PM PEAK HOUR PROTOCOL APPENDIX A

A 2.1 Inputs

4x6 lanes

Coastal

40 mph cruise speed (Table B.10)

50% red time

20% cold starts (Table B.6, Outer Arterial PM Peak 15-30 Range)
  (.17 factor)

2010 analysis year

Traffic volumes per HMM (Higgins) Ex 42 buildout – cumulative w/o interchange

7m to receptor (residential property line to North)

1 ppm background CO (Salinas Hig School – monitoring station #3)
A.2.2 Base

Table A.4

<table>
<thead>
<tr>
<th></th>
<th>Approach</th>
<th>Depart</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 lane @ 7 m</td>
<td>40.6</td>
<td>24.0</td>
</tr>
<tr>
<td>6 lane @ 7 m</td>
<td>53.9</td>
<td>28.3</td>
</tr>
</tbody>
</table>
A 2.3 Volume Correction

Table A.5

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4 lane (800/lane)</td>
<td>40.6 x .85 = 34.51</td>
<td>24.0 x .85 = 20.40 depart</td>
</tr>
<tr>
<td>6 lane (500/lane)</td>
<td>53.9 x .58 = 31.26</td>
<td>28.3 x .58 = 16.41 depart</td>
</tr>
</tbody>
</table>

A 2.4 Intersection Performance

Table A.6 Approach 40 mph/50% red /800/lane
Table A.7 Depart 40 mph/50% red/500/lane

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A6</td>
<td>34.51 x 1.00 = 34.5</td>
</tr>
<tr>
<td>A7</td>
<td>20.40 x .20 = 4.1</td>
</tr>
<tr>
<td>A6</td>
<td>31.26 x .31 = 9.7</td>
</tr>
<tr>
<td>A7</td>
<td>16.41 x .11 = 1.8</td>
</tr>
</tbody>
</table>

A 2.5 Total

50.1

A 2.6 Wind

Adjust for wind speed of 1 m/s:

50.1 x .7 = 35.1

A 2.7 Cold Starts

Table A.8 Correction factor 0.17

35.1 x .017 = 6.0
A 2.8 SCAQMD

N/A

A 2.9 Volume Ratio

\[
\frac{1525}{1428} = 1.07 \quad \text{Table A.9} \rightarrow .91
\]

\[
6.0 \times .91 = 5.46
\]

Contribution to
1 Hour CO = 5.46 ppm

A 2.10 Background CO

1 ppm per MBWAPCD data from Salinas #3

A 2.11 Total 1 Hour CO

\[
\begin{align*}
5.46 \\
+ 1.10 \\
\hline
6.46 \text{ ppm}
\end{align*}
\]

A 2.12 8 Hour CO

Using generalized persistence factor for suburban areas

\[
\begin{align*}
6.46 \\
\times 0.6 \\
\hline
3.88 \text{ ppm}
\end{align*}
\]

<table>
<thead>
<tr>
<th>Standards</th>
<th>State</th>
<th>Federal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 hour</td>
<td>20</td>
<td>35</td>
</tr>
<tr>
<td>8 hour</td>
<td>9</td>
<td>9</td>
</tr>
</tbody>
</table>

Less than standard – no significant impact.