



T R A M W A Y B O A R D.

SPECIAL WORK.

ABSTRACT OF LINES IN NORTHERN AREA.

SHOWING REFERENCE LETTERS AND NUMBERS, IN RESPECT TO ATTACHED DATA.

ROUTE SECTION LETTERS IN MAP	LINE NO.	REFERENCES IN SKETCH - PLANS AND MAP	LOCATION OF SPECIAL WORK
A	4	A6 to A11	From Junct. Gertrude St. & Nicholson St. TO Terminus Bourke St.
B	4	A1 " A5	" Terminus Nicholson St. TO Junction Gertrude and Nicholson Streets.
C	4	B1 " B7	" do Queen's Parade TO Curve & Junction Gertrude & Nicholson Sts.
D	2	A.1	Shunts - Terminus Collins Street.
E	2	A2 to A5	From Collins St. (adjacent to Shunts) TO Shunts Gisborne St.
F	2	A6 to A7	" Curve Gisborne St. (opp Grey St.) to Curve Gisborne St. and Victoria Pde.
G	2	B1 to B7	" Shunts Terminus Victoria St. TO Slight Curve opp. Fitzroy E.H.
H	2	C1 to C7	" Shunt Terminus St. George's Rd. TO Curve and Junct ⁿ Brunswick St. and Victoria Parade.
J	1	1 to 12.	" Shunts Terminus Bridge Rd. Richmond TO Shunts Term. Spencer Street
K	3	6	Three (3) Shunts Elizabeth Street
L	3	5	Emergency Shunt Elizabeth St. (Nr. Lonsdale St.)
M	3	1 to 4	Shunts Terminus Sydney Rd. TO Em. Shunt Elizabeth St. (Nr. Victoria St.)
N	5	B1 to B9	Shunt Term. Abbotsford St. TO Curve and Junct. (Lonsdale St. with Elizabeth St.)
O	5	A1 to A7	Shunts Term. Flemington Rd. TO Curve & Junct. Victoria St. with Elizabeth Street
P	8	3	Em. Shunts Swanston St. (opp. Flinders St. Station)
R	8	1 to 2	Shunts Term. Swanston St. to Curve opp. Franklin St.
S	6	3 to 7	Curve, Junction of Elgin St. and Lygon St. TO Curve and Junction, Lonsdale St. and Swanston St.
T	6	1 to 2	Shunt, and "Turn-In" and "Turn-Out" Car Depot Johnston St.
U	7	1 to 2	Shunts, Terminus Rathdown St. TO Curve and Junction Rathdown and Elgin Sts.
V	10	1 to 3	Curve and Junction, Collins and Market Streets TO Curve Moray Street

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(1)

TWO SHUNTS AT TERMINUS, ALSO TURN-IN TO
TRAMCAR DEPÔT · BRIDGE ROAD · RICHMOND.
LINE 1. PLAN 14

SCHEDULE OF SHUNTS, CROSSINGS AND CURVES

TRAMWAY BOARD.

SPECIAL TRACK WORK.

RICHMOND LINE.

No. 1.

REFERENCES OF ABBREVIATIONS ON PLANS.

From Terminus Bridge Road (near Electric Tram Terminus)

ABBREVIATIONS

DETAILS

1.	Or.R.Ch.	denotes	Ordinary Rail Check.
2.	Ch. of S.C.R.	"	Check of Special Check Rail
3.	Ch. of S.C.R., V.B. Worn	"	Check of Special Check Rail Very Badly Worn
4.	Ch. of S.C.R., Sl. Worn	"	Check of Special Check Rail Slightly Worn
5.	Hd. B.Gr.	"	Side of Head Badly Grooved.
6.	Hd. Sl. Gr.	"	Side of Head Slightly Grooved.
7.	Or.R.Ch. Worn	"	Ordinary Rail-Check Worn.
8.	Or.R.Ch. Sl. Worn	"	Ordinary Rail-Check Slightly Worn
9.	R. Pump	"	Rail Pumping
10.	R. Tr. 90 Mils Low.	"	Rail Tread 90 Mils lower than wheel-gauge.
11.	Clearance = .136	"	Clearance (taken with Wheel-Gauge) between flange and bottom of Groove of Rail.
12.	R. Bottom	"	Rail bottoming on bottom of Groove.
13.	Gauge Tight up to (1/4")	"	Gauge Narrower (by 1/4") than Standard Gauge of Tram Rails = 4' 8 1/2".
14.	Gauge Wide up to (3/8")	"	Gauge Wider (by 3/8") than Standard Gauge of Tram Rails = 4' 8 1/2"
15.	R.	"	Rolling Place.
16.	B.	"	Braking-Place.
17.	R. & B.	"	Rolling and Braking
18.	R. & L.B.	"	Rolling and Light Braking

NOTE. Super-Elevation is always on INNER Rails, unless otherwise stated.

