24TH STREET – NACIMIENTO LAKE DRIVE TO US ROUTE 101

RECOMMENDATIONS

Pavement Maintenance Options (Short-Term)

These options are not available for this street because of structural deficiencies and/or pavement cracking condition.

Pavement Rehabilitation Options (Long-Term)

Overlay Options

For option 1, we recommend 4 inch digouts for base failures, placing a 1/2 inch HMA leveling course, pavement fabric and a 1-3/4 inch HMA overlay.

Estimated Cost: $812,000 Estimated Life Expectancy: 10-12 Years

For option 2, we recommend 4 inch digouts for base failures, placing a 1/2 inch HMA leveling course and a 1-3/4 inch RHMA overlay.

Estimated Cost: $815,000 Estimated Life Expectancy: 10-12 Years

Recycle and Mill and Replace Options

For option 1, we recommend milling off 3-1/2 inches of the existing pavement, 4 inch digouts of base failures, placing a 1 inch HMA leveling course and place a 2-1/2 inch RHMA surface course.

Estimated Cost: $1,320,000 Estimated Life Expectancy: 12-15 Years

For option 2, we recommend cold in-place recycling to a depth of 4 inches and placing a 2 inch HMA surface course.

Estimated Cost: $774,000 Estimated Life Expectancy: 12-15 Years

Reconstruction Options

This section of pavement was not evaluated for reconstruction options.

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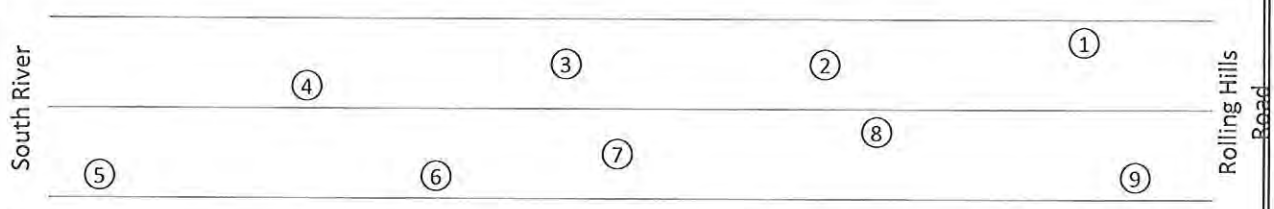
CalTrans/AMRL QC/QA • Construction Management



NOTES:
- NTS
- ACTUAL ROAD MAY NOT BE STRAIGHT
- NOT ALL ROADS CONNECTING TO THIS STREET ARE SHOWN
- WIDTH OF ROAD MAY VARY WITHIN THE BOUNDARY SECTION
- ALL LOCATIONS SHOWN ARE APPROXIMATED

24th Street

[Section of Road ≈ 4500ft]

TRAFFIC LAYOUT:
- 2-WAY STREET
- LANE NUMBER VARIES EACH WAY

VISUAL DESCRIPTION FOR THIS SECTION OF ROAD

The pavement exhibits mild weathering and raveling, block shrinkage cracking and intermitant areas of alligator cracking progressing to base failure. West of Vine Street there are areas of unimproved edges.

CORING LOG

Symbol	Location	Core Data		R-value
1	West of US Route 101 500ft	AC Fabric	9.00" YES	N.A.
2	West of US Route 101 1500ft	AC Fabric	4.75 YES	N.A.
3	West of US Route 101 2500ft	AC Fabric	6.00" YES	N.A.
4	West of US Route 101 3500ft	AC Fabric	4.50" YES	N.A.
5	East of Nacimiento Lake Drive 200ft	AC Fabric	7.00" YES	N.A.
6	East of Nacimiento Lake Drive 1500ft	AC Fabric	4.50" YES	N.A.
7	East of Nacimiento Lake Drive 2200ft	AC Fabric	7.25" YES	N.A.
8	East of Nacimiento Lake Drive 3200ft	AC Fabric	7.00" YES	N.A.
9	East of Nacimiento Lake Drive 4200ft	AC Fabric	6.00" YES	N.A.

