



CITY OF KIRKLAND

Department of Public Works

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MEMORANDUM

To: Kurt Triplett, City Manager

From: Public Safety Building Executive Steering Committee
Marilynne Beard, Assistant City Manager
Tracey Dunlap, P.E., Director of Finance and Administration
Eric Olsen, Chief of Police
Ray Steiger, P.E., Director of Public Works
Donna Burris, Internal Services Manager
Noel Hupprich, Project Manager

Date: February 28, 2012

Subject: PUBLIC SAFETY BUILDING - PROJECT UPDATE

RECOMMENDATION:

City Council receives an update on outstanding questions related to the the Public Safety Building (PSB) project, and provides direction on selected Project scope elements.

BACKGROUND DISCUSSION:

At their February 21, 2012 study session, City Council received an update on the PSB. After the presentation, City Council expressed their interest in hearing more detail on the following elements:

1. Implications of adding a second floor for future growth;
2. Evaluation of concrete slab removal versus installation of a false floor for utilities;
3. Advantages of locating vehicle maintenance bay at the PSB;
4. Cost/benefit of increasing the size of the jail by 30 beds and contracting them out.

Second Floor

The City Council asked for more information regarding the feasibility and cost of adding structural improvements with the current PSB project to allow for a future second floor. Following the study session, staff and the consultant team met with Councilmember Sternoff regarding supplemental questions about the structure and possible uses. Based on the meeting and questions raised in the study session, staff is working with the design team to determine a list and likely costs and schedule impacts to the PSB. However due to the complexity of the options, details were not available for this memo and will be presented at the March 6, 2012 City Council meeting.

Slab removal

At the study session, the question was raised whether other alternatives were considered to avoid demolition of the existing slab where new underground utilities are required. The design team considered other options within the jail area and Police and Court separately.

Jail area

Consideration was made as to whether or not there is a way to avoid demolition of the slab for underground utilities by locating the plumbing systems above the existing concrete slab but below a raised floor system.

For the jail facility, a secure, durable, tamper-proof floor must be provided (concrete is being assumed). Plumbing lines within the jail area are approximately 100 feet in length and would require approximately two feet of depth to accommodate the systems so they could slope to drain. There are a couple ways to do this:

- Provide two feet of fill on top of the existing slab at the jail and provide concrete curbs at the perimeter with new slab on top. The fill would add about 250 pounds per square foot on top of the existing slab which may cause settlement. Rough order of magnitude for this would be on the order of \$10-\$12/sf.
- Build a false floor structure with a slab on top. This is the most costly option as it would require hanging the pipes rather than direct bury. Also, the floor system would need to be seismically braced. Rough order of magnitude for this would be on the order of \$15-\$20/sf.

A rough order of magnitude cost for the proposed removal of slab and replacement with new slab is on the order of \$7-\$8/sf. This cost comparison of the alternative indicates that demolition of the existing concrete slab and replacement with new slab in order to complete the plumbing is the least costly option.

In addition to being less costly for installation of plumbing systems required in the jail area, the design team re-examined rationale for their recommendation to remove the entire slab in the jail area. They concluded that it is also required in order to install new footings to support the new concrete block (CMU) walls that are being designed and constructed within the jail area. Since these new footings cannot be installed on top of the existing slab, the amount of new footings needed to support the CMU walls is such that removal of the entire slab is the most cost effective approach in this area.

Police and Court area

Raised access floor systems are economical in many office buildings because they allow for more efficient delivery of HVAC in that heat rises and can be recirculated easier. Raised access floors also allow future flexibility for electrical/data systems. During discussions at the study session, the Architect indicated that a raised floor could provide some savings. However, as a raised floor option was subsequently considered throughout the Police and Court layout, it became clear that a raised floor system would add little value for the cost. The system would

not be effective at the gun range, evidence and vehicle storage areas, SWAT, locker rooms, fitness, lobbies or courtrooms. This leaves the only the office space. In addition to the additional cost for the access flooring system, on the order of \$15/sf., ADA codes require fully accessible spaces throughout the facility. Ramps and handrails will be required at all floor level transitions and would necessarily require increased floor space to be located in and require more expensive construction methods to install them to align with other portions of the building.

Based on this analysis, staff is not recommending changes to the planned removal of the concrete slab based.

Vehicle maintenance

City Council raised concerns at the study session regarding the addition of vehicle maintenance capabilities at the PSB. In an attempt to address the Council's concerns and questions, a brief background into fleet operations is provide in the following portion of the memo. Depending on the City department involved, there are a variety of operational approaches required by the fleet staff in order to most efficiently address maintenance needs.

