Bexar County Public Works Department Flood Control Program

Bulverde Rd. at Mud Creek Trib. A (SC-27)

October 22\textsuperscript{nd}, 2015
Agenda

- Introductions
  - Bexar County Flood Control (Engineering, Construction and PR)
- Program Background
- Project Overview
- Project Benefits
- Project Details
- Construction Phasing
- Q&A
Bexar County Flood Control Program

• 10-year, $500 Million Capital Improvement Program
• Currently in year 9 of 10, with numerous projects heading into construction phase.
• The Hill Country is known as flash flood alley, with 1,000 ft. elevation drop across Bexar County.
• Flood Control program works with local municipalities and agencies to deliver projects that alleviate flooding across the region.
• Half of all flood deaths occur in vehicles.
• Turn around, don’t drown!
Project Overview

- Eliminating low water crossing on **Jung Rd.**, via Jung Rd. realignment.
- Eliminating low water crossing on **Bulverde Rd.**, between Jung Rd. and Quiet Meadow, adding bridge-class MBC crossing under Bulverde Rd.
- Enhancing culvert capacity on **Miss Ellie Dr.**, between Quiet Meadow and Green Breeze, reducing back water effect that causes flooding.
- Advertisement: October 2015
- Estimated Construction Cost: $3.2 Million
Project Benefits

- Allows for **unflooded vehicular travel** across Mud Creek Unnamed Tributary A during storm events up to the 100-year (1% annual chance) storm event.
- Allows **emergency responders** to safely travel across the Tributary during storm events, improving response times.
- Eliminates the need for barricades and lengthy detour routes during storm events.
- Flood study shows that improvements will lower the WSE by over 2’ on Bulverde Rd.
- Improves safety, sight distance and traffic flow at the Bulverde Rd. and Jung Rd. intersection.
- Removes several homes on Green Breeze out of the FEMA 100-yr floodplain, removing need for flood insurance and allowing residents to get out safely during rain events.
Project Details

Overall Layout
Project Details

Site Plan – Miss Ellie Drive
Other Considerations

- Improvements, including roadside ditches along New Jung Rd. and Bulverde Rd. will become property of, and maintained by, the City of San Antonio.
- All disturbed areas will be vegetated using native seed mixes.
- Utility relocations (CPS, SAWS, Telecoms) will be necessary to accommodate the improvements. CPS & Telecoms have already started relocations.
- Project will be constructed in phases and detours will be utilized when necessary. Motorists will be notified in advance of modifications to the construction and traffic phasing.
- Notification beacon will be installed for southbound Bulverde Road traffic to alert motorists of new signal ahead.
Bulverde Road

– Phase I

• Improvements to Bulverde Rd. and Quiet Meadow intersection, including installation of new traffic signal.

• SAWS new water mains and services to be installed on Bulverde Rd. as well as new CPS gas line.

• Construction of pavement for new Jung Rd., including SAWS water mains/services and temporary detour roadway.
  – Bulverde Rd. and Jung Rd. remain open during construction activities.
  – Existing traffic signal at Bulverde Rd./existing Jung Rd. intersection will remain operational.
Bulverde Road

– Phase II

• Construct **Bulverde Rd.** drainage improvements (bridge class culverts and ditches) & complete SAWS and CPS work.
  – Bulverde Rd. closure (between exist. Jung Rd. and Quiet Meadow) to allow for shorter construction duration and reduced cost. New light at Quiet Meadow/Bulverde Rd. will be activated (south, east and westbound).
    » Southbound traffic will detour through new Jung Rd. and temporary road installed in Phase I.
    » Northbound will detour through existing Jung Rd. following to temporary road.
    » Westbound traffic only allowed for new Jung Rd.
    » Existing Jung Rd. will remain open in both directions.
Construction Phasing

Bulverde Road

– Phase II
Bulverde Road

– Phase II (Traffic Control Signs)
Construction Phasing

Bulverde Road

– Phase III

• Install temporary construction lanes to improve sections of Bulverde Rd. (east and west) while two way traffic is allowed.
• Open new Jung Rd. to normal traffic from Bulverde Rd.
• Existing Jung Rd. and temporary detour pavement demolition.
• Continue drainage improvements.

– Phase IV

• Mill & overlay Quiet Meadow and Bulverde Rd. as shown on the plans.
Construction Phasing

Miss Ellie Drive

– Phase I
  • Install southbound portion of culvert and reconstruct lane installing barricades for southbound traffic control through one lane (12-ft wide).
  • Install northbound portion (similar traffic control measures).
  • New water main and gas line installation.

– Phase II
  • Mill and overlay Miss Ellie Dr. between Green Breeze and Quiet Meadow intersections.
  • Open to full two way traffic.
Construction Phasing

Miss Ellie Drive
Miss Ellie Drive

– Traffic Control Devices
Contact Info
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*This presentation will be posted on the website