(1)

TWO SHUNTS AT TERMINUS, ALSO TURN-IN TO
TRAMCAR DEPÔT · BRIDGE ROAD · RICHMOND.
LINE 1. PLAN 1A

SCHEDULE OF SHUNTS, CROSSINGS AND CURVES
ON TRAMWAY LINES.

RICHMOND LINE.

No. 1.

From Terminus Bridge Road (near Electric Tram Terminus)

To do Spencer Street.

1. { Shunts at Terminus
 ("Turn-In" and "Turn-Out" at Depot.) }
2. Curve, Bridge Road (opposite Church Street)
3. Curve, do (" Hoddle St. near Richmond Engine House)
4. Curve, Wellington Parade, (opposite Simpson Street)
5. Emergency Shunts, do (nearly opp. Simpson Street)
6. Curve, Wellington Parade (opp. Spring Street).
7. Emergency Shunt, Flinders St. (opp. Rutters Shop)
8. do Flinders St. (opp. Met. Gas Coy's Offices)
9. Right-Angle Crossing Flinders St. with Swanston Street.
10. do do Flinders St. with Market Street.
11. do Curve Junction of Flinders St. with Spencer St.
12. Shunts (three) at Terminus - Spencer Street

TOTAL. ~~13 Separate Sketch Plans.~~

11. 1916.

(1)

TWO SHUNTS AT TERMINUS, ALSO TURN-IN TO
TRAMCAR DEPÔT · BRIDGE ROAD · RICHMOND.
LINE 1. PLAN 1^A

LINE 1.

DESCRIPTION 1. A.

BRIDGE ROAD TERMINUS - RICHMOND.

Dummy and Trailer Shunts, and

"Turn-In" to Tramcar Depot.

1. The Curved Rails of the two Shunts, also of "Turn-in" to Depot are worn, the checks of Special Check rails of Inner Curves being worn and the heads of opposite outer rails being grooved, as a result of the above Check-wear.

2. Eight of 10 heels of Points to Shunt-rails, and "Turn-in" are of bad fit and rocking, and in several cases, there is considerable diagonal wear on rail-treads. The two Points to "Turn-In" to Car Depot are rocking badly, and the rail-tread of Casting is very badly grooved diagonally. All Tongues are worn to varying degrees.

The Casting of Point of Dummy-Shunt, on No. 1 Up-Rail is broken through both lines of rails.

3. At the intersection of Tram-rails with the Points and Crossings, in many cases, hammering is taking place.

4. At the intersections of Tram-rails with Slot-rails, hammering is taking place to varying degrees. At the intersection of Slot-rail with No. 2 Up-rail, the bottom of rail-groove is cracked.

5. The joints of rails, within 1 ft. 6 ins. of crossing intersections and 12 ins. of Points, are wide, varying from $3/16"$ to $3/4"$, and, in several cases are hammered.

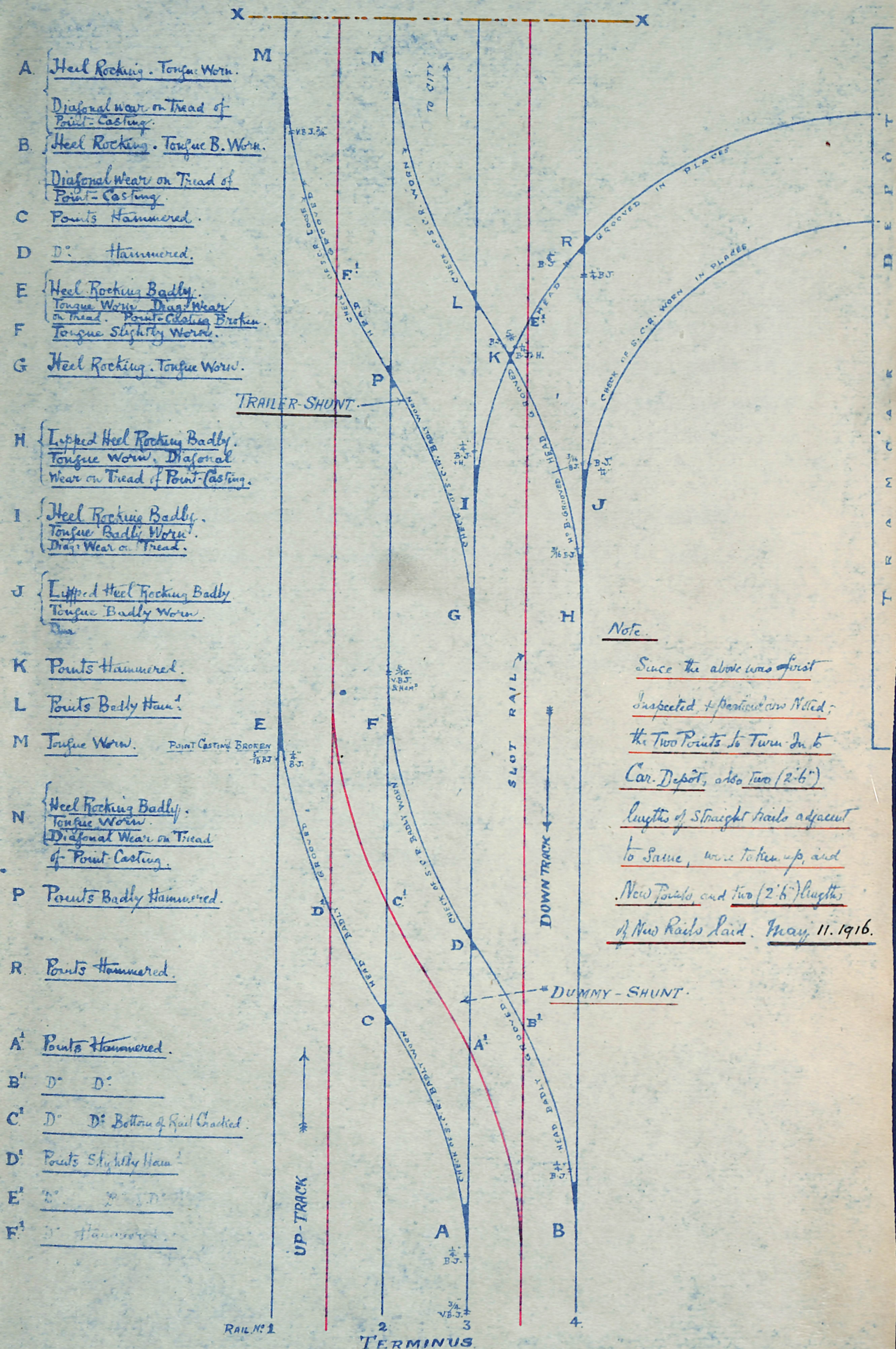
NOTE - Since this portion of track was first inspected, and the above particulars noted, the two old Points to "Turn-In" to Depot, also two short lengths of straight rail (each 2'6") adjacent to Points, have been taken up and removed and New Points, also two new (2'6") lengths of straight rails have been fixed. This was carried out on May 11th, 1916.

