City Engineer Report April 17, 2014

2012 SIDEWALK REHABILITATION:

Preliminary assessments have been calculated and notices to affected property owners have been mailed. The contract for the assessment project was awarded to Curtis Contracting of Ely, Iowa. The contract is now in hand.

No change from the last report.

2013 SIDEWALK REHABILITATION:

Repairs by the property owners are continuing with work on street corners occurring where necessary to accommodate resident repairs.

No change from the last report.

U.S. HIGHWAY 30 CORRIDOR IMPROVEMENTS:

The entire project is now open to through traffic. Finish grading and seeding on the Iowa Highway 1 intersection will be accomplished in the spring of 2014. Temporary erosion control measures are in place for the winter season in this area. Local survey control has been located by City staff and "as built" utility structure locations will be surveyed by City staff and updated on the GIS utility maps.

Permanent seeding has been applied to the remaining area. The Contractor is now scheduled to remove the two "rumble strip" areas east of Highway 1 and replace with a pavement patch. Topographical work will take place with City crews for "as built" utility locates when ground conditions permit.

EIGHTH AVENUE QUIET ZONE:

Correspondence continues with UPRR and Quiet Zone technologies with the goal of filing a notice of intent for a quiet zone and track crossing improvements for a full concrete plank crossing including pedestrian accommodations within UPRR right of way.

No change from the last report.

IOWA HIGHWAY 1 H.M.A. RESURFACING PROJECT

The IDOT will be opening bids in January 2014 for the Hot Mix Asphalt (HMA) pavement resurfacing for Iowa Highway 1 through Mount Vernon. The project will consist of full depth patching, existing pavement milling, and HMA resurfacing. Construction will occur in the summer of 2014.

A contract has been entered into with Manatt's inc. The Pre-Construction conference was held on April 25th in Davenport. Arrangements have been made to accommodate the burying of a conduit at the First Street intersection for the new traffic signals.

It is anticipated that the Contractor will start work in the City limits between U.S. Highway 30 and the UPRR tracks in two to three weeks with HMA milling. The Contractor will then follow up with full depth patching then HMA overlay.

U.S. HIGHWAY 30 BYPASS

Snyder and Associates are in the process of preparing plans for the U.S. Highway 30 Mount Vernon – Lisbon Bypass. Preliminary plans and design centerline alignment geometrics have been provided by the design engineer and City staff has transferred GIS coordinates into Iowa State Plane North coordinates and drafted onto a City Map.

City input in the design process:

Storm water management
Easement acquisition
City utility extension
Access locations

The Lisbon has confirmed acceptance of the East (Adams Avenue) interchange by not acting on a resolution to pursue a Sutliff Road interchange. This confirms that the U.S. Highway 30 bypass project is still in progress. There will be no access to U.S. Highway 30 from Highway 1 to the Adams Avenue interchange (3.4 miles). This will affect the long range planning discussions for the Southeast quadrant of the community, specifically the Oak Ridge area and Stoner Plaza area. This planning will affect street connection locations to Highway 1, area storm management design and street alignment.

Final design is now actively in progress. Right of way acquisition of whole parcel takings is in progress and the remaining parcel acquisitions will begin when IDOT defines the needed parcels.

At this juncture in the process, grading, storm structures, bridges are programmed. The expected contract opening would be in late summer of 2016 with construction in 2019 and 2020. Paving has not yet been programmed.

COMPREHENSIVE PLAN

Maps and infrastructure information have been provided to Chad Sands to aid with the development of a Mount Vernon Comprehensive Plan update. This information includes the proposed U.S. Highway 30 alignment.

Participation in the Transportation & Infrastructure and the Facilities/Natural Hazards/ Joint Planning Efforts sub-committees by Engineering staff has been in the form of meeting attendance and by offering information in the form of maps and reports.

CITY MAP UPDATES

City Zoning and Utility maps in both GIS and CAD are being updated to show recent city infrastructure work. City utility locations from the Eighth Avenue reconstruction project have been surveyed in the field and the GIS maps have been updated. Once the utility locations been surveyed and downloaded, they will also be added to the City GIS maps.

New "Truck Maps" have been put together for use in the field. A GPS generated utility location unit has been ordered.

STRUCTURE REPLACEMENT PROGRAM

Every year the City has a contractor remove and replace designated sanitary and storm structures. This year a larger number of structures (14) have been designated for replacement. A list with locations has been tabulated and will be sent out to Contractors.

STREET PROJECTS:

SEVENTH STREET FROM EIGHTH Ave. NW TO FIFTH Ave. NW

The scope of the project design is:

Complete removal of the existing seal coat surface and P.C.C. curb & gutter

Core out existing natural subbase, compact, construct and construct a 6" drainable granular sub-base with longitudinal subdrain.

Replace existing 4" CIP Watermain with a new 8" PVC watermain, valves, and fire hydrants.

Construct a new P.C.C. pavement with full 6" curb & gutter

Sidewalk replacement that is necessary due to grade adjustment and intersection replacement will be included in the project. Necessary sidewalk repairs not generated from this project will be left to the property owners.

