Appendix 5.11A
Soil Loss Calculations
<table>
<thead>
<tr>
<th>Soil Type</th>
<th>Acreage</th>
<th>Soil Loss Estimates Using RUSLE2 software (tons/ac/year)</th>
</tr>
</thead>
<tbody>
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<td></td>
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<td>Slope</td>
</tr>
<tr>
<td>Project Site</td>
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<tr>
<td>122</td>
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<td>211</td>
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<tr>
<td>Subtotal (tons)</td>
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</tr>
<tr>
<td>Off-Site Laydown Area</td>
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<td></td>
</tr>
<tr>
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<td>UNK</td>
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<tr>
<td>Subtotal</td>
<td></td>
<td>0.0</td>
</tr>
<tr>
<td>Off-Site Parking Area</td>
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</tr>
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<td>Subtotal</td>
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<tr>
<td>TOTAL</td>
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</table>

Assumptions:
Assumes slope is the mid-point of the slope class
Assumes no grading on the off-site laydown area or off-site parking areas.
Assumes project site will be 25% bare soil during construction.
Grading
PM10 Emission Factor (ton/acre/month)\textsuperscript{a} 0.11 PM10 emission factor from URBEMIS2007 per email on 5/31/12 from Elyse Engel/SJC. MRI factor of 0.011 tons/acre/month is based on 168 hours per month of construction activity.

Project Site
Duration (months): 4 Assumes 4 months of active grading.
Site Acreage: 25.63 Assumes 100% of site will need to be graded after demolition
PM10 Emitted (tons): 1.12
TSP Emitted (tons)\textsuperscript{b}: 22.552 assume TSP is 50% PM10 as per 5/31/12 email from Elyse Engel/SJC. Source: SCAQMD CEQA Handbook (1993) Table A9-9-E, Factor J
Mitigated TSP Emitted (tons): 7.893 Assume 65% reduction in PM10 with watering thrice daily per SCAQMD CEQA Handbook (1993) Table 11-4

Off-site Laydown Area
Duration (months): 0 Assumes off-site laydown area will not need grading
Acres exposed: 0.0 Assumes 0 months of active grading
PM10 Emitted (tons): 0.00
TSP Emitted for Site (tons): 0.000
Mitigated TSP Emitted (tons): 0.000 Assume 65% reduction in TSP with watering thrice daily per SCAQMD CEQA Handbook (1993) Table 11-4

Off-site Parking Area
Duration (months): 0 Assumes off-site laydown area will not need grading
Acres exposed: 0.0 Assumes 0 months of active grading
PM10 Emitted (tons): 0.00
TSP Emitted for Site (tons): 0.000
Mitigated TSP Emitted (tons): 0.000 Assume 65% reduction in TSP with watering thrice daily per SCAQMD CEQA Handbook (1993) Table 11-4

Total Unmitigated TSP Emitted (tons): 22.552
Total Mitigated TSP Emitted (tons): 7.893 Assume 65% reduction in PM10 with watering thrice daily per SCAQMD CEQA Handbook (1993) Table 11-4

\textsuperscript{b} Conversion Factor Source: Southern California Air Quality Management District (SCAQMD). 1993. CEQA Guidelines, Estimating Emissions from Wind Erosion of Storage Piles (Table A9-9-E)
\textsuperscript{c} Mitigation Efficiency Rate Source: SCAQMD. 1993 CEQA Guidelines (Table 11-4)

Wind Blown Dust
TSP Emission Factor (ton/acre/year) 0.38 Emission Factor Source: AP-42, Section 11.9 Western Surface Coal Mining Table 11.9-4, January 1995.

Project Site
Acres exposed: 6.41 Assumes that 25% of the project area is exposed during construction
Duration (months): 38 Assumes 38 months of construction after grading
TSP Emitted for Site (tons): 7.710
Mitigated TSP Emitted (tons): 2.698 Assume 65% reduction in TSP with watering thrice daily per SCAQMD CEQA Handbook (1993) Table 11-4

Off-site Laydown Area
Acres exposed: 0.0 Assumes off-site laydown area is completely covered (natural veg, gravelled or paved) during construction
Duration (months): 38 Assumes 38 months of construction traffic
TSP Emitted for Site (tons): 0.000
Mitigated TSP Emitted (tons): 0.000 Assume 65% reduction in TSP with watering thrice daily per SCAQMD CEQA Handbook (1993) Table 11-4

Off-site Parking Area
Acres exposed: 0.0 Assumes off-site parking area is completely covered (natural veg, gravelled or paved) during construction
Duration (months): 38 Assumes 38 months of construction traffic
TSP Emitted for Site (tons): 0.000
Mitigated TSP Emitted (tons): 0.000 Assume 65% reduction in TSP with watering thrice daily per SCAQMD CEQA Handbook (1993) Table 11-4

Total Wind Blown Dust (tons) without mitigation 7.710
Total WBD (tons) with mitigation 2.698 Assume 65% reduction in PM10 with watering thrice daily per SCAQMD CEQA Handbook (1993) Table 11-4

Project total without mitigation 30.262
Project total with mitigation 10.592