Loucks Avenue and McClure Avenue Intersection Reconstruction and Realignment Project

At the January 22, 2013 City Council meeting, under Item No. 13-022, Councilman Sandberg requested additional information on the design of the newly-constructed, two-way intersection of Loucks and McClure. Staff has reviewed the approved Council Minutes and the video from the August 9, 2011 Council meeting where the project's design contract with the Farnsworth Group was discussed and approved. The majority of that discussion centered on allowing the left turn movement from Loucks Avenue onto McClure Avenue. Council directed Staff to implement the design and construction to convert Loucks Avenue, between Sheridan Road and McClure Avenue, from a one-way street to a two-way street, changing the No Left Turn design from Loucks Avenue to McClure Avenue to allow left turns as well as right turns, and to report back on the success of the configuration after a one-year trial basis. Staff interpreted this as direction to design the right-in/ right-out configuration and then remove the center island (commonly referred to as a "pork chop") to allow for left turns, which would facilitate a trial basis of one-year. If, after the trial period, it was deemed a high accident intersection, it would be easily converted to right-in/ right-out by installing the "pork chop" with very little cost. Attached are the minutes from the August 9, 2011 meeting and an assessment by Farnsworth Group (design engineers on the project). Also attached is a conceptual mock up that was used as an exhibit with the original Council communication. The next two drawings are actual designs that take turning movements into account and allow for either traffic pattern to work.
UNFINISHED BUSINESS

(INCLUDING BUT NOT LIMITED TO MOTIONS TO RECONSIDER ITEMS, IF ANY, FROM THE PREVIOUS REGULAR MEETING)

(11-246) Communications from the City Manager and Mayor Ardis with Recommendations as Follows:

A. Communication from the City Manager with Request to Receive and File a REPORT on ISSUES Involving SPRINGDALE HISTORIC CEMETERY;

B. REAPPOINTMENT and APPOINTMENT by Mayor Jim Ardis to the SPRINGDALE CEMETERY MANAGEMENT AUTHORITY, with Request to Concur:

REAPPOINTMENT:
Kent Rotherham (Voting) - Term Expires 6/30/2015

APPOINTMENT:
Floyd C. Dailey, Jr. (Voting) - Term Expires 6/30/2015

Council Member Riggenbach moved to receive and file the report on issues involving Springdale Historic Cemetery and to concur with the reappointment of Kent Rotherham and the appointment of Floyd C. Dailey, Jr. to the Springdale Cemetery Management Authority; seconded by Council Member Van Auken.

Approved by roll call vote.
Yees: Akeson, Gulley, Irving, Riggenbach, Spain, Spears, Turner, Van Auken, Weaver, Mayor Ardis - 10;
Nays: Sandberg - 1.

(11-255) Communication from the City Manager and Director of Public Works with Request to Direct Staff to IMPLEMENT the DESIGN and CONSTRUCTION to CONVERT LOUCKS AVENUE, Between Sheridan Road and McClure Avenue, from a ONE-WAY STREET to a TWO-WAY STREET, with Supplemental Information.

Council Member Van Auken said the Council had received an e-mail from Kathy Craig, area business owner and President of the Sheridan Triangle Business Association, and she said the businesses in the group gave their full support to the proposal. She said neighborhood association members also agreed with the design.

Council Member Van Auken moved to direct Staff to implement the design and construction to convert Loucks Avenue, between Sheridan Road and McClure Avenue, from a one-way street to a two-way street, and to receive and file the supplemental information; seconded by Council Member Turner.

Council Member Sandberg spoke in support of converting Loucks to a two-way street as outlined, with the exception of the area of Loucks Avenue that meets McClure Avenue. He said he was opposed to the no left turn from Loucks onto McClure Avenue. He suggested changing that portion of the design to allow left turns as well as right turns at that location.

Director of Public Works Dave Barber said there were concerns there would be cut-through traffic from Sheridan to McClure using Loucks Avenue.
Council Member Sandberg displayed a PowerPoint presentation showing alternative designs. He said a change in the plan would solve parking issues for businesses and would solve cut-through traffic.

