

Memorandum

City of Lawrence

Public Works

TO: David L. Corliss, City Manager
FROM: David P. Cronin, P.E., City Engineer
CC: Diane Stoddard, Cynthia Wagner, Charles Soules, Mark Thiel, Melinda Harger
DATE: September 30, 2013
RE: Project No. PW1224, Farmland Infrastructure Project: Street, Storm Sewer and Waterline Improvements
Project update and approve change orders
City Commission Agenda October 8, 2013

Project Background

- September 2010 the City took ownership of the former Farmland Industries nitrogen fertilizer production plant on Highway K-10
- 2011 the City began demolition of the abandoned structures on the site removing over 1600 tons of scrap metals
- February 2012 the City contracted with Bartlett & West Engineers to develop a masterplan and infrastructure plans for the future industrial land use of the property
- May 2012 the City held meetings with neighbors and businesses to discuss the concept plan
- December 18, 2012 the City Commission approved the final plat
- December 11, 2012 the City Commission awarded the intersection improvements at O'Connell and K-10 including signalization and turn lanes into the Farmland site
- Plat filed January 31, 2013
- City Commission approved Resolution No. 7011 and Resolution No. 7012 establishing March 5th for the public hearing on the Benefit District for infrastructure
- March 5, 2013 City Commission approves Resolution 7015 establishing the Benefit District for streets, storm sewer, grading and waterlines in the maximum amount of \$7,855,000 and Resolution 7016 establishing the Benefit District for sanitary sewer improvements in the maximum amount of \$1,725,000
- Infrastructure project PW1224 Bid March 19, 2013
- Infrastructure project awarded to RD Johnson in amount of \$4,984,556.30

Project Details/Cost

The improvements include site grading for building pad ready lots and the installation of infrastructure for the Farmland Property:

- Streets – 10" concrete pavement, curb and gutter, storm sewer, sidewalks on both sides, bike lanes, and fiber conduit
- Water – 12" looped water main, hydrants and valves

The project is funded 100% by the Benefit District and 0% by City at large. The improvement district includes all property within the Farmland plat and will be assessed based on the proportionate share of square footage of each tract.

The infrastructure project awarded to RD Johnson on March 26, 2013 total \$4,984,556.30 which included:

- Base bid of \$4,293,827.40 for streets, storm sewer and waterlines.
- Bid Alternate 1 of \$690,728.63 for rough grading on sites: 'A', 'B South', 'C North', and 'C South'.

Bid Alternate 2 was not awarded for rough grading on sites 'B North', 'D', 'E North' and 'E South' due to the large expense (\$2,450,000) of moving dirt across site to less desirable lots.

The Notice to Proceed date was April 11, 2013 and the project has a completion date of November 27, 2013 for the base bid and September 19, 2014 for Bid Alternate 1. The project has encountered numerous unforeseen conditions that have slowed the progress of the project and completion of the project will be delayed to Spring 2014. These conditions include excess rock excavation, old foundation removals and time to construct KDHE sediment basins. However, the front lots between K-10 and new east/west road have been finished and the road grading is complete. Storm sewer installation and curb and gutter is expected to be complete this fall, with final street pavement installation next spring.

The Farmland Sanitary Sewer Improvements (City Project No. 12S008) was awarded to Amino Brothers Co., Inc. on April 2, 2013 in the amount of \$601,089.49. The Notice to Proceed date was April 30, 2013 and the project had a contract completion date of August 30, 2013. As a result of unanticipated site conditions, the project has experienced delays, piping realignments, and additional work to remove existing material. On September 25, 2013, Amino Brothers submitted a request for \$36,632.21 in change orders and \$9,097.85 in bid item quantity changes as well as a time extension request for 60 calendar days. These requests are being reviewed and will be a future agenda item.

Change Orders

There are several change orders complete, underway or pending due to conditions beyond the original scope of the project as summarized below.

Change Order 1: Transite Removal & Lab Building Demolition - \$19,000

Work included removal of transite (asbestos) and demolition of lab building and hauling to landfill.

Change Order 2: Transite Removal from old foundation and dirt pile - \$145,000

Work included removal of 2776 tons of soil contaminated with transite (asbestos) from around the old compressor building. Soils were loaded into trucks lined and covered with plastic and hauled to landfill.

Change Order 3: Nitrogen Soil Removal to Old Lagoon & Removal of Foundations - \$205,034.30

Work included moving nitrogen soil to old lagoons on north end of property and removal of several large building foundations in sites 'B South' & 'C South' that conflicted with final grading. Work is complete, however, other large foundations remain in 'B North' which will not be removed with this project.

Change Order 4: Erosion control items to comply with KDHE Notice of Intent for Stormwater runoff - \$250,918. Work included excavation/grading to establish sediment basins, silt fence, rock ditch checks, inlets and pipe.

Change Order 5: Installation of warning signs - \$2250

Installed large warning signs at entrances for safety of public.

Change Order 6: Credit for RCB change - (-\$15,000)

Changed from precast arch culvert to cast in place box culvert for ease of constructability and cost savings.

Change Order 7: RCB foundation stabilization - \$16,740

Excavation of unsuitable soils and installation of compacted rock subgrade for RCB culvert.

Change Order 8: Traffic Control for 23rd & O'Connell intersection - \$7634.77

Traffic control and signs on 23rd St that were included in intersection project and remain until completion of infrastructure project.

Change Order 9: Waterline through nitric acid site - \$41,631.40

The waterline along new east/west road runs through area contaminated with nitric acid and KDHE is requiring the waterline to be fused. Costs include over excavation of dirt and rock and fill of uncontaminated dirt.

