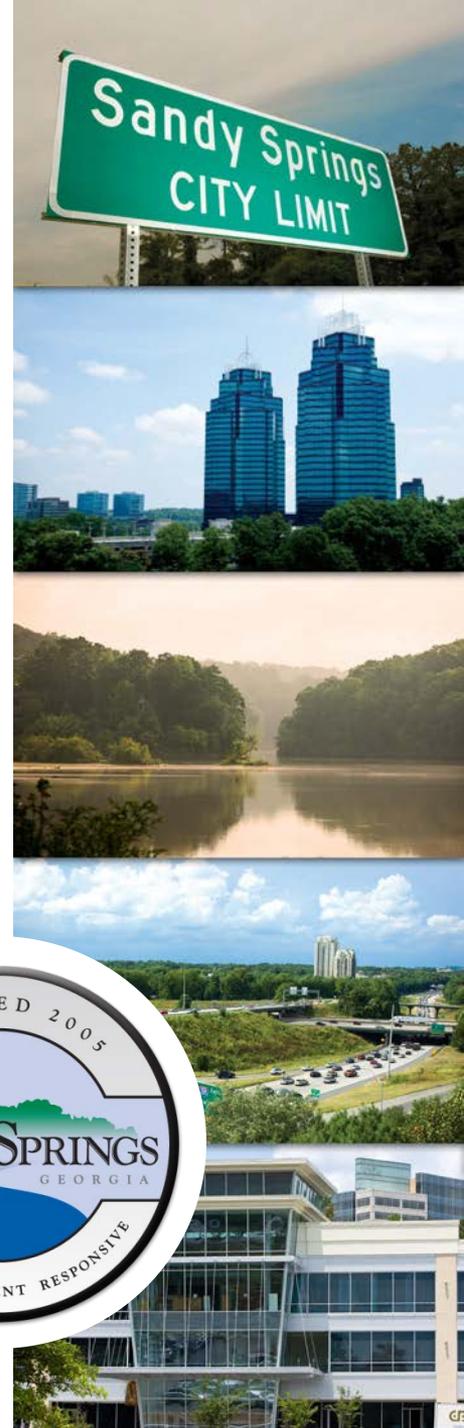


# LAKE FORREST DRIVE UPDATE

August 6, 2013



# Lake Forrest Drive Update

2

- Actions To-Date
  - Work Orders – 13 since 2009 for clean-up, 8 of the 13 this year alone
  - 5/24/2013 – United Consulting NTP for technical review of slope
  - 5/29/2013 – Jersey barrier installed at location of chronic failure
  - 6/05/2013 – Last mud slide/road closed
  - 6/14/2013 – Preliminary report received from United Consulting
  - 7/19/2013 – Trees completely removed from top of slope
  - 8/01/2013 – Final Report received from United Consulting
  - 8/05/2013 – Closed Road to Southbound and Northbound Traffic
- Pending Actions
  - Engage design engineer to design final solution

# Lake Forrest Drive Update

3

- Recommended Plan of Action
  - Emergency procurement of design consultant under the following regulations:
    - Georgia Code:
      - O.C.G.A. § 36-91-22 – Exceptions; use of inmate labor; emergency situations
        - (e) The requirements of this chapter shall not apply to public works construction projects necessitated by an emergency; provided, however, that the nature of the emergency shall be described in the minutes of the governing authority. Any contract let by a county pursuant to this subsection shall be ratified, as soon as practicable, on the minutes of the governing authority, and the nature of the emergency shall be described therein.

# Lake Forrest Drive Update

4

- Emergency Procurement Continued
  - Section V.C of the City purchasing policy:
    - (4) Award of Proposal
      - (e) Emergency Purchasing: It is understood that, from time to time, occasions arise at departments, which dictate immediate action to purchase items in order to prevent disruption of operations. The Purchasing Agent shall have the authority to purchase commodities and services where there exists an emergency constituting a threat to public health, safety or welfare or to the soundness and integrity of public property or to the delivery of essential services and where the adverse effect of such emergency may worsen materially with the passage of time.
      - Adherence to these regulations and procedures concerning dollar amounts and bidding will be followed as closely as circumstances will allow. All emergencies will be documented and reports given to the City Manager and Mayor and Council.