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Nacimiento Lake Drive

US Route 101

24th Street

[Section of Road ≈ 4500ft]

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TRAFFIC LAYOUT:
- 2-WAY STREET
- LANE NUMBER VARIES EACH WAY

DEFLECTION ANALYSIS

Lane	Tolerable	TI	80th Percentile	Percent Reduction	HMA Overlay
West Bound	17	8.0	24.92	31.78	1.68 - inches
East Bound	17	8.0	25.65	33.71	1.92 - inches
				Overlay Required by Reflective Cracking	3.50 - inches

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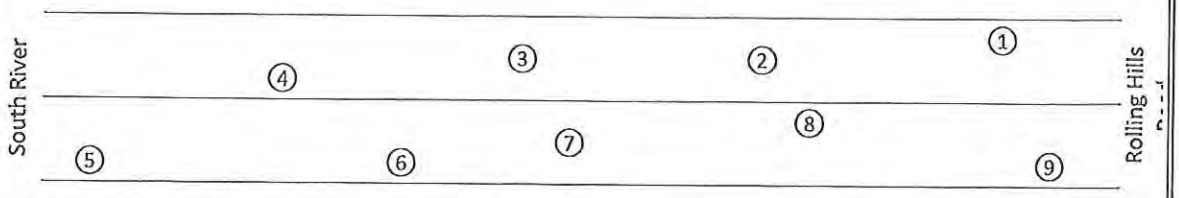

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24th Street

[Section of Road ≈ 4500ft]

N

TRAFFIC LAYOUT:
- 2-WAY STREET
- LANE NUMBER VARIES EACH WAY

VISUAL DESCRIPTION FOR THIS SECTION OF ROAD

CORING LOG				
Symbol	Location	Core Data		R-value
1	West of US Route 101 500ft	AC Fabric	9.00" YES	N.A.
2	West of US Route 101 1500ft	AC Fabric	4.75 YES	N.A.
3	West of US Route 101 2500ft	AC Fabric	6.00" YES	N.A.
4	West of US Route 101 3500ft	AC Fabric	4.50" YES	N.A.
5	East of Nacimiento Lake Drive 200ft	AC Fabric	7.00" YES	N.A.
6	East of Nacimiento Lake Drive 1500ft	AC Fabric	4.50" YES	N.A.
7	East of Nacimiento Lake Drive 2200ft	AC Fabric	7.25" YES	N.A.
8	East of Nacimiento Lake Drive 3200ft	AC Fabric	7.00" YES	N.A.
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Nacimiento Lake Drive

US Route 101

24th Street

[Section of Road ≈ 4500ft]

N

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TRAFFIC LAYOUT:
- 2-WAY STREET
- LANE NUMBER VARIES EACH WAY

PHOTO LOG

Symbol	Location	Comments
A	_____ of _____ _____ ft	
B	_____ of _____ _____ ft	
C	_____ of _____ _____ ft	

DEFLECTION ANALYSIS

Lane	Tolerable	TI	80th Percentile	Percent Reduction	HMA Overlay
West Bound	17	8.0	24.92	31.78	1.68 - inches
East Bound	17	8.0	25.65	33.71	1.92 - inches
				Overlay Required by Reflective Cracking	3.50 - inches

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PAVEMENT ENGINEERING INCORPORATED

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04/01/13

City of Paso Robles

Road: 24th
From: US101
To: Lake Nacicmento
Lane/Line: WB

Survey Date: 03/30/13
Thickness: 0.50
Traffic Index: 8.00
Project Number: 130065

Deflection Data Analysis

Deflection Readings (Equivalent Deflectometer Units)

No. of Tests	Low	Mean	High	Std. Dev.
43	21.05	23.72	26.72	1.43

Road Surface

Thickness	Traffic Index
0.50	8.00

Structural Design

Tolerable	80th Percentile	90th Percentile	% Reduction	GE Deficient
17.00	24.92	25.55	31.78	0.27