Council Member Akeson also spoke in support of allowing left turns onto McClure Avenue from Loucks Avenue. In discussion, she stated there should be circulation patterns that provided choices for drivers for this location.

Council Member Weaver questioned if this was the best place to spend the money first, and he questioned how long it would take to finish the project.

Director Barber explained in the five-year CIP plan, there was no funding for further improvements. He said this proposal was brought forward by the businesses and residents who lived in the area and they supported changing Loucks back to two-way traffic. He said this was the project his Department was requested to bring to Council for consideration.

Council Member Van Auken stated there was still facade improvement money that was being used by those businesses. She said the businesses had been patient with the City and Engineers had reviewed the plans several times, and she felt the proposal was the safest plan for the area.

In discussion with Mayor Ardis regarding safety issues of allowing left turns from Loucks Avenue onto McClure Avenue, Director Barber explained there was reduced site distance where Flora Avenue joined with McClure Avenue. He said there would be overlapping turning movements at this location and the proposal would maintain walk ability in that area. He said allowing a left turn from Loucks onto McClure would encourage drivers to cut-through the neighborhood.

Following further discussion, Council Member Van Auken moved to amend her motion to direct Staff to implement the design and construction to convert Loucks Avenue, between Sheridan Road and McClure Avenue, from a one-way street to a two-way street, changing the no left turn design from Loucks Avenue to McClure Avenue to allow left turns as well as right turns, and to request a report back after a trial basis, and to receive and file the supplemental information; seconded by Council Member Turner.

Director Barber suggested a one-year trial basis. No objections were heard.

Amended motion to direct Staff to implement the design and construction to convert Loucks Avenue, between Sheridan Road and McClure Avenue, from a one-way street to a two-way street, changing the No Left Turn design from Loucks Avenue to McClure Avenue to allow left turns as well as right turns, and request a report back after a one-year trial basis, and to receive and file the supplemental information was approved by roll call vote.

Yeas: Akeson, Gulley, Irving, Riggenbach, Sandberg, Spain, Spears, Turner, Van Auken, Weaver, Mayor Ardis - 11;

Nays: None.

Communication from the City Manager and Corporation Counsel Requesting DEFERRAL of the Adoption of an ORDINANCE Amending CHAPTER 20 of the Code of the City of Peoria ADDING SECTION 20-111 Pertaining to POSSESSION of CANNABIS or DRUG PARAPHERNALIA until the SEPTEMBER 13, 2011, REGULAR CITY COUNCIL MEETING.

Council Member Spain moved to defer this item until the September 13, 2011, Regular City Council Meeting; seconded by Council Member Van Auken.
Summary of Loucks and McClure Intersection Geometric Basis

Introduction and Project Background

The City of Peoria hired Farnsworth Group in December, 2007 to build upon the Charrette vision and to create a Master Plan for the Peoria Sheridan Triangle Business District. The study limits were along Sheridan Road from the north edge of McClure Avenue to the south edge of Hanssler Place. The development of the Master Plan proceeded with extensive input from the Project Study Group (PSG) consisting of a multi-disciplinary team with members from the City of Peoria staff, neighborhood association members, business owners, and the design team. The study area was later revised to include a traffic analysis of the Loucks and McClure intersection. The complete Master Plan documents, associated exhibits, data, and colored renderings were submitted to the City November, 2008. The PSG believed the realignment of Loucks at both Gift and McClure offered a very good opportunity for traffic calming in the neighborhood and District.

Existing Conditions

Sheridan Road is functionally classified as a Minor Arterial, currently 50’ wide (face to face of curb), with two 12’ through lanes, 8’ parking lanes on both sides, and a 10’ center turn lane.

Loucks Avenue, east of Sheridan is functionally classified as a Local Street, but operates currently more as a “Collector Street”. It is currently 40’ wide, with two 11’ through lanes and 9’ parking lanes along both sides.

McClure Avenue is functionally classified as a Minor Arterial, currently approximately 38’ wide (face to face of curb), with a through lane in each direction.