# Lake Forrest Drive Update

5

- United Consulting Detail Report
  - 9 borings performed including 7 at the base of the slope and 2 on the top of the slope
  - On the bottom of the slope, solid rock was hit at depths ranging from 2 to 16 feet
  - On the top of the slope, solid rock was hit at 20 and 37 feet
  - Height of the slope is approximately 40 feet at tallest point
- Based on these results the slope may have little to no substantial rock. For long term stability to be achieved in-situ slope stabilization such as a block gravity wall or soil nail wall should be constructed.

# Lake Forrest Drive Update

6

- Preliminary Permanent Stabilization Techniques Under Consideration
  - Soil nail/rock bolt wall
    - Lessens impact on property but is expensive when coupled with aesthetic enhancements
    - Based on recent bids the estimated cost is \$60 to \$70 per square foot plus additional \$20 to \$30 for aesthetic treatment
    - Total estimated cost \$780,000 to \$1.5 Million

# Lake Forrest Drive Update – Soil Nail Wall

7



# Lake Forrest Drive Update

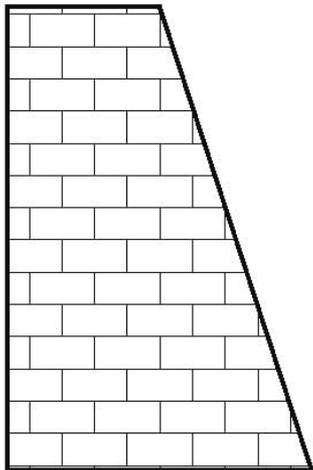
8

- Rubble gravity wall
  - Greater impact on property than soil nail but far less impact than increasing the slope
  - Aesthetically pleasing without additional cost
  - Estimated cost is roughly half to one third of the cost of the soil nail wall
  - \$30 to \$40 per square foot
  - Total estimated cost \$390,000 to \$600,000

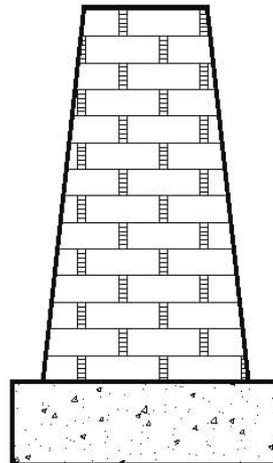
# Lake Forrest Drive Update – Gravity Type Walls

9

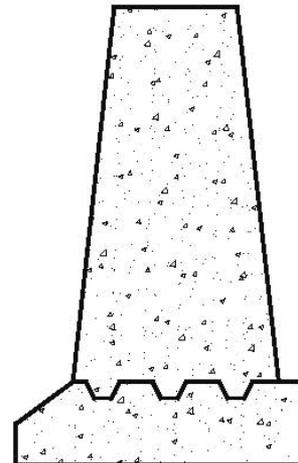
Gravity Retaining Walls



Masonry Unit



Stone



Poured Concrete



R. Salgado

[www.foundationengineering.info](http://www.foundationengineering.info)

# Lake Forrest Drive Update

10

- Factors affecting time line
  - Contractor's Work Schedule:
    - Longer work hours allowed?
    - Weekend work allowed?
- Tentative Schedule:
  - Issue NTP to Design Consultant – 8/07/2013
  - Design due – 8/28/2013
  - Award Construction Contract – 9/12/2013
  - Begin Construction – Late September

# Lake Forrest Drive Update

11

- Budget
  - Spent to Date:
    - Tree Clearing: \$30,000
    - Traffic control: \$13,000
    - Geotech: \$20,500
  - Estimated cost going forward:
    - Survey/Design: \$50,000 to \$85,000
    - Construction: \$600,000 to \$1.8 million

# Questions ?