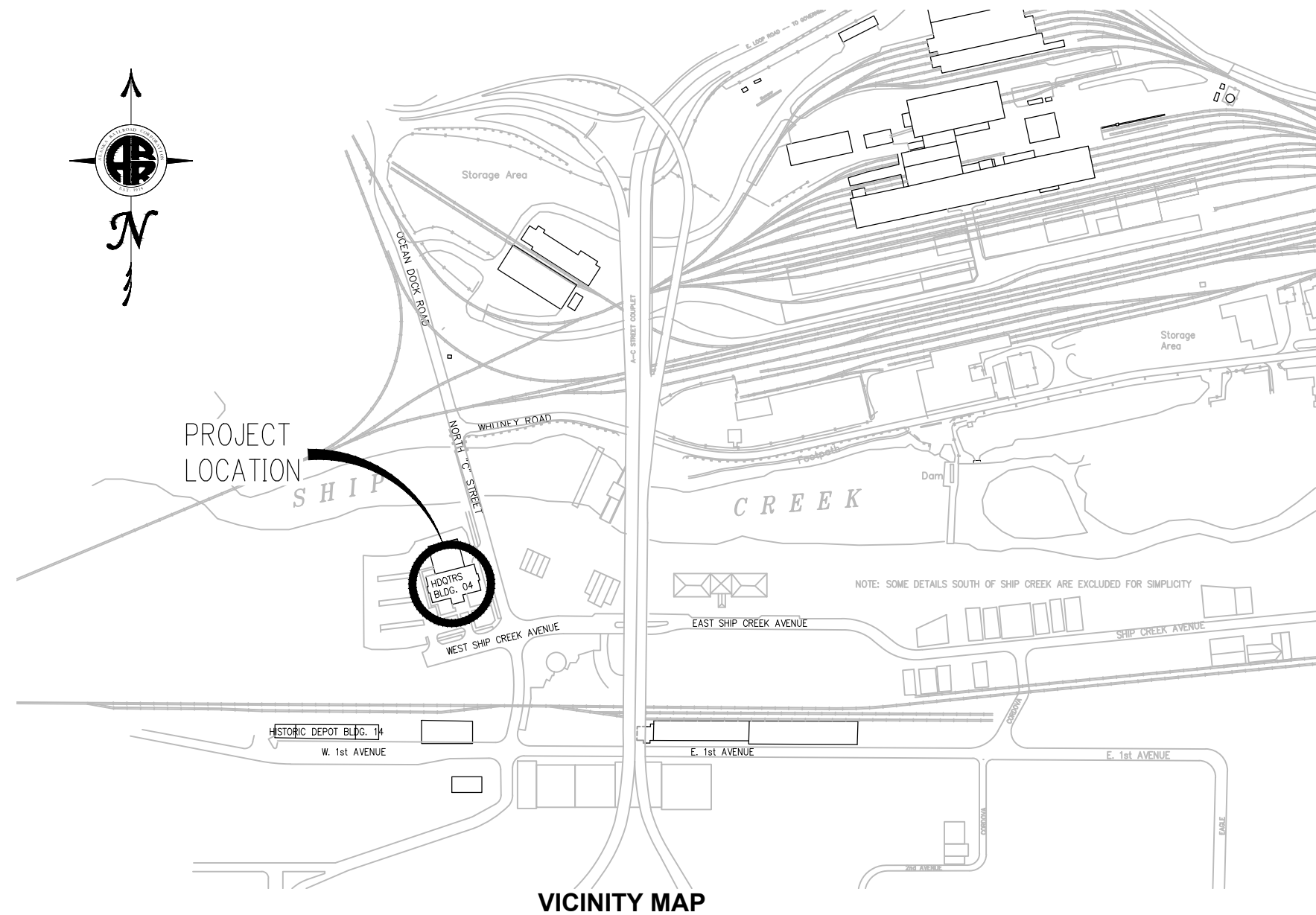





ALASKA RAILROAD CORPORATION

# 327 WEST SHIP CREEK AVE. (BLDG 04) PHASE II ROOF REPLACEMENT

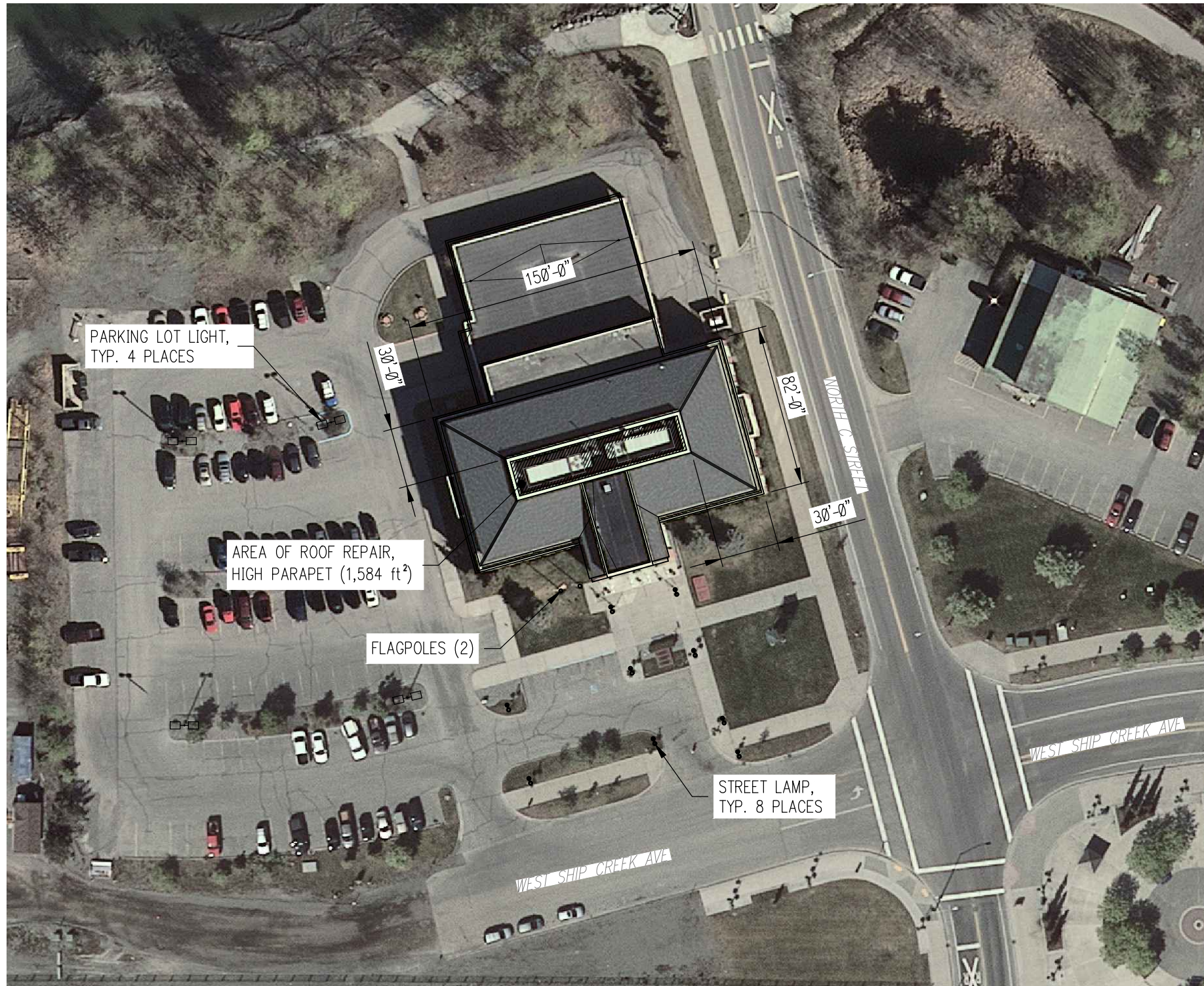
APRIL 2021



VICINITY MAP

 <b>ALASKA RAILROAD CORPORATION</b> ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500		
PROJECT : <b>ANCHORAGE BUILDING 04 PHASE II ROOF REPLACEMENT</b>		
TITLE: <b>TITLE SHEET &amp; LOCATION MAP</b>		
DESIGNED BY: ARRC	SCALE : NO SCALE	AFE NO.:
DRAWN BY: CDL	DATE : 4/5/2021	ACAD FILE:
CHECKED BY: S.M.		DWG NO. <b>1</b> OF <b>10</b>
APPROVED BY: CDR		

P:\Engineering\ACAD\ARRC\BLDG-04\2020 Roof Replacement\BLDG 04.dwg VPort: 02 SITE PLAN & NOTES Plot Style: 750C-Half.ctb



**NOTES:**

1. DIMENSIONS AND WEIGHTS OF ROOFTOP HVAC UNITS ARE AS FOLLOWS:
  - 1.1. RTU-1, 8,500 lb, 394 5/16" L x 90 5/16" W x 82 5/16" H
  - 1.2. RTU-2, 8,700 lb, 394 5/16" L x 90 5/16" W x 82 5/16" H




**SAFETY:**

**Mandatory Minimum Personal Protective Equipment (PPE):**

- All contractor personnel shall at all times wear at least:
- Hard hats
  - Safety glasses
  - Safety toe work boots
  - Reflective vests

Contractor shall have and comply with an OSHA approved fall protection plan at all times.  
All workers shall attend a preconstruction safety meeting with Alaska Railroad.

