



## **Modified Waters Delivery to Everglades National Park 8.5 Square Mile Area Frequently Asked Questions**

### **1. Why is blasting necessary?**

The natural characteristics of South Florida's limestone bedrock makes blasting necessary. The limestone bedrock in south Florida is close to the surface and has holes and cracks, making it an unsuitable foundation for large buildings. Mechanical excavation for large projects is not practical or cost effective without the use of blasting. Blasting is a standard construction practice that will be used to remove limestone to create a stable concrete foundation for the pump station. The pump station excavation will be approximately 73' by 89' by 27' deep for the main building. Blasting will also be used to excavate the canal which will be approximately 20' wide, 14' deep and 3.5 miles long. The limestone will be crushed on site and used as fill to build a levee.

### **2. How is the blasting done?**

The contractor will drill a series of holes into the limestone and place a predetermined amount of blasting agent into the hole. The top two feet will be filled with crushed rock, to fill the hole and force the explosive energy into the rock to fracture it, rather than out of the top of the hole. The charges in each hole will have millisecond delays to reduce vibration and noise. Blasts are controlled, with a minimum amount of explosives used. A special mat is used, as needed, to cover the blast area and help to contain the materials. The contractor will conduct only the amount of blasting necessary to accomplish the job.

### **3. Will I hear, feel or see the blasts?**

Depending on how close you are to the blast site, you may hear a noise, see a cloud of dust and/or feel a slight thud or vibration, but you will be surprised by how minor it seems. Human response levels to ground vibrations and noise are considerably below those levels necessary to induce damage to residential structures.

### **4. When and how often will the blasting be done?**

Based on the current blasting plan, blasting will take place on weekdays during daylight hours. Blasting will not occur during major holidays. Due to the amount of time involved in securing the area, drilling and loading a series of holes for blasting, typically no more than one or two blasts a day are expected. Blasting will take place throughout the construction schedule, whenever required to fracture and remove rock, and is usually not done on cloudy days because certain atmospheric conditions affect blast efficiency.

### **5. How and when will we be notified before blasting begins?**

If you are in the immediate vicinity of the blast, you will be notified in advance. A vibration monitoring contractor will visit each home or business to do a pre-blast inspection, as required by Miami-Dade County regulations. This inspection will document the existing condition of the structures, so there will be a record available. Prior to any blast, a *flag person* will be posted at all access points to the danger area. A *warning siren* (one-minute series of long, easy-to-hear signals) will be sounded five minutes before the blast. A *blast signal* (series of short, easy-to-hear signals) will be sounded one minute before the blast. Finally, an *all-clear signal* (a long, easy-to-hear signal) will be sounded following the inspection of the blast area.



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- 6. Will I be asked to leave my home before a blast in my neighborhood is done?**  
No one will be evacuated from their home or business during construction. If the contractor determines that a home or business structure is too close to a blast location, they will not blast, and will do mechanical excavation in that area only.
- 7. Is it possible my home or property will be damaged by the blasting?**  
With strict limitations and monitoring in place, no damage to structures is expected. The construction contractor, Florida Energy Services, Inc. and the vibration monitoring contractor, Vibration Energy Services, Inc. are very experienced with this type of work. They will conduct a test-blasting program to determine what is needed to fracture the rock and not exceed vibration limits. They will use the minimum amount of explosives and will control the blasts. Blasts will be monitored and must meet all applicable Miami-Dade County, state and local regulations for noise and vibration.
- 8. Will blasts affect my animals?**  
The blasts are of very short duration with minimal sound. Blasting has been conducted near animals on other projects, including a project in close proximity to the Miami Zoo, and no problems have been encountered. Animals are more sensitive to vibrations; however, the blast vibration will not be any greater than normal vibrations felt every day.
- 9. What if I discover damage to my home or property that I suspect was caused by the blasting?**  
Vibration Energy Services, Inc. will conduct pre-blast surveys on structures that are in the areas closest to the blast locations. They will document the condition of structures before blasting begins, including photographs. In the unlikely event that you discover damage after the blasting, please report it to Bill Kleinert at Vibration Energy Services, Inc. at 954-741-5953 or Rory Simons with Florida Energy Services, Inc. at 239-777-8529. Damage claims will be inspected within 30 days following initial notification and will be processed within 90 days, but no longer than six months, after all blasting is completed. If issues are not resolved within a reasonable period of time, contact the Prime Contractor, Atlantic Skanska, or Tony Jettinghoff of the U.S. Army Corps of Engineers at the Atlantic Skanska trailer adjacent to the pump station construction site at the intersection of SW 168<sup>th</sup> Street and SW 205<sup>th</sup> Avenue.
- 10. Will the blasting and construction affect traffic in my neighborhood?**  
Construction operations will be conducted to ensure a minimum delay to traffic. Traffic will be stopped by a flag person for no more than five minutes during blasting operations. SW 160<sup>th</sup> Street and Mitchell Drive/SW 144<sup>th</sup> Street will be closed permanently at the seepage canal location and bridges will be constructed over the seepage canal at SW 168<sup>th</sup> Street, SW 152<sup>nd</sup> Street, SW 136<sup>th</sup> Street and SW 197<sup>th</sup> Avenue.