



CITY OF MADISON
INTER-DEPARTMENTAL
CORRESPONDENCE

DATE: April 13, 2017
TO: Alder Verveer
FROM: David C. Dryer, P.E., City Traffic Engineer and Parking Utility Manager
SUBJECT: Judge Doyle Square Government East Replacement Ramp

Alder Verveer, you asked about the width of the entrance/exit openings of the new Government East ramp to Wilson Street. I understand that some neighborhood residents raised a concern that the proposed openings are too wide, auto-centric and not pedestrian friendly. It is helpful, in this discussion, to consider access to the existing Government East ramp, those dimensions, and what is proposed with the new Government East ramp.

The existing Government East ramp is a 516-vehicle facility, operated today with six lanes: three entrance and three exit lanes. There are two lanes on Pinckney, with one entrance and one exit, and four lanes just behind the entrance/exit opening at Wilson Street, with one standard entrance and exit, one permit-only entrance and one permit/credit card exit.

The new Government East ramp is proposed to accommodate approximately 560-vehicles, and operate with four lanes. This includes one reversible public access lane to/from Doty St., and three public exit/entrance lanes on Wilson Street. The Wilson Street configuration would allow the center lane to be reversible, to be able to maintain two entrance lanes and two exit lanes, depending on the direction of the reversible single lane from Doty Street, which would be an entry in the AM and an exit in the PM. The City in the Request For Proposal process did not dictate the number of lanes that were to be provided by the development team, rather it noted that the City required access be provided from two points and via Doty and Wilson Streets. The width of the openings and number of lanes is not a requirement of Traffic Engineering, rather a need for redundancy, which is an operational requirement of the Parking Utility.

We have heard some comments that the Utility does not need two entrance lanes and two exit lanes--that three total lanes to the ramp will suffice. The Parking Utility's need for two lanes of ingress and egress is not a matter of traffic engineering capacity, or peak traffic volumes; rather, it is an operational requirement, due to the nature of public parking, and unfamiliar users. The Government East Garage has a small number of permit parkers – about 60, with the vast majority of use generated from transient hourly parkers. These users are often unfamiliar with the parking garage, and our system revenue and parking control equipment. Parking is often the first and last impression of the City that visitors have. It is important that visitors have a positive experience. The Wilson lanes are necessary to maintain a satisfactory level of service for visitors, and prevent users from experiencing significant delays caused by other users, equipment malfunction, and scheduled equipment maintenance. Unlike parking facilities occupied primarily by repeat customers and permit parkers, public parking garages must be designed to accommodate high turnover (shorter-term parkers), and unfamiliar users. This is particularly important with the nearby location of Monona Terrace.

Equipment in public parking facilities require frequent maintenance due to the volume of transactions requiring the printing and reading of spitter tickets, credit cards and cash transactions, as opposed to a facility with primarily permit parkers who pay monthly and use Radio-Frequency Identification or License Plate Recognition systems. Additionally, issues arise on a daily basis where staff assistance is required to assist a visitor at an entrance or exit station in our public parking garages, such as a user losing a ticket, not having money to pay at the exit, or entering an exit lane and only having cash, inserting proximity cards (permit parkers) into the credit card reader, and jamming equipment, unreadable ticket due to folding or equipment error. Without a second entrance/exit, other users would be unable to enter or exit the facility until staff has assisted the user blocking the lane or repaired the malfunction. Operationally, it would be unrealistic to assume that a single reversible lane could address such issues, as the lane must first be cleared of traffic before it can be changed to the opposite direction. It is imperative for daily operations, and ensuring a positive user experience that there are two exits, and two entrances available.

The private development required that the private parking garage be separate from the public parking garage, with separate access control. The design team, and Walker Parking Consultants, studied alternative configurations to the Wilson Street entrance. They did so to see whether the driveway could be narrowed, with the public and private sharing the entrance drives, and then separating the lanes within the entry of the garage. Other configurations to accomplish a narrower driveway width, would result in ramp slopes from Doty Street to the public underground garage in excess of 16%, and would not be recommended. The current proposed configuration of the Doty Street lane provides a maximum slope of 12%. A radiant heating system is proposed to address concerns that snow and water might cause freezing conditions on the ramp. Even with this equipment, Parking Utility staff expects that conditions of extreme cold may require the closure of the Doty Street entrance/exit ramp.

The Walker/Beitler team currently has proposed the Wilson Street entrance width to be approximately 45 feet. This includes width for supplemental motorcycle access lanes, which allow motorcycles to bypass gates and pay-stations. Motorcyclists will pay via parking meters near their parking area.

We recognize the neighborhood's concerns, and have reviewed the design, to determine if the opening width can be narrowed. We have determined that we can narrow the Wilson Street

opening by 9-10 feet, by eliminating the motorcycle lanes extended to the sidewalk. We can reconfigure motorcycles to share the general traffic lanes, until they reach the control gate area, where the motorcycle lane will shift to go around the entrance/exit gates and pay-stations. Additionally, we are reviewing the design, to determine whether the three lanes on Wilson Street can be reduced to a 10' width, which would reduce the driveway width by an additional 6', for a total width of approximately 30'.

Parking Staff does not recommend eliminating the reversible lane, and thereby reducing the building opening. The current design is not an atypical parking ramp feature or design. In fact, the Wilson Street entrance will be similar to the Overture Center, which has three lane driveways on both Dayton and Mifflin Street, with widths of approximately 30'. The new Judge Doyle Garage, with four lanes, will have fewer lanes than all other Parking Utility Garages, with the exception of the State Street Campus Lake and Frances Garages, which each have four lanes, essentially providing eight lanes for the garages. Driveway widths at other Parking Utility facilities range from 24' to 40'.

The configuration as proposed also provides for:

- Machines failure: The redundancy of the existing or proposed configuration allows ramp operations staff to maintain ramp use when a lane is taken out of operation due to equipment failure. This also includes lane closure for preventative maintenance.
- Public parking ramps serve different customers than private parking ramp developments. Private ramps predominantly serve repeat customers and employees. While the Parking Utility serves downtown employees. In many instances, we also serve a great number of transient customers. Many of whom are first time customers. For example, many Government East customers are visitors to Monona Terrace. It is important that we can park and exit visitors promptly, efficiently, and without confusion. We believe the system, as configured by the Beitler team, provides a configuration necessary for this level of customer service.
- The wider opening in the building envelope provides superior sight distance to pedestrians on the sidewalk

In conclusion, we believe the existing configuration, as proposed by Beitler, is the preferred design necessary for the successful operation of the new Government East Ramp.

Let Sabrina, or I, know if you have any questions.

cc: Sabrina Tolley, Assistant Parking Utility Manager