

Appendix 5C

**Noise Modeling Results
for CMF/SOL Infill Site**

Appendix 5C - 2

Traffic Noise Model Calculations



| Project: Level II Infill Correctional Facilities Project - CMF/SOL Single Housing Unit | | | | Input | | | | | | | | | | Output | | | | | |
|---|--------------|--------------------------|--------------------------|---|-------------|--------------------------------------|-----|--------|-------|-------|--|-------|---------|-----------------------------|--------|--------|-------------|--------|-----|
| Noise Level Descriptor: Ldn Site Conditions: Soft Traffic Input: ADT Traffic K-Factor: | | | | Distance to Directional Centerline, (feet) ₄ | | Traffic Distribution Characteristics | | | | | Ldn, (dBA) _{5,6,7} Distance to Contour, (feet) ₃ | | | | | | | | |
| | | | | | | | | | | | | | | | | ADT | Speed (mph) | Near | Far |
| Number | Name | From | To | ADT | Speed (mph) | Near | Far | % Auto | % Med | % Hvy | % Day | % Eve | % Night | Ldn, (dBA) _{5,6,7} | 70 dBA | 65 dBA | 60 dBA | 55 dBA | |
| Existing + Infill Conditions | | | | | | | | | | | | | | | | | | | |
| 1 | Alamo Drive | Davis Street | Alamo Lane | 21,900 | 35 | 68 | 142 | 97.5% | 1.5% | 1.0% | 85.0% | 5.0% | 10.0% | 63.3 | 35 | 76 | 164 | 353 | |
| 2 | Alamo Drive | Alamo Lane | Mariposa Avenue | 20,840 | 45 | 68 | 142 | 97.5% | 1.5% | 1.0% | 85.0% | 5.0% | 10.0% | 66.2 | 55 | 118 | 254 | 546 | |
| 3 | Alamo Drive | Mariposa Avenue | Peabody Road | 20,450 | 45 | 68 | 142 | 97.5% | 1.5% | 1.0% | 85.0% | 5.0% | 10.0% | 66.1 | 54 | 116 | 250 | 539 | |
| 4 | Peabody Road | Elmira Road | Cliffside Drive | 23,240 | 35 | 64 | 139 | 97.5% | 1.5% | 1.0% | 85.0% | 5.0% | 10.0% | 63.9 | 37 | 80 | 172 | 371 | |
| 5 | Peabody Road | Cliffside Drive | Hume Way-Berryessa Drive | 23,990 | 35 | 64 | 139 | 97.5% | 1.5% | 1.0% | 85.0% | 5.0% | 10.0% | 64.1 | 38 | 82 | 176 | 379 | |
| 6 | Peabody Road | Hume Way-Berryessa Drive | Marshall Road | 21,150 | 35 | 64 | 139 | 97.5% | 1.5% | 1.0% | 85.0% | 5.0% | 10.0% | 63.5 | 35 | 75 | 162 | 348 | |
| 7 | Peabody Road | Marshall Road | Alamo Drive | 20,120 | 35 | 64 | 139 | 97.5% | 1.5% | 1.0% | 85.0% | 5.0% | 10.0% | 63.3 | 34 | 73 | 156 | 337 | |
| 8 | Peabody Road | Alamo Drive | California Drive | 23,360 | 35 | 64 | 139 | 97.5% | 1.5% | 1.0% | 85.0% | 5.0% | 10.0% | 63.9 | 37 | 80 | 173 | 372 | |
| 9 | Peabody Road | California Drive | Caldwell Drive | 22,940 | 35 | 64 | 139 | 97.5% | 1.5% | 1.0% | 85.0% | 5.0% | 10.0% | 63.9 | 37 | 79 | 171 | 367 | |
| 10 | Peabody Road | Caldwell Drive | Morning Glory Drive | 22,660 | 35 | 64 | 139 | 97.5% | 1.5% | 1.0% | 85.0% | 5.0% | 10.0% | 63.8 | 36 | 79 | 169 | 364 | |
| 11 | Peabody Road | Morning Glory Drive | Foxboro Parkway | 22,370 | 35 | 64 | 139 | 97.5% | 1.5% | 1.0% | 85.0% | 5.0% | 10.0% | 63.7 | 36 | 78 | 168 | 361 | |
| 12 | Peabody Road | Foxboro Parkway | CSP-Solano Driveway | 22,180 | 35 | 64 | 139 | 97.5% | 1.5% | 1.0% | 85.0% | 5.0% | 10.0% | 63.7 | 36 | 77 | 167 | 359 | |

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

