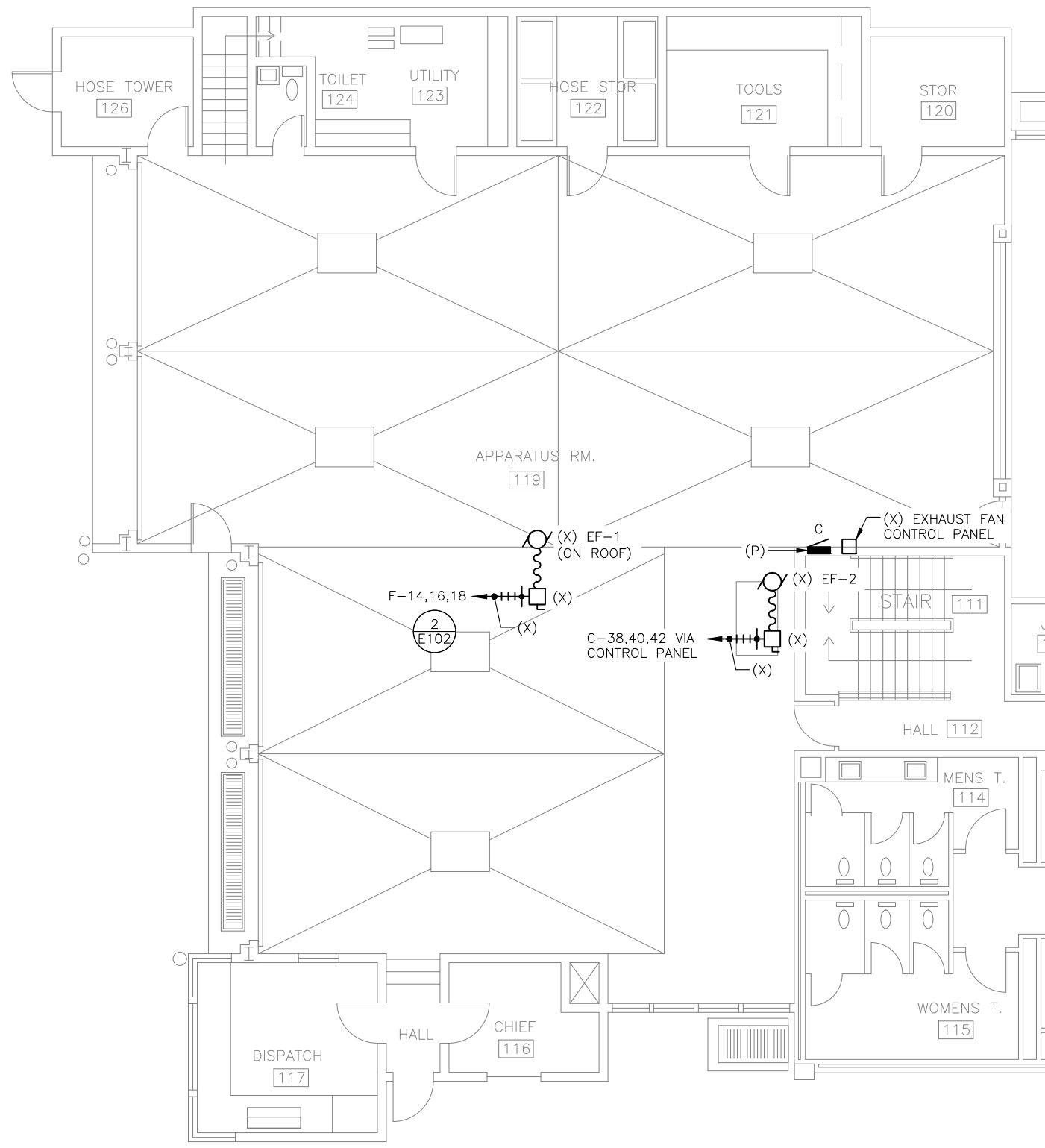
217 2nd ST, STE 208, JUNEAU, AK 99801  
PH: (907) 586-5900 / FAX: (907) 586-5901

JANUARY 27, 2021

PLAN - DESIGN - CONSTRUCT  
A. E. S. E. C. S. M. P. A. N. Y.  
9109 Mendocino Mall Rd. Ste. 4, Juneau, AK 99801  
907.780.6060 | A E C C 6 0 5

PROJECT:  
CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT  
CBJ CONTRACT NO. BE21-177  
JUNEAU, ALASKA

SHEET TITLE:  
JUNEAU FIRE STATION ELECTRICAL DEMOLITION PLAN



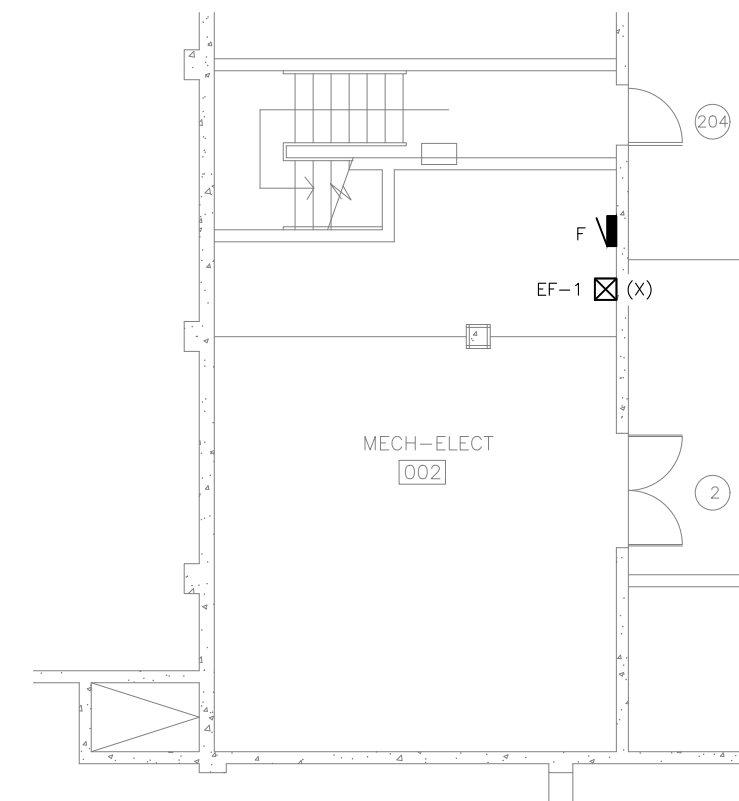
**1 DOUGLAS FIRE STATION MAIN FLOOR ELECTRICAL DEMOLITION PLAN**  
 SCALE: 0 2' 4' 8' 16'

**NOTES:**

1. RECONNECT PANELBOARD C TO THE EXISTING FEEDER. THE PANELBOARD IS RECESSED IN A TILE WALL. COORDINATE CUTTING AND PATCHING WITH THE GENERAL CONTRACTOR FOR A FLUSH INSTALLATION.



**KEYPLANS**



**2 DOUGLAS FIRE STATION LOWER FLOOR ELECTRICAL DEMOLITION PLAN**  
 SCALE: 0 2' 4' 8' 16'

CONSULTANT:  
**EGENY**  
 ENGINEERING, LLC  
 217 2nd St, Ste 208, JUNEAU, AK 99801  
 PH: (907) 586-5900 / FAX: (907) 586-5901

PROFESSIONAL SEAL  
 1911  
 E. J. Beggs  
 E.E. 10453  
 JANUARY 27, 2021

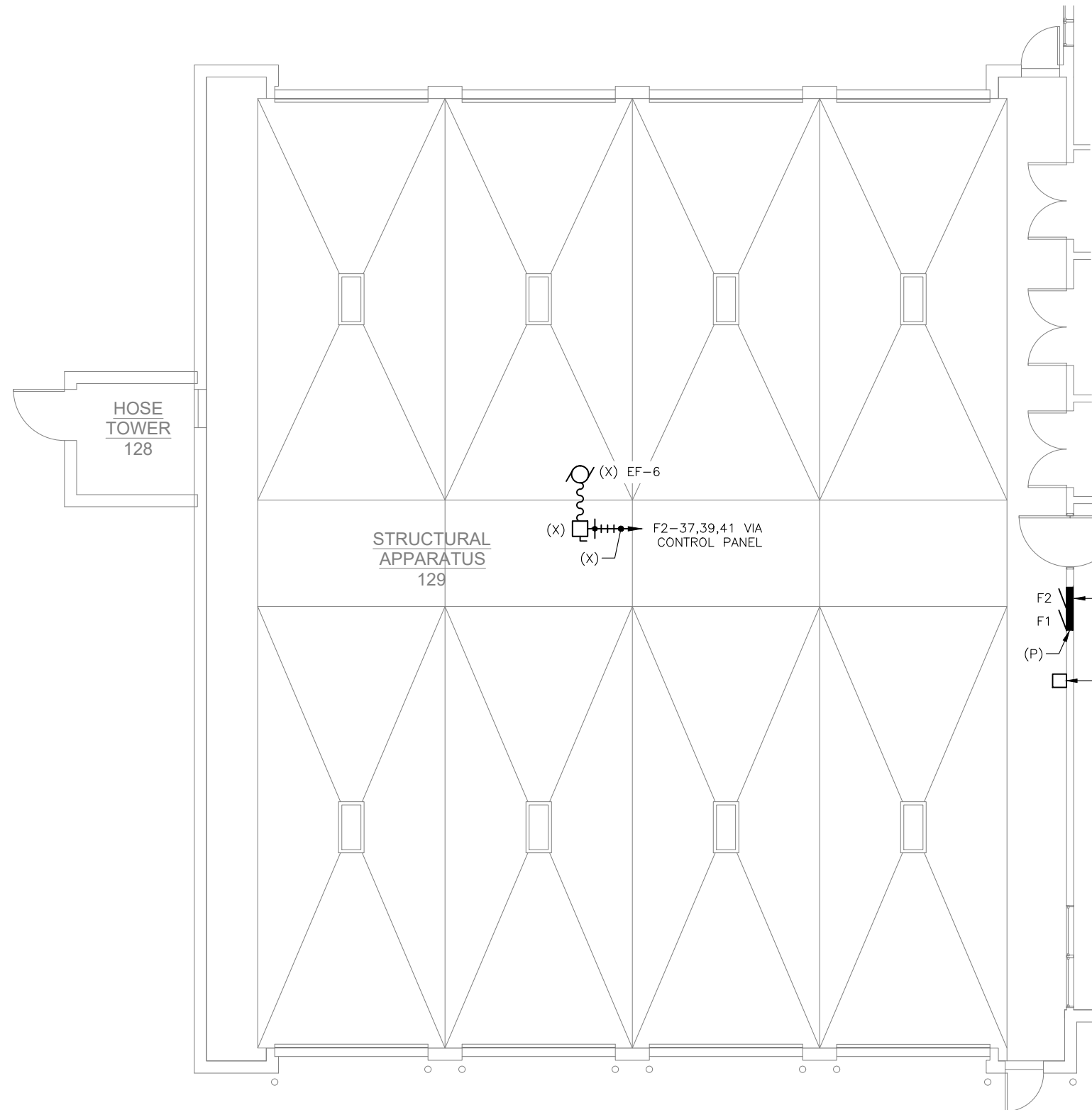
**PDC**  
 ENGINEERS  
 PLAN - DESIGN - CONSTRUCT  
 A. E. S. E. C. S. M. P. A. N. Y.  
 9109 Mendocino Mall Rd. Ste. 4, Juneau, AK 99801  
 907.780.6060 | A.E.C.C.605

PROJECT:  
**CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT**  
**CBJ CONTRACT NO. BE21-177**  
 JUNEAU, ALASKA

SHEET TITLE:  
**DOUGLAS FIRE STATION ELECTRICAL DEMOLITION PLAN**

DESIGN	BJB
DRAWN	BJB
CHECKED	BJB
DATE	01/27/2021
PROJECT No. 19309.01JN	
SHEET NUMBER	
<b>E102</b>	

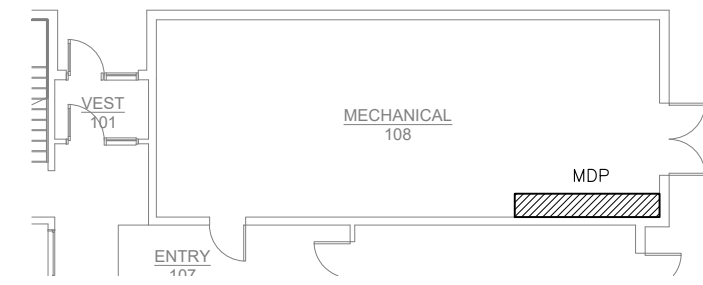
No.	Date	Item



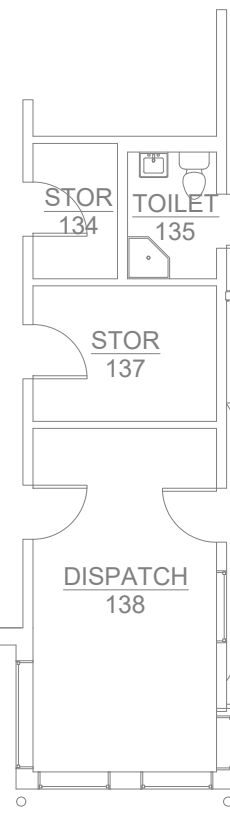
**1** **GLACIER FIRE STATION ELECTRICAL DEMOLITION PLAN**  
 SCALE: 0 2' 4' 8' 16'

**NOTES:**

1. THE BUS CAPACITY OF PANELBOARD F INCREASES WITH THIS PROJECT. DEMOLISH THE EXISTING FEEDER: 1-1/2"C, 4#2. CUT THE EXISTING FEEDER CONDUIT AT THE SLAB BELOW PANELBOARD F AND CAP. PROVIDE NEW FEEDER: 2"C, 4#3/0, 1#6G. TERMINATE AT EXISTING SPARE 200/3 CIRCUIT BREAKER IN THE EXISTING MAIN DISTRIBUTION PANEL (MDP). ROUTE CONDUIT ABOVE ACCESSIBLE CEILING IN CORRIDOR BETWEEN APPARATUS 129 AND MECHANICAL 108. SURFACE MOUNT THE NEW PANELBOARDS OVER THE EXISTING BACKBOXES.



**2** **MECHANICAL 108 DEMOLITION PLAN**  
 SCALE: 0 4' 8' 16'



**AREA OF WORK**  
**AREA OF WORK**  
**KEYPLAN**

No.	Date	Item

CONSULTANT:  
**EGENY**  
 ENGINEERING, LLC  
 217 2nd St., Ste. 208, Juneau, AK 99801  
 PH: (907) 586-5900 / FAX: (907) 586-5901

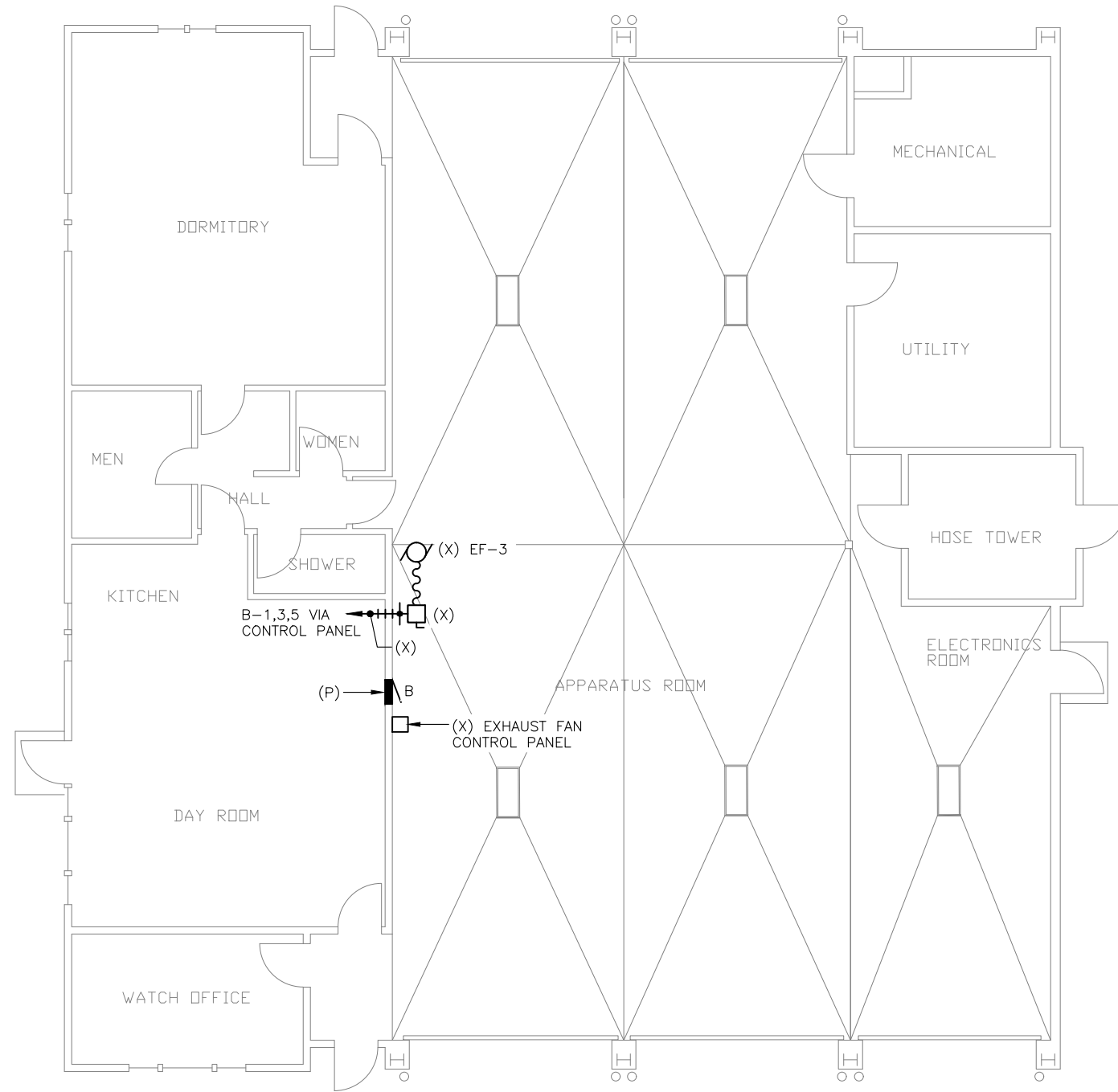
STATE OF ALASKA  
 Board of Professional Engineers  
 License No. 10453  
 JANUARY 27, 2021

**PDC**  
 ENGINEERS  
 PLAN • DESIGN • CONSTRUCT  
 A. E. S. E. C. S. M. P. A. N. Y.  
 9109 Mendocino Mall Rd. Ste. 4, Juneau, AK 99801  
 907.780.6060 | A.E.C.C.6.0.5

PROJECT:  
**CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT**  
**CBJ CONTRACT NO. BE21-177**  
 JUNEAU, ALASKA

SHEET TITLE:  
**GLACIER FIRE STATION ELECTRICAL DEMOLITION PLAN**

DESIGN	BJB
DRAWN	BJB
CHECKED	BJB
DATE	01/27/2021
PROJECT No.	19309.01JN
SHEET NUMBER	<b>E103</b>



NOTES:

1. RECONNECT PANELBOARD B TO THE EXISTING FEEDER. SURFACE MOUNT THE NEW PANELBOARD OVER THE EXISTING BACKBOX.

1 **AUKE BAY FIRE STATION ELECTRICAL DEMOLITION PLAN**

SCALE: 0 2' 4' 8' 16'



No.	Date	Item

DESIGN	BJB
DRAWN	BJB
CHECKED	BJB
DATE	01/27/2021

PROJECT No.  
**19309.01JN**  
SHEET NUMBER

**E104**

SHEET TITLE :

**AUKE BAY FIRE STATION  
ELECTRICAL DEMOLITION PLAN**

PROJECT :

