

112th Avenue Capital Improvements Options

April 9, 2018

Purpose

- Provide update to Council on status of 112th Avenue
- Provide options for Council's consideration
 - Improvement options
 - Estimated costs
 - Pros & Cons





Infrastructure Project Overview





Goals for Infrastructure Package B

- Get 112th out of the 100 year floodplain
- Avoid or minimize impacts to the FRICO Canal
- Complete east west connection
- Maximize future park space
- Minimize floodplain impacts
- Accomplishing Second Creek Improvements includes re-establishing 2nd Creek Channel
- Minimize impacts to developers





Infrastructure Package B

Council endorsed the following concept for Package B



- Review comments from FRICO created serious challenges
 - FRICO would require a single span box culvert for the O'Brian Canal this requires 112th elevation to be raised and would classify it as a dam resulting in double the 100 year water storage needed
 - This has created construction feasibility and costs impacts



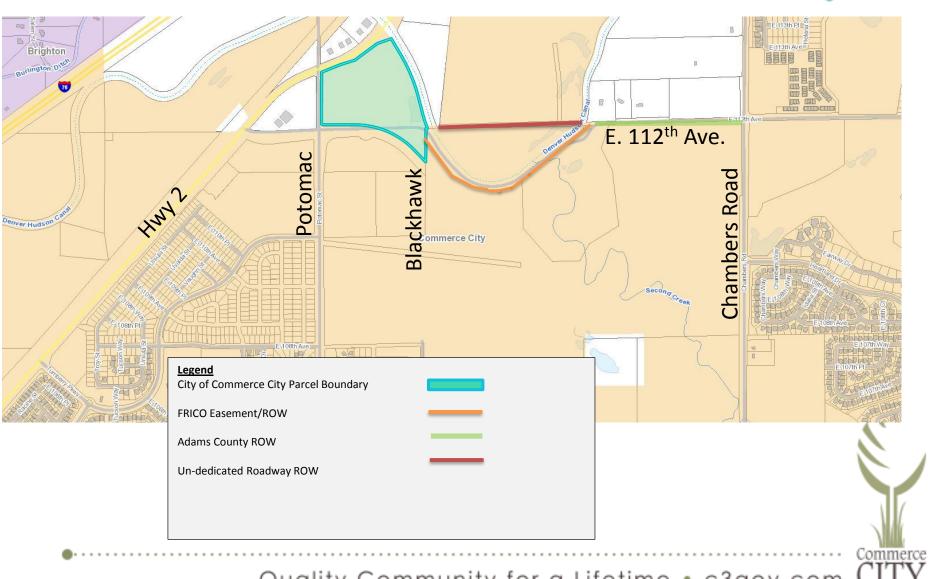
Timeline of Decisions on Package B

- Original plan was to locate recreation center in Second Creek Community Park
- In 2015 decision made to move it west to Parcel O
- 2017 staff presented 3 112th Ave. options to Council:
 - Alternative 1: Move 112th south to a narrow point in 2nd
 Creek, minimizing involvement with the FRICO canal
 - Alternative 2: Keep 112th in its current alignment and do not raise it out of the 100 yr. floodplain
 - Alternative 3: Do not connect 112th as a road, master plan as an open space with bike and pedestrian connections, finish water quality and other drainage improvements needed for Package A and Rec Center
- Council decision to suspend work on Package B

Current Status of Package B

- Message about suspending work was conveyed to Shea, shortly after the 2017-2-13 Council meeting
- Later, Shea sold their interest to Oakwood Homes
- Staff has met with Oakwood multiple times:
 - Oakwood & City staff agree to design 112th from Blackhawk to Tower
 - Oakwood proposes 112th construction in three phases:
 - 1st phase: Chambers Road to Parkside Drive
 - 2nd phase: Blackhawk Street to Chambers Road
 - 3rd phase: Parkside Drive to Tower
- Multiple steps must happen before 112th construction

Land/Right-of-Way Ownership



Ultimate Improvements

- Decide on desired alignment:
 - City does not own 112th ROW between Blackhawk Street & Chambers Road
 - Working near the O'Brian Canal must involve FRICO
- Re-establishment of Second Creek channel & crossings of O'Brian Canal & Burlington Ditch
 - Floodplain & wetlands issues
 - Regional storm water pond funding issues
 - Reunion Metropolitan District ownership of retention pond
- Oakwood plat & dedication of floodplain
- Design of regional storm water pond

Improvement Options

Option	Rough Order of Magnitude Cost	Time Needed
Ultimate Improvements (including detention pond construction & storm water conveyance below roadway)	\$15M - \$20M	1 to 1½ years each for FRICO, 404/401, & CLOMR permitting (some overlap) plus construction
Interim Improvements: add geotextile, fill low area & pave current alignment	\$750K - \$1M	1 to 1½ years each for FRICO, 404/401, & CLOMR permitting (some overlap) plus construction
Interim Improvements: grade road, add geotextile, fill area slightly to improve drainage	\$500K - \$550K	1 to 1½ years each for FRICO, 404/401, & CLOMR permitting (some overlap) plus construction
Interim Improvements: grade road, add stabilization & slight amount of material at low spot	\$100K - \$150K	Time for the maintenance work only (no permit required)
Do nothing; leave road closed	\$0	

Improvement Option Pros & Cons

Option	Pros	Cons	
Ultimate Improvements (including detention pond construction & storm water conveyance below roadway)	Raises 112 th out of floodplain, improves drainage	Time required for design, permitting, & construction; cost	
Interim Improvements: add geotextile, fill low area & pave current alignment	Provides access quicker	Doesn't raise 112 th out of floodplain or improve drainage; time required for permitting & construction; cost; FRICO objects to paving	
Interim Improvements: grade road, add geotextile, fill area slightly to improve drainage	Provides access quicker	Doesn't raise 112 th out of floodplain or improve drainage; time required for permitting & construction; cost	
Interim Improvements: grade road, add stabilization & slight amount of material at low spot	Provides access quicker	Doesn't raise 112 th out of floodplain or improve drainage; construction; cost	
Do nothing; leave road closed	Design ultimate improvements	Doesn't provide access now	

Available Funding

- Current funds available:
 - \$4 million from 2K project
 - \$1.8 million from Second Creek Drainage Basin Fund
 - \$3 million NRDS grant (must be under contract by 2019)
 - Oakwood contribution for ½ of roadway improvements for ultimate improvement solution
 - 2K cash fund balance (as Council determines from \$7 million*)
 - Fund balance in General Fund (estimated \$10.9 million after CIPP commitments through 2022)
 - Other misc. sources of funds

*after commitments shown on next slide

Notes on Available 2-K Funding

Source or Designation	Est. Amount	Est. Net Remaining
2017 Fund Balance (Estimated before audit)	\$23,701,000	
2018 Budget for Tower-Pena	-\$10,000,000	\$13,701,000
Denver Repayment	+\$5,238,000*	\$18,939,000
2020 Budget for 88 th Ave. Widening	-\$5,000,000	\$13,939,000
2022 Budget for 120 th & Hwy 85 Interchange	-\$7,000,000	\$6,939,000

*could be up to \$6,000,000 by 2021





Discussion