

CURVE AT JUNCTION OF
PLENTY R^D AND QUEEN'S P^{DE}

LINE 4.

DESCRIPTION B.2.

CURVE and JUNCTION of PLENTY ROAD
and QUEEN'S PARADE.

1. The Special Checks to Check-rails of No. 2 Rail (Up Track) are slightly worn; whilst the special checks of No. 4 Rail (Down Track) are badly worn in places.
2. The sides of heads of Nos. 1 and 3 Rails are grooved to varying amounts, and badly so in places.

Length of Curve 103' 0"

DATE OF CURVE RAIL RENEWALS.

Full Renewal, both tracks, Rails 1, 2, 3 and 4 December 31st. 1914.

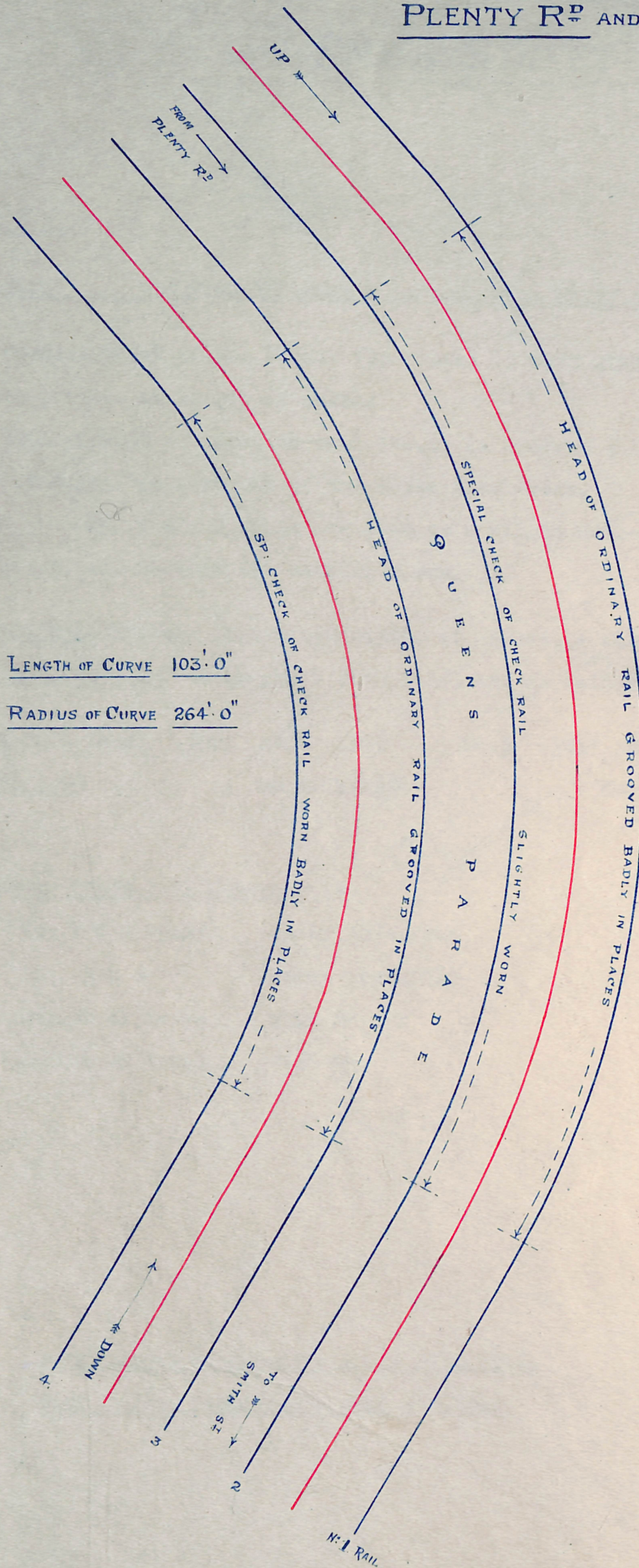
Length of Curve ... 103' 0".
Radius of Curve ... 264' 0"

DATE First Inspected - April 27th. 1916.

DATE Last Inspected - July 4th. 1916.

UP
PLENTY RD
QUEEN'S
PARADE
SPECIAL CHECK OF CHECK RAIL
SLIGHTLY WORN
RAIL GROOVED IN PLACES
BADLY IN PLACES
TOE PLIMS
N
H-I RAIL

CURVE AT JUNCTION OF
PLENTY R^D AND QUEEN'S P^{DE}



CURVE JUNCTION OF QUEENS PARADE WITH SMITH STREET

LINE 4.

DESCRIPTION^B 3.

CURVE ... JUNCTION OF QUEEN'S PARADE, with SMITH STREET.

1. The special Check of No. 1 Rail (Up Track) is worn slightly, for greater portion of length of curve.
2. The side of head of opposite rail (No.2) is grooved slightly in centre of Curve, as a result of the above check-wear.

NOTE ! Nos. 1 and 2 Rails are laid on a slight down-gradient (to City), and Cars "drift" through Curve.

CLEARANCES, between flange and bottom of groove, - also
SUPER-ELEVATIONS, taken April 26th.1916, are as follows :-

CLEARANCES - No.1 Rail	.287"	No.2	.279"	No.3	.341"	No.4	.279"
SUPER-ELEVATIONS		No.2	1 3/8"			No.4 Rail	1 5/8"