DATE OF FIRST INSPECTION - MAY 11th, 1916.

DATE OF LAST INSPECTION - JULY 4th, 1916.

(1)

TWO SHUNTS AT TERMINUS, ALSO TURN-IN TO
TRAMCAR DEPÔT · BRIDGE ROAD · RICHMOND.
LINE 1. PLAN 1⁴



SLIGHT CURVE · "DEVIATION"

BRIDGE ROAD · RICHMOND ·

NEAR CAR DEPOT.

LINE 1.

LINE 1.

DESCRIPTION 1B.

SLIGHT CURVE ("DEVIATION") BRIDGE ROAD, RICHMOND

(opp. River Street).

NO. 1 RAIL (UP TRACK).

The Special Check to Ordinary rail (for a length of about 9 yds.) is worn to varying degrees. A short length of ordinary rail-check is very badly worn. The tread is 10 Mils lower than wheel gauge, and rail is bottoming for about 6 yards.

NO. 3 RAIL (DOWN TRACK).

The ordinary rail-check is worn for a length of about 6 yards, whilst the side of head, for a distance of about 3 yards, is badly grooved.

NOS. 2 and 4 RAILS.

The sides of heads of Tram rails are grooved to varying amounts, and in places very badly so.

GAUGE between Nos. 1 and 2 Rails is $1\frac{1}{2}$ " too wide.

CLEARANCES, between flange and bottom of groove; also

SUPER-ELEVATIONS, taken July 22nd.1916.

	<u>CLEARANCES</u>	<u>SUPER-ELEVATIONS.</u>
No. 1 Rail ...	0"	
No. 2 Rail ...	.093"	18"
No. 3 Rail ...	.326"	
No. 4 Rail ...	.264"	1"

DATES OF CURVE RAIL RENEWALS.

Nos. 1 & 2 Rails Decr. 28th.1900
Nos. 3 & 4 " March 31st.1914.