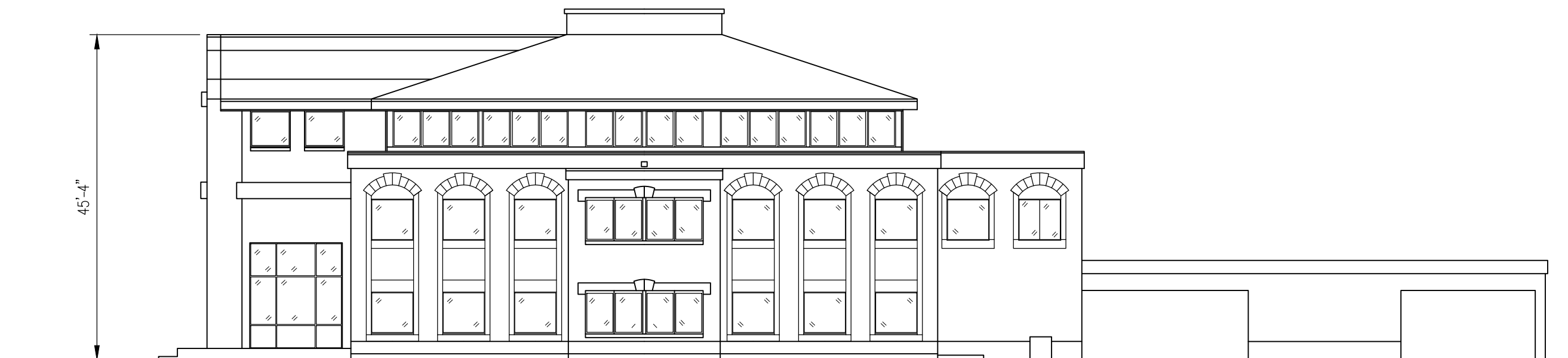
A SITE PLAN  
2 SCALE: 1/64" = 1'-0"

 <b>ALASKA RAILROAD CORPORATION</b> ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500		
PROJECT :		
<b>ANCHORAGE BUILDING 04 PHASE II ROOF REPLACEMENT</b>		
TITLE:		
<b>SITE PLAN &amp; NOTES</b>		
DESIGNED BY: ARRC	SCALE : AS NOTED	AFE NO.:
DRAWN BY: CDL	DATE : 4/5/2021	ACAD FILE:
CHECKED BY: S.M		DWG NO.
APPROVED BY: CDR		<b>2</b> OF <b>10</b>

REV.	DATE	BY	REVISION




A NORTH BUILDING ELEVATION  
3 SCALE: 1/16" = 1'-0"

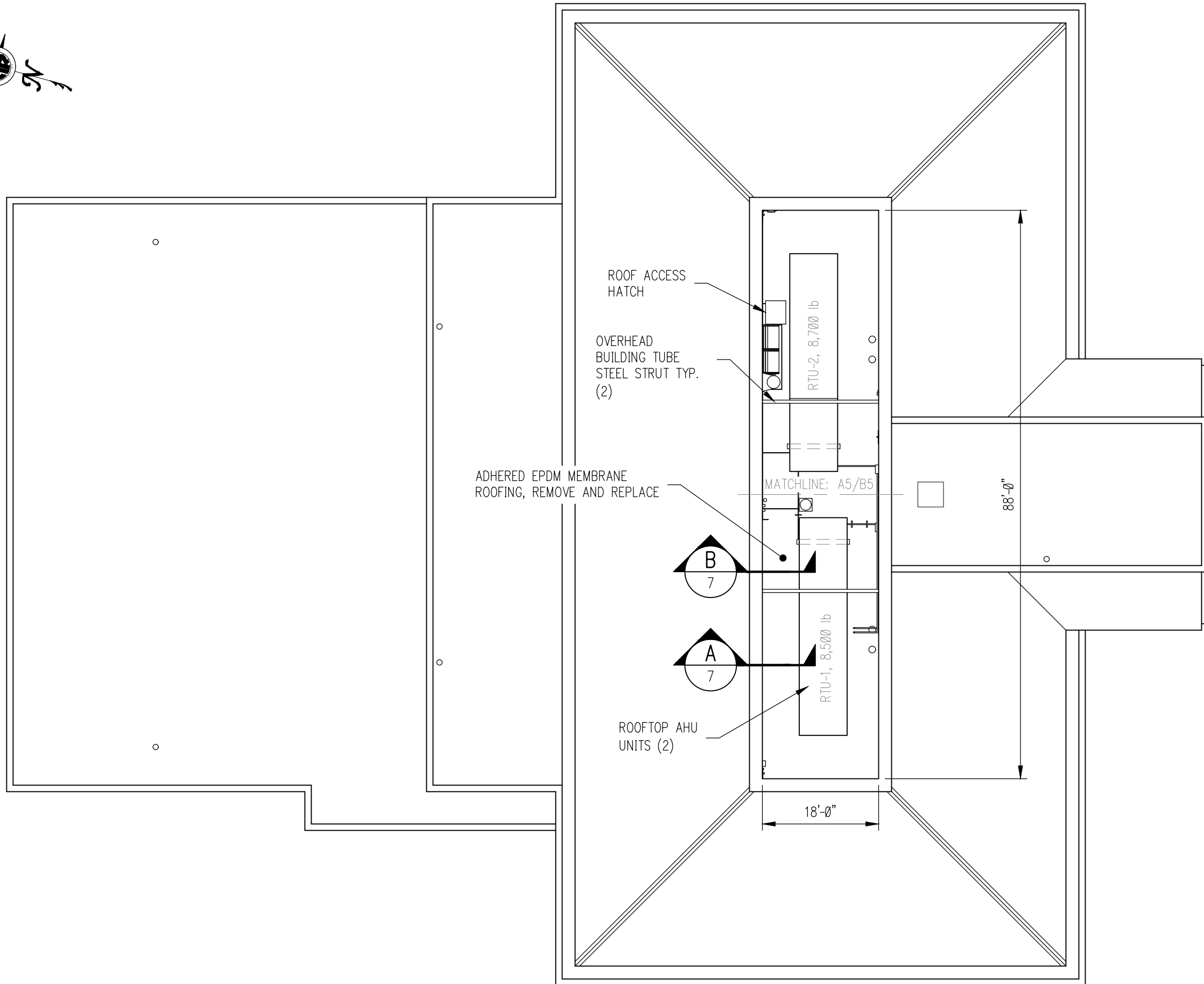


B EAST BUILDING ELEVATION  
3 SCALE: 1/16" = 1'-0"

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REV.	DATE	BY	REVISION

 <b>ALASKA RAILROAD CORPORATION</b> ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500			
PROJECT : <b>ANCHORAGE BUILDING 04 PHASE II ROOF REPLACEMENT</b>			
TITLE: <b>ELEVATIONS</b>			
DESIGNED BY: ARRC	SCALE : AS NOTED	AFE NO.:	
DRAWN BY: CDL	DATE : 4/5/2021	ACAD FILE:	
CHECKED BY: S M		DWG NO. <b>3</b> OF <b>10</b>	
APPROVED BY: CDR			