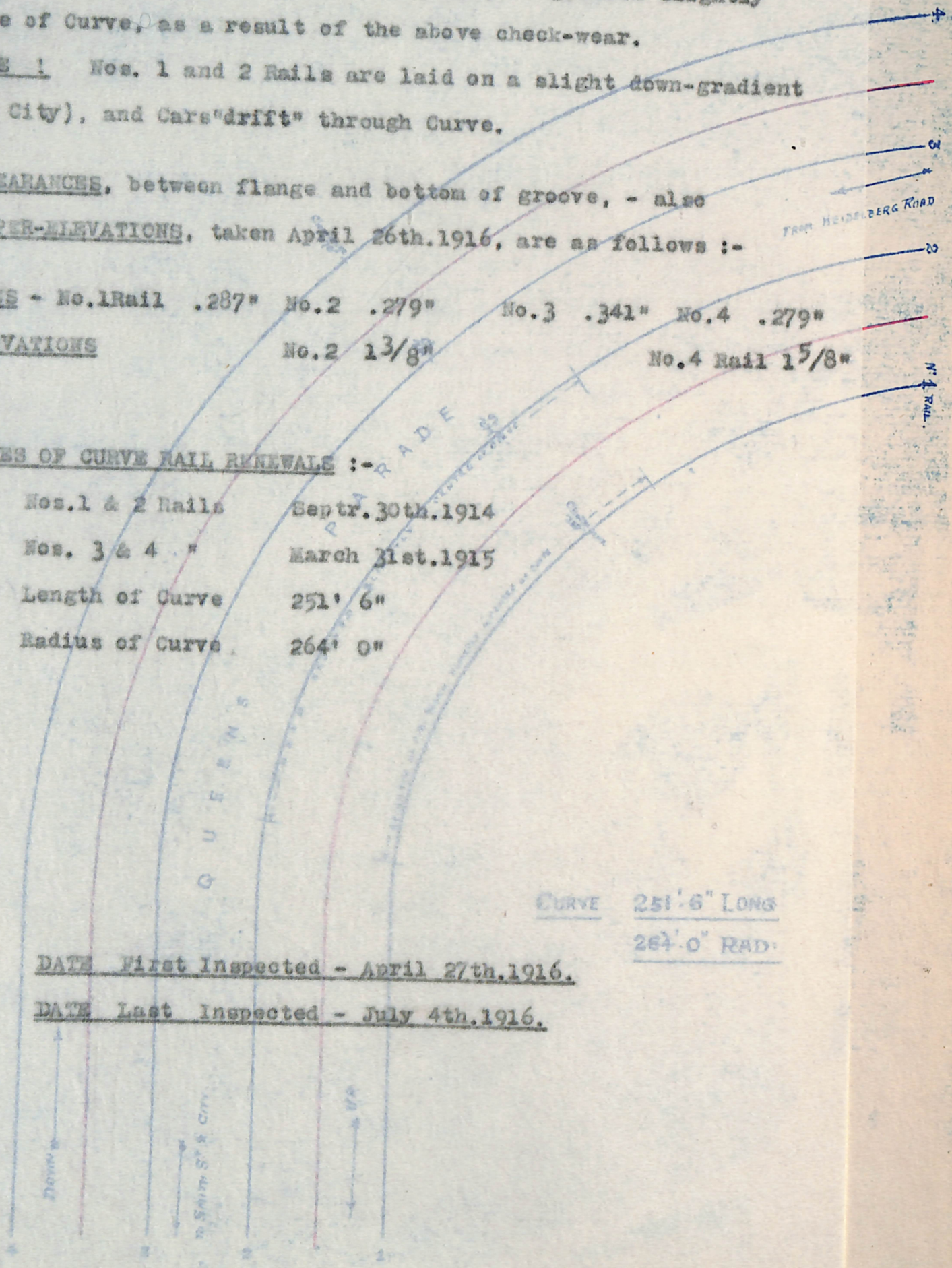
DATES OF CURVE RAIL RENEWALS :-

Nos.1 & 2 Rails	Septr.30th.1914
Nos. 3 & 4 "	March 31st.1915
Length of Curve	251' 6"
Radius of Curve	264' 0"

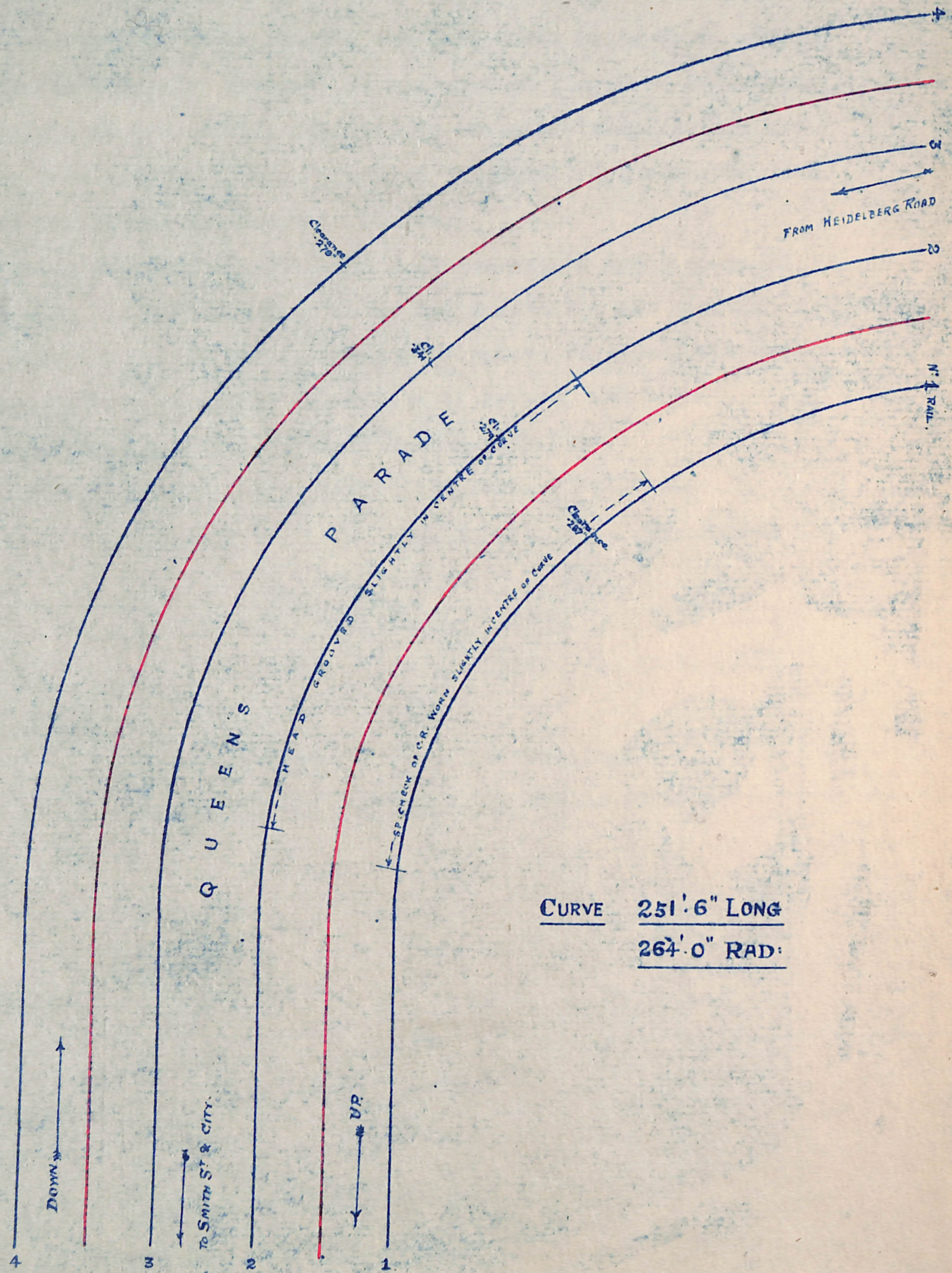
CURVE 251' 6" LONG
264' 0" RAD.

DATE First Inspected - April 27th.1916.

DATE Last Inspected - July 4th.1916.



CURVE JUNCTION OF QUEENS PARADE WITH SMITH STREET



CURVE 251'6" LONG
264'0" RAD:

CROSSING - JOHNSTON AND

SMITH STREETS

LINE 4.

DESCRIPTION B4.

RIGHT-ANGLE CROSSING - JUNCTION of SMITH ST. with JOHNSTON ST.

There is considerable wear on Tram-rails at the intersections, resulting in excessive hammering; and in several cases the rails are bottoming at these places.

2. The Tram-rails, between Crossing-intersections and Slot-rails, are worn for a portion of their length, the Rail Check being worn, and the opposite Rail-head being grooved, as a result of the above check-wear.

3. The Joints of Tram-rails, adjacent to Crossing-intersections are wide, (varying from 1/4" to 1/2"). Many of the Joints are hammered, and presumably the fishplates are loose in places.

4. The Paving adjacent to Slot-rail (between Nos. 1 and 2 up-rails, Smith St.) on N.E. side of Crossing, is in bad condition, and worn in patches, for about 20 yards, due to opening up paving to adjust Tie-bars.

CLEARANCES between flange and bottom of groove, and

SUPER-ELEVATIONS, taken April 25th. and 26th. 1916.

