



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

BR. 127.5 REPLACEMENT

LATITUDE: 61.3177°, LONGITUDE: -149.6191°

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8. RAIL CROSS SECTIONS STA 105+00 TO STA 106+00	16. 119'-8" DECK PLATE GIRDER FRAMING PLAN

REFERENCES

NONE



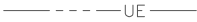













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ALASKA RAILROAD CORPORATION ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500		
PROJECT : BRIDGE 127.5 EAGLE RIVER BRIDGE REPLACEMENT		
TITLE: COVER SHEET		
DESIGNED BY: AGH	SCALE : AS SHOWN	AFE NO.: 10944
DRAWN BY: AEP	DATE : DEC 17, 2021	DWG NO.
CHECKED BY: AGH	APPROVED BY: X	1 OF 16

LEGEND


TOPO

- EXISTING BRIDGE 
- EXISTING COMMUNICATIONS 
- EXISTING UNDERGROUND POWER 
- EXISTING WATER EDGE 
- EXISTING GRAVEL ROAD 
- EXISTING CULVERT 
- EDGE OF VEGETATION 
- EXISTING CONCRETE 
- EXISTING SIGN 
- CONTROL POINT 
- EXISTING POWER POLE 
- EXISTING ELECTRICAL PEDISTAL 
- EXISTING ELECTRICAL VAULT 
- EXISTING ELECTRICAL METER 
- EXISTING LIGHT POLE 
- EXISTING FIBER OPTIC VAULT 

TRACK

- EXISTING TRACK 
- PROPOSED TRACK 
- SHIFT TRACK 
- REMOVED TRACK 
- GRADING - CUT LIMITS 
- GRADING - FILL LIMITS 
- PROPOSED CULVERT EXTENSION 

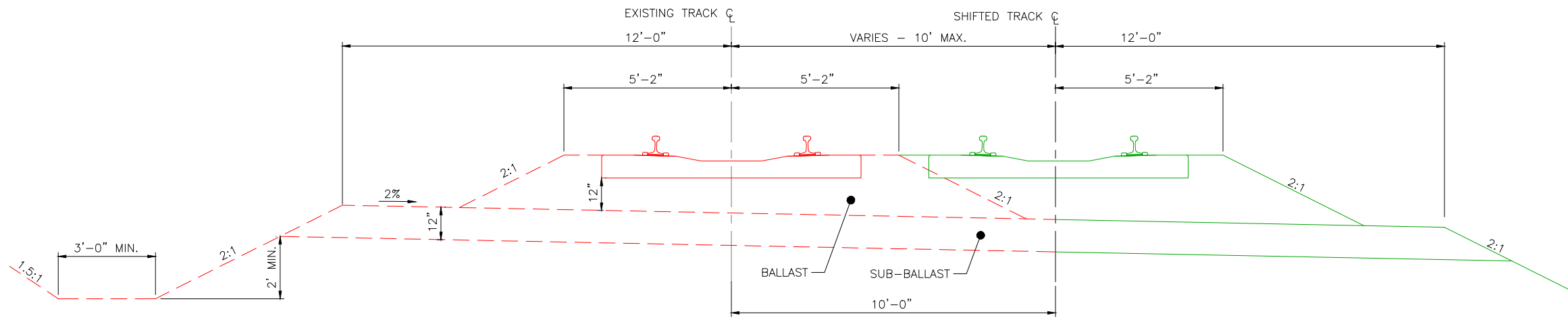
RIGHT OF WAY

- EXISTING RIGHT OF WAY 

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ALASKA RAILROAD CORPORATION		
ENGINEERING SERVICES		
<small>P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500</small>		
PROJECT : BRIDGE 127.5 OVER EAGLE RIVER BRIDGE REPLACEMENT		
TITLE: LEGEND		
DESIGNED BY: KRK	SCALE : N.T.S.	AFE NO.: 10944
DRAWN BY: MMQ	DATE : DEC. 17, 2021	DWG NO.
CHECKED BY: KRK		2 OF 16
APPROVED BY: XX		





TRACK SHIFT SECTION

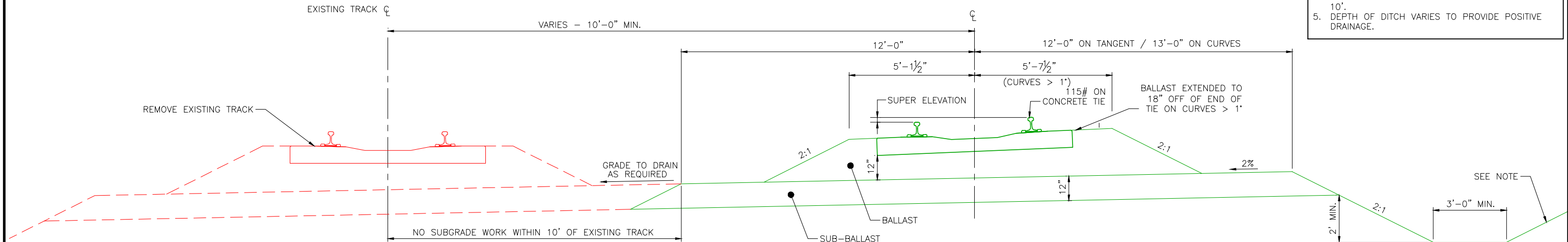
STA 73+50 - 77+60
STA 95+30 - 97+75

BALLAST REQUIRED FOR 100' TRACK		
CURVED TRACK	SUPER ELEVATION	CUBIC YARDS
	1"	80.1
	2"	84.8
	3"	89.6
	4"	94.9
5"	100.0	
TANGENT TRACK		84.3

SUB-BALLAST REQUIRED FOR 100' TRACK		
CURVED TRACK	DEGREE OF CURVE	CUBIC YARDS
	0' - 1'	96.3
	1' - 2'	98.2
	2' - 6'	100.0
	+ 6'	101.9
TANGENT TRACK		96.3

SUB-BALLAST WIDTH FOR DEGREE OF CURVATURE		
DIMENSIONS	DIMENSIONS	
	2'01" - 6'00" INCLUSIVE	13'

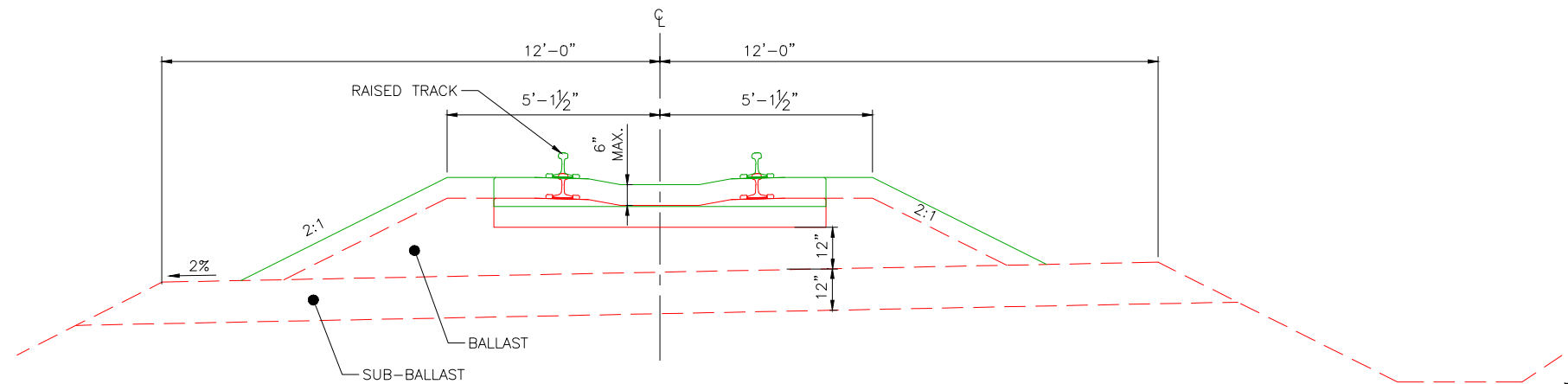
- NOTES**
- BALLAST DEPTH SHALL BE MINIMUM 12" UNDER TIE, MEASURED AT LOW RAIL.
 - ALL QUANTITIES ESTIMATED, REPRESENT IN-PLACE, COMPACTED MATERIAL, BASED ON 2,640 EACH, 8'-3" CONCRETE TIES PER MILE AND MINIMUM BALLAST AND SUB-BALLAST DIMENSIONS.
 - SUB GRADE SHALL SLOPE TO PREVAILING DRAINAGE SIDE ON TANGENT, OR TO THE INSIDE OF CURVE.
 - SUBGRADE SLOPE TRANSITION RATE TO BE 1" IN 10'.
 - DEPTH OF DITCH VARIES TO PROVIDE POSITIVE DRAINAGE.



