**CMAQ FY 2020-2024 INPUT MODULE WORKSHEET**  Before Improvement

(Complete one worksheet for before conditions and one worksheet for after conditions  After Improvement

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **General Information** | | | **Site Information** | | | | | | | | | | | | | | | | | | |
| Analysis Time Period: **PM Peak**  Analysis Year | | | Intersection  Area Type  CBD  Other Jurisdiction | | | | | | | | | | | | | | | | | | |
| **Intersection Geometry (draw or attach)** | | | | | | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | | | | | |
| **Volume and Timing Input** | | | | | | | | | | | | | | | | | | | | | |
|  | | | | | EB | | | | WB | | | | | NB | | | | SB | | | |
| LT | TH | | RT1 | LT | | TH | RT1 | | LT | TH | | RT1 | LT | | TH | RT1 |
| Volume, V (veh/h) | | | | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  |
| % heavy vehicles, % HV | | | | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  |
| Peak-hour factor, PHF | | | | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  |
| Pretimed (P) or actuated (A) | | | | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  |
| Start-up lost time, I1 (s) | | | | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  |
| Extension of effective green time, e (s) | | | | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  |
| Arrival type, AT | | | | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  |
| Approach pedestrian volume,2 vped (p/h) | | | | |  | | | |  | | | | |  | | | |  | | | |
| Approach bicycle volume,2 vbic (bicycles/h) | | | | |  | | | |  | | | | |  | | | |  | | | |
| Parking (Y or N) | | | | |  | | | |  | | | | |  | | | |  | | | |
| Parking maneuvers, Nm, (maneuvers/h) | | | | |  | | | |  | | | | |  | | | |  | | | |
| Bus Stopping, NB (buses/h) | | | | |  | | | |  | | | | |  | | | |  | | | |
| Min. timing for pedestrians,3 Gp (s) | | | | |  | | | |  | | | | |  | | | |  | | | |
| **Signal Phasing Plan** | | | | | | | | | | | | | | | | | | | | | |
| Diagram | 01 | 02 | | 03 | | | 04 | | | 05 | | | 06 | | | 07 | | | 08 | | |
| Timing | G= Y= | G= Y= | | G= Y= | | | G= Y= | | | G= Y= | | | G= Y= | | | G= Y= | | | G= Y= | | |
| Protected turns | | | | Permitted turns Pedestrian | | | | | | | | | Cycle length, C = s | | | | | | | | |
| **Notes** | | | | | | | | | | | | | | | | | | | | | |
| 1. RT volumes, as shown, exclude ROR 2. Approach pedestrian and bicycle volumes are those that conflict with right turns from the subject approach. 3. Refer to Equation 16-2 | | | | | | | | | | | | | | | | | | | | | |

**ACTUATED CONTROLLER PROPERTIES**

Scheme:

Reverse

1 2 3 4

1

5 6 7 8

Reverse

Phase Settings (All times are in seconds)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Phase | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Max Green |  |  |  |  |  |  |  |  |
| Min Green |  |  |  |  |  |  |  |  |
| Amber |  |  |  |  |  |  |  |  |
| All Red |  |  |  |  |  |  |  |  |
| Veh. Ext. |  |  |  |  |  |  |  |  |
| Min Recall |  |  |  |  |  |  |  |  |
| Max Recall |  |  |  |  |  |  |  |  |

**ACTUATED CONTROLLER COORDINATION**

Use Coordination  Note: All times are in seconds

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Phase | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Force-off |  | 0 |  |  |  | 0 |  |  |
| Phase can terminate before force-off |  |  |  |  |  |  |  |  |
| Permissive 1 |  |  |  |  |  |  |  |  |
| Period 2 |  |  |  |  |  |  |  |  |
| Flags |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Yield Point | |  | Cycle Length | |  |
|  |  | |  |  | |  |
| Extended Side-Street Leading Left-Turn Phases | | | | | | |
| Phase |  | Duration | | |  | |
|  |  |  | | |  | |
| Phase |  | Duration | | |  | |

Permissive Periods

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Begin Times | | | | | |
| 1 |  | 2 |  | 3 |  |
|  | | | | | |
| End Times | | | | | |
| 1 |  | 2 |  | 3 |  |