The two sets of Tests on the SMITH STREET LINE, are as follows :-

No. 1 Rail	No. 2 Rail	No. 3 Rail	No. 4 Rail
CLEARANCES.			
S.W. .062	S.W. .155	S.W. .202	S.W. .171
N.E. .171	N.E. .217	N.W. .171	N.W. .155
SUPER-ELEVATIONS.			
	S.W. 0 (Rolling)	S.W. 0 (Rolling)	

The two Sets of Tests on the JOHNSTON STREET LINE, are as follows :-

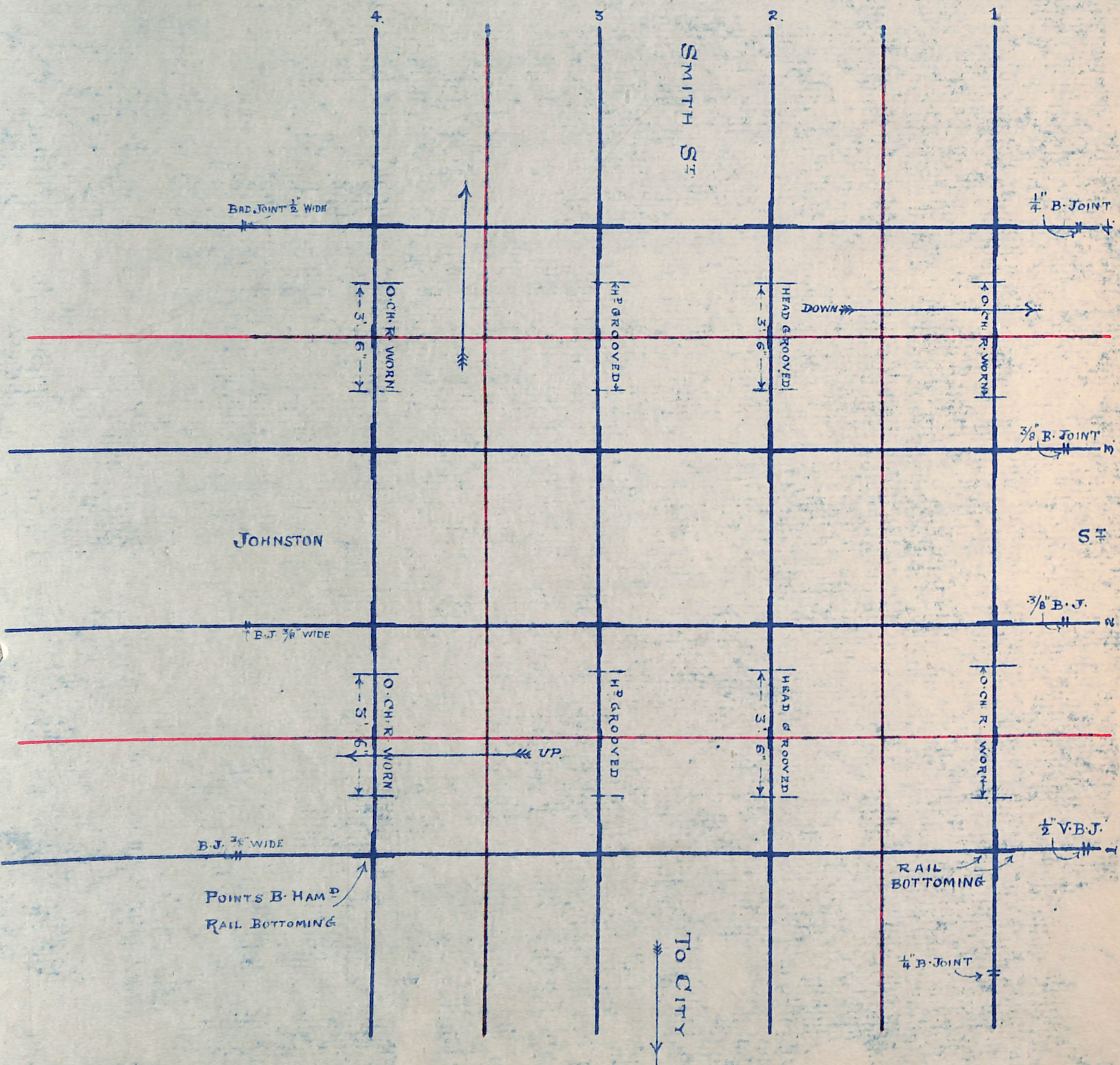
CLEARANCES.			
S.W. 0	S.W. .062	N.W. .116	N.W. .155
S.E. .147	S.E. .163	N.E. .070	N.E. .062
SUPER-ELEVATIONS.			
S.W. 3/8"		N.W. 0	
S.E. 3/8"		N.E. 1/8"	

DATE First Inspected - April 28th. 1916.

DATE Last Inspected - July 4th. 1916.

CROSSING JOHNSTON AND SMITH STREETS

STATE SAVINGS BANK



RIGHT ANGLE CURVE

JUNCTION OF SMITH AND GERTRUDE STS.

LINE 4.

DESCRIPTION B 5.

RIGHT-ANGLE CURVE - JUNCTION OF SMITH STREET with GERTRUDE STREET.

1. The special Checks to Check-rails of Nos. 2 and 4 rails, are badly worn for a greater portion of their length, whilst in places the special check to No. 2 Rail is in-effective.

The sides of heads of these rails (Nos. 2 and 4) are grooved in places.

2. The sides of heads of opposite rails (Nos. 1 and 3) are grooved badly in places, as a result of the above check-wear.

The special checks to these rails (Nos. 1 and 3) are loose and ineffective in places.

CLEARANCES, between flange and bottom of groove, and SUPER-ELEVATIONS, taken April 25th.1916, are as follows :-

<u>CLEARANCE</u>	No. 1 Rail	.155	No. 2	.403	No. 3	.155	No. 4	.500
<u>SUPER-ELEVATION</u>	"	"	4 1/8" (R)		"	2 5/8" (R)		

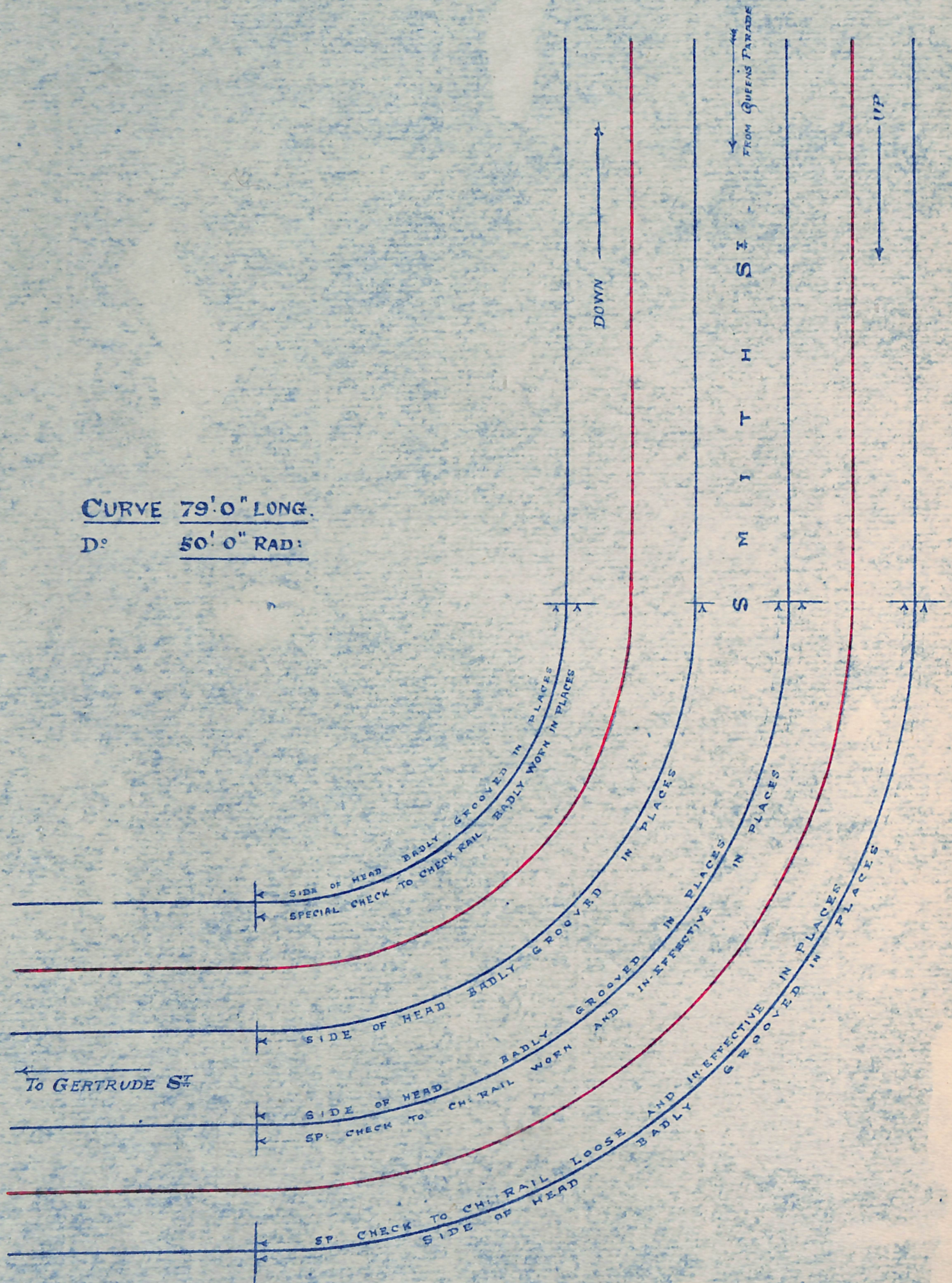
DATE OF CURVE RENEWALS.

