

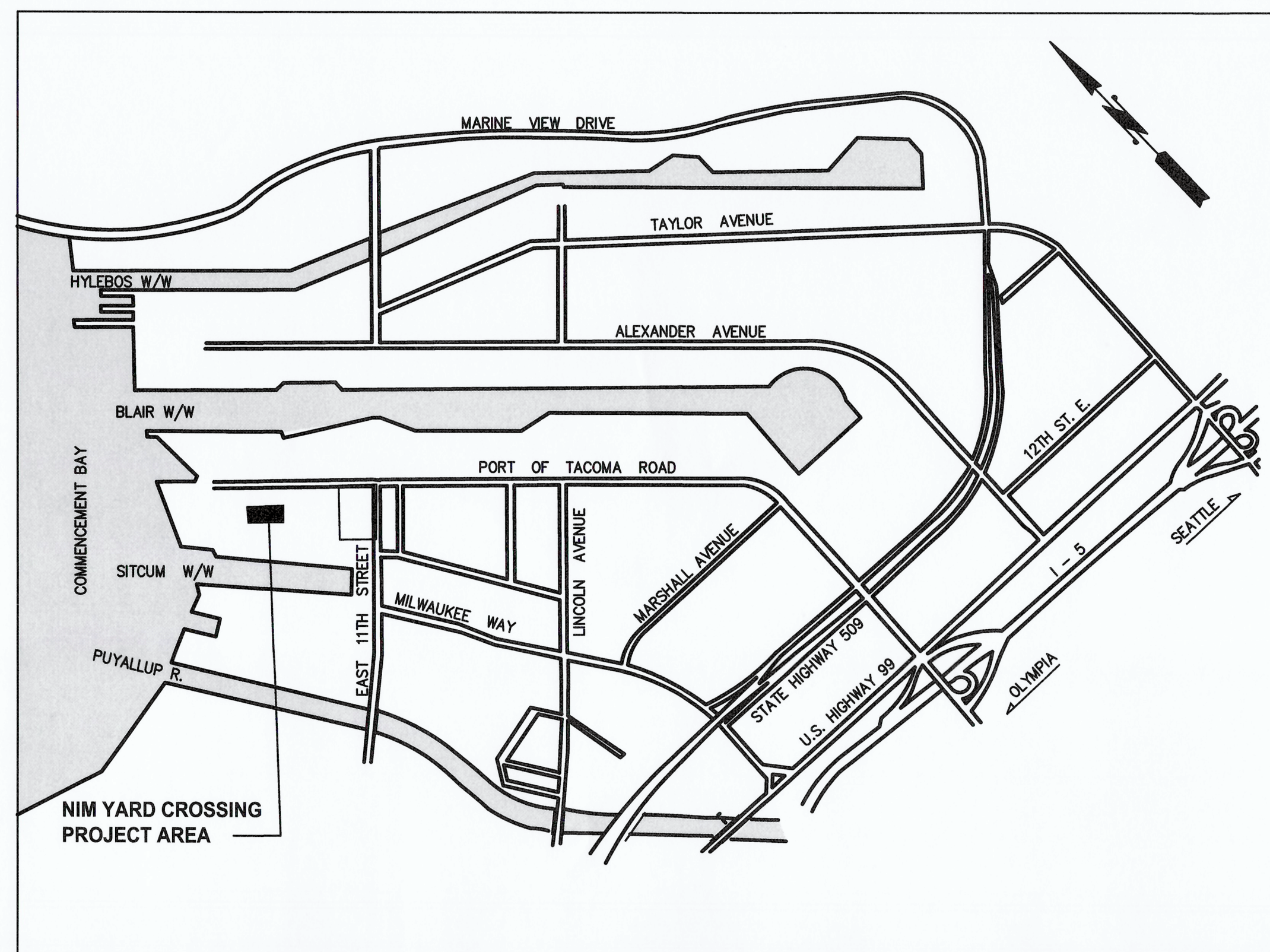
NIM CROSSING PANEL REPAIRS
PROJECT NO. 201141.01
CONTRACT NO. 071721

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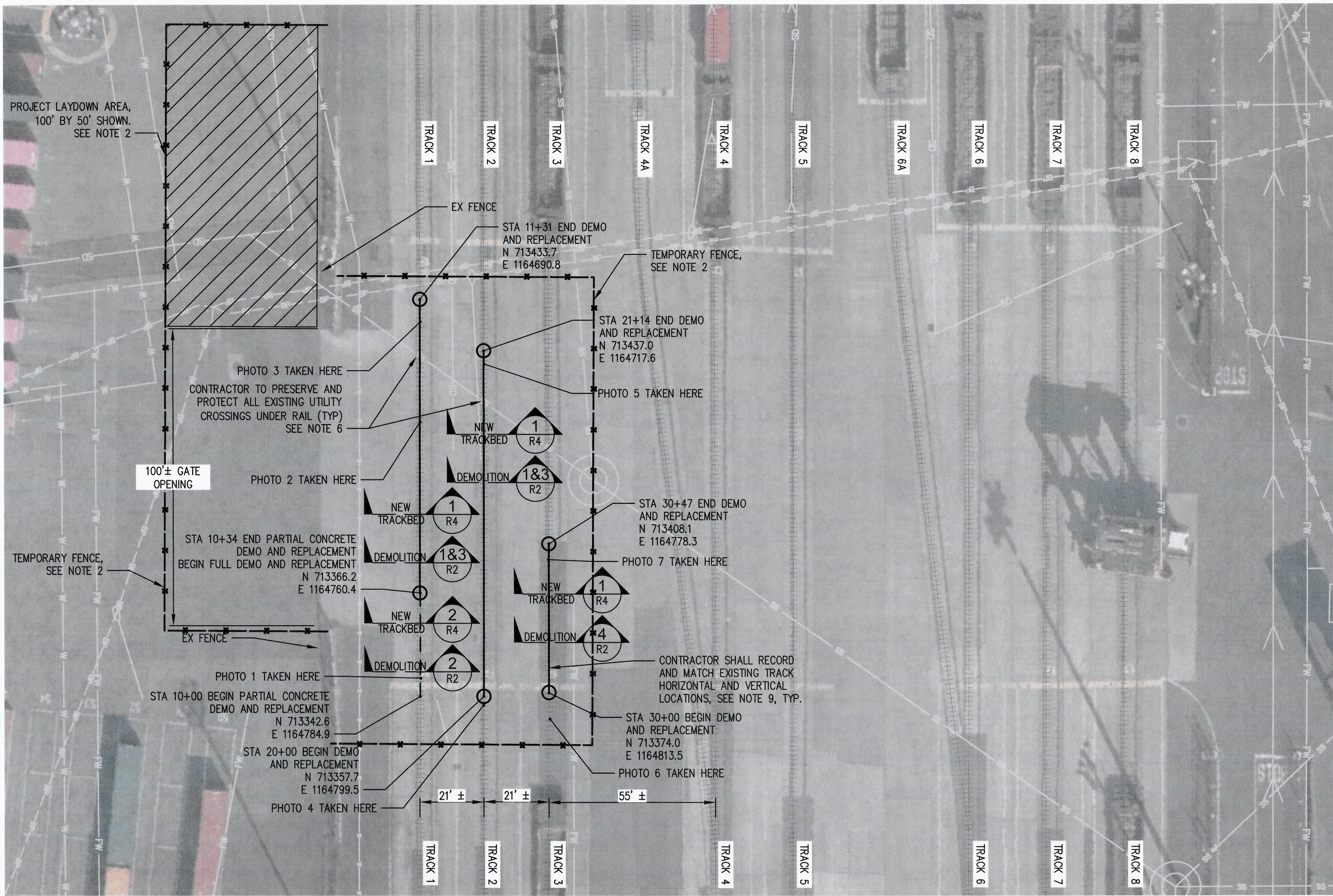
SHEET #	SHEET DESIGNATION	SHEET TITLE
1	G1	COVER SHEET
2	R1	SITE PLAN
3	R2	EXISTING CONDITION SECTIONS
4	R3	EXISTING CONDITION PHOTOS
5	R4	SECTION DETAILS
6	R5	RAIL DETAILS