NEW TRACK SECTION

STA 77+60 - 95+30

- NOTE:**
- STA 77+60 TO 84+00 USE 2:1 SLOPE
 - STA 84+00 TO 95+30 USE 1.5:1 SLOPE



RAISE TRACK SECTION

STA 72+00 - 73+50
STA 97+75 - 99+74
STA 103+34 - 105+74

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PROJECT : BRIDGE 127.5 OVER EAGLE RIVER BRIDGE REPLACEMENT

TITLE: RAIL TYPICAL SECTIONS

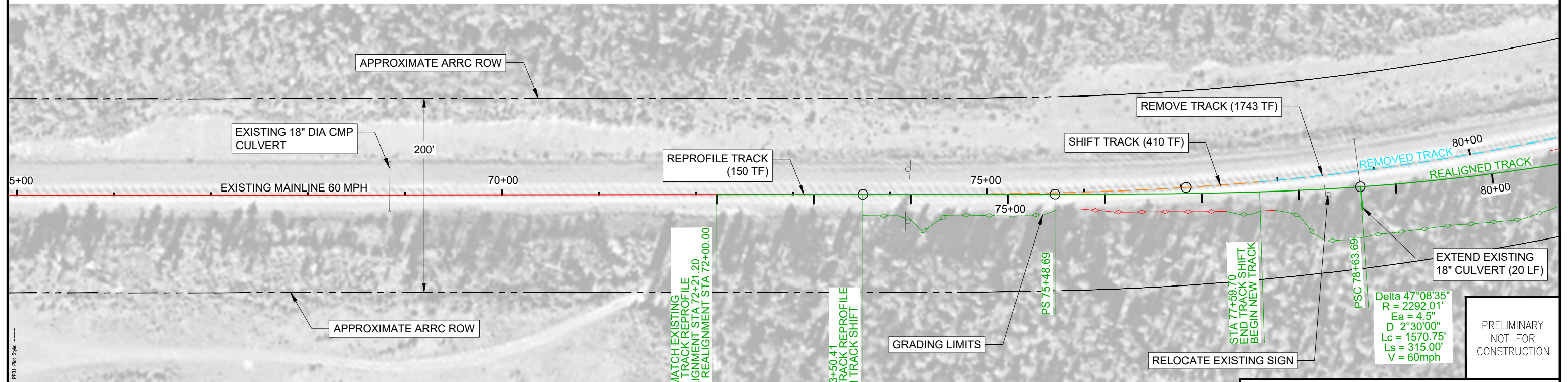
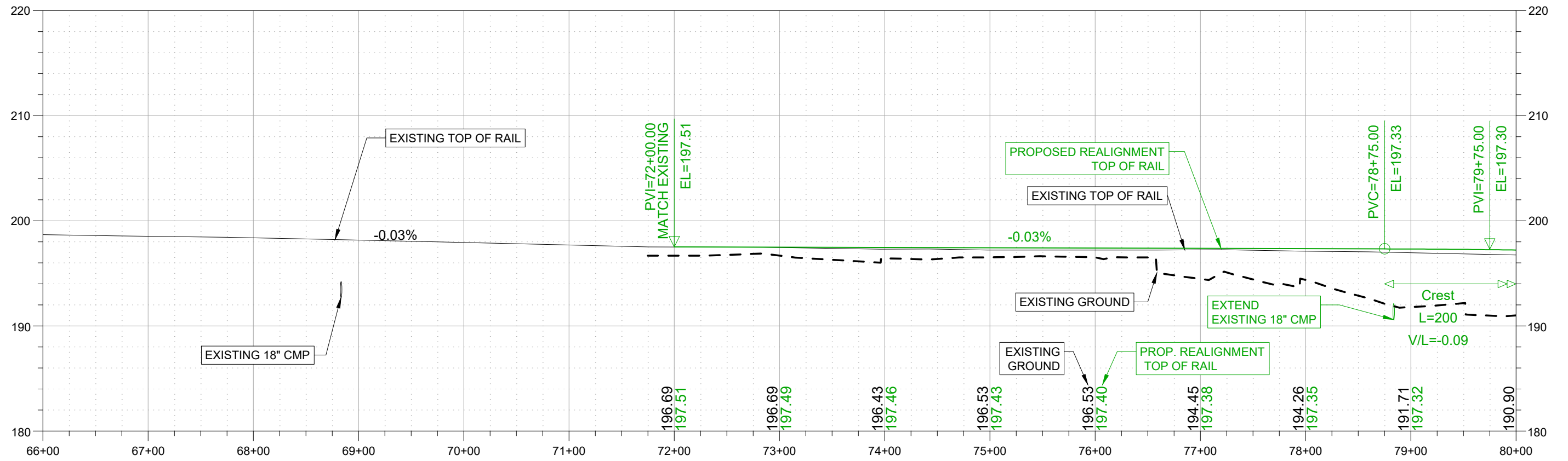
DESIGNED BY: KRK
DRAWN BY: MMQ
CHECKED BY: KRK
APPROVED BY: XX

SCALE : N.T.S.
DATE : DEC. 17, 2021

AFE NO.: 10944
DWG NO. 3 OF 16



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Delta 47°08'35"
 R = 2292.01'
 Ea = 4.5"
 D = 2°30'00"
 Lc = 1570.75'
 Ls = 315.00'
 V = 60mph

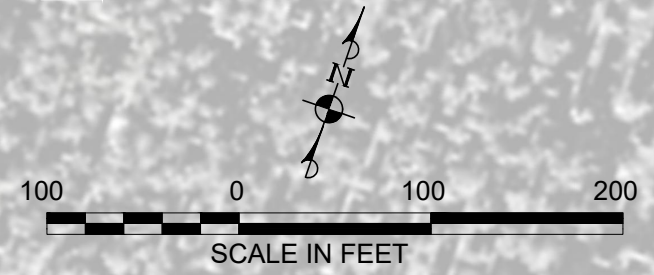
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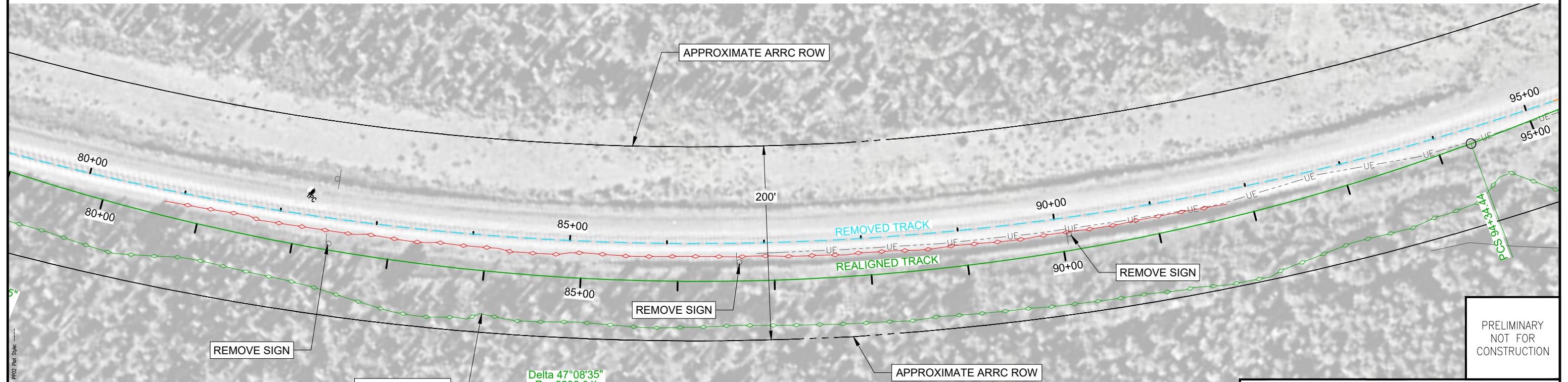
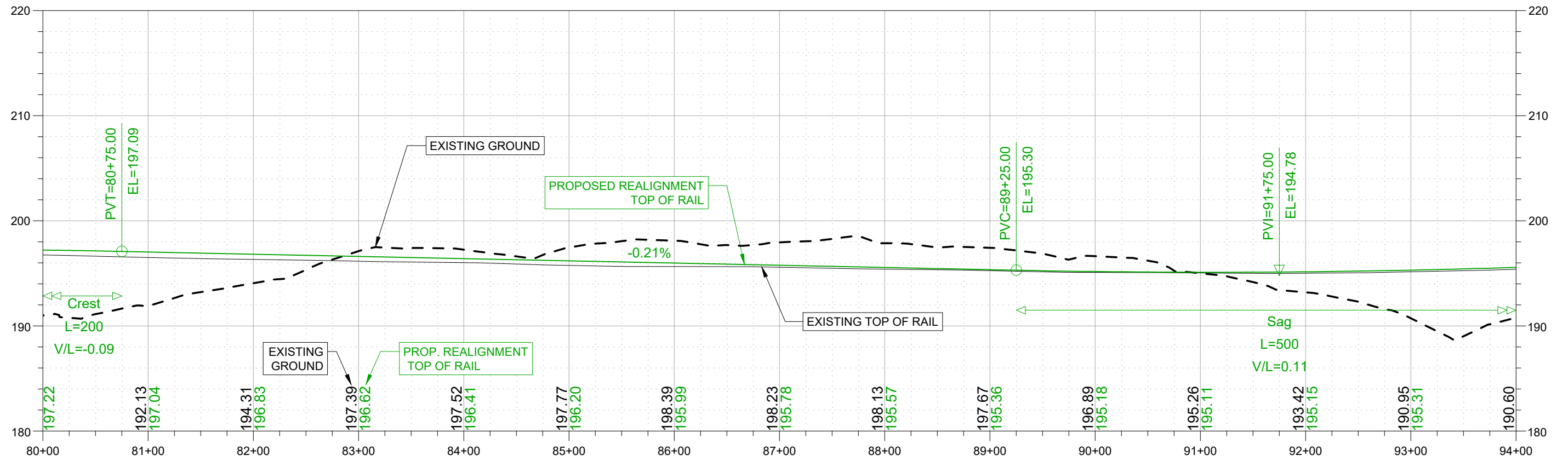
PROJECT : BRIDGE 127.5 OVER EAGLE RIVER BRIDGE REPLACEMENT