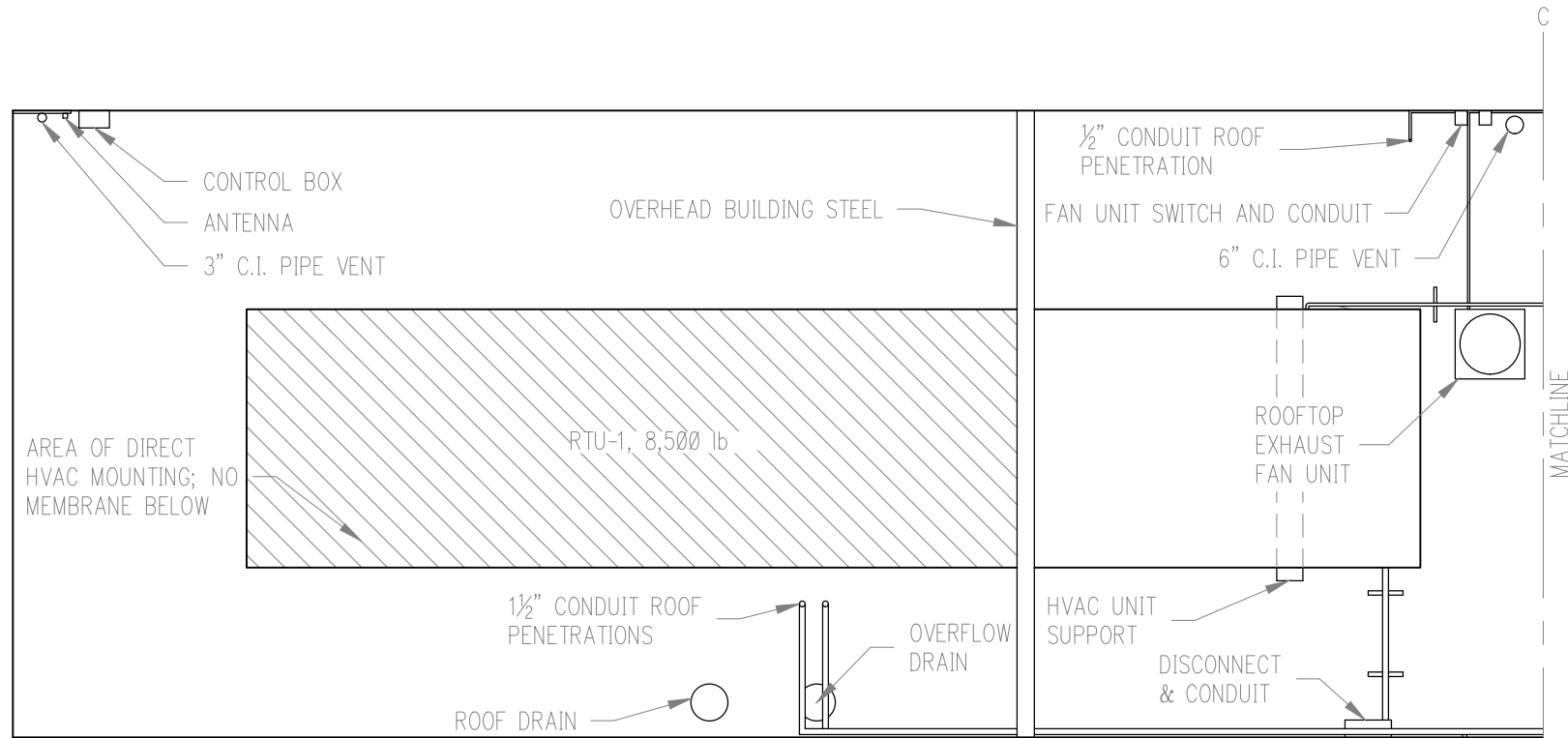


A ROOF PLAN  
4 SCALE: 1/16" = 1'-0"

REV.	DATE	BY	REVISION

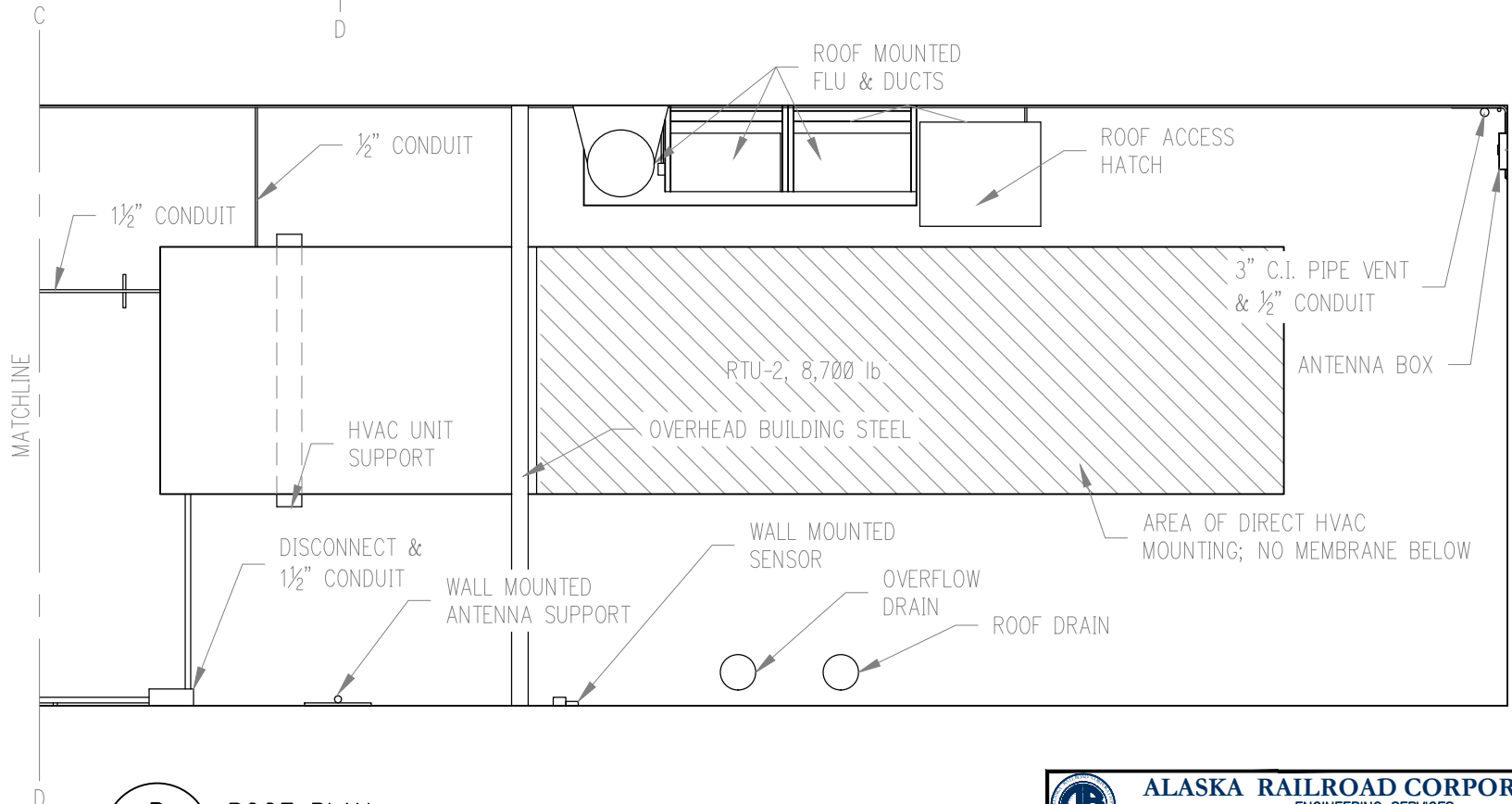
 <b>ALASKA RAILROAD CORPORATION</b> ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500		
PROJECT : <b>ANCHORAGE BUILDING 04 PHASE II ROOF REPLACEMENT</b>		
TITLE: <b>ROOF PLAN AS-BUILT CONDITIONS</b>		
DESIGNED BY: ARRC	SCALE : AS NOTED	AFE NO.:
DRAWN BY: CDL	DATE : 4/5/2021	ACAD FILE:
CHECKED BY: S M		DWG NO. <b>4</b> OF <b>10</b>
APPROVED BY: CDR		

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- NOTES:
1. REMOVE EXISTING CONDUITS TO JOINT NEAREST ROOF DECK. CONDUIT AT PENETRATIONS THROUGH ROOF DECK TO BE MAINTAINED AND RE-USED. PULL CONDUCTORS BACK INTO PANEL BOXES TO ALLOW RE-USE FOLLOWING CONSTRUCTION.
  2. REMOVE DISCONNECT SWITCHES FOR RTU-1 AND RTU-2 AND SAVE FOR REINSTALLATION.
  3. REMOVE CONTROL BOXES AND ASSOCIATED ANTENNAE AND SAVE FOR REINSTALLATION.
  4. REMOVE ROOFTOP UNITS, EXHAUST FAN, BOILER FLU, ROOF MOUNTED DUCTS AND SAVE FOR REINSTALLATION.
  5. LOCK AND TAG OUT CIRCUITS FEEDING ROOF TOP UTILITIES AS REQUIRED.
  6. RTU-1 AND RTU-2 ARE FED FROM MDP ON FIRST FLOOR.
  7. RECEPTACLES AND EXHAUST FAN FED FROM PANEL PC2-2,4 ON THIRD FLOOR.