DATE first inspected

May 11th.1916

DATE last Inspected

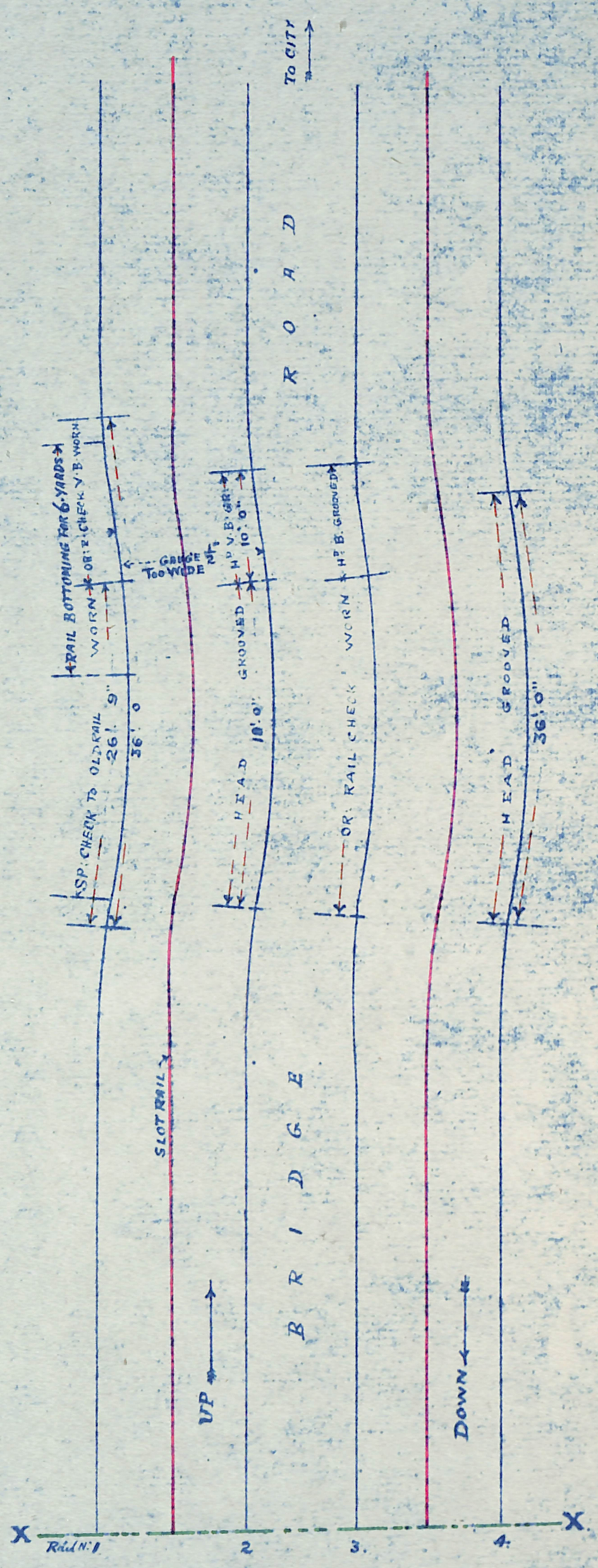
July 4th.1916.

SLIGHT CURVE · "DEVIATION"

BRIDGE ROAD · RICHMOND ·

NEAR CAR DEPÔT.

LINE 1.
PLAN. 1^B



CURVES · EAST & WEST OF CHURCH ST ·

BRIDGE ROAD · RICHMOND ·

LINE 1.

DESCRIPTION 2.

(A) BRIDGE ROAD Church Street. EAST CURVE.
(Near Richmond Town Hall).

1. The ordinary and special rail-checks to Nos. 2 and 4 Rails, are worn to varying degrees. The check of No. 2 Rail is badly worn
The heads of opposite rails (Nos. 1 and 3) are grooved to
The heads of opposite rails (Nos. 2 and 4) are grooved to
varying amounts as a result of the above check-wear. The treads
of these two rails are beaded over in places, presumably from heavy
wear.

No. 3 Rail (Near Town Hall) is bottoming in places.

Dates of Curve Rail Renewals. (East Curve)

Nos. 2 and 3 Rails	April 21st., 1904
Nos. 1 and 4 Rails	June 30th., 1913.
Nos. 2 and 3 Rails	April 21st., 1904.
Nos. 1 and 4 Rails	June 30th., 1913.

Date of First Inspection - May 11th. 1916.

Date of Last Inspection - July 4th. 1916.

Date of Last Inspection - July 4th. 1916.

CURVES · EAST & WEST OF CHURCH S^T ·

BRIDGE ROAD · RICHMOND ·

LINE 1
PLAN 2

LINE 1.

DESCRIPTION 2.

(B) BRIDGE ROAD. CHURCH STREET. WEST CURVE.

The Ordinary and Special Rail-Checks to Nos. 2 and 4 Rails, E.S.A. BANK ·
are worn to varying degrees. The Check of No. 2 Rail is badly worn
for a length of about ten feet.

The heads of opposite rails (Nos. 1 and 3) are grooved to
varying amounts as a result of the above check-wear. STREET ·

Nos. 3 and 4 Rails, opposite E.S. & A. Bank, are bottoming.
Braking spot.

No. 3 Rail & Super-Elevation $1\frac{1}{4}$ "

No. 1 Rail .171" Clearance, between flange and bottom of groove.

No. 2 Rail .295" Clearance, between flange and bottom of groove
and Super-Elevation $1\frac{1}{4}$ ".

Dates of Curve Rail Renewals (West Curve).

Nos. 2 and 3 Rails April 21st., 1904.

Nos. 1 and 4 Rails June 30th., 1913.

EAST CURVE

Date of First Inspection - May 11th. 1916.

