UK/Nicholasville Road Flood Mitigation Project

Bell Engineering

November 7, 2014
About The Project
Goals

- Control 100-year, 24-hr storm event
- Create a visually pleasing engineering design
- Accommodate key stakeholders
- Manage fixed budget
- Maximize parking
- Accommodate/ incorporate Alumni Drive realignment
Key Elements

- Aggressive schedule
- Site limitations
- Limited budget
- Evolving scope of work
- Managing multiple contractors
- Accommodating University, hospital and other stakeholder activities
- Constant communication with Owner
Stakeholders
Stakeholders

• UK
  • Ag Campus
  • Parking
  • Athletics
  • Housing
  • Transportation
  • Master Planners
  • Arboretum
  • Physical Plant

• Non-University
  • FEMA
  • LFUCG
  • Utilities
  • Baptist Health
  • Corps Of Engineers
  • KY DOW
  • Friends of Wolf Run
  • Neighborhood Associations
Hydraulic Model
Existing Condition - Box Culvert @ Nicholasville Rd.
24-hour, 100-year Storm (6.81 in)

Flow Rate (cfs)

Time Interval (hh:mm)

51% Flow Reduction
Utilities
Utilities

- KYTC
- LFUCG Sewers
- LFUCG Stormwater
- LFUCG Traffic
- Columbia Gas
- Kentucky American Water
- Kentucky Utilities
PROPOSED PARKING

FEMA = 645
REVISED GOOD BARN = 231
SOUTH CAMPUS = 370
TOTAL PROPOSED PARKING = 1,246
FUTURE SOUTH CAMPUS = 35
TOTAL W/FUTURE = 1,281

Parking Plan

Bus Stop
Transportation Plan

- Bike Trail
- Roundabout
- Realignment
- Bike Lanes
- Bike Trail
- Bike Trail
- Bike Trail
- Bike Trail
Big Elm Fork
Vision
Area 1 – Proposed (2-years)
Area 1 – Proposed (20-years)
Area 2 – During Construction
Area 2 – Proposed (2-years)
Area 4 – Proposed inc. Alumni Drive
Area 5 (Greg Page) – During Construction
Area 5 (Greg Page) – During Construction
Current Schedule

- Area 1: April 2015
- Area 2: COMPLETE
- Area 3: August 2015
- Area 4: August 2015
- Area 5: December 2014
- Area 6: December 2014
Questions?

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