**A** ROOF PLAN  
5 SCALE: 3/16" = 1'-0"

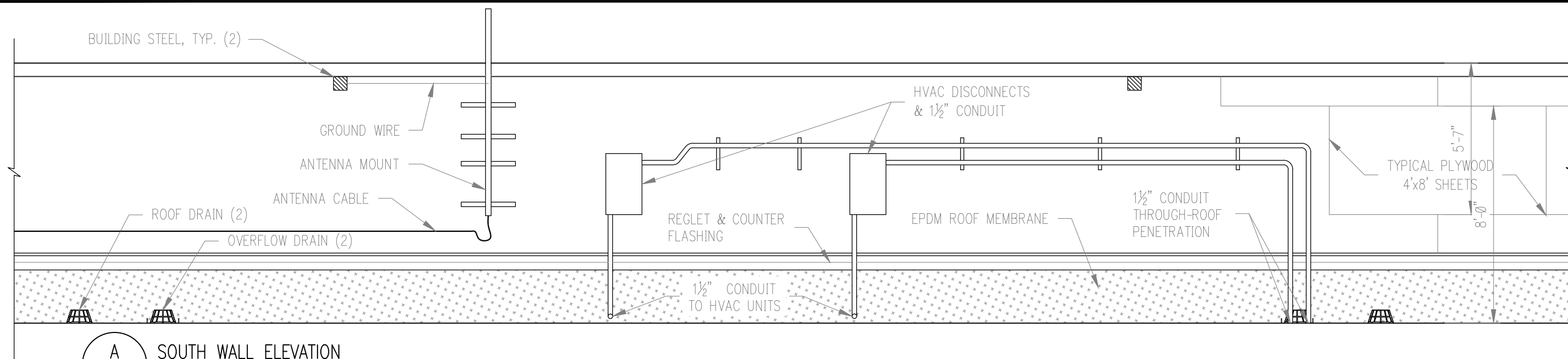


**B** ROOF PLAN  
5 SCALE: 3/16" = 1'-0"

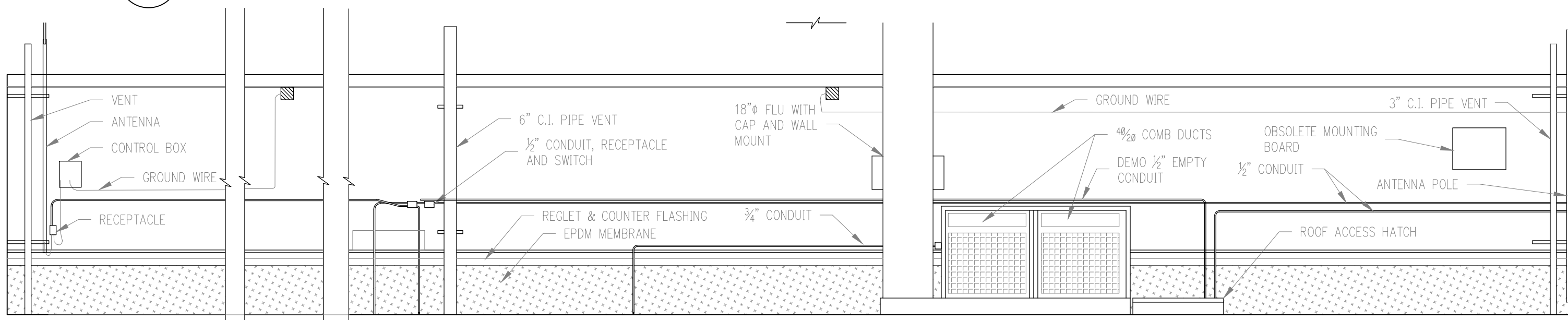
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REV.	DATE	BY	REVISION

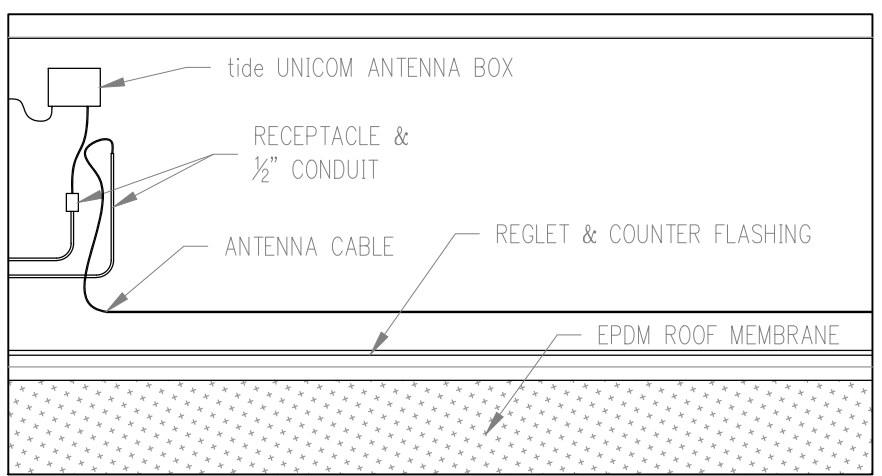
<b>ALASKA RAILROAD CORPORATION</b> ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500		
PROJECT : <b>ANCHORAGE BUILDING 04 PHASE II ROOF REPLACEMENT</b>		
TITLE: <b>PARAPET ROOF PLAN PLAN VIEW AS-BUILT CONDITION</b>		
DESIGNED BY: ARRC	SCALE : AS NOTED	AFE NO.:
DRAWN BY: CDL	DATE : 4/5/2021	ACAD FILE:
CHECKED BY: S.M		DWG NO. <b>5</b> OF <b>10</b>
APPROVED BY: CDR		



**A** SOUTH WALL ELEVATION  
6 SCALE: 1/4" = 1'-0"



**B** NORTH WALL ELEVATION  
6 SCALE: 1/4" = 1'-0"



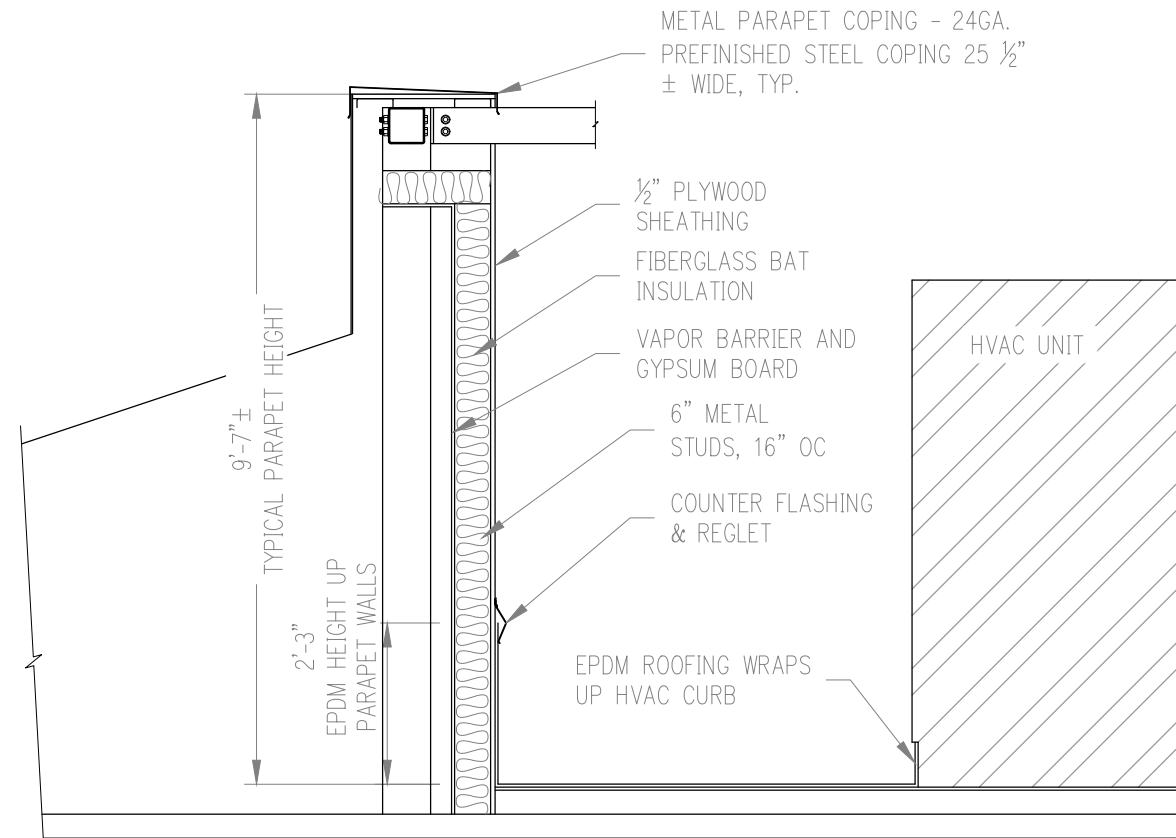
**C** EAST WALL ELEVATION  
6 SCALE: 1/4" = 1'-0"

