

FILE NAME: \\COWTOWN\DRAWING\RAIL\HEAVY RAIL PROJECTS\GOODRICH GROUP\DESIGN\GOODRICH-COVER\COVER.DWG PLOT DATE: 20 March, 2019 PLOT BY: Sewell, Rob\B/C PLOT STYLE: Shell-Cover-Hof.ctb ORIGINAL SHEET - ANSI D 22"x 34" (558.8mm x 863.6mm)

CONCEPTUAL DESIGN

GOODRICH

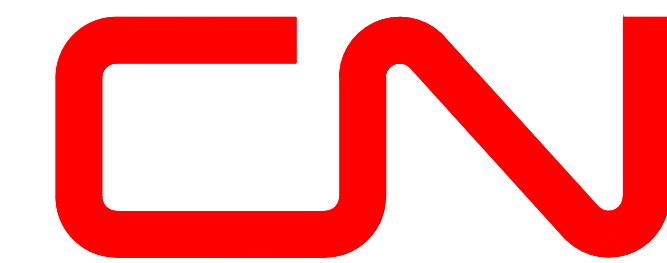
SURREY LUMBER TRANSLOAD FACILITY

SURREY, BC

BROWNSVILLE SPUR - Mi 0.64

YALE SUBDIVISION - HB MILE 117.63

GOODRICH GROUP



LIST OF PROJECT DRAWINGS

00	COVER SHEET
