

**The Villages MPD  
Phase 1A Preliminary Plat  
(PLN11-0001)  
Short-Term Construction Noise Mitigation Plan**

Applicant: BD Village Partners, LP  
Date: July 18, 2013

Pursuant to Condition of Approval No. 35 of The Villages MPD Permit Approval (Black Diamond Ordinance No. 10-946) and Conditions of Approval Nos. 13 and 86 of the Hearing Examiner's Phase 1A Preliminary Plat decision, the Applicant and its contractors working on The Villages MPD site shall use industry standard best practices to mitigate the adverse effects of construction noise by utilizing the following methods, whenever feasible:

DESIGN CONSIDERATIONS AND PROJECT LAYOUT

**Processing Facility:** If feasible, the processing facility will be located in a remote location to minimize the noise that is generated from this area. This facility will process and store topsoil, rocks, tree and brush debris, and other project items. Trucks hauling these materials shall remain on internal roadways instead of the surrounding surface streets. Debris shall be "recycled" onsite for alternative uses and re-incorporated back into the project, to the greatest extent possible. This will alleviate numerous construction truck trips to and from the site as well as the associated noise these trips would generate. Site development within The Villages MPD is subject to The Villages MPD Development Agreement and requires approval by the City of Black Diamond. Permit applications and review of the processing facility by City staff is required.

**Employee Parking and Construction Staging Area:** The employee parking and construction staging area shall initially be located in a remote portion of the site to minimize the noise from vehicles when they are present. This area will move over time, even within Phase 1A, as development progresses. Maintenance vehicles will typically perform maintenance operations at the start and end of work hours, and the siting of the employee parking and construction staging area in a remote location on-site will insure the least amount of noise and disturbance to the surrounding public. Construction vehicles and equipment shall not start up prior to established work hours. Initially, access to this site will be off of Roberts Drive via the main construction entrance.

**50' Buffer Along East Property Line:** The 50' wide buffer along the east property line located outside of The Villages MPD Phase 1A Preliminary Plat shall remain undisturbed (i.e., no clearing or grading shall occur in this area) throughout the development of the Phase 1A Preliminary Plat. This 50' wide area will serve as a noise buffer for property owners adjacent to Villages Development Parcel V13.

## SEQUENCE OF OPERATIONS

**Work Hours of Operation:** Contractors shall adhere to the work hours of operation established in The Villages MPD Phase 1A Preliminary Plat Condition of Approval No. 12 and The Villages MPD Development Agreement Section 12.8.13, which provide that work hours of operation shall be limited to 7:00 a.m. to 7:00 p.m. on weekdays, 9:00 a.m. to 5:00 p.m. on Saturday, and shall be prohibited on Sundays and City holidays, subject to emergency construction and repair needs as set forth in BDMC 8.12.040.C. In addition, trucks larger than Single Unit (SU) trucks will be restricted to entering and leaving the site before 3:30 pm, Monday – Friday.

In addition, rock crushing and wood grinding and shredding shall only occur between the hours of 9:00 a.m. and 5:00 p.m., Monday – Friday and is prohibited on weekends and City holidays.

**Combine Operations:** Contractors shall be required to combine particularly noisy operations in the same time period, and within the work hours of operation set forth above. The total noise level produced shall not be significantly greater than the level produced if the operations were performed separately.

## CONSTRUCTION NOISE BEST MANAGEMENT PRACTICES

**Stationary Construction Equipment:** Stationary construction equipment shall be located distant from sensitive receiving properties, whenever possible. Where this is infeasible, or where noise impacts would still be likely to occur, portable noise barriers shall be placed around the equipment (pumps, compressors, welding machines) with the opening directed away from the sensitive receiving property.

**Equipment Maintenance and Muffling:** Contractors shall be required to employ construction noise BMPs such as minimizing construction noise with properly sized and maintained mufflers, engine intake silencers, engine enclosures, and turning off equipment when not in use.

**Avoid Impact Pile Driving:** Contractors shall be required to minimize impact pile-driving in favor of less noisy pile installation methods. If impact pile driving is necessary, the potential for noise impacts shall be minimized by strict adherence to daytime only. Contractors shall also be required to minimize metal to metal impact with wood spacers as much as possible.

**Hydraulic or Electric Models:** Contractors shall be required to substitute hydraulic or electric models for impact tools such as jackhammers, rock drills and pavement breakers, wherever feasible.

**Electric Pumps:** Contractors shall be required to use electric pumps whenever pumps are required.

**Ambient-Sensing Broadband Backup Alarms:** Contractors shall ensure that all equipment required to use backup alarms utilizes ambient-sensing broadband alarms that broadcast a warning sound loud enough to be heard over background noise, but without having to use a preset, maximum volume. The Applicant has elected to require its contractors to use ambient-

sensing broadband backup alarms rather than simply ambient-sensing pure-tone backup alarms because broadband alarms produce a sound that includes a range of frequencies, which makes it easier to determine directionality (i.e., provides adequate safety for workers) and eliminates the pure-tone noise produced by standard alarms that can be a source of annoyance at more distant locations.

**Lift Materials:** Contractors shall be required to lift, rather than drag materials wherever feasible.

**Haul Truck Bed Liners:** If feasible, haul trucks shall use bed liners or soft material (e.g., dirt) as bedding when loading rocky material to reduce the level of noise that will be generated from this activity.

**Limited Music Volume:** Music played by contractors shall not be played at an unreasonable level if audible at residential locations outside of The Villages MPD.

### RESIDENT INVOLVEMENT

**Noise Control Hotline:** The Applicant shall establish a noise control "hotline" to allow neighbors affected by noise to contact the City and the designated construction manager to ask questions or to report violations of this Short-Term Construction Noise Mitigation Plan per Condition of Approval No. 41 of The Villages MPD Permit Approval and Condition of Approval No. 10 of The Villages MPD Phase 1A Preliminary Plat.

The Applicant shall establish the noise control "hotline" prior to commencement of any development activity on the Preliminary Plat 1A site per Condition of Approval No. 14 of The Villages MPD Phase 1A Preliminary Plat.

Whether this Short-Term Construction Noise Mitigation Plan has been violated shall be determined by the City in its reasonable discretion. Failure to comply with this Short-Term Construction Noise Mitigation Plan shall result first in a warning and one or more continuing failures may result in cessation of construction activities until the Applicant provides an acceptable solution to the City that will reasonably achieve the intent of this Short-Term Construction Noise Mitigation Plan and allow construction to continue. This Short-Term Construction Noise Mitigation Plan shall not be construed as limiting or altering the City's authority to enforce its noise regulations.

**Noise Attenuation for Existing Residents:** To provide construction noise attenuation for existing residents adjoining The Villages MPD Phase 1A Preliminary Plat, the Applicant shall comply with the mitigation conditions set forth in Condition of Approval No. 44 of The Villages MPD Permit Approval, Section 13.7 of The Villages MPD Development Agreement, and Condition of Approval No. 11 of the Phase 1A Preliminary Plat.

Approved this 18<sup>th</sup> day of July 2013:

A handwritten signature in black ink, appearing to read 'Andrew Williamson', written over a horizontal line.

Andrew Williamson  
Executive Director Econ Dev & Eng Svcs/Designated Official

A handwritten signature in black ink, appearing to read 'Stacey Welsh', written over a horizontal line.

Stacey Welsh, AICP  
Community Development Director/Designated Official