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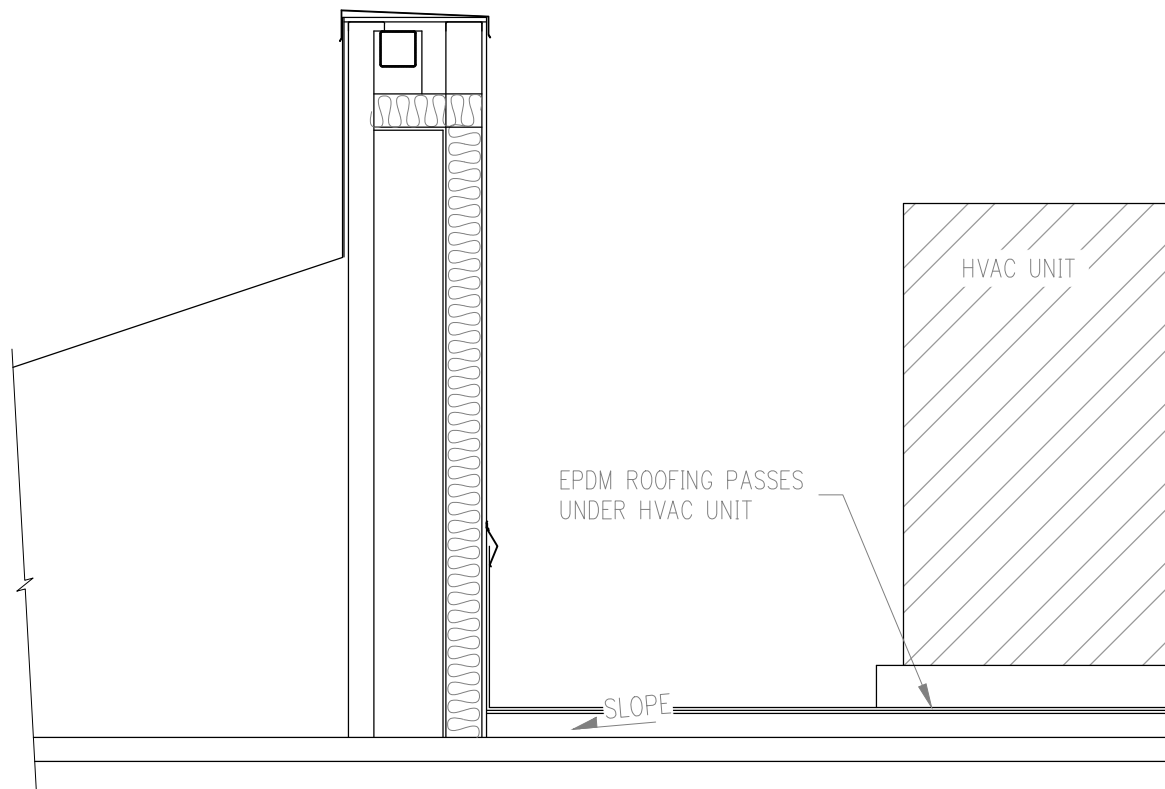
REV.	DATE	BY	REVISION

<b>ALASKA RAILROAD CORPORATION</b> ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500			
PROJECT : <b>ANCHORAGE BUILDING 04 PHASE II ROOF REPLACEMENT</b>			
TITLE: <b>PARAPET ROOF DETAILS WALL ELEVATIONS AS-BUILT CONDITIONS</b>			
DESIGNED BY: ARRC	SCALE : AS NOTED	AFE NO.:	
DRAWN BY: CDL	DATE : 4/5/2021	ACAD FILE:	
CHECKED BY: S.M.		DWG NO.:	<b>6</b> OF <b>10</b>
APPROVED BY: CDR			

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**A** ROOF SECTION  
 7 SCALE: NTS

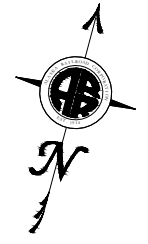


**B** ROOF SECTION  
 7 SCALE: NTS

NOTE:  
 TYPICAL PERIMETER CONCRETE DECK SLOPE AS INDICATED PER STRUCTURAL DRAWINGS. PERCENT SLOPE UNKNOWN.

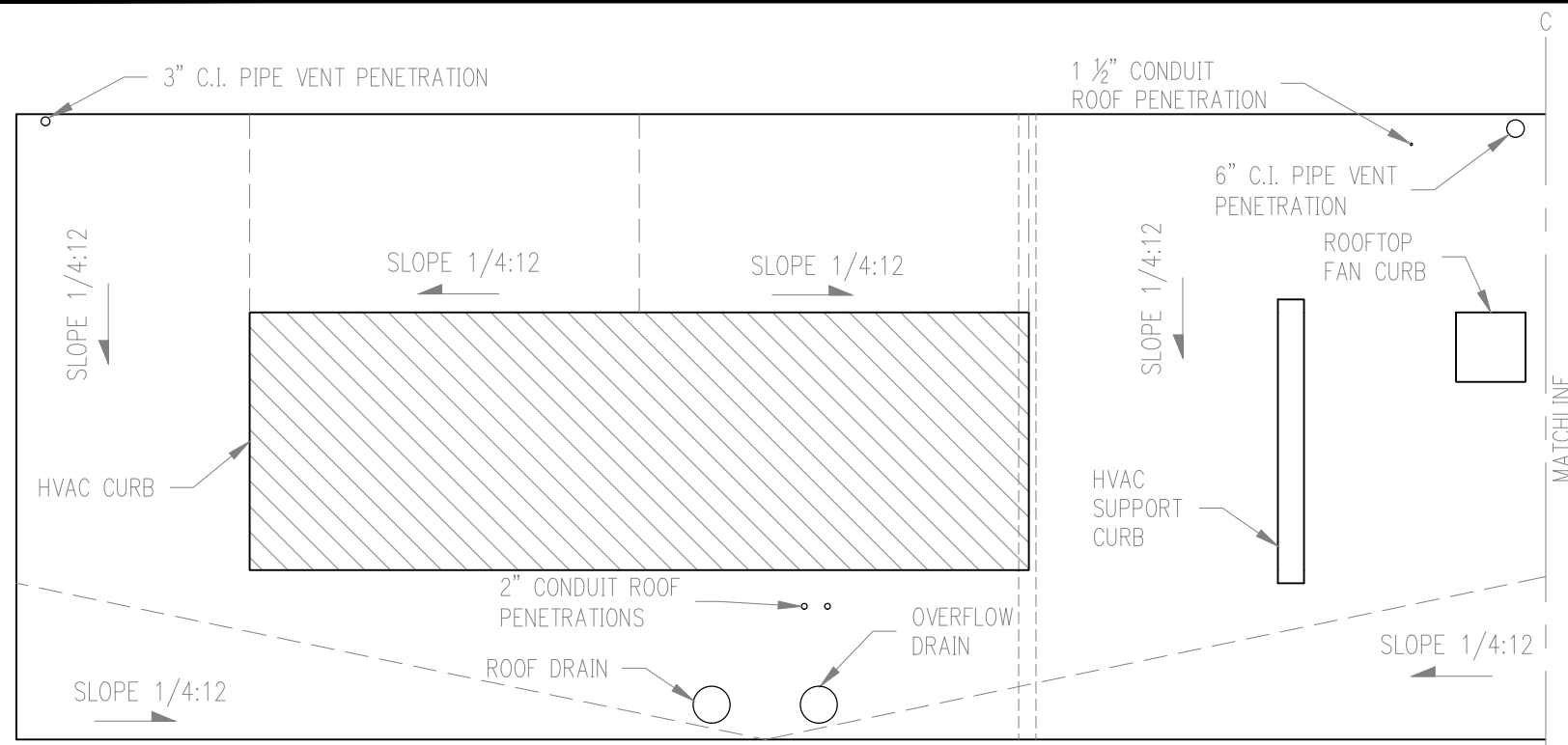
REV.	DATE	BY	REVISION

 <b>ALASKA RAILROAD CORPORATION</b> ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500		
PROJECT : <b>ANCHORAGE BUILDING 04                  PHASE II ROOF REPLACEMENT</b>		
TITLE: <b>PARAPET ROOF DETAILS                  SECTIONS &amp; EXISTING CONDITIONS</b>		
DESIGNED BY: ARRC	SCALE : AS NOTED	AFE NO.:
DRAWN BY: CDL	DATE : 4/5/2021	ACAD FILE:
CHECKED BY: S.M.		DWG NO. <b>7</b> OF <b>10</b>
APPROVED BY: CDR		



NOTES CONTINUED:

