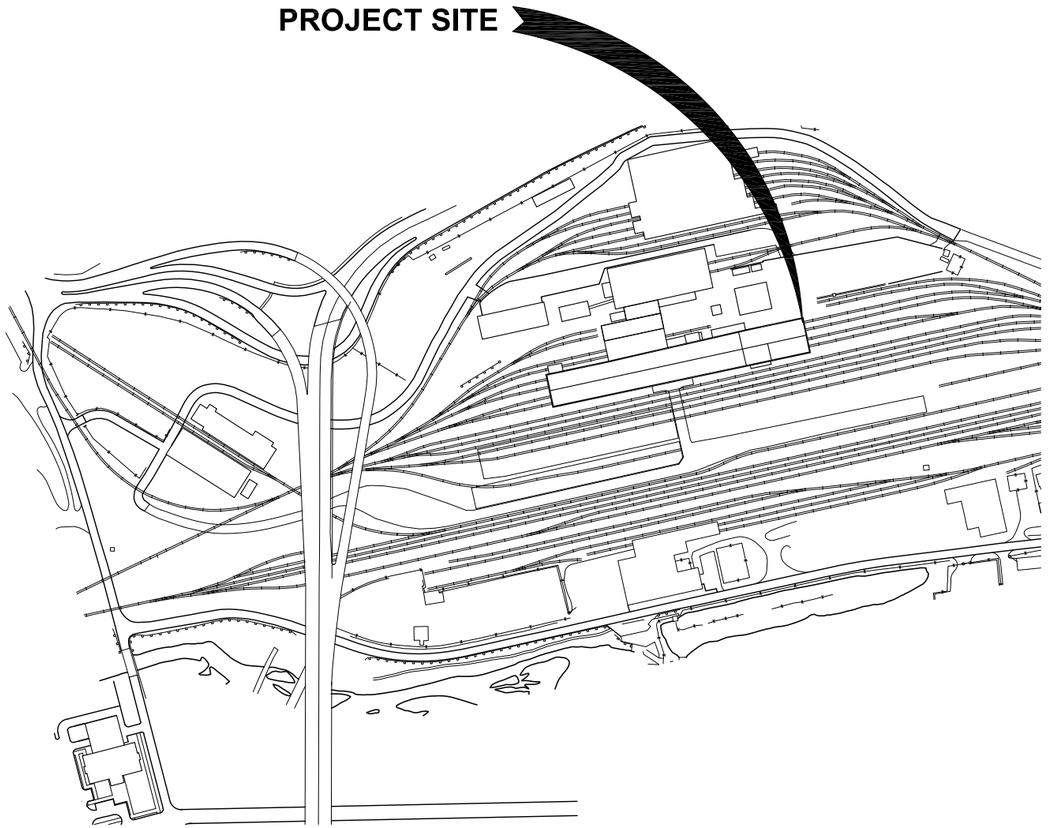
Alaska Railroad Corporation

ANCHORAGE CAR SHOP
BRACE ANGLE REPLACEMENT

WORK UNDER THIS PROJECT SCOPE INCLUDES DEMOLITION OF FIXED LADDER AND CRANE ACCESS PLATFORM, REPLACEMENT OF X BRACE ANGLE LEG AND ATTACHMENT.



SITE PLAN
NO SCALE

DRAWING INDEX:	
DRAWING NO.	DESCRIPTION
1	TITLE SHEET (THIS DRAWING)
2	EAST WALL FRAMING GENERAL ARRANGEMENT
3	DEMOLITION PLAN
4	CONSTRUCTION PLAN
5	HEATER SUPPORT DETAILS
6	BRACE REPLACEMENT DETAILS

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
Fall protection when working from manlift or scissorlift

All workers shall attend a preconstructlon safety meetlng glven by Alaska Rallroad.

