TPC 02.12.14
ITEM F.1.
HAND-OUT (2)

Benishek-Clark, Anne

From: Woznick, Thomas
Sent: Wednesday, February 12, 2014 11:56 AM
To: Amanda White; Ann Kovich; David Tolmie; Ellingson, Susan; Gary Poulson; Kamp, Charles; Kate Lloyd; Ken Golden; Margaret Bergamini; Schmidt, Chris; Schroeder, Ann; Wayne Bigelow
Cc: Weier, Anita; Benishek-Clark, Anne; Dryer, David; Koloen, James; Monks, Anne; Schmiedicke, David; 'George Austin'
Subject: FW: Effect of Judge Doyle Square plan on parking facilities?
Attachments: GE Summary - 2013.pdf; GE Opinon of Probable Costs - 2013.pdf; GEOccupancy2007-13.pdf; JDS_PreliminarySharedParkingDemands.pdf

Importance: High

Good afternoon,

Alder Weier posed some good questions, and I thought you might like to see my response.

Best,

Tom Woznick
Parking Operations Manager
City of Madison Parking Utility

From: Woznick, Thomas
Sent: Wednesday, February 12, 2014 11:39 AM
To: Weier, Anita
Cc: Dryer, David
Subject: RE: Effect of Judge Doyle Square plan on parking facilities?
Importance: High

Hi Alder Weier,

If the plan fails passage then we will need to decide how we want to proceed. If the entire Judge Doyle Square project were rejected, we could completely replace Government East (GE). If the current proposal(s) were rejected but efforts were to continue to pursue the Judge Doyle Square development, we could continue a phased restoration (remediation) of Government East (GE) which began in 2012. The first two PDF's attached provide a restoration summary and opinion of probable costs (OPC) to continue to restore GE in order to make it last an additional ten years. As referenced in the GE Summary attachment the approximate costs for the 1st two phases in 2012 and 2013 were estimated at $250K for each year. Total capital costs billed to GE in 2012 were $255K and in 2013 were $305K. The GE OPC attachment provides estimated costs for continuation of the phased restoration for an additional ten years, which includes total costs of $2.7M (or $270K/year).

We would fund the restoration (remediation) and/or replacement of GE with Parking Utility reserves, which has a current balance of $24M.

If the plan passes at Council we will proceed with negotiations for a final development agreement to undertake the Judge Doyle Square development. As is referenced in the project requirements within the request for qualifications the design of parking should include approximately 520-600 public parking spaces to replace the Parking Utility's 520 space Government East parking garage. The Government East garage has the highest peak average occupancy of our garages over the past 7 years (3rd PDF attached), as well as historically, thus we desire to replace at least the current number of

parking spaces. The rationale for constructing up to 600 spaces is that it would allow for an increase up to 15% of public parking spaces to meet additional demand as a result of the development, including new retail uses.

Land use details will need to be negotiated thus it is unclear how many spaces will be needed to serve the hotel and/or other land uses. The JDS Development team's response (final PDF attachment) provided preliminary shared parking demand estimates for new development (where certain spaces are shared to serve different uses). Whether or not the parking uses will be separated and/or shared will also have to be negotiated. Ultimately it is our goal to have enough public parking to meet the demands for public parking to serve the variety of uses in this area.

Please let me if you have any questions. Thanks!

Best,

Tom Woznick
Parking Operations Manager
City of Madison Parking Utility

From: Weier, Anita
Sent: Tuesday, February 11, 2014 5:09 PM
To: Woznick, Thomas
Subject: RE: Effect of Judge Doyle Square plan on parking facilities?

Hi: Thanks for the information.
If the Judge Doyle JDS plan fails passage at the Council, how and when would we fund the Government East ramp replacement??
Also, if it goes through, how many spaces would public have and how many for the hotel?
Would they be separate?
Thanks, Alder Weier
320-5820

GOVERNMENT EAST PARKING GARAGE – RESTORATION SUMMARY

The Government East Parking Garage is 3 bays wide, consisting of 3 full structural levels and a partial 4th level at the top, center bay. There is a lower level which consists of a concrete slab-on-grade (SOG). The ramp is accessed on the south, Wilson Street end of the ramp, at the SOG lower level, and on the west, Pinckney Street side at the first structural level. A "speed ramp" located in the western parking bay carves out an area of the parking structure as it slopes from the north end of the 3rd level to the south end of the lower level.