Full Renewal, both Tracks.	Rails 1, 2, 3 and 4	Octr.13th.1907.
New Check Rails	" 2 and 4	June 13th..1913.
" " "	(Rail 2 (As cars jumping track)	March 31st.1914

DATE First Inspected - June 19th.1916.

DATE Last Inspected - July 4th.1916.

JUNCTION OF SMITH AND GERTRUDE S^{T.S.}



EM: SHUNT GERTRUDE ST

OPP. NICHOLSON ST ENGINE HOUSE

LINE 4.

DESCRIPTION B 6.

A Nil

B *Wheel low and Rocking*
Head Hammered **EMERGENCY SHUNT - GERTRUDE STREET**
Points Slightly Hammered
 (opposite NICHOLSON ST. POWER STATION)

C Nil

D Nil

E Nil

F *Point Worn low*
Head Hammered by Wheel
 A short length of No. 1 ordinary rail-check (adjacent to Point of Shunt) is badly worn, and rail is bottoming.
 A length of No. 3 ordinary rail (adjacent to Point of Shunt) is pumping, resulting in loosening of adjacent paving. Fishplates are, presumably, loose.

The heels of 2 of the four Points are rocking, and below levels of adjoining rails, resulting in excessive hammering.

Tongues are worn to varying amounts.

At the Crossing-intersections, hammering is taking place to varying degrees.

Two of the joints of Tram-rails, adjacent to rail intersections, and Points are wide, and are hammered.

Hammering is also taking place at some of the other joints.

DATE First inspected - April 25th. 1916.

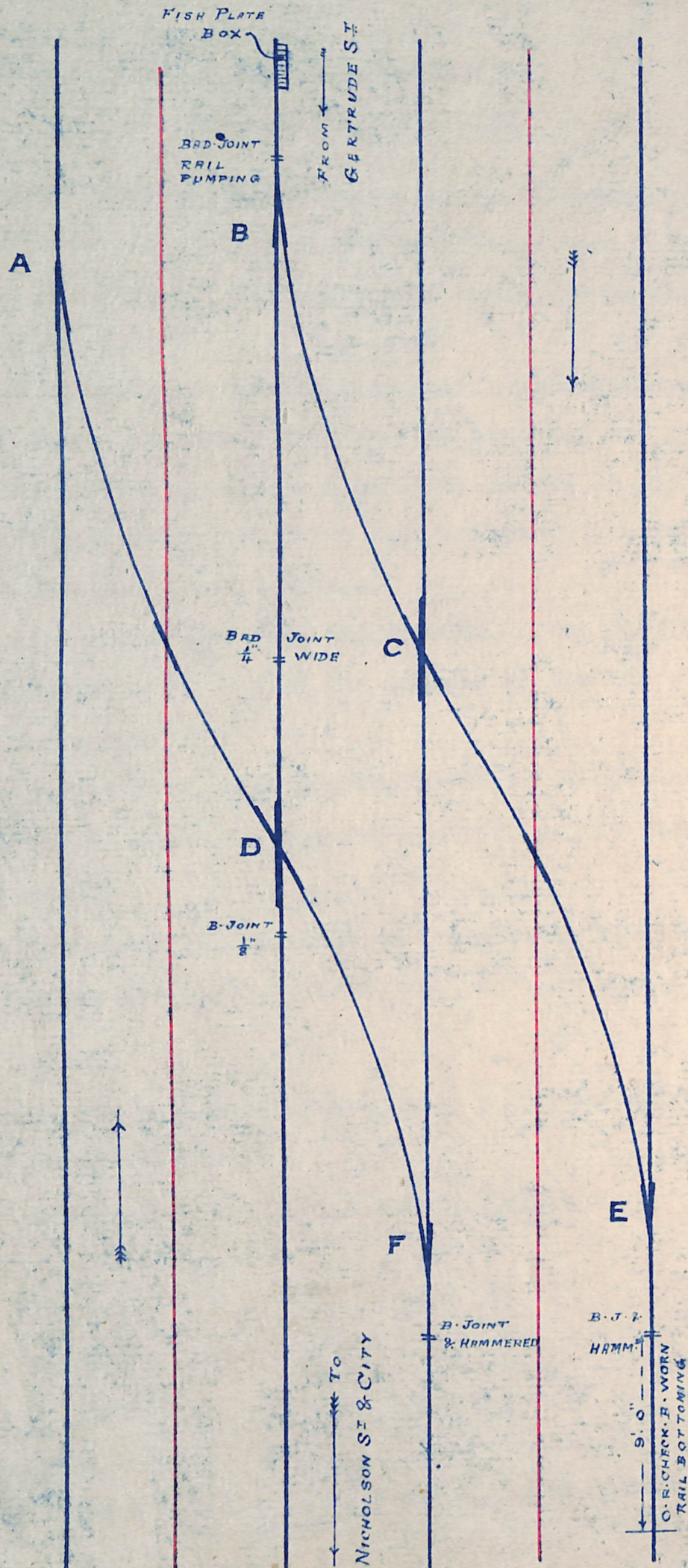
DATE Last inspected - July 4th. 1916.

NICHOLSON ST POWER STATION

EM: SHUNT CERTRUDE ST

OPP: NICHOLSON ST ENGINE HOUSE

- A Nil
- B } Heel low and Rocking
 Head Hammered
- C Points Slightly Hammered
- D Nil
- E Nil
- F Point Worn low.
 Heel Rocking
 Head Hammered by Heel.



NICHOLSON ST POWER STATION

CURVE AT JUNCTION OF GERTRUDE AND NICHOLSON STREETS.

LINE 4.

DESCRIPTION B.7.

A Cast Trailing Points Very Badly Worn.

B D - - - - - Very Badly Worn.

C Lipped Heel Rocking. Tongue Worn.

D Ordinary Heel Rocking. Tongue Worn.

E Rail and Slot Intersection Badly Hammered. Rail Head Grooved.

CURVE and JUNCTION - JUNCTION of GERTRUDE STREET

G Rail Intersections Hammered.

1. The Checks of Special Check Rails, also ordinary Rail Checks (Nos. 1 and 3 Rails) of Curve and Deviation, are very badly worn. The sides of heads of Nos. 1 and 3 Rails, between end of Curve and Deviation are grooved to varying amounts.
2. The sides of heads of opposite Special Check rails and Ordinary rails (Nos. 2 and 4) of Curve, are grooved to varying degrees, and very badly so in places. The special Checks, and ordinary checks of the same rails (Nos. 2 and 4) between end of Curve and Deviation, are worn to varying amounts, and very badly so in places.
3. The heels of 2 Points are of bad fit, and rocking. The Tongues of the two Trailing-Points are worn, whilst the tongues of the two Facing-Points are very badly worn.
4. At the Crossing-intersections, also at intersections of Slot-rails with Tram-rails, Points are hammered, to varying degrees, and in places side of rail-head is grooved.
5. 12 of the Joints of Tram-rails, adjacent to Crossing-intersections and Points, are wide (varying from $1/8"$ to $1/2"$) and, in many cases, hammered.

