

BALLAST SECTION FOR CONCRETE TIES IN CWR TRACK

BALLAST SECTION FOR WOOD TIES IN CWR TRACK

BALLAST SECTION FOR STEEL TIES IN CWR TRACK

BALLAST IN CUBIC YARDS PER MILE

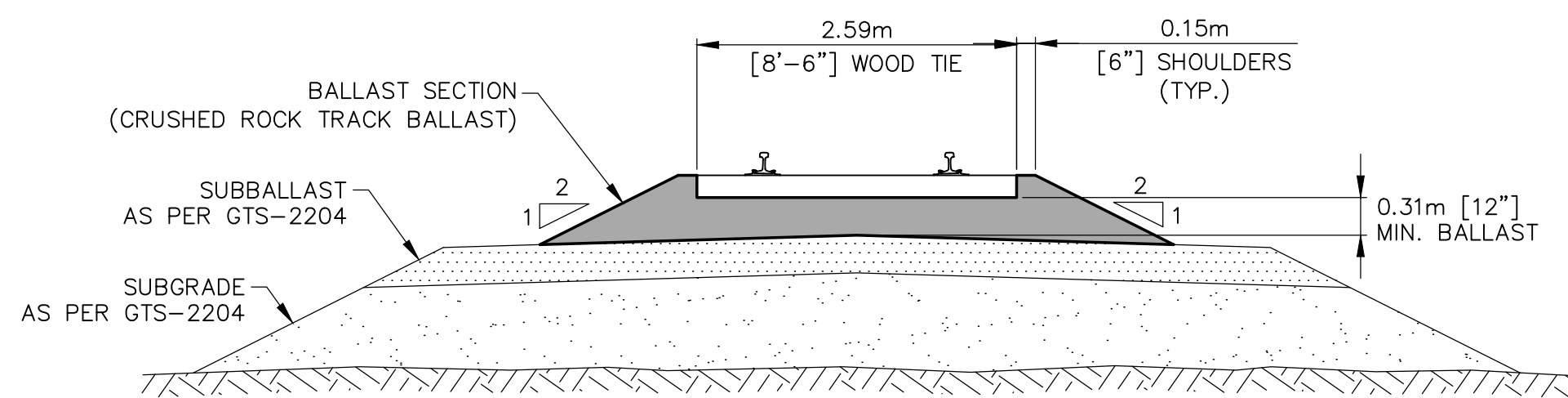
TYPE & QUANTITY TIE/MILE	DEPTH OF BALLAST UNDER TIE										
	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"	
CONCRETE (2640)	2000	2190	2480	2680	2980	3190	3510	3780	4060	4350	
WOOD # 1 (3110)	1900	2090	2380	2580	2890	3100	3420	3690	3970	4250	
STEEL (2640)	850	1010	1250	1420	1680	1860	2130	2360	2600	2840	

BALLAST IN CUBIC METERS PER KILOMETER

TYPE & QUANTITY TIE/KILOMETER	DEPTH OF BALLAST UNDER TIE (m)										
	0.080	0.100	0.130	0.150	0.180	0.200	0.230	0.255	0.280	0.305	
CONCRETE (1640)	950	1040	1180	1280	1420	1520	1670	1800	1930	2070	
WOOD # 1 (1933)	900	990	1130	1230	1370	1470	1630	1760	1890	2020	
STEEL (1640)	410	480	600	680	800	880	1010	1120	1240	1350	

NOTES:

- 1.A. BALLAST SECTIONS SHOWN ON THIS PLAN ARE FOR NEW TRACK CONSTRUCTION AND REHABILITATION OF EXISTING TRACKS.
- 1.B. THE TYPE OF BALLAST USED AND THE MANNER IN WHICH IT IS PLACED AND MAINTAINED MUST BE IN ACCORDANCE WITH METROLINX CRUSHED ROCK TRACK BALLAST SPECIFICATION, LATEST ISSUE.
2. THE SLOPES SHOWN IN THIS PLAN ARE THE MAXIMUM (STEEPEST) WHICH SHALL BE USED. SLOPES MAY BE FLATTENED TO THE LINE OF REPOSE OF THE MATERIAL, IF NECESSARY, TO ACHIEVE STABILITY.
3. ALL BALLAST QUANTITIES SHOWN PROVIDE AN ALLOWANCE OF 15% FOR SHRINKAGE.
4. TO AVOID CREATING A RESTRICTED OVERHEAD CLEARANCE OR MAKING AN EXISTING RESTRICTED OVERHEAD CLEARANCE WORSE, A SURVEY SHOULD BE MADE BEFORE UNDERTAKING A BALLAST LIFT. SEE GTS-3003 FOR CLEARANCES AND REGULATIONS.
5. SIDINGS ADJACENT TO MAINLINE MUST NOT BE HIGHER THAN MAINLINE OR MORE THAN 3" (0.076) LOWER.
6. FOR "TYPICAL EMBANKMENTS & EXCAVATIONS TRACK BEDS FOR MAIN TRACK," SEE GTS-2204.
7. ON THE HIGH SIDE OF CURVES AT LOCATIONS WHERE APPROVED BY THE DIRECTOR, ENGINEERING - TRACK, THE BALLAST SHOULDER WIDTH MAY BE INCREASED TO 18".



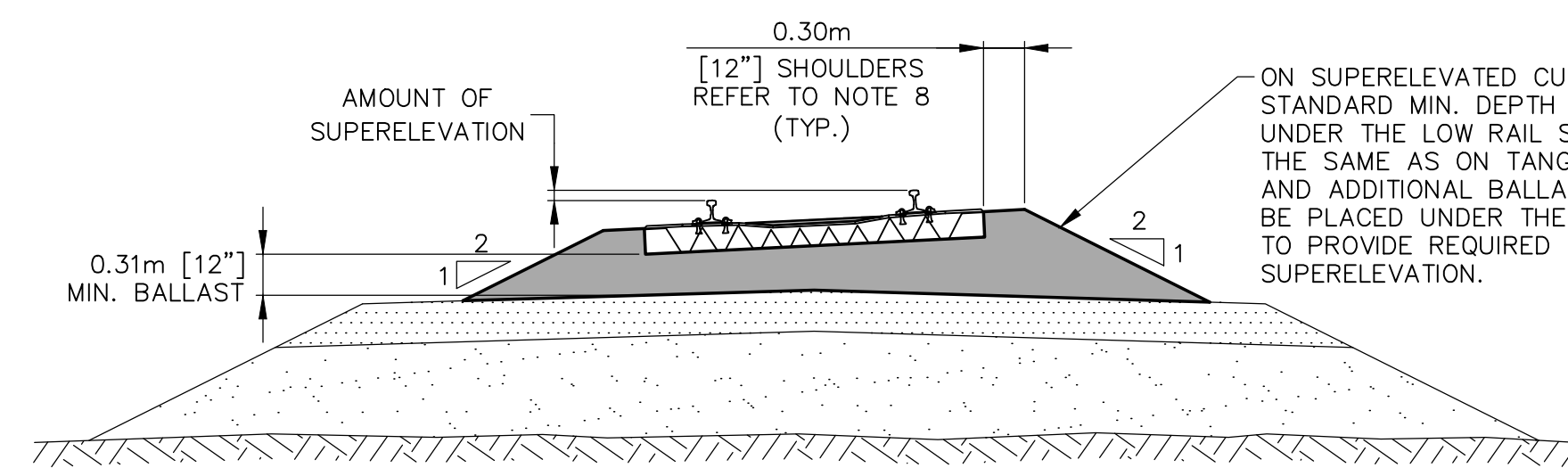
BALLAST SECTION FOR WOOD TIES IN JOINTED TRACK

BALLAST IN CUBIC YARDS PER MILE

TYPE & QUANTITY TIE/MILE	DEPTH OF BALLAST UNDER TIE										
	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"	
WOOD # 1 (3110)	1690	1870	2140	2330	2610	2810	3110	3360	3630	3890	
WOOD # 2 (1933)	1790	1970	2240	2430	2720	2910	3210	3470	3730	4000	