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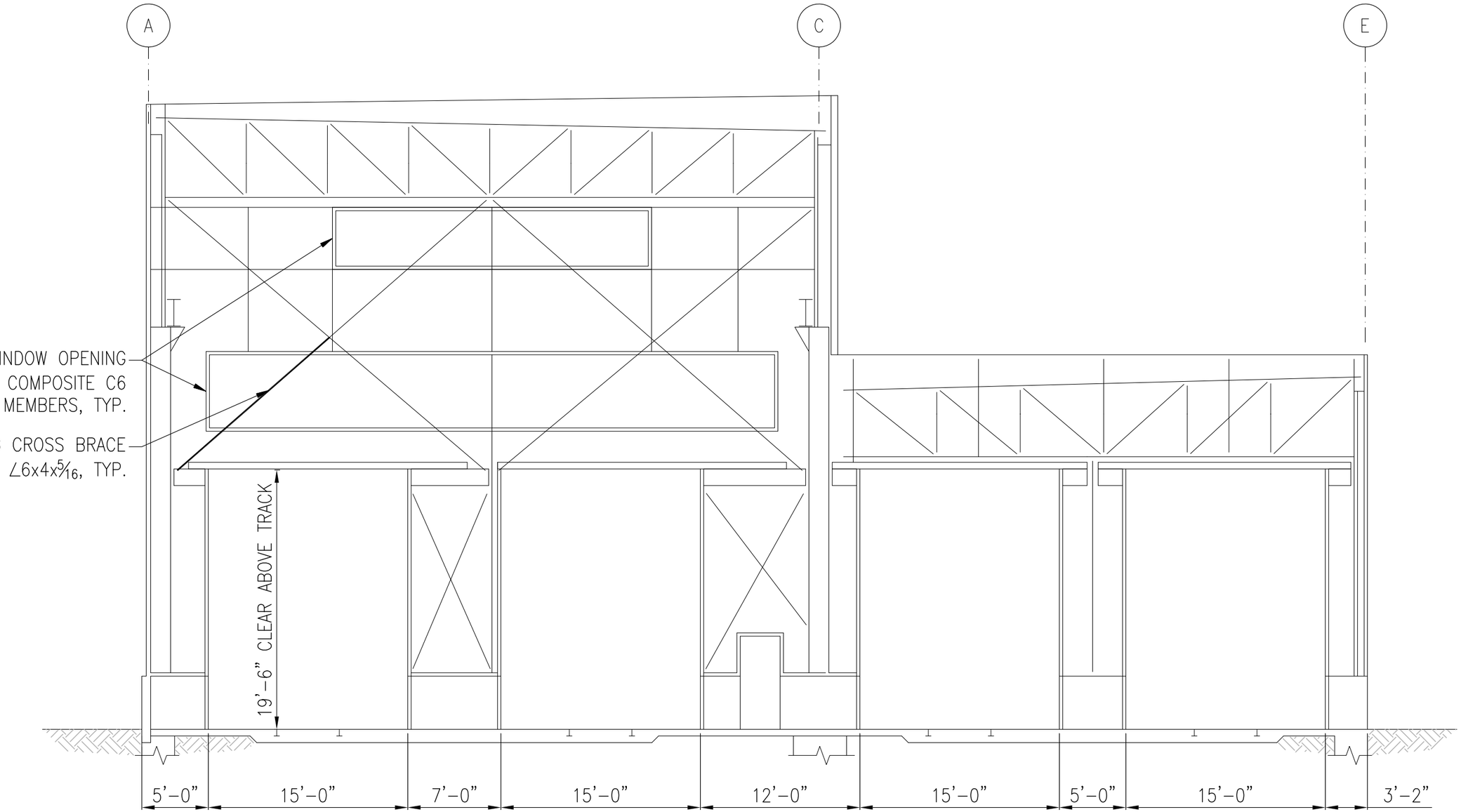
REV.	DATE	BY	REVISION

ALASKA RAILROAD CORPORATION
ENGINEERING SERVICES
P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500

PROJECT :
ANCHORAGE WHEEL SHOP
X BRACE ANGLE REPLACEMENT

TITLE:
CAR SHOP
SITE PLAN

DESIGNED BY: ARRC	SCALE: H: 1" =150' V: AS NOTED	**G1**	AFE NO.:
DRAWN BY: ARRC			ACAD FILE: -
CHECKED BY: CDR	DATE: 2021		DWG NO. 1 OF 5
APPROVED BY: CDR			



NOTE: REPLACE LEG OF CROSS BRACE.