**CCFR WIDE VEHICLE EXHAUST  
SYSTEM REPLACEMENT  
CBJ CONTRACT NO. BE21-177**

**JUNEAU, ALASKA**

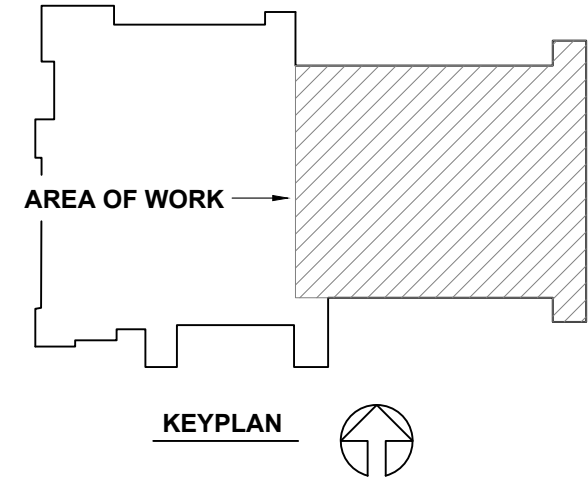
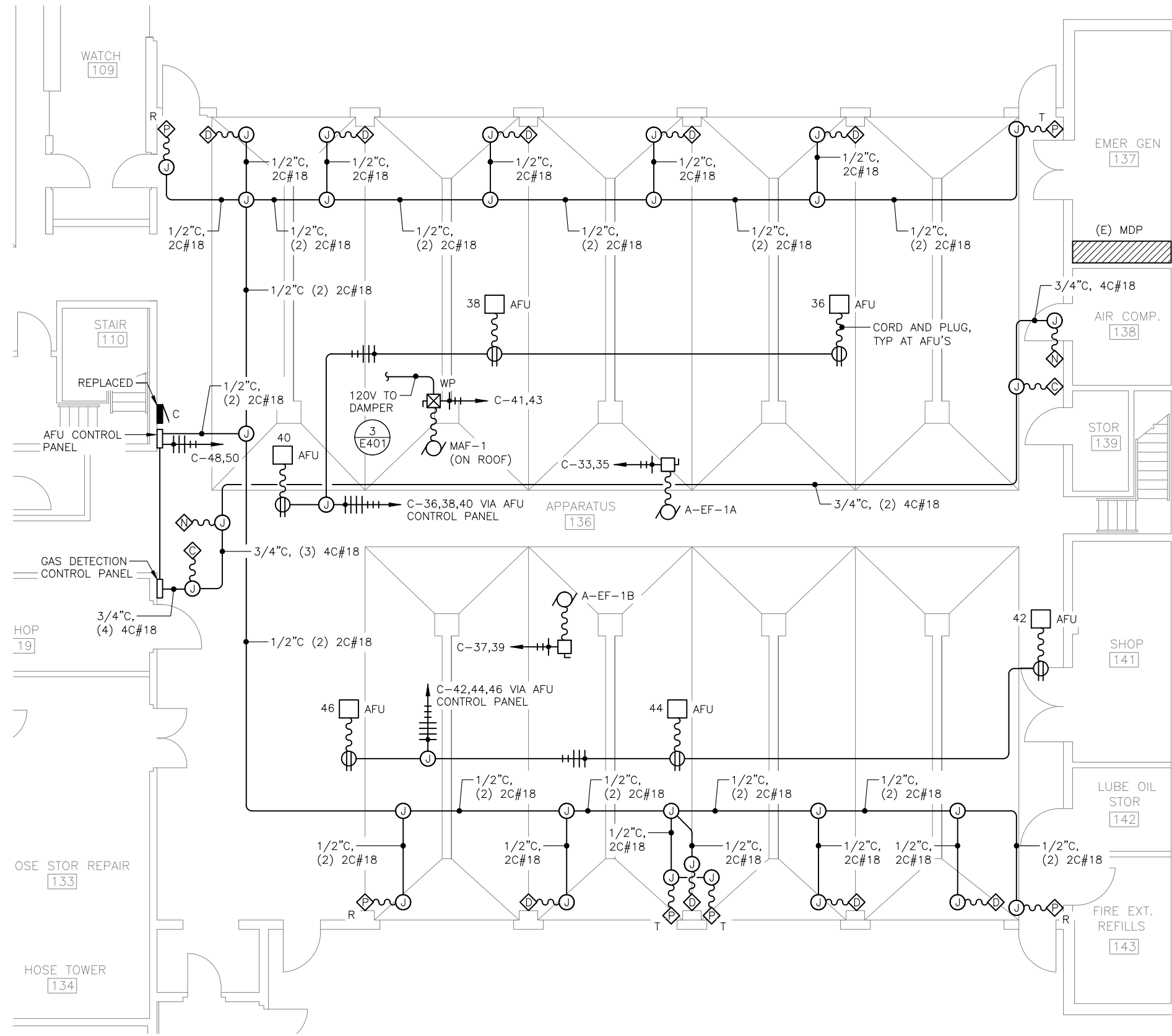
**PDC**  
ENGINEERS  
PLAN - DESIGN - CONSTRUCT  
A. E. S. P. E. C. S. M. P. A. N. Y.  
9109 Mendocino Mall Rd. Ste. 4, Juneau, AK 99801  
907.780.6060 | A E C C 6 0 5

STATE OF ALASKA  
Professional Engineer  
Edry Beggs  
No. 10453  
JANUARY 27, 2021

CONSULTANT :  
**EGENY**  
ENGINEERING, LLC  
217 2nd St, Ste 208, JUNEAU, AK 99801  
PH: (907) 586-5900 / FAX: (907) 586-5901

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION, AFFECTING ALL LABELED SCALES

\\emeralddocshare\Projects\109\_PDC\_Engineers\17\_CCFR\_Air\_Channels\Drawings\E201\_LAYOUT\_Jan 28, 2021 11:35 AM



**1 JUNEAU FIRE STATION ELECTRICAL PLAN**  
 SCALE: 0 2' 4' 8' 16'

No.	Date	Item

CONSULTANT:  
**EGENYI**  
 ENGINEERING, LLC  
 217 2nd St. Ste. 208, JUNEAU, AK 99801  
 PH: (907) 586-5900 / FAX: (907) 586-5901

PROFESSIONAL SEAL  
 JUNEAU, ALASKA  
 1911  
 E. J. Beggs  
 E.E. 10453  
 JANUARY 27, 2021

**PDC**  
 ENGINEERS  
 PLAN • DESIGN • CONSTRUCT  
 A. E. S. E. C. S. M. P. A. N. Y.  
 9109 Mendocino Mall Rd. Ste. 4, Juneau, AK 99801  
 907.780.6060 | A E C C 6 0 5

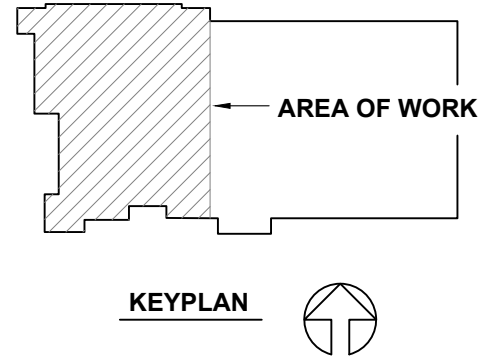
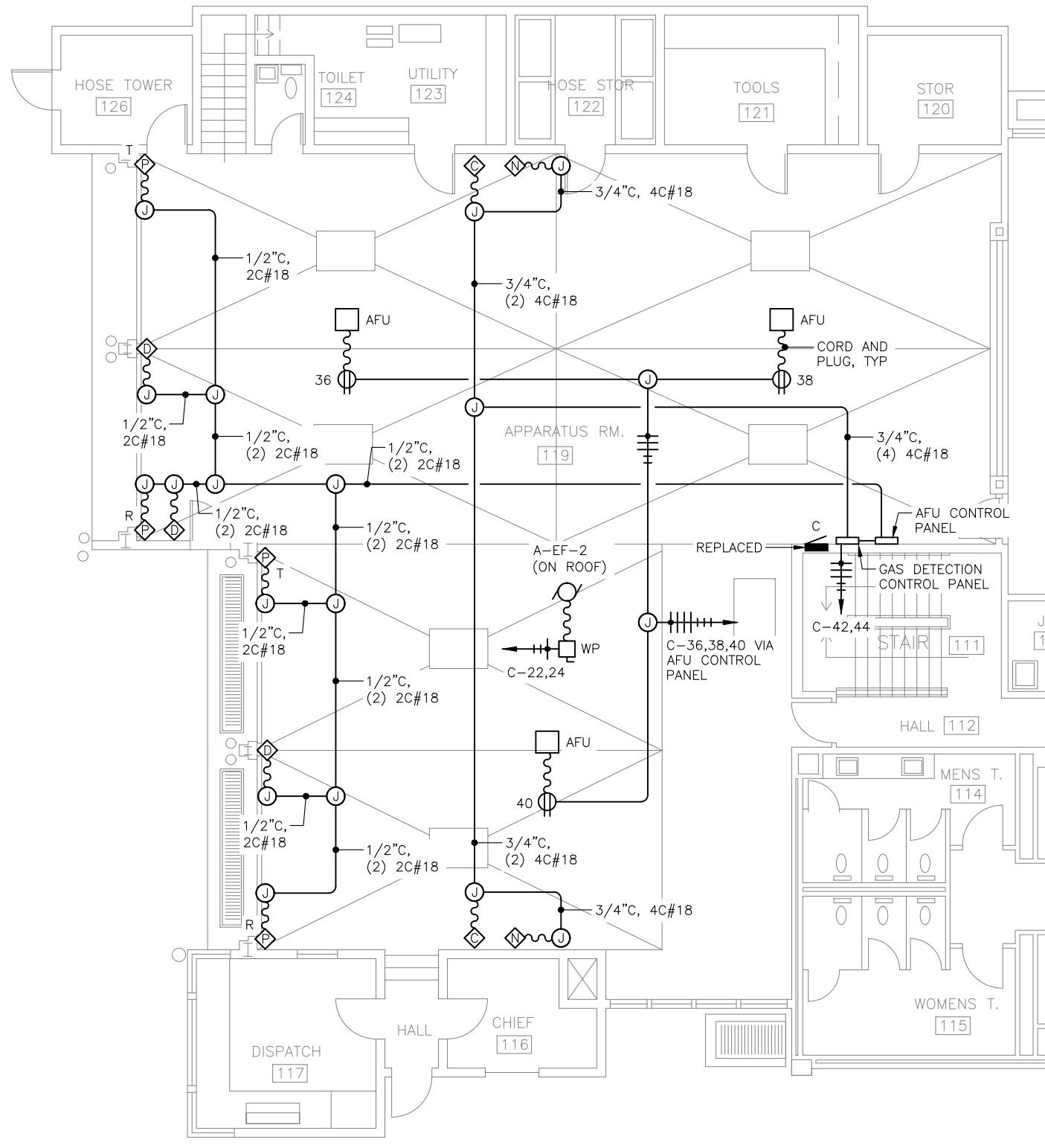
PROJECT:  
**CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT**  
**CBJ CONTRACT NO. BE21-177**  
 JUNEAU, ALASKA

SHEET TITLE:  
**JUNEAU FIRE STATION ELECTRICAL PLAN**

DESIGN: BJB  
 DRAWN: BJB  
 CHECKED: BJB  
 DATE: 01/27/2021  
 PROJECT No. 19309.01JN  
 SHEET NUMBER  
**E201**

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION, AFFECTING ALL LABELED SCALES

\\Ems\docs\shared\Projects\109\_PDC\_Engineers\17\_CCFR\_Air\_Change\Drawings\E202\_LAYOUT\_Jan 28, 2021 11:35 AM



**1 DOUGLAS FIRE STATION MAIN FLOOR ELECTRICAL PLAN**  
 SCALE: 0 2' 4' 8' 16'

DESIGN	BJB	
DRAWN	BJB	
CHECKED	BJB	
DATE	01/27/2021	
PROJECT No. <b>19309.01JN</b>		
SHEET NUMBER <b>E202</b>		
No.	Date	Item
REVISIONS		

CONSULTANT:  
**EGENYI**  
 ENGINEERING, LLC  
 217 2nd St., Ste. 208, JUNEAU, AK 99801  
 PH: (907) 586-5900 / FAX: (907) 586-5901

STATE OF ALASKA  
 Board of Professional Engineers  
 License No. 10453  
 JANUARY 27, 2021

**PDC**  
 ENGINEERS  
 PLAN • DESIGN • CONSTRUCT  
 A. E. S. E. C. S. M. P. A. N. Y.  
 9109 Mendocino Mall Rd., Ste. 4, Juneau, AK 99801  
 907.780.6060 | A.E.C.C.605

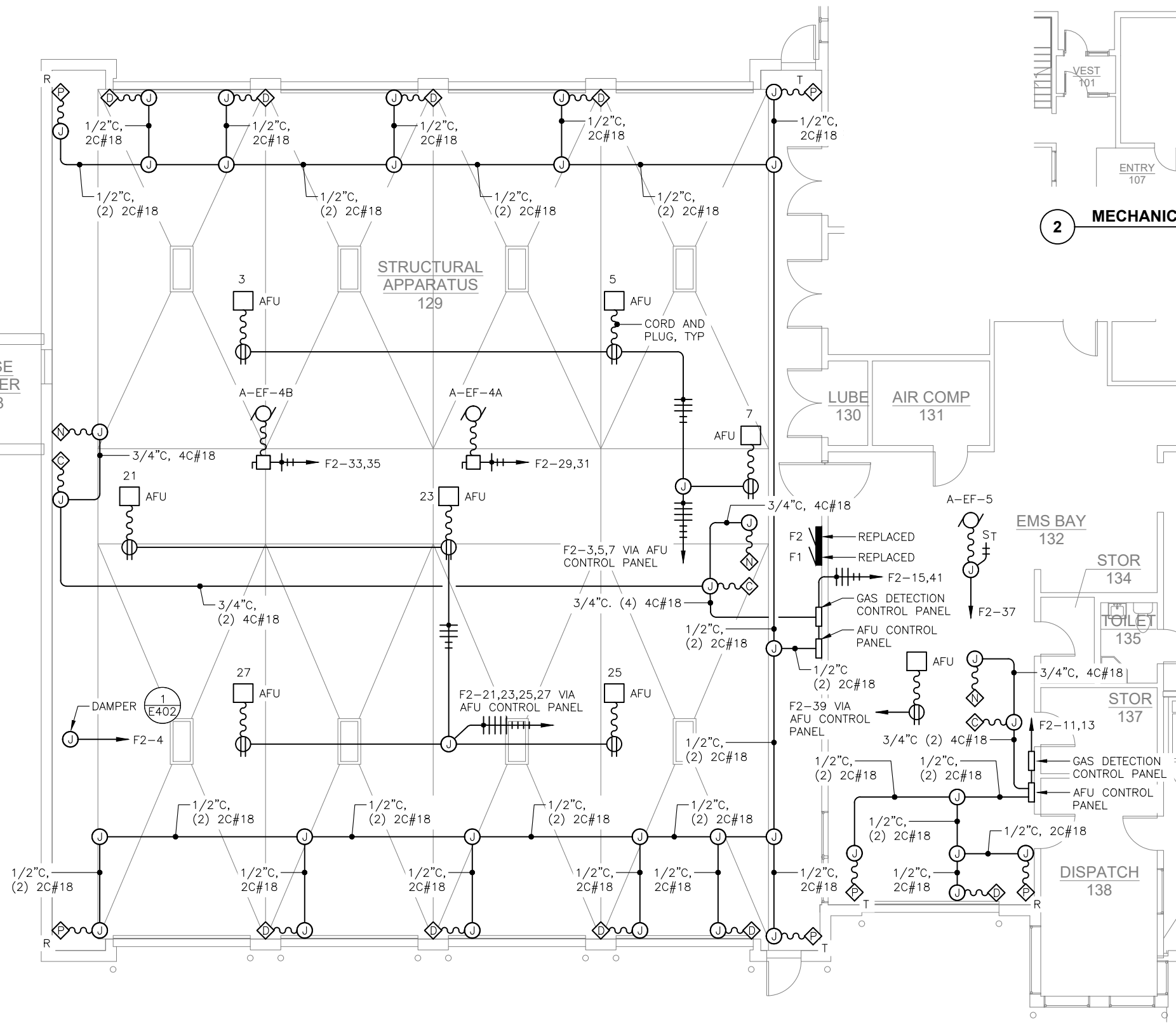
PROJECT:  
**CCFR WIDE VEHICLE EXHAUST  
 SYSTEM REPLACEMENT  
 CBJ CONTRACT NO. BE21-177**  
 JUNEAU, ALASKA

SHEET TITLE:  
**DOUGLAS FIRE STATION  
 ELECTRICAL PLAN**

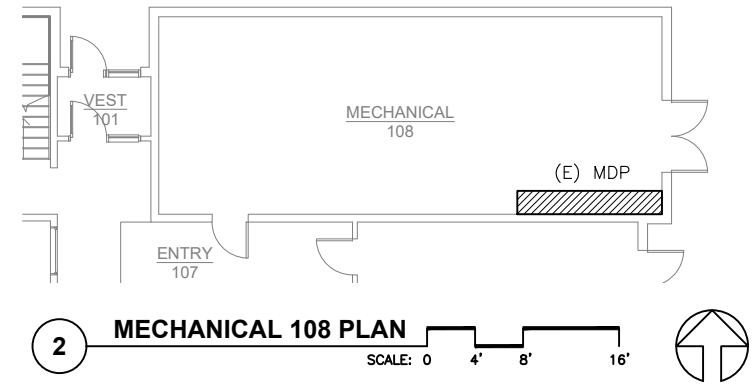


IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION, AFFECTING ALL LABELED SCALES

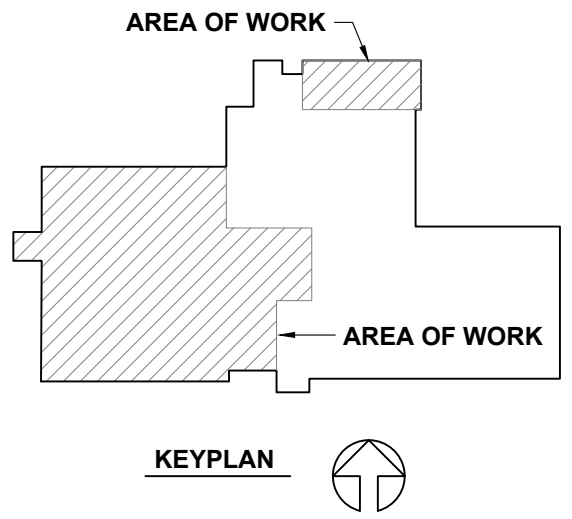
\\Ems\docs\shared\Projects\109\_PDC\_Engineers\17\_CCFR\_Air\_Change\Drawings\E203\_LAYOUT\_Jan 28, 2021 11:35 AM



**1** GLACIER FIRE STATION ELECTRICAL PLAN  
SCALE: 0 2' 4' 8' 16'



**2** MECHANICAL 108 PLAN  
SCALE: 0 4' 8' 16'



KEYPLAN

CONSULTANT:  
**EGENI**  
ENGINEERING, LLC  
217 2nd St., Ste. 208, JUNEAU, AK 99801  
PH: (907) 586-5900 / FAX: (907) 586-5901

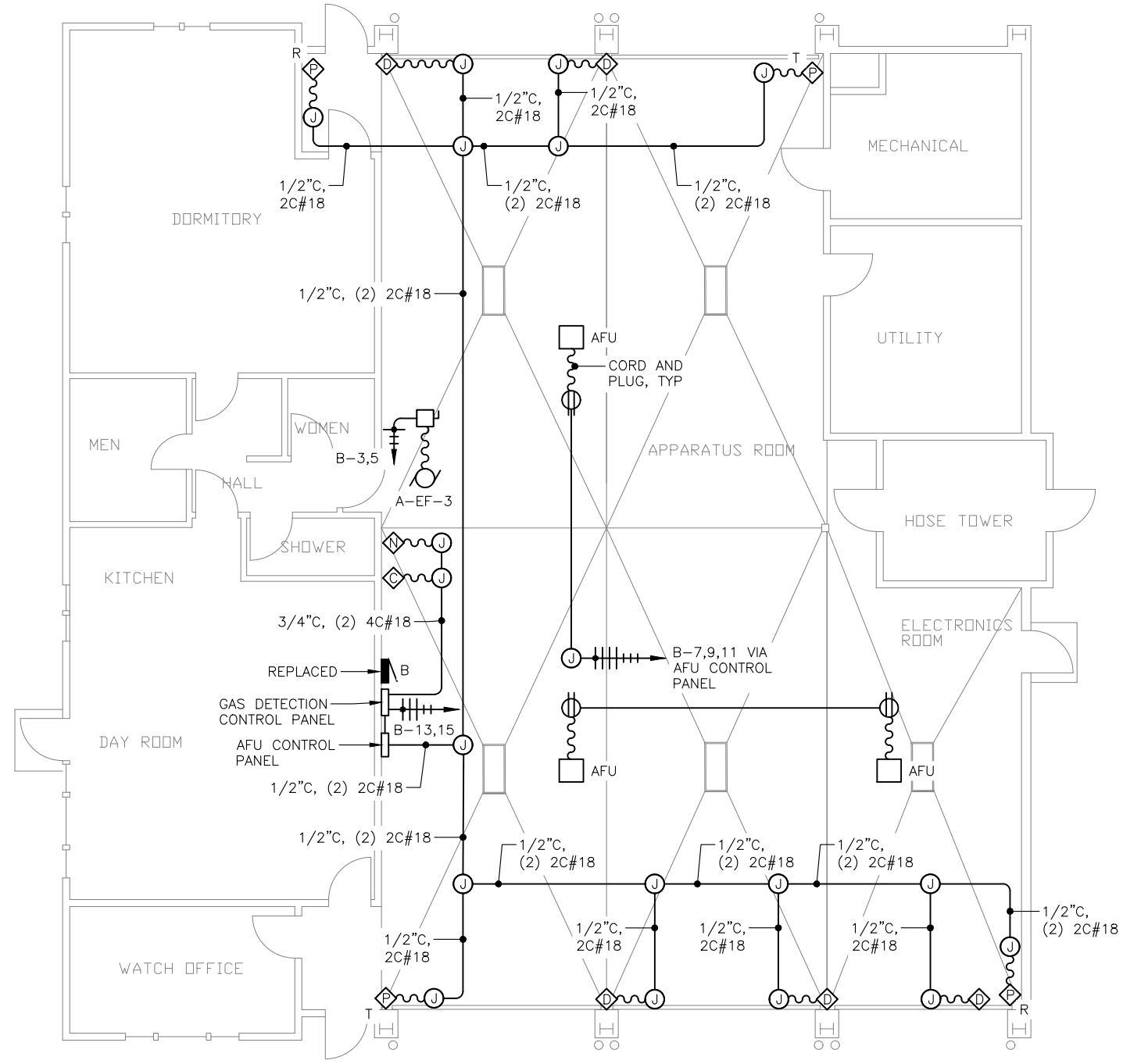
PROFESSIONAL SEAL  
JANUARY 27, 2021

**PDC**  
ENGINEERS  
ARCHITECTS  
PLANNERS  
DESIGNERS  
CONSTRUCTORS  
9109 Mendocino Mall Rd. Ste. 4, Juneau, AK 99801  
907.780.6060 | A E C C 6 0 5

PROJECT:  
**CCFR WIDE VEHICLE EXHAUST  
SYSTEM REPLACEMENT  
CBJ CONTRACT NO. BE21-177**  
JUNEAU, ALASKA

SHEET TITLE:  
**GLACIER FIRE STATION  
ELECTRICAL PLAN**

DESIGN	BJB	
DRAWN	BJB	
CHECKED	BJB	
DATE	01/27/2021	
PROJECT No. <b>19309.01JN</b>		
SHEET NUMBER <b>E203</b>		
No.	Date	Item
REVISIONS		



1 AUKE BAY FIRE STATION ELECTRICAL PLAN

SCALE: 0 2' 4' 8' 16'

DESIGN	BJB	
DRAWN	BJB	
CHECKED	BJB	
DATE	01/27/2021	
PROJECT No. 19309.01JN		
SHEET NUMBER		
<b>E204</b>		
No.	Date	Item
REVISIONS		

CONSULTANT:

EGENYI  
ENGINEERING, LLC  
217 2nd St., Ste. 208, JUNEAU, AK 99801  
PH: (907) 586-5900 / FAX: (907) 586-5901

BARRY BEGGS  
Professional Engineer  
License No. 10453  
State of Alaska  
JANUARY 27, 2021

PDC  
ENGINEERS & ARCHITECTS  
PLAN - DESIGN - CONSTRUCT  
A. E. S. E. C. S. M. P. A. N. Y.  
9109 Mendocino Mall Rd. Ste. 4, Juneau, AK 99801  
907.780.6060 | A E C C 6 0 5

PROJECT:

**CCFR WIDE VEHICLE EXHAUST  
SYSTEM REPLACEMENT  
CBJ CONTRACT NO. BE21-177**

JUNEAU, ALASKA

SHEET TITLE:

**AUKE BAY FIRE STATION  
ELECTRICAL PLAN**

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION, AFFECTING ALL LABELED SCALES

PANEL C (JUNEAU)										
POLE NO.	LOAD SERVED	LOAD		CB	PH	CB	LOAD		LOAD SERVED	POLE NO.
		TYPE	KVA				TYPE	KVA		
1	LTG EXIT			20/1	A	20/1			LTG	2
3	LTG CORRIDOR			20/1	B	20/1			LTG BAY 1	4
5	LTG CORRIDOR			20/1	C	20/1			LTG BAY 2	6
7	LTG CORRIDOR			20/1	A	20/1			REC CORD REEL BAY 1 EAST (1)	8
9	LTG CORRIDOR			20/1	B	20/1			REC CORD REEL BAY 2 EAST (1)	10
11	REC CORD REEL (1)			20/1	C	20/1			SPARE (1)	12
13	REC CORD REEL (1)			20/1	A	20/1			REC EAST (1)	14
15	SPARE			20/1	B	20/1			OH DOOR BAY 1 EAST	16
17	REC ENGINE 11 WEST (1)			20/1	C	20/1			OH DOOR BAY 1 EAST	18
19	OH DOOR BAY 3			20/1	A	20/1			OH DOOR BAY 2 EAST	20
21	OH DOOR BAY 2			20/1	B	20/2			OH DOOR BAY 2 EAST	22
23	FAN			20/1	C	--			OH DOOR BAY 3 EAST	24
25	TV NORTH WALL			20/1	A	30/1			UPS	26
27	LTG WORK BENCH			20/1	B	30/1			UPS	28
29	SPARE			20/2	C	30/3			SPARE	30
31	----			--	A	--			----	32
33	A-EF-1A (2)	M	0.8	25/2	B	--			----	34
35	----	M	0.8	--	C	20/1	M	1.7	AFU (2)	36
37	A-EF-1B (2)	M	0.3	20/2	A	20/1	M	1.7	AFU (2)	38
39	----	M	0.3	--	B	20/1	M	1.7	AFU (2)	40
41	MAF-1 (2)	M	1.2	20/2	C	20/1	M	1.7	AFU (2)	42
43	----	M	1.2	--	A	20/1	M	1.7	AFU (2)	44
45	SPARE			20/1	B	20/1	M	1.7	AFU (2)	46
47	SPARE			20/1	C	20/1	C	0.1	GAS DETECTION CONTROL PANEL (2)	48
49	SPARE			20/1	A	20/1	C	0.1	AFU CONTROL PANEL (2)	50
51	SPARE			20/1	B	20/1			SPARE	52
53	SPARE			20/1	C	20/1			SPARE	54
55	SPARE			20/1	A	20/1			SPARE	56
57	SPARE			20/1	B	20/1			SPARE	58
59	SPARE			20/1	C	20/1			SPARE	60
61	SPARE			20/1	A	20/1			SPARE	62
63	SPARE			20/1	B	20/1			SPARE	64
65	SPARE			20/1	C	20/1			SPARE	66

VOLTAGE: 120/208V, 3P, 4W	LOAD SUMMARY	CONNECTED LOAD (KVA)	DEMAND FACTOR	DEMAND KVA	NOTES:
AIC RATING: 10,000A	(L) LIGHTING	.	100% OF LOAD	.	1. PROVIDE GFCI CIRCUIT BREAKER.
MOUNTING: SURFACE	(R) RECEPTACLE	.	NEC 220-44	.	2. NEW LOAD.
MAIN: LUGS ONLY	(M) MOTOR	.	NEC 430-24	.	3. PROVIDE INTEGRAL TVSS.
BUS: 150A	(C) CONTINUOUS	.	125% OF LOAD	.	
	(N) NON-CONTINUOUS	.	100% OF LOAD	.	
	(K) KITCHEN	.	NEC 220-56	.	
	TOTAL	.	.	.	

PANEL C (DOUGLAS)										
POLE NO.	LOAD SERVED	LOAD		CB	PH	CB	LOAD		LOAD SERVED	POLE NO.
		TYPE	KVA				TYPE	KVA		
1	REC APPARATUS 119, EXTERIOR			20/1	A	20/1			LTG APPARATUS 119 SOUTH	2
3	REC APPARATUS 119, STORAGE 120			20/1	B	20/1			LTG APPARATUS 119 NORTH	4
5	REC TOOL ROOM 121			20/1	C	20/1			LTG STORAGE 120, MEZZ	6
7	REC UTILITY 123, MEZZ, EXTERIOR			20/1	A	20/1			LTG LTS 121, HOSE 123, UTIL 123	8
9	TREADMILL MEZZ			20/1	B	20/1			BAY DOOR FLOOD LTG	10
11	CORD REEL (1)			20/1	C	20/1			GARAGE BAY DOOR #2	12
13	CORD REEL (1)			20/1	A	20/1			GARAGE BAY DOOR #1	14
15	CORD REEL (1)			20/1	B	20/1			GARAGE BAY DOOR #4	16
17	CORD REEL (1)			20/1	C	20/1			BARAGE BAY DOOR #3	18
19	HOT WATER HEATER			20/3	A	20/1			TIMER	20
21	----			--	B	20/2	M	0.1	A-EF-2 (2)	22
23	----			--	C	--	M	0.1	----	24
25	AIR COMPRESSOR			15/3	A	60/3			CASCADE AIR COMPRESSOR	26
27	----			--	B	--			----	28
29	----			--	C	--			----	30
31	WELDER			50/3	A	20/1			REC SPRINKLER 120	32
33	----			--	B	30/1			SIREN	34
35	----			--	C	20/1	M	1.7	AFU (2)	36
37	SPRINKLER AIR COMPRESSOR			15/3	A	20/1	M	1.7	AFU (2)	38
39	----			--	B	20/1	M	1.7	AFU (2)	40
41	----			--	C	20/1	C	0.1	AFU CONTROL PANEL (2)	42
43	SPARE			20/1	A	20/1	C	0.1	GAS DETECTION CONTROL PANEL (2)	44
45	SPARE			20/1	B	20/1			SPARE	46
47	SPARE			20/1	C	20/1			SPARE	48
49	SPARE			20/1	A	20/1			SPARE	50
51	SPARE			20/1	B	20/1			SPARE	52
53	SPARE			20/1	C	20/1			SPARE	54

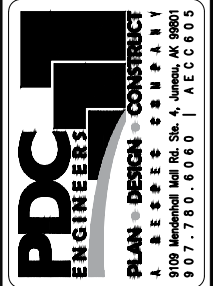
VOLTAGE: 120/208V, 3P, 4W	LOAD SUMMARY	CONNECTED LOAD (KVA)	DEMAND FACTOR	DEMAND KVA	NOTES:
AIC RATING: 10,000A	(L) LIGHTING	.	100% OF LOAD	.	1. PROVIDE GFCI CIRCUIT BREAKER.
MOUNTING: FLUSH	(R) RECEPTACLE	.	NEC 220-44	.	2. NEW LOAD.
MAIN: LUGS ONLY	(M) MOTOR	.	NEC 430-24	.	3. PROVIDE INTEGRAL TVSS.
BUS: 150A	(C) CONTINUOUS	.	125% OF LOAD	.	
	(N) NON-CONTINUOUS	.	100% OF LOAD	.	
	(K) KITCHEN	.	NEC 220-56	.	
	TOTAL	.	.	.	

PANEL B (AUKE BAY)										
POLE NO.	LOAD SERVED	LOAD		CB	PH	CB	LOAD		LOAD SERVED	POLE NO.
		TYPE	KVA				TYPE	KVA		
1	REC BAY (1)			20/1	A	20/1			REC BAY (1)	2
3	A-EF-3 (2)	M	0.9	20/2	B	20/1			LIGHTING CONTROL PANEL	4
5	----	M	0.9	--	C	20/1			SPARE (1)	6
7	AFU (2)	M	1.7	20/1	A	20/1			SPARE	8
9	AFU (2)	M	1.7	20/1	B	20/1			SPARE	10
11	AFU (2)	M	1.7	20/1	C	20/1			SPARE	12
13	AFU CONTROL PANEL (2)	C	0.1	20/1	A	20/1			SPARE	14
15	GAS DETECTION CONTROL PANEL (2)	C	0.1	20/1	B	20/1			SPARE	16
17	SPARE			20/1	C	20/1			SPARE	18

VOLTAGE: 120/208V, 3P, 4W	LOAD SUMMARY	CONNECTED LOAD (KVA)	DEMAND FACTOR	DEMAND KVA	NOTES:
AIC RATING: 10,000A	(L) LIGHTING	.	100% OF LOAD	.	1. PROVIDE GFCI CIRCUIT BREAKER.
MOUNTING: RECESSED	(R) RECEPTACLE	.	NEC 220-44	.	2. NEW LOAD.
MAIN: LUGS ONLY	(M) MOTOR	.	NEC 430-24	.	3. PROVIDE INTEGRAL TVSS.
BUS: 100A	(C) CONTINUOUS	.	125% OF LOAD	.	
	(N) NON-CONTINUOUS	.	100% OF LOAD	.	
	(K) KITCHEN	.	NEC 220-56	.	
	TOTAL	.	.	.	

DESIGN	BJB	
DRAWN	BJB	
CHECKED	BJB	
DATE	01/27/2021	
PROJECT No. 19309.01JN		
SHEET NUMBER		
<b>E301</b>		
No.	Date	Item
REVISIONS		



PROJECT :  
**CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT**  
**CBJ CONTRACT NO. BE21-177**  
 SHEET TITLE :  
**SCHEDULES**  
 JUNEAU, ALASKA

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION, AFFECTING ALL LABELED SCALES

\\Emerald\cadd\alaska\Projects\109 PDC Engineers\17 CCFR Air Cleaners\Drawings\E302 Layout1 - Jan 26, 2021, 11:38 AM

**PANEL F - SECTION 1 (GLACIER)**

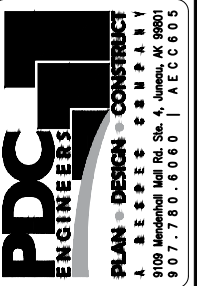
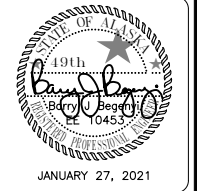
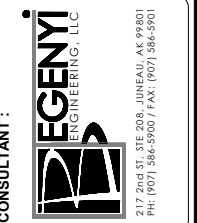
POLE NO.	LOAD SERVED	LOAD		PH	CB	LOAD		LOAD SERVED	POLE NO.
		TYPE	KVA			TYPE	KVA		
1	LTG 129			20/1	A	20/1		LTG 116,126,127,130,131	2
3	LTG 129 BAY 1			20/1	B	20/1		LTG 129 BAY 1	4
5	LTG 129 BAY 1			20/1	C	20/1		LTG 129 BAY 3	6
7	SPARE			20/1	A	20/1		LTG 129 BAY 2, LV TRANSFORMER	8
9	LTG 129 BAY 4			20/1	B	20/1		LTG 129 BAY 2	10
11	LTG 129 BAY 4			20/1	C	20/1		LTG 128 HOSE TOWER	12
13	REC 129 SW AND EXTERIOR W (1)			20/1	A	20/1		REC 129 NW AND EXTERIOR NW (1)	14
15	CABLE REEL BAY 1 E (1)			20/1	B	20/1		REC 127 W	16
17	CABLE REEL BAY 2 E (1)			20/1	C	20/1		REC 127 W	18
19	CABLE REEL BAY 3 E (1)			20/1	A	20/1		REC 127 E	20
21	CABLE REEL BAY 4 E (1)			20/1	B	20/1		REC 127 E	22
23	SPARE			20/1	C	20/1		SPARE	24
25	CABLE REEL BAY 1 W (1)			20/1	A	20/1		SPARE	26
27	CABLE REEL BAY 2 W (1)			20/1	B	20/1		REC 129 S (1)	28
29	CABLE REEL BAY 3 W (1)			20/1	C	20/1		REC EXTERIOR E (1)	30
31	CABLE REEL BAY 4 W (1)			20/1	A	20/1		REC 129 NE AND EXTERIOR NE (1)	32
33	UH, EF-10 128 HOSE TOWER			20/1	B	20/1		SPARE	34
35	SPARE			20/1	C	20/1		SPARE	36
37	SPARE			20/1	A	20/1		SPARE	38
39	SPARE			20/1	B	20/1		SPARE	40
41	SPARE			20/1	C	20/1		SPARE	42

VOLTAGE: 120/208V, 3P, 4W	LOAD SUMMARY	CONNECTED LOAD (KVA)	DEMAND FACTOR	DEMAND KVA	NOTES: 1. PROVIDE GFCI CIRCUIT BREAKER. 2. PROVIDE FEED THRU LUGS. 3. PROVIDE INTEGRAL TVSS.
AIC RATING: 10,000	(L) LIGHTING	.	100% OF LOAD	.	
MOUNTING: SURFACE	(R) RECEPTACLE	.	NEC 220-44	.	
MAIN: LUGS ONLY	(M) MOTOR	.	NEC 430-24	.	
BUS: 200A	(C) CONTINUOUS	.	125% OF LOAD	.	
	(N) NON-CONTINUOUS	.	100% OF LOAD	.	
	(K) KITCHEN	.	NEC 220-56	.	
	TOTAL	.		.	

**PANEL F - SECTION 2 (GLACIER)**

POLE NO.	LOAD SERVED	LOAD		PH	CB	LOAD		LOAD SERVED	POLE NO.
		TYPE	KVA			TYPE	KVA		
1	DOOR 13			25/1	A	25/1		DOOR 6	2
3	AHU (1)	M	1.7	20/1	B	20/1		SPARE	4
5	AHU (1)	M	1.7	20/1	C	20/1		SPARE	6
7	AHU (1)	M	1.7	20/1	A	20/1		SPARE	8
9	DOOR 12			25/1	B	25/1		DOOR 7	10
11	AFU CONTROL PANEL (1)	C	0.1	20/1	C	20/1		SPARE	12
13	GAS DETECTION CONTROL PANEL (1)	C	0.1	20/1	A	20/1		SPARE	14
15	AFU CONTROL PANEL (1)	C	0.1	20/1	B	20/1		SPARE	16
17	DOOR 11			25/1	C	25/1		DOOR 8	18
19	DOOR 10			25/1	A	25/1		DOOR 9	20
21	AHU (1)	M	1.7	20/1	B	25/1		SPARE	22
23	AHU (1)	M	1.7	20/1	C	20/1		TV RECEPTACLE	24
25	AHU (1)	M	1.7	20/1	A	15/3		AHU-4	26
27	AHU (1)	M	1.7	20/1	B	--		----	28
29	A-EF-4A (1)	M	1.5	25/2	C	--		----	30
31	----	M	1.5	--	A	20/1		SPARE	32
33	A-EF-4B (1)	M	0.6	20/2	B	20/1		SPARE	34
35	----	M	0.6	--	C	20/1		SPARE	36
37	A-EF-5 (1)	M	0.7	20/1	A	20/1		SPARE	38
39	AFU (1)	M	1.7	20/1	B	20/1		SPARE	40
41	GAS DETECTION CONTROL PANEL (1)	C	0.1	20/1	C	20/1		SPARE	42

VOLTAGE: 120/208V, 3P, 4W	LOAD SUMMARY	CONNECTED LOAD (KVA)	DEMAND FACTOR	DEMAND KVA	NOTES: 1. NEW LOAD.
AIC RATING: 10,000	(L) LIGHTING	.	100% OF LOAD	.	
MOUNTING: SURFACE	(R) RECEPTACLE	.	NEC 220-44	.	
MAIN: LUGS ONLY	(M) MOTOR	.	NEC 430-24	.	
BUS: 200A	(C) CONTINUOUS	.	125% OF LOAD	.	
	(N) NON-CONTINUOUS	.	100% OF LOAD	.	
	(K) KITCHEN	.	NEC 220-56	.	
	TOTAL	.		.	



PROJECT:  
**CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT**  
**CBJ CONTRACT NO. BE21-177**  
 JUNEAU, ALASKA

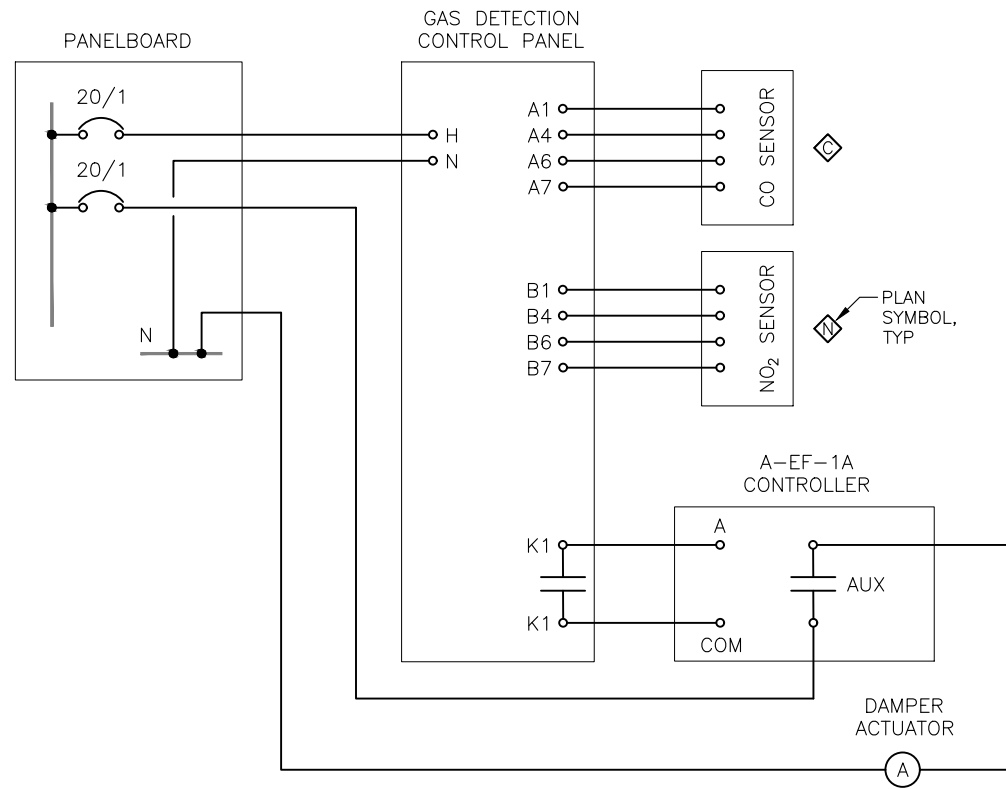
SHEET TITLE:  
**SCHEDULES**

DESIGN: BJB  
 DRAWN: BJB  
 CHECKED: BJB  
 DATE: 01/27/2021

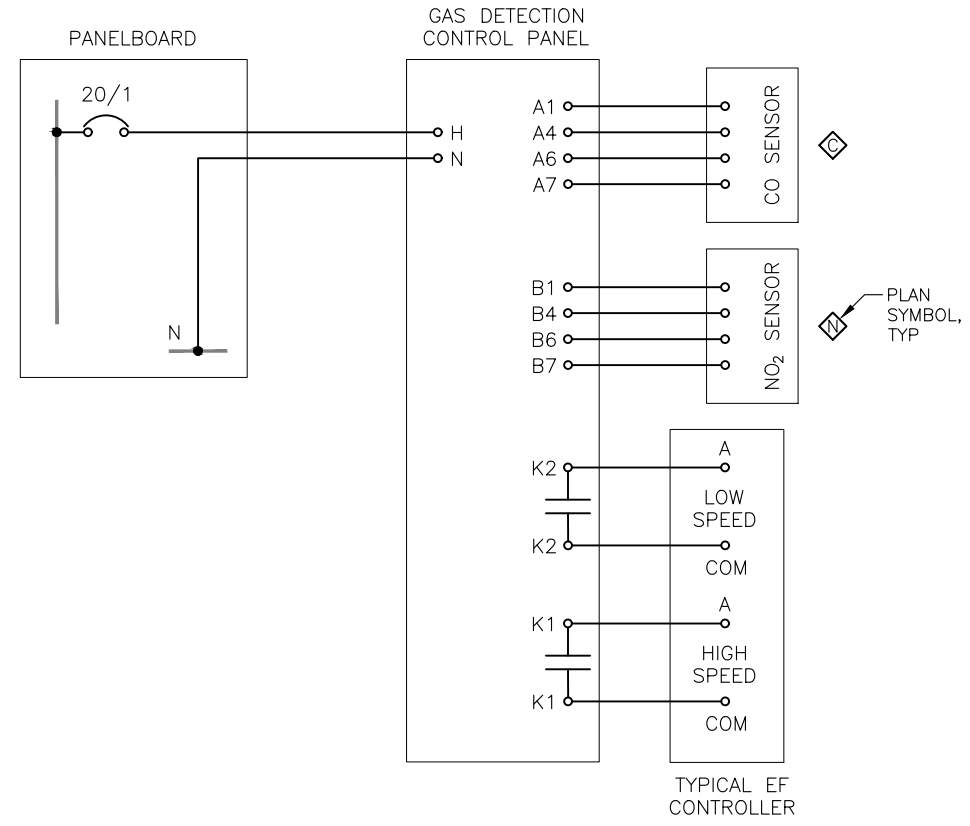
PROJECT No.  
**19309.01JN**  
 SHEET NUMBER  
**E302**

No.	Date	Item





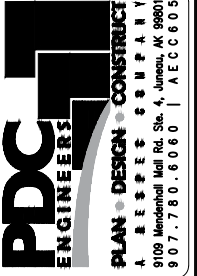
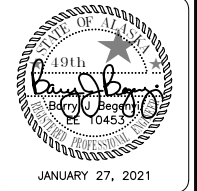
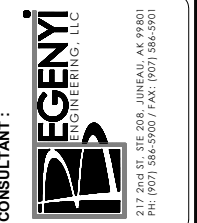
1 A-EF-4A CONTROL DIAGRAM



2 TYPICAL EF CONTROL DIAGRAM

NOTES:

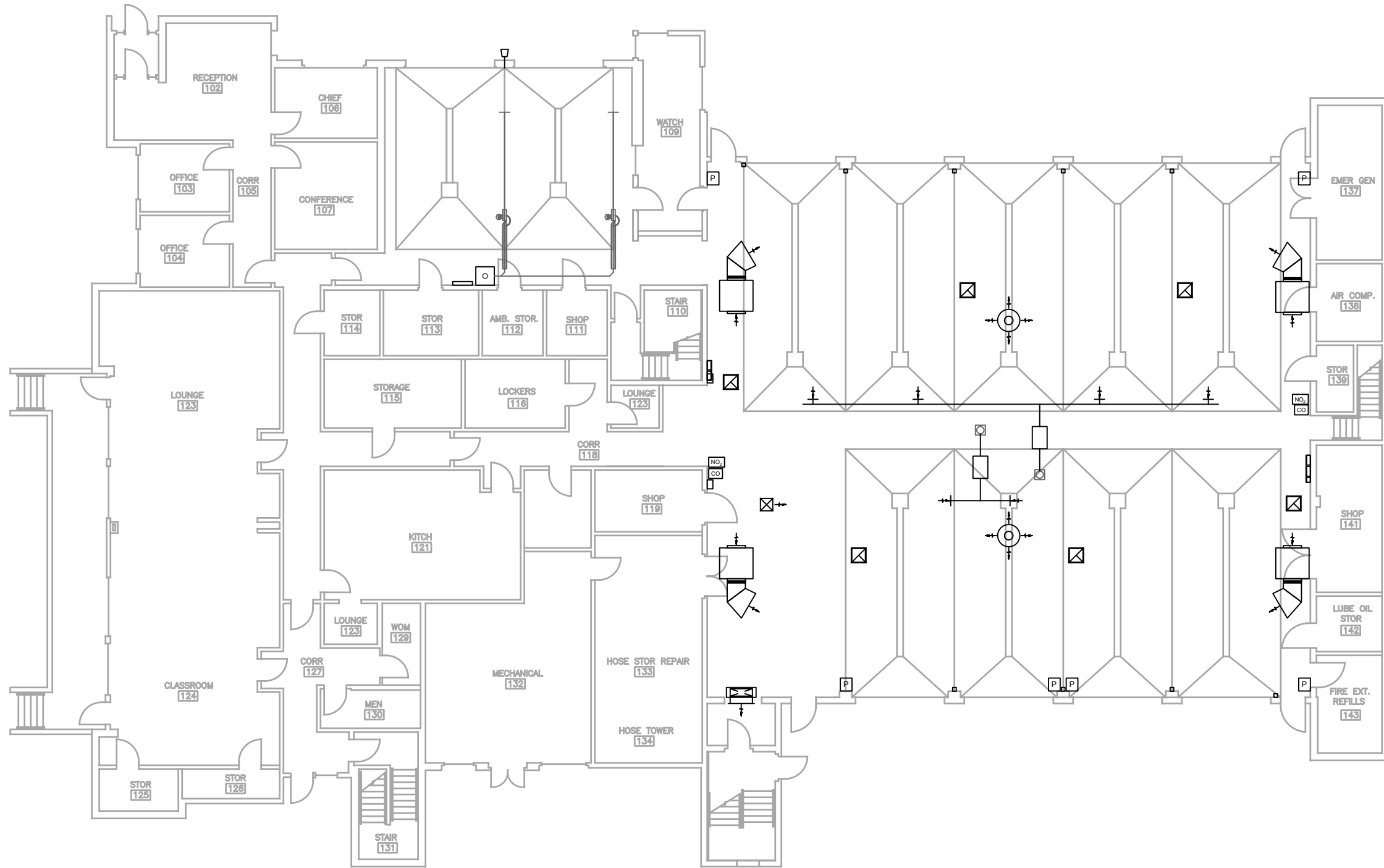
1. REFER TO THE PLAN DRAWINGS FOR THE QUANTITY OF SENSORS, SWITCHES, AND CONTROLLERS.
2. REFER TO THE MECHANICAL DRAWINGS FOR MOTOR SEQUENCE OF OPERATION.



PROJECT :  
CCFR WIDE VEHICLE EXHAUST  
SYSTEM REPLACEMENT  
CBJ CONTRACT NO. BE21-177  
JUNEAU, ALASKA

SHEET TITLE :  
**DIAGRAMS**

DESIGN	BJB	
DRAWN	BJB	
CHECKED	BJB	
DATE	01/27/2021	
PROJECT No. <b>19309.01JN</b>		
SHEET NUMBER <b>E402</b>		
No.	Date	Item
REVISIONS		



**1 JUNEAU FIRE STATION FLOOR PLAN**

SCALE: 0 4' 8' 16'



No.	Date	Item

**Jensen Yorba Wall Inc.**  
 CONSULTANT :  
 522 West 10th Street  
 Juneau, Alaska 99801  
 907.586.1070  
 AECC137  
 jensenyorbawall.com

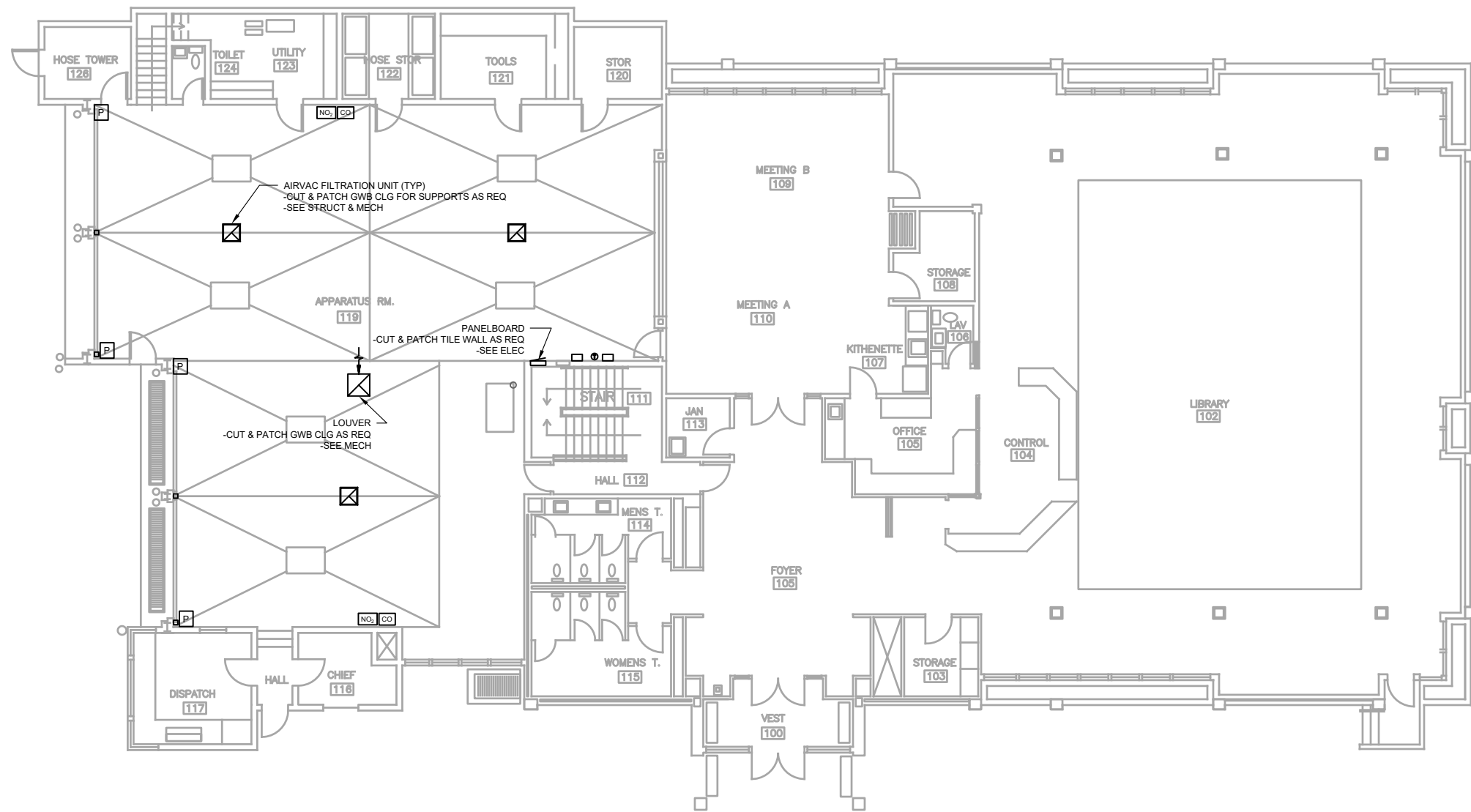


**PDC ENGINEERS**  
 PLAN • DESIGN • CONSTRUCT  
 A R E S P E C T I V E C O M P A N Y  
 2700 Combell St., Ste. 500, Anchorage, AK 99503  
 907.743.3700 | AECC605

PROJECT :  
**CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT**  
**CBJ CONTRACT NO. BE21-177**  
**JUNEAU, ALASKA**

SHEET TITLE :  
**JUNEAU FIRE STATION FLOOR PLAN**

DESIGN ADG  
 DRAWN ADG  
 CHECKED WJ  
 DATE 01/27/2021  
 PROJECT No. 19309.01JN  
 SHEET NUMBER  
**A101**  
 OF SHEETS



1 DOUGLAS FIRE STATION FLOOR PLAN - ALTERNATE #2

SCALE: 0 4' 8' 16'



No.	Date	Item

DESIGN	ADG
DRAWN	ADG
CHECKED	WJ
DATE	01/27/2021
PROJECT No.	19309.01JN
SHEET NUMBER	A102
OF SHEETS	

**Jensen Yorba Wall Inc.**  
 CONSULTANT:  
 522 West 10th Street  
 Juneau, Alaska 99801  
 907.586.1070  
 AECC137  
 jensenyorbawall.com



**PDC ENGINEERS**  
 PLAN • DESIGN • CONSTRUCT  
 A RESPEC COMPANY  
 2700 Combell St., Ste. 500, Anchorage, AK 99503  
 907.743.3700 | AECC605

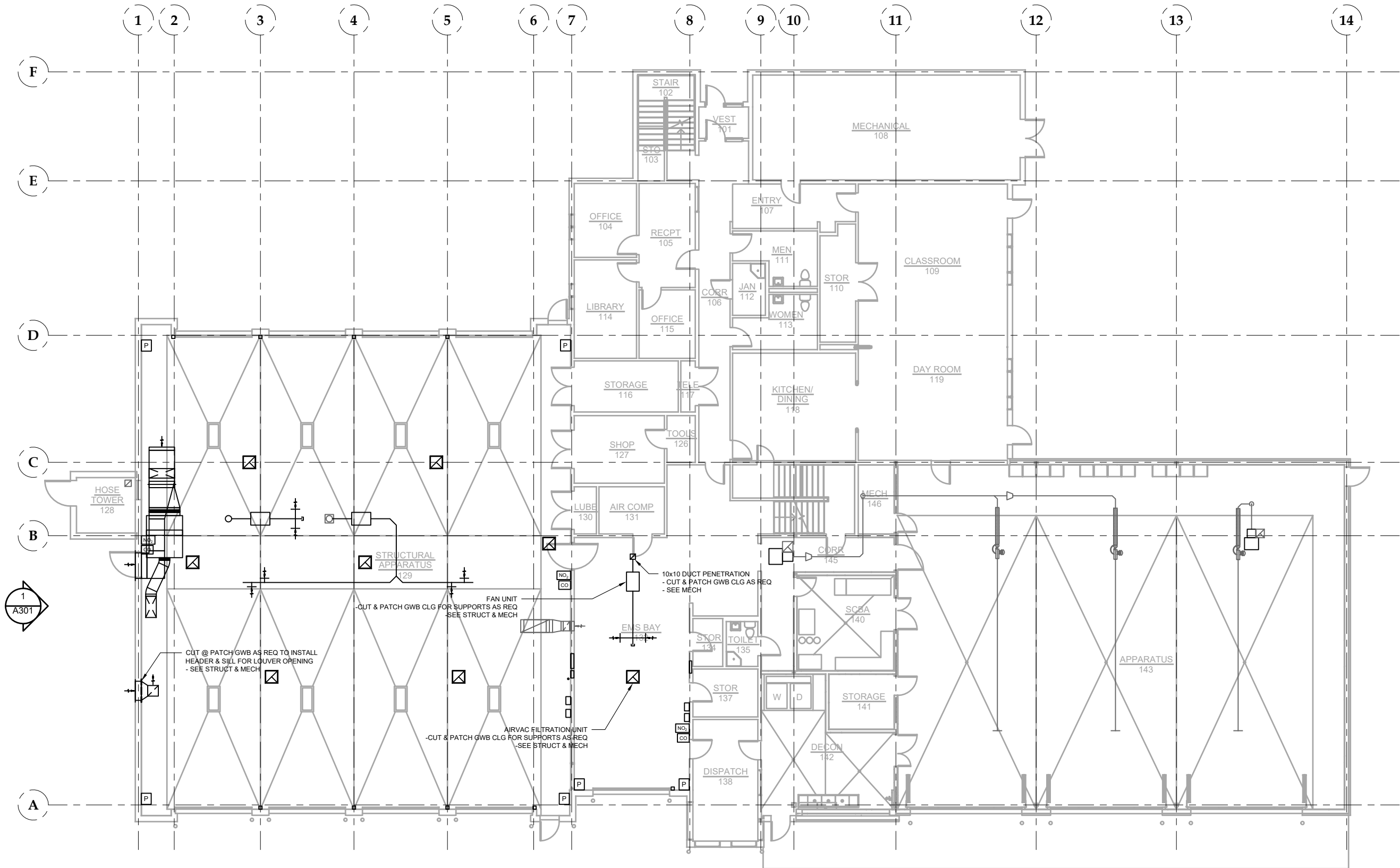
PROJECT:  
**CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT**  
**CBJ CONTRACT NO. BE21-177**  
 JUNEAU, ALASKA

SHEET TITLE:  
**DOUGLAS FIRE STATION FLOOR PLAN**



1" IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION. AFFECTING ALL LABELED SCALES

C:\Users\aguzman\Desktop\Office\Temp\CCFER - Mech\Updates\CAD\CAD\Acb\A103\_Layout\_1.jan.28.2021\_5:53 PM



1 GLACIER VALLEY FIRE STATION FLOOR PLAN

SCALE: 0 4' 8' 16'



No.	Date	Item

**Jensen Yorba Wall Inc.**  
 522 West 10th Street  
 Juneau, Alaska 99801  
 907.586.1070  
 AECC137  
 jensenyorbawall.com



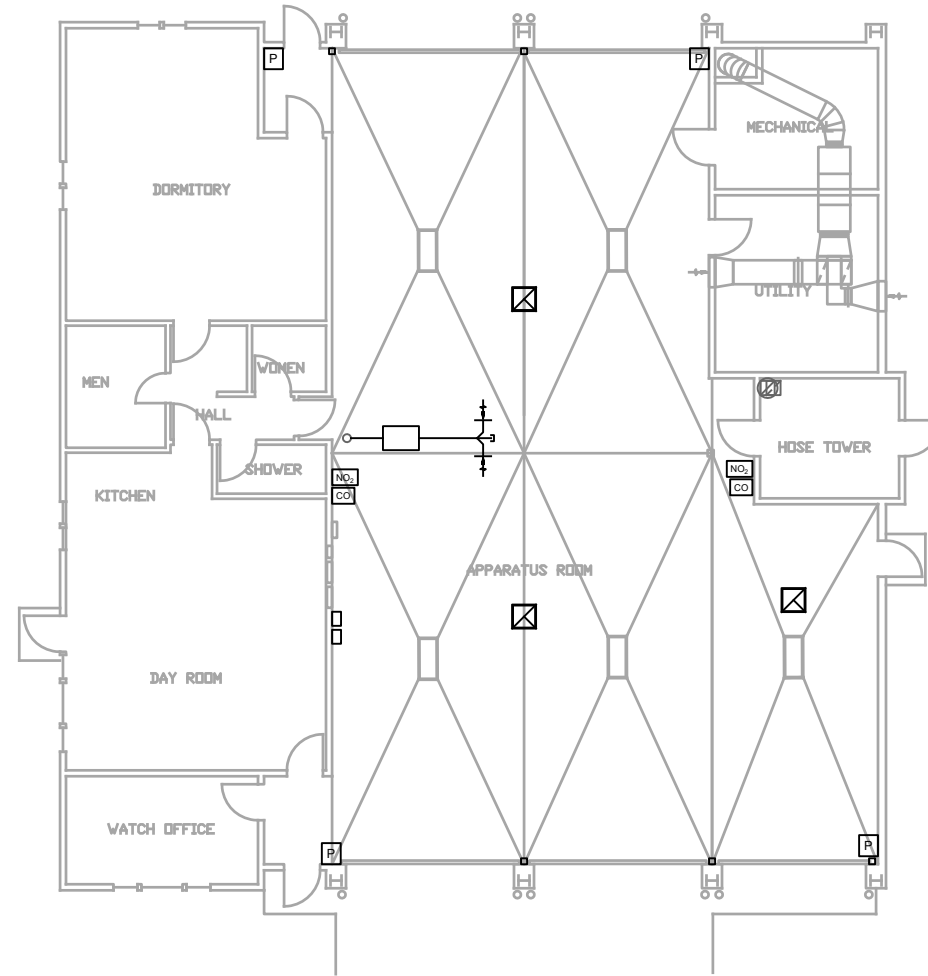
**PDC ENGINEERS**  
 PLAN • DESIGN • CONSTRUCT  
 A R E P E C C O M P A N Y  
 2700 Combell St., Ste. 500, Anchorage, AK 99503  
 907.743.3700 | AECC 605

PROJECT:  
**CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT**  
**CBJ CONTRACT NO. BE21-177**  
 JUNEAU, ALASKA

SHEET TITLE:  
**GLACIER VALLEY FIRE STATION FLOOR PLAN**

DESIGN	ADG
DRAWN	ADG
CHECKED	WJ
DATE	01/27/2021
PROJECT No.	19309.01JN
SHEET NUMBER	<b>A103</b>
OF	SHEETS

**SHEET NOTES**  
 1. PATCH ALL FASTENER HOLES LEFT BY THE REMOVED CEILING EQUIPMENT WITH WOOD PUTTY TO MATCH EX WOOD FINISH



1

**AUKE BAY FIRE STATION FLOOR PLAN - ALTERNATE #1**

SCALE: 0 4' 8' 16'



No.	Date	Item

DESIGN	ADG
DRAWN	ADG
CHECKED	WJ
DATE	01/27/2021
PROJECT No. <b>19309.01JN</b>	
SHEET NUMBER <b>A104</b>	
OF	SHEETS

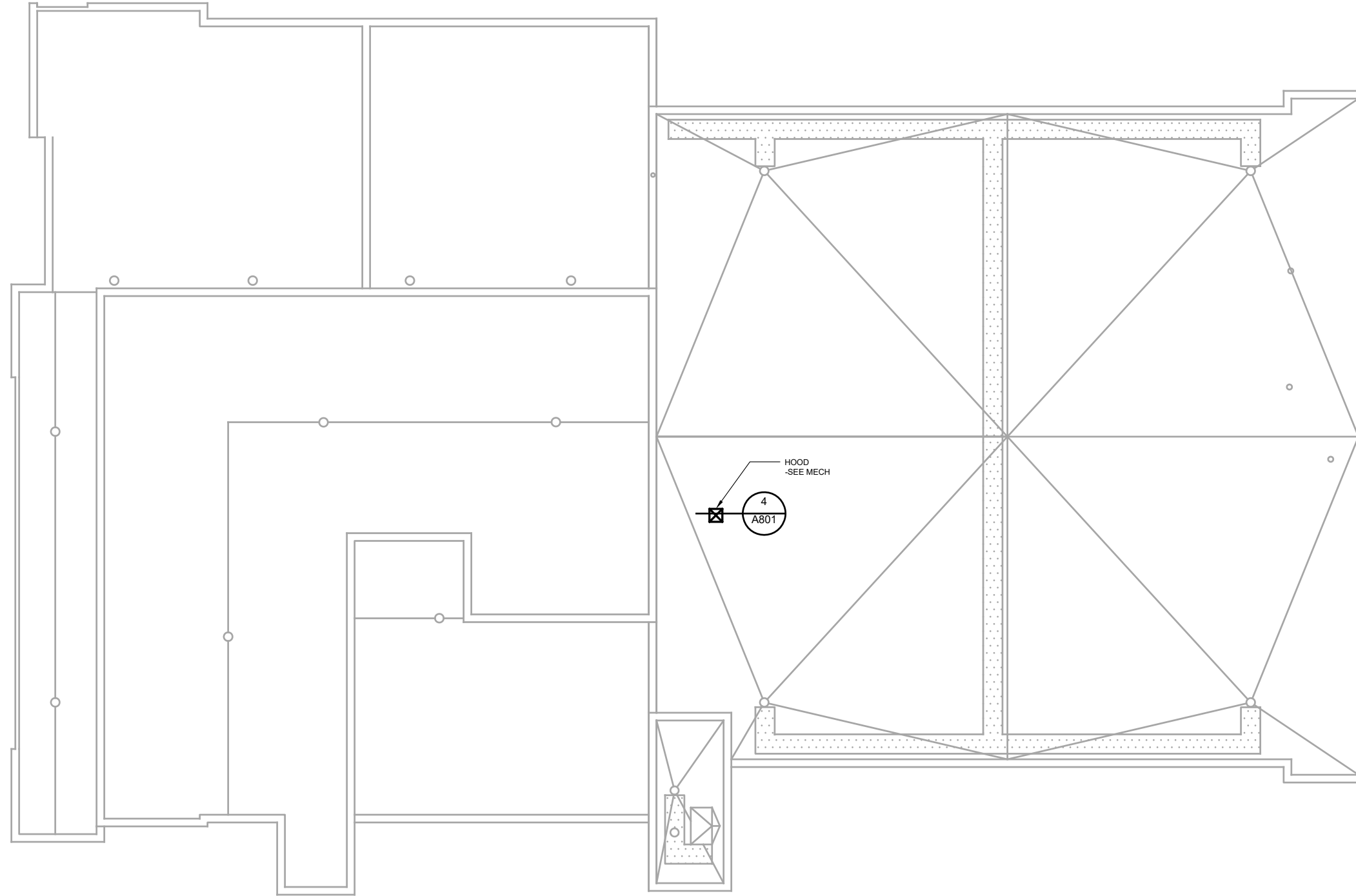
SHEET TITLE:  
**AUKE BAY FIRE STATION FLOOR PLAN**

PROJECT:  
**CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT**  
**CBJ CONTRACT NO. BE21-177**  
**JUNEAU, ALASKA**

