

**APPENDIX I**

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**NOISE DATA**

# Back Bay Landing Project

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## Noise Worksheets

Provided by PCR Services Corporation

- Ambient Noise Data
- Construction Noise Calculations
- Off-Site Traffic Noise Calculations

## Appendix

- Ambient Noise Data

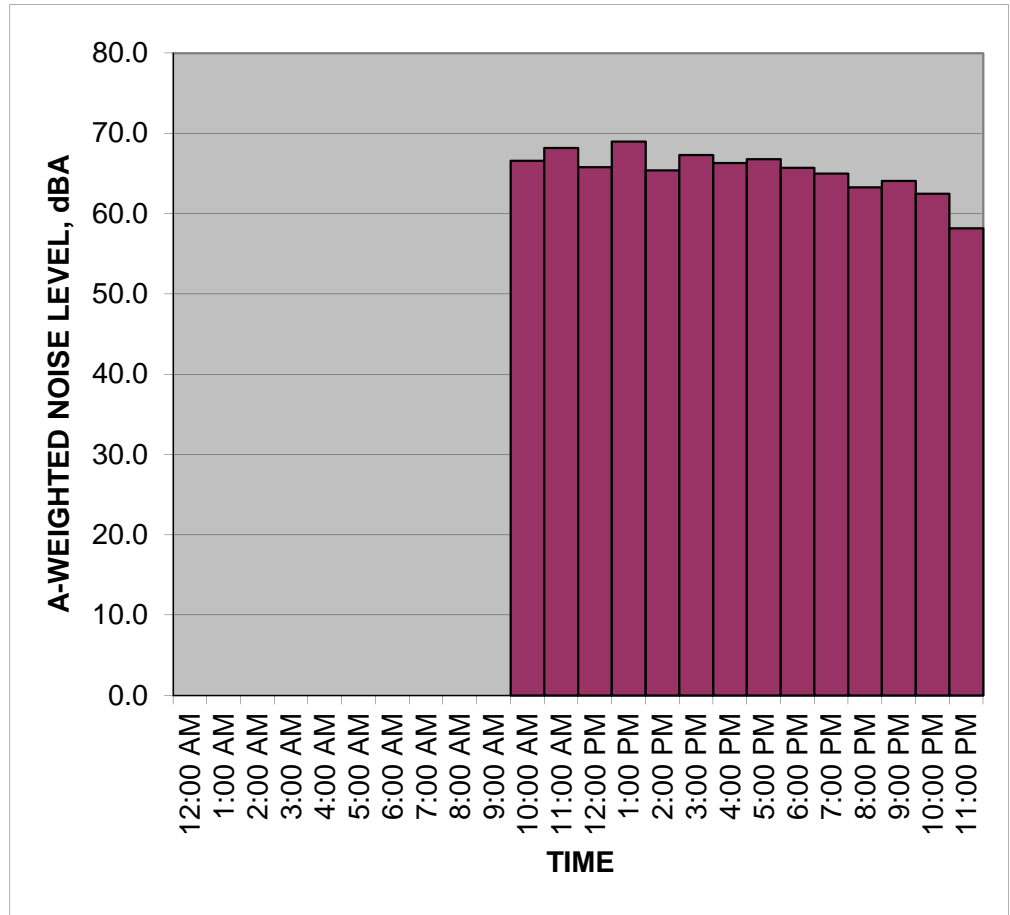
# Measured Ambient Noise Levels



Project: Back Bay Landing  
 Location: R1 - Project Site  
 Sources: Ambient

Date: October 18, 2012

TIME	HNL, dB(A)
12:00 AM	0.0
1:00 AM	0.0
2:00 AM	0.0
3:00 AM	0.0
4:00 AM	0.0
5:00 AM	0.0
6:00 AM	0.0
7:00 AM	0.0
8:00 AM	0.0
9:00 AM	0.0
10:00 AM	66.6
11:00 AM	68.2
12:00 PM	65.8
1:00 PM	69.0
2:00 PM	65.4
3:00 PM	67.3
4:00 PM	66.3
5:00 PM	66.8
6:00 PM	65.7
7:00 PM	65.0
8:00 PM	63.3
9:00 PM	64.1
10:00 PM	62.5
11:00 PM	58.2
<b>CNEL, dB(A):</b>	<b>68.3</b>



**NOTES:**

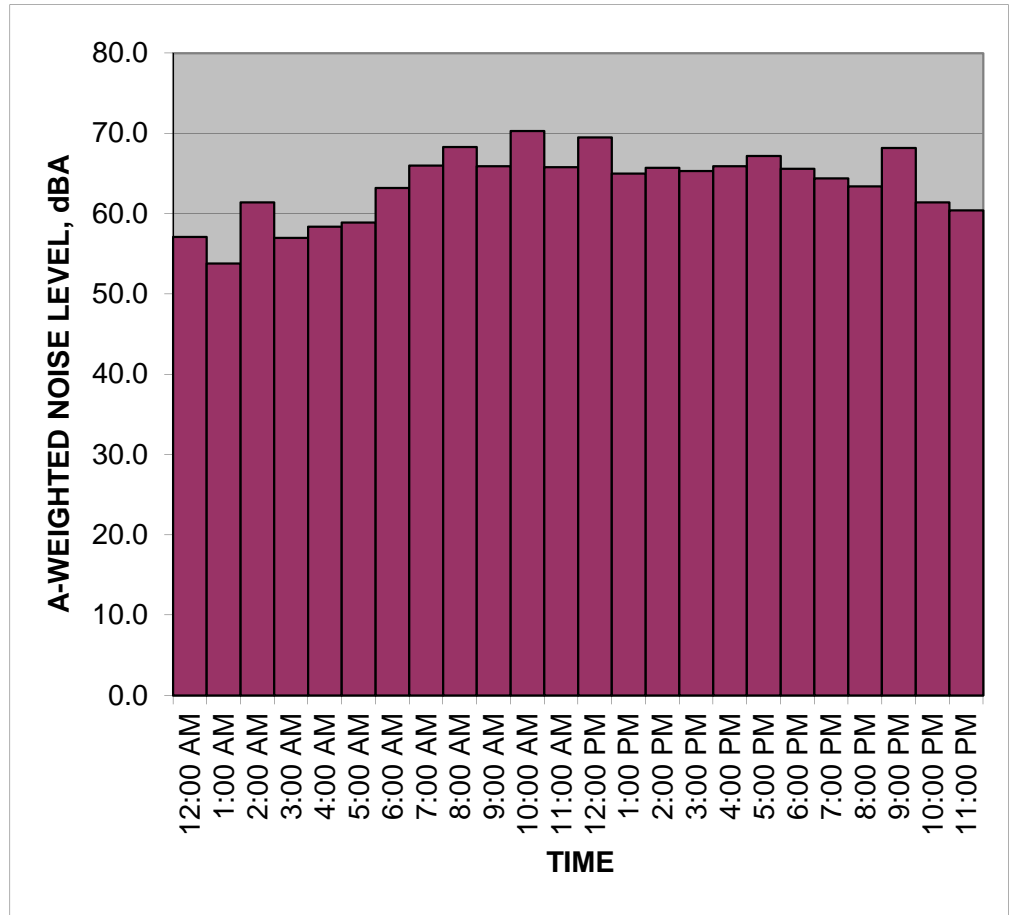
# Measured Ambient Noise Levels



Project: Back Bay Landing  
 Location: R1 - Project Site  
 Sources: Ambient

Date: October 19, 2012

TIME	HNL, dB(A)
12:00 AM	57.1
1:00 AM	53.8
2:00 AM	61.4
3:00 AM	57.0
4:00 AM	58.4
5:00 AM	58.9
6:00 AM	63.2
7:00 AM	66.0
8:00 AM	68.3
9:00 AM	65.9
10:00 AM	70.3
11:00 AM	65.8
12:00 PM	69.5
1:00 PM	65.0
2:00 PM	65.7
3:00 PM	65.3
4:00 PM	65.9
5:00 PM	67.2
6:00 PM	65.6
7:00 PM	64.4
8:00 PM	63.4
9:00 PM	68.2
10:00 PM	61.4
11:00 PM	60.4
<b>CNEL, dB(A):</b>	<b>68.9</b>