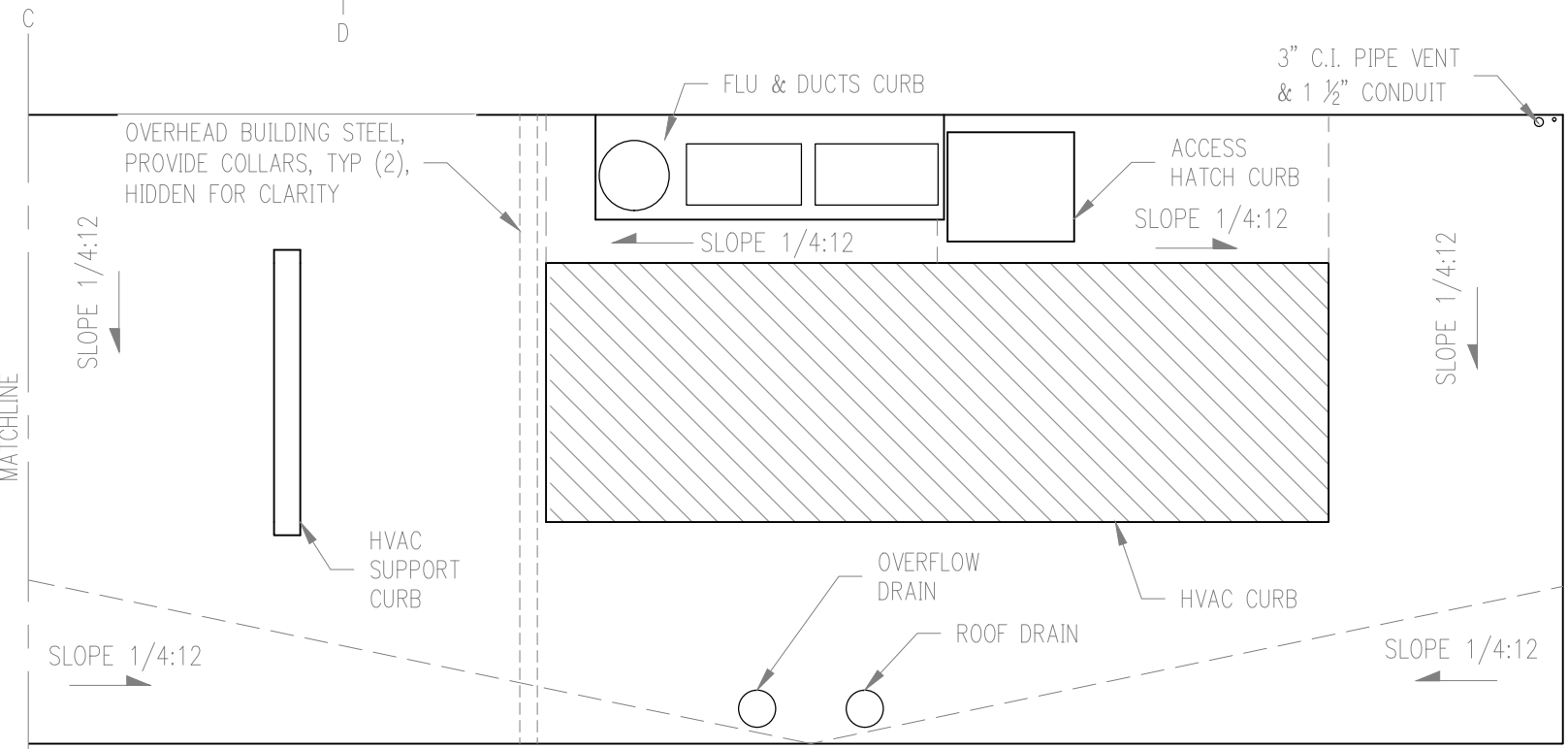
12. THE CITY ADOPTED BUILDING CODE REQUIRES SECONDARY EMERGENCY OVERFLOW DRAIN INSTALLATION TO COMPLY WITH THE ADOPTED PLUMBING CODE (15 IBC 1503.4.1). SECONDARY SYSTEMS ARE REQUIRED TO BE SEPARATE FROM THE PRIMARY SYSTEM AND DISCHARGE ABOVE GRADE IN OBSERVABLE LOCATIONS (15 UPC 1101.12.2.2.1). SEALING OF THE OVERFLOW DAM IS REQUIRED TO SEPARATE THE PRIMARY SYSTEM FLOW FROM THE SECONDARY FLOW OBSERVED.
13. THE SURFACE ON WHICH THE INSULATION OR ROOFING MEMBRANE IS TO BE APPLIED SHALL BE CLEAN, SMOOTH, DRY, AND FREE OF PROJECTIONS OR CONTAMINANTS THAT WOULD PREVENT PROPER APPLICATION OF OR BE INCOMPATIBLE WITH THE NEW INSTALLATION, SUCH AS FINS, SHARP EDGES, FOREIGN MATERIALS, OIL AND GREASE.
14. REINSTALL EXHAUST FAN, FLU, DUCTS, RTU-1 AND RTU-2.
15. REINSTALL CONDUITS, DISCONNECTS, CONTROL BOXES AND ASSOCIATED ANTENNAE.



**A** ROOF PLAN  
8 SCALE: 3/16" = 1'-0"


NOTES:

1. REMOVE EXISTING ROOFING TO CONCRETE DECK AND INSTALL NEW. AVERAGE INSULATION VALUE R-22 AT FLAT ROOF DECK.
2. REPLACE PARAPET WALL INSULATION WITH UNFACED R21 FIBERGLASS BAT.
3. ICE & WATER SHIELD TO BE GRACE OR APPROVED EQUAL.
4. REPLACEMENT SHEATHING TO BE 1/2" APA C-C PLUGGED AND TOUCH SANDED, GROUP 2, EXTERIOR PLYWOOD. FASTEN TO STEEL STUDS USING #10 SIMPSON PPSD SHEATHING TO CFS SCREWS AT 8" OC EDGE SPACING, 10" OC INTERMEDIATE SPACING.
5. PARAPET WALL SIDING TO BE MAGIC METALS 29 GAUGE MESA WALL PANELS OR APPROVED EQUAL IN LIGHT STONE COLOR, INSTALLED HORIZONTALLY. FASTEN USING #9x1-1/2" WOODGRIP SCREWS WITH EPDM WASHERS THROUGH 1/8" PRE-DRILLED HOLES IN PANELS 24" OC, STARTING 3" IN FROM PANEL EDGES. PANEL STITCH SCREWS TO BE 3/4" STITCH SCREWS WITH EPDM WASHERS, 12" OC IN LINE WITH FIELD SCREWS. USE SEALER TAPE BETWEEN ALL PANEL SIDE AND END LAPS. BRUSH DRILL TAILINGS FROM WALL PANELS IMMEDIATELY TO PREVENT RUST STAINS.
6. REPLACE ROOF AND OVERFLOW DRAIN FLASH CLAMP & GRAVEL STOP WITH NEW, PART 1310C. REPLACE OVERFLOW DRAIN 2" HIGH WATER DAM COLLAR WITH NEW, PART 1310WDC2.
7. REPLACE ROOF AND OVERFLOW DRAIN "J.R. SMITH" POLY DOMES, PART 71445 WITH EQUIVALENT CAST IRON DOMES.
8. ALL EXISTING WALL MOUNTED UTILITIES TO BE REINSTALLED AFTER INSTALLATION OF METAL SIDING. PROVIDE NEW SUPPORTS AND HARDWARE AS NEEDED INCLUDING SUPPORTS OVER EPDM ROOF.
9. PROVIDE RUBBER OR PLASTIC END CAPS FOR ALL UTILITY SUPPORT STRUTS.
10. PROVIDE AND INSTALL 30" x 30" EPDM MOLDED WALKWAY PAD ON NEW ROOFING IN FRONT OF ROOF ACCESS HATCH PER MANUFACTURERS INSTRUCTIONS.
11. ATTACH ALL UTILITY SUPPORTS TO STEEL STUDS. CONTRACTOR TO PROVIDE STEEL STUD BRIDGING FOR SUPPORT WHERE UTILITY IS NOT ABLE TO BE SUPPORTED BY EXISTING STEEL STUDS.
12. SUBMIT FLASHING DETAIL FOR STEEL STRUTS AT WALL.