A / GA1 **EAST WALL, INTERIOR ELEVATION**
NO SCALE

REV.	DATE	BY	REVISION

ALASKA RAILROAD CORPORATION
ENGINEERING SERVICES
P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500

PROJECT :
ANCHORAGE CAR SHOP
X BRACE ANGLE REPLACEMENT

TITLE:
CAR SHOP
EAST WALL FRAMING ELEVATION

DESIGNED BY: ARRC	SCALE: H: V: AS NOTED	**GA1**	AFE NO.:		
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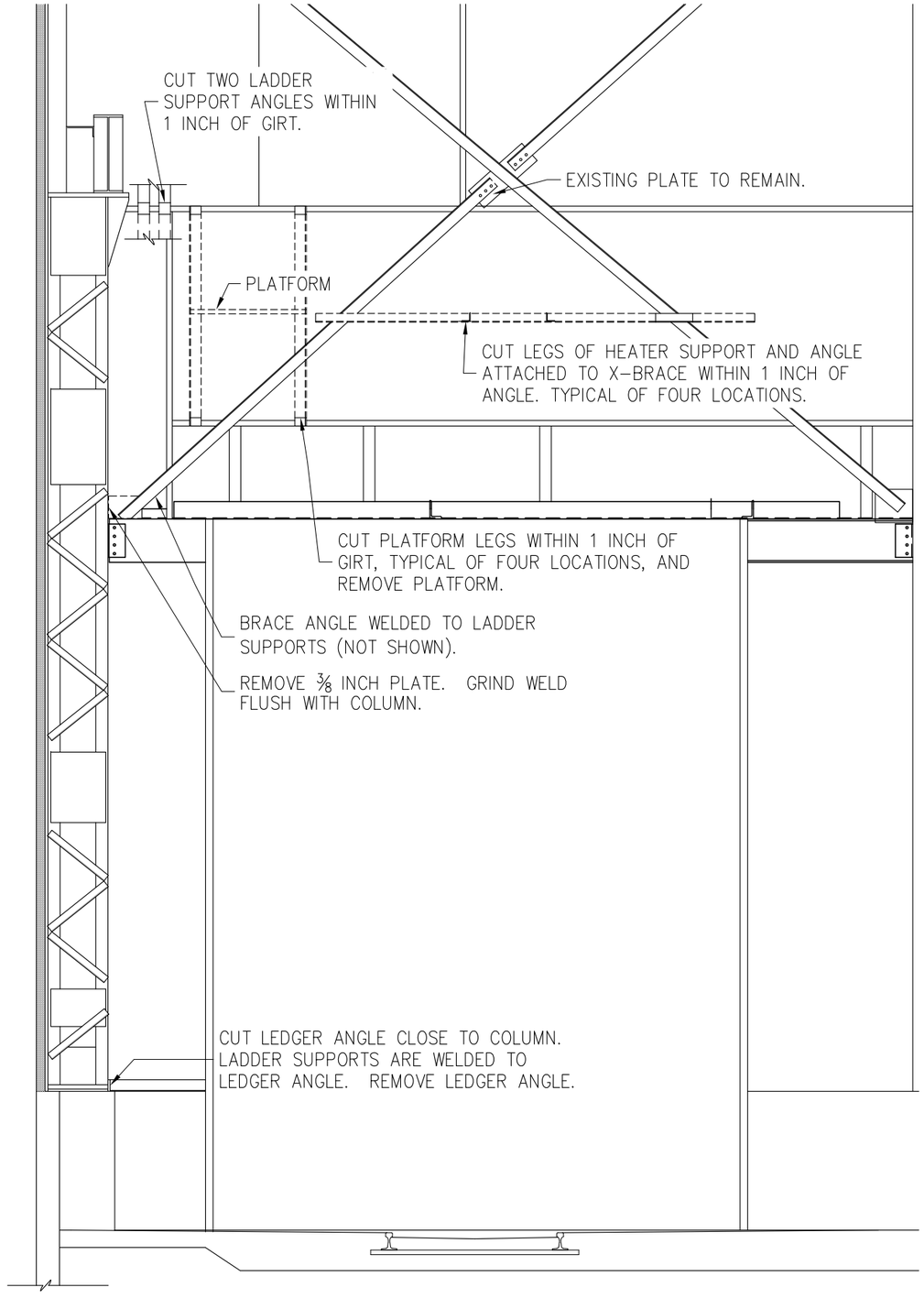

B/D1 **EAST WALL, PARTIAL INTERIOR ELEVATION**
NO SCALE

NOTES:

1. CRANE ACCESS LADDER AND PLATFORM ARE TO BE REMOVED AND WILL NOT BE REPLACED.
2. LEG OF X–BRACE AND PLATE WELDED TO COLUMN ARE TO BE REMOVED AND REPLACED. DO NOT REMOVE LEG OF X–BRACE UNTIL PREPARED TO BE REPLACED.
3. TAKE CARE TO AVOID DAMAGING WINDOWS.
4. CONTRACTOR IS RESPONSIBLE FOR LOCK OUT TAG OUT OF OVERHEAD CRANE AT ELECTRICAL DISCONNECT SWITCH WHEN WORKING IN OPERATING AREA OF CRANE OR WITHIN 5 FEET OF CRANE ELECTRICAL BUSBARS. COORDINATE CRANE SERVICE DISRUPTION WITH SHOP WORK LEAD.