CLEARANCES, between flange and bottom of groove, also SUPER-ELEVATIONS, taken April 23rd.1916, are as follows :-

		CLEARANCE	SUPER-ELEVATION
No. 1 Rail		.434	
" 2 "		.403	$3\frac{1}{2}"$ (R)
" 3 "		.442	
" 4 "		.442	$3\frac{1}{2}"$ (R)

DATES OF CURVE RAIL RENEWALS.

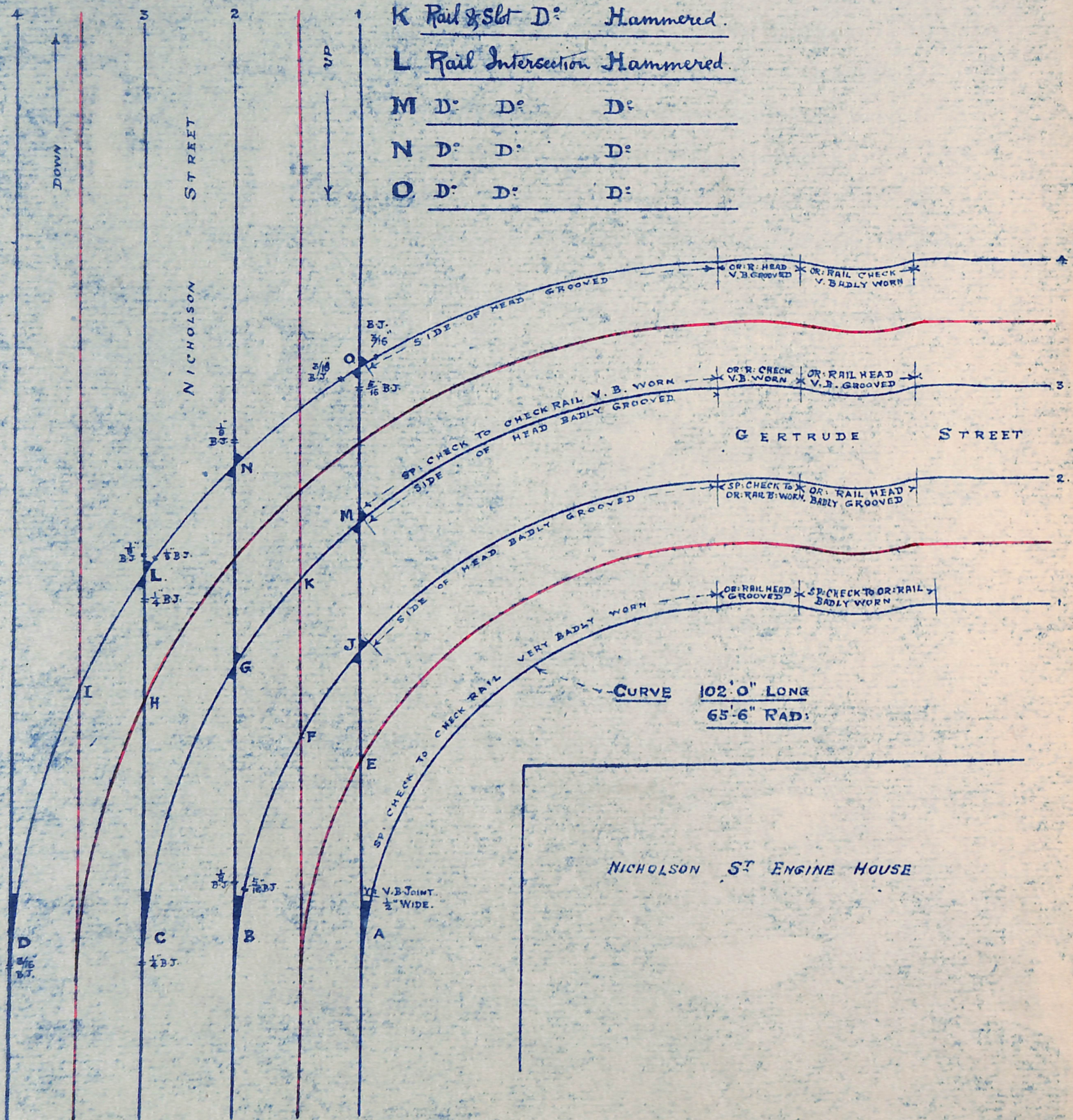
Full Renewals, both Tracks. Rails 1, 2, 3 and 4 March 31st.1911.

DATE First Inspected - APRIL 25th.1916.

DATE Last Inspected - JULY 4th., 1916.

CURVE AT JUNCTION OF GERTRUDE AND NICHOLSON STREETS.

- A Cast Trailing Points Very Badly Worn.
- B D° - - - Very Badly Worn.
- C Lipped Heel Rocking. Tongue Worn.
- D Ordinary Heel Rocking Tongue Worn.
- E Rail and Slot Intersection Badly Hammered Rail Head Grooved.
- F D° - D° - - D° D° - - -
- G Rail Intersections Hammered.
- H Rail and Slot Intersection Hammered.
- I Nil.
- J Rail-Intersection Hammered.
- K Rail & Slot D° Hammered.
- L Rail Intersection Hammered.
- M D° D° D°
- N D° D° D°
- O D° D° D°



DOUBLE SHUNTS AT TERMINUS

FLEMINGTON ROAD

SCHEDULE OF SHUNTS, FLEMINGTON ROAD.

CROSSINGS AND CURVES.

NORTH AND WEST MELBOURNE LINES.

No. 5.

NORTH MELBOURNE ROUTE.

- | | | | |
|---|----|---------------------------|--|
| A | 1. | Double Shunts at Terminus | Flemington Road |
| " | 2. | "Turn-In" and "Turn-Out" | Tram-car Depot Flemington Road |
| " | 3. | Curve | Junction of Flemington Road with Abbotsford Street |
| " | 4. | Curve and Junction | Junction of Abbotsford St. with Queensberry St. |
| " | 5. | Curve | Junction of Queensberry St. with Erroll Street. |
| " | 6. | Curve | Junction of Erroll Street with Victoria Street. |
| " | 7. | Curve and Junction | Junction of Victoria Street with Elizabeth Street. |

WEST MELBOURNE ROUTE.

- | | | | |
|---|----|--------------------------|---|
| B | 1. | Single Shunt at Terminus | Abbotsford Street (opp. West Melb. Engine House) |
| " | 2. | Curve | Junction of Abbotsford Street with Spencer Street |
| " | 3. | Curve | in Spencer Street opposite Hawke Street |
| " | 4. | Curve | in Spencer Street opposite Roden Street |
| " | 5. | Curve | in Spencer Street opposite Stanley Street |
| " | 6. | Curve | in Spencer Street opposite Rosslyn Street |
| " | 7. | Curve | in Spencer Street opposite Budley Street |
| " | 8. | Curve | Junction of Spencer St. with Lonsdale Street. |
| " | 9. | Curve and Junction | Junction of Lonsdale Street with Elizabeth St. |

DOUBLE SHUNTS AT TERMINUS FLEMINGTON ROAD

LINE 5.

DESCRIPTION A 1.

DOUBLE SHUNTS at TERMINUS, FLEMINGTON ROAD.