**NOTES:**

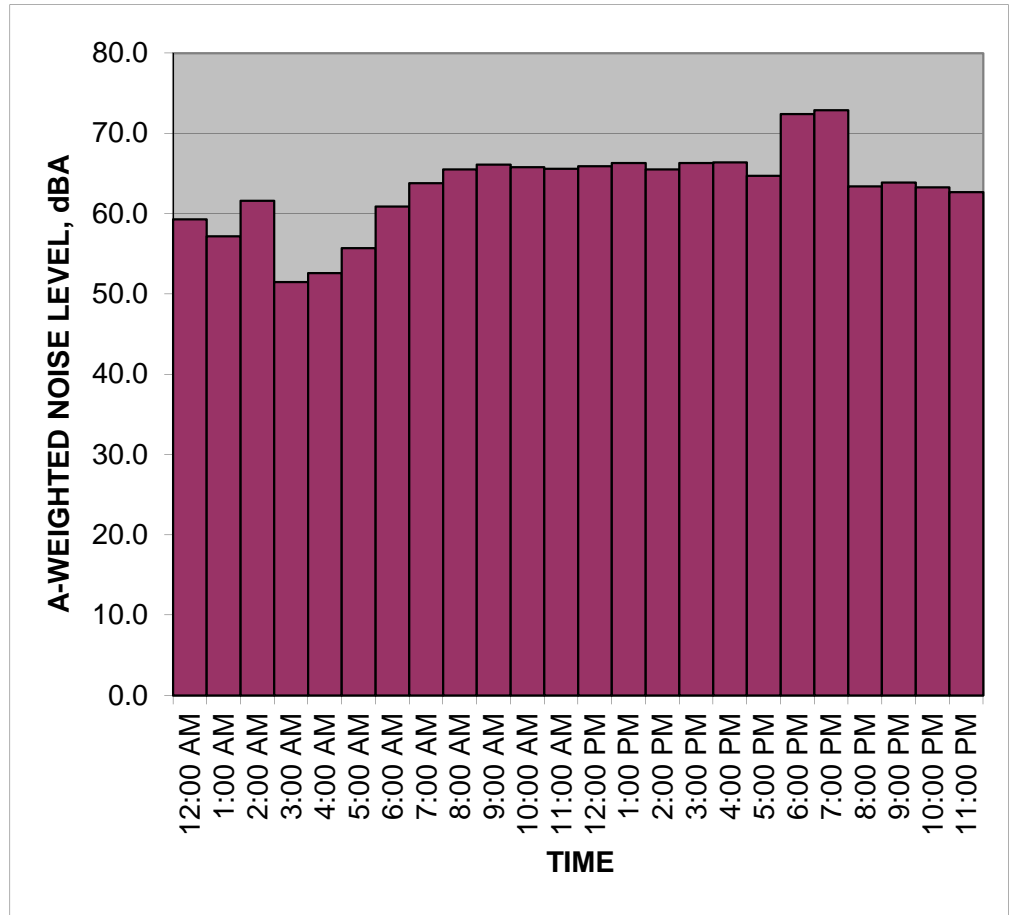
# Measured Ambient Noise Levels



Project: Back Bay Landing  
 Location: R1 - Project Site  
 Sources: Ambient

Date: October 20, 2012

TIME	HNL, dB(A)
12:00 AM	59.3
1:00 AM	57.2
2:00 AM	61.6
3:00 AM	51.5
4:00 AM	52.6
5:00 AM	55.7
6:00 AM	60.9
7:00 AM	63.8
8:00 AM	65.5
9:00 AM	66.1
10:00 AM	65.8
11:00 AM	65.6
12:00 PM	65.9
1:00 PM	66.3
2:00 PM	65.5
3:00 PM	66.3
4:00 PM	66.4
5:00 PM	64.7
6:00 PM	72.4
7:00 PM	72.9
8:00 PM	63.4
9:00 PM	63.9
10:00 PM	63.3
11:00 PM	62.7
<b>CNEL, dB(A):</b>	<b>69.7</b>



**NOTES:**

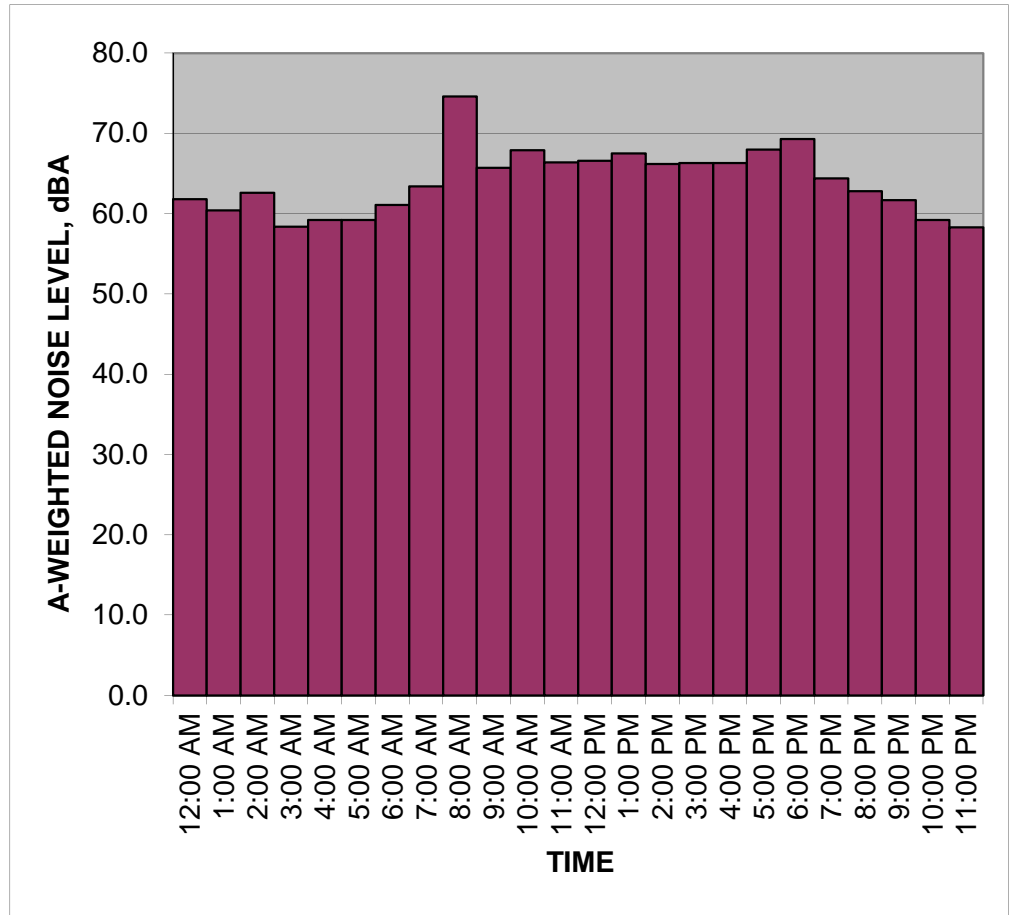
# Measured Ambient Noise Levels



Project: Back Bay Landing  
 Location: R1 - Project Site  
 Sources: Ambient

Date: October 21, 2012

TIME	HNL, dB(A)
12:00 AM	61.8
1:00 AM	60.4
2:00 AM	62.6
3:00 AM	58.4
4:00 AM	59.2
5:00 AM	59.2
6:00 AM	61.1
7:00 AM	63.4
8:00 AM	74.6
9:00 AM	65.7
10:00 AM	67.9
11:00 AM	66.4
12:00 PM	66.6
1:00 PM	67.5
2:00 PM	66.2
3:00 PM	66.3
4:00 PM	66.3
5:00 PM	68.0
6:00 PM	69.3
7:00 PM	64.4
8:00 PM	62.8
9:00 PM	61.7
10:00 PM	59.2
11:00 PM	58.3
<b>CNEL, dB(A):</b>	<b>69.2</b>



**NOTES:**

## Appendix

- Construction Noise Calculations



**Project: Westgate Specific Plan**
**Construction Phase: Phase 1  
Demolition**
**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Rubber Tired Dozers	1	82	40%	65	0
Tractors/Loaders/Backhoes	2	80	25%	65	0
Concrete/Industrial Saws	2	90	20%	65	0
Other Construction Equipmer	1	85	50%	65	0
Aerial Lift	1	75	20%	65	0

**Receptor: R1**
**Construction Hour:**

- 12 Hours during daytime (7 am to 7 pm)
- 0 Hours during evening (7 pm to 10 pm)
- 0 Hours during nighttime (10 pm to 7 am)

**Results:**

**Lmax: 91**  
**Leq: 86**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 & FHWA RCNM, 2005

**Project: Westgate Specific Plan**
**Construction Phase: Phase 2  
Excavation**
**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Excavators	2	81	40%	65	0
Graders	2	85	40%	65	0
Rubber Tired Loader	1	79	50%	65	0
Tractors/Loaders/Backhoes	2	80	25%	65	0
Other Construction Equipment	1	85	50%	65	0
Bore/drill rig	1	79	20%	65	0
Air Compressors	1	78	50%	65	0
Pump	1	81	50%	65	0