**PDC ENGINEERS**  
 PLAN • DESIGN • CONSTRUCT  
 REGISTERED COMPANY  
 2700 Combell St., Ste. 500, Anchorage, AK 99503  
 907.743.3700 | A E C C 6 0 5



**Jensen Yorba Wall Inc.**  
 CONSULTANT:  
 522 West 10th Street  
 Juneau, Alaska 99801  
 907.586.1070  
 AECC137  
 jensenyorbawall.com



**1 JUNEAU FIRE STATION ROOF PLAN**

SCALE: 0 4' 8' 16'



No.	Date	Item

DESIGN	ADG
DRAWN	ADG
CHECKED	WJ
DATE	01/27/2021
PROJECT No. <b>19309.01JN</b>	
SHEET NUMBER	
<b>A201</b>	
OF	SHEETS

SHEET TITLE :  
**JUNEAU FIRE STATION ROOF PLAN**

PROJECT :  
**CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT  
CBJ CONTRACT NO. BE21-177  
JUNEAU, ALASKA**

**PDC**  
ENGINEERS  
PLAN • DESIGN • CONSTRUCT  
REGISTERED COMPANY  
2700 Combell St., Ste. 500, Anchorage, AK 99503  
907.743.3700 | A E C C 6 0 5

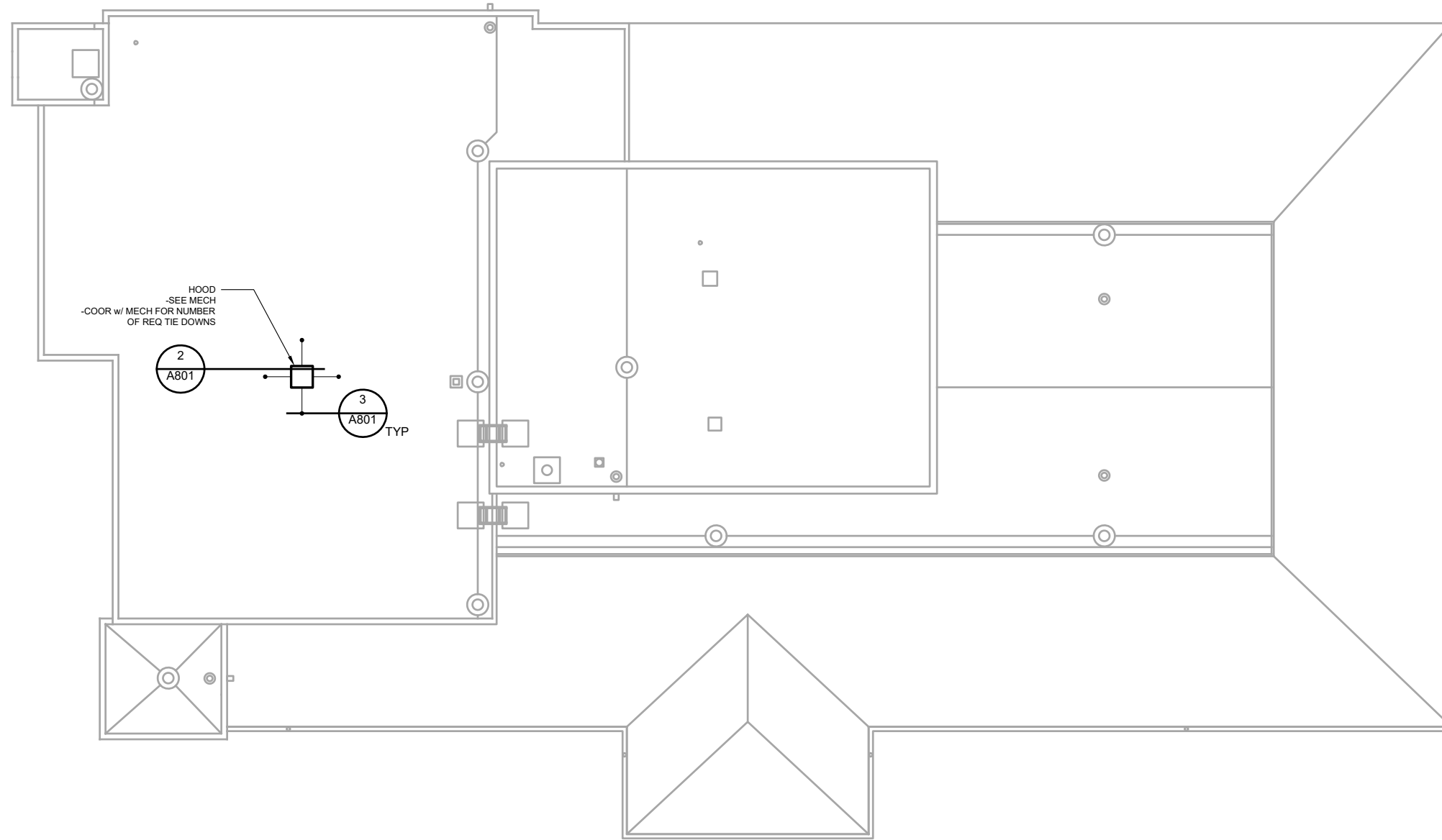
STATE OF ALASKA  
49<sup>TH</sup>  
WAYNE JENSEN  
REGISTERED PROFESSIONAL ENGINEER

Jensen Yorba Wall Inc.  
CONSULTANT :  
522 West 10th Street  
Juneau, Alaska 99801  
907.586.1070  
AECC137  
jensenyorbawall.com

1"

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION. AFFECTING ALL LABELED SCALES

C:\Users\adguzman\Desktop\Office\Temp\CFCFR - Mech Upgrades\CAD\CD\A202\_Layout\_1.jan 27, 2021 10:16 AM



1 DOUGLAS FIRE STATION ROOF PLAN - ALTERNATE #2

SCALE: 0 4' 8' 16'



No.	Date	Item

DESIGN	ADG
DRAWN	ADG
CHECKED	WJ
DATE	01/27/2021
PROJECT No.	19309.01JN
SHEET NUMBER	A202
OF	SHEETS

SHEET TITLE :  
**DOUGLAS FIRE STATION ROOF PLAN**

PROJECT :  
**CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT**  
**CBJ CONTRACT NO. BE21-177**  
**JUNEAU, ALASKA**

**PDC**  
**ENGINEERS**  
**PLAN • DESIGN • CONSTRUCT**  
**A R E P E C C O M P A N Y**  
 2700 Combell St., Ste. 500, Anchorage, AK 99503  
 907.743.3700 | A E C C 6 0 5

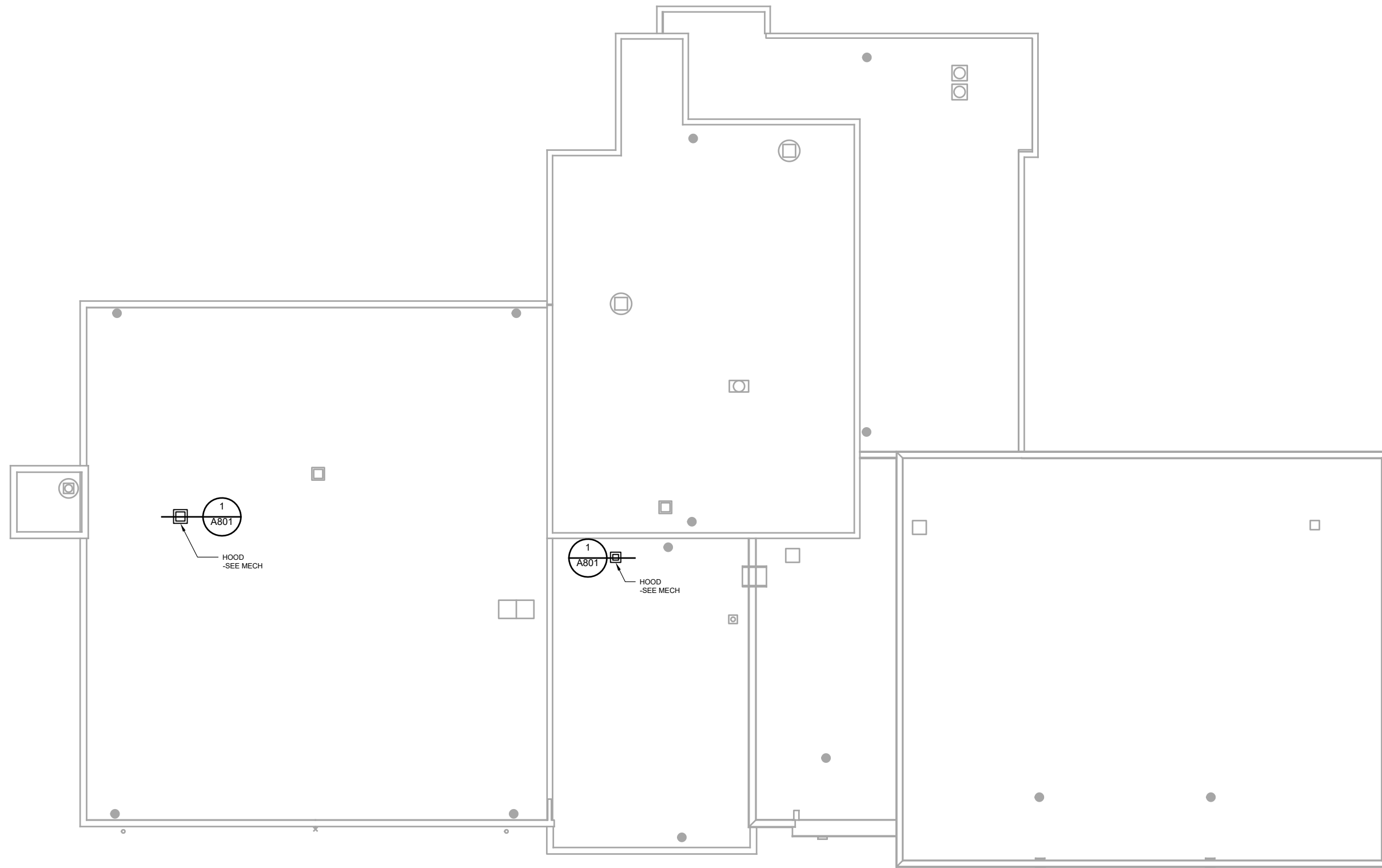


**Jensen Yorba Wall Inc.**  
 CONSULTANT :  
 522 West 10th Street  
 Juneau, Alaska 99801  
 907.586.1070  
 AECC137  
 jensenyorbawall.com

1"

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION, AFFECTING ALL LABELED SCALES

C:\Users\jaguzman\Desktop\Office\Temp\CCFR - Mesh Upgrade\CAD\CD\Arch\A203\_Layout1 Jan 27, 2021 10:17 AM



1 GLACIER VALLEY FIRE STATION ROOF PLAN

SCALE: 0 4' 8' 16'



No.	Date	Item

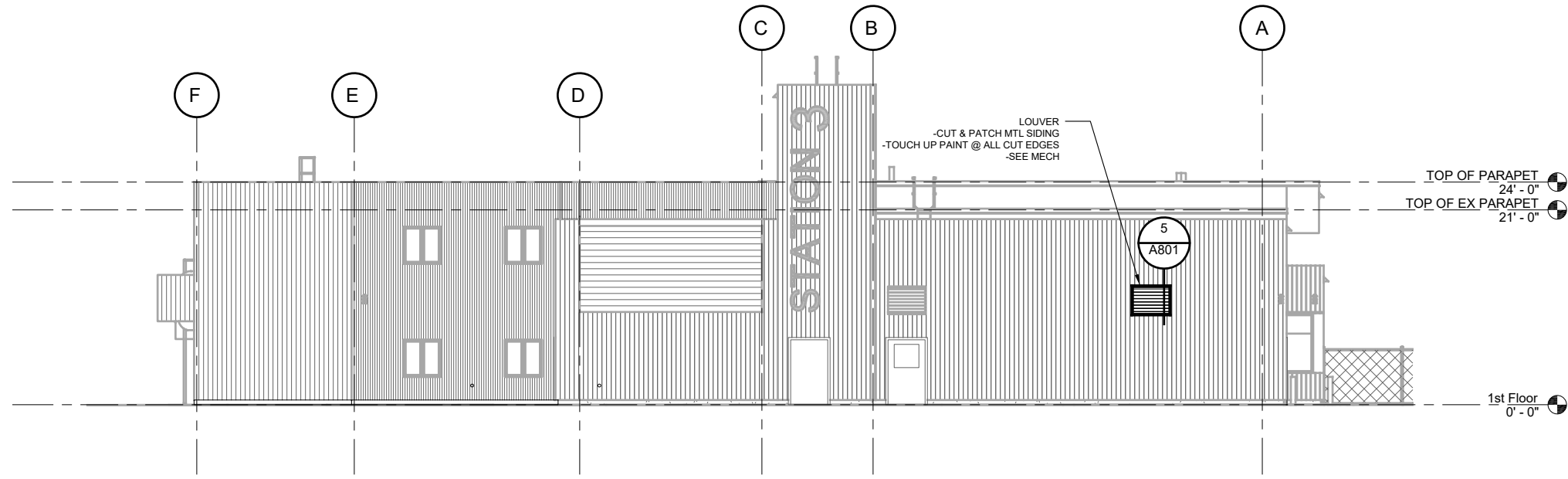
DESIGN	ADG
DRAWN	ADG
CHECKED	WJ
DATE	01/27/2021
PROJECT No. 19309.01JN	
SHEET NUMBER A203	
OF	SHEETS

SHEET TITLE :  
GLACIER VALLEY FIRE STATION  
ROOF PLAN

PROJECT :  
CCFR WIDE VEHICLE EXHAUST  
SYSTEM REPLACEMENT  
CBJ CONTRACT NO. BE21-177  
JUNEAU, ALASKA



Jensen Yorba Wall Inc.  
522 West 10th Street  
Juneau, Alaska 99801  
907.586.1070  
AECC137  
jensenyorbawall.com



1 GLACIER VALLEY FIRE STATION EXTERIOR ELEVATION

SCALE: 0 4' 8' 16'

**Jensen Yorba Wall Inc.**  
 CONSULTANT :  
 522 West 10th Street  
 Juneau, Alaska 99801  
 907.586.1070  
 AECC137  
 jensenyorbawall.com



**PDC ENGINEERS**  
 PLAN • DESIGN • CONSTRUCT  
 REGISTERED COMPANY  
 2700 Combell St., Ste. 500, Anchorage, AK 99503  
 907.744.3700 | AECC605

PROJECT :  
**CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT**  
**CBJ CONTRACT NO. BE21-177**  
 JUNEAU, ALASKA

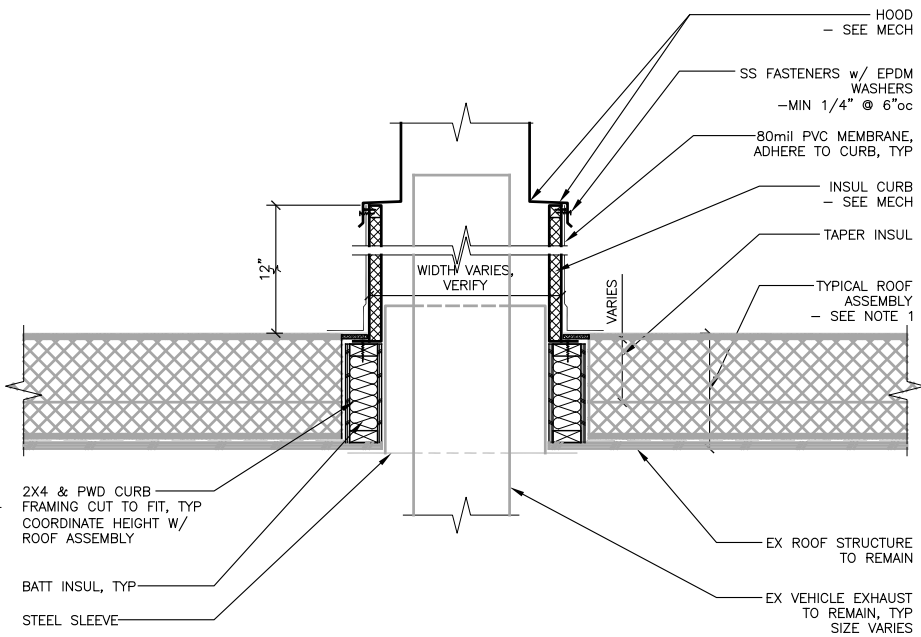
SHEET TITLE :  
**GLACIER VALLEY FIRE STATION EXTERIOR ELEVATION**

DESIGN	ADG
DRAWN	ADG
CHECKED	WJ
DATE	01/27/2021
PROJECT No. <b>19309.01JN</b>	
SHEET NUMBER <b>A303</b>	
OF	SHEETS

No.	Date	Item

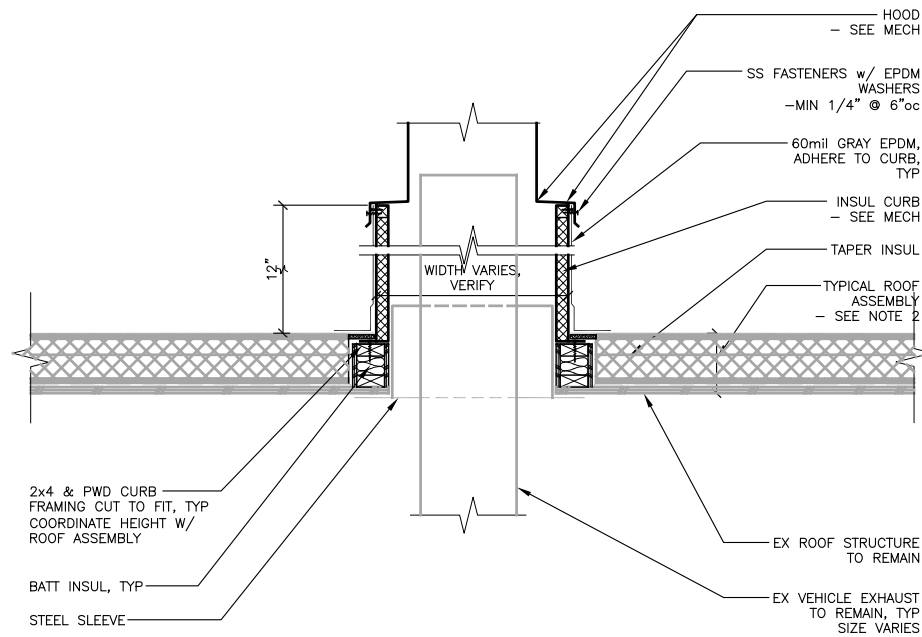
IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION. AFFECTING ALL LABELED SCALES

**NOTE 1: EXISTING ROOF ASSEMBLY**  
 - 80mil PVC MEMBRANE, FULLY ADHERED  
 - 1/2" COVER BOARD  
 - TAPERED XPS ROOF INSUL  
 - 4" XPS ROOF INSUL  
 - 1/2" SUBSTRATE BOARD FASTENED TO PWD DECK

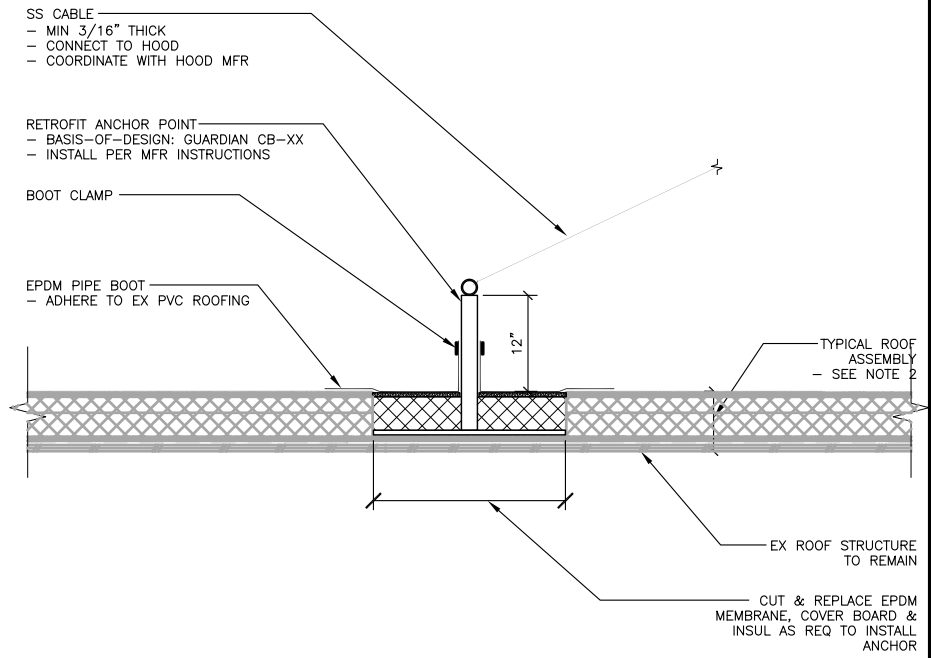


**1 HOOD CURB, JUNEAU FIRE** SCALE: 0 6" 1' 2' 3'

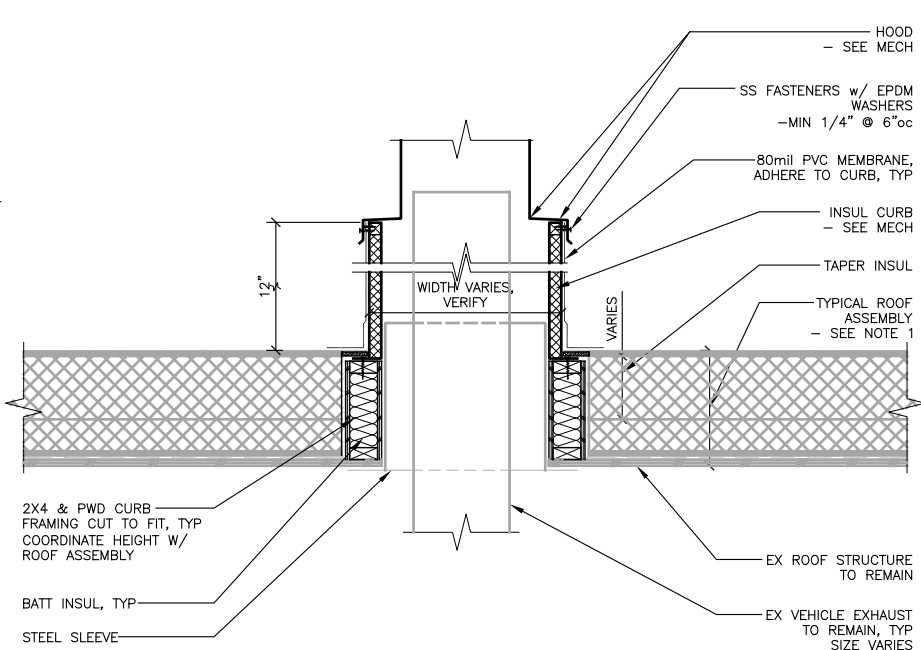
**NOTE 2: EXISTING ROOF ASSEMBLY**  
 - FULLY ADHERED EPDM  
 - 7/16" OSB COVER BOARD  
 - 2" RIGID INSUL  
 - 3" RIGID INSUL  
 - 5/8" GYPSUM SHEATHING