In the summer of 2011 a condition evaluation and associated Opinion of Probable costs was completed to assess the current condition of the parking garage and projected cost to restore the structure. The evaluation primarily consisted of a chain drag survey and visual evaluation. The chain drag survey was done to detect unsound areas of the structural parking slabs. The detectable unsound areas are primarily the result of corrosion induced delaminations. They may also be areas where the previously placed concrete overlay or concrete patch has unbounded from the structural concrete slab onto which it was cast. The corrosion induced delaminations occur when the internal forces of the expanding rusting reinforcing steel exceed the bond strength of the concrete to reinforcing steel. A horizontal "planar" crack develops within the concrete slab at the level of the reinforcing steel. The unbounded or delaminated areas of concrete can be detected by dragging a chain over the surface of the concrete slabs. The unsound area can be further defined be hammer tapping the surface.

The chain drag survey completed in 2011 estimated a total of 33,670 square feet of unsound area; delaminations, unbounded overlay/patches. Based on our past knowledge of the structure, reinforcement layout within the slab and areas of the slab determined to be unsound we broke the area of unsound concrete into the following categories; unbounded overlay/patches 6,730 sf, repair below 1-layer of reinforcing steel 8,420 sf, repair below 2-layers of reinforcing steel 18,520 sf, full depth slap replacement 200 sf. The visual evaluation looked at other needed repairs to the top and underside of the structure.

A phased restoration of the Government East Parking Garage began in 2012. This first phase consisted of concrete repairs at the west side of the first level which runs parallel to Pinckney Street. The repairs consisted of jack hammering out areas of unsound concrete, sand blasting clean the exposed reinforcing steel and exposed concrete surfaces and casting back new concrete to match the elevations and profile of the surrounding concrete surfaces. The final removal area for the four removal categories/depths was 5770 square feet, which matched up closely to the estimated area established in the 2011 study.

The second phase of restoration is being completed on the East bay of the first level for the 2013 repair phase. The estimated final removal quantity for this area is 5870 square feet for the four concrete top of slab removal categories. This represents an approximately 20% increase in removal area from the 2011 condition evaluation estimate. The increase in concrete deterioration over time is expected as the corrosion process continues in the reinforced concrete slabs.

The repair cost for each of the first two phases, 2012 and 2013, was approximately $250,000. The restoration of the center bay of the first level is envisioned for 2014. The cost for this

restoration phase is again estimated to be approximately $250,000. Repairs have focused on the concrete slabs and support structure of beams and columns. Repairs/ replacement of the expansion joints and trench drains have been deferred. The replacement concrete has contained a corrosion inhibitor which is intended to neutralize the impact of salt on the reinforcing encased in the new concrete. There has been no attempt to extend the life for the long term with a surface applied waterproofing; such as a silane sealer or elastromeric membrane.

The 2011 condition evaluation did not consider the cost to extend or upgrade the existing electrical system and lighting, or the internal storm sewer system. The attached up-dated Opinion of Probable Cost (OPC) reflects the restoration outlined in the 2011 condition evaluation and the work that was completed in 2012 and 2013. The quantities for repair have been revised to reflect the fact that the ongoing corrosion process will increase the restoration effort required over time.

The attached OPC shows a total cost for repairs, including expansion joint and trench drain replacement, and separate costs for the application of a membrane to the restored surfaces. Separate costs are also shown for the replacement of existing electrical controls and updated lighting.

Quantities and costs shown in this current report reflect values for the time of this report. Some growth in repair areas has been assumed. It should be noted however that the deterioration will increase at an increasing rate over time and the costs used will also increase with time.