TITLE: TRACK PLAN AND PROFILE STA 66+00 TO STA 80+00

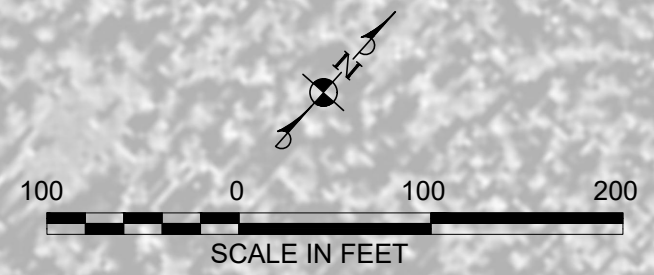
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DRAWN BY: MMQ	DATE : DEC. 17, 2021	DWG NO. 4 OF 16
CHECKED BY: KRK		
APPROVED BY: XX		



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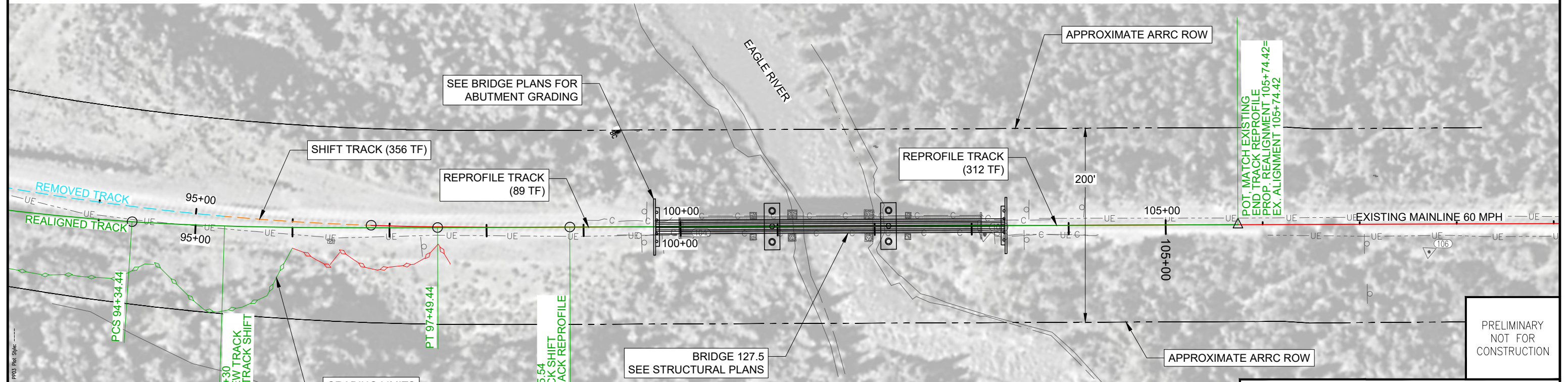
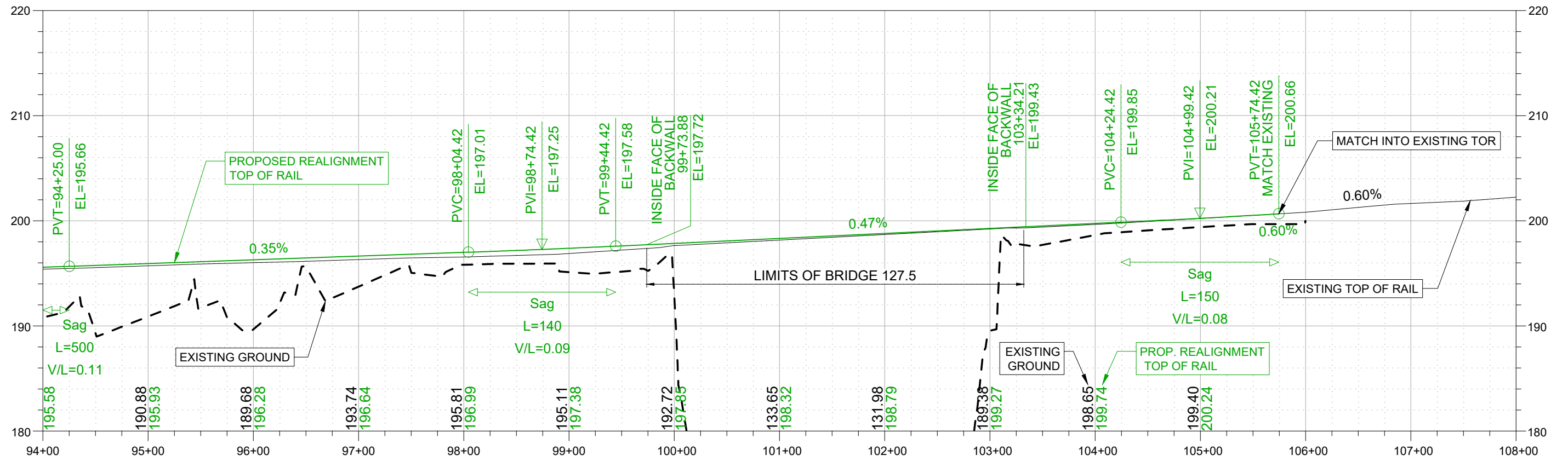


Delta 47°08'35"
 R = 2292.01'
 Ea = 4.5"
 D 2°30'00"
 Lc = 1570.75'
 Ls = 315.00'
 V = 60mph



ALASKA RAILROAD CORPORATION ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500		
PROJECT : BRIDGE 127.5 OVER EAGLE RIVER BRIDGE REPLACEMENT		
TITLE: TRACK PLAN AND PROFILE STA 80+00 TO STA 94+00		
DESIGNED BY: KRK	SCALE : 1" = 100'	AFE NO.: 10944
DRAWN BY: MMQ	DATE : DEC. 17, 2021	DWG NO.
CHECKED BY: KRK		5 OF 16
APPROVED BY: XX		