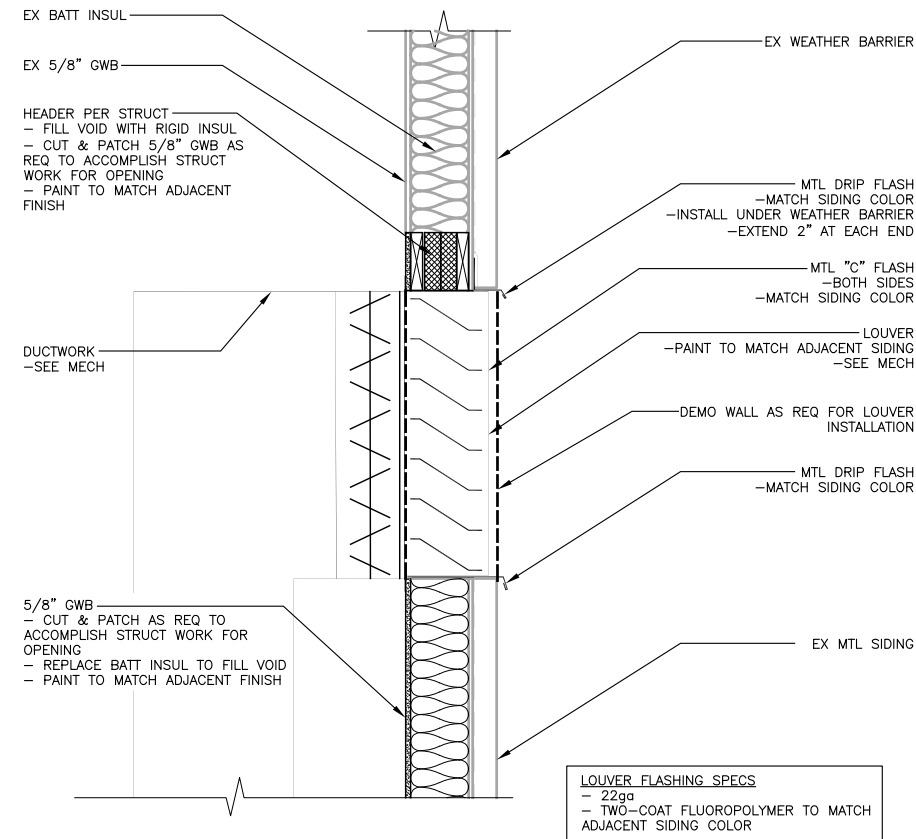
**2 HOOD CURB, DOUGLAS FIRE** SCALE: 0 6" 1' 2' 3'



**3 TIE ANCHOR, DOUGLAS FIRE** SCALE: 0 6" 1' 2' 3'



**4 HOOD CURB, GVFS** SCALE: 0 6" 1' 2' 3'



**5 WALL VENT DETAIL** SCALE: 0 6" 1' 2' 3'

**LOUVER FLASHING SPECS**  
 - 22ga  
 - TWO-COAT FLUOROPOLYMER TO MATCH ADJACENT SIDING COLOR

**Jensen Yorba Wall Inc.**  
 CONSULTANT:  
 522 West 10th Street  
 Juneau, Alaska 99801  
 907.586.1070  
 AECC137  
 jensenyorbawall.com



**PDC ENGINEERS**  
 PLAN • DESIGN • CONSTRUCT  
 A R E S P E C I A L I Z E D C O M P A N Y  
 2700 Combell St., Ste. 500, Anchorage, AK 99503  
 907.743.3700 | AECC 605

**PROJECT:**  
 CCFR WIDE VEHICLE EXHAUST  
 SYSTEM REPLACEMENT  
 CBJ CONTRACT NO. BE21-177  
 JUNEAU, ALASKA

**SHEET TITLE:**  
 DETAILS

DESIGN	ADG
DRAWN	ADG
CHECKED	WJ
DATE	01/27/2021
PROJECT No. 19309.01JN	
SHEET NUMBER	
<b>A801</b>	
OF SHEETS	

C:\Users\jaguzman\Desktop\Office\Temp\GCFR - Mesh Upgrade\CAD\CAD\A801\_Layout - Jan 27, 2021 10:15 AM

GENERAL NOTES

- 1. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE FOLLOWING CODES:
2. THE INTERNATIONAL BUILDING CODE (IBC) 2012 AND ITS REFERENCED STANDARDS, HEREIN REFERRED TO AS "THE CODE", AND OTHER REGULATORY CRITERIA WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK.
3. PRIOR TO FABRICATION AND CONSTRUCTION, THE CONTRACTOR SHALL VERIFY EXISTING ELEVATIONS AND DIMENSIONS ASSOCIATED WITH THE WORK. ALL OMISSIONS OR CONFLICTS BETWEEN VARIOUS ELEMENTS OF THE CONTRACT DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO PROCEEDING WITH THE RELATED WORK.
4. THE STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHOD OF CONSTRUCTION. CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN LIVE LOADS.
5. THESE CONTRACT DRAWINGS WERE PREPARED WITH THE ASSISTANCE OF OWNER PROVIDED INFORMATION. THE CONTRACTOR IS RESPONSIBLE FOR BECOMING COMPLETELY FAMILIAR WITH ALL EXISTING CONDITIONS AND VERIFICATION OF EXISTING CONSTRUCTION, ELEVATIONS, AND DIMENSIONS. IF EXISTING CONDITIONS VARY FROM THE REQUIREMENTS OF THE CONTRACT, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE OWNERS REPRESENTATIVE BEFORE WORK STARTS.

STRUCTURAL DESIGN DATA

SEISMIC LOADS: BASED ON THE EQUIVALENT LATERAL FORCE PROCEDURE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CODE.

SEISMIC IMPORTANCE FACTOR I = 1.5
OCCUPANCY CATEGORY IV
SITE CLASS D
SHORT-PERIOD DESIGN ACCELERATION DOUGLAS: Sps = 0.483g
JUNEAU: Sps = 0.49g
GLACIER VALLEY: Sps = 0.489g
AUKE BAY: Sps = 0.554g
1-SECOND DESIGN ACCELERATION DOUGLAS: Sd1 = 0.40g
JUNEAU: Sd1 = 0.402g
GLACIER VALLEY: Sd1 = 0.402g
AUKE BAY: Sd1 = 0.425g
SEISMIC DESIGN CATEGORY D
RESPONSE MODIFICATION FACTOR Rp = 6 (MECH COMPONENTS CONSTRUCTED OF SHEET METAL FRAMING)

ARCHITECTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS

- 1. ALL COMPONENTS SHALL BE ANCHORED TO THE BUILDING STRUCTURE.

STRUCTURAL WOOD NOTES

- 1. ALL STRUCTURAL LUMBER SHALL BE VISUALLY OR MACHINE STRESS GRADED, IN ACCORDANCE WITH THE LATEST EDITIONS OF THE WEST COAST LUMBER INSPECTION BUREAU (WCLIB) TECHNICAL PUBLICATION NO. 17 OR THE WESTERN WOOD PRODUCTS ASSOCIATION (WWPA) "WESTERN LUMBER GRADING RULES (G5)". THE DESIGN AND CONSTRUCTION STANDARDS OF ALL WOOD FRAMING SHALL CONFORM TO THE REQUIREMENTS OF CHAPTER 23 OF THE CODE AND THE LATEST EDITION OF THE "AMERICAN FOREST & PAPER ASSOCIATION NATIONAL DESIGN SPECIFICATION".
2. ALL CONVENTIONAL AND COMPOSITE FRAMING MATERIALS SHALL CONFORM TO THE FOLLOWING:
a. CONVENTIONAL SAWN LUMBER 2x:
SPECIES: DOUGLAS FIR
GRADE: NO. 2
3. THERE SHALL BE NO FIELD CUTTING OF STRUCTURAL TIMBER MEMBERS FOR THE WORK OF OTHER TRADES WITHOUT THE PRIOR REVIEW OF THE ENGINEER.
4. ALL NAILS SHALL BE COMMON WIRE NAILS. NAILING SHALL CONFORM TO TABLE 2304.9.1 OF THE CODE.
5. STANDARD WASHERS SHALL BE USED UNDER ALL BOLT HEADS AND NUTS CONTACTING WOOD.
6. IF PNEUMATIC NAILERS ARE TO BE USED THE CONTRACTOR MUST SUBMIT A SCHEDULE OF FASTENERS AS DESIRED AS A SUBSTITUTION TO THE ENGINEER FOR APPROVAL.

- 7. NO WOOD TREATMENTS OR PRESERVATIVES SHALL BE USED WITHOUT PRIOR REVIEW OF THE ENGINEER.
8. ALL WOOD LEDGERS, PLATES, SILLS, AND NAILERS IN CONTACT WITH CONCRETE, EARTH, OR WITHIN 6" OF EARTH SHALL BE TREATED IN ACCORDANCE SECTION 2303.1.8 OF THE CODE. NAILS AND METAL FASTENERS SHALL BE GALVANIZED OR STAINLESS STEEL AS RECOMMENDED BY THE TREATED WOOD MANUFACTURER.
9. ALL OTHER WOOD CONSTRUCTION IDENTIFIED IN THE CODE SECTION 2304.11 SHALL BE PRESSURE-TREATED.
10. ALL FASTENERS IN CONTACT WITH PRESSURE-TREATED WOOD SHALL BE HOT-DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE, OR COPPER FASTENERS.

HARDWARE

- 1. EATON: B22 SH HDG CHANNELS, B106-42 TWO HOLE OFFSET Z-SUPPORT, B446A-1/2 SWIVEL HANGER, N225SS6 CHANNEL NUT W/ SPRING, B202D SQUARE WASHER, B335-1 TWO HOLE ADJUSTABLE HINGE, B335-2-1/2" THREE HOLE ADJUSTABLE HINGE, B360 TWO HOLE CORNER ANGLE, B140 THREE HOLE CORNER PLATE. FINISH SHALL BE GALVANIZED OR ZINC, UNO.
2. SIMPSON: A34 FRAMING CLIPS, A35 FRAMING CLIPS, HU212-2 JOIST HANGERS
3. CABLE IS 3/8". CRIMPING SLEEVES ARE 3/8".
4. THREADED ROD IS 1/2" DIAMETER
5. NAILS ARE COMMON, UNO. #14 WOOD SCREWS REQUIRE 3/4" WASHER AND PRE-DRILLED HOLE.
6. #14X 1-1/2" SMS SCREWS REQUIRE A 3/4" WASHER.
7. LAG SCREWS ARE 1/4" DIAMETER X 3" MIN, PRE-DRILL HOLE.

STRUCTURAL ABBREVIATIONS

@ AT
APPROX APPROXIMATELY
ARCH ARCHITECTURAL
BET/BTWN BETWEEN
BM BEAM
CONT CONTINUOUS
DIA/DIAM/DIAMETER
DIM DIMENSION
DL DEAD LOAD
DWG DRAWING
(E) EXISTING
EA EACH
EMBED EMBEDDED
EOR ENGINEER OF RECORD
FT FOOT/FEET
GA GAGE
H/HORIZ HORIZONTAL
IBC INTERNATIONAL BUILDING CODE
IN INCH(ES)
K KIP (1000 LB)
KSI KIPS PER SQUARE INCH
LL LIVE LOAD
LONG LONGITUDINAL
MAX MAXIMUM
MECH MECHANICAL
MIN MINIMUM
NTS NOT TO SCALE
OC ON CENTER
PLF POUNDS PER LINEAL FOOT
PSF POUNDS PER SQUARE FOOT
PSI POUNDS PER SQUARE INCH
REF REFERENCE
REQ'D REQUIRED
SCHED SCHEDULE
SCR SCREWS
SIM SIMILAR
SMS SHEET METAL SCREWS
TYP TYPICAL
UNO UNLESS NOTED OTHERWISE
V/VERT VERTICAL
W/ WITH

CONSULTANT :



PROJECT :
CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT
CBJ CONTRACT NO. BE21-177
JUNEAU, ALASKA

SHEET TITLE :
GENERAL NOTES & ABBREVIATIONS

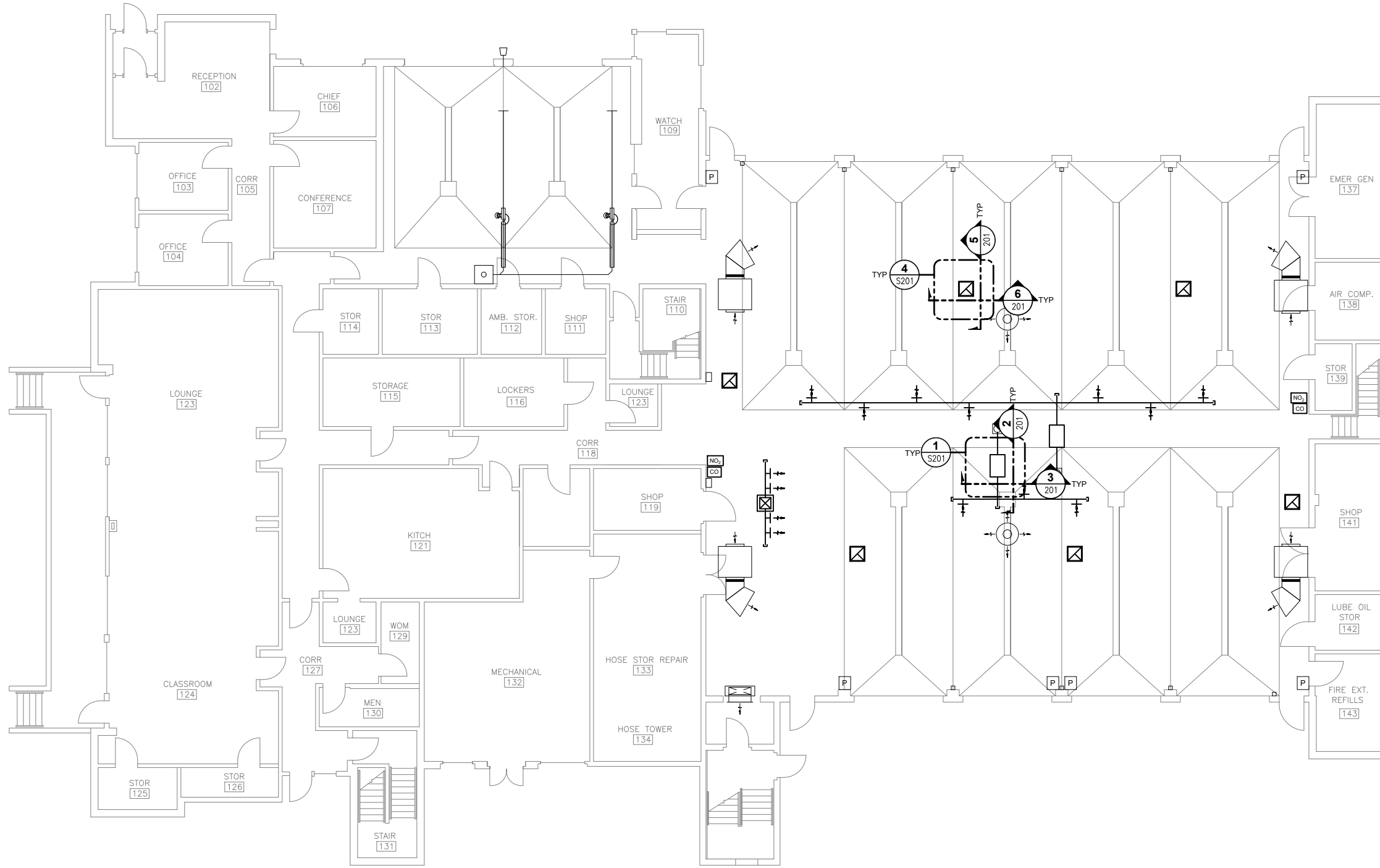
DESIGN JMW
DRAWN JMW / DJM
CHECKED BRB
DATE 01/28/2021

PROJECT No. 19309.01JN
SHEET NUMBER

S001

Table with columns: No., Date, Item, REVISIONS





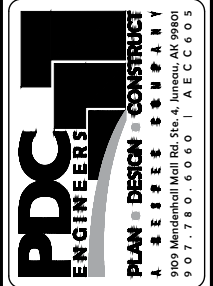
**1** JUNEAU FIRE STATION PLAN  
 S101 SCALE: 1/8" = 1'-0"

No.	Date	Item

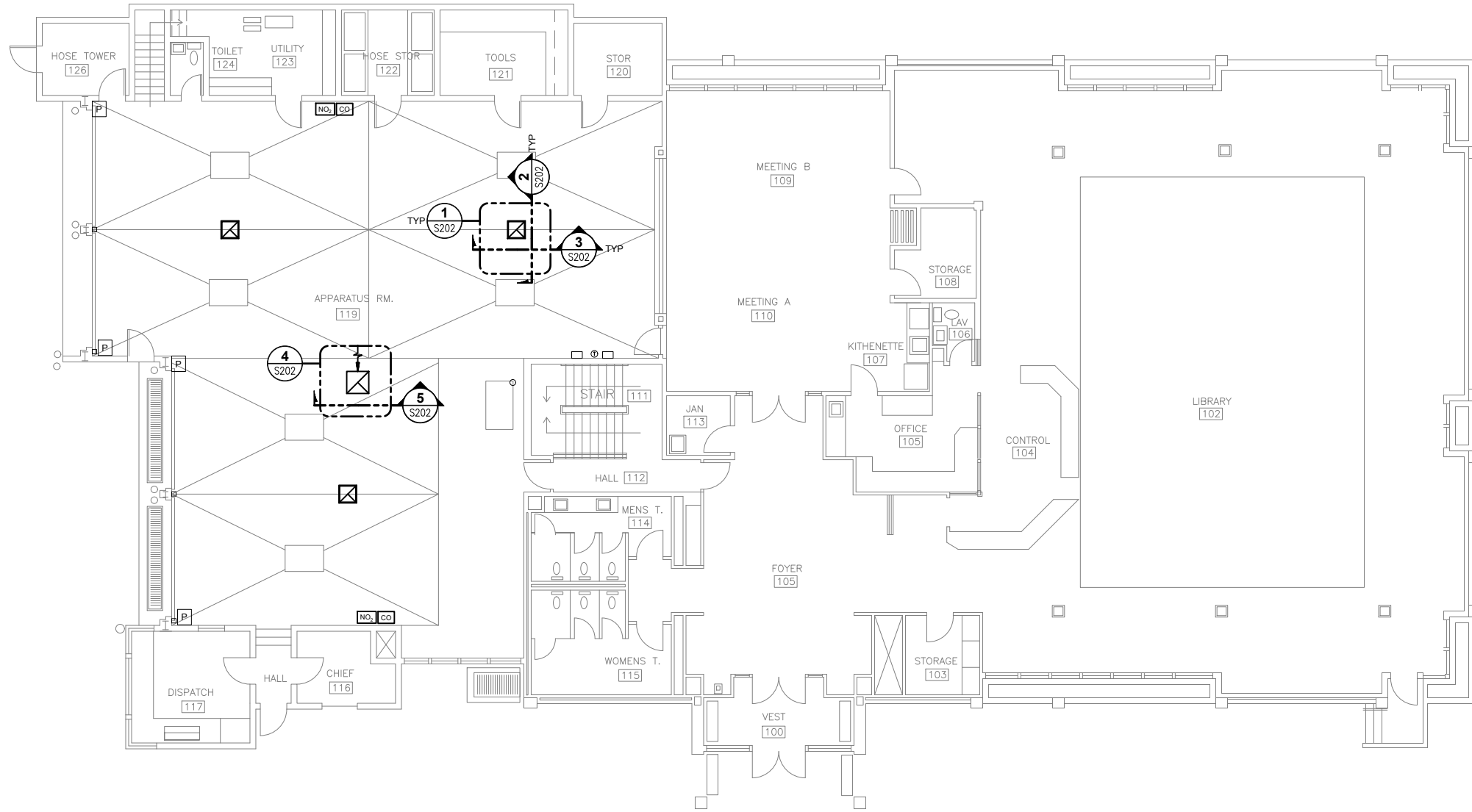
DESIGN	JMW
DRAWN	JMW / DJM
CHECKED	BRB
DATE	01/28/2021
PROJECT No.	19309.01JN
SHEET NUMBER	S101

SHEET TITLE :  
**JUNEAU FIRE STATION PLAN**

PROJECT :  
**CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT**  
**CBJ CONTRACT NO. BE21-177**  
**JUNEAU, ALASKA**

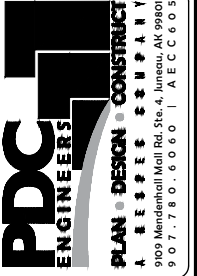
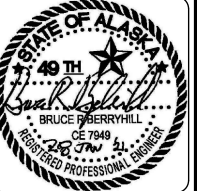


CONSULTANT :



**1 DOUGLAS FIRE STATION PLAN**  
 S102 SCALE: 1/8" = 1'-0"

CONSULTANT :