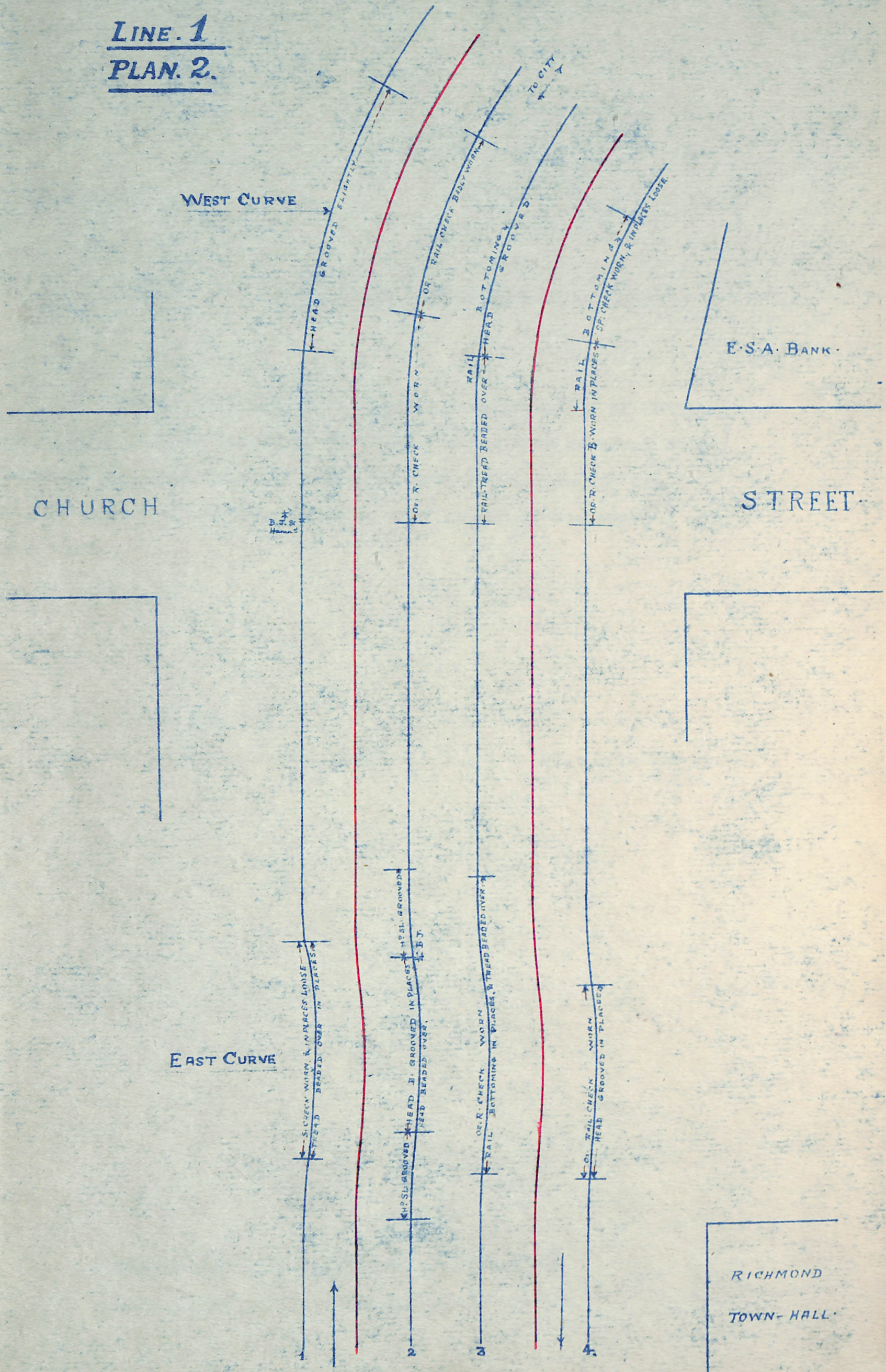
Date of Last Inspection - July 4th. 1916.

RICHMOND

TOWN-HALL ·

BRIDGE ROAD · RICHMOND ·

PLAN. 2.



CURVE · BRIDGE ROAD · RICHMOND ·

OPP: · HODDLE ST ·

LINE 1
PLAN 3.

LINE 1.

DESCRIPTION 3.

CURVE · - · BRIDGE ROAD · (opposite Hoddle Street)