01	CONCEPTUAL DESIGN - SITE PLAN
02	CONCEPTUAL PLAN

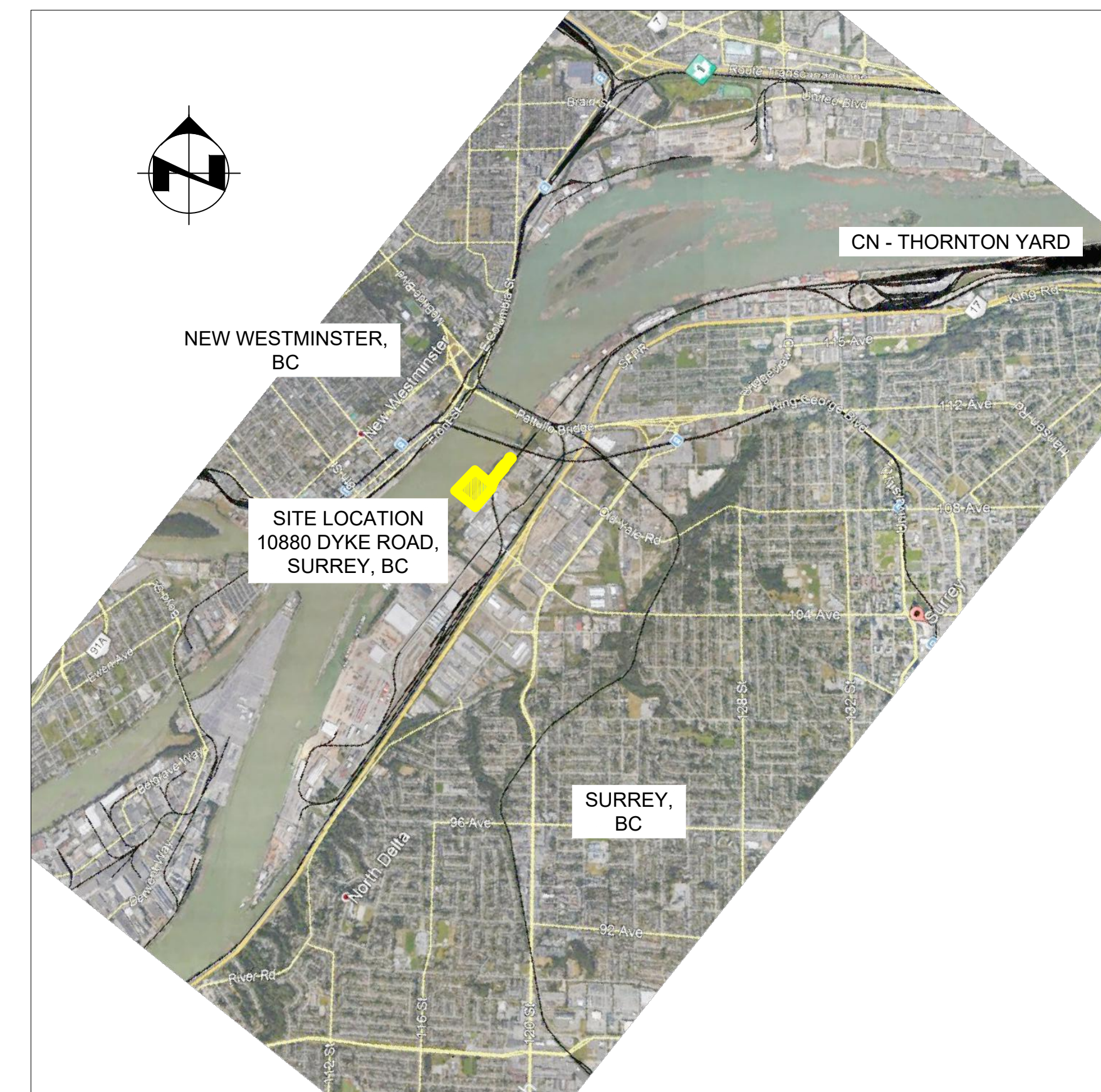
NOT FOR CONSTRUCTION

ISSUED FOR REVIEW

A ISSUED FOR FEASIBILITY REVIEW 2019 Mar.20
Issued YY.MM.DD



Unit 2100 - 4720 Kingsway
Burnaby, BC
V5H 4N2, Canada



SITE VICINITY MAP
NTS

Drawing No.
00

Revision
A



NOTES:

PERMIT-SEAL

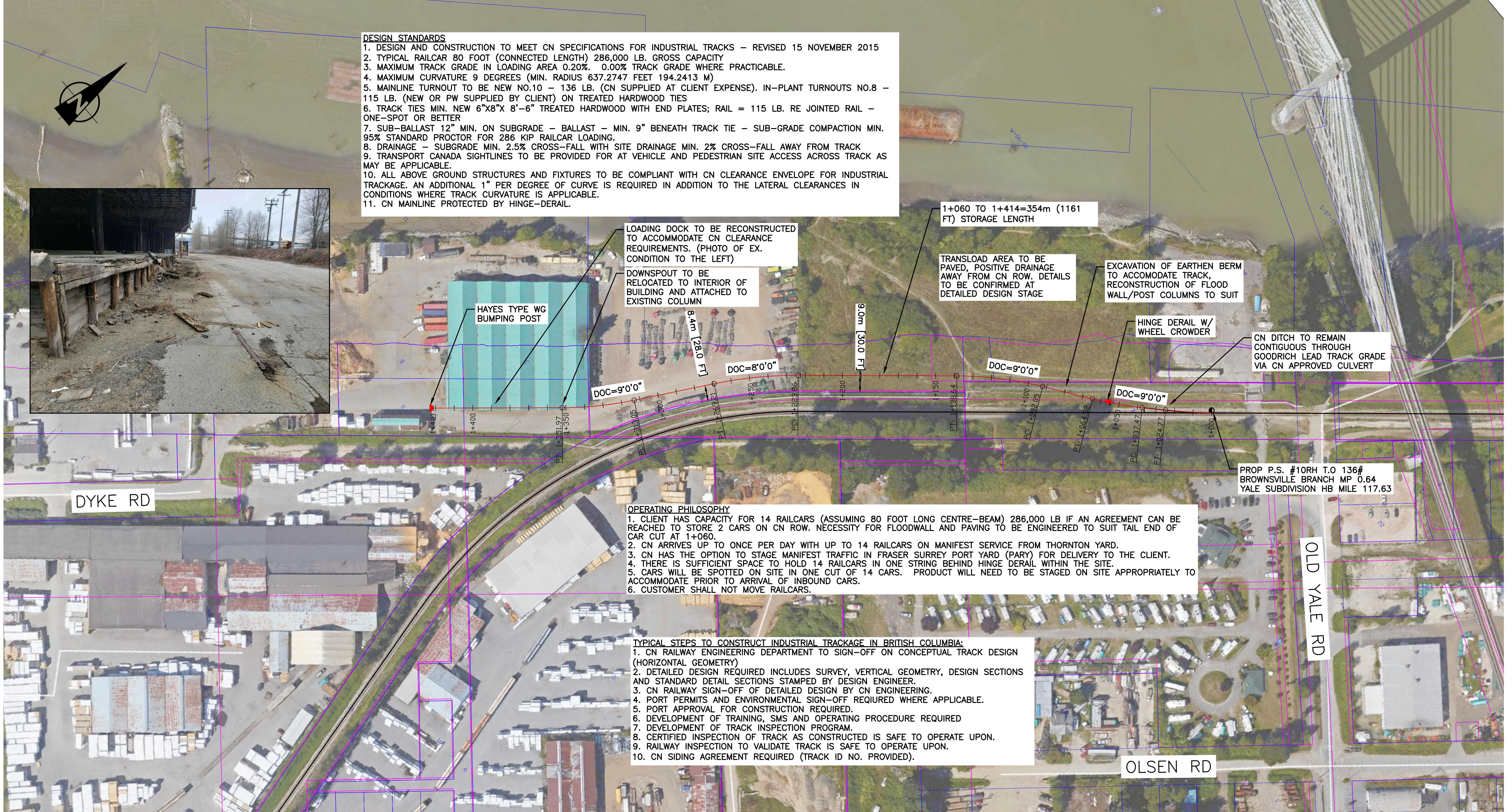
DRAWING No.	TITLE	REV	DATE	DESCRIPTION	DRN	CHK	APP
-	REFERENCE DRAWINGS	A	03/20	CONCEPTUAL DESIGN - SITE PLAN	RS	GS	GS