PROJECT :  
**CCFR WIDE VEHICLE EXHAUST  
 SYSTEM REPLACEMENT**  
 CBJ CONTRACT NO. BE21-177  
 JUNEAU, ALASKA

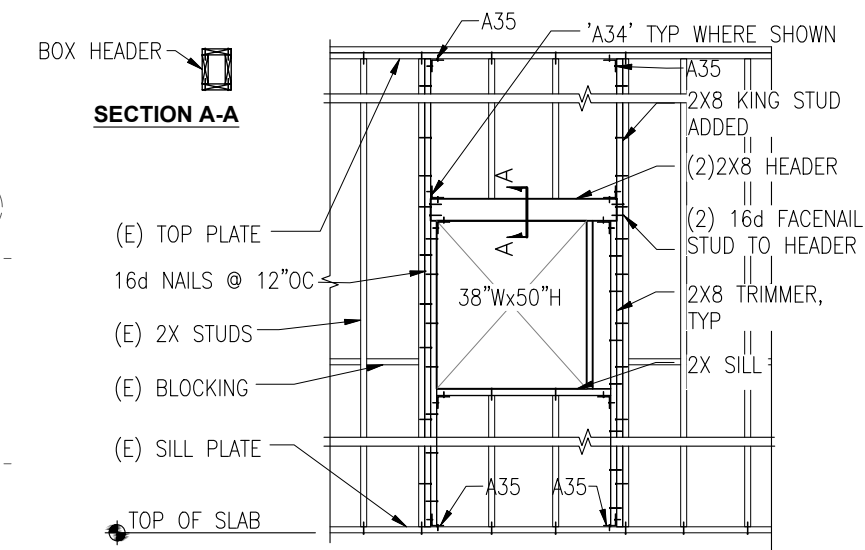
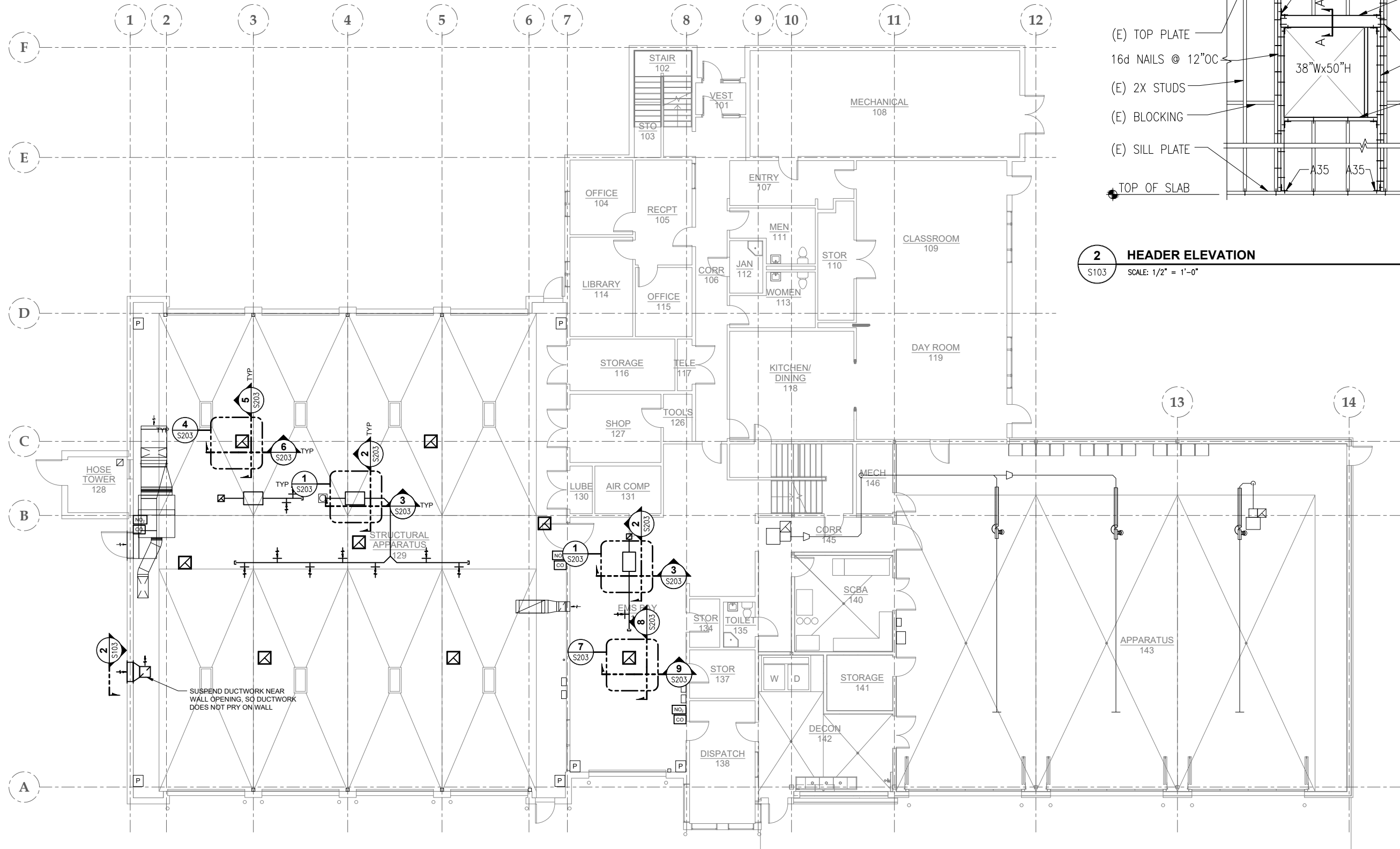
SHEET TITLE :  
**DOUGLAS FIRE STATION PLAN**

DESIGN JMW  
 DRAWN JMW / DJM  
 CHECKED BRB  
 DATE 01/28/2021

PROJECT No.  
**19309.01JN**  
 SHEET NUMBER

**S102**

No.	Date	Item



**2** HEADER ELEVATION  
S103 SCALE: 1/2" = 1'-0"

**1** GLACIER VALLEY FIRE STATION PLAN  
S103 SCALE: 1/8" = 1'-0"

No.	Date	Item

CONSULTANT:

**PDC**  
ENGINEERS  
PLAN - DESIGN - CONSTRUCTION  
A E E E E E COMPANY  
9909 Mendonhall Mall Rd. Ste. 4, Juneau, AK 99801  
907.780.6060 | A E C C 6 0 5

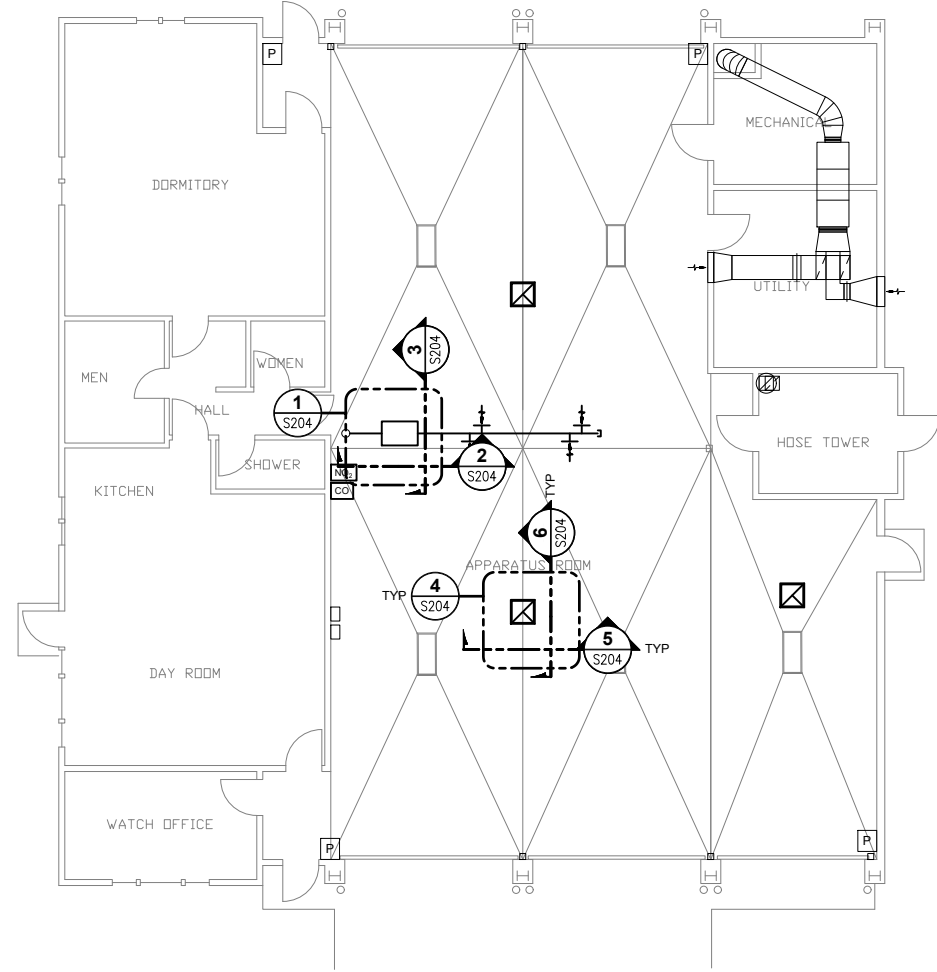
PROJECT:  
CCFR WIDE VEHICLE EXHAUST  
SYSTEM REPLACEMENT  
CBJ CONTRACT NO. BE21-177  
JUNEAU, ALASKA

SHEET TITLE:  
GLACIER VALLEY FIRE STATION  
PLAN

DESIGN	JMW
DRAWN	JMW / DJM
CHECKED	BRB
DATE	01/28/2021

PROJECT No.  
**19309.01JN**  
SHEET NUMBER  
**S103**

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION, AFFECTING ALL LABELED SCALES



**1** AUKE BAY FIRE STATION PLAN  
S104 SCALE: 1/8" = 1'-0"

No.	Date	Item

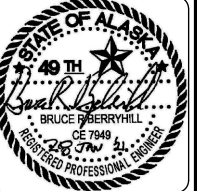
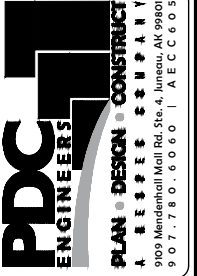
DESIGN JMW  
DRAWN JMW / DJM  
CHECKED BRB  
DATE 01/28/2021

PROJECT No.  
**19309.01JN**  
SHEET NUMBER

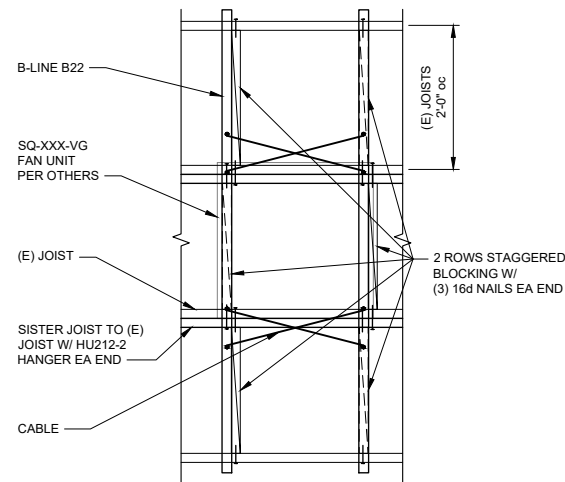
**S104**

SHEET TITLE :  
**AUKE BAY FIRE STATION PLAN**

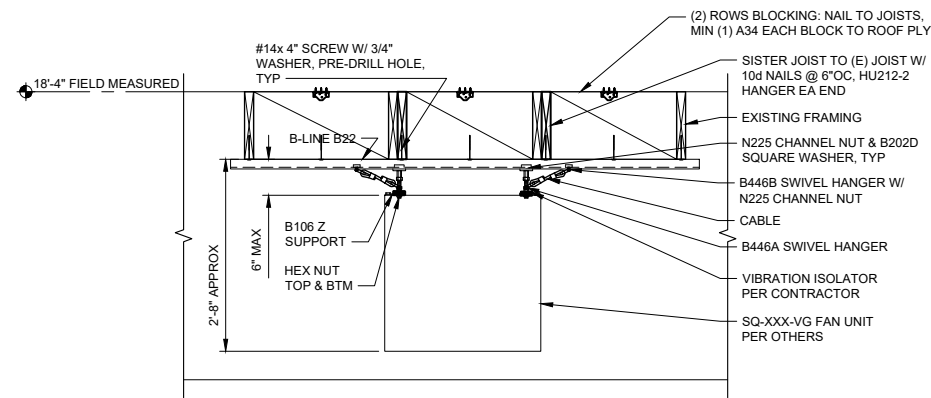
PROJECT :  
**CCFR WIDE VEHICLE EXHAUST  
SYSTEM REPLACEMENT  
CBJ CONTRACT NO. BE21-177  
JUNEAU, ALASKA**



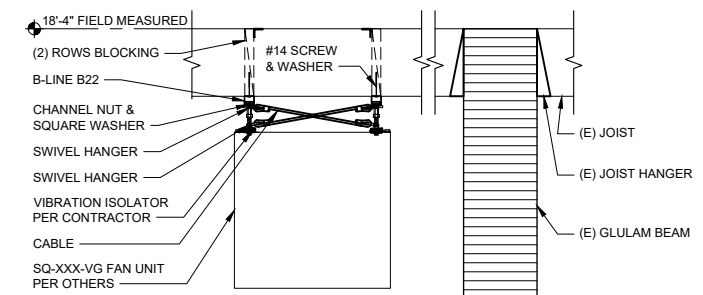
CONSULTANT :



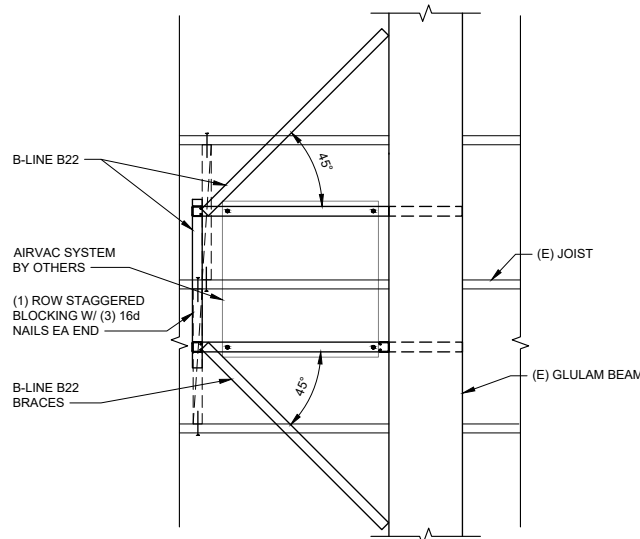
**1 PLAN**  
S201 SCALE: 3/4" = 1'-0"



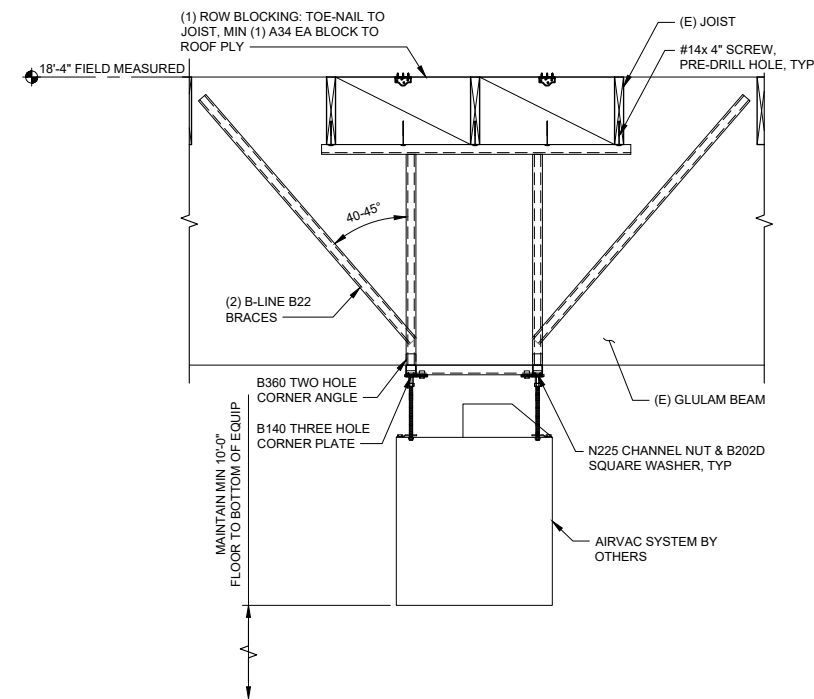
**2 LONGITUDINAL SECTION**  
S201 SCALE: 3/4" = 1'-0"



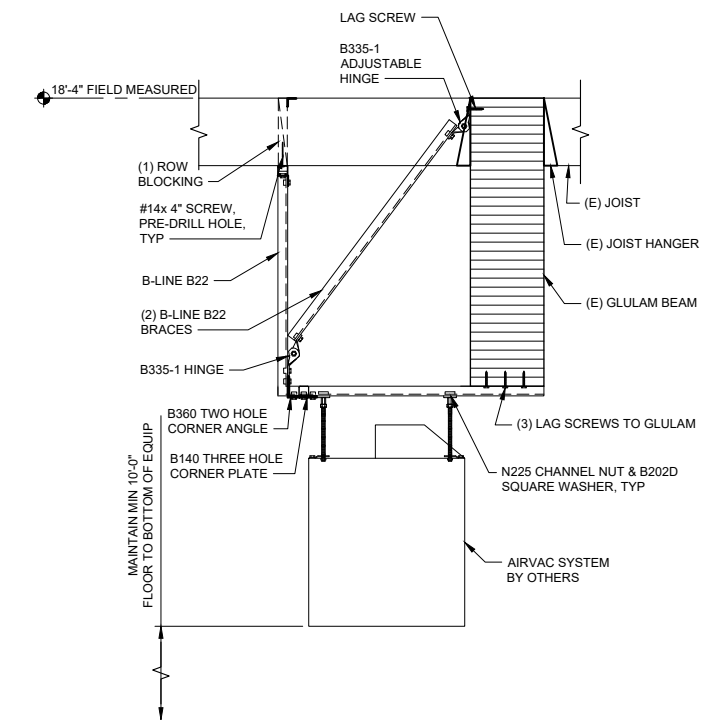
**3 TRANSVERSE SECTION**  
S201 SCALE: 3/4" = 1'-0"



**4 PLAN**  
S201 SCALE: 3/4" = 1'-0"

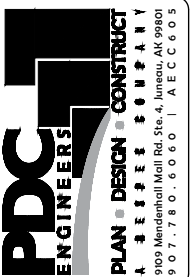


**5 LONGITUDINAL SECTION**  
S201 SCALE: 3/4" = 1'-0"



**6 TRANSVERSE SECTION**  
S201 SCALE: 3/4" = 1'-0"

CONSULTANT :



PROJECT :  
**CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT**  
CBJ CONTRACT NO. BE21-177  
JUNEAU, ALASKA

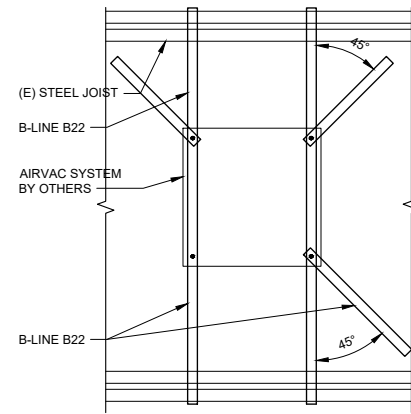
SHEET TITLE :  
**JUNEAU FIRE STATION DETAILS**

DESIGN JMW  
DRAWN JMW / DJM  
CHECKED BRB  
DATE 01/28/2021

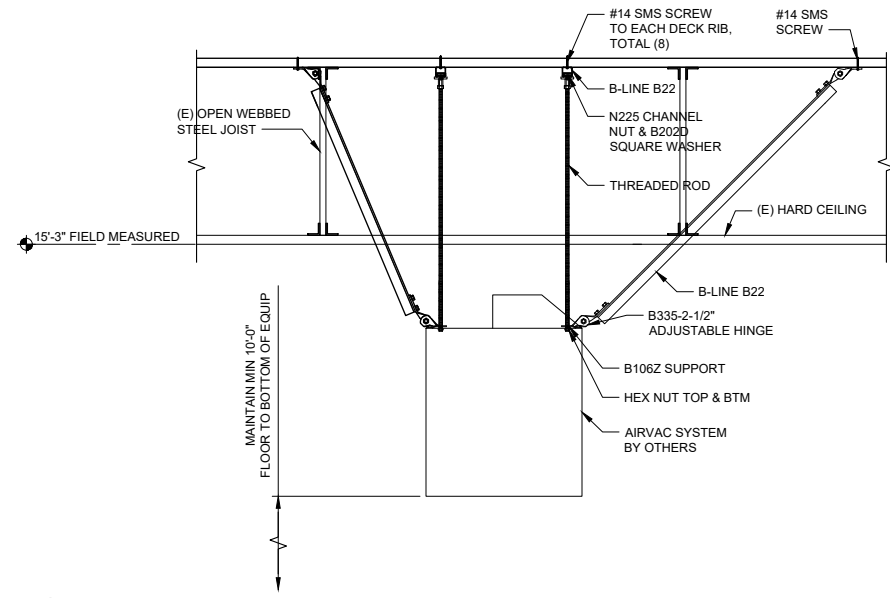
PROJECT No.  
**19309.01JN**  
SHEET NUMBER

**S201**

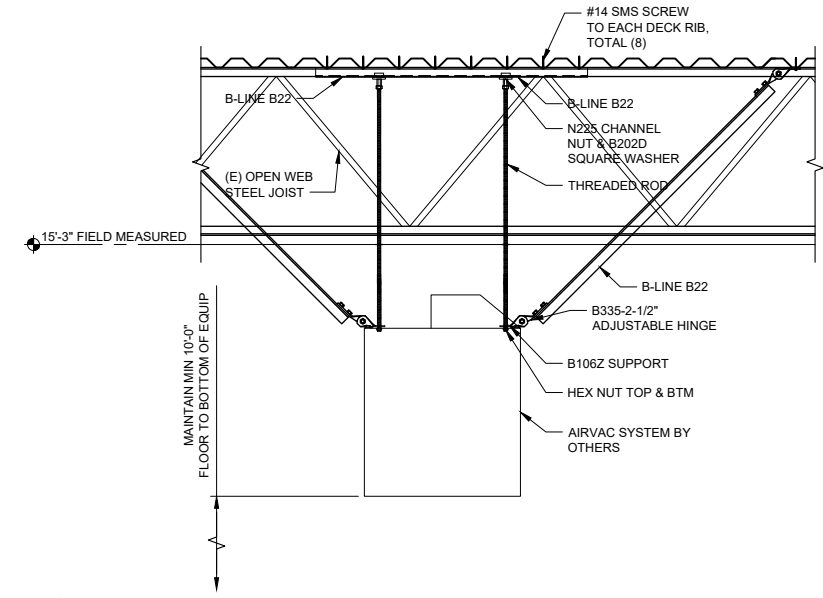
No.	Date	Item



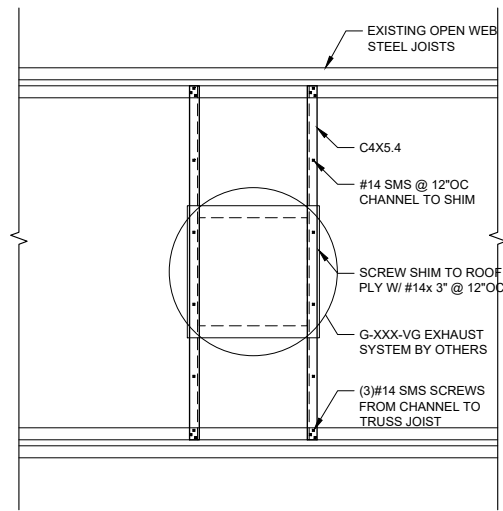
**1 PLAN**  
S202 SCALE: 3/4" = 1'-0"