STATE OF ALASKA
49 TH
Christian D. Ryll
CE-10380
1/28/2022
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	BY	REVISION

ALASKA RAILROAD CORPORATION
ENGINEERING SERVICES
P.O. BOX 107500, ANCHORAGE, ALASKA 99510–7500

PROJECT :
ANCHORAGE CAR SHOP
X BRACE ANGLE REPLACEMENT

TITLE:
CAR SHOP
DEMOLITION PLAN

DESIGNED BY: ARRC	SCALE: H: V: AS NOTED	**D1**	AFE NO.:	
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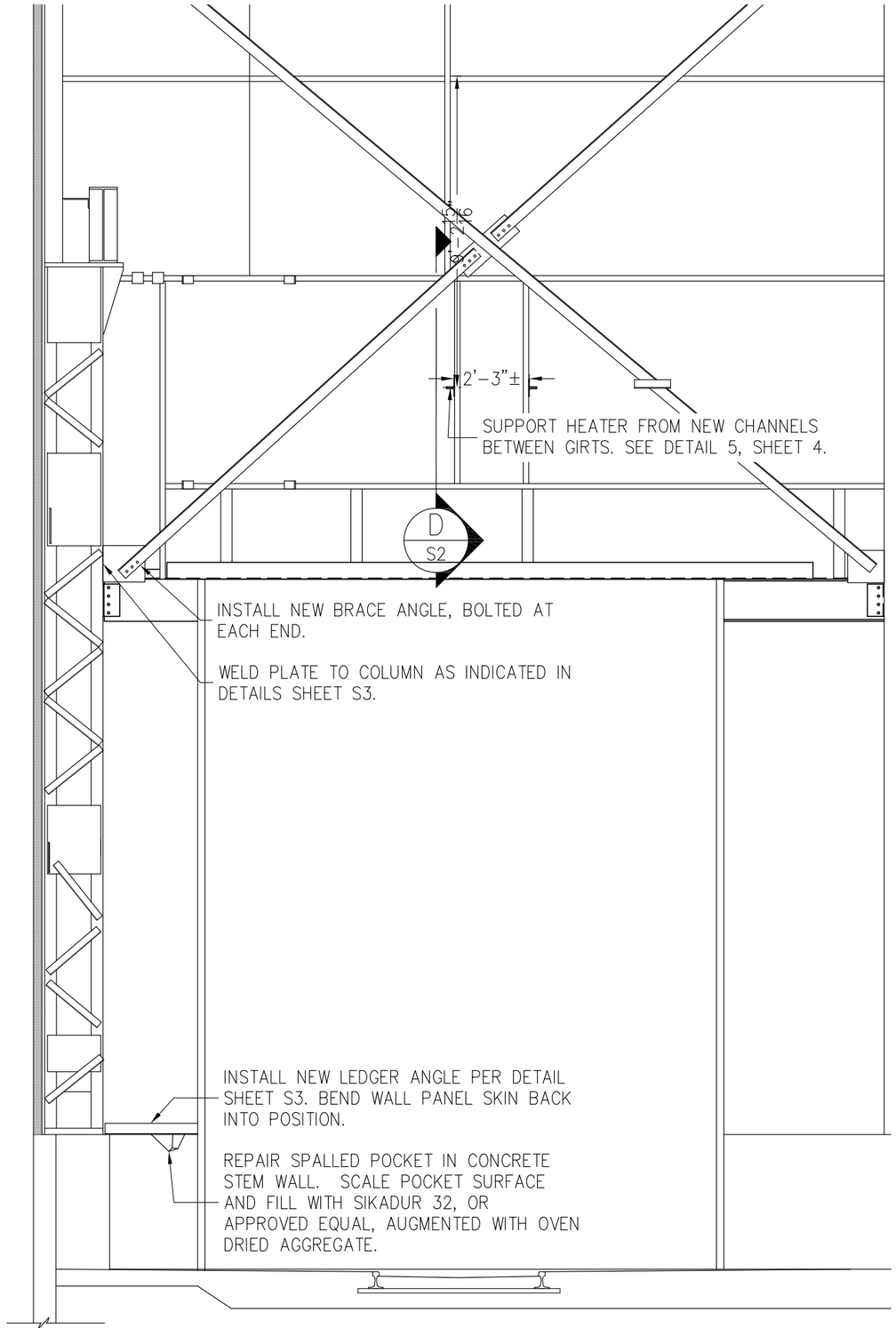

C / S1 **EAST WALL INTERIOR ELEVATION**
NO SCALE

DOCUMENTS INCORPORATED INTO THE SPECIFICATION BY REFERENCE:

A. ASTM A36, STANDARD SPECIFICATION FOR CARBON STRUCTURAL STEEL.
B. ASTM A3125, STD. SPECIFICATION FOR HIGH STRENGTH STRUCTURAL BOLTS.
C. ASTM A563, STD. SPECIFICATION FOR CARBON AND ALLOY STEEL NUTS.
D. ASTM F436, STD. SPECIFICATION FOR HARDENED STEEL WASHERS.
E. AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE, AWS D1.1