GOODRICH GROUP

JACOBS

PROJECT NAME		Proposed Lumber Transload		MILE 0.64	SCALE
DRAWN	R. SEWELL	BROWNSVILLE BRANCH		AS NOTED	
DESIGNED	R. SEWELL			DATE	2019.03.20
CHECKED	G. SMITH			SHEET	
APPROVED		PROJECT NO.	DRAWING NUMBER	REV	A

ORIGINAL SHEET - ANSI D 22" x 34" (558.8mm x 863.6mm)
 FILE NAME: \\COMTOWN\DRAWING\RAIL\HEAVY RAIL PROJECTS\GOODRICH GROUP\DESIGN\CSD GOODRICH CONCEPTUAL FOR CN.DWG PLOT DATE: 20 March 2019 PLOT BY: Sewell, Rob/VBC PLOTSTYLE: Shell-Local-Full.ctb



DESIGN STANDARDS

1. DESIGN AND CONSTRUCTION TO MEET CN SPECIFICATIONS FOR INDUSTRIAL TRACKS - REVISED 15 NOVEMBER 2015
2. TYPICAL RAILCAR 80 FOOT (CONNECTED LENGTH) 286,000 LB. GROSS CAPACITY
3. MAXIMUM TRACK GRADE IN LOADING AREA 0.20%. 0.00% TRACK GRADE WHERE PRACTICABLE.
4. MAXIMUM CURVATURE 9 DEGREES (MIN. RADIUS 637.2747 FEET 194.2413 M)
5. MAINLINE TURNOUT TO BE NEW NO.10 - 136 LB. (CN SUPPLIED AT CLIENT EXPENSE), IN-PLANT TURNOUTS NO.8 - 115 LB. (NEW OR PW SUPPLIED BY CLIENT) ON TREATED HARDWOOD TIES
6. TRACK TIES MIN. NEW 6"x8"x 8'-6" TREATED HARDWOOD WITH END PLATES; RAIL = 115 LB. RE JOINTED RAIL - ONE-SPOT OR BETTER
7. SUB-BALLAST 12" MIN. ON SUBGRADE - BALLAST - MIN. 9" BENEATH TRACK TIE - SUB-GRADE COMPACTION MIN. 95% STANDARD PROCTOR FOR 286 KIP RAILCAR LOADING.
8. DRAINAGE - SUBGRADE MIN. 2.5% CROSS-FALL WITH SITE DRAINAGE MIN. 2% CROSS-FALL AWAY FROM TRACK
9. TRANSPORT CANADA SIGHTLINES TO BE PROVIDED FOR AT VEHICLE AND PEDESTRIAN SITE ACCESS ACROSS TRACK AS MAY BE APPLICABLE.
10. ALL ABOVE GROUND STRUCTURES AND FIXTURES TO BE COMPLIANT WITH CN CLEARANCE ENVELOPE FOR INDUSTRIAL TRACKAGE. AN ADDITIONAL 1" PER DEGREE OF CURVE IS REQUIRED IN ADDITION TO THE LATERAL CLEARANCES IN CONDITIONS WHERE TRACK CURVATURE IS APPLICABLE.
11. CN MAINLINE PROTECTED BY HINGE-DERAIL.