**Receptor: R1**
**Construction Hour:** 12 Hours during daytime (7 am to 7 pm)  
 0 Hours during evening (7 pm to 10 pm)  
 0 Hours during nighttime (10 pm to 7 am)

**Results:**
**Lmax: 86**  
**Leq: 86**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 &amp; FHWA RCNM, 2005

**Project: Westgate Specific Plan**
**Construction Phase: Phase 3  
Foundation**
**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Air Compressor	2	78	50%	100	0
Cement and Mortar Mixers	2	79	40%	100	0
Pump	1	81	50%	100	0
Tractor/loader/backhoe	2	80	25%	100	0
Other Construction Equipmen	1	85	50%	100	0

**Receptor: R1**
**Construction Hour:** 12 Hours during daytime (7 am to 7 pm)  
 0 Hours during evening (7 pm to 10 pm)  
 0 Hours during nighttime (10 pm to 7 am)

**Results:**
**Lmax: 79**  
**Leq: 80**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 &amp; FHWA RCNM, 2005

**Project: Westgate Specific Plan**

**Construction Phase: Phase 4**  
**Vertical Construction**

**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Crane	1	81	40%	100	0
Air Compressor	2	78	50%	100	0
Aerial Lift	2	75	20%	100	0
Forklifts	2	75	10%	100	0
Tractor/loader/backhoe	2	80	25%	100	0
Concrete/Industrial Saw	1	90	20%	100	0
Other Construction Equipment	2	85	50%	100	0

**Receptor: R1**

**Construction Hour:**  
 12 Hours during daytime (7 am to 7 pm)  
 0 Hours during evening (7 pm to 10 pm)  
 0 Hours during nighttime (10 pm to 7 am)

**Results:**  
**Lmax: 84**  
**Leq: 82**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 & FHWA RCNM, 2005

**Project: Westgate Specific Plan**
**Construction Phase: Phase 5  
Paving**
**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Rubber Tired Dozers	1	82	40%	65	0
Tractors/Loaders/Backhoes	1	80	25%	65	0
Pavers	1	77	50%	65	0
Pavement Scarifier	1	90	20%	65	0
Rollers	1	80	20%	65	0
Cement and Mortar Mixers	1	79	40%	65	0

**Receptor: R1**
**Construction Hour:** 12 Hours during daytime (7 am to 7 pm)  
 0 Hours during evening (7 pm to 10 pm)  
 0 Hours during nighttime (10 pm to 7 am)

**Results:**
**Lmax: 88**  
**Leq: 83**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 &amp; FHWA RCNM, 2005

**Project: Westgate Specific Plan**
**Construction Phase: Phase 1  
Demolition**
**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Rubber Tired Dozers	1	82	40%	35	0
Tractors/Loaders/Backhoes	2	80	25%	35	0
Concrete/Industrial Saws	2	90	20%	35	0
Other Construction Equipmer	1	85	50%	35	0
Aerial Lift	1	75	20%	35	0

**Receptor: R2**
**Construction Hour:**

- 12 Hours during daytime (7 am to 7 pm)
- 0 Hours during evening (7 pm to 10 pm)
- 0 Hours during nighttime (10 pm to 7 am)

**Results:**

**Lmax: 96**  
**Leq: 91**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 & FHWA RCNM, 2005

**Project: Westgate Specific Plan**

**Construction Phase: Phase 2  
Excavation**

**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Excavators	2	81	40%	35	0
Graders	2	85	40%	35	0
Rubber Tired Loader	1	79	50%	35	0
Tractors/Loaders/Backhoes	2	80	25%	35	0
Other Construction Equipment	1	85	50%	35	0
Bore/drill rig	1	79	20%	35	0
Air Compressors	1	78	50%	35	0
Pump	1	81	50%	35	0

**Receptor: R2**

**Construction Hour:**  
 12 Hours during daytime (7 am to 7 pm)  
 0 Hours during evening (7 pm to 10 pm)  
 0 Hours during nighttime (10 pm to 7 am)

**Results:**  
**Lmax: 91**  
**Leq: 92**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 & FHWA RCNM, 2005

**Project: Westgate Specific Plan**
**Construction Phase: Phase 3  
Foundation**
**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Air Compressor	2	78	50%	60	0
Cement and Mortar Mixers	2	79	40%	60	0
Pump	1	81	50%	60	0
Tractor/loader/backhoe	2	80	25%	60	0
Other Construction Equipmen	1	85	50%	60	0

**Receptor: R2**
**Construction Hour:** 12 Hours during daytime (7 am to 7 pm)  
 0 Hours during evening (7 pm to 10 pm)  
 0 Hours during nighttime (10 pm to 7 am)

**Results:**
**Lmax: 83**  
**Leq: 84**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 &amp; FHWA RCNM, 2005



**Project: Westgate Specific Plan**
**Construction Phase: Phase 4**  
**Vertical Construction**
**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Crane	1	81	40%	60	0
Air Compressor	2	78	50%	60	0
Aerial Lift	2	75	20%	60	0
Forklifts	2	75	10%	60	0
Tractor/loader/backhoe	2	80	25%	60	0
Concrete/Industrial Saw	1	90	20%	60	0
Other Construction Equipmen	2	85	50%	60	0

**Receptor: R2**
**Construction Hour:**  
 12 Hours during daytime (7 am to 7 pm)  
 0 Hours during evening (7 pm to 10 pm)  
 0 Hours during nighttime (10 pm to 7 am)

**Results:**
**Lmax: 88**  
**Leq: 87**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 &amp; FHWA RCNM, 2005

**Project: Westgate Specific Plan**
**Construction Phase: Phase 5  
Paving**
**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Rubber Tired Dozers	1	82	40%	35	0
Tractors/Loaders/Backhoes	1	80	25%	35	0
Pavers	1	77	50%	35	0
Pavement Scarifier	1	90	20%	35	0
Rollers	1	80	20%	35	0
Cement and Mortar Mixers	1	79	40%	35	0

**Receptor: R2**
**Construction Hour:**

- 12 Hours during daytime (7 am to 7 pm)
- 0 Hours during evening (7 pm to 10 pm)
- 0 Hours during nighttime (10 pm to 7 am)

**Results:**

**Lmax: 93**  
**Leq: 89**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 & FHWA RCNM, 2005

**Project: Westgate Specific Plan**
**Construction Phase: Phase 1  
Demolition**
**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Rubber Tired Dozers	1	82	40%	400	0
Tractors/Loaders/Backhoes	2	80	25%	400	0
Concrete/Industrial Saws	2	90	20%	400	0
Other Construction Equipmer	1	85	50%	400	0
Aerial Lift	1	75	20%	400	0

**Receptor: R3**
**Construction Hour:**

- 12 Hours during daytime (7 am to 7 pm)
- 0 Hours during evening (7 pm to 10 pm)
- 0 Hours during nighttime (10 pm to 7 am)

**Results:**
**Lmax: 75**  
**Leq: 70**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 &amp; FHWA RCNM, 2005

**Project: Westgate Specific Plan**

**Construction Phase: Phase 2  
Excavation**

**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Excavators	2	81	40%	400	0
Graders	2	85	40%	400	0
Rubber Tired Loader	1	79	50%	400	0
Tractors/Loaders/Backhoes	2	80	25%	400	0
Other Construction Equipment	1	85	50%	400	0
Bore/drill rig	1	79	20%	400	0
Air Compressors	1	78	50%	400	0
Pump	1	81	50%	400	0

**Receptor: R3**

**Construction Hour:**  
 12 Hours during daytime (7 am to 7 pm)  
 0 Hours during evening (7 pm to 10 pm)  
 0 Hours during nighttime (10 pm to 7 am)

**Results:**  
**Lmax: 70**  
**Leq: 70**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 & FHWA RCNM, 2005

**Project: Westgate Specific Plan**
**Construction Phase: Phase 3  
Foundation**
**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Air Compressor	2	78	50%	420	0
Cement and Mortar Mixers	2	79	40%	420	0
Pump	1	81	50%	420	0
Tractor/loader/backhoe	2	80	25%	420	0
Other Construction Equipmen	1	85	50%	420	0

**Receptor: R3**
**Construction Hour:** 12 Hours during daytime (7 am to 7 pm)  
 0 Hours during evening (7 pm to 10 pm)  
 0 Hours during nighttime (10 pm to 7 am)