PROJECT AND LAYDOWN AREAS



<div> <div>G1</div> <div>SHEET 1 OF 6</div> </div>	<div> <div>NIM CROSSING PANEL REPAIRS</div> <div>COVER SHEET</div> </div>				<div> <div>APPROVED:</div> <div> <div>TJH</div> <div>07/01/2022</div> </div> </div>		<div>  </div>	<div>  </div>	<div> <div>2407 North 31st Street, Suite 100</div> <div>(253) 396-0150 Fax (253) 396-0162</div> <div>P.O. BOX 1837 TACOMA, WA 98401 (253)396-5941</div> </div>	<div>  </div>
	<div> <div>DIRECTOR ENG. DATE</div> <div> <div>7-12-22</div> <div>7/12/2022</div> </div> </div>		<div> <div>CHECKED BY</div> <div>DATE</div> </div>		<div> <div>MARK:</div> <div>REVISION:</div> <div>BY:</div> <div>DATE:</div> </div>					
	<div> <div>PRINTED BY:</div> <div>thelbig Jul 11, 2022</div> </div>		<div> <div>APPR:</div> <div>DATE:</div> </div>							
	<div> <div>TOWNSHIP: 20N</div> <div>RANGE: 03E</div> <div>SECTION: 2, 3</div> </div>		<div> <div>M. ID:</div> <div>201141.01</div> </div>							
<div> <div>PARCEL: MULTIPLE</div> <div>DRAWING SCALE: AS NOTED</div> </div>		<div> <div>PORT OF TACOMA</div> <div>TACOMA, WA 98401-1837</div> </div>								



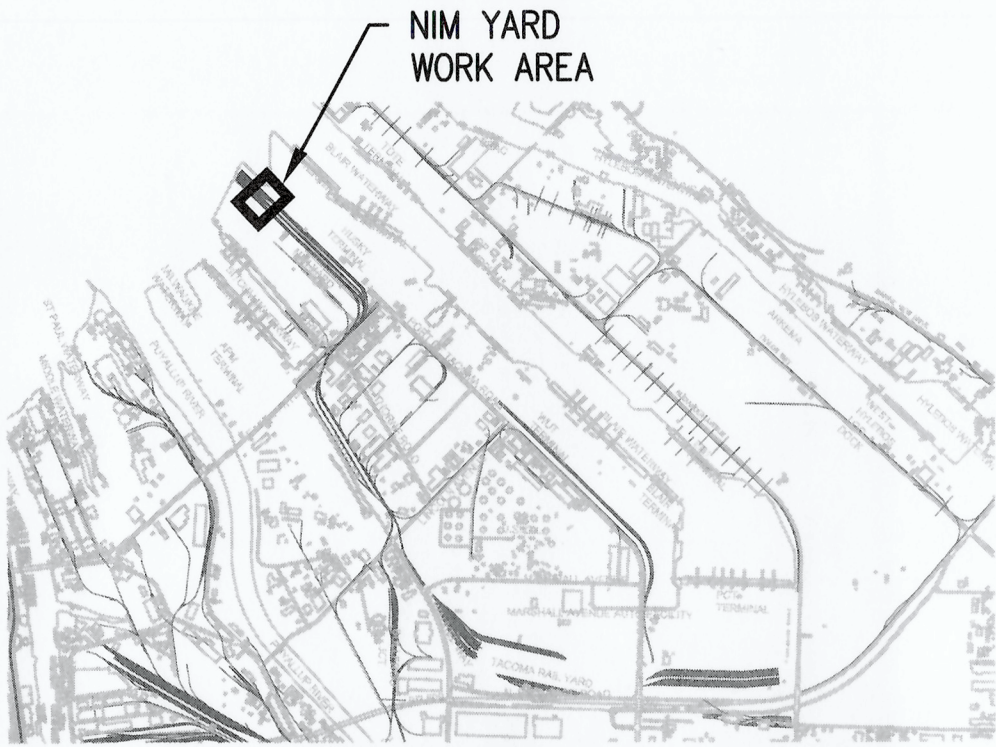
SITE PLAN
SCALE: 1" = 20'

LEGEND

- EXISTING RAIL, SEE NOTE 9
- PARTIAL CONCRETE DEMO AND REPLACEMENT, SEE DETAIL 2 ON SHEET R2
- REMOVE EXISTING TRACK AND INSTALL NEW TRACK, SEE DETAILS 1, 3, AND 4 ON SHEET R2
- CONTRACTOR LAYDOWN AND STAGING AREA
- WELDED JOINT TO EX RAIL, SEE NOTE 3
- TEMPORARY FENCE

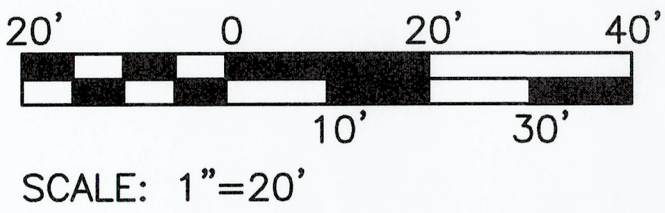
NOTES

- SEE SHEETS R2 THROUGH R3 FOR EXISTING TRACKBED SECTIONS AND PHOTOS. SEE DETAIL 1 ON SHEET R4 FOR THE PROPOSED TRACKBED SECTION.
- TRACK REPLACEMENTS ARE WITHIN AN ACTIVE YARD. CONTRACTOR SHALL CONFINE OPERATIONS AND STAGING TO THE LAYDOWN AREA SHOWN ON THE PLANS. LAYDOWN AND TEMPORARY FENCING LIMITS SHALL BE CONFIRMED WITH PORT IN THE FIELD. CONTRACTOR SHALL YIELD TO RAIL TRAFFIC AT ALL TIMES, AND SHALL BE REQUIRED TO COORDINATE WORK ON A WEEKLY AND DAILY BASIS WITH TERMINAL OPERATIONS AND LONGSHORE.
- ALL EXISTING RAIL IS ASSUMED TO BE 115 LB RAIL. CONTRACTOR TO CONFIRM IN FIELD. TRACKS 1 AND 2 ARE WELDED RAIL, TRACK 3 IS JOINTED RAIL. FOR BIDDING, CONTRACTOR SHALL ASSUME WELDED JOINTS AT THE CONNECTIONS TO EXISTING RAIL ARE BETWEEN THE SAME SIZE RAIL SECTIONS. CONTRACTOR SHALL INCLUDE A UNIT COST FOR A COMPROMISE WELDED JOINT IN THE EVENT THAT A RAIL SIZE OTHER THAN 115 LB IS ENCOUNTERED AT THE CONNECTION LOCATIONS.
- ALL NEW RAIL SHALL BE 115 LB WELDED RAIL, UNO.
- ALL NEW TRACK TIES ARE STEEL, SEE R5 FOR STANDARD DETAILS.
- ALL LOCATIONS OF EXISTING IMPROVEMENTS SHOWN ARE FROM AVAILABLE GIS RECORDS AND SHOULD BE CONSIDERED APPROXIMATE AND NOT NECESSARILY COMPLETE. THE CONTRACTOR SHALL FIELD VERIFY ALL IMPROVEMENTS AND EXISTING UTILITIES.
- CONTRACTOR SHALL MAINTAIN AND PROTECT ALL SITE IMPROVEMENTS NOT OTHERWISE NOTED FOR DEMOLITION. CONTRACTOR SHALL REPAIR OR REPLACE ALL ITEMS DAMAGED BY CONSTRUCTION AT NO ADDITIONAL COST TO THE PORT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR EMPLOYING THE NECESSARY BMPs AS NEEDED TO PREVENT SEDIMENT LADEN RUNOFF FROM LEAVING THE SITE OR ENTERING THE STORM DRAIN SYSTEM.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MATCHING THE HORIZONTAL AND VERTICAL LOCATION OF EXISTING TRACK WORK FOR ALL NEW TRACK WORK. AT A MINIMUM, PRIOR TO DEMOLITION, THE CONTRACTOR SHALL INSTALL SURVEY PINS AT 20' INTERVALS OFFSET 15' FROM TRACK CENTERLINE AND RECORD EXISTING TOP OF RAIL ELEVATIONS. EACH PIN SHALL HAVE UNIQUE NUMBERS CORRESPONDING TO THAT LOCATION'S HORIZONTAL POSITION AND ELEVATION. ALL INFORMATION SHALL BE MADE AVAILABLE TO THE PORT AT THEIR REQUEST. VERTICAL CONTROL SURVEY OF FINISHED TOP OF RAIL SHALL BE SUBMITTED TO THE PORT FOR REVIEW AND APPROVAL. SUBMITTAL SHALL INCLUDE A TABLE COMPARING EXISTING SURVEYED DATA TO AS CONSTRUCTED TOP OF RAIL ELEVATIONS AT SAME INTERVAL ABOVE.
- (NOT IN CONTRACT). SEE PHOTOS ON SHEET R3 FOR STRIPING AND PAVEMENT MARKING REPLACEMENT REQUIREMENTS. STRIPING AND PAVEMENT MARKING TO BE COMPLETED BY PORT MAINTENANCE UPON COMPLETION OF CONTRACT WORK.



