

Community Blasting Meeting Park West



04.29.2020

Always In Process

Agenda

Section 1 Team Introductions

Section 2 Project Overview

Section 3 Blasting Theory & Planned Blasting Controls

Section 4 Demonstration

Section 5 Questions

We will open the floor for questions after the presentation.

Please mute your microphone to prevent feedback.

Thank you for your patience!

Team Introductions

Section

1

Ripley Bickerstaff

M.S. Civil Engineering, Vanderbilt University

B.E. Civil Engineering, Vanderbilt University

LEED AP BD + C

Hoar Employee Since 2004

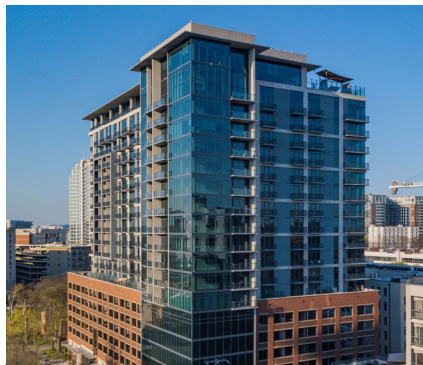


HoarConstruction

 HoarConstruction



19 YRS
In Nashville



#6
2018 NBJ



80+
Local Employees



**JASON
BENNETT**
Vice President

The Morris - Midtown



Capitol View - Downtown



Broadwest - Midtown



Tennessee State – North Nashville



Columbia State - Franklin



Hill Center – Green Hills



Wade C. Hutchinson

Civil Engineer, P.E.

44 Years Blasting Vibration Experience

Member of State of Tennessee Blasting Advisory Committee

Member of International Society Explosive Engineers

Member of American Society of Civil Engineers

VCE Inc

VCE Inc

Company Overview

Incorporated 1975

Three Divisions: Technical//Investigative//Digital

Corporate Office: Nashville, TN

Regional Offices throughout the Southeast and Southwest

Project Overview

Section

2

GBT Realty
Chartwell Hospitality
Designer - Gresham Smith
210 Residential Units
400+ Underground
Pkg Spaces
10 Story Hotel
10,000+ SF Retail
Greenway Improvements
Signal Improvements
Traffic Calming



Blasting Theory & Planned Blasting Controls

Section

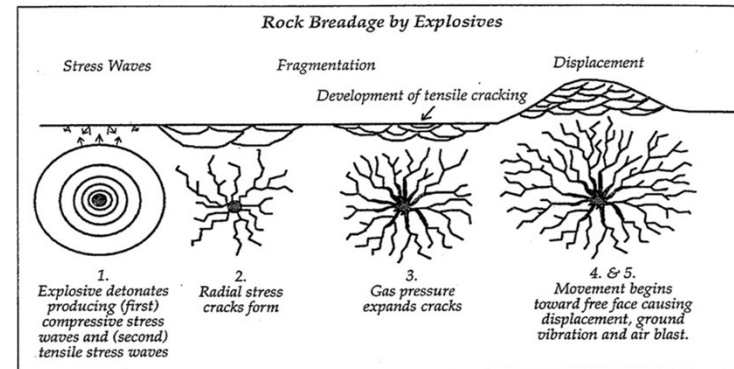
3

Project Site



Blasting Theory

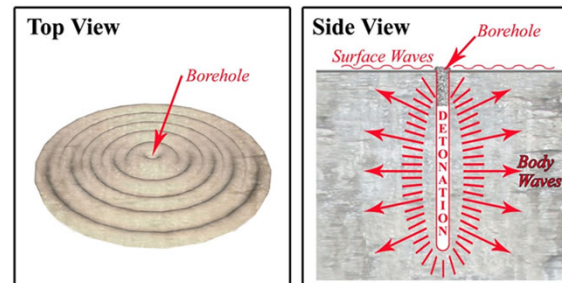
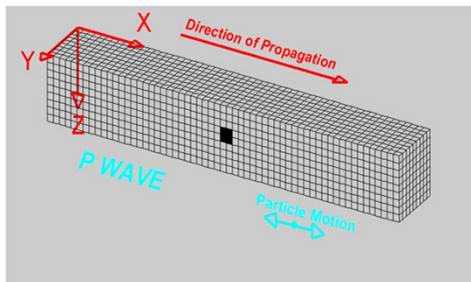
- Close Proximity Blasting Experience
- Energy Theory
 - Breaks Rock
 - Displaces Rock (Heaves)
 - Creates Vibration
 - Creates Air Overpressure (Noise)
 - Fly Rock