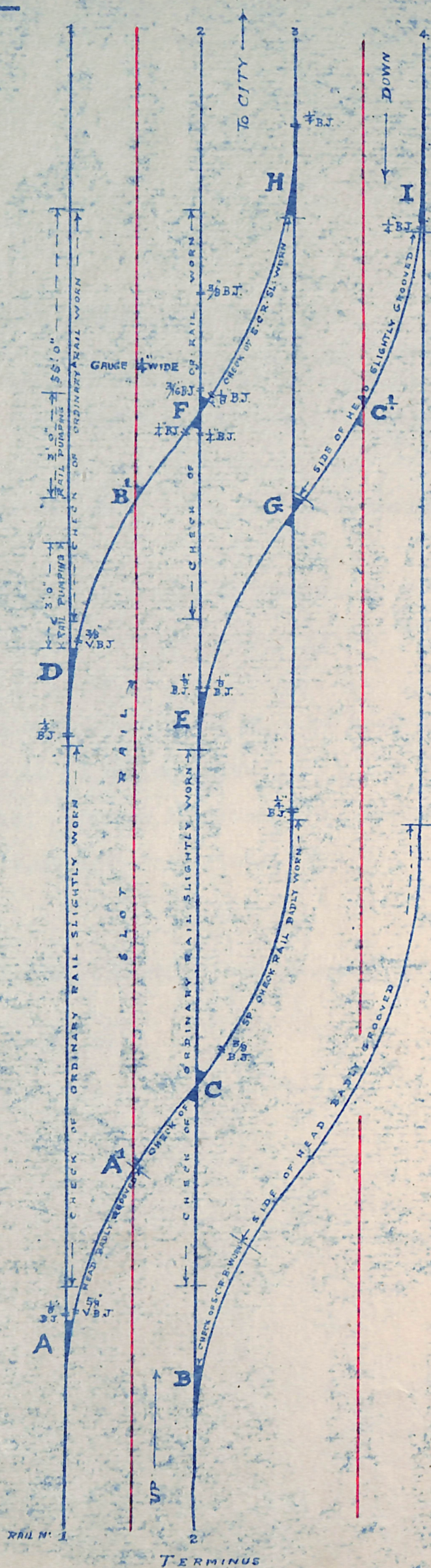
1. The special Checks to the two Inner-curves of Dummy-Shunt are badly worn, whilst the special Check to one of the Inner-curves of trailer shunt is slightly worn.
2. The sides of heads of three of the Outer-curves of Dummy and Trailer Shunts, are grooved to varying amounts, and in places badly so, as a result of the above check-wear.
3. Nos. 1 and 2 Rails (Up Track). Between the Points of Dummy-Shunt to beyond Points of Trailer-Shunt, the ordinary Rail-Checks are worn, due to the gauge being wide.
4. Two short lengths of No. 1 Rail (Up Track) adjacent to Point of Trailer-Shunt, are pumping, and fishplates are presumably loose. Paving on each side of pumping rails is loose.
5. The Tongues of 5 of the 6 Points are worn to varying degrees. One of the Heels of Point-Castings is of bad fit, and rocking.
6. At the Crossing-Intersections, also at intersections of Slat-rails with Tram-rails, hammering to varying amounts is taking place.
7. 15 of the joints of Tram-rails, adjacent to Crossing-intersections and points, are wide, varying from $1/8"$ to $5/8"$, and in many cases are hammered.

DATE FIRST INSPECTED - May 5th.1916.

DATE LAST INSPECTED - July 4th.1916.

DOUBLE SHUNTS AT TERMINUS FLEMINGTON ROAD

- A. Tongue Slightly Worn
- B. Heel Rocking Tongue Worn
- C. Hammering at Rail Intersections
- D. Tongue Slightly Worn
- E. D° Slightly Worn
- F. Hammering at Rail Intersections
- G. D°
- H. Heel Slightly Hammered Tongue Sl. Worn
- I.
- A¹. Hammering at Rail and Slot Intersection
- B¹. Slight Hammering at D° D° D°
- C¹.



TURN-IN AND TURN-OUT TO

CAR DEPÔT-FLEMINGTON ROAD.

LINE 5. DESCRIPTION A 2.
 A Heel Bad Fit and Rocking. Tongue Worn.
 B D' Rocking. Tongue Worn.
 C Light Hammering at Rail Intersections.
 D
 E Heel Rocking. Tongue Worn.

"TURN-IN" and "TURN-OUT" to TRAMCAR DEPOT, FLEMINGTON ROAD.

1. The Checks of Special Check-rails of Curved Rails are worn to varying degrees, and in places badly so. The sides of heads of outer rails are grooved in places, as a result of the above check-wear.
2. Five of the heels of the 6 Points are of loose fit, and rocking. Tongues are worn to varying amounts.
3. Two lengths of Nos. 1 and 2 Rails (Up Track) on S. side of Points of Shunt, are pumping, and fishplates are presumably loose. Paving on each side of pumping rails is loose.
4. At the/intersections, also at intersections of Slot rails with Tram-rails, hammering to varying degrees is taking place.
5. 23 of the Joints of Tram-rails, adjacent to Crossing intersections, and Points, are wide (varying from $1/4"$ to $11/16"$), and in several x cases are hammered.

CLEARANCES between flange and bottom of groove, taken April 12th. 1916.

(13 yards past Points at Car House)

No. 2 Rail	O.	No. 3 Rail	O.	No. 4 Rail	O.
No. 2 Bottoming for 19 yards					
No. 3	"	"	13	"	
No. 4	"	"	8	"	