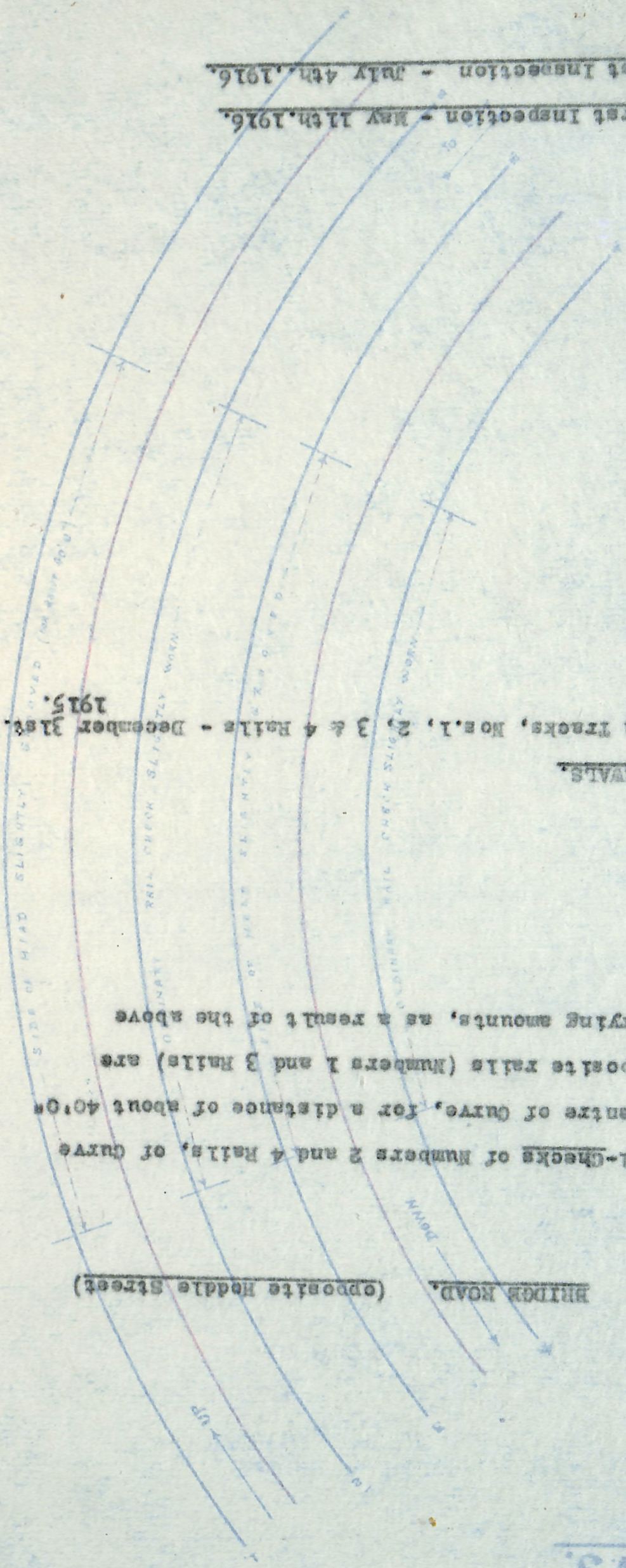
The ordinary Rail-Checks of Numbers 2 and 4 Rails, of Curve are slightly worn in centre of Curve, for a distance of about 40' whilst the heads of opposite rails (Numbers 1 and 3 Rails) are slightly grooved to varying amounts, as a result of the above check wear.

DATES OF CURVE RAIL RENEWALS.

Rail renewal both tracks, Nos. 1, 2, 3 & 4 Rails - December 31st, 1915.

Date of First Inspection - May 11th, 1916.

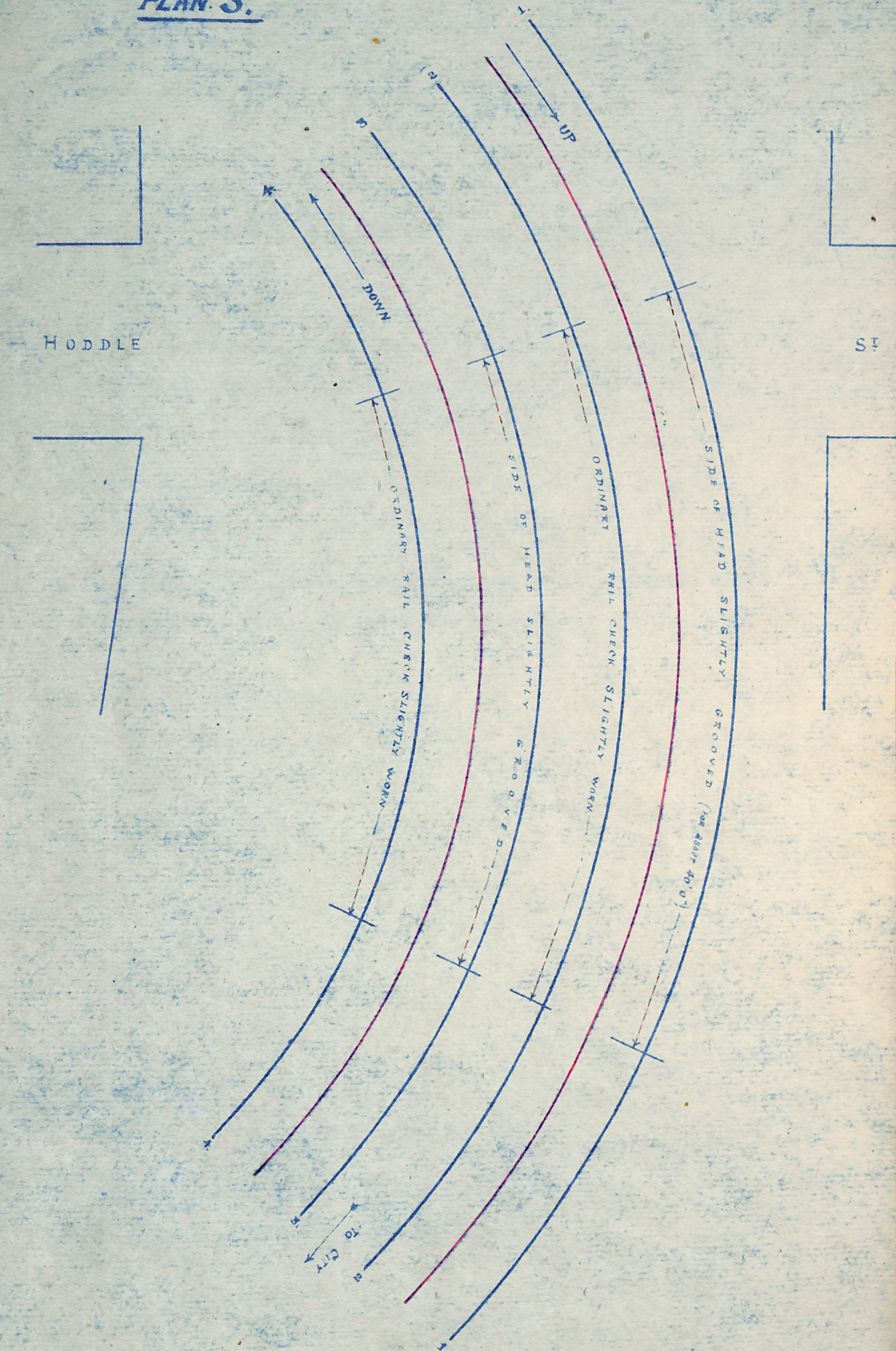
Date of Last Inspection - July 4th, 1916.