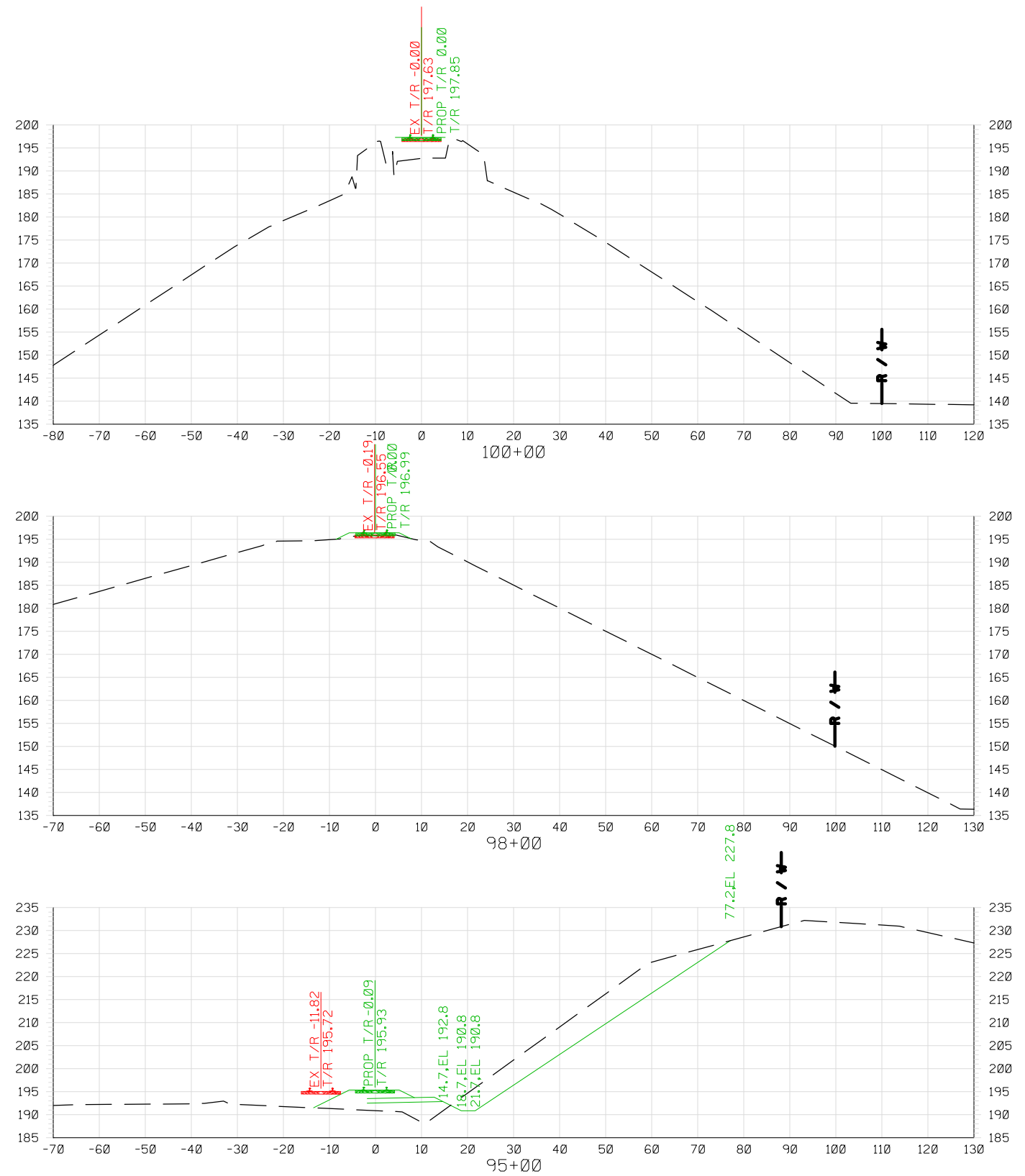
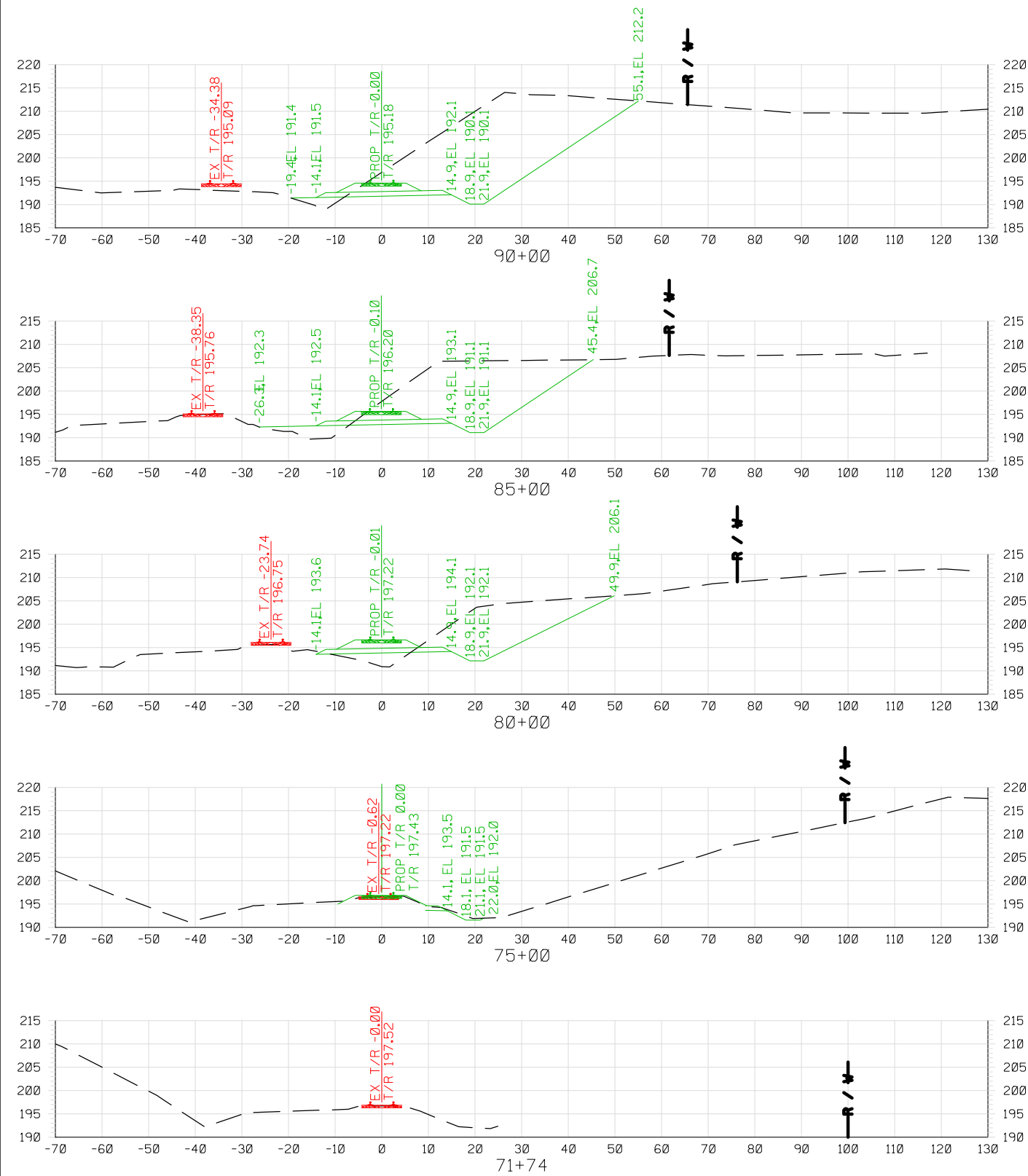
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ALASKA RAILROAD CORPORATION ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500		
PROJECT : BRIDGE 127.5 OVER EAGLE RIVER BRIDGE REPLACEMENT		
TITLE: TRACK PLAN AND PROFILE STA 94+00 TO STA 108+00		
DESIGNED BY: KRK	SCALE : 1" = 100'	AFE NO.: 10944
DRAWN BY: MMQ	DATE : DEC. 17, 2021	DWG NO.
CHECKED BY: KRK		6 OF 16
APPROVED BY: XX		