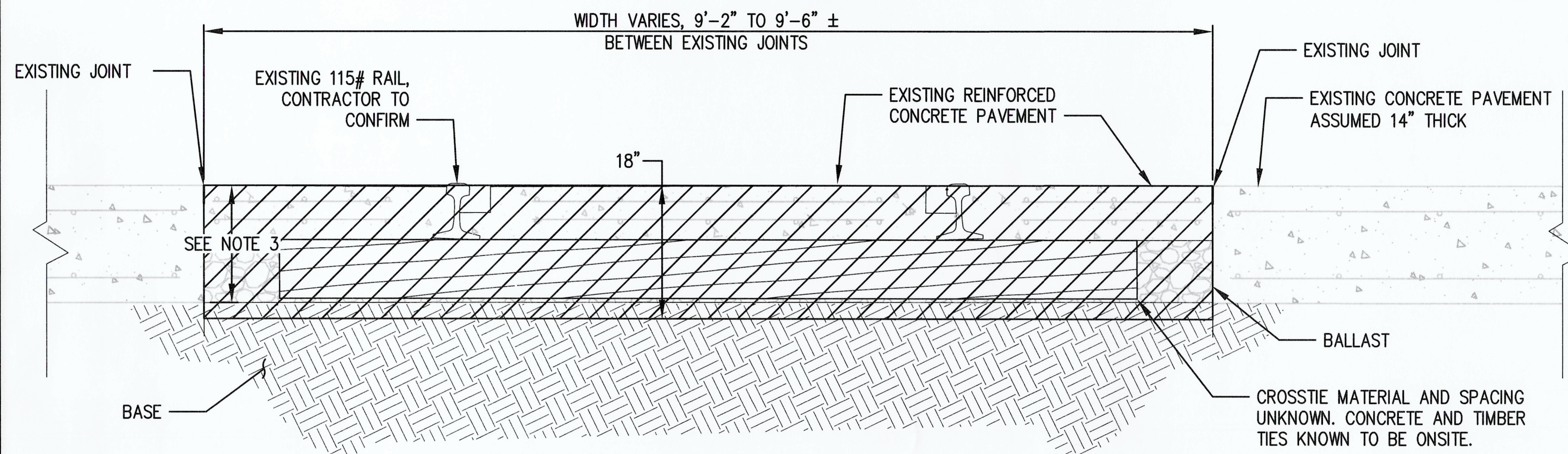
KEY PLAN

NTS

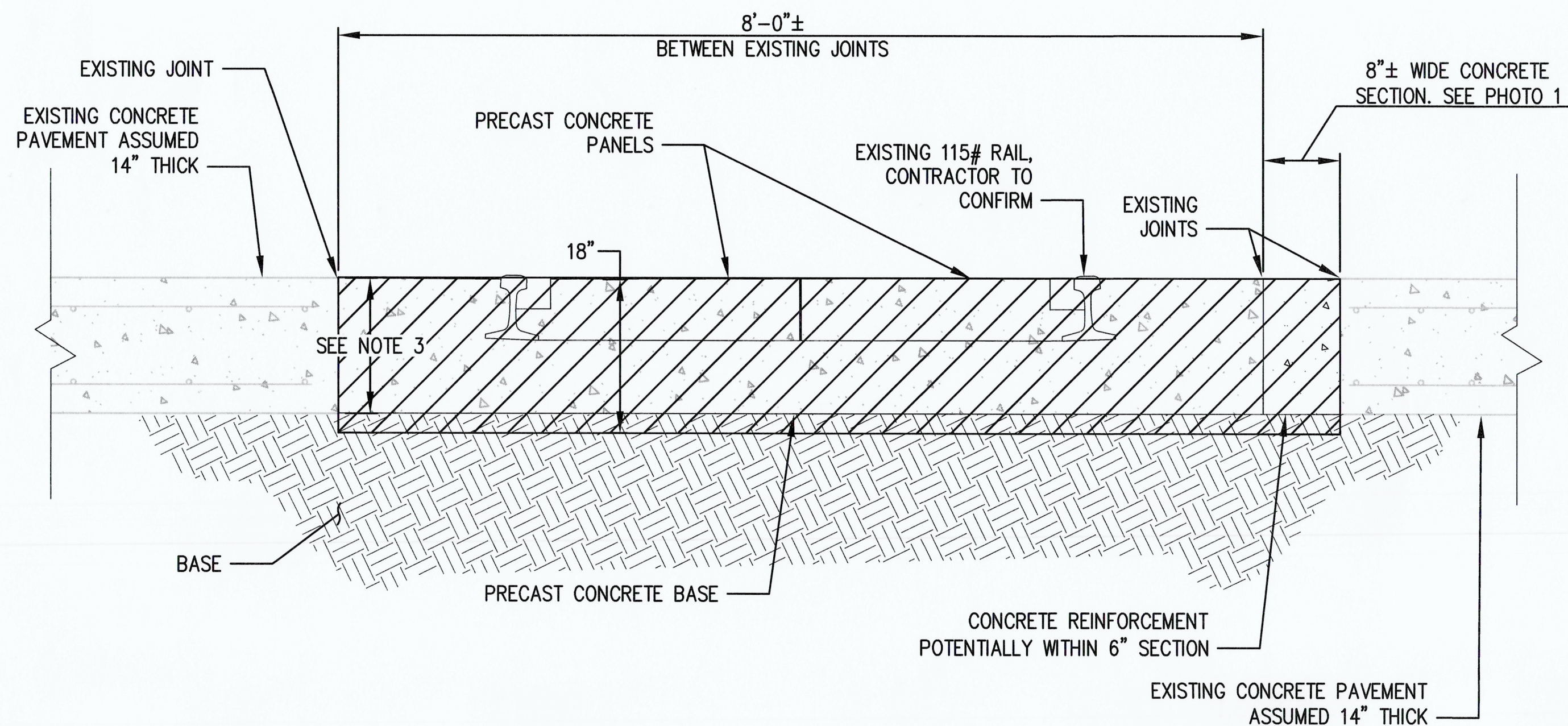


SCALE: 1"=20'

R1 SHEET 2 OF 6 CONT/CONS: 071721 M. ID: 201141.01 PHASE: BID SET	NIM CROSSING PANEL REPAIRS SITE PLAN				APPROVED: <i>Stacy M. Mc...</i> 7-12-22 TJH CHECKED BY: SWK DATE: 07/11/2022	2407 North 31st Street, Suite 100 Tacoma, Washington 98407 (253) 396-0150 Fax (253) 396-0162 P.O. BOX 1837 TACOMA, WA 98401	Port of Tacoma		
	TOWNSHIP: 20N RANGE: 03E SECTION: 2, 3	DAT-HRZ: W83-SF VERT: PORT OF TACOMA	PARCEL: MULTIPLE DRAWING SCALE: AS NOTED	PORT ADDRESS: ONE SITCUM PLAZA TACOMA, WA 98401-1837	DATE: 7/13/2022	REVISION: 1	BY: []	APPR: []	DATE: []
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1 EX TRACKS 1 & 2 - CIP CONCRETE SECTION
R1 SCALE: 1" = 1'-0"