CURVE · BRIDGE ROAD · RICHMOND ·

— OPP: HODDLE ST —

LINE 1
PLAN 3.



CURVE · WELLINGTON PARADE.

RICHMOND · OPP · SIMPSON ST

LINE 1.

LINE 1.
PLAN 4

DESCRIPTION 4.

CURVE. WELLINGTON PARADE. (Opposite Simpson St.)

1. The Ordinary rail-checks of Nos. 1 and 3 Rails, are badly worn for greater portion of length of curve, and Nos. 1, 3 and 4 rails are bottoming in places.
2. The heads of opposite rails (Nos. 2 and 4 Rails), are grooved badly, in places, as a result of the above check wear.
3. There is a wide joint (1/4") at Richmond end of No. 4 Curved Rail, where it adjoins straight rail, and rails are hammered at joint.

Date of Curve Rail Renewals.

Full Renewal both Tracks. Feby. 4th. 1906. Rails Nos. 1, 2, 3 & 4.

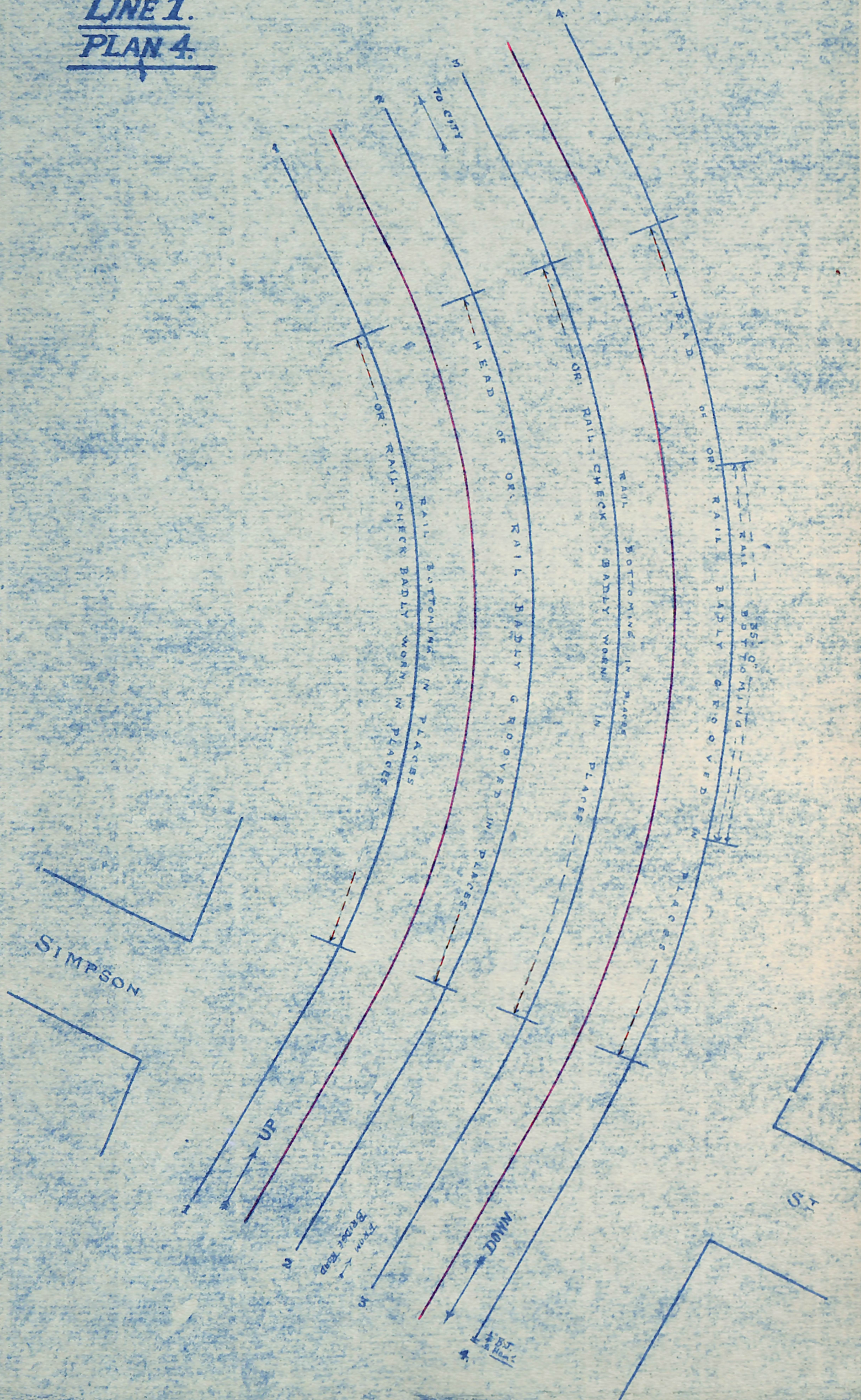
Date of first Inspection - May 11th. 1916.