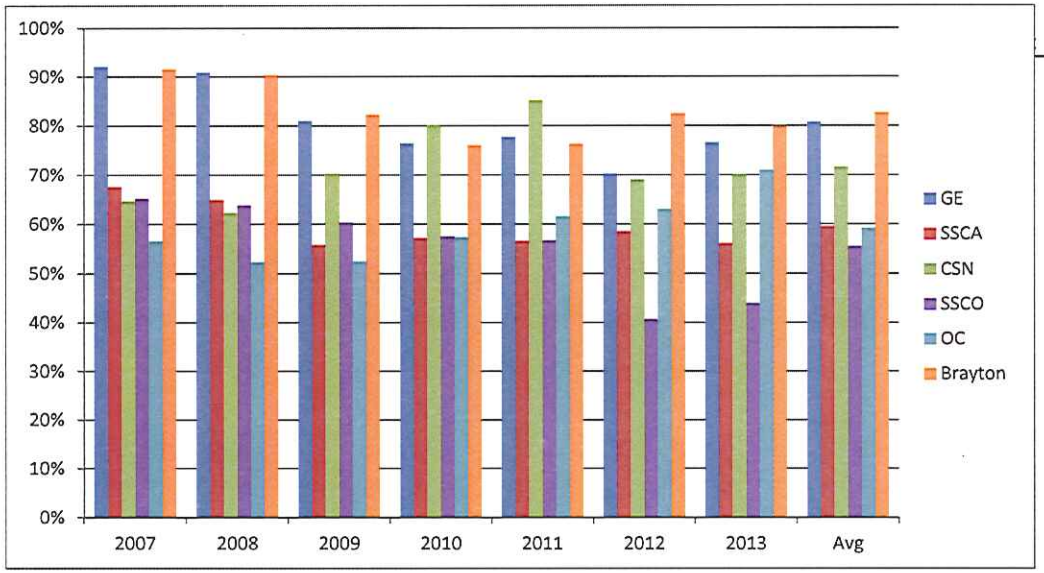
JSD PROFESSIONAL SERVICES, INC
GOVERNMENT EAST PARKING GARAGE
OPINION OF PROBABLE COSTS

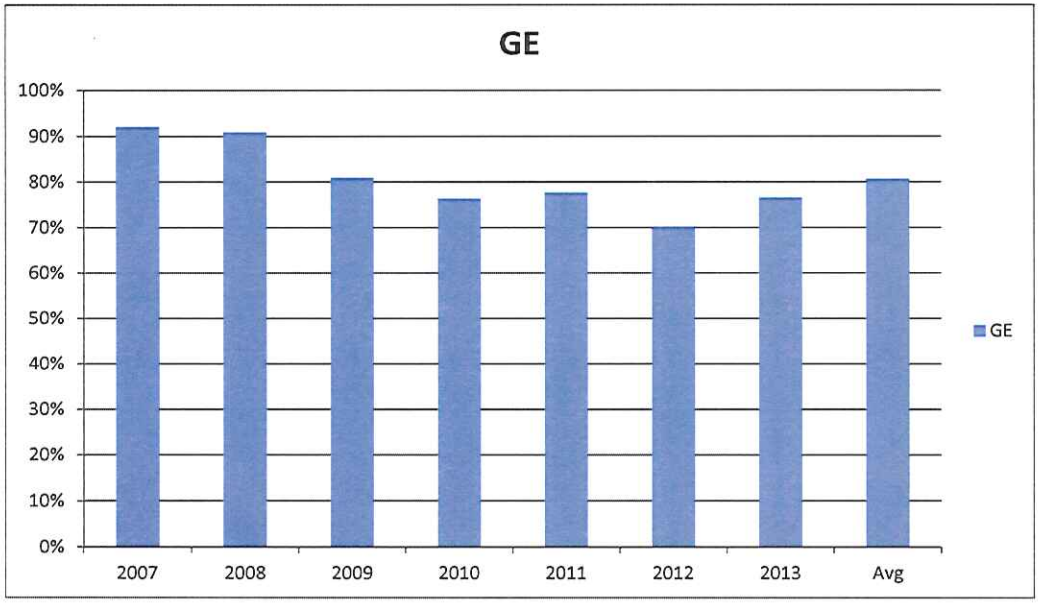
Item No.	Description	Est. Quantity	Unit	Unit Cost	AMOUNT
	CONCRETE RESTORATION				
1 .	Concrete Repair at Slab-on-Grade	600	SF	$28.00	$16,800
2 .	Topside Slab Repair at Unbonded Overlay	5,650	SF	$30.00	$169,500
3 .	Topside Slab Repair Below 1-Layer of Reinforcing	7,060	SF	$34.00	$240,040
4 .	Topside Slab Repair Below 2-Layers of Reinforcing	14,120	SF	$38.00	$536,560
5 .	Full Depth Slab Replacement	1,410	SF	$70.00	$98,700
6 .	Concrete Repair at Bottom of Slabs and Beams	1,000	SF	$65.00	$65,000
7 .	Concrete Repairs to Tops of Parapets and Walls	500	LF	$50.00	$25,000
8 .	Concrete Repairs to Vertical Surfaces	1,500	SF	$65.00	$97,500
9 .	Column Base Repairs	100	SF	$60.00	$6,000
10 .	Install Supplemental Reinforcing Steel	500	LBS	$5.00	$2,500
11 .	Replace Sealant at Cracks & Joints	3,000	LF	$5.00	$15,000
12 .	Replace Expansion Joint Seal System	264	LF	$100.00	$26,400
13 .	Replace Trench Drain	36	LF	$180.00	$6,480
14 .	Sub-Total				**$1,305,480**
15 .	General Conditions/Mobilization (5%)				**$65,274**
16 .	Total				**$1,370,750**
	CONCRETE MEMBRANE PROTECTION				
1 .	Membrane Wear Coat and Top Coat Replacement	30,000	SF	$3.00	$90,000
2 .	Full System Membrane Placement	129,000	SF	$5.50	$709,500
3 .	Sub-Total				**$799,500**
4 .	General Conditions/Mobilization (5%)				**$39,975**
5 .	Total				**$839,500**
	ELECTRICAL/ STORMSEWER UPGRADES				
1 .	Upgrade Electrical Systems and Controls				$80,000
2 .	Rewire and Relight Structure				$270,000
3 .	Stormwater System Modifications				$90,000
4 .	Sub-Total				**$440,000**
5 .	General Conditions/Mobilization (5%)				**$22,000**
6 .	Total				**$462,000**
	Grand Total				**$2,672,250**