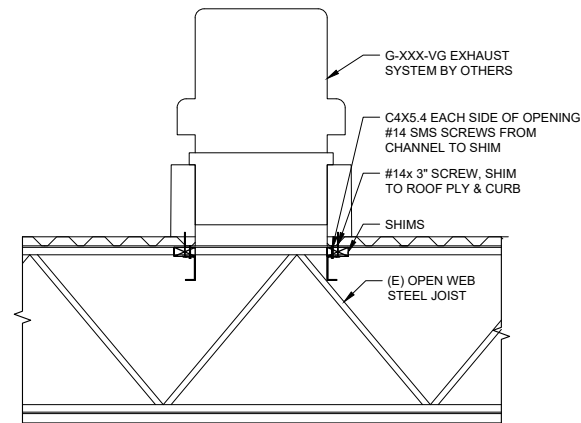
**2 LONGITUDINAL**  
S202 SCALE: 3/4" = 1'-0"



**3 TRANSVERSE**  
S202 SCALE: 3/4" = 1'-0"

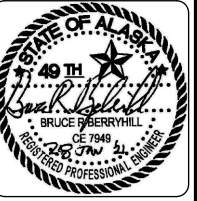


**4 PLAN**  
S202 SCALE: 3/4" = 1'-0"



**5 ELEVATION**  
S202 SCALE: 3/4" = 1'-0"

CONSULTANT :



PROJECT :  
**CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT**  
CBJ CONTRACT NO. BE21-177  
JUNEAU, ALASKA

SHEET TITLE :  
**DOUGLAS FIRE STATION DETAILS**

DESIGN JMW  
DRAWN JMW / DJM  
CHECKED BRB  
DATE 01/28/2021

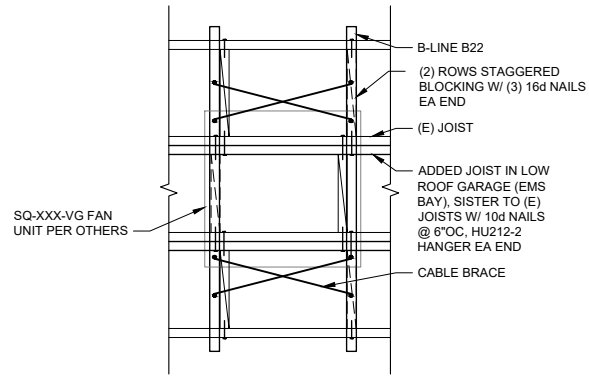
PROJECT No.  
**19309.01JN**  
SHEET NUMBER

**S202**

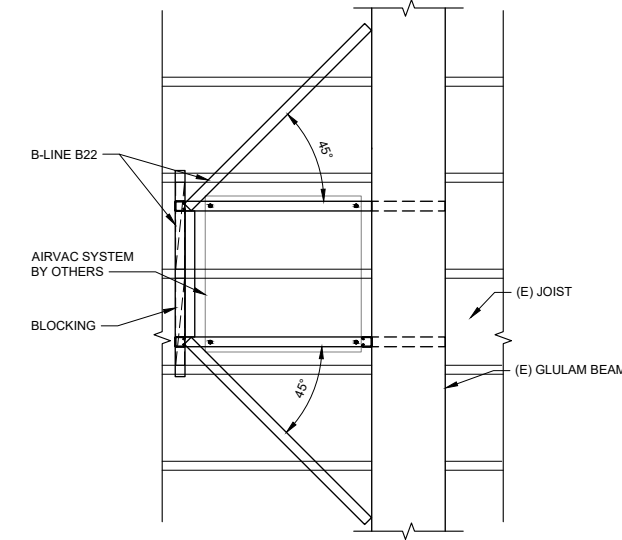
No.	Date	Item

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION, AFFECTING ALL LABELED SCALES

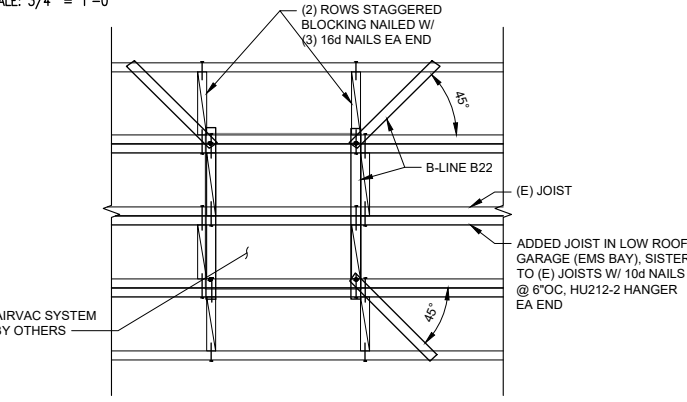
P:\2019\19309\_01\IN-CBL\_CCFR\_S203\203-01\FB\_S203 GLACIER VALLEY FIRE STATION DETAILS.dwg, 28, 2021, 3:41 PM



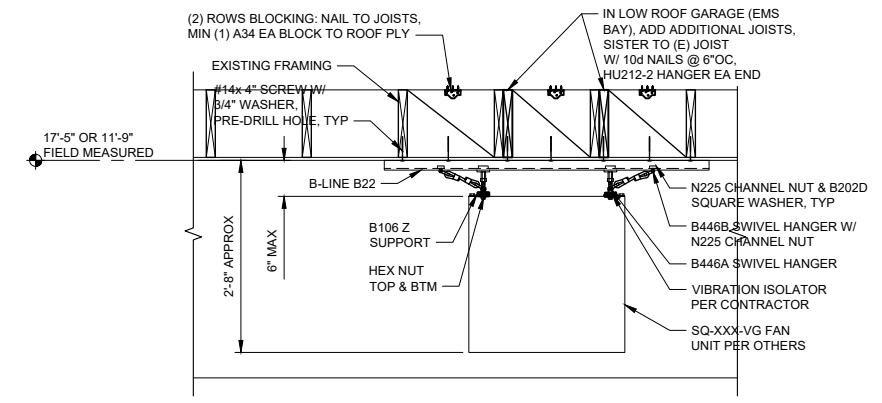
**1 PLAN**  
S203 SCALE: 3/4" = 1'-0"



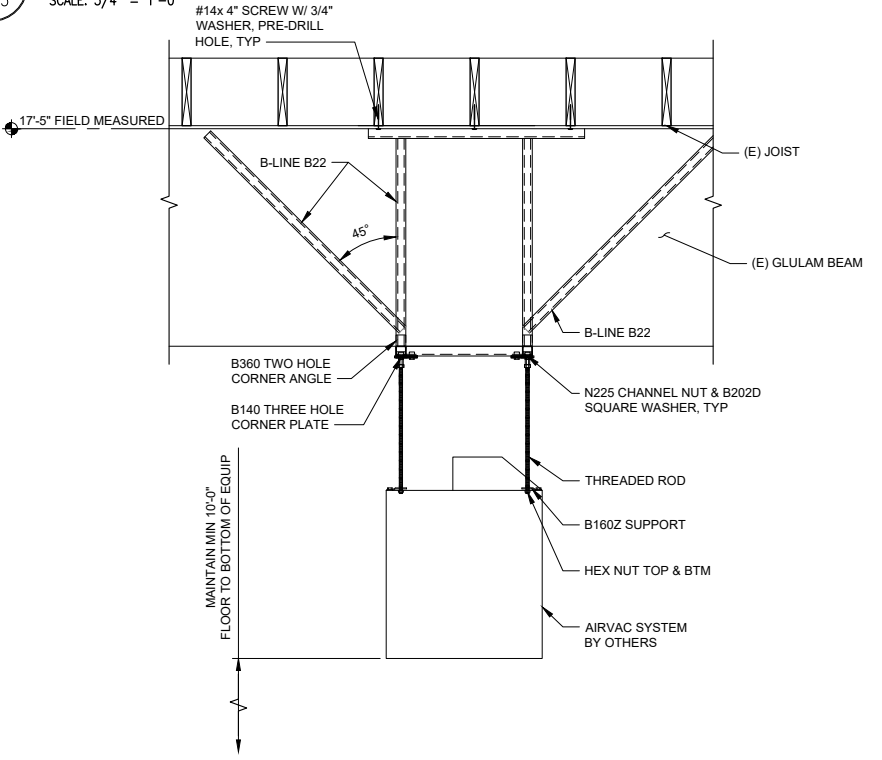
**4 PLAN**  
S203 SCALE: 3/4" = 1'-0"



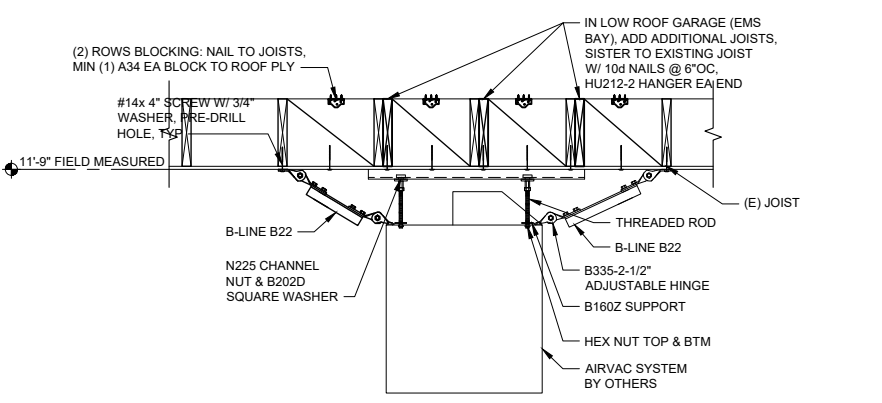
**7 PLAN**  
S203 SCALE: 3/4" = 1'-0"



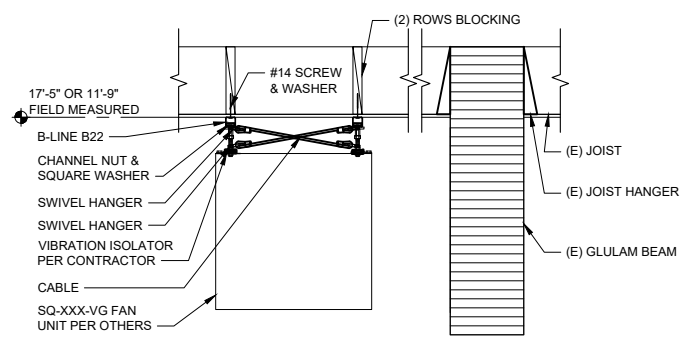
**2 LONGITUDINAL SECTION**  
S203 SCALE: 3/4" = 1'-0"



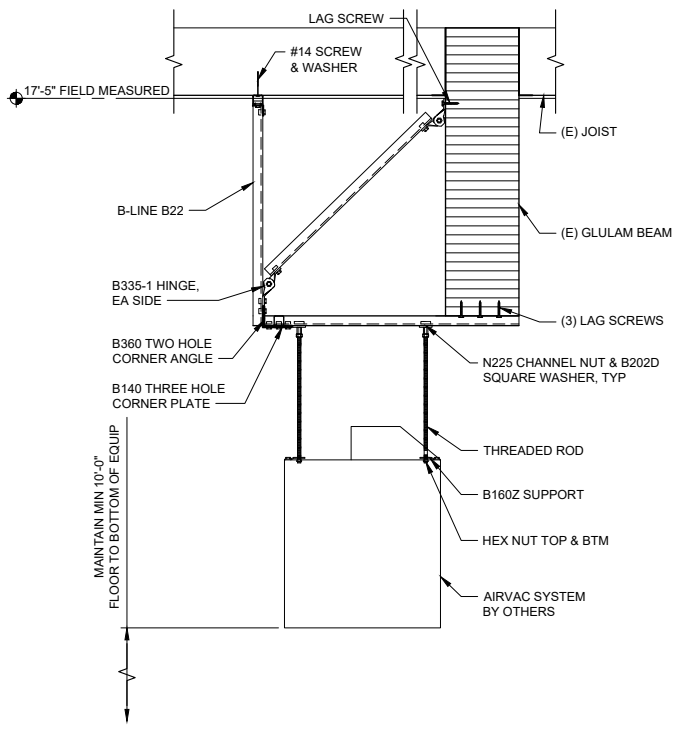
**5 LONGITUDINAL SECTION**  
S203 SCALE: 3/4" = 1'-0"



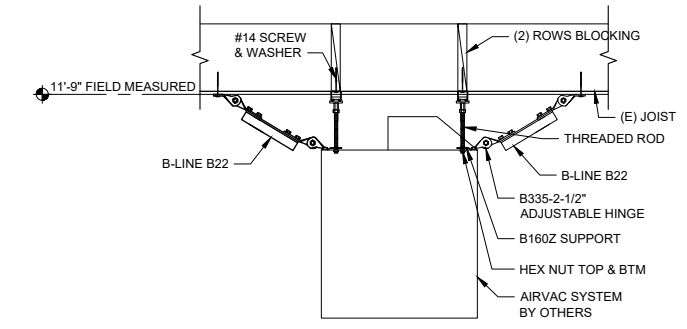
**8 LONGITUDINAL SECTION**  
S203 SCALE: 3/4" = 1'-0"



**3 TRANSVERSE SECTION**  
S203 SCALE: 3/4" = 1'-0"

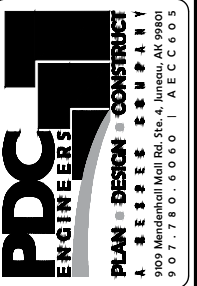
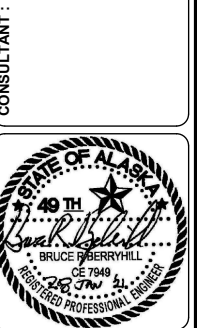


**6 TRANSVERSE SECTION**  
S203 SCALE: 3/4" = 1'-0"



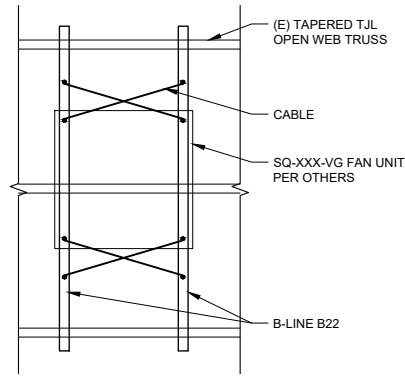
**9 TRANSVERSE SECTION**  
S203 SCALE: 3/4" = 1'-0"

DESIGN	JMW	
DRAWN	JMW / DJM	
CHECKED	BRB	
DATE	01/28/2021	
PROJECT No. 19309.01JN		
SHEET NUMBER		
<b>S203</b>		
No.	Date	Item
REVISIONS		



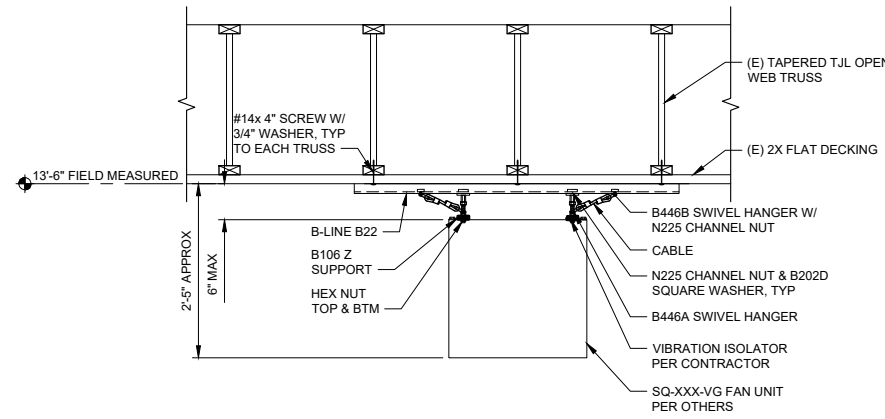
PROJECT: CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT  
CBJ CONTRACT NO. BE21-177  
JUNEAU, ALASKA

SHEET TITLE: GLACIER VALLEY FIRE STATION DETAILS



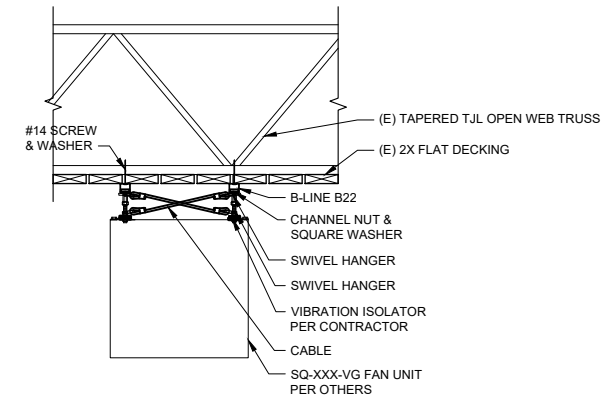
1 PLAN

S204 SCALE: 3/4" = 1'-0"



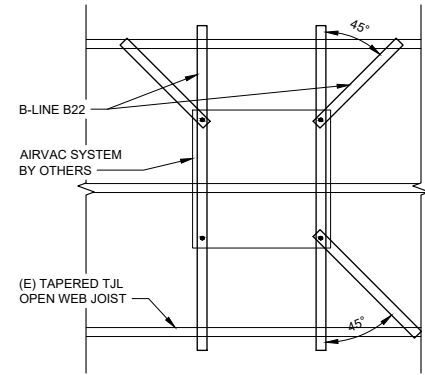
2 LONGITUDINAL SECTION

S204 SCALE: 3/4" = 1'-0"



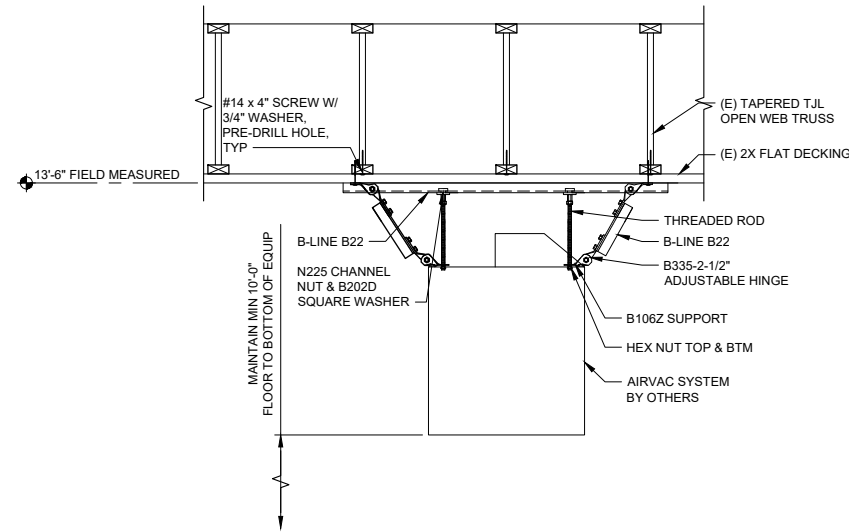
3 TRANSVERSE SECTION

S204 SCALE: 3/4" = 1'-0"



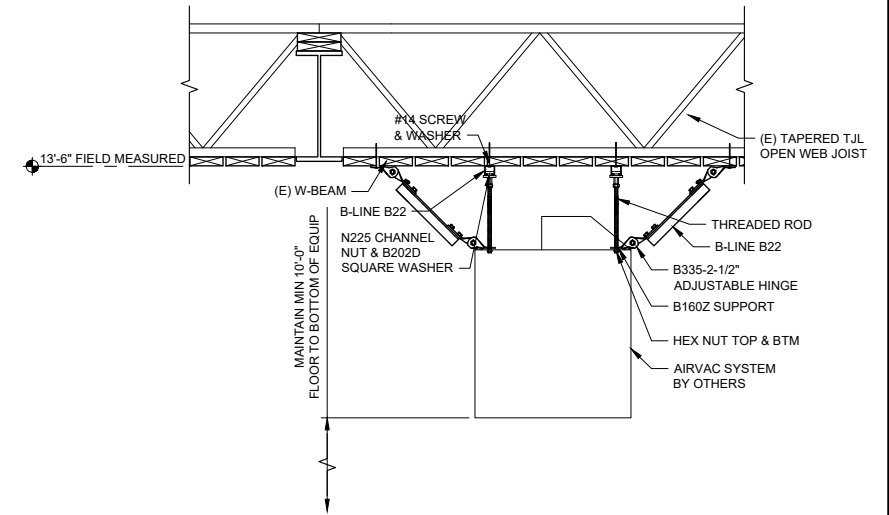
4 PLAN

S204 SCALE: 3/4" = 1'-0"



5 LONGITUDINAL SECTION

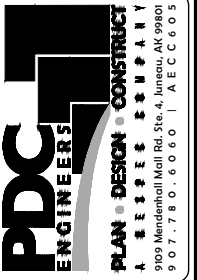
S204 SCALE: 3/4" = 1'-0"



6 TRANSVERSE SECTION

S204 SCALE: 3/4" = 1'-0"

CONSULTANT :



PROJECT :  
**CCFR WIDE VEHICLE EXHAUST SYSTEM REPLACEMENT**  
**CBJ CONTRACT NO. BE21-177**  
 JUNEAU, ALASKA

SHEET TITLE :  
**AUKE BAY FIRE STATION DETAILS**

DESIGN JMW  
 DRAWN JMW / DJM  
 CHECKED BRB  
 DATE 01/28/2021

PROJECT No.  
**19309.01JN**  
 SHEET NUMBER

**S204**

No.	Date	Item