**Results:**
**Lmax: 67**  
**Leq: 68**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 &amp; FHWA RCNM, 2005

**Project: Westgate Specific Plan**
**Construction Phase: Phase 4**  
**Vertical Construction**
**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Crane	1	81	40%	420	0
Air Compressor	2	78	50%	420	0
Aerial Lift	2	75	20%	420	0
Forklifts	2	75	10%	420	0
Tractor/loader/backhoe	2	80	25%	420	0
Concrete/Industrial Saw	1	90	20%	420	0
Other Construction Equipment	2	85	50%	420	0

**Receptor: R3**
**Construction Hour:**  
 12 Hours during daytime (7 am to 7 pm)  
 0 Hours during evening (7 pm to 10 pm)  
 0 Hours during nighttime (10 pm to 7 am)

**Results:**
**Lmax: 72**  
**Leq: 70**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 &amp; FHWA RCNM, 2005

**Project: Westgate Specific Plan**
**Construction Phase: Phase 5  
Paving**
**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Rubber Tired Dozers	1	82	40%	400	0
Tractors/Loaders/Backhoes	1	80	25%	400	0
Pavers	1	77	50%	400	0
Pavement Scarifier	1	90	20%	400	0
Rollers	1	80	20%	400	0
Cement and Mortar Mixers	1	79	40%	400	0

**Receptor: R3**
**Construction Hour:**

- 12 Hours during daytime (7 am to 7 pm)
- 0 Hours during evening (7 pm to 10 pm)
- 0 Hours during nighttime (10 pm to 7 am)

**Results:**
**Lmax: 72**  
**Leq: 68**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 &amp; FHWA RCNM, 2005

**Project: Westgate Specific Plan**
**Construction Phase: Phase 1  
Demolition**
**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Rubber Tired Dozers	1	82	40%	1900	0
Tractors/Loaders/Backhoes	2	80	25%	1900	0
Concrete/Industrial Saws	2	90	20%	1900	0
Other Construction Equipmer	1	85	50%	1900	0
Aerial Lift	1	75	20%	1900	0

**Receptor: R4**
**Construction Hour:**

- 12 Hours during daytime (7 am to 7 pm)
- 0 Hours during evening (7 pm to 10 pm)
- 0 Hours during nighttime (10 pm to 7 am)

**Results:**
**Lmax: 61**  
**Leq: 57**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 &amp; FHWA RCNM, 2005



**Project: Westgate Specific Plan**
**Construction Phase: Phase 2  
Excavation**
**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Excavators	2	81	40%	1900	0
Graders	2	85	40%	1900	0
Rubber Tired Loader	1	79	50%	1900	0
Tractors/Loaders/Backhoes	2	80	25%	1900	0
Other Construction Equipment	1	85	50%	1900	0
Bore/drill rig	1	79	20%	1900	0
Air Compressors	1	78	50%	1900	0
Pump	1	81	50%	1900	0

**Receptor: R4**
**Construction Hour:**

- 12 Hours during daytime (7 am to 7 pm)
- 0 Hours during evening (7 pm to 10 pm)
- 0 Hours during nighttime (10 pm to 7 am)

**Results:**
**Lmax: 56**  
**Leq: 57**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 &amp; FHWA RCNM, 2005

**Project: Westgate Specific Plan**

**Construction Phase: Phase 3  
Foundation**

**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Air Compressor	2	78	50%	1900	0
Cement and Mortar Mixers	2	79	40%	1900	0
Pump	1	81	50%	1900	0
Tractor/loader/backhoe	2	80	25%	1900	0
Other Construction Equipmen	1	85	50%	1900	0

**Receptor: R4**

**Construction Hour:**  
 12 Hours during daytime (7 am to 7 pm)  
 0 Hours during evening (7 pm to 10 pm)  
 0 Hours during nighttime (10 pm to 7 am)

**Results:**  
**Lmax: 53**  
**Leq: 54**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 & FHWA RCNM, 2005

**Project: Westgate Specific Plan**
**Construction Phase: Phase 4**  
**Vertical Construction**
**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Crane	1	81	40%	1900	0
Air Compressor	2	78	50%	1900	0
Aerial Lift	2	75	20%	1900	0
Forklifts	2	75	10%	1900	0
Tractor/loader/backhoe	2	80	25%	1900	0
Concrete/Industrial Saw	1	90	20%	1900	0
Other Construction Equipmen	2	85	50%	1900	0

**Receptor: R4**
**Construction Hour:**  
 12 Hours during daytime (7 am to 7 pm)  
 0 Hours during evening (7 pm to 10 pm)  
 0 Hours during nighttime (10 pm to 7 am)

**Results:**
**Lmax: 58**  
**Leq: 57**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 &amp; FHWA RCNM, 2005

**Project: Westgate Specific Plan**

**Construction Phase: Phase 5  
Paving**

**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Rubber Tired Dozers	1	82	40%	1900	0
Tractors/Loaders/Backhoes	1	80	25%	1900	0
Pavers	1	77	50%	1900	0
Pavement Scarifier	1	90	20%	1900	0
Rollers	1	80	20%	1900	0
Cement and Mortar Mixers	1	79	40%	1900	0

**Receptor: R4**

**Construction Hour:**  
 12 Hours during daytime (7 am to 7 pm)  
 0 Hours during evening (7 pm to 10 pm)  
 0 Hours during nighttime (10 pm to 7 am)

**Results:**  
**Lmax: 58**  
**Leq: 54**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 & FHWA RCNM, 2005

**Project: Westgate Specific Plan**
**Construction Phase: Phase 1  
Demolition**
**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Rubber Tired Dozers	1	82	40%	1125	0
Tractors/Loaders/Backhoes	2	80	25%	1125	0
Concrete/Industrial Saws	2	90	20%	1125	0
Other Construction Equipmer	1	85	50%	1125	0
Aerial Lift	1	75	20%	1125	0

**Receptor: R5**
**Construction Hour:**

- 12 Hours during daytime (7 am to 7 pm)
- 0 Hours during evening (7 pm to 10 pm)
- 0 Hours during nighttime (10 pm to 7 am)

**Results:**
**Lmax: 66**  
**Leq: 61**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 &amp; FHWA RCNM, 2005

**Project: Westgate Specific Plan**

**Construction Phase: Phase 2  
Excavation**

**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Excavators	2	81	40%	1125	0
Graders	2	85	40%	1125	0
Rubber Tired Loader	1	79	50%	1125	0
Tractors/Loaders/Backhoes	2	80	25%	1125	0
Other Construction Equipment	1	85	50%	1125	0
Bore/drill rig	1	79	20%	1125	0
Air Compressors	1	78	50%	1125	0
Pump	1	81	50%	1125	0

**Receptor: R5**

**Construction Hour:**  
 12 Hours during daytime (7 am to 7 pm)  
 0 Hours during evening (7 pm to 10 pm)  
 0 Hours during nighttime (10 pm to 7 am)

**Results:**  
**Lmax: 61**  
**Leq: 61**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 & FHWA RCNM, 2005

**Project: Westgate Specific Plan**
**Construction Phase: Phase 3  
Foundation**
**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Air Compressor	2	78	50%	1125	0
Cement and Mortar Mixers	2	79	40%	1125	0
Pump	1	81	50%	1125	0
Tractor/loader/backhoe	2	80	25%	1125	0
Other Construction Equipmen	1	85	50%	1125	0

**Receptor: R5**
**Construction Hour:**

- 12 Hours during daytime (7 am to 7 pm)
- 0 Hours during evening (7 pm to 10 pm)
- 0 Hours during nighttime (10 pm to 7 am)

**Results:**

**Lmax: 58**  
**Leq: 59**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 & FHWA RCNM, 2005

**Project: Westgate Specific Plan**
**Construction Phase: Phase 4**  
**Vertical Construction**
**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Crane	1	81	40%	1125	0
Air Compressor	2	78	50%	1125	0
Aerial Lift	2	75	20%	1125	0
Forklifts	2	75	10%	1125	0
Tractor/loader/backhoe	2	80	25%	1125	0
Concrete/Industrial Saw	1	90	20%	1125	0
Other Construction Equipment	2	85	50%	1125	0

**Receptor: R5**
**Construction Hour:**  
 12 Hours during daytime (7 am to 7 pm)  
 0 Hours during evening (7 pm to 10 pm)  
 0 Hours during nighttime (10 pm to 7 am)

**Results:**
**Lmax: 63**  
**Leq: 61**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 &amp; FHWA RCNM, 2005



**Project: Westgate Specific Plan**
**Construction Phase: Phase 5  
Paving**
**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Rubber Tired Dozers	1	82	40%	1125	0
Tractors/Loaders/Backhoes	1	80	25%	1125	0
Pavers	1	77	50%	1125	0
Pavement Scarifier	1	90	20%	1125	0
Rollers	1	80	20%	1125	0
Cement and Mortar Mixers	1	79	40%	1125	0