MATERIALS:

A. STRUCTURAL STEEL: ALL SHAPES AND PLATES – ASTM A36. THE CONTRACTOR MAY PROPOSE AN ALTERNATIVE SECTION SIZE, OR ALTERNATIVE MATERIAL SPECIFICATION, SUBJECT TO ARRC ACCEPTANCE AND APPROVAL.
B. BOLTS: ASTM F3125 GRADE A325 TYPE 1
C. NUTS: ASTM A563DH
D. WASHERS: ASTM F436 TYPE 1
E. WELD ELECTRODES SHALL BE COMPATIBLE WITH BASE STEEL MATERIAL PROPERTIES AND SHALL HAVE MINIMUM TENSILE STRENGTH OF 70,000 PSI.

FABRICATION:

A. ALL WELDERS SHALL BE QUALIFIED FOR THE WELD PROCEDURE PER AWS D1.1.
B. ALL WELD SPLATTER AND SLAG SHALL BE REMOVED.
C. CJP WELDS SHALL BE 100% ULTRASONICALLY TESTED.
D. FILLET WELDS SHALL BE 100% VISUALLY INSPECTED.
E. DEFECTIVE WELDS SHALL BE REPAIRED PER AWS D1.1 AND RETESTED UNTIL THEY PASS.
F. FIELD PAINT WELDS AND AFFECTED AREAS AFTER PASSING TESTING.
G. BOLTS SHALL BE TIGHTEN USING TURN-OF-NUT METHOD, WITH WASHER UNDER TURNED ELEMENT.

COATINGS:

A. ALL STEEL SHALL RECEIVE PRIMER COATING. SHERWIN WILLIAMS STEEL SPEC SHOPCOAT PRIMER, GRAY COLOR, OR APPROVED EQUAL APPLIED PER MANUFACTURE'S INSTRUCTIONS.

SUBMITTALS:

A. SUBMITTALS LISTED BELOW MUST BE PROVIDED AND APPROVED BY THE OWNER'S REPRESENTATIVE BEFORE COMMENCING FABRICATION WORK:
   1. MANUFACTURER CERTIFICATES FOR ALL MATERIALS STATING COMPLIANCE WITH APPLICABLE SPECIFICATION.
   2. ALL WELD PROCEDURES.
   3. WELDER CERTIFICATES FOR WELDERS ON PROJECT TO SHOW COMPLIANCE.
   4. ALL WELD TEST RESULTS.
   5. THIRD PARTY WELD TESTING AGENCY.
   6. STEEL COATING.

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ENGINEERING SERVICES
P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500

