**Bigelow Boulevard Reconfiguration Project**

**Oakland Design-Build Inc.**

### The Problem
- Unsafe pedestrian-to-vehicle interaction
- Current configuration encourages jaywalking
- Heavy pedestrian volume generates constant roadway congestion
- Motorists miss multiple light cycles
- Increased aggression could lead to accidents

### Alternate Solution Analysis
- **Location:** In between Cathedral and WPU

### Project Goals & Scope
- Provide innovative, multifaceted solution by:
  - Reducing pedestrian-vehicle conflicts
  - Creating a sustainable, campus-style landscape
  - Maintaining motorist access along Bigelow:
    - O’Hara St. to Schenley Dr.
  - Maintain access into/out of Soldiers & Sailors Garage
  - Preserving aesthetic appeal of the “Heart of Oakland”, namely the William Pitt Union & the Cathedral of Learning

### Lift Station Design
- **Reconfigured combined sewer (CS) system to avoid conflicts with walls**
- **Eliminate junction at Bigelow-Fifth intersection**
- **Lift station incorporated to design to accommodate runoff accumulation at low point of roadway**

### Water Resource Solution
- **Proposed Roadway Vertical Alignment**
- **Re-routed Combined Sewer System**
- **Load-bearing & Non Load-bearing Wall Systems**
  - LB – Secondary File Walls
  - NLB – Cantilever (Gravity) Walls
- **Steel Girder Structures: Comprehensive Design**
  - Soldiers & Sailors Extension, Fifth Ave, Forbes Ave
  - Precast/Prestressed Concrete Slab Structures: Preliminary Design
  - Soldiers & Sailors Extension, Fifth Ave, Forbes Ave

### Typical Secant Pile Section
- **Geotechnical Design**
  - **Secant Pile System:** Supports Structures
    - Low profile construction, less impact to daily life
    - Design Heights: 18 ft, 20 ft, and 22 ft
    - Requires temporary shoring during construction
    - Lateral supports will be used where necessary

### 3D Renderings

### Design Deliverables
- **Cost Estimate:** $35 Million
- **Construction Duration:** 3.5 Years, Nov. 2016 to Apr. 2020
- **Select:** Project Summary

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**Project Manager:** Nathan Schaeffer
**Water Resources Manager:** Matthew Kambic
**Geotechnical Team:** Robert Gehris and Garrett Swarm
**Structural Team:** Nicholas Hoffmaster, Jiangmin Lin, and Grant Stahl