**Receptor: R5**
**Construction Hour:**

- 12 Hours during daytime (7 am to 7 pm)
- 0 Hours during evening (7 pm to 10 pm)
- 0 Hours during nighttime (10 pm to 7 am)

**Results:**
**Lmax: 63**  
**Leq: 59**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 &amp; FHWA RCNM, 2005

**Project: Westgate Specific Plan**

**Construction Phase: Phase 6**  
**Water Pipeline Alt1**

**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Excavator	1	81	40%	40	0
Other Equipment	1	85	50%	40	0
Backhoe	1	80	40%	40	0
Cranes	1	81	40%	40	0

**Receptor: R1**

**Construction Hour:**  
 12 Hours during daytime (7 am to 7 pm)  
 0 Hours during evening (7 pm to 10 pm)  
 0 Hours during nighttime (10 pm to 7 am)

**Results:**  
**Lmax: 87**  
**Leq: 87**

A1  
 A2

Source for Ref. Noise Levels: LA CEQA Guides, 2006 & FHWA RCNM, 2005

**Project: Westgate Specific Plan**
**Construction Phase: Phase 6**  
**Water Pipeline Alt1**
**Equipment**

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Excavator	1	81	40%	50	0
Other Equipment	1	85	50%	50	0
Backhoe	1	80	40%	50	0
Cranes	1	81	40%	50	0

**Receptor: R2**
**Construction Hour:**  
 12 Hours during daytime (7 am to 7 pm)  
 0 Hours during evening (7 pm to 10 pm)  
 0 Hours during nighttime (10 pm to 7 am)

**Results:**
**Lmax: 85**  
**Leq: 85**

 A1  
 A2

Source for Ref. Noise Levels: LA CEQA Guides, 2006 &amp; FHWA RCNM, 2005

**Project: Westgate Specific Plan**
**Construction Phase: Phase 6**  
**Water Pipeline Alt1**
**Equipment**

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Excavator	1	81	40%	550	0
Other Equipment	1	85	50%	550	0
Backhoe	1	80	40%	550	0
Cranes	1	81	40%	550	0

**Receptor: R3**
**Construction Hour:**  
 12 Hours during daytime (7 am to 7 pm)  
 0 Hours during evening (7 pm to 10 pm)  
 0 Hours during nighttime (10 pm to 7 am)

**Results:**
**Lmax: 64**  
**Leq: 64**

 A1  
 A2

Source for Ref. Noise Levels: LA CEQA Guides, 2006 &amp; FHWA RCNM, 2005

**Project: Westgate Specific Plan**

**Construction Phase: Phase 6**  
**Water Pipeline Alt1**

**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Excavator	1	81	40%	1800	0
Other Equipment	1	85	50%	1800	0
Backhoe	1	80	40%	1800	0
Cranes	1	81	40%	1800	0

**Receptor: R4**

**Construction Hour:**  
 12 Hours during daytime (7 am to 7 pm)  
 0 Hours during evening (7 pm to 10 pm)  
 0 Hours during nighttime (10 pm to 7 am)

**Results:**  
**Lmax: 54**  
**Leq: 54**

A1  
 A2

Source for Ref. Noise Levels: LA CEQA Guides, 2006 & FHWA RCNM, 2005

**Project: Westgate Specific Plan**

**Construction Phase: Phase 6**  
**Water Pipeline Alt1**

**Equipment**

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Excavator	1	81	40%	1200	0
Other Equipment	1	85	50%	1200	0
Backhoe	1	80	40%	1200	0
Cranes	1	81	40%	1200	0

**Receptor: R5**

**Construction Hour:**  
 12 Hours during daytime (7 am to 7 pm)  
 0 Hours during evening (7 pm to 10 pm)  
 0 Hours during nighttime (10 pm to 7 am)

**Results:**  
**Lmax: 57**  
**Leq: 57**

A1  
 A2

Source for Ref. Noise Levels: LA CEQA Guides, 2006 & FHWA RCNM, 2005

**Project: Westgate Specific Plan**
**Construction Phase: Phase 6**  
**Water Pipeline Alt2**
**Equipment**

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Excavator	1	81	40%	80	0
Other Equipment	1	85	50%	80	0
Backhoe	1	80	40%	80	0
Cranes	1	81	40%	80	0

**Receptor: R1**
**Construction Hour:**  
 12 Hours during daytime (7 am to 7 pm)  
 0 Hours during evening (7 pm to 10 pm)  
 0 Hours during nighttime (10 pm to 7 am)

**Results:**
**Lmax: 81**  
**Leq: 81**

 A1  
 A2

Source for Ref. Noise Levels: LA CEQA Guides, 2006 &amp; FHWA RCNM, 2005

**Project: Westgate Specific Plan**

**Construction Phase: Phase 6**  
**Water Pipeline Alt2**

**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Excavator	1	81	40%	280	0
Other Equipment	1	85	50%	280	0
Backhoe	1	80	40%	280	0
Cranes	1	81	40%	280	0

**Receptor: R2**

**Construction Hour:**  
 12 Hours during daytime (7 am to 7 pm)  
 0 Hours during evening (7 pm to 10 pm)  
 0 Hours during nighttime (10 pm to 7 am)

**Results:**  
**Lmax: 70**  
**Leq: 70**

A1  
 A2

Source for Ref. Noise Levels: LA CEQA Guides, 2006 & FHWA RCNM, 2005



**Project: Westgate Specific Plan**
**Construction Phase: Phase 6**  
**Water Pipeline Alt2**
**Equipment**

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Excavator	1	81	40%	450	0
Other Equipment	1	85	50%	450	0
Backhoe	1	80	40%	450	0
Cranes	1	81	40%	450	0

**Receptor: R3**
**Construction Hour:**  
 12 Hours during daytime (7 am to 7 pm)  
 0 Hours during evening (7 pm to 10 pm)  
 0 Hours during nighttime (10 pm to 7 am)

**Results:**  
**Lmax: 66**  
**Leq: 66**

 A1  
 A2

Source for Ref. Noise Levels: LA CEQA Guides, 2006 &amp; FHWA RCNM, 2005

**Project: Westgate Specific Plan**
**Construction Phase: Phase 6**  
**Water Pipeline Alt2**
**Equipment**

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Excavator	1	81	40%	2000	0
Other Equipment	1	85	50%	2000	0
Backhoe	1	80	40%	2000	0
Cranes	1	81	40%	2000	0

**Receptor: R4**
**Construction Hour:**  
 12 Hours during daytime (7 am to 7 pm)  
 0 Hours during evening (7 pm to 10 pm)  
 0 Hours during nighttime (10 pm to 7 am)

**Results:**  
**Lmax: 53**  
**Leq: 53**

 A1  
 A2

Source for Ref. Noise Levels: LA CEQA Guides, 2006 &amp; FHWA RCNM, 2005

**Project: Westgate Specific Plan**

**Construction Phase: Phase 6**  
**Water Pipeline Alt2**

**Equipment**

<b>Description</b>	<b>No. of Equip.</b>	<b>Reference Noise Level at 50ft, Lmax</b>	<b>Acoustical Usage Factor</b>	<b>Distance to Receptor, ft</b>	<b>Estimated Noise Shielding, dBA</b>
Excavator	1	81	40%	1200	0
Other Equipment	1	85	50%	1200	0
Backhoe	1	80	40%	1200	0
Cranes	1	81	40%	1200	0

**Receptor: R5**

**Construction Hour:**  
 12 Hours during daytime (7 am to 7 pm)  
 0 Hours during evening (7 pm to 10 pm)  
 0 Hours during nighttime (10 pm to 7 am)