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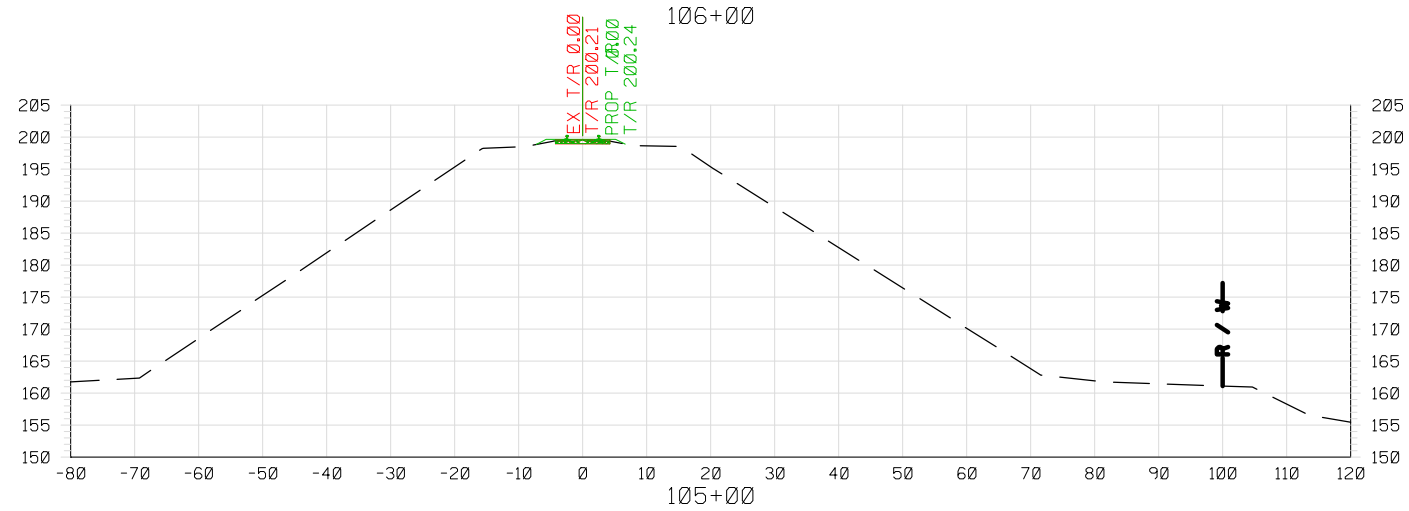
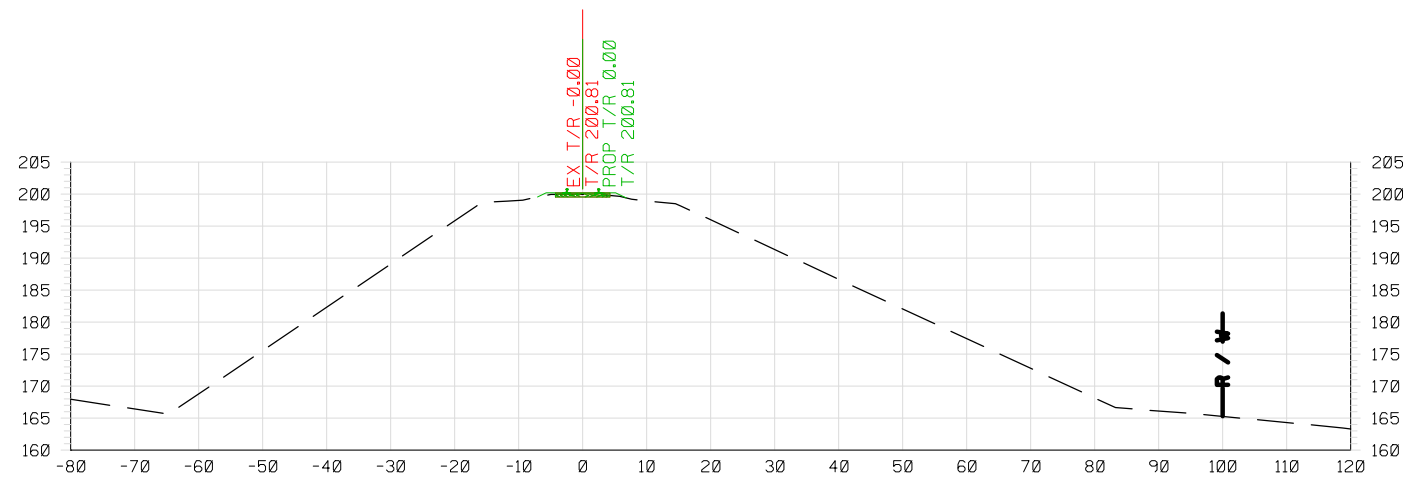


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2525 C Street, Suite 500
Anchorage, AK 99503-2633
907-644-2000

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PROJECT : BRIDGE 127.5 OVER EAGLE RIVER BRIDGE REPLACEMENT		
TITLE: RAIL CROSS SECTIONS STA 71+74 TO STA 100+00		
DESIGNED BY: KRK	SCALE : N.T.S.	AFE NO.: 10944
DRAWN BY: MMQ	DATE : DEC. 17, 2021	DWG NO.
CHECKED BY: KRK		7 OF 16
APPROVED BY: XX		

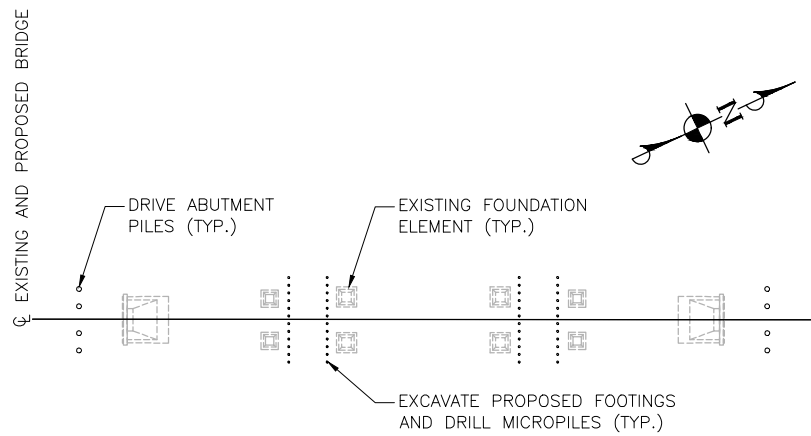


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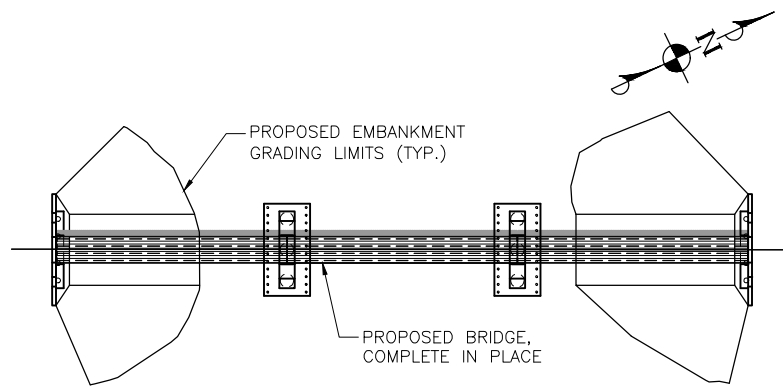
ALASKA RAILROAD CORPORATION ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500		
PROJECT : BRIDGE 127.5 OVER EAGLE RIVER BRIDGE REPLACEMENT		
TITLE: RAIL CROSS SECTIONS STA 105+00 TO STA 106+00		
DESIGNED BY: KRK	SCALE : N.T.S.	AFE NO.: 10944
DRAWN BY: MMQ	DATE : DEC. 17, 2021	DWG NO.
CHECKED BY: KRK	APPROVED BY: XX	8 OF 16



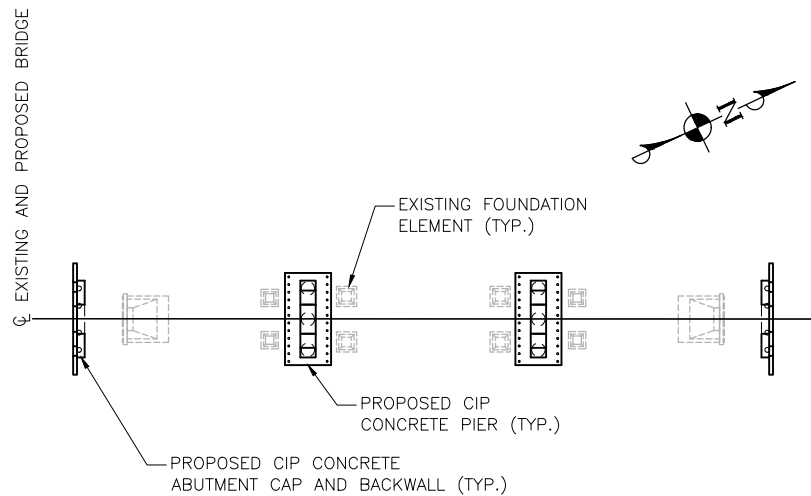
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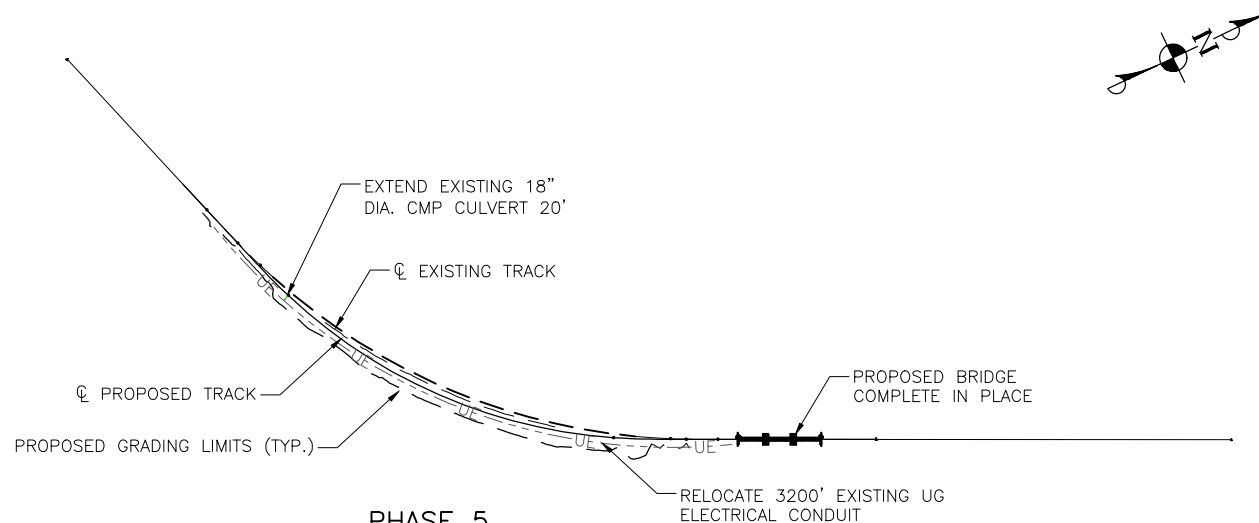
PHASE 1
 INSTALL TEMPORARY SHORING AT PIERS AS NEEDED.
 INSTALL TEMPORARY JUMP SPANS AT ABUTMENTS AS NEEDED.
 DRIVE ABUTMENT PILES, DRILL MICROPILES AT PIERS.