HMA Overlay
0.14

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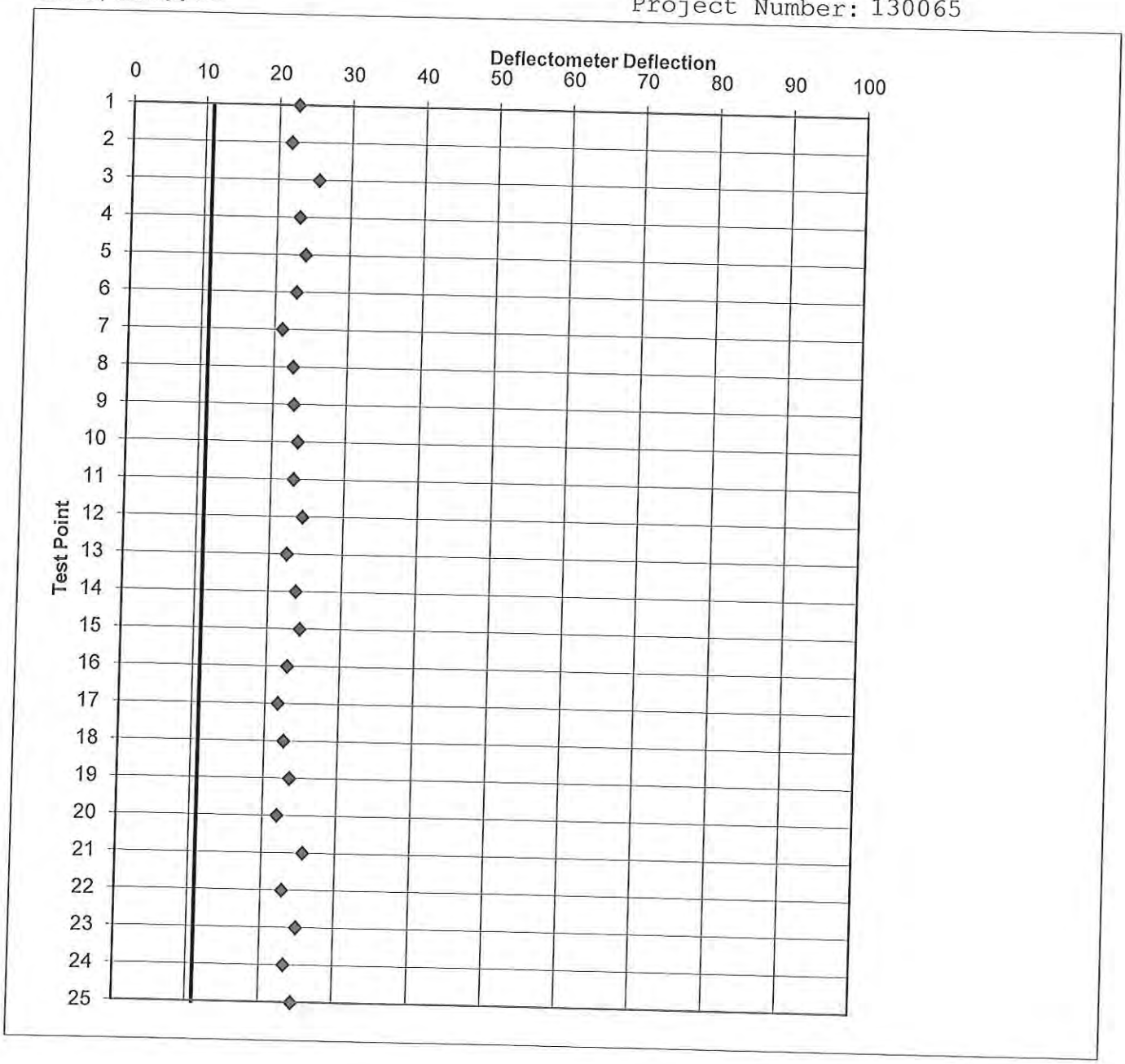

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Date: 4/1/2013

Client: City of Paso Robles
Road: 24th
From: US101
To: Lake Nacicmento
Lane/Line: WB

Interval: 100
Survey Date: 3/30/13
Thickness: 0.50
Traffic Index: 8.00
Project Number: 130065

