

SPECIAL WORK SESSION OF DECEMBER 15, 2011

The City of Kings Mountain, North Carolina met in Special Work Session at 3:00 p.m. on Thursday, December 15, 2011 in the Conference Room at Public Works with Mayor Rick Murphrey presiding.

ATTENDANCE

The following Councilmembers were present: Howard Shipp, Dean Spears, Keith Miller, Mike Butler, Rodney Gordon, Rick Moore and Tommy Hawkins.

Also present: Marilyn H. Sellers, City Manager and Ann L. Sessom, City Clerk.

INVOCATION

The invocation was given by Mayor Murphrey.

SPECIAL MEETING

Joel Wood and Associates presented Water System Improvements power point presentation. Areas discussed were:

- New 36" water line
- Water plant upgrade
- Water line rehab
- Moss Lake spillway rehab

36" Water Line

- Replace existing 24" steel transmission line
- Existing line near end of useful life
- Eliminate one booster pump station
- Increase system capacity

Three options were discussed giving the pros and cons on each route.

Option 1

Cons

- 85 property owners impacted
- Difficult laying conditions
- Impact existing utilities & storm drains
- Cemetery impact
- Heritage tree impacts
- 10.35 acres of permanent & 10.35 acres temporary right of ways
- \$17,084,00 construction cost for this section

Pros

- Shortest route
- Previously developed corridor
- Good topography
- Less likely to impact endangered species
- Minimum wetland impacts
- Easy access by maintenance crews

Option 2

Cons

- Major creek crossing
- Possible impact to endangered species
- Bad topography
- Possible wetland impacts

Pros

- Only 35 property owners impacted
- Good laying conditions
- 9.0 acres of permanent and 9.0 acres temporary right of way
- \$15,877,000 construction cost for this section

Option 3

Cons

- Impact to wetlands
- 53 property owners impacted
- 6 creek crossings
- Possible impact to endangered species
- Bad topography
- Possible impact to 2 houses

Pros

- 11.25 acres permanent & 11.25 acres temporary right of way
- Fair to good laying conditions
- \$15,980,000 construction cost for this section

Option 2 was recommended as the best alternative for the following reasons:

- Impacts least number of property owners
- Good laying conditions
- Lowest initial cost
- Least amount of right of way & easement required
- Impacts to the environment are within acceptable limits
- Computer model verifies system capability

Water Plant Upgrade

The purpose of the water plant upgrade:

- Will have to expand plant within 5 years to be in compliance with 80% rule
- Components nearing end of useful life
- Plant last upgraded in 1978

Current & Projected Water Use

• Existing Avg. daily use	2.52 MGD
• Data Centers	1.80 MGD
• Bessemer City Add'l	1.40 MGD
• Southern Power	<u>.68 MGD</u>
Total	6.40 MGD

6.4 MGD = 80% Plant Capacity

The rehab options are:

- Option 1: Rehab existing plant with no expansion - \$8,142,000
- Option 2: Rehab existing plant with 2 MGD expansion - \$10,138,000

Water Line Replacement:

The purpose of the water line replacement is that the water lines have exceeded their useful life. Line capacity reduced because of erosion and tuberculation frequent breaks and leaks - \$5,295,000.

Moss Lake Spillway

The Moss Lake spillway evaluation was reviewed with the following options and costs:

Option 1

- Complete replacement
- Requires significant draining of lake
- \$6,000,000 construction cost

Option 2

- Rehabilitate & replace weir as needed
- Spillway not at end of service life
- \$600,000 construction cost

Cost Summary for all projects:

• 36" water line (Best alternate route)	\$15,877,000
• Water plant rehab	\$10,138,000
• Water line rehab (Gold Street, King Street, Mountain Street)	\$ 5,295,000
• Moss Lake spillway rehab	<u>\$ 600,000</u>
Total	\$31,910,000

The time schedule of the expansion and rehabilitation projects is three years.

ADJOURNMENT:

Upon motion by Councilmember Keith Miller and seconded by Councilmember Tommy Hawkins, it was unanimously voted to adjourn the Special Work Session of the City Council at 4:40 p.m.

BY: _____
Edgar O. Murphrey, Jr., Mayor

ATTEST:

Ann L. Sessom, MMC
City Clerk