PROJECT :
ANCHORAGE CAR SHOP
X BRACE ANGLE REPLACEMENT

TITLE:
CONSTRUCTION PLAN
ANGLE LEG REPLACEMENT

DESIGNED BY: ARRC	SCALE: H: AS NOTED V: AS NOTED	**S1**	AFE NO.:
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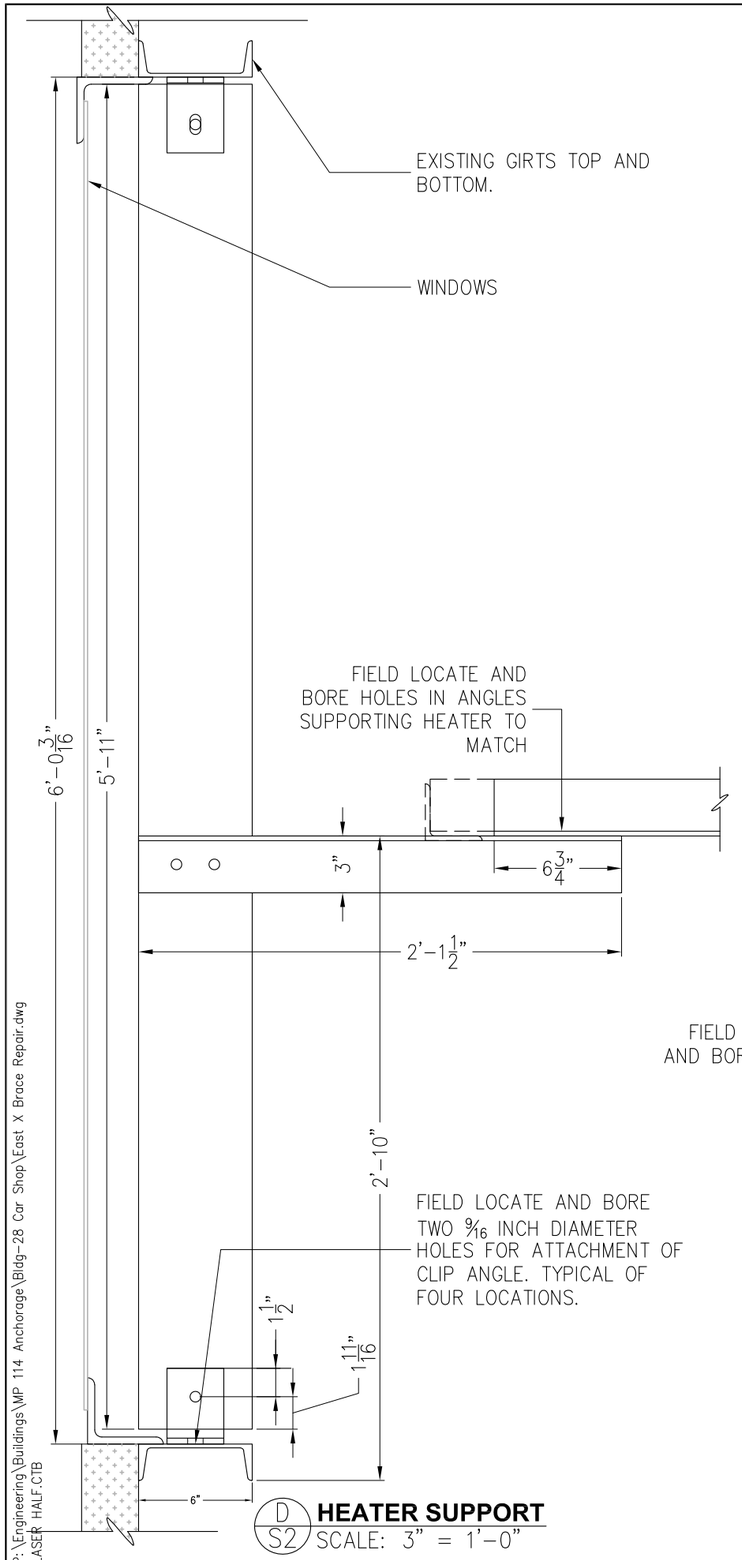
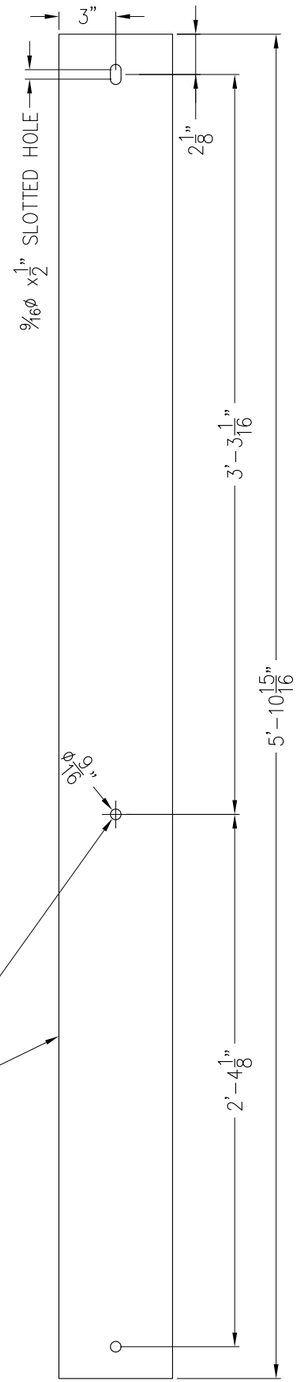
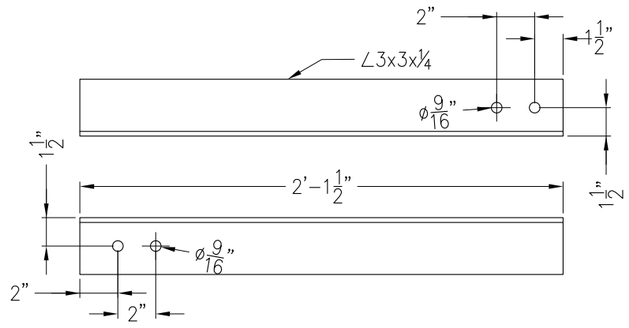