Test Points	Dynaflect	Conditions	Comments	Deflection	Exclude
1	1.02		Black Oak Drive	22.640	
2	0.98			21.733	
3	1.15		Ysabel Avenue	25.590	
4	1.04			23.094	
5	1.08			24.002	
6	1.03			22.867	
7	0.95			21.052	
8	1.02			22.640	
9	1.03			22.867	
10	1.06			23.548	
11	1.04		River Side	23.094	
12	1.10			24.455	
13	1.01			22.413	
14	1.07			23.775	
15	1.10			24.455	
16	1.03			22.867	
17	0.98			21.733	
18	1.02			22.640	
19	1.06			23.548	
20	0.99			21.960	
21	1.15			25.590	
22	1.03			22.867	
23	1.12			24.909	
24	1.05		Spring Street	23.321	
25	1.10			24.455	
26	1.14			25.363	
27	0.97			21.506	
28	1.16			25.816	
29	1.20			26.724	
30	1.03			22.867	
31	1.08			24.002	

32	1.08		Vine Street	24.002	
33	1.10			24.455	
34	1.06			23.548	
35	1.03			22.867	
36	1.18			26.270	
37	1.20		Casa Blanca Court	26.724	
38	1.15			25.590	
39	1.02		Royal Court	22.640	
40	1.15			25.590	
41	1.04			23.094	
42	1.08			24.002	
43	1.03		Glencrest Lane	22.867	

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City of Paso Robles

Road:	24th	Survey Date:	03/30/13
From:	Lake Nacicmento	Thickness:	0.50
To:	US101	Traffic Index:	8.00
Lane/Line:	EB	Project Number:	130065

Deflection Data Analysis

Deflection Readings (Equivalent Deflectometer Units)

No. of Tests	Low	Mean	High	Std. Dev.
43	19.24	23.92	29.90	2.06

Road Surface

Thickness	Traffic Index
0.50	8.00

Structural Design

Tolerable	80th Percentile	90th Percentile	% Reduction	GE Deficient
17.00	25.65	26.55	33.71	0.31