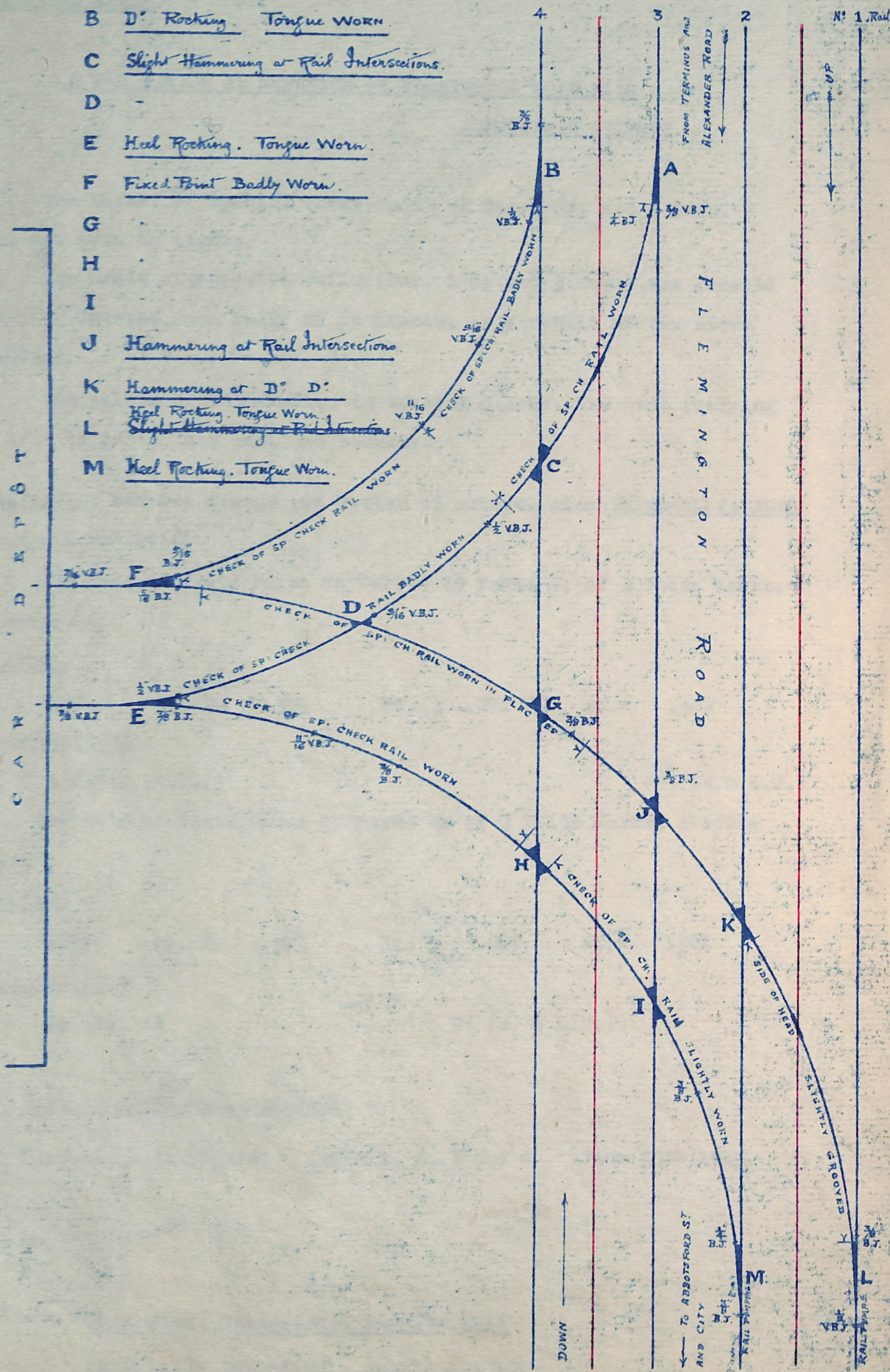
DATE First Inspected May 5th, 1916

DATE Last Inspected July 4th, 1916.

TURN-IN AND TURN-OUT TO

CAR DEPÔT · FLEMINGTON ROAD ·

- | | |
|---|---|
| A | <u>Heel Bad Fit and Rocking. Tongue Worn.</u> |
| B | <u>D° Rocking. Tongue Worn.</u> |
| C | <u>Slight Hammering at Rail Intersections.</u> |
| D | - |
| E | <u>Heel Rocking. Tongue Worn.</u> |
| F | <u>Fixed Point Badly Worn.</u> |
| G | - |
| H | - |
| I | - |
| J | <u>Hammering at Rail Intersections.</u> |
| K | <u>Hammering at D° D°</u>
Heel Rocking. Tongue Worn.
Slight Hammering at Rail Intersections. |
| L | |
| M | <u>Heel Rocking. Tongue Worn.</u> |



CURVE AT JUNCTION OF FLEMINGTON RD WITH ABBOTSFORD ST

LINE 5.

DESCRIPTION A 3.

CURVE. 121' 10" LONG

132' 0" RADIUS

CURVE - at JUNCTION of FLEMINGTON ROAD with
ABBOTSFORD STREET.

1. The Checks of Special Check-rails of Nos. 2 Up, and 4 Down Rails, are worn in places.
2. The heads of opposite rails (Nos. 1 Up and 3 Down) are grooved to varying degrees, and badly so in places, as a result of the above Check-wear.
3. The joints of Tram-rails, in several places, are wide (Varying from 1/8" to 3/8"), and some are hammered.

CLEARANCES, between flange and bottom of groove, also SUPER-ELEVATIONS taken April 6th. 1916.

The Sets of Tests taken on Curve, 19 yards N. of 3 White Marks, AbbotSFord St.

CLEARANCES.

No. 1	.250.	No. 2.	.310	No. 3	.271	No. 4	.302
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SUPER-ELEVATIONS

1 3/4" (R. & L.B.)

2 1/4" (R. & L.B.)

The sets of Tests taken 47 yards N. of 3 White Marks, AbbotSFord St.

CLEARANCES.

No. 1	.279.	No. 2.	.310	No. 3	.295	No. 4	.341
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SUPER-ELEVATIONS

" 2 1/2" (B)

" 2" (R. & L.B.)

DATE OF CURVE RAIL RENEWALS. -

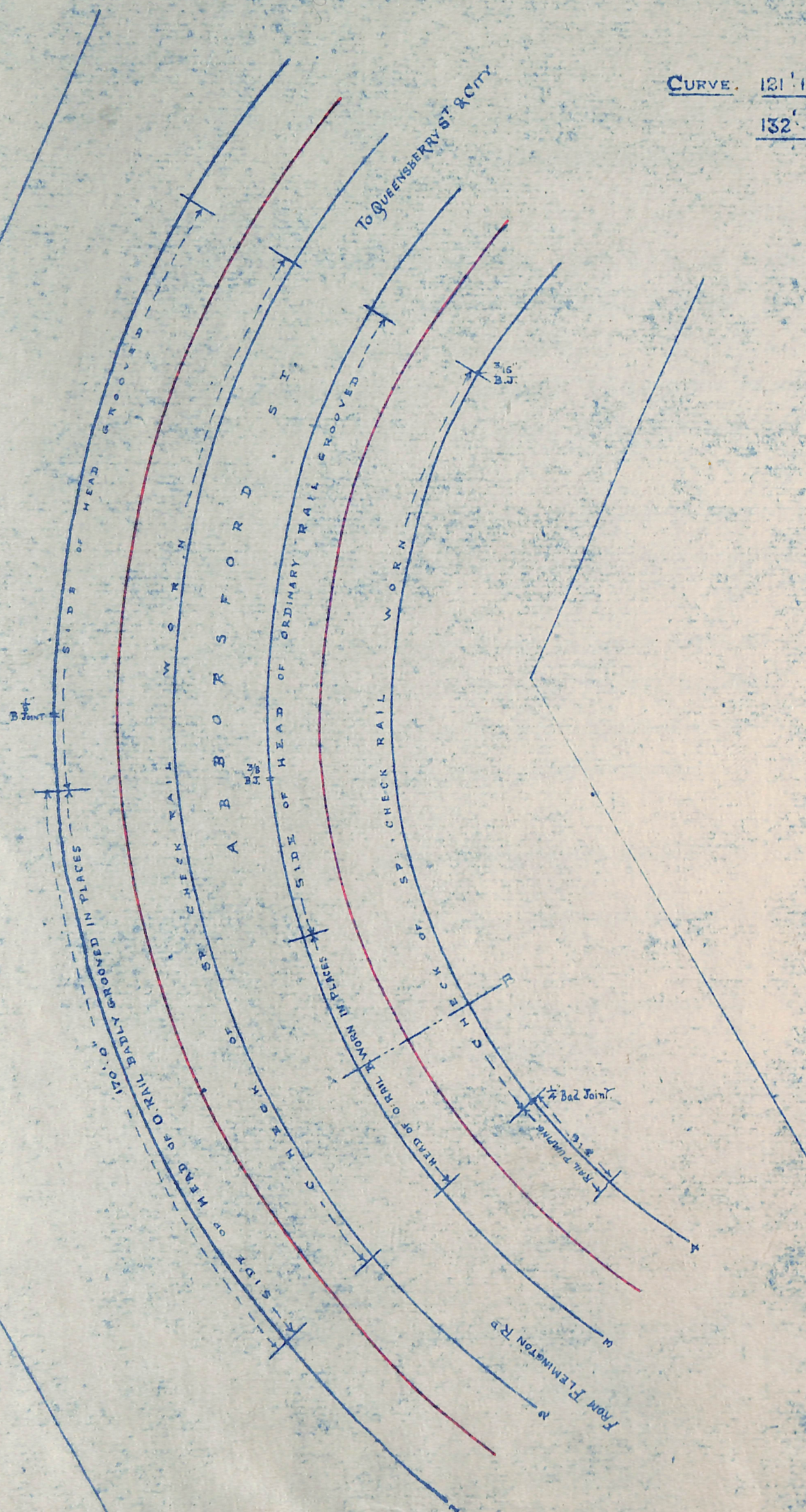
Full Renewal, both Tracks, Rails 1, 2, 3 and 4 June 30th. 1913.