The intersection configuration (prior to the recent realignment project) of McClure and Loucks and Bootz was a four-leg intersection consisting of east and west legs (McClure), a north leg (Bootz) and a northwest leg (Loucks). Traffic could not enter the intersection from Loucks under the previous configuration because it was a one-way street leading traffic away from the intersection. The northwest bound movement from McClure to Loucks was made with a very large, sweeping curve allowing for higher vehicle speeds in this area. This intersection was under stop control on Bootz with free flow movements on McClure and northwest bound Loucks.

Master Plan and Intersection Realignment Scoping History

Prior to the August 9, 2011 Council Meeting, at the request of city staff, Farnsworth Group prepared a memorandum (attached and dated July 28, 2011) summarizing Master Plan criteria related to the Loucks and McClure intersection as well as conversion of Loucks from a one-way to a two-way configuration. The benefits associated with conversion to a two-way alignment included increased vehicular and pedestrian safety and improved connectivity, access, and mobility within the district and neighborhood.

As part of the overall Master Plan for the Sheridan Triangle, the memorandum recommended conversion of Loucks to two-way with a southbound right in - right out alignment of Loucks Avenue at McClure for several reasons summarized below:

- Reduced intersection site distance available at the intersection
• Geometry of existing street intersection spacing and overlapping turning movements
• Provide traffic calming by keeping Loucks a "Local Street" and prevent cut through traffic to improve walkability, increase safety due to the high number of existing driveways and on street parking, and improve pedestrian safety (additional traffic calming will be seen by reducing the speed of the entering traffic from westbound McClure)
• Desire to keep "through traffic" on Sheridan and McClure to help maintain and improve upon a vibrant business district with high visibility from traveling motorists and potential customers

After Council discussion on August 9, 2011- city staff was asked to change the "no left turn" Master Plan concept from Loucks Avenue to McClure Avenue to allow left turns as well as right turns, and requested to provide a report back after a one-year trial basis.

A Professional Services Agreement for Design Services for this intersection reconstruction was approved on November 22, 2011. Included in this agreement was a scope of services stating part of the design to be providing a traditional intersection with south bound, left turn lane on newly realigned Loucks Avenue. The design team was directed verbally to proceed with a design that allowed for the outside intersection curb radii to remain in place and accommodate installation/flexibility for a future inside curb radii of a right in – right out island if problems or accidents happened during the one year trial period or as part of the overall Sheridan Triangle implementation. This would allow for potential right in - right out island installation/modification in an easy, cost effective manner should the need ever arise in the future or if the overall Sheridan Triangle Master Plan was ever implemented.

**Final Geometric Design**

On January 26, 2012 a design review coordination meeting was held between Farnsworth Group and City staff to present plan design geometrics for the intersection. During this meeting, the design vehicle used for turning movements to establish curb radii geometrics was discussed (meeting minutes are attached). IDOT Bureau of Local Roads design policy standards for this intersection (McClure Arterial Route and Loucks Local Street) specifies a WB-50 truck to be used as the design vehicle and was presented with associated geometrics. The City asked that the movements for an AASHTO City- Bus be analyzed to determine if utilizing a bus decreased the size of the intersection by a significant amount. Follow-up analysis illustrated that using a City-Bus as a design vehicle did not significantly reduce the intersection footprint. See attached Turning Movement Exhibits referenced above. The flexibility of outside curb geometrics as proposed to allow for a traditional intersection of right and left turns, while allowing them to also stay in place should a right in - right out island be required was illustrated and also allowed the WB-50 turning movements in the current configuration of Loucks.

As shown on the attached turning movement exhibits, a proposed truck making a southbound right turn is required to track through the current left turn lane in order to complete the turn and keep the trailer back wheels from running over the outside curb radius.

Accommodating the southbound truck right turning movement while also providing the outside curbs to remain in place should a right in – right out island ever be installed in the future results in a wider southbound approach width at the intersection. Intersection design practice indicates an unstriped/unmarked approach wider than approximately 16’ can create ambiguity and confusion for both left and right turning vehicles approaching from the north. Striping a separate auxiliary right turn lane and left turn lane eliminates this issue.