LOADING DOCK TO BE RECONSTRUCTED TO ACCOMMODATE CN CLEARANCE REQUIREMENTS. (PHOTO OF EX. CONDITION TO THE LEFT)

DOWNSPOUT TO BE RELOCATED TO INTERIOR OF BUILDING AND ATTACHED TO EXISTING COLUMN

1+060 TO 1+414=354m (1161 FT) STORAGE LENGTH

TRANSLOAD AREA TO BE PAVED, POSITIVE DRAINAGE AWAY FROM CN ROW. DETAILS TO BE CONFIRMED AT DETAILED DESIGN STAGE

EXCAVATION OF EARTHEN BERM TO ACCOMMODATE TRACK, RECONSTRUCTION OF FLOOD WALL/POST COLUMNS TO SUIT

CN DITCH TO REMAIN CONTIGUOUS THROUGH GOODRICH LEAD TRACK GRADE VIA CN APPROVED CULVERT

PROP. P.S. #10RH T.O 136# BROWNSVILLE BRANCH MP 0.64 YALE SUBDIVISION HB MILE 117.63

OPERATING PHILOSOPHY

1. CLIENT HAS CAPACITY FOR 14 RAILCARS (ASSUMING 80 FOOT LONG CENTRE-BEAM) 286,000 LB IF AN AGREEMENT CAN BE REACHED TO STORE 2 CARS ON CN ROW. NECESSITY FOR FLOODWALL AND PAVING TO BE ENGINEERED TO SUIT TAIL END OF CAR CUT AT 1+060.
2. CN ARRIVES UP TO ONCE PER DAY WITH UP TO 14 RAILCARS ON MANIFEST SERVICE FROM THORNTON YARD.
3. CN HAS THE OPTION TO STAGE MANIFEST TRAFFIC IN FRASER SURREY PORT YARD (PARY) FOR DELIVERY TO THE CLIENT.
4. THERE IS SUFFICIENT SPACE TO HOLD 14 RAILCARS IN ONE STRING BEHIND HINGE DERAIL WITHIN THE SITE.
5. CARS WILL BE SPOTTED ON SITE IN ONE CUT OF 14 CARS. PRODUCT WILL NEED TO BE STAGED ON SITE APPROPRIATELY TO ACCOMMODATE PRIOR TO ARRIVAL OF INBOUND CARS.
6. CUSTOMER SHALL NOT MOVE RAILCARS.

TYPICAL STEPS TO CONSTRUCT INDUSTRIAL TRACKAGE IN BRITISH COLUMBIA:

1. CN RAILWAY ENGINEERING DEPARTMENT TO SIGN-OFF ON CONCEPTUAL TRACK DESIGN (HORIZONTAL GEOMETRY)
2. DETAILED DESIGN REQUIRED INCLUDES SURVEY, VERTICAL GEOMETRY, DESIGN SECTIONS AND STANDARD DETAIL SECTIONS STAMPED BY DESIGN ENGINEER.
3. CN RAILWAY SIGN-OFF OF DETAILED DESIGN BY CN ENGINEERING.
4. PORT PERMITS AND ENVIRONMENTAL SIGN-OFF REQUIRED WHERE APPLICABLE.
5. PORT APPROVAL FOR CONSTRUCTION REQUIRED.
6. DEVELOPMENT OF TRAINING, SMS AND OPERATING PROCEDURE REQUIRED
7. DEVELOPMENT OF TRACK INSPECTION PROGRAM.
8. CERTIFIED INSPECTION OF TRACK AS CONSTRUCTED IS SAFE TO OPERATE UPON.
9. RAILWAY INSPECTION TO VALIDATE TRACK IS SAFE TO OPERATE UPON.
10. CN SIDING AGREEMENT REQUIRED (TRACK ID NO. PROVIDED).



NOTES:

PERMIT-SEAL ENGINEERING SERVICES	DRAWING No. _____ TITLE _____ REFERENCE DRAWINGS	A 03/20 CONCEPTUAL PLAN REV DATE DESCRIPTION DRN CHK APP	GOODRICH GROUP JACOBS	PROJECT NAME Proposed Lumber Transload	MILE 0.64 SCALE AS NOTED
	R. SEWELL DESIGNED	R. SEWELL CHECKED	G. SMITH APPROVED	BROWNSVILLE BRANCH CONCEPTUAL PLAN	DATE 2019.03.20 SHEET
	PROJECT NO. _____ DRAWING NUMBER _____	REV _____	REV _____	REV _____	SCALE _____
	REFERENCE DRAWINGS	REVISIONS	REVISIONS	REVISIONS	REVISIONS