NOTE:
Costs do not include any stair tower modifications or updates including window and/or door replacement. Modifications and updates also do not include change to the ramp attendants office, toilet room or cashiers booths or mechanical systems associated with these spaces. Replacement of traffic loops and restriping costs are not included.

MEMBRANE NOTE:
Place Full System membrane on severely worn areas, new concrete at restored areas previously covered with membrane, and all concrete surfaces not previously covered. Place membrane wear coat and top coat onto existing membrane on all other areas of slab areas.

GOVT EAST GARAGE OCCUPANCIES 2007-2013





Annual Average Peak Occupancies Mon-Fri 10AM-2PM (cashiered and monthly)

Facility	2007	2008	2009	2010	2011	2012	2013	Avg
GE	92%	91%	81%	76%	78%	70%	77%	81%
SSCA	68%	65%	56%	57%	57%	59%	56%	60%
CSN	65%	62%	70%	80%	85%	69%	70%	72%
SSCO	65%	64%	60%	58%	57%	41%	44%	55%
OC	57%	52%	53%	57%	62%	63%	71%	59%
Brayton	92%	90%	82%	76%	76%	82%	80%	83%

GE Monthly Average Peak Occupancies Mon-Fri 10AM-2PM (cashiered and monthly)

GE								
Month	2007	2008	2009	2010	2011	2012	2013	Avg
Jan	91%	94%	78%	79%	82%	68%	68%	80%
Feb	94%	93%	95%	77%	88%	75%	79%	86%
Mar	91%	92%	95%	75%	83%	73%	76%	84%
Apr	89%	93%	92%	79%	83%	69%	82%	84%
May	93%	92%	93%	80%	80%	73%	78%	84%
Jun	87%	89%	77%	81%	80%	66%	86%	81%
Jul	87%	91%	71%	76%	71%	64%	80%	77%
Aug	92%	88%	72%	77%	68%	73%	81%	79%
Sep	93%	93%	78%	73%	73%	76%	78%	81%
Oct	94%	96%	79%	78%	82%	80%	81%	84%
Nov	90%	95%	73%	70%	73%	60%	68%	76%
Dec	90%	90%	69%	72%	70%	66%	63%	74%
Annual Avg	91%	92%	81%	76%	78%	70%	77%	81%

GE Year	Cashiered	Monthly	Total
2013	$1,648,014	$201,260	$1,849,274
2012	$1,538,359	$177,193	$1,715,552
2011	$1,564,410	$199,714	$1,764,124
2010	$1,506,748	$202,586	$1,709,334
2009	$1,377,638	$178,101	$1,555,739
2008	$1,322,214	$166,546	$1,488,760
2007	$1,319,574	$166,461	$1,486,035