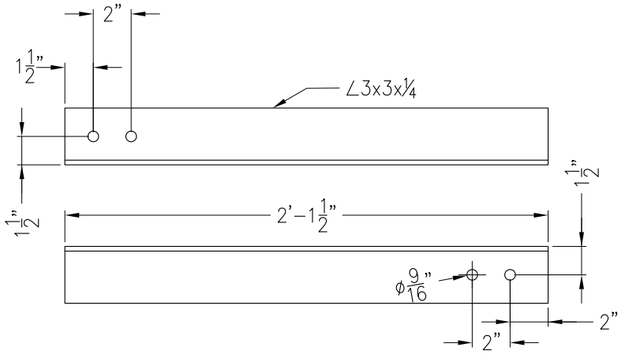
D S2 **HEATER SUPPORT**
SCALE: 3" = 1'-0"



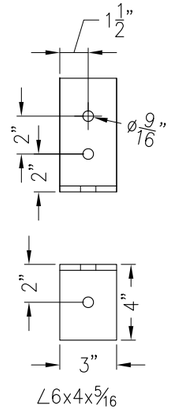
E S2 **CHANNELS**
SCALE: 3" = 1'-0" TWO THUS



F S2 **HEATER SUPPORT ANGLE 1**
SCALE: 3" = 1'-0"



G S2 **HEATER SUPPORT ANGLE 2**
SCALE: 3" = 1'-0"



H S2 **CHANNEL CLIP ANGLE**
SCALE: 3" = 1'-0" FOUR THUS

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ENGINEERING SERVICES
P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500

PROJECT :
ANCHORAGE CAR SHOP
X BRACE ANGLE REPLACEMENT

TITLE:
CONSTRUCTION PLAN
HEATER SUPPORT REPLACEMENT

DESIGNED BY: ARRC	SCALE: H: AS NOTED V: AS NOTED	**S2**	AFE NO.:
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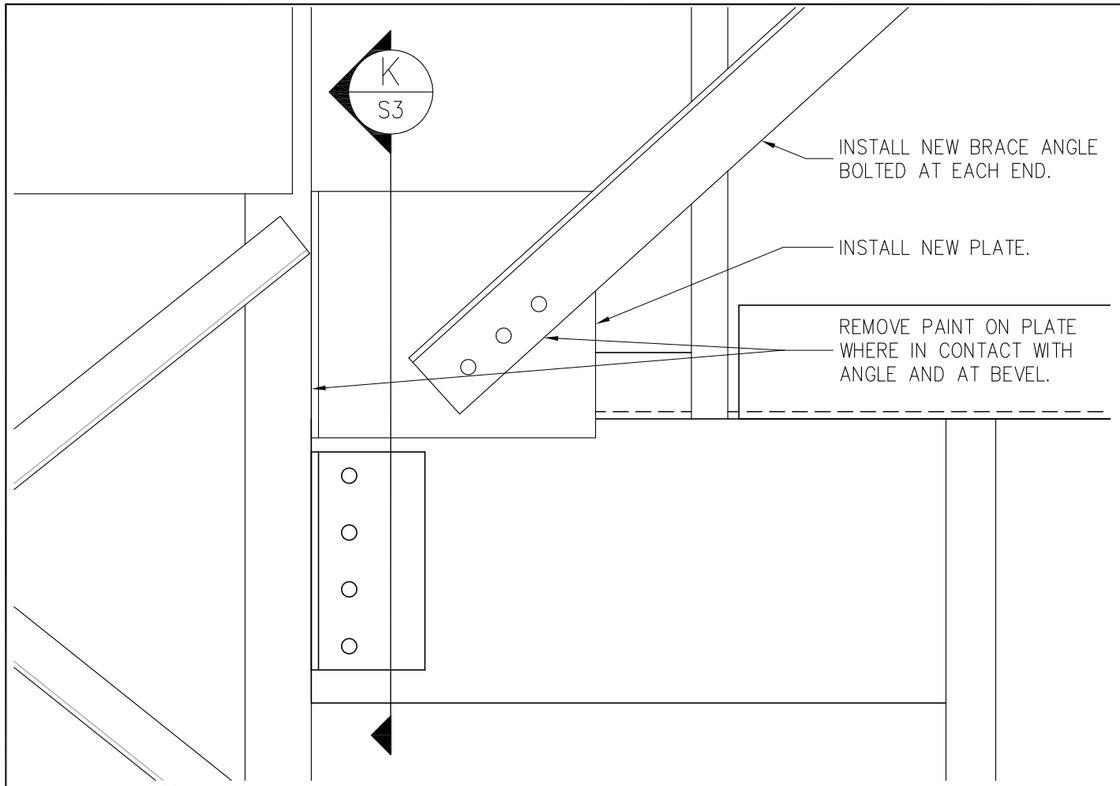
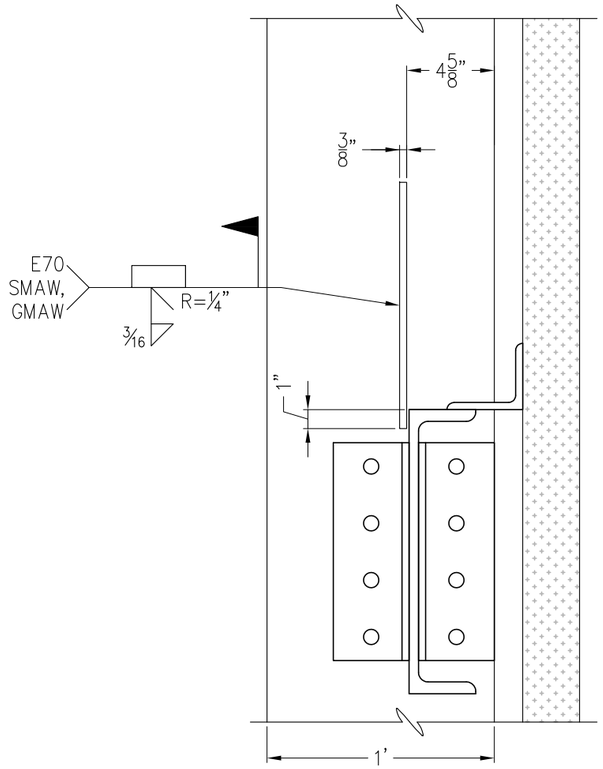