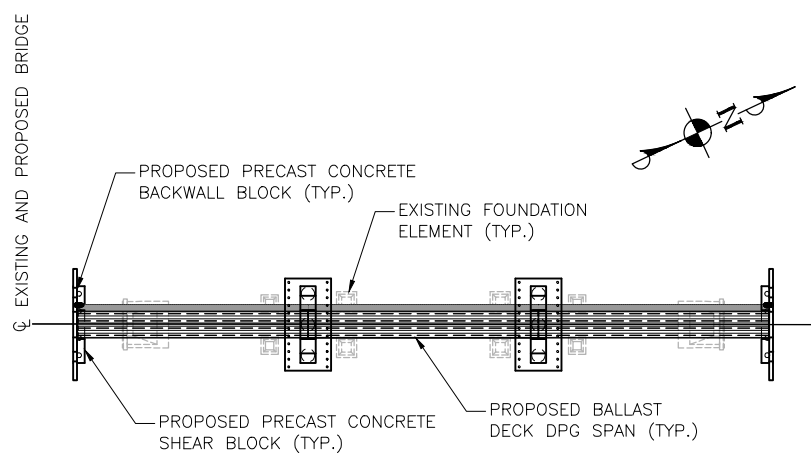
PHASE 4
 REMOVE REMAINING EXISTING SUBSTRUCTURE AND RESTORE SITE.
 REMOVE TEMPORARY SHORING AT PIERS.



PHASE 2
 CONSTRUCT CIP CONCRETE PIERS AND ABUTMENTS.
 REMOVE TEMPORARY JUMP SPANS AT ABUTMENTS.



PHASE 5
 REALIGN TRACK, RELOCATE UTILITIES, AND EXTEND CULVERT (TRACK OUTAGE).
 RELOCATE 3200' EXISTING UG ELECTRICAL CONDUIT



PHASE 3
 REMOVE EXISTING SPANS AND SET NEW SPANS, BACKWALL BLOCKS, AND SHEAR BLOCKS
 AND CUT DOWN EXISTING ABUTMENTS (TRACK OUTAGE).

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

PROJECT :
**BRIDGE 127.5 OVER EAGLE RIVER
 BRIDGE REPLACEMENT**

TITLE:
CONSTRUCTION PHASING PLAN

DESIGNED BY: AGH	SCALE : AS SHOWN	AFE NO.: 10944
DRAWN BY: AEP	DATE : DEC. 17, 2021	DWG NO.
CHECKED BY: AGH		10 OF 16
APPROVED BY: X		

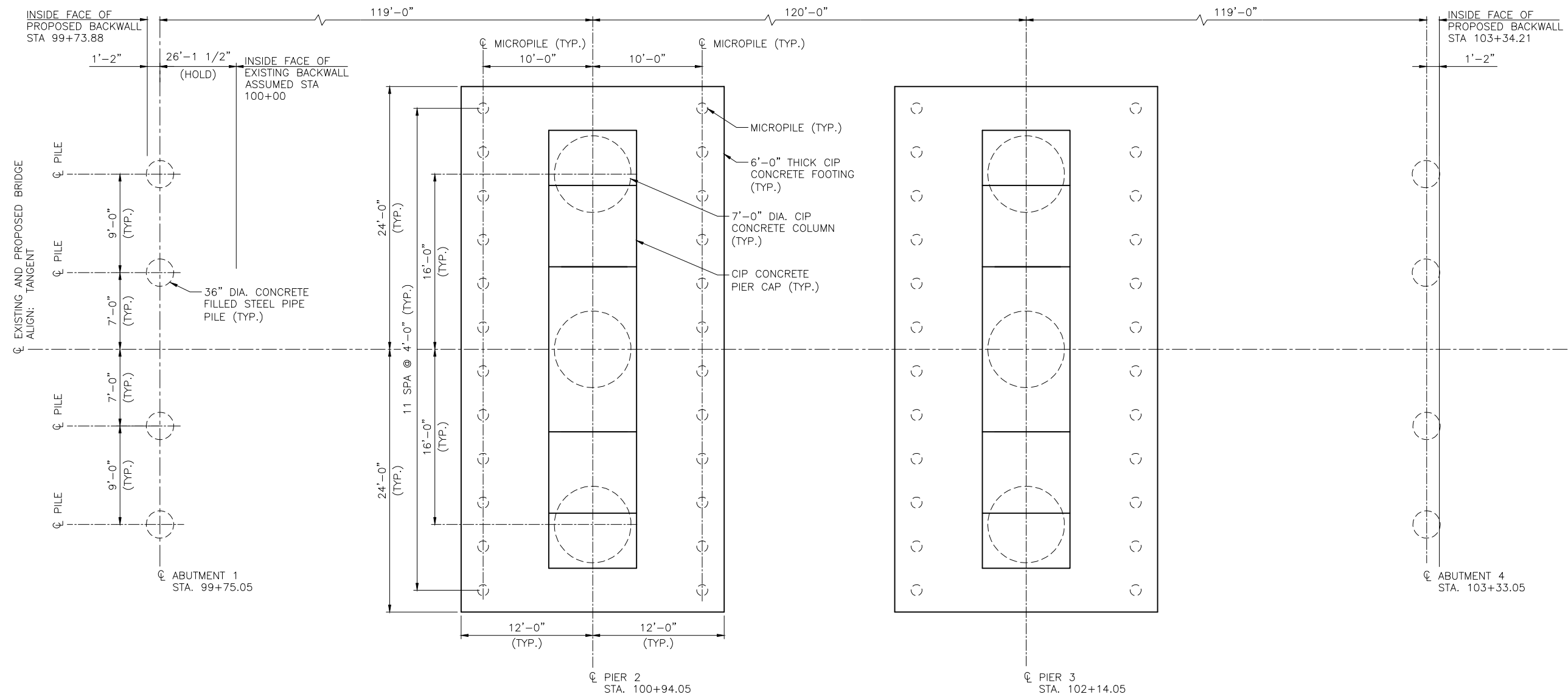


2525 C Street, Suite 500
 Anchorage, AK 99503-2633
 907-644-2000

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SOUTH TO ANCHORAGE

NORTH TO WASILLA



FOUNDATION PLAN
SCALE: 3/32" = 1'-0"

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

PROJECT :

**BRIDGE 127.5 OVER EAGLE RIVER
BRIDGE REPLACEMENT**

TITLE:

FOUNDATION PLAN



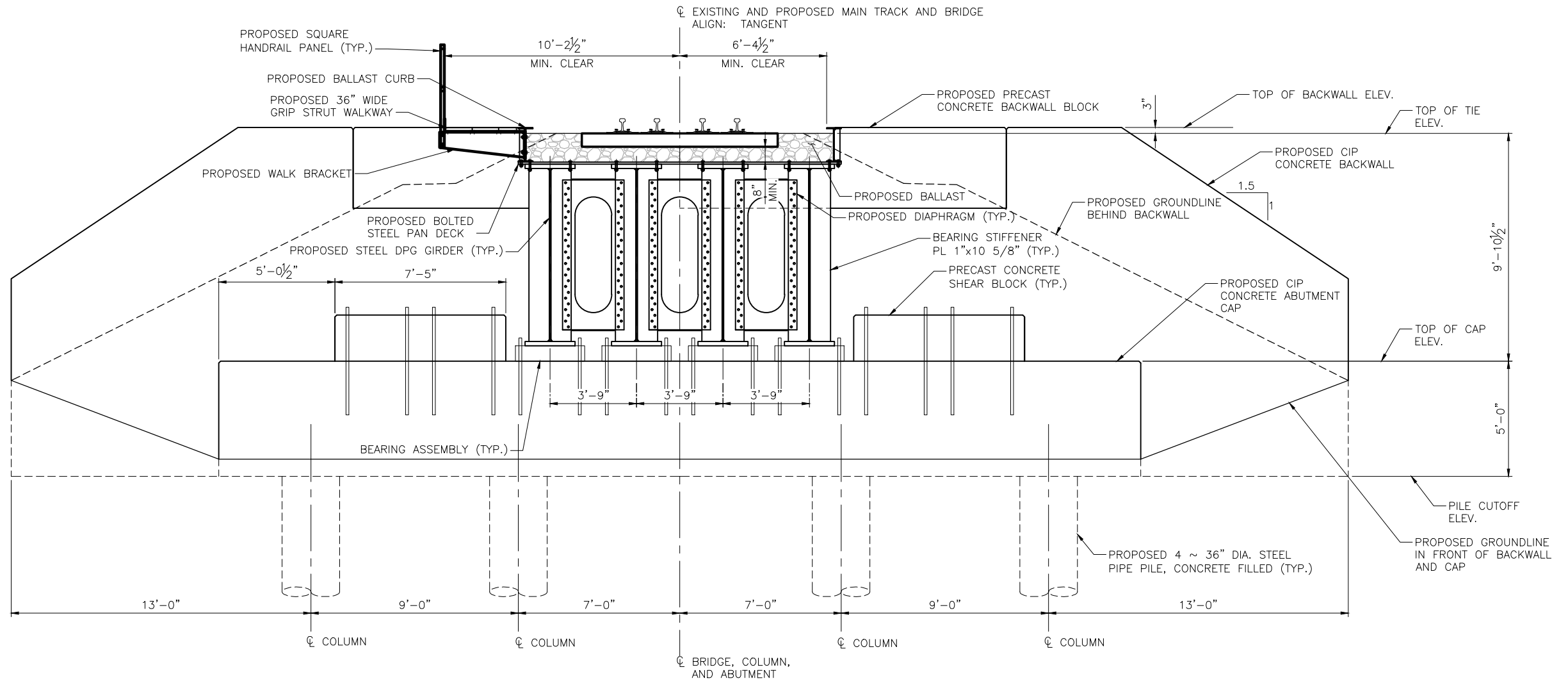
2525 C Street, Suite 500
Anchorage, AK 99503-2633
907-644-2000

DESIGNED BY: AGH
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CHECKED BY: AGH
APPROVED BY: X

SCALE : AS SHOWN
DATE : DEC. 17, 2021

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DWG NO.
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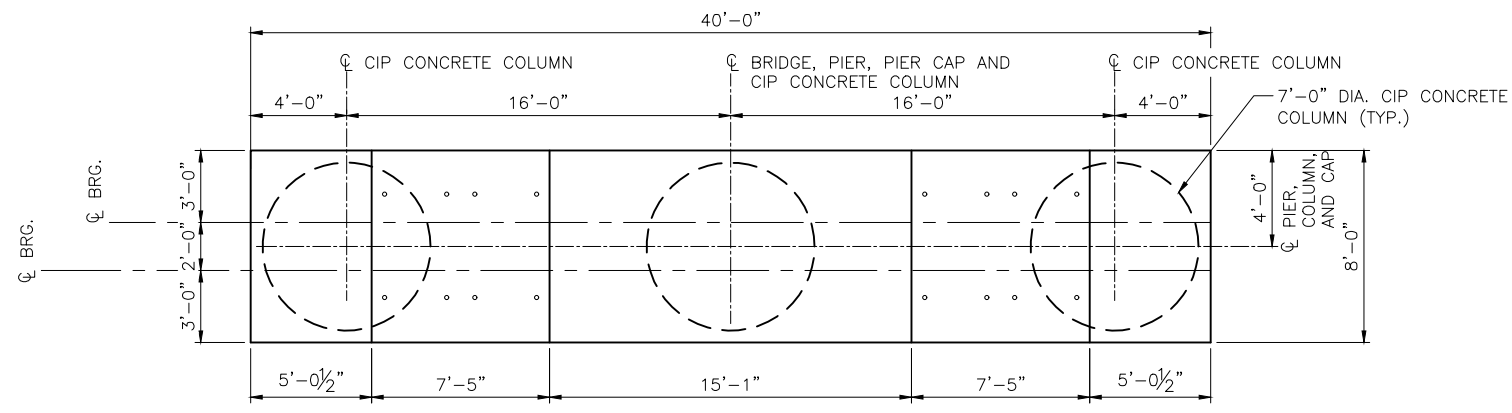
SECTION - ABUTMENT

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EXISTING ABUTMENT NOT SHOWN FOR CLARITY.

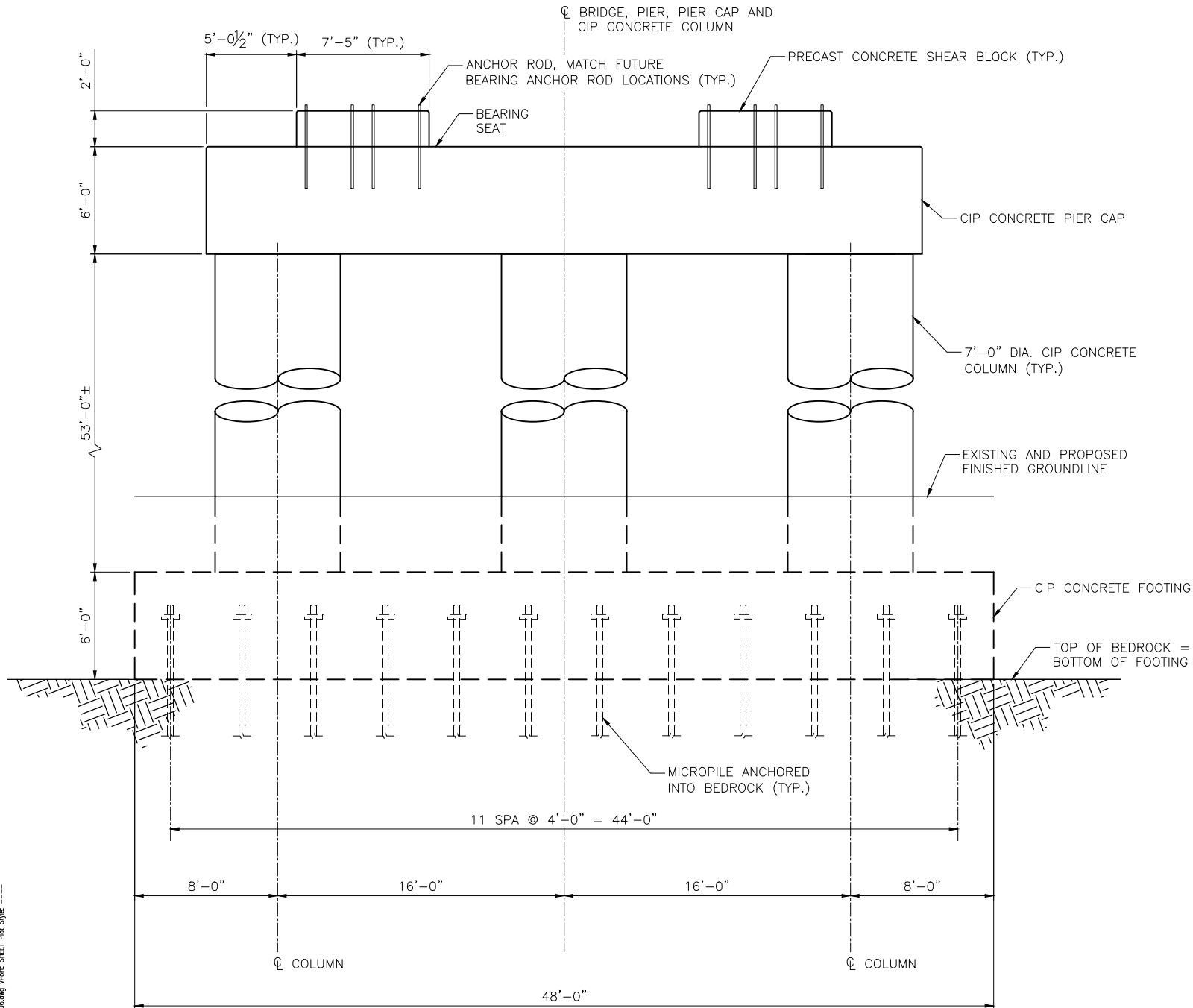
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PROJECT : BRIDGE 127.5 OVER EAGLE RIVER BRIDGE REPLACEMENT		
TITLE: BRIDGE TYPICAL SECTIONS (2 OF 2)		
DESIGNED BY: AGH	SCALE : AS SHOWN	AFE NO.: 10944
DRAWN BY: AEP	DATE : DEC. 17, 2021	DWG NO.
CHECKED BY: AGH		13 OF 16
APPROVED BY: X		