**Results:**  
**Lmax: 57**  
**Leq: 57**

A1  
 A2

Source for Ref. Noise Levels: LA CEQA Guides, 2006 & FHWA RCNM, 2005

## Appendix

- Off-Site Traffic Noise Calculations

**Roadway Traffic Noise Calculations**  
1 of 8



**Project: Back Bay Landing**

<b>Existing</b>										
Roadway/Segment	Speed MPH	Traffic Volumes			Leq			CNEL		
		AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
West Coast Highway w/o Newport Boulevard	40	3432	3757	0	73.4	70.8	69.3	74.6	72.1	70.5
West Coast Highway between Tustin Avenue and Dover Drive	40	3279	3812	0	72.9	70.6	69.1	74.1	71.8	70.3
West Coast Highway between Dover Drive and Bayside Drive	40	4662	5684	0	74.9	72.5	71.0	76.1	73.7	72.2
East Coast Highway between Bayside Drive and Jamboree Road	40	3950	4944	0	74.3	71.9	70.4	75.5	73.1	71.6
East Coast Highway between Jamboree Road and Newport Center	40	3043	3773	0	73.7	71.0	69.4	74.9	72.2	70.6
<b>Future No Project Buildout</b>										
Roadway/Segment	Speed MPH	Traffic Volumes			Leq			CNEL		
		AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
West Coast Highway w/o Newport Boulevard	40	3999	4515	0	74.2	71.6	70.1	75.4	72.9	71.3
West Coast Highway between Tustin Avenue and Dover Drive	40	3909	4682	0	73.7	71.5	70.0	75.0	72.7	71.2
West Coast Highway between Dover Drive and Bayside Drive	40	5409	6742	0	75.6	73.2	71.7	76.9	74.5	72.9
East Coast Highway between Bayside Drive and Jamboree Road	40	4683	5906	0	75.1	72.7	71.1	76.3	73.9	72.3
East Coast Highway between Jamboree Road and Newport Center	40	3740	4660	0	74.6	71.9	70.3	75.8	73.2	71.5
<b>Future With Project Buildout</b>										
Roadway/Segment	Speed MPH	Traffic Volumes			Leq			CNEL		
		AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
West Coast Highway w/o Newport Boulevard	40	4012	4534	0	74.2	71.7	70.1	75.4	72.9	71.3
West Coast Highway between Tustin Avenue and Dover Drive	40	3948	4734	0	73.8	71.5	70.0	75.0	72.7	71.2
West Coast Highway between Dover Drive and Bayside Drive	40	5484	6841	0	75.7	73.3	71.8	76.9	74.5	73.0
East Coast Highway between Bayside Drive and Jamboree Road	40	4725	5956	0	75.1	72.7	71.2	76.3	73.9	72.4
East Coast Highway between Jamboree Road and Newport Center	40	3757	4692	0	74.6	72.0	70.3	75.8	73.2	71.6

Summary	CNEL			
	25 ft. from ROW		At ROW	
	Project Increment	Cumulative Increment	Project Increment	Cumulative Increment
Roadway/Segment				
West Coast Highway w/o Newport Boulevard	0.0	0.8	0.0	0.8
West Coast Highway between Tustin Avenue and Dover Drive	0.0	0.9	0.0	0.9
West Coast Highway between Dover Drive and Bayside Drive	0.0	0.8	0.0	0.8
East Coast Highway between Bayside Drive and Jamboree Road	0.0	0.8	0.0	0.8
East Coast Highway between Jamboree Road and Newport Center	0.0	1.0	0.0	0.9

Vehicle Type	% of ADT			Sub total
	Day	Eve	Night	
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

**Roadway Traffic Noise Calculations**  
2 of 8



**Project: Back Bay Landing**

<b>Existing</b>										
Roadway/Segment	Speed MPH	Traffic Volumes			Leq			CNEL		
		AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
East Coast Highway e/o Newport Center Drive	40	2955	2976	0	72.1	69.7	68.1	73.3	70.9	69.4
Dover Drive between West Coast Highway and 16th Street	40	2006	2283	0	71.5	68.8	67.2	72.7	70.1	68.4
Dover Drive between 16th Street and Westcliff Drive	35	1779	1992	0	70.3	67.3	65.5	71.5	68.5	66.7
Dover Drive between Westcliff Drive and 19th Street	30	1336	1605	0	68.2	65.3	63.5	69.4	66.5	64.7
19th Street w/o Dover Drive	30	406	568	0	63.7	60.7	59.0	64.9	62.0	60.2
<b>Future No Project Buildout</b>										
Roadway/Segment	Speed MPH	Traffic Volumes			Leq			CNEL		
		AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
East Coast Highway e/o Newport Center Drive	40	3610	3758	0	73.1	70.7	69.2	74.3	71.9	70.4
Dover Drive between West Coast Highway and 16th Street	40	2139	2521	0	71.9	69.3	67.6	73.1	70.5	68.9
Dover Drive between 16th Street and Westcliff Drive	35	1868	2152	0	70.6	67.6	65.8	71.8	68.8	67.1
Dover Drive between Westcliff Drive and 19th Street	30	1387	1682	0	68.4	65.5	63.7	69.7	66.7	64.9
19th Street w/o Dover Drive	30	411	578	0	63.8	60.8	59.1	65.0	62.0	60.3
<b>Future With Project Buildout</b>										
Roadway/Segment	Speed MPH	Traffic Volumes			Leq			CNEL		
		AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
East Coast Highway e/o Newport Center Drive	40	3626	3798	0	73.1	70.7	69.2	74.4	72.0	70.4
Dover Drive between West Coast Highway and 16th Street	40	2174	2572	0	72.0	69.4	67.7	73.2	70.6	68.9
Dover Drive between 16th Street and Westcliff Drive	35	1895	2191	0	70.7	67.7	65.9	71.9	68.9	67.1
Dover Drive between Westcliff Drive and 19th Street	30	1395	1694	0	68.5	65.5	63.7	69.7	66.7	65.0
19th Street w/o Dover Drive	30	411	578	0	63.8	60.8	59.1	65.0	62.0	60.3

Summary	CNEL			
	25 ft. from ROW		At ROW	
	Project Increment	Cumulative Increment	Project Increment	Cumulative Increment
Roadway/Segment				
East Coast Highway e/o Newport Center Drive	0.1	1.1	0.1	1.1
Dover Drive between West Coast Highway and 16th Street	0.1	0.5	0.1	0.5
Dover Drive between 16th Street and Westcliff Drive	0.1	0.4	0.1	0.4
Dover Drive between Westcliff Drive and 19th Street	0.0	0.2	0.0	0.3
19th Street w/o Dover Drive	0.0	0.0	0.0	0.1

Vehicle Type	% of ADT			Sub total
	Day	Eve	Night	
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

**Roadway Traffic Noise Calculations**  
3 of 8



**Project: Back Bay Landing**

<b>Existing</b>										
Roadway/Segment	Speed MPH	Traffic Volumes			Leq			CNEL		
		AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
San Joaquin Hills Road between Jamboree Road and Santa Cruz	40	1150	1594	0	69.9	67.3	65.6	71.1	68.5	66.9
San Joaquin Hills Road between Santa Cruz Drive and Santa Rosa Drive	40	975	1225	0	68.8	66.1	64.5	70.0	67.3	65.7
San Joaquin Hills Road between Santa Rosa Drive and MacArthur Drive	40	1614	1785	0	70.4	67.8	66.1	71.6	69.0	67.4
Jamboree Road between East Coast Highway and Santa Barbara Drive	40	2422	2774	0	72.3	69.7	68.1	73.5	70.9	69.3
Jamboree Road between Santa Barbara Drive and San Joaquin Hills Road	40	2974	3199	0	72.9	70.3	68.7	74.2	71.5	69.9
<b>Future No Project Buildout</b>										
Roadway/Segment	Speed MPH	Traffic Volumes			Leq			CNEL		
		AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
San Joaquin Hills Road between Jamboree Road and Santa Cruz	40	1282	1772	0	70.4	67.7	66.1	71.6	69.0	67.3
San Joaquin Hills Road between Santa Cruz Drive and Santa Rosa Drive	40	1075	1349	0	69.2	66.6	64.9	70.4	67.8	66.1
San Joaquin Hills Road between Santa Rosa Drive and MacArthur Drive	40	1730	1924	0	70.7	68.1	66.5	72.0	69.3	67.7
Jamboree Road between East Coast Highway and Santa Barbara Drive	40	2909	3350	0	73.1	70.5	68.9	74.4	71.7	70.1
Jamboree Road between Santa Barbara Drive and San Joaquin Hills Road	40	3517	3819	0	73.7	71.1	69.4	74.9	72.3	70.7
<b>Future With Project Buildout</b>										
Roadway/Segment	Speed MPH	Traffic Volumes			Leq			CNEL		
		AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
San Joaquin Hills Road between Jamboree Road and Santa Cruz	40	1289	1781	0	70.4	67.8	66.1	71.6	69.0	67.3
San Joaquin Hills Road between Santa Cruz Drive and Santa Rosa Drive	40	1081	1358	0	69.2	66.6	64.9	70.4	67.8	66.2
San Joaquin Hills Road between Santa Rosa Drive and MacArthur Drive	40	1736	1933	0	70.8	68.1	66.5	72.0	69.3	67.7
Jamboree Road between East Coast Highway and Santa Barbara Drive	40	2933	3383	0	73.2	70.5	68.9	74.4	71.8	70.1
Jamboree Road between Santa Barbara Drive and San Joaquin Hills Road	40	3542	3852	0	73.8	71.1	69.5	75.0	72.3	70.7