**B** ROOF PLAN  
8 SCALE: 3/16" = 1'-0"

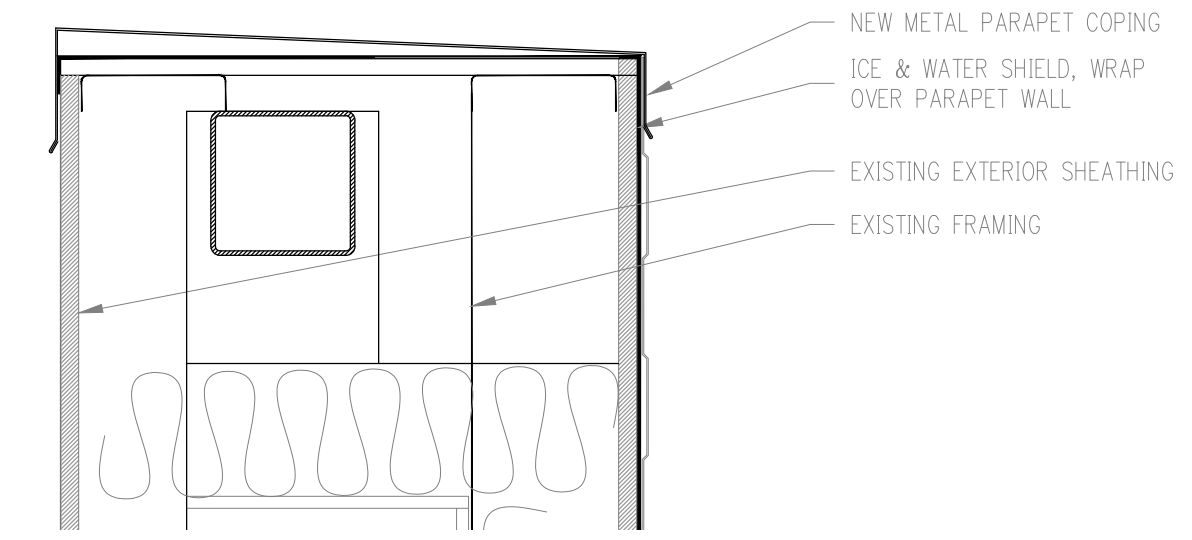
REV.	DATE	BY	REVISION

 <b>ALASKA RAILROAD CORPORATION</b> ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500	
PROJECT :	
<b>ANCHORAGE BUILDING 04 PHASE II ROOF REPLACEMENT</b>	
TITLE:	
<b>PARAPET ROOF DETAILS REPLACEMENT PLAN &amp; NOTES</b>	
DESIGNED BY: ARRC	SCALE : AS NOTED
DRAWN BY: CDL	ACAD FILE:
CHECKED BY: S M	DWG NO.
APPROVED BY: CDR	DATE : 4/5/2021
AFE NO.: 8 OF 10	

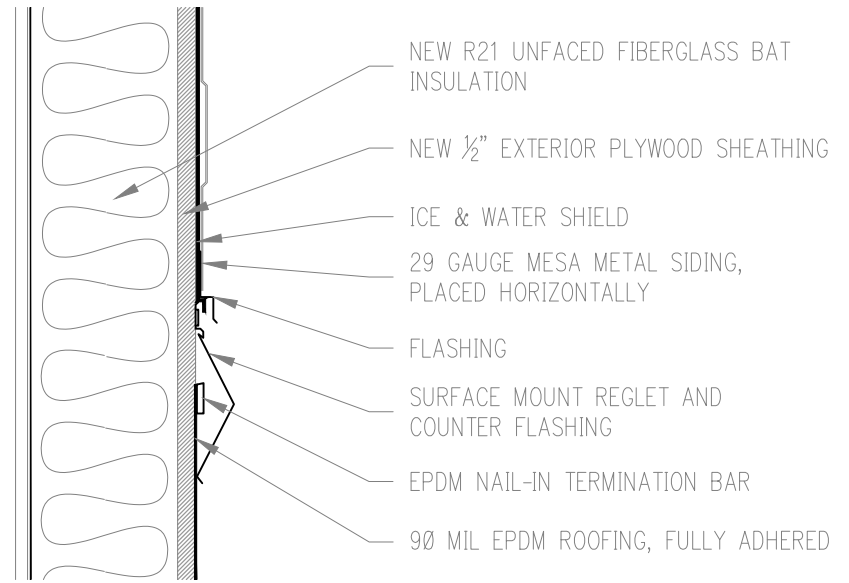
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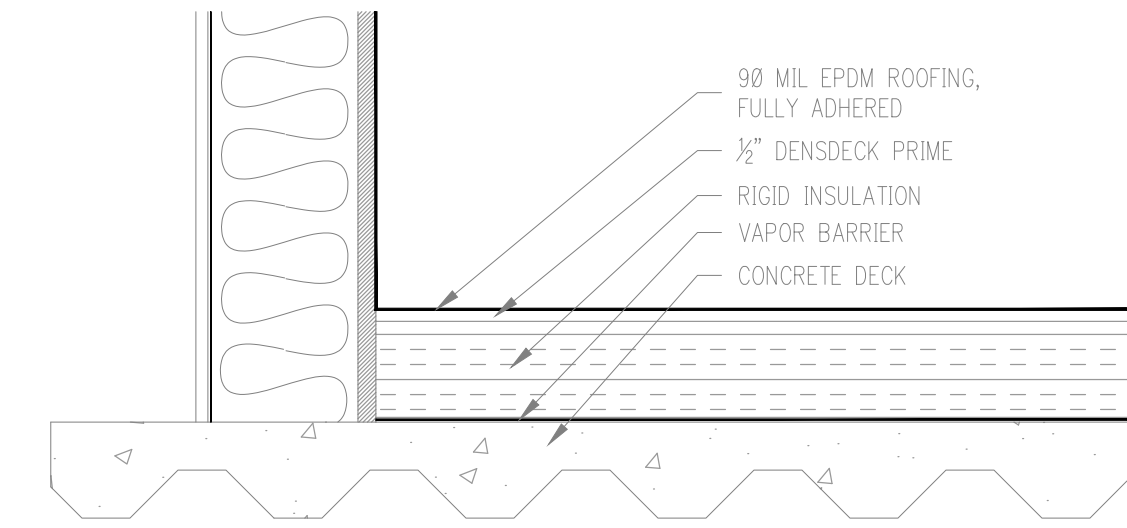
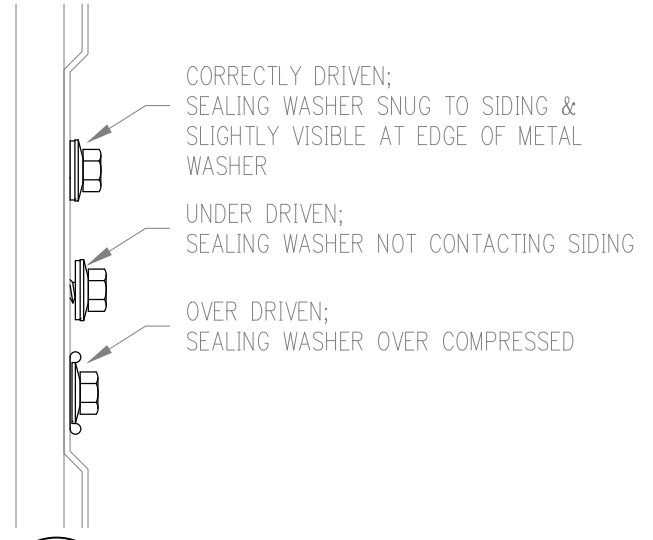
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**A** TYP. REPLACEMENT ROOF AND WALL SECTION  
**9** SCALE: NTS