3 EX TRACKS 1 & 2 - PRECAST PANEL SECTION
R1 SCALE: 1" = 1'-0"

TRACK LENGTH BY SECTION

TRACK 1 TOTAL: 131 FEET

PARTIAL DEMO SECTION: 34 FEET, STA 10+00 TO 10+34

CIP CONCRETE SECTION: 49 FEET, STA 10+58 TO 10+82,
STA 10+90 TO 11+06, 11+22 TO 11+31

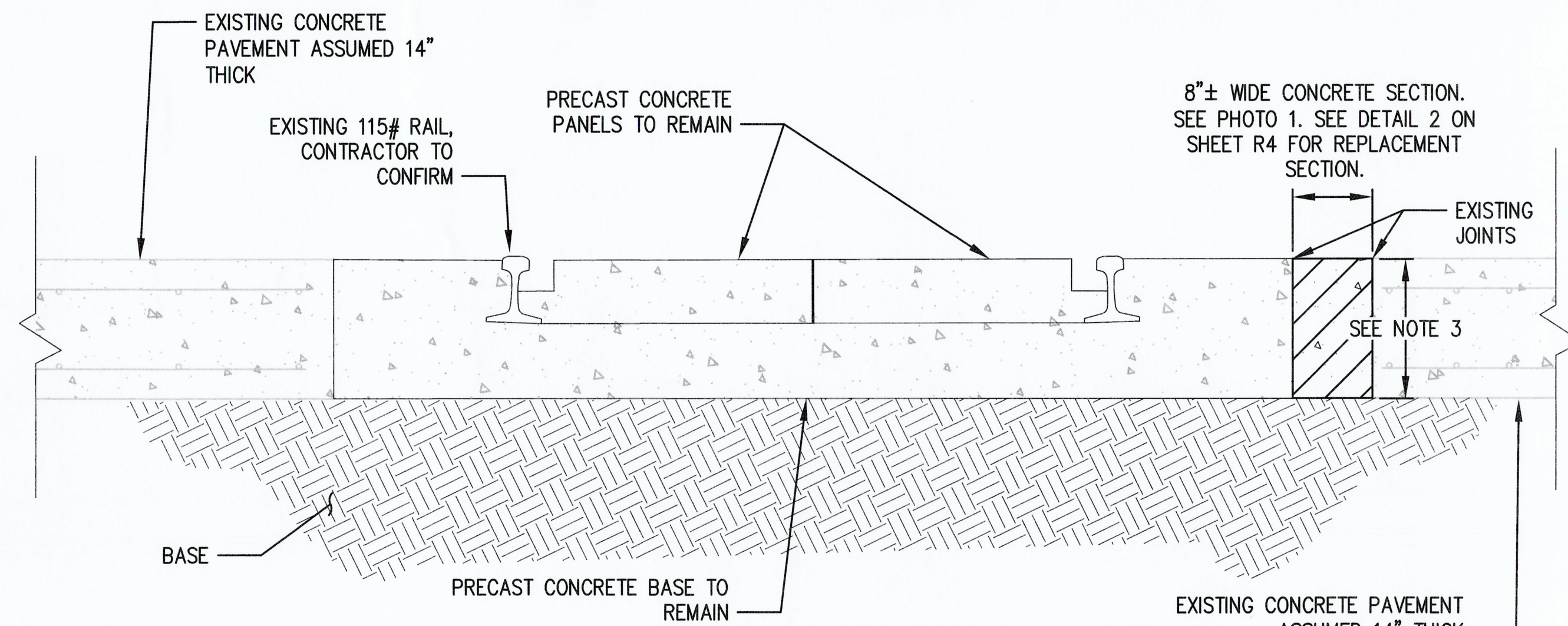
PRECAST PANEL SECTION: 48 FEET, STA 10+34 TO 10+58,
STA 10+82 TO STA 10+90, STA 11+06 TO 11+22

TRACK 2 TOTAL: 114 FEET

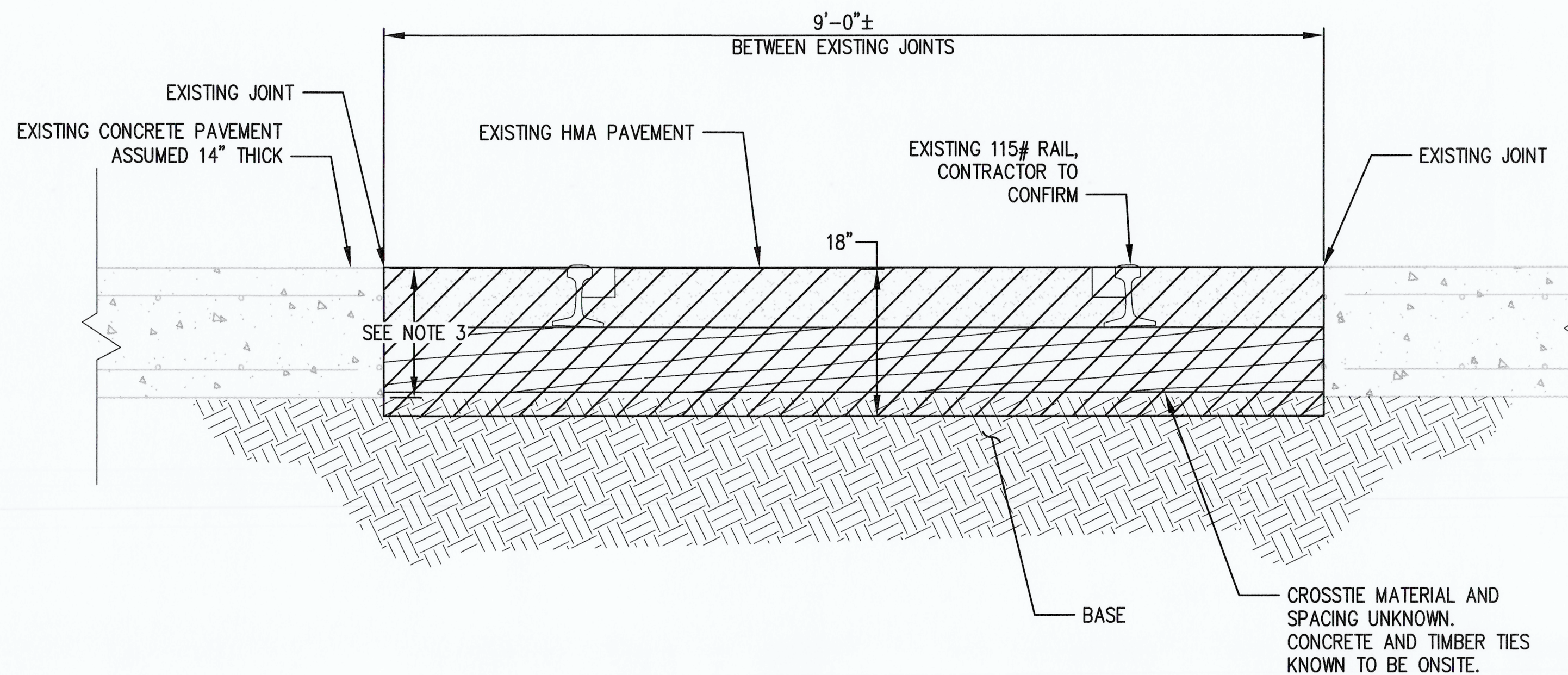
CIP CONCRETE SECTION: 34 FEET, STA 20+80 TO 21+14

PRECAST PANEL SECTION: 80 FEET, STA 20+00 TO 20+80

TRACK 3 TOTAL, HMA SECTION: 47 FEET, STA 30+00 TO 30+47



2 EX TRACK 1 - PARTIAL DEMO SECTION
R1 SCALE: 1" = 1'-0"



4 EX TRACK 3 - HMA SECTION
R1 SCALE: 1" = 1'-0"

DEMOLITION NOTES

- TRACK LENGTH BY SECTION INFORMATION IS APPROXIMATE FOR BIDDING PURPOSES. ACTUAL LENGTHS SHALL BE CONFIRMED IN THE FIELD BY THE CONTRACTOR PRIOR TO DEMOLITION.
- EXISTING SECTION INFORMATION GATHERED FROM AVAILABLE AS-BUILT INFORMATION OF OTHER AREAS OF THE NIM YARD. ANY DISCREPANCY DISCOVERED DURING CONSTRUCTION SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
- SECTION DEPTHS SHOWN HAVE BEEN APPROXIMATED BASED ON AS-BUILT INFORMATION. CONTRACTOR SHALL USE THE DEPTHS SHOWN FOR BIDDING PURPOSES AND CONFIRM DEPTHS DURING CONSTRUCTION.
- WIDTH OF DEMOLITION SECTIONS VARY. CONTRACTOR SHALL USE THE WIDTHS SHOWN FOR BIDDING PURPOSES AND CONFIRM ACTUAL WIDTHS DURING CONSTRUCTION.
- PRECAST PANELS ARE ASSUMED TO BE A THREE-PIECE MODULE CONSISTING OF A BASE PANEL AND TWO CENTER PANES SIMILAR TO THE THREE-PIECE MODULE MANUFACTURED BY PREMIER MODULAR RAILROAD CROSSINGS INC.

