East Williams Street Project – Dust Control Measures

- Post a publicly visible sign with large font, providing the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. An email address or telephone number for texts may also be included.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes. Clear signage in large font shall be provided for construction workers at all access points for this requirement.
- Construction equipment and vehicles will be properly tuned and maintained. All construction equipment will use low sulfur fuel. This minimizes diesel particulate matter (soot).
- Water or apply a dust palliative to the site and equipment as often as necessary to control fugitive dust emissions.
- Soil binder will be spread on any unpaved roads used for construction purposes, and on all Project construction parking areas.
- Equipment and materials storage sites will be located as far away from residences and parks as practicable. Construction areas will be kept clean and orderly.
- Track-out reduction measures will be used at Project access points to minimize dust and mud deposits on roads affected by construction traffic. Dust and mud that are deposited on paved, public roads due to construction activity and traffic will be promptly and regularly removed to reduce dust emissions. Sweeping shall be performed as needed.
- To minimize spreading dust into the wider community, all transported loads of soils and wet materials will be covered before transport, or 2 feet of freeboard will be provided.
- To the extent feasible, construction traffic will be scheduled and routed to reduce congestion during peak travel times.
- As soon as practical after grading, the contractor will stabilize soil to reduce windblown dust on spoils piles and areas not subject to near-term paving.

East Williams Street - Construction Noise Control Measures

- A sign will be placed near the worksite displaying appropriate contact information and a toll-free hotline for use by the public to report significant adverse noise. This can be the same sign noted in the Dust Control Plan. During non-business hours, calls to the hotline will be directed to voicemail, which is checked daily during normal business hours.
- All noise-generating work shall be performed during permitted hours.
- The Contractor will notify residents of schedules and provide information during the pre-construction meeting to discuss noise concerns.
- The Contractor will provide notices in English and Spanish to the surrounding community using a template provided by Carson City. The notices will state the construction schedule and information on the toll-free hotline.
- The Contractor will coordinate with the Parks Department to minimize noise impacts to recreation sites.
- The Contractor will regularly train its employees to be sensitive to noise impact problems and will discuss noise control methods. This will help ensure that operators and supervisors are aware of any noise problems and work to improve conditions.
- The Contractor will adjust all audible back-up alarms sound levels to the minimum required for their intended safety purposes.
- If complaints about audible back-up alarms persist, the Contractor will evaluate alternatives to high-amplitude sonic alarms, including the use of signal persons, strobe lights, or alternative safety equipment and/or processes as allowed.
- Stationary noise sources, such as generators and air compressors, will be placed away from noise-sensitive receivers, e.g., residences and businesses.
- The Contractor will ensure that all field conferences, meetings, and other group discussions will take place away from residents.
- The Contractor will not allow the use of personal noise generating devices, such as personal radios, in the field.
- The Contract will ensure that noise producing equipment is turned off when not in use, and not left idling.
- The Contractor will ensure that if pneumatic impact tools and equipment are used, they will have intake and exhaust mufflers recommended by the manufacturer.

- The Contractor will equip noise-generating equipment with the most effective noise control devices (i.e., mufflers, lagging, and/or motor enclosures).
- The Contractor will properly maintain all equipment to avoid additional noise due to worn or improperly maintained parts.
- The Contractor will schedule activities to avoid operating numerous pieces of noise-generating equipment simultaneously near sensitive receptors such as homes and businesses.
- When possible, the contractor will use construction equipment manufactured or modified to reduce noise and vibration emissions. Examples include electric instead of diesel-powered equipment, and hydraulic instead of pneumatic tools.

DNL Calculator

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the **Day/Night Noise Level Calculator Electronic Assessment Tool Overview (/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/)**.

Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID	E. Williams at Fall St
Record Date	11/15/2022
User's Name	David Morrow

Road # 1 Name:	**Williams St**

Road #1

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☐
Effective Distance	50	50	
Distance to Stop Sign			
Average Speed	30	30	
Average Daily Trips (ADT)	7523	1328	
Night Fraction of ADT	10	10	
Road Gradient (%)			
Vehicle DNL	60	63	0
Calculate Road #1 DNL	65	Reset	

Add Road Source Add Rail Source

Airport Noise Level	
Loud Impulse Sounds?	○Yes ◉No

Combined DNL for all Road and Rail sources	**65**
Combined DNL including Airport	**N/A**
Site DNL with Loud Impulse Sound	

Calculate Reset

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative**: Cancel the project at this location
- **Other Reasonable Alternatives**: Choose an alternate site
- **Mitigation**
    - **Contact your Field or Regional Environmental Officer (/programs/environmental-review/hud-environmental-staff-contacts/)**
    - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
    - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
    - Incorporate natural or man-made barriers. See ***The Noise Guidebook (/resource/313/hud-noise-guidebook/)***
    - Construct noise barrier. See the **Barrier Performance Module (/programs/environmental-review/bpm-calculator/)**

Tools and Guidance

Day/Night Noise Level Assessment Tool User Guide (/resource/3822/day-night-noise-level-assessment-tool-user-guide/)

Day/Night Noise Level Assessment Tool Flowcharts (/resource/3823/day-night-noise-level-assessment-tool-flowcharts/)

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DNL Calculator

Site ID	E. Williams 300' east of Roop St
Record Date	11/15/2022
User's Name	David Morrow

Road # 1 Name:	**Williams St**

Road #1

Vehicle Type	Cars ☑	Medium Trucks ☑	Heavy Trucks ☐
Effective Distance	50	50	
Distance to Stop Sign			
Average Speed	35	35	
Average Daily Trips (ADT)	14365	2535	
Night Fraction of ADT	10	10	
Road Gradient (%)			
Vehicle DNL	64	67	0
Calculate Road #1 DNL	69	Reset	

Add Road Source | Add Rail Source

Airport Noise Level	
Loud Impulse Sounds?	○Yes ◉No

Combined DNL for all Road and Rail sources	**69**
Combined DNL including Airport	**N/A**
Site DNL with Loud Impulse Sound	

Calculate | Reset

Mitigation Options

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DNL Calculator

Site ID	E. Williams 300' west of Roop St
Record Date	11/15/2022
User's Name	David Morrow

Road # 1 Name:	**Williams St**

Road #1

Vehicle Type	Cars ☑	Medium Trucks ☑	Heavy Trucks ☐
Effective Distance	50	50	
Distance to Stop Sign			
Average Speed	30	30	
Average Daily Trips (ADT)	9945	1755	
Night Fraction of ADT	10	10	
Road Gradient (%)			
Vehicle DNL	62	64	0
Calculate Road #1 DNL	66	Reset	

Add Road Source Add Rail Source

Airport Noise Level	
Loud Impulse Sounds?	○Yes ◉No

Combined DNL for all Road and Rail sources	**66**
Combined DNL including Airport	**N/A**
Site DNL with Loud Impulse Sound	

Calculate Reset

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