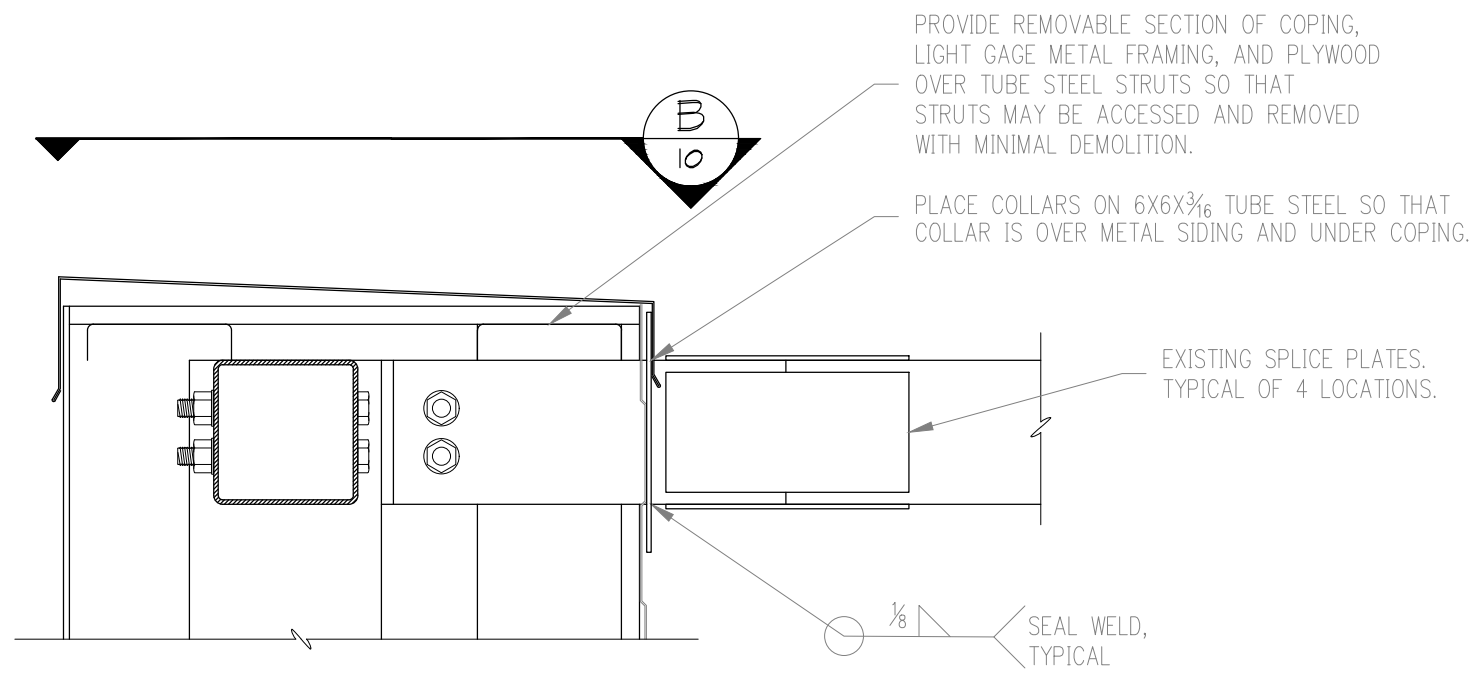
**B** METAL SIDING FASTENER INSTALLATION  
**9** SCALE: NTS



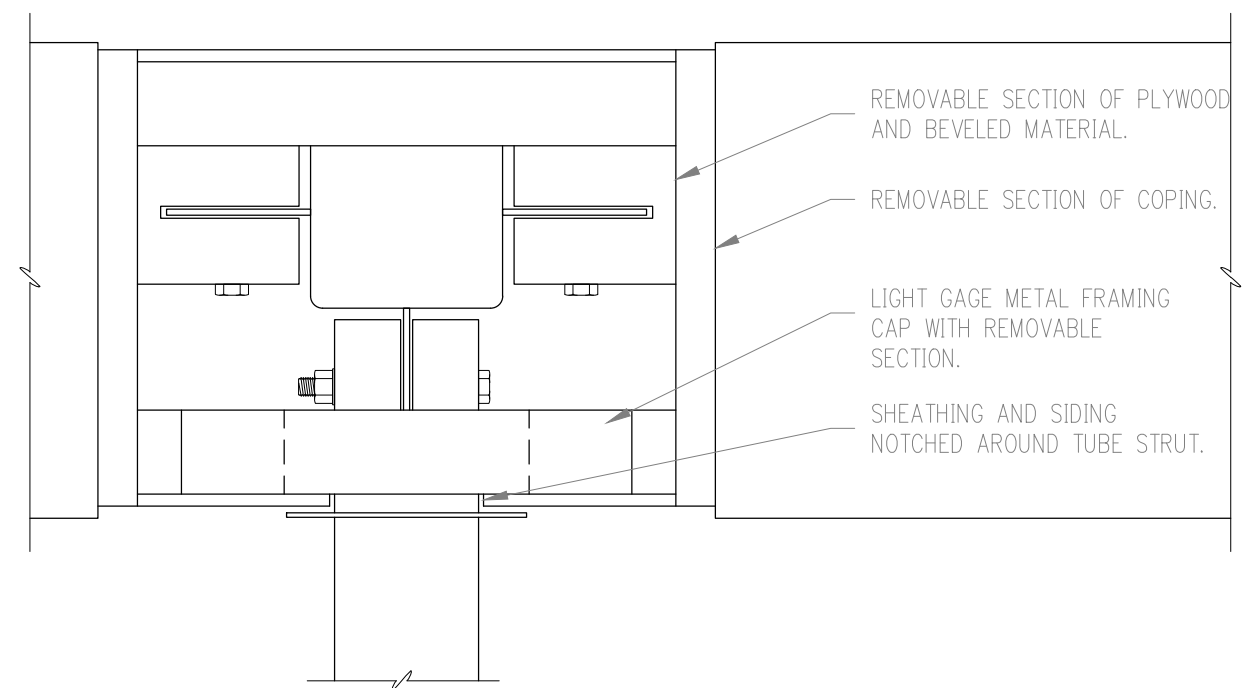
 <b>ALASKA RAILROAD CORPORATION</b> ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500		PROJECT :
		<b>ANCHORAGE BUILDING 04          PHASE II ROOF REPLACEMENT</b>
TITLE:		<b>PARAPET ROOF DETAILS          REPLACEMENT SECTIONS &amp; DETAILS</b>
DESIGNED BY: CDR	SCALE : AS NOTED	AFE NO.:
DRAWN BY: CDL	DATE : 4/5/2021	ACAD FILE:
CHECKED BY: S.M		DWG NO. <b>9</b> OF <b>10</b>
APPROVED BY: CDR		

REV.	DATE	BY	REVISION

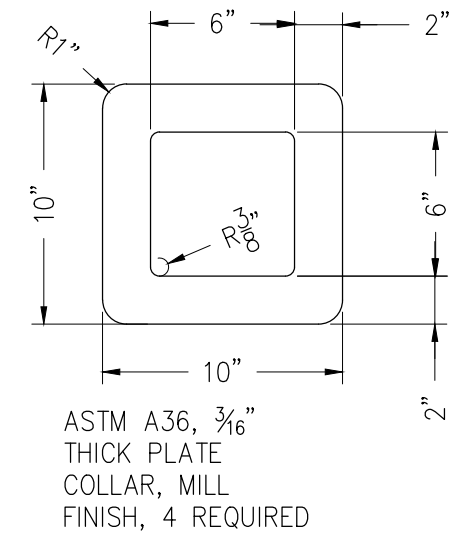
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**A**  
10  
REPLACEMENT PARAPET SECTION DETAIL  
SCALE: NTS



**B**  
10  
REPLACEMENT PARAPET PLAN DETAIL  
SCALE: NTS



**C**  
10  
COLLAR PLATE DETAIL  
SCALE: NTS

- NOTES:
- MARK TUBE STRUTS WITH LOCATION AND ORIENTATION, PRIOR TO REMOVAL, SO THAT THEY MAY BE PROPERLY REPLACED.
  - EXISTING BOLTS, NUTS AND WASHERS MAY BE RE-USED.

**DOCUMENTS INCORPORATED INTO THE SPECIFICATION BY REFERENCE:**

- AWS D1.1, STRUCTURAL WELDING MANUAL.
- ASTM A36, STANDARD SPECIFICATION FOR CARBON STRUCTURAL STEEL.
- ASTM A3125, STD. SPECIFICATION FOR HIGH STRENGTH STRUCTURAL BOLTS.
- ASTM A500, STANDARD SPECIFICATION FOR COLD-FORMED WELDED AND SEAMLESS CARBON STEEL STRUCTURAL TUBING IN ROUNDS AND SHAPES.
- ASTM A563, STD. SPECIFICATION FOR CARBON AND ALLOY STEEL NUTS.
- ASTM F436, STD. SPECIFICATION FOR HARDENED STEEL WASHERS.

**MATERIALS:**

- STRUCTURAL STEEL:
  - STRUCTURAL TUBING – ASTM A500 GRADE C
  - ALL OTHER SHAPES AND PLATES – ASTM A36, MILL FINISH
- BOLTS: ASTM F3125 GRADE A325, TYPE 1
- NUTS: ASTM A563DH
- WASHERS: ASTM F436 TYPE 1
- WELD ELECTRODE:
 

WELD ELECTRODES SHALL BE COMPATIBLE WITH THE BASE STEEL MATERIAL PROPERTIES AND SHALL HAVE A MINIMUM TENSILE STRENGTH OF 70,000 PSI.

**FABRICATION:**

- ALL WELDERS SHALL BE QUALIFIED FOR THE WELD PROCEDURE PER AWS D1.1.
- THE FABRICATOR, OR THEIR SUBCONTRACTOR, SHALL PERFORM QUALITY CONTROL WELD TESTING. INSPECTORS SHALL BE AWS CERTIFIED. ALL WELD TESTS SHALL BE DOCUMENTED WITH COPIES FURNISHED TO ALASKA RAILROAD CORPORATION.
  - ALL FILLET WELDS SHALL BE 100% VISUALLY INSPECTED.
- ALL DEFECTIVE WELDS SHALL BE REPAIRED AND RETESTED UNTIL THEY PASS.
- ALL WELD SPLATTER AND SLAG SHALL BE REMOVED. LAMINATIONS, SLIVERS, TEARS AND FINS SHALL BE REMOVED.

**SUBMITTALS:**

- SUBMITTALS LISTED BELOW MUST BE PROVIDED AND APPROVED BY THE ENGINEER BEFORE COMMENCING FABRICATION WORK:
  - MANUFACTURER CERTIFICATES FOR ALL MATERIALS STATING COMPLIANCE WITH APPLICABLE SPECIFICATION.
  - WELDER CERTIFICATIONS.



REV.	DATE	BY	REVISION

<b>ALASKA RAILROAD CORPORATION</b> ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500		
PROJECT : <b>ANCHORAGE BUILDING 04 PHASE II ROOF REPLACEMENT</b>		
TITLE: <b>PARAPET TUBE STRUT DETAILS REPLACEMENT SECTIONS &amp; DETAILS</b>		
DESIGNED BY: CDR	SCALE : AS NOTED	AFE NO.:
DRAWN BY: CDL	DATE : 3/31/2021	ACAD FILE: DWG NO.
CHECKED BY: S M		<b>10</b> OF <b>10</b>
APPROVED BY: CDR		