BALLAST IN CUBIC METERS PER KILOMETER

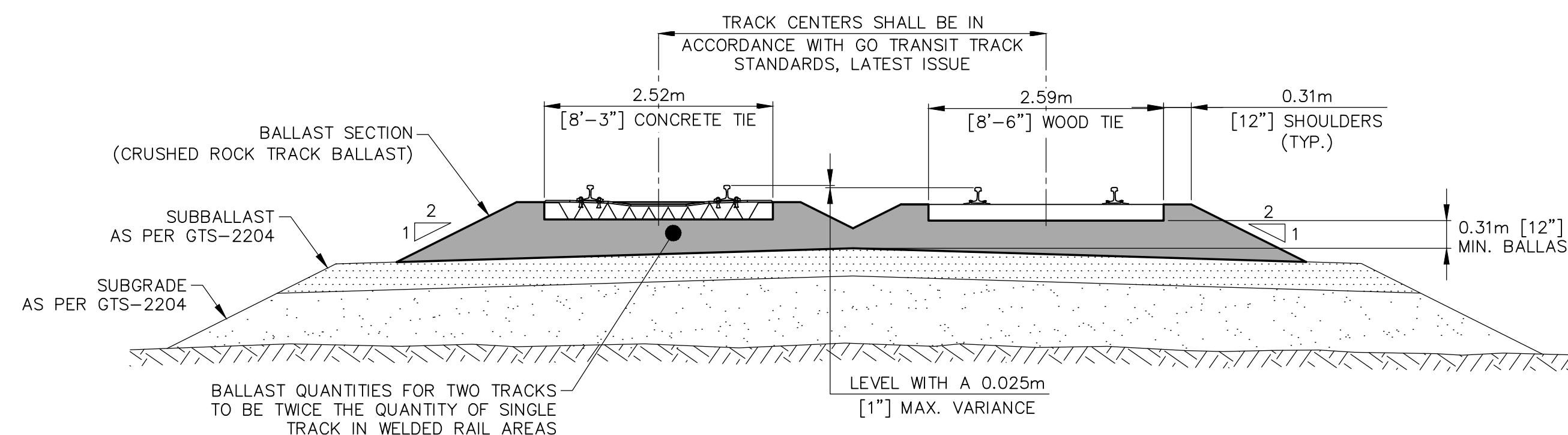
TYPE & QUANTITY TIE/KILOMETER	DEPTH OF BALLAST UNDER TIE (m)										
	0.080	0.100	0.130	0.150	0.180	0.200	0.230	0.255	0.280	0.305	
WOOD # 1 (1933)	800	890	1020	1110	1240	1340	1480	1600	1730	1850	
WOOD # 2 (1933)	850	940	1070	1160	1290	1390	1530	1650	1780	1900	



CURVED TRACK WITH SUPERELEVATION

BALLAST IN CUBIC YARDS PER 100 FEET AMOUNT OF SUPERELEVATION					
1"	2"	3"	4"	5"	
0.00	0.96	5.94	11.36	17.38	

BALLAST IN CUBIC METERS PER 100 METERS AMOUNT OF SUPERELEVATION (m)					
0.025	0.050	0.075	0.100	0.125	
0.00	2.40	14.90	28.50	43.60	



BALLAST SECTION FOR TWO MAIN TANGENT TRACKS IN CWR TRACK

METRIC CONVERSION: 1 inch=25.4mm, 1 foot=304.8mm

No.	Date	Revision	By	Approved
2	23/10/31	UPDATED BALLAST DIMENSIONS AND QUANTITIES, ADDED STEEL TIE SECTION		
1	18/07/27	ADDED IMPERIAL TO METRIC CONVERSION NOTE		

Standard / TYPICAL BALLAST SECTIONS

Drawn	NA	Checked	SJ	Approved	
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Date	OCTOBER 31/2023	Plan Number	GTS-2205	Rev	2
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