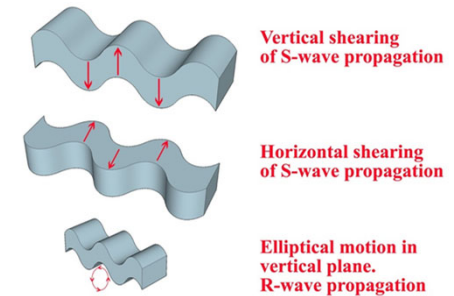
Rock Breakage Sequence (Fig. 2-2)

Blasting Theory

- Wave Theory
 - Primary Waves (P Waves)
 - Oscillating Waves (Peak Particle Velocity)



Generation of body and surface waves



Planned Blasting Controls

Blasting Control Measures Planned for the Project

- Oversight by Team of Blasting Specialists
- Pre-blast Inspections (Exceeding State Standard)
- Line Drilling of Blasting Site Perimeter
- One Blast Window Per Day
- Trial Blasting (Similar to Conservatory at Executive Residence)
- Multi-Direction Seismic Monitoring Program
- Weekly Blasting Summary of Seismic Results

Pre Blast Zone Pre Blast Surveys



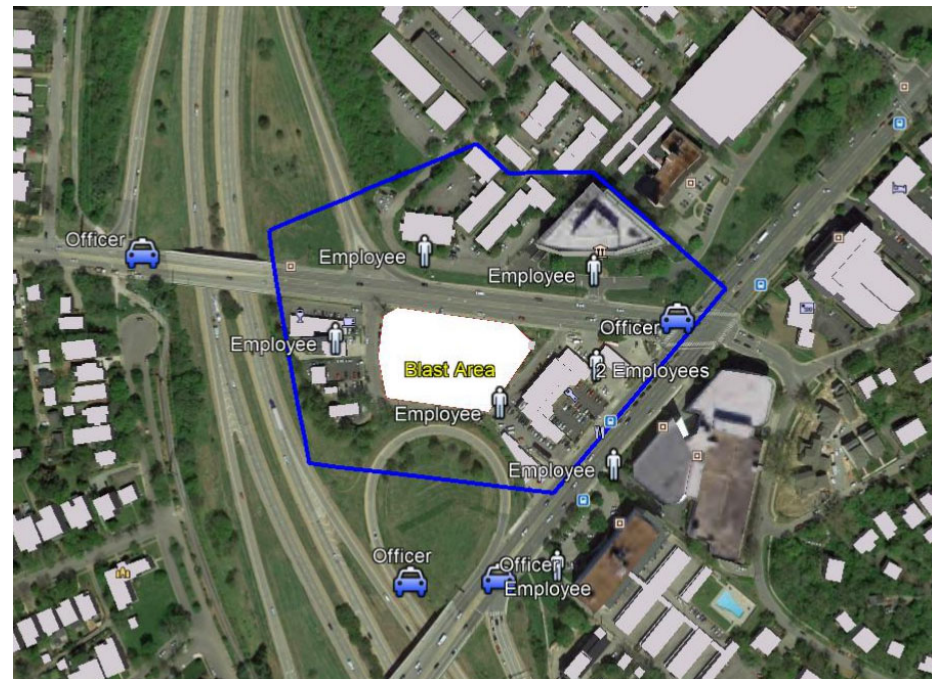
Planned Blasting Controls

- Line Drilling
- Blasting Site Perimeter



Planned Blasting Controls

- Preblast Plan Review by State Fire Marshal
- One Blast Window/Day
- Safety & Traffic Control



Planned Blasting Controls

- Trial Blasting



Planned Blasting Controls



- Multi-Direction Seismic Monitoring of Blasting on Project
- Weekly Summary of seismic results posted on project website:

<https://hoar.com/parke-west-updates/>



Questions

This presentation may be downloaded from the project website
<https://hoar.com/parke-west-updates/>

Additional questions or comments?
parkewest@hoar.com

Section

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