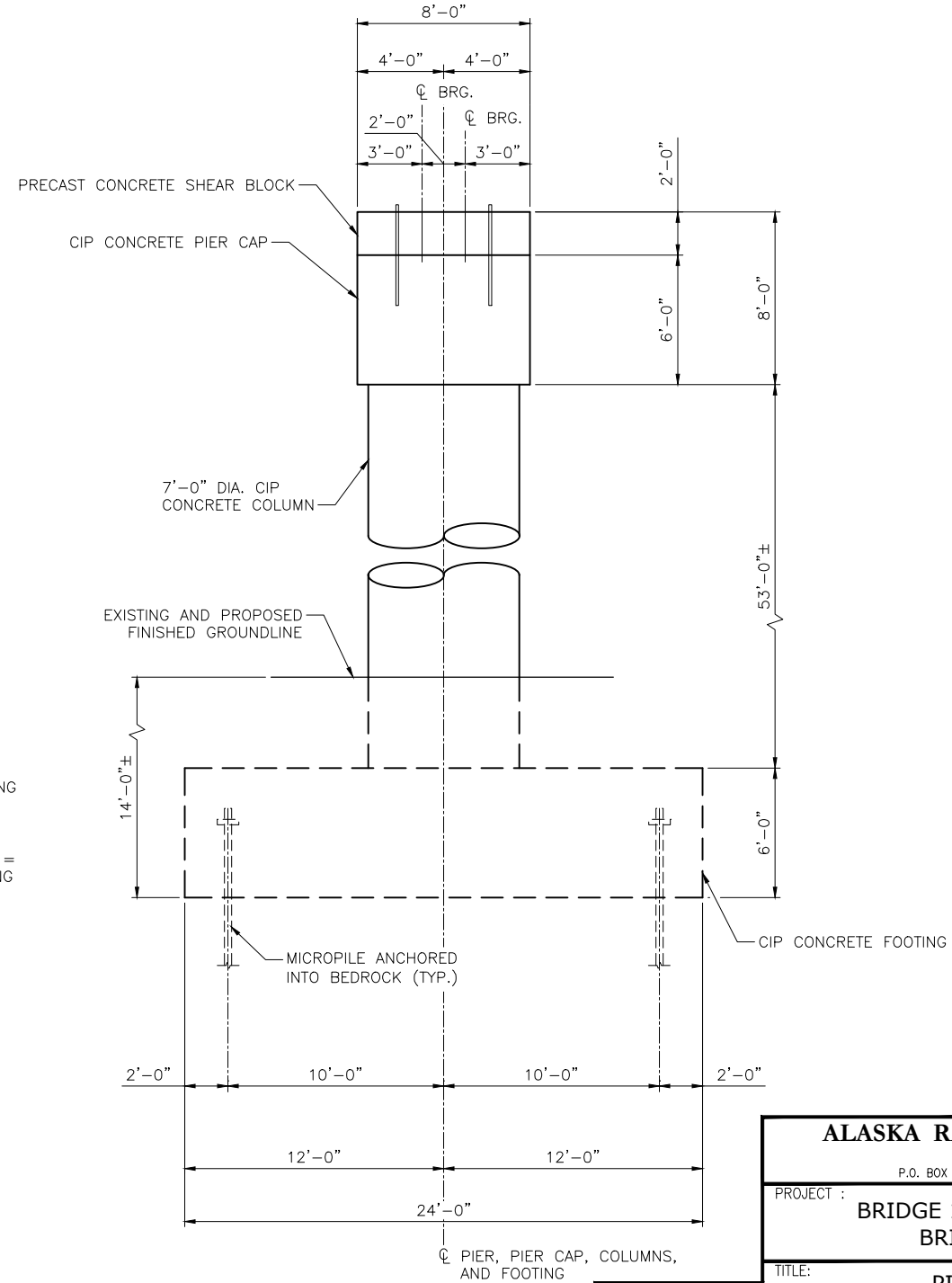




PLAN
SCALE: 1/8" = 1'-0"



ELEVATION
SCALE: 1/8" = 1'-0"



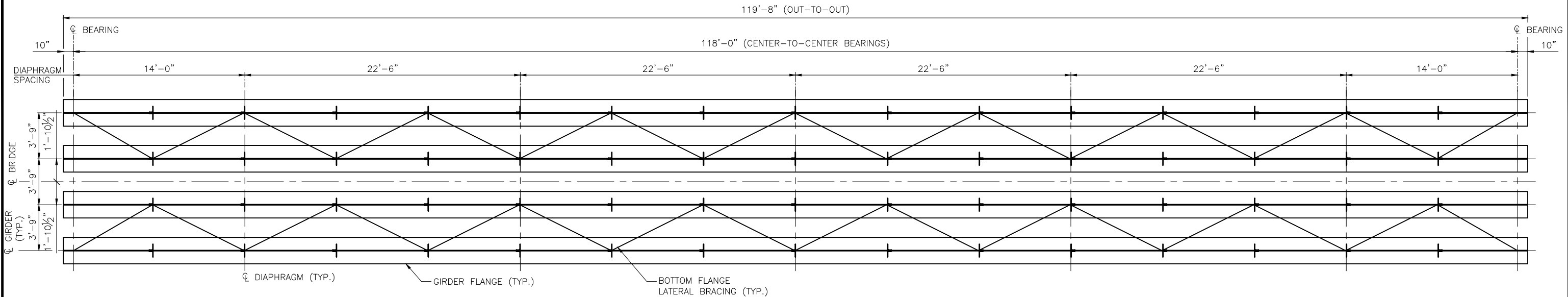
END VIEW
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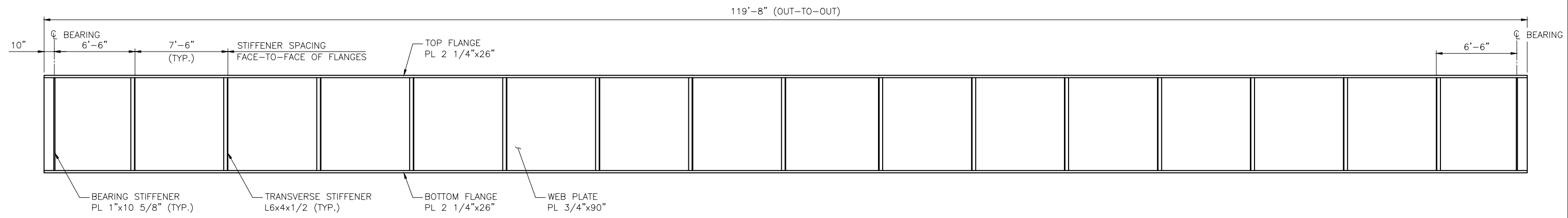
ALASKA RAILROAD CORPORATION ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500		
PROJECT : BRIDGE 127.5 OVER EAGLE RIVER BRIDGE REPLACEMENT		
TITLE: PIER FRAMING PLAN		
DESIGNED BY: AGH	SCALE : AS SHOWN	AFE NO.: 10944
DRAWN BY: AEP	DATE : DEC. 17, 2021	DWG NO. 15 OF 16
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APPROVED BY: X		



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PLAN
SCALE: 1/8" = 1'-0"



ELEVATION
SCALE: 1/8" = 1'-0"

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

PROJECT :
**BRIDGE 127.5 OVER EAGLE RIVER
BRIDGE REPLACEMENT**

TITLE:
119'-8" DECK PLATE GIRDER FRAMING PLAN

DESIGNED BY: AGH	SCALE : AS SHOWN	AFE NO.: 10944
DRAWN BY: AEP	DATE : DEC. 17, 2021	DWG NO.
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APPROVED BY: X		



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