Date of Second Inspection - July 4th. 1916.

CURVE · WELLINGTON PARADE.

— RICHMOND · OPP: SIMPSON ST —

LINE 1.
PLAN 4.



EMERGENCY SHUNTS - WELLINGTON PARADE -

NEAR JUNCTION OF SIMPSON ST

LINE 1.

PLAN 5.

LINE 1.

DESCRIPTION 5.

EMERGENCY SHUNTS (2).

WELLINGTON PARADE.

(near Junction of Simpson St.)

1. The Curved rails of Trailer-Shunt are worn to varying amounts, the Special Checks to ordinary rails of the two Inner Curves being worn. On one of the rails the Special Check is loose and ineffective in places.

The heads of the two Outer Curves are grooved, as a result of the above Check-wear.
2. Five of the 8 heels of Points are of loose fit, and rocking. In several cases they are below level of rails, resulting in excessive hammering. There is also in several cases, considerable diagonal wear on rail-treads adjacent to Points.

Tongues are worn to varying amounts.
3. On No. 1 Rail (Up Track) Two lengths of rails, (near points of Dummy and Trailer-Shunts), are pumping.
4. On No. 3 Rail (Down Track) One length of rail (between point of Dummy-Shunt and Slot-rail) is pumping, and Paving on each side of rail is loose.
5. Nos. 1 and 2 Rails (Up Track) adjacent to Points of Dummy-shunt, are $3/16"$ and $1/8"$ respectively, out of alignment.
6. At the intersections of Tram-rails with the points and crossings, in many cases there is bad hammering, and the fish-plates, presumably, loose.
7. At the intersections of Tram-rails with Slot-rails, hammering is taking place to varying degrees.
8. The joints of rails, within $1'6"$ of intersections, and $12"$ of Points, are wide, varying $1/8"$ to $7/16"$, and in many cases are hammered.

Date of 1st. inspection - May 11th. 1916.

Date of 2nd. Inspection - July 4th. 1916.

CURVE · WELLINGTON PARADE ·

— OPPOSITE SPRING STREET —

LINE 1
PLAN 6.

LINE 1.

DESCRIPTION 6.

CURVE.

FLINDERS STREET.

(opposite Spring Street).

The Special Checks to Check-rails, also ordinary Rail-Checks to Nos. 1 and 3 Rails, are worn to varying amounts, and in places ineffective.

The heads of opposite rails (Nos. 2 and 4) are grooved to varying degrees, and in places very badly so, as a result of the above Check-wear.

Clearances between flange and bottom of groove are as follows :-

No. 1 - .295. No. 2 - .124. No. 3 - .360 No. 4 - 0

No. 4 rail is bottoming for 20 yds.

Dates of Curve Rail Renewals.

Nos. 2 and 4 Rails.

Feb. March, 1903.

No. 1 Rail

June 30th. 1915.

No. 3 Rail

Dec. 31st. 1915.

Date of 1st. Inspection - May 11th. 1916.

Date of 2nd. Inspection - July 4th. 1916.

CURVE · WELLINGTON PARADE ·

— OPPOSITE SPRING STREET · —

LINE 1
PLAN 6.