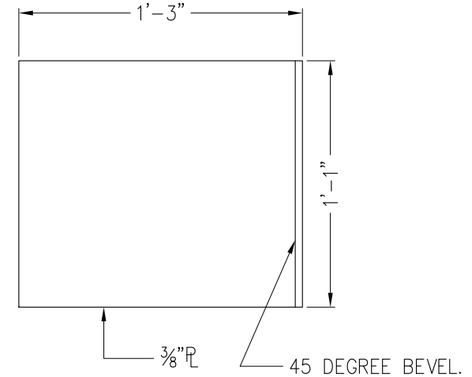
J/S3 **X BRACE TO COLUMN CONNECTION**
NO SCALE



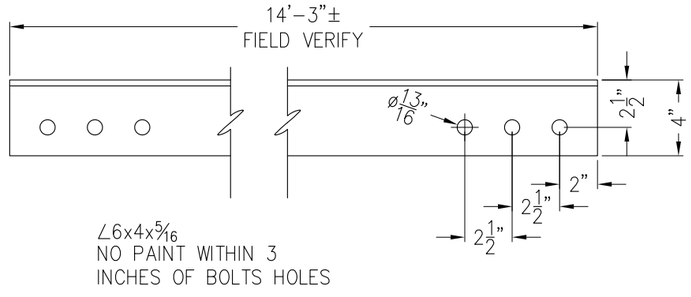
K/S3 **SECTION K**
SCALE: 3" = 1'-0"

NOTES:

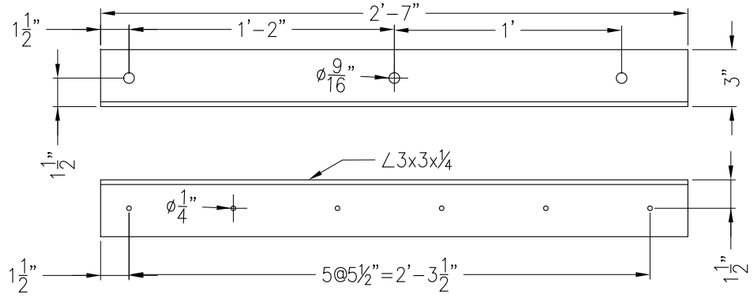
1. LEG OF X-BRACE BEING REPLACED TO BE ALIGNED WITH EXISTING OPPOSITE LEG OF BRACE.
2. SECURE LEDGER ANGLE TO CONCRETE USING 3 HILTI HAS-E, 8 INCH LONG, ½ INCH DIAMETER, ALL-THREAD AND REDHEAD A7+ ADHESIVE.
3. SECURE LEDGER ANGLE TO STEEL WALL PANEL USING SIX #12 TEKS HEX HEAD 1½ INCH LONG SELF DRILLING FASTENERS.



N/S3 **X BRACE PLATE**
SCALE: 3" = 1'-0"



L/S3 **X BRACE ANGLE**
SCALE: 3" = 1'-0"



M/S3 **LEDGER ANGLE**
SCALE: 3" = 1'-0"

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ALASKA RAILROAD CORPORATION
ENGINEERING SERVICES
P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500

PROJECT :
ANCHORAGE CAR SHOP
X BRACE ANGLE REPLACEMENT

TITLE:
CONSTRUCTION PLAN
ANGLE LEG REPLACEMENT

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