Council decisions that need to be made are:

7" Thick pavement or 8" thick pavement

Pavement width:

24' width (Existing)
28' width (Normal Local Street)
31' width (Arterial and Collector)

Design is progressing under these parameters:

24' BC-BC pavement width
8" Pavement Thickness
Replace the existing 4" Watermain with new 8" Watermain and new fire hydrants

Sanitary sewer televising has been ordered in the alleys to help determine what repair work may be necessary to include in the project. Survey boundary work has been ordered to determine the street right of way limits. The survey field work has been accomplished and the ROW location is being calculated.

FIFTH Ave. NW FROM FIRST St. W TO EIGHTH St. NW

The existing pavement is most P.C.C. concrete, most likely 6" thick on natural sub-grade. Although the pavement from First St. to Second St. is generally structurally sound, cracking displacement and spawlling have decreased the level of service to a marginal or poor condition. An asphalt (HMA) overlay could economically bring the pavement surface to a much more acceptable level of service and extend existing pavement service life while avoiding the cost and headaches of a full depth reconstruction.

The remaining pavement is in need of patching and curb repair prior to cracking, seating and HMA overlay.

The proposed scope of the project design is:

New 6" PVC watermain installed longitudinally in the "parking area"

Storm and sanitary structure replacement where necessary

Full depth patching where needed

Cracking and seating the entire area of the P.C.C. pavement except the curb & gutter

2" to 3" Asphalt (HMA) overlay on engineering fabric

THIRD Ave. NW FROM FIRST St. W TO SEVENTH St. NW

The existing pavement is most P.C.C. concrete, most likely 6" thick on natural sub-grade. The pavement is generally structurally sound, cracking, displacement, pop outs and spawlling have decreased the level of service to a marginal condition. An asphalt (HMA) overlay could economically bring the pavement surface to a much more acceptable level of service and extend existing pavement service life while avoiding the cost and headaches of a full depth reconstruction.

Storm structure replacement where necessary

Full depth patching where needed

Cracking and seating the entire area of the P.C.C. pavement except the curb & gutter

2" to 3" Asphalt (HMA) overlay on engineering fabric

TRAFFIC SIGNAL REPLACEMENT

Preliminary discussions have taken place with an electrical contractor and the IDOT District 6 office to determine the procedure for getting the 4 traffic signals replaced at the intersection of Iowa Highway 1 and First Street. The proposed scope of the project is to include:

Removal of the existing signals and electrical wiring
Removal of the sidewalk area concrete
New wiring for the signals
New signal
New sidewalks, possibly including amenities such as P.C.C. pavers.

City crews will soon begin a topographic survey for the purpose of as much in house design as is possible.

NEW WATER WELL

Preliminary discussions were held with a well contractor and the Iowa Geological survey regarding the possibility of a new Silurian well at either Bryant Park or Memorial Park. A request will be made to the Iowa Geological survey to model both proposed locations to offer opinions regarding the feasibility and projected yield at these locations. Once a preferred site has been determined, construction permit forms will be submitted to IDNR Water Supply section.

A request for a site survey has been submitted to both the Department of Natural Resources and the Iowa Geological Survey for the Bryant Park location.

FRINGE AREA/ ANNEXATION AGREEMENT

Chad Sands of the Eastern Iowa Council of Governments (ECICOG) has been approached to aid with the development of a 28-E agreement (Or possibly two separate agreements) between the City of Mount Vernon, City of Lisbon, and Linn County outlining specifics regarding:

Proposed long range annexation boundaries for the two communities
Proposed development review items within the two mile review jurisdiction

Discussions have been started with the City of Lisbon, Linn County, and ECICOG regarding the implementation of this agreement. The plan of action at this time would be to let the Comprehensive Plan update work to progress to a point where the parameters of the agreement are thoughtfully determined, then draft and ratify the agreement.

NEW WORK

"WAGON PASS" REMOVAL FROM UNDERNEATH FIRST STREET WEST

Cast in place concrete box structure constructed in 1936 has deteriorated to the point that it needs to be removed. The plan of action is to saw the pavement on top of the structure, backfill the cavity with sand or similar compactable material, confine the backslopes with a compacted cohesive clay material and place new pavement over the backfill.

Discussions with adjacent property owners have been had to help determine a plan of action regarding the responsibility of replacing the structure, if any responsibility exists.

PIPE BURSTING OR DIRECTIONAL BORING FOR SEWER REPLACEMENT

Approximately 950 lineal feet of sanitary sewer has been designated for need of replacement apart from the 1,400 lineal feet of sanitary sewer designated to be televised as a part of the Seventh Street NW project. It has been determined that the most cost effective way to replace the 950 lineal feet would be by pipe bursting or directional boring. This would also be the least disruptive method in existing residential neighborhood areas.

The most cost effective remediation method for the sewer associated with the Seventh Street project will be determined upon review of the camera videos.