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	SWK	07/11/2022	PROJ. ENGR	DATE
DIRECTOR	ENG. DATE	7-12-22	PRINTED BY:	thelbig Jul 11, 2022
PORT ADDRESS:	ONE SITCUM PLAZA			
	TACOMA, WA 98401-1837			
NIM CROSSING PANEL REPAIRS				
EXISTING CONDITION SECTIONS				
TOWNSHIP: 20N	RANGE: 03E	SECTION: 2, 3		
DAT-HRZ: W83-SF	VERT: PORT OF TACOMA			
PARCEL: MULTIPLE	DRAWING SCALE: AS NOTED			
SHEET 3 OF 6				
CON/CONS: 071721				
M. ID: 201141.01				
PHASE: BID SET				

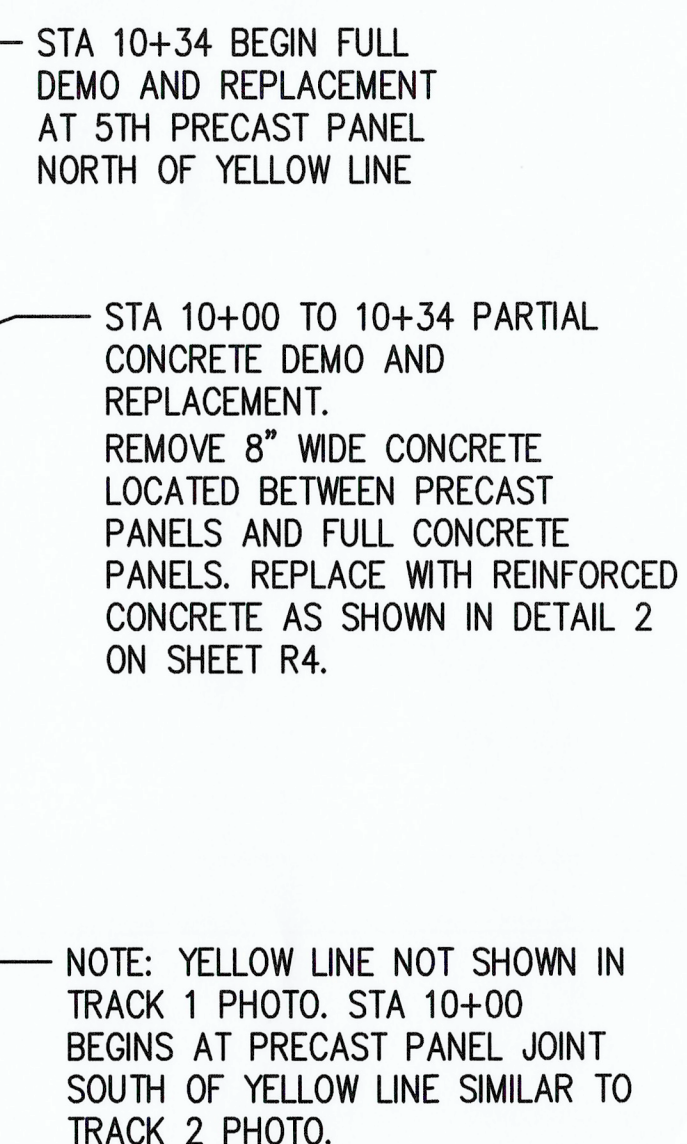
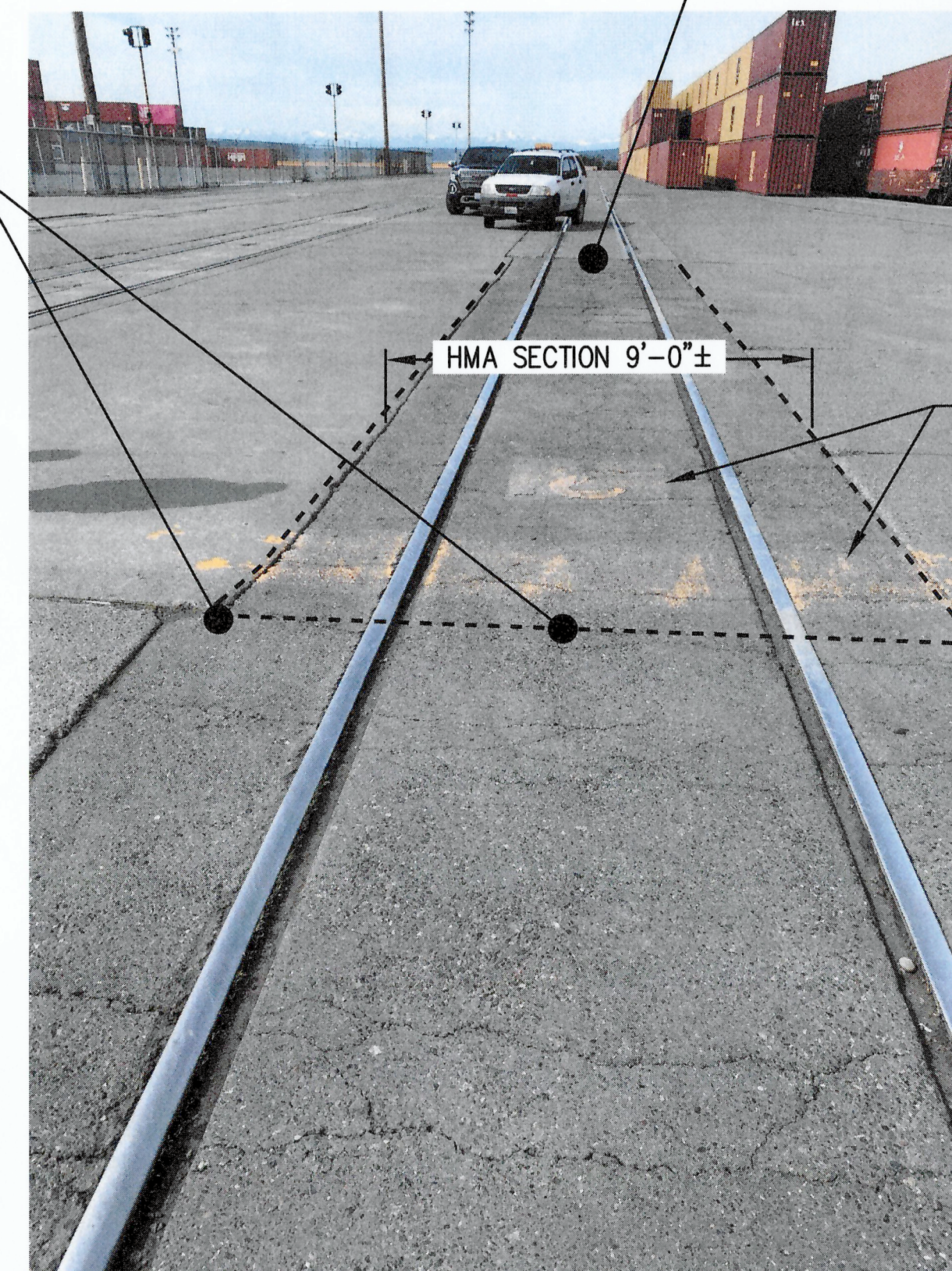


Diagram illustrating the dimensions and components of a precast panel section:

- PROTECT EX UTILITY**: Indicated by a dashed line and arrows pointing to the top and bottom edges of the panel.
- CIP SECTION 9'-2" TO 9'-6" ±**: Dimension indicating the length of the concrete-in-place (CIP) section.
- PRECAST PANEL SECTION 8'-0" ±**: Dimension indicating the length of the precast panel section.
- 8' ±**: Dimension indicating the width of the panel section.