<b>CNEL</b>				
Summary	25 ft. from ROW		At ROW	
	Project Increment	Cumulative Increment	Project Increment	Cumulative Increment
Roadway/Segment				
San Joaquin Hills Road between Jamboree Road and Santa Cruz	0.0	0.5	0.0	0.5
San Joaquin Hills Road between Santa Cruz Drive and Santa Rosa Drive	0.0	0.5	0.0	0.4
San Joaquin Hills Road between Santa Rosa Drive and MacArthur Drive	0.0	0.3	0.0	0.4
Jamboree Road between East Coast Highway and Santa Barbara Drive	0.1	0.9	0.0	0.9
Jamboree Road between Santa Barbara Drive and San Joaquin Hills Road	0.0	0.8	0.1	0.8

Vehicle Type	% of ADT			Sub total
	Day	Eve	Night	
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

**Roadway Traffic Noise Calculations**  
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**Project: Back Bay Landing**

<b>Existing</b>										
Roadway/Segment	Speed MPH	Traffic Volumes			Leq			CNEL		
		AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
Irvine Avenue between 19th Street/Westcliff Drive and 19th Street	40	1578	2073	0	71.4	68.6	66.9	72.6	69.8	68.1
Irvine Avenue n/o 19th Street	40	1972	2353	0	71.9	69.1	67.5	73.2	70.4	68.7
Westcliff Drive between Irvine Avenue and Dover Drive	35	1116	1344	0	67.0	64.7	63.2	68.2	65.9	64.4
Bayside Drive n/o East Coast Highway	30	129	158	0	58.2	55.2	53.4	59.4	56.4	54.7
Bayside Drive s/o East Coast Highway	35	763	993	0	67.2	64.2	62.5	68.4	65.5	63.7
<b>Future No Project Buildout</b>										
Roadway/Segment	Speed MPH	Traffic Volumes			Leq			CNEL		
		AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
Irvine Avenue between 19th Street/Westcliff Drive and 19th Street	40	1664	2197	0	71.6	68.8	67.2	72.9	70.1	68.4
Irvine Avenue n/o 19th Street	40	2074	2495	0	72.2	69.4	67.7	73.4	70.6	68.9
Westcliff Drive between Irvine Avenue and Dover Drive	35	1251	1559	0	67.6	65.3	63.9	68.8	66.6	65.1
Bayside Drive n/o East Coast Highway	30	229	288	0	60.8	57.8	56.1	62.0	59.0	57.3
Bayside Drive s/o East Coast Highway	35	822	1194	0	68.0	65.0	63.3	69.2	66.3	64.5
<b>Future With Project Buildout</b>										
Roadway/Segment	Speed MPH	Traffic Volumes			Leq			CNEL		
		AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
Irvine Avenue between 19th Street/Westcliff Drive and 19th Street	40	1670	2204	0	71.7	68.9	67.2	72.9	70.1	68.4
Irvine Avenue n/o 19th Street	40	2085	2510	0	72.2	69.4	67.7	73.4	70.6	69.0
Westcliff Drive between Irvine Avenue and Dover Drive	35	1268	1583	0	67.7	65.4	63.9	68.9	66.6	65.1
Bayside Drive n/o East Coast Highway	30	356	496	0	63.1	60.2	58.4	64.3	61.4	59.6
Bayside Drive s/o East Coast Highway	35	833	1210	0	68.1	65.1	63.4	69.3	66.3	64.6

Summary	CNEL			
	25 ft. from ROW		At ROW	
	Project Increment	Cumulative Increment	Project Increment	Cumulative Increment
Irvine Avenue between 19th Street/Westcliff Drive and 19th Street	0.0	0.3	0.0	0.3
Irvine Avenue n/o 19th Street	0.0	0.2	0.0	0.2
Westcliff Drive between Irvine Avenue and Dover Drive	0.0	0.7	0.1	0.7
Bayside Drive n/o East Coast Highway	2.4	5.0	2.3	4.9
Bayside Drive s/o East Coast Highway	0.0	0.8	0.1	0.9

Vehicle Type	% of ADT			Sub total
	Day	Eve	Night	
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%



**Roadway Traffic Noise Calculations**  
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**Project: Back Bay Landing**

<b>Existing</b>										
Roadway/Segment	Speed MPH	Traffic Volumes			Leq			CNEL		
		AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
West Coast Highway w/o Newport Boulevard	40	3432	3757	0	73.4	70.8	69.3	74.6	72.1	70.5
West Coast Highway between Tustin Avenue and Dover Drive	40	3279	3812	0	72.9	70.6	69.1	74.1	71.8	70.3
West Coast Highway between Dover Drive and Bayside Drive	40	4662	5684	0	74.9	72.5	71.0	76.1	73.7	72.2
East Coast Highway between Bayside Drive and Jamboree Road	40	3950	4944	0	74.3	71.9	70.4	75.5	73.1	71.6
East Coast Highway between Jamboree Road and Newport Center	40	3043	3773	0	73.7	71.0	69.4	74.9	72.2	70.6
<b>Existing with Project</b>										
Roadway/Segment	Speed MPH	Traffic Volumes			Leq			CNEL		
		AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
West Coast Highway w/o Newport Boulevard	40	3445	3775	0	73.4	70.9	69.3	74.6	72.1	70.5
West Coast Highway between Tustin Avenue and Dover Drive	40	3316	3864	0	72.9	70.6	69.2	74.1	71.9	70.4
West Coast Highway between Dover Drive and Bayside Drive	40	4737	5789	0	75.0	72.6	71.0	76.2	73.8	72.3
East Coast Highway between Bayside Drive and Jamboree Road	40	3992	4998	0	74.3	71.9	70.4	75.6	73.2	71.6
East Coast Highway between Jamboree Road and Newport Center	40	3062	3796	0	73.7	71.0	69.4	74.9	72.3	70.6
<b>Future With Project Buildout</b>										
Roadway/Segment	Speed MPH	Traffic Volumes			Leq			CNEL		
		AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
West Coast Highway w/o Newport Boulevard	40	4012	4534	0	74.2	71.7	70.1	75.4	72.9	71.3
West Coast Highway between Tustin Avenue and Dover Drive	40	3948	4734	0	73.8	71.5	70.0	75.0	72.7	71.2
West Coast Highway between Dover Drive and Bayside Drive	40	5484	6841	0	75.7	73.3	71.8	76.9	74.5	73.0
East Coast Highway between Bayside Drive and Jamboree Road	40	4725	5956	0	75.1	72.7	71.2	76.3	73.9	72.4
East Coast Highway between Jamboree Road and Newport Center	40	3757	4692	0	74.6	72.0	70.3	75.8	73.2	71.6

Summary	CNEL			
	25 ft. from ROW		At ROW	
	Project Increment	Cumulative Increment	Project Increment	Cumulative Increment
Roadway/Segment				
West Coast Highway w/o Newport Boulevard	0.0	0.8	0.0	0.8
West Coast Highway between Tustin Avenue and Dover Drive	0.1	0.9	0.0	0.9
West Coast Highway between Dover Drive and Bayside Drive	0.1	0.8	0.1	0.8
East Coast Highway between Bayside Drive and Jamboree Road	0.1	0.8	0.1	0.8
East Coast Highway between Jamboree Road and Newport Center	0.1	1.0	0.0	0.9

Vehicle Type	% of ADT			Sub total
	Day	Even	Night	
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

**Roadway Traffic Noise Calculations**  
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**Project: Back Bay Landing**

<b>Existing</b>										
Roadway/Segment	Speed MPH	Traffic Volumes			Leq			CNEL		
		AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
East Coast Highway e/o Newport Center Drive	40	2955	2976	0	72.1	69.7	68.1	73.3	70.9	69.4
Dover Drive between West Coast Highway and 16th Street	40	2006	2283	0	71.5	68.8	67.2	72.7	70.1	68.4
Dover Drive between 16th Street and Westcliff Drive	35	1779	1992	0	70.3	67.3	65.5	71.5	68.5	66.7
Dover Drive between Westcliff Drive and 19th Street	30	1336	1605	0	68.2	65.3	63.5	69.4	66.5	64.7
19th Street w/o Dover Drive	30	406	568	0	63.7	60.7	59.0	64.9	62.0	60.2
<b>Existing with Project</b>										
Roadway/Segment	Speed MPH	Traffic Volumes			Leq			CNEL		
		AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
East Coast Highway e/o Newport Center Drive	40	2974	2998	0	72.1	69.7	68.2	73.3	70.9	69.4
Dover Drive between West Coast Highway and 16th Street	40	2041	2333	0	71.6	68.9	67.3	72.8	70.1	68.5
Dover Drive between 16th Street and Westcliff Drive	35	1806	2032	0	70.3	67.4	65.6	71.6	68.6	66.8
Dover Drive between Westcliff Drive and 19th Street	30	1344	1617	0	68.3	65.3	63.5	69.5	66.5	64.8
19th Street w/o Dover Drive	30	406	568	0	63.7	60.7	59.0	64.9	62.0	60.2
<b>Future With Project Buildout</b>										
Roadway/Segment	Speed MPH	Traffic Volumes			Leq			CNEL		
		AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
East Coast Highway e/o Newport Center Drive	40	3626	3798	0	73.1	70.7	69.2	74.4	72.0	70.4
Dover Drive between West Coast Highway and 16th Street	40	2174	2572	0	72.0	69.4	67.7	73.2	70.6	68.9
Dover Drive between 16th Street and Westcliff Drive	35	1895	2191	0	70.7	67.7	65.9	71.9	68.9	67.1
Dover Drive between Westcliff Drive and 19th Street	30	1395	1694	0	68.5	65.5	63.7	69.7	66.7	65.0
19th Street w/o Dover Drive	30	411	578	0	63.8	60.8	59.1	65.0	62.0	60.3

