

# Intersection Control Evaluation

## (Business 53 and 27<sup>th</sup> Avenue/Shopko Drive)

	<b>Traffic Signal</b>	<b>Roundabout</b>																		
<b>OPERATIONAL ANALYSIS</b>	<p>The Level of Service for the 2033 PM peak traffic volumes are summarized below:</p> <p><b>Intersection LOS (Delay)</b></p> <ul style="list-style-type: none"> <li>• <b>Overall: C (24.4 sec)</b> <ul style="list-style-type: none"> <li>○ Northbound Approach: C (22.6)</li> <li>○ Southbound Approach: B (15.7)</li> <li>○ Eastbound Approach: D (38.9)</li> <li>○ Westbound Approach: D (39.4)</li> </ul> </li> </ul> <p><i>Synchro - HCM 2010</i></p>	<p>The Level of Service for the 2033 PM peak traffic volumes are summarized below:</p> <p><b>Intersection LOS (Delay)</b></p> <ul style="list-style-type: none"> <li>• <b>Overall: A (9.5 sec)</b> <ul style="list-style-type: none"> <li>○ Northbound Approach: A (9.6)</li> <li>○ Southbound Approach: A (9.1)</li> <li>○ Eastbound Approach: B (11.2)</li> <li>○ Westbound Approach: A (9.7)</li> </ul> </li> </ul> <p><i>HCS 2010 – 6.60</i></p>																		
<b>CONSTRUCTION COSTS</b>	<p>Pavement Area: <b>26,700 sy</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Construction Cost</td> <td style="width: 10%; text-align: center;">= \$</td> <td style="width: 30%; text-align: right;">1,590,000</td> </tr> <tr> <td>*Misc. Const. Cost</td> <td style="text-align: center;">= \$</td> <td style="text-align: right;">560,000</td> </tr> <tr> <td>**E&amp;C</td> <td style="text-align: center;">= \$</td> <td style="text-align: right;">320,000</td> </tr> </table> <p>*35% miscellaneous construction costs **15% construction engineering costs</p> <p><b>Total Estimated Cost = \$2,470,000</b></p>	Construction Cost	= \$	1,590,000	*Misc. Const. Cost	= \$	560,000	**E&C	= \$	320,000	<p>Pavement Area: <b>21,400 sy</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Construction Cost</td> <td style="width: 10%; text-align: center;">= \$</td> <td style="width: 30%; text-align: right;">1,300,000</td> </tr> <tr> <td>*Misc. Const. Cost</td> <td style="text-align: center;">= \$</td> <td style="text-align: right;">450,000</td> </tr> <tr> <td>**E&amp;C</td> <td style="text-align: center;">= \$</td> <td style="text-align: right;">260,000</td> </tr> </table> <p>*35% miscellaneous construction costs **15% construction engineering costs</p> <p><b>Total Estimated Cost = \$2,010,000</b></p>	Construction Cost	= \$	1,300,000	*Misc. Const. Cost	= \$	450,000	**E&C	= \$	260,000
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<b>RIGHT-OF-WAY</b>	<p>Properties impacted:</p> <ul style="list-style-type: none"> <li>• ABC Supply Company</li> <li>• Holiday Gas Station</li> <li>• Shopko</li> <li>• Lot south of Shopko</li> <li>• EZ Auto Credit*</li> <li>• Heckel's</li> </ul> <p>*May require full take</p> <p><b>Real Estate Area = 75,600 sf</b></p>	<p>Properties impacted:</p> <ul style="list-style-type: none"> <li>• ABC Supply Company</li> <li>• Holiday Gas Station</li> <li>• Shopko</li> <li>• Lot south of Shopko</li> <li>• EZ Auto Credit*</li> </ul> <p>*May require full take</p> <p><b>Real Estate Area = 63,550 sf</b></p>																		