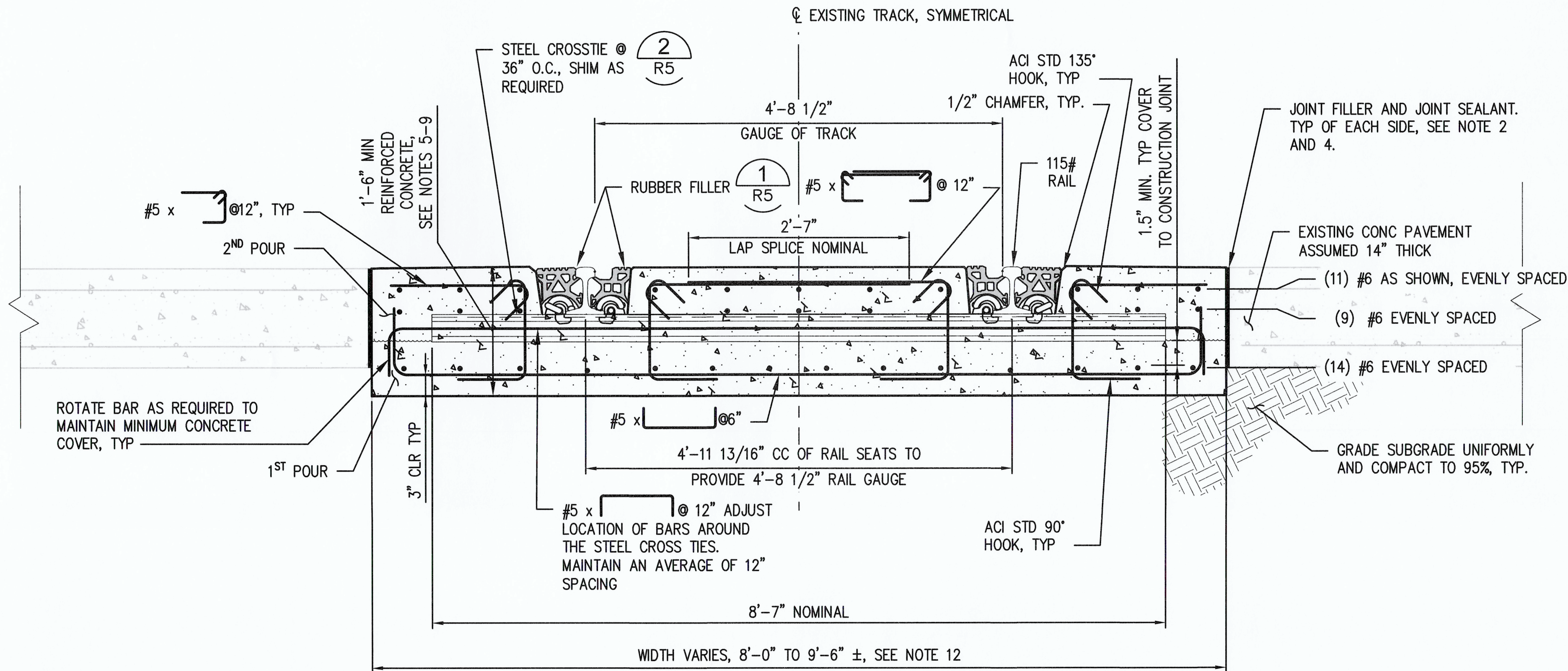
STA 30+00 BEGIN DEMO AND
REPLACEMENT AT ADJACENT
CONCRETE PANEL JOINT
APPROXIMATELY 6" SOUTH OF
YELLOW LINE



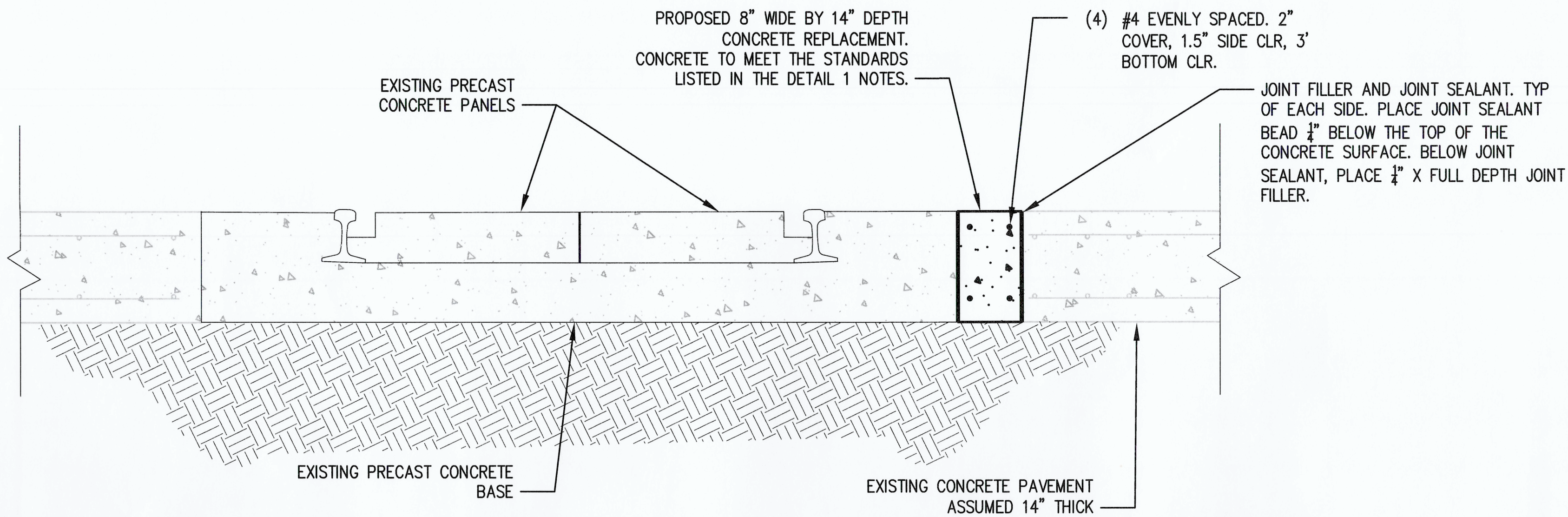
STA 30+47 END DEMO AND REPLACEMENT AT EX JOINT