Change Order 10: Waterline extension from east/west road to K-10 - \$85,000 (estimate)

Work includes installing new waterline from proposed waterline on east/west road to waterline on K-10 for irrigation of berms fronting the property. Waterline installation will also provide a loop for future tenants of the front lots. Price includes installation of waterline and could increase if rock excavation is required. Contractor will perform exploratory digging to identify rock depth prior to approval of costs.

Change Order 11: Retaining wall along east/west road - \$149,000

A retaining wall is required due to the significant roadway cut along Farmland Road just north of the cemetery on the eastern half of the property. The need for a wall not anticipated in the original design plans.

Change Order 12: Compost and topsoil on berms - \$45,000

Topsoil on entire site was stripped and stockpiled prior to excavation activities. Due to the presence of rock and old building foundations there is not enough topsoil stockpiled to adequately spread back on entire site and berms along K-10. Establishing landscaping and grass on berms is a priority for use of topsoil. To obtain a 9" uniform soil depth, 2500 CY of topsoil and 2500 CY of compost will be spread and tilled in. The compost is being hauled by contractor from city owned compost facility from an excess stockpile.

Change Order 13: Removal of all utility poles on Farmland site - \$25,000

Contractor is removing all abandoned utility poles on Farmland site. Poles adjacent to active Westar transmission lines were anchored down prior to removal for safety reasons. Approximately 100 poles will be removed.

Possible Future Change Orders

Change Order 14: Extending O'Connell road north to 19th Street - \$1,000,000 (estimate)

City staff has begun discussions with general contractor, RD Johnson, to complete the extension of O'Connell Road to connect to 19th Street. The work would be a design-build change order with the contractor performing the design and construction with city staff oversight. The topography and future alignment of O'Connell is straightforward and this approach would save design costs and time. The work items would be overrun from the same unit costs as originally awarded in the PW1224 Farmland Roads contract.

Change Order 15: Landfill removals on site 'C North' - unknown cost

Three landfills that were used by the Farmland Industries plant exist on site 'C North'. The details of these landfills are as follows:

- Lime sludge landfill - The lime sludge from Farmland Industries water treatment process was disposed of in a landfill that was uncovered during grading. The lime can possibly be used to neutralize on site soils with a low pH or land applied off site as agricultural lime. The estimated volume is 8400 CY and city staff will work with KDHE on disposal.
- Insulation landfill - Insulation from two large ammonia storage tanks on the Farmland site. Insulation has been tested and no asbestos was detected. The insulation landfill is approximately 3500 CY to 4200 CY.
- Solid waste landfill - Farmland Industries disposed of daily solid waste from operations up to when the landfill was capped and closed in 1990. The landfill was permitted by KDHE and moving to another landfill (Hamm's or Deffenbaugh) would incur normal solid waste tipping fees plus hauling costs. The solid waste landfill deed restriction measurement was 5333 CY, however the landfill was not in the deed restricted location so city staff is working with the contractor to uncap and measure an accurate size.

Change Order 16: Removal of concrete debris pile - \$100,000 (estimate)

A large stockpile of concrete debris has grown from the old building and road removals performed by city forces last year and the contractor this year. The concrete can be buried on site in an old pond area and costs are approximate.

Change Order 17: Additional rock removal - unknown cost

Site 'C North' contains a large amount of rock excavation to complete before final grade. Due to the costly rock removal costs and the uncertainty of what final grade a potential tenant may desire on this lot, city staff is recommending leaving rock and deferring this item to a future project.

Additional Project: Irrigation and landscaping - \$270,000 (estimate)

The Parks and Recreation Department is coordinating plans and bidding of project to install first two phases of irrigation and landscaping for the berms that front K-10. Costs will be paid from the benefit district. Work will begin early 2014.

City staff is recommending deferring Change Order items 15, 16 & 17 until cost estimates are more accurate. Staff is recommending proceeding with Change Order 14 to extend O'Connell road to connect with 19th Street. This connection will cost approximately \$1,000,000 and would further enhance street

connectivity in East Lawrence; connection will be opened following relocation of Westar transmission pole in 2015 and improvements to 19th Street in 2016.

Cost Summary

Original Base Bid Contract	\$4,293,827.40
Bid Alternate 1 awarded	\$690,728.63
Change Order 1: Transite Removal & Lab Building Demolition	19,000.00
Change Order 2: Transite Removal from old foundation and dirt pile	145,000.00
Change Order 3: Nitrogen Soil Removal to Old Lagoon & Removal of Foundations	205,034.30
Change Order 4: Erosion control items for KDHE NOI for Stormwater runoff	250,918.00
Change Order 5: Installation of warning signs	2,250.00
Change Order 6: Credit for RCB change	-15,000.00
Change Order 7: RCB foundation stabilization	16,740.00
Change Order 8: Traffic Control for 23rd & O'Connell intersection	7,634.77
Change Order 9: Waterline through nitric acid site	41,631.40
Change Order 10: Waterline extension from east/west road to K-10	85,000.00
Change Order 11: Retaining wall along east/west road	149,000.00
Change Order 12: Compost and topsoil on berms	45,000.00
Change Order 13: Removal of all utility poles on Farmland site	25,000.00
Total Change Orders to date	\$977,208.47
Total Project Cost to date	\$5,961,764.50
Change Order 14: Extension of O'Connell Road	\$1,000,000.00
Irrigation and Landscaping Project	\$270,000.00
Total Project Cost	\$7,231,764.50
<i>Maximum amount of Benefit District</i>	<i>\$7,855,000.00</i>

City staff has requested the use of remediation funds from KDHE for transite removal, nitrogen soil removal, erosion control costs and landfill removals.

Action Request:

Approve Change Orders 1 through 13 for PW1224: Farmland Infrastructure project in amount of \$977,208.47 and direct staff to begin negotiating with contractor to complete design-build work for O'Connell Road extension to 19th Street.

Attachments: Site Map