Roadway/Segment	CNEL			
	25 ft. from ROW		At ROW	
	Project Increment	Cumulative Increment	Project Increment	Cumulative Increment
East Coast Highway e/o Newport Center Drive	0.0	1.1	0.0	1.1
Dover Drive between West Coast Highway and 16th Street	0.0	0.5	0.1	0.5
Dover Drive between 16th Street and Westcliff Drive	0.1	0.4	0.1	0.4
Dover Drive between Westcliff Drive and 19th Street	0.0	0.2	0.1	0.3
19th Street w/o Dover Drive	0.0	0.0	0.0	0.1

Vehicle Type	% of ADT			Sub total
	Day	Eve	Night	
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

**Roadway Traffic Noise Calculations**  
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**Project: Back Bay Landing**

<b>Existing</b>										
Roadway/Segment	Speed MPH	Traffic Volumes			Leq			CNEL		
		AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
San Joaquin Hills Road between Jamboree Road and Santa Cruz	40	1150	1594	0	69.9	67.3	65.6	71.1	68.5	66.9
San Joaquin Hills Road between Santa Cruz Drive and Santa Rosa Drive	40	975	1225	0	68.8	66.1	64.5	70.0	67.3	65.7
San Joaquin Hills Road between Santa Rosa Drive and MacArthur Drive	40	1614	1785	0	70.4	67.8	66.1	71.6	69.0	67.4
Jamboree Road between East Coast Highway and Santa Barbara Drive	40	2422	2774	0	72.3	69.7	68.1	73.5	70.9	69.3
Jamboree Road between Santa Barbara Drive and San Joaquin Hills Road	40	2974	3199	0	72.9	70.3	68.7	74.2	71.5	69.9
<b>Existing with Project</b>										
Roadway/Segment	Speed MPH	Traffic Volumes			Leq			CNEL		
		AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
San Joaquin Hills Road between Jamboree Road and Santa Cruz	40	1157	1603	0	69.9	67.3	65.7	71.2	68.5	66.9
San Joaquin Hills Road between Santa Cruz Drive and Santa Rosa Drive	40	982	1234	0	68.8	66.2	64.5	70.0	67.4	65.7
San Joaquin Hills Road between Santa Rosa Drive and MacArthur Drive	40	1621	1794	0	70.4	67.8	66.2	71.6	69.0	67.4
Jamboree Road between East Coast Highway and Santa Barbara Drive	40	2447	2807	0	72.4	69.7	68.1	73.6	70.9	69.3
Jamboree Road between Santa Barbara Drive and San Joaquin Hills Road	40	2999	3233	0	73.0	70.3	68.7	74.2	71.6	69.9
<b>Future With Project Buildout</b>										
Roadway/Segment	Speed MPH	Traffic Volumes			Leq			CNEL		
		AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
San Joaquin Hills Road between Jamboree Road and Santa Cruz	40	1289	1781	0	70.4	67.8	66.1	71.6	69.0	67.3
San Joaquin Hills Road between Santa Cruz Drive and Santa Rosa Drive	40	1081	1358	0	69.2	66.6	64.9	70.4	67.8	66.2
San Joaquin Hills Road between Santa Rosa Drive and MacArthur Drive	40	1736	1933	0	70.8	68.1	66.5	72.0	69.3	67.7
Jamboree Road between East Coast Highway and Santa Barbara Drive	40	2933	3383	0	73.2	70.5	68.9	74.4	71.8	70.1
Jamboree Road between Santa Barbara Drive and San Joaquin Hills Road	40	3542	3852	0	73.8	71.1	69.5	75.0	72.3	70.7

Summary	CNEL			
	25 ft. from ROW		At ROW	
	Project Increment	Cumulative Increment	Project Increment	Cumulative Increment
Roadway/Segment				
San Joaquin Hills Road between Jamboree Road and Santa Cruz	0.0	0.5	0.1	0.5
San Joaquin Hills Road between Santa Cruz Drive and Santa Rosa Drive	0.1	0.5	0.0	0.4
San Joaquin Hills Road between Santa Rosa Drive and MacArthur Drive	0.0	0.3	0.0	0.4
Jamboree Road between East Coast Highway and Santa Barbara Drive	0.0	0.9	0.1	0.9
Jamboree Road between Santa Barbara Drive and San Joaquin Hills Road	0.1	0.8	0.0	0.8

Vehicle Type	% of ADT			Sub total
	Day	Eve	Night	
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

**Roadway Traffic Noise Calculations**  
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**Project: Back Bay Landing**

<b>Existing</b>										
Roadway/Segment	Speed MPH	Traffic Volumes			Leq			CNEL		
		AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
Irvine Avenue between 19th Street/Westcliff Drive and 19th Street	40	1578	2073	0	71.4	68.6	66.9	72.6	69.8	68.1
Irvine Avenue n/o 19th Street	40	1972	2353	0	71.9	69.1	67.5	73.2	70.4	68.7
Westcliff Drive between Irvine Avenue and Dover Drive	35	1116	1344	0	67.0	64.7	63.2	68.2	65.9	64.4
Bayside Drive n/o East Coast Highway	30	129	158	0	58.2	55.2	53.4	59.4	56.4	54.7
Bayside Drive s/o East Coast Highway	35	763	993	0	67.2	64.2	62.5	68.4	65.5	63.7
<b>Existing with Project</b>										
Roadway/Segment	Speed MPH	Traffic Volumes			Leq			CNEL		
		AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
Irvine Avenue between 19th Street/Westcliff Drive and 19th Street	40	1583	2080	0	71.4	68.6	66.9	72.6	69.8	68.1
Irvine Avenue n/o 19th Street	40	1982	2367	0	72.0	69.2	67.5	73.2	70.4	68.7
Westcliff Drive between Irvine Avenue and Dover Drive	35	1133	1367	0	67.0	64.8	63.3	68.3	66.0	64.5
Bayside Drive n/o East Coast Highway	30	256	366	0	61.8	58.8	57.1	63.0	60.1	58.3
Bayside Drive s/o East Coast Highway	35	774	1009	0	67.3	64.3	62.6	68.5	65.5	63.8
<b>Future With Project Buildout</b>										
Roadway/Segment	Speed MPH	Traffic Volumes			Leq			CNEL		
		AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
Irvine Avenue between 19th Street/Westcliff Drive and 19th Street	40	1670	2204	0	71.7	68.9	67.2	72.9	70.1	68.4
Irvine Avenue n/o 19th Street	40	2085	2510	0	72.2	69.4	67.7	73.4	70.6	69.0
Westcliff Drive between Irvine Avenue and Dover Drive	35	1268	1583	0	67.7	65.4	63.9	68.9	66.6	65.1
Bayside Drive n/o East Coast Highway	30	356	496	0	63.1	60.2	58.4	64.3	61.4	59.6
Bayside Drive s/o East Coast Highway	35	833	1210	0	68.1	65.1	63.4	69.3	66.3	64.6

Summary	CNEL			
	25 ft. from ROW		At ROW	
	Project Increment	Cumulative Increment	Project Increment	Cumulative Increment
Irvine Avenue between 19th Street/Westcliff Drive and 19th Street	0.0	0.3	0.0	0.3
Irvine Avenue n/o 19th Street	0.0	0.2	0.0	0.2
Westcliff Drive between Irvine Avenue and Dover Drive	0.1	0.7	0.1	0.7
Bayside Drive n/o East Coast Highway	3.7	5.0	3.6	4.9
Bayside Drive s/o East Coast Highway	0.0	0.8	0.1	0.9

Vehicle Type	% of ADT			Sub total
	Day	Eve	Night	
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%