DATE First Inspected - May 5th. 1916

DATE Last Inspected - July 4th. 1916.

CURVE AT JUNCTION OF
FLEMINGTON R^D WITH ABBOTSFORD S^W

CURVE: 121' 10" LONG
132' 0" RADIUS



CURVE AT JUNCTION OF

LINE 5-PLAN A-4

ABBOTSFORD AND QUEENSBERRY STS.

Shunt at West Melbourne Terminus.

LINE 5.

DESCRIPTION A 4.

CURVE and JUNCTION at JUNCTION of ABBOTSFORD ST. with QUEENSBERRY STREET.

1. The checks of Special Check Rails of Nos. 1 and 3 rails, are worn to varying amounts, and badly so in places. The sides of Heads of opposite rails (Nos. 2 and 4) are grooved to varying degrees, and badly so in places, as a result of the above check-wear.
2. No. 1 Ordinary Straight Rail, adjacent to East end of Curve, is bottoming for about 5 feet; whilst the ordinary rail-check, for a length of about 18 feet, is worn away.
3. 8 of the Joints of rails, adjacent to Crossing-intersections, and Points, are wide, (varying from $1/8"$ to $1/4"$) and in several cases are hammered.
4. One of the heels of the four Points is below level of Casting, of loose fit, and rocking. Tongues are worn to varying degrees.
5. Hammering and Wear is taking place, to varying degrees, and in some cases badly so, at the Crossing-Intersections, also at Intersections of Slot-rails with tram-rails.

CORRUGATIONS (up to 9 Mile) are apparent on No. 2 Rail, in centre of Curve.

GAUGE, between Nos. 1 & 2 Rails, near East end of Curve, is tight up to $1/4"$.

CLEARANCES, between flange and bottom of groove, also SUPER-ELEVATIONS, taken in Centre of Curve, April 13th. 1916 -

	CLEARANCE	SUPER-ELEVATION
NO. 1 RAIL	.287	$3\frac{1}{2}"$ (R)
No. 2 "	.125	$2\frac{1}{2}"$ (R)
No. 3 "	.450	
No. 4 "	.186	

Note. Nos. 3 and 4 rails Slight Down Gradient.

DATES OF CURVE RAIL RENEWALS.

Rails Nos. 1, 2 and 4	Renewed Aug. 2nd., Octr. 4th. 1903.
Rail No. 3	May 5th. 1907.
133 ft. Check Rail No. 1	March 31st. 1914
81 ft. " " No. 3	June 30th. 1915.

DATE first Inspected - May 8th. 1916.

DATE Last Inspected - July 4th. 1916.

CURVE AT JUNCTION OF

LINE 5 PLAN A-4

ABBOTSFORD AND QUEENSBERRY STS.

Shunt at West Melbourne Terminus.

Heel below level of Rail, and Rocking
A Tongue Worn.

B Heel Rocking. Tongue Worn.

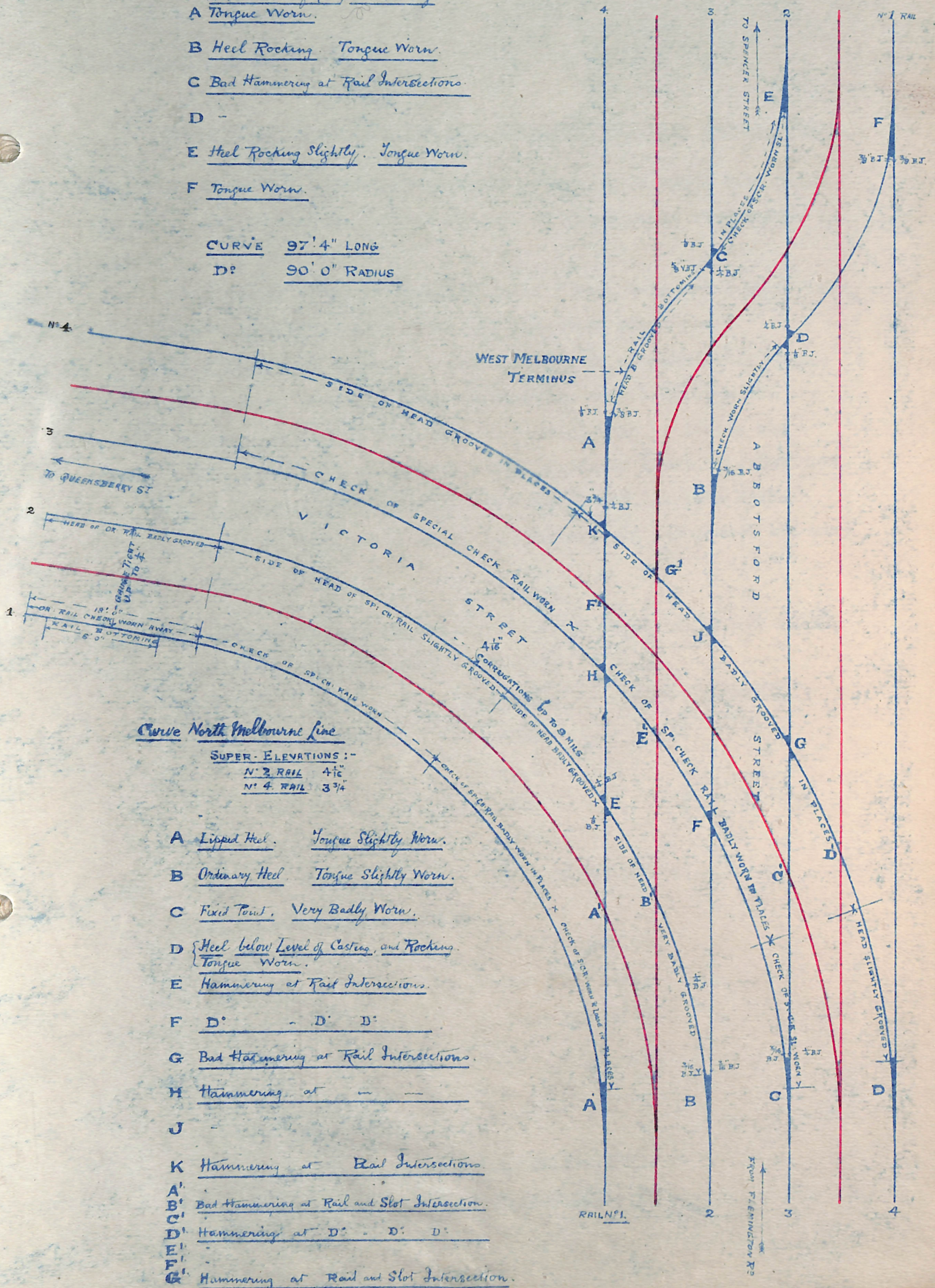
C Bad Hammering at Rail Intersections.

D -

E Heel Rocking Slightly. Tongue Worn.

F Tongue Worn.

CURVE 97' 4" LONG
D: 90' 0" RADIUS



Curve North Melbourne Line

SUPER-ELEVATIONS :-
N° 2 RAIL 4 1/8"
N° 4 RAIL 3 3/4"

A Lipped Heel. Tongue Slightly Worn.

B Ordinary Heel. Tongue Slightly Worn.

C Fixed Point. Very Badly Worn.

D Heel below Level of Castings, and Rocking.
Tongue Worn.

E Hammering at Rail Intersections.

F D: - D: D:

G Bad Hammering at Rail Intersections.

H Hammering at -

J -

K Hammering at Rail Intersections.

A' Bad Hammering at Rail and Slot Intersection.

B' Hammering at D: - D: D:

C' Hammering at Rail and Slot Intersection.