COMPRESSED AIR BOX, NO LONGER IN USE

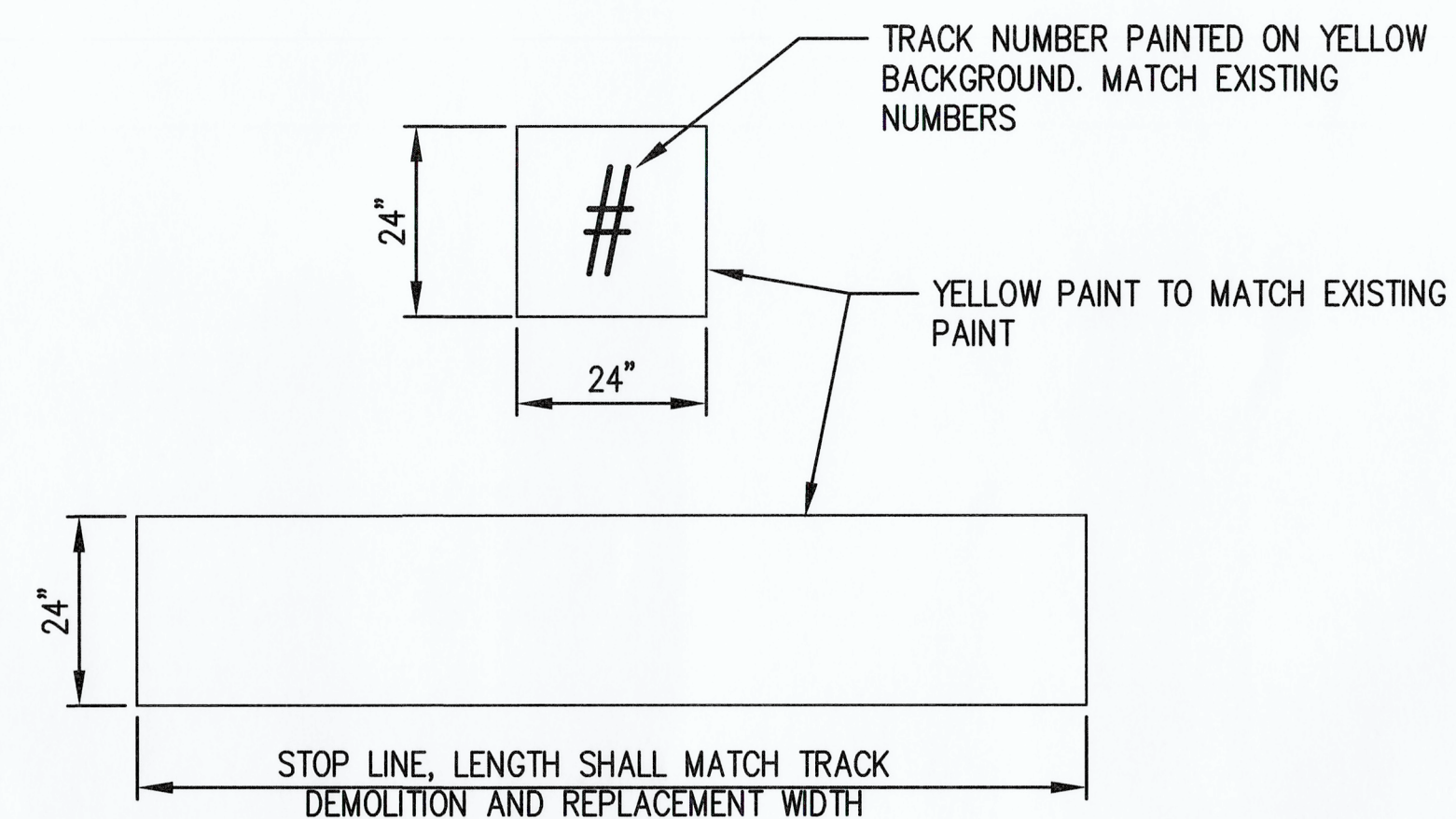
[illegible]



1 NEW TRACKBED SECTION
SCALE: NTS



2 PARTIAL CONCRETE REPLACEMENT
SCALE: 1" = 1'-0"



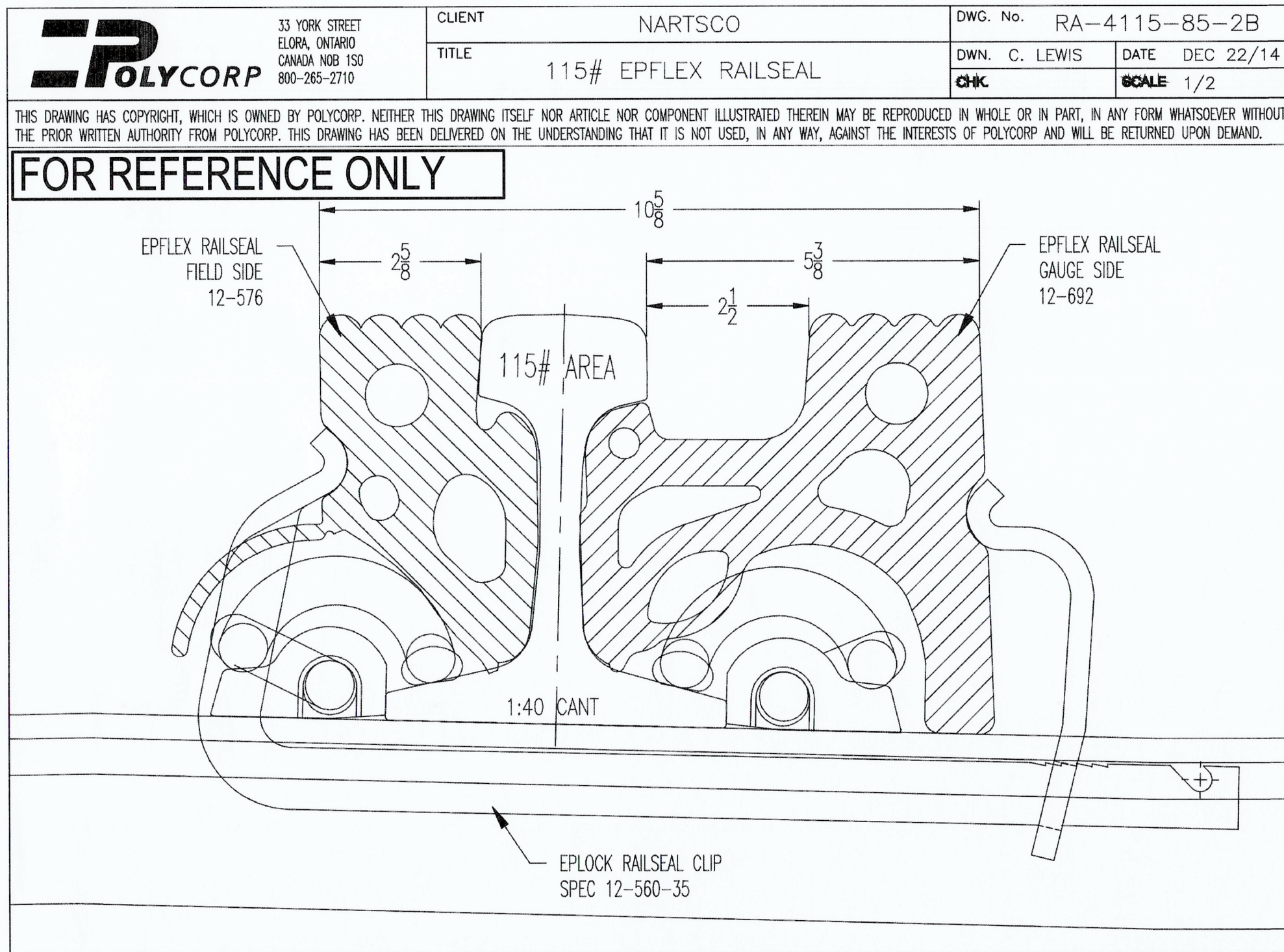
DETAIL 3 NOT IN CONTRACT. PAINT AND STRIPING WORK TO BE COMPLETED BY PORT MAINTENANCE AFTER CONTRACT WORK IS COMPLETE.