HMA Overlay
0.16

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04/01/13

City of Paso Robles

Road: 24th
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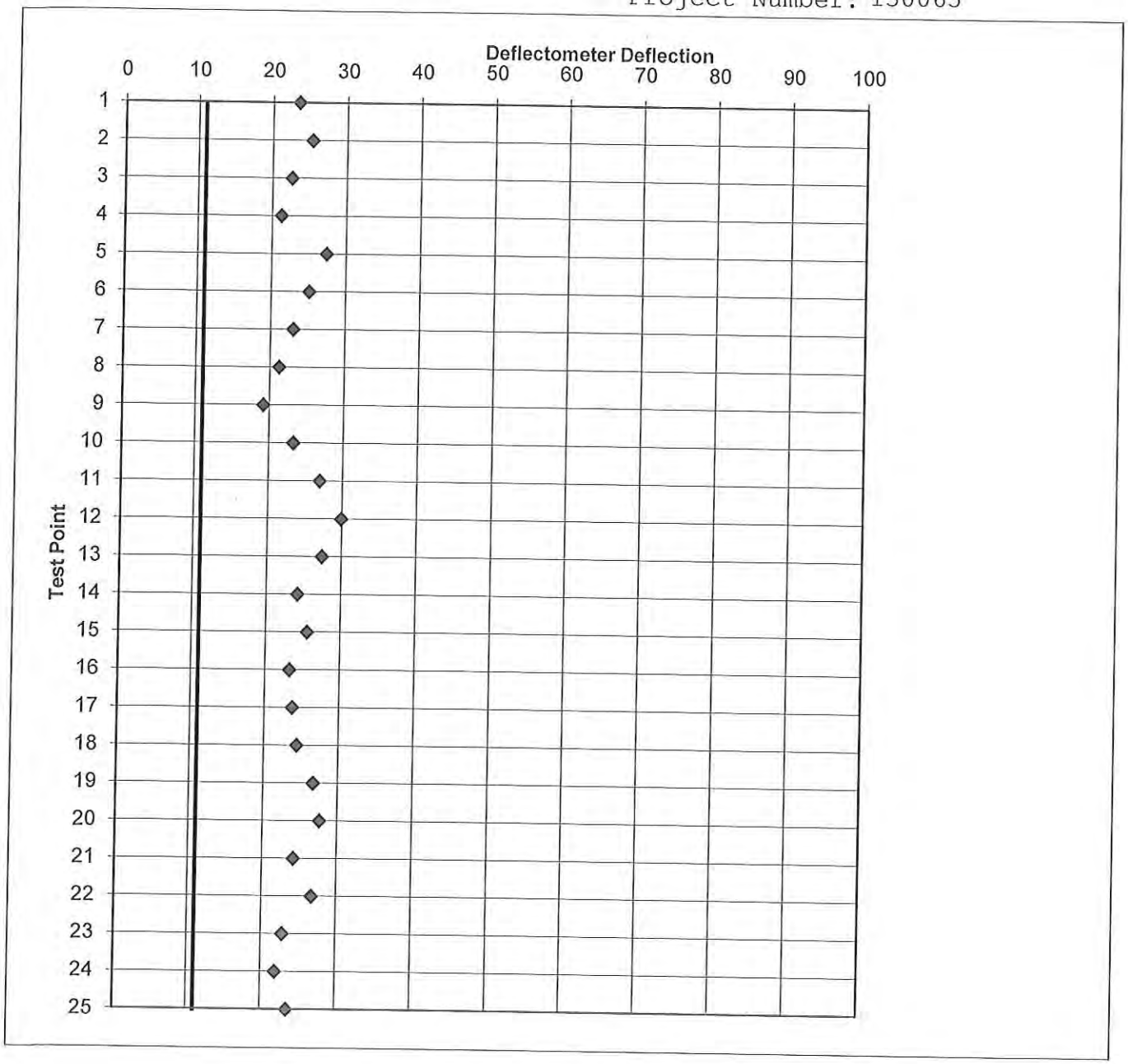
To: US101
Lane/Line: EB

Survey Date: 03/30/13
Thickness: 0.50
Traffic Index: 8.00
Project Number: 130065



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Interval: 100
Survey Date: 3/30/13
Thickness: 0.50
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Project Number: 130065

Test Points	Dynaflect	Conditions	Comments	Deflection	Exclude
1	1.06			23.548	
2	1.14		Wilo Deer Street	25.363	
3	1.02			22.640	
4	0.96			21.279	
5	1.23			27.405	
6	1.13			25.136	
7	1.04			23.094	
8	0.96			21.279	
9	0.87			19.237	
10	1.05		Vine Street	23.321	
11	1.21			26.951	
12	1.34			29.900	
13	1.23			27.405	
14	1.09		Oak Street	24.228	
15	1.15			25.590	
16	1.05			23.321	
17	1.07			23.775	
18	1.10		Spring Street	24.455	
19	1.20			26.724	
20	1.24			27.631	
21	1.09		Park Street	24.228	
22	1.20			26.724	
23	1.03			22.867	
24	0.99			21.960	
25	1.06			23.548	
26	1.03			22.867	
27	1.05			23.321	
28	1.14			25.363	
29	1.10			24.455	
30	1.02		River Side	22.640	
31	1.06			23.548	

32	0.99			21.960	
33	1.02			22.640	
34	1.04			23.094	
35	1.13			25.136	
36	1.01			22.413	
37	1.05			23.321	
38	0.98			21.733	
39	1.03			22.867	
40	1.01			22.413	
41	1.05			23.321	
42	0.99			21.960	
43	1.07			23.775	

24TH STREET – NACIMIENTO LAKE DRIVE TO US ROUTE 101
Ysabel Avenue looking Westbound

24TH STREET – NACIMIENTO LAKE DRIVE TO US ROUTE 101
Park Street looking Westbound

24TH STREET – NACIMIENTO LAKE DRIVE TO US ROUTE 101
Oak Street looking Westbound

24TH STREET – NACIMIENTO LAKE DRIVE TO US ROUTE 101
Royal Court looking Westbound