3 PAINT AND STRIPING DETAIL
SCALE: 1" = 2'-0"

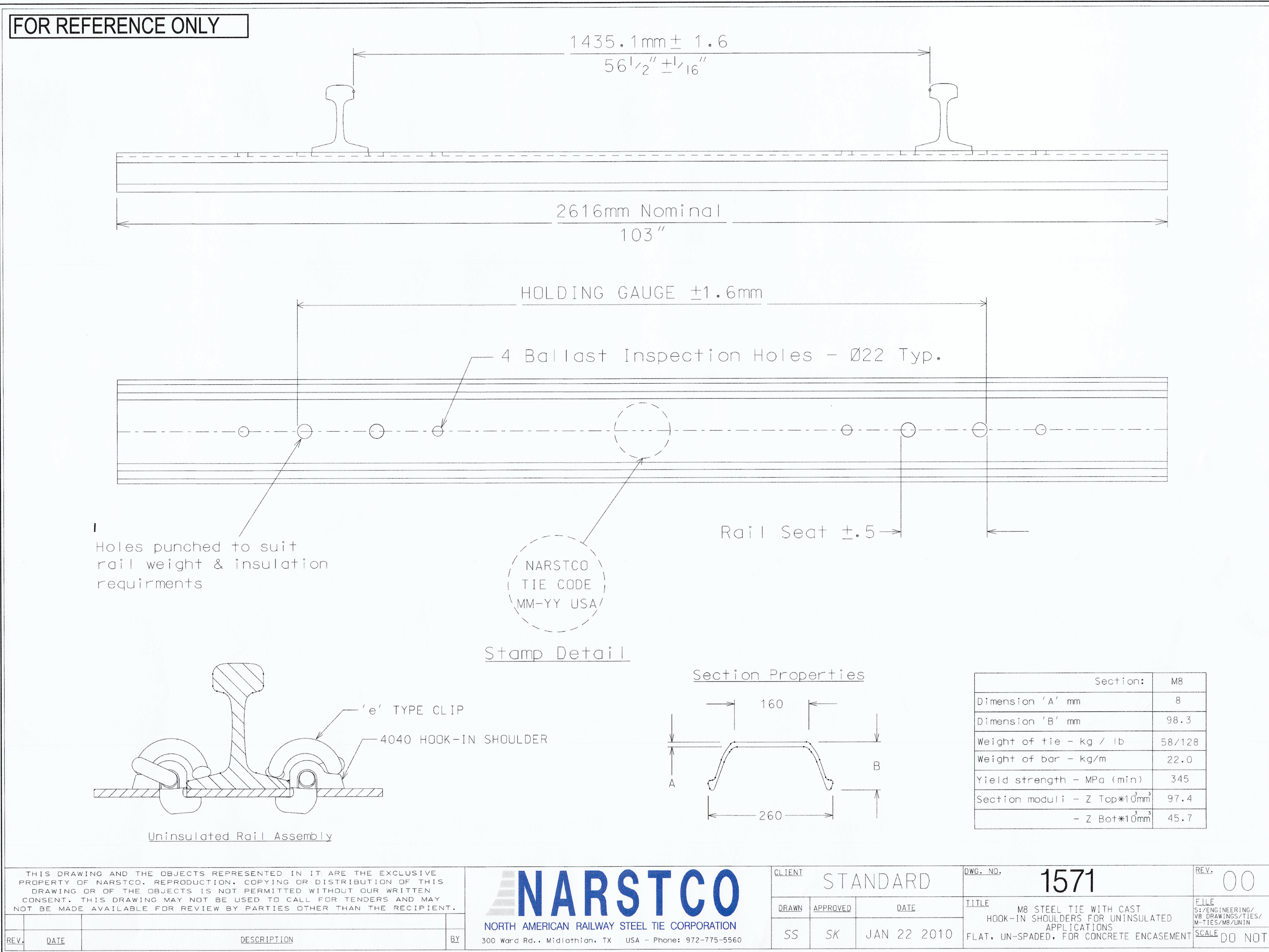
NEW SECTION NOTES

- PLACE ONE (1) $\frac{1}{2}$ " X $\frac{1}{2}$ " TO 2" DEPTH EXPANSION JOINT FILLER PER TRACK LOCATED APPROXIMATELY HALF WAY BETWEEN THE BEGINNING AND END OF TRACKBED REPLACEMENT.
- BETWEEN EXISTING PAVEMENT AND NEW CONCRETE TRACKBED, PLACE JOINT SEALANT BEAD $\frac{1}{4}$ " BELOW THE TOP OF THE CONCRETE SURFACE. BELOW JOINT SEALANT, PLACE $\frac{1}{2}$ " X FULL DEPTH JOINT FILLER.
- PLACE TRANSVERSE CONSTRUCTION JOINTS AT ALL LOCATIONS WHERE NEW TRACKBED SECTION CHANGES WIDTH. LOCATE AND CONSTRUCT CONTRACTION JOINTS EVENLY SPACED BETWEEN CONSTRUCTION JOINTS SUCH THAT A CONTRACTION JOINT OR CONSTRUCTION JOINT OCCURS AT AN INTERVAL OF NOT MORE THAN 20 FEET.
- WHERE SPALLING ON EXISTING PAVEMENT SURFACE HAD OCCURED, CLEAN SURFACE, EPOXY AND PATCH TO SMOOTH CONDITION.
- REBAR SHOP DRAWINGS SHALL BE REVIEWED AND APPROVED PRIOR TO FABRICATION.
- CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI AT 28 DAYS SHALL BE USED.
- CONCRETE SHALL ACHIEVE 4000 PSI COMPRESSIVE STRENGTH PRIOR TO OPENING TRACKS TO TRAIN OPERATIONS.
- CONTRACTOR MAY CONSIDER USE OF HIGH EARLY STRENGTH CONCRETE. IF HIGH EARLY STRENGTH CONCRETE IS USED, CONCRETE SHALL CURE FOR 3 DAYS OR UNTIL 4000 PSI COMPRESSIVE STRENGTH IS ACHIEVED, WHICHEVER IS GREATER, BEFORE OPENING TRACKS TO TRAIN OPERATIONS.
- THE FIRST POUR OF CONCRETE SHALL CURE FOR 2 DAYS OR UNTIL 60% OF 28 DAY COMPRESSIVE STRENGTH IS ACHIEVED, WHICHEVER IS GREATER, BEFORE SECOND POUR IS PLACED.
- MINIMUM DIMENSION IS ASSUMED TO MATCH EXISTING CONDITIONS IN THE YARD. THE DEPTH SHALL BE REVISED TO MATCH EXISTING IF IT IS FOUND TO BE GREATER THAN SHOWN.
- LAP SPICE #6 BARS 3'-1". NO MORE THAN 50% OF THE LONGITUDINAL BARS MAY BE SPICED AT A LOCATION. STAGGER ADJACENT BAR SPICE BY A MINIMUM OF 3'-1".
- FOR PRECAST PANEL DEMOLITION AND REPLACEMENT AREAS, CONTRACTOR SHALL TORCH CUT TIES TO PROVIDE 3" CLEAR ON BOTH SIDES OF TIE.

	2407 North 31st Street, Suite 100 Tacoma, Washington 98407 (253) 396-0150 Fax (253) 396-0162		DATE: APPR:
	kpff	REVISION:	BY:
	T.J.H. 07/01/2022 CHECKED BY: DATE:	SWK 07/11/2022 PROJ. ENGR DATE:	PRINTED BY: thebig Jul 11, 2022 PORT ADDRESS: ONE SITCUM PLAZA TACOMA, WA 98401-1837
NIM CROSSING PANEL REPAIRS SECTION DETAILS	TOWNSHIP: 20N RANGE: 03E DAT-HRZ: W83-SF PARCEL: MULTIPLE	SECTION: 2, 3 VERT: PORT OF TACOMA DRAWING SCALE: AS NOTED	SHEET 5 OF 6 CONT/CONS: 07/17/21 M. ID: 201141.01 PHASE: BID SET



1 RUBBER FILLER DETAIL
R4 SCALE: NTS



...M8UE FLAT UN-SPADED FOR CONCRE 1/22/2010 10:40:55 AM

2 STEEL CROSSTIE
R4 SCALE: NTS

R5 SHEET 6 OF 6 CONT/CONS: 071721 M. ID: 201141.01 PHASE: BID SET	NIM CROSSING PANEL REPAIRS RAIL DETAILS				APPROVED: <i>Stacy Nicks</i> 7-12-21 TJH 07/01/2022 CHECKED BY: SWK 07/11/2022 DIRECTOR ENG. DATE: PROJ. ENGR DATE: PRINTED BY: thebig Jul 11, 2022 PORT ADDRESS: ONE SITCUM PLAZA TACOMA, WA 98401-1837	Port of Tacoma 2407 North 31st Street, Suite 100 Tacoma, Washington 98407 (253) 396-0150 Fax (253) 396-0162 P.O. BOX 1837 TACOMA, WA 98401 (206)365-5441
	DATE: 7/13/2022				DATE: 7/13/2022	
	BY: 7/13/2022				BY: 7/13/2022	
	REVISION: 7/13/2022				REVISION: 7/13/2022	
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