The current fleet shop is located at the Maintenance Center adjacent to all 93 Public Works and 58 Parks vehicles and major equipment. The fleet shop has benefited from this joint location with these departments as there is essentially no time or labor expense required for the "shuttling" of vehicles to or from remote locations by the fleet staff or field crews. Field breakdowns are rare, and so most repair and maintenance activities can be scheduled or performed with crews merely delivering the vehicle to the shop at the end of their shift or during the day, identifying the specifics of the issue, and then shifting to another vehicle.

The Fire Department on the other hand currently maintains six Fire Stations throughout the City. For minor repairs and maintenance, it is fleet's practice to have an Emergency Vehicle Technician (mechanic) perform these repairs at the Fire Station location. In these cases, tools, parts, and diagnostic equipment must be fully anticipated in order to avoid extra trips. This practice avoids having the Fire engine company "swap gear" to a reserve apparatus, shuttle the apparatus to and from the shop, and then "re-swap" gear. While beneficial for Fire staff, this remote operation is not the most efficient use of fleet or staff time, but it is required due to the operations and locations involved. More extensive preventative maintenance or scheduled repairs are conducted at the fleet shop where more tools and large lifts are available. Fire staff delivers the vehicles and are then shuttled back to their station.

Of the four major departmental fleet users, only Police vehicles are completely shuttled by fleet staff or police officers between their remote location (City Hall) and the fleet shop. The two sites are one mile apart, and the shuttling of police vehicles averaged six round trips per day during 2011. These trips were required to support a number of maintenance and repair activities for the police fleet as shown in Table 1.

The 66 vehicle police fleet (after annexation) represents approximately 25% of the entire City fleet, and all 66 police vehicles are scheduled to move from their current City Hall location to the new Public Safety Building (PSB) in Totem Lake in 2014. This move will add another two

miles to the distance between the vehicles and the fleet shop and will thereby triple the time and distance required to shuttle the vehicles. This will cumulatively require significant lost production.

Classification of Repair/Maintenance	2010	2011	Proposed PSB Activity
Check Charging and/or Replace batteries	32	32	√
Tire Repairs and/or Replace Tires	66	100	√
Headlamps and Misc lighting	30	43	√
Preventive Maintenance	180	213	√
Brake repairs	23	38	√
Electrical Police Equipment Repairs	140	108	√
Prepare for Service	17	35	√
Heater; A/C repairs	4	9	
Glass, Seat, mirror, interior repairs	19	36	√
Steering	1	1	
Instrumentation	1	3	√
Suspension	7	1	
Rear axle repairs	2	3	
Power train repair	1	1	
Transmission repairs	2	4	
Starter repair	0	2	√
Ignition repair	2	1	√
Engine repair	4	2	
Exhaust system repair	6	3	
Cooling System repairs	14	9	
Fuel System repairs	19	30	
Total Annual Police Repair Orders	<u>570</u>	<u>674</u>	

Table 1. 2010-2011 Police Vehicle Repair and Maintenance Activities

The current fleet shop has six vehicle bays and is at its maximum capacity. The addition of the scheduled annexation vehicles and fleet staff constitutes the need for two additional vehicle bays, and would bring the total number of bays to eight. By including a vehicle service bay in the PSB, there is both the opportunity to reduce the required expansion of the maintenance center fleet shop, and at the same time, greatly reduce the loss of productive time by both fleet staff and police officers by eliminating the need to shuttle vehicles between the two facilities.

It is proposed that the PSB service bay be staffed by one Emergency Vehicle Technician (EVT) who has been primarily assigned to police vehicles. This EVT would split time between the PSB and the Maintenance Center fleet shop as the workload dictates. Their schedule would be aligned with the police shift changes such that officers could detail the needed repairs or convey specific issues with the vehicle; these details are imperative to correct and timely

maintenance. During anticipated inclement weather, fleet staff would also be available to install chains.

In order to minimize duplicity of expensive equipment, limited repairs and preventative maintenance will be performed at the PSB service bay. It is anticipated that the bay would be equipped with one above-ground lift (estimated cost of \$5,000), a tire changer/wheel balancer (\$4,500), and a storage area for police specific tires, parts, and lubricants. A minimal parts inventory would be needed due to the availability same day delivery by local dealers and suppliers. It is estimated that 60 - 80% of the historical police vehicle repairs and maintenance can be performed at the PSB bay (see Table 1). The remaining 20 – 40% will continue to be outsourced or performed at the Maintenance Center where larger capacity equipment will remain.

Jail staffing and 30 additional beds

At the study session, staff provided the possible option of completing an additional 30 jail beds as part of the current project. If the City were to contract out jail beds to neighboring jurisdictions, the capital cost could be recovered within one year. The City Council asked for more information about the level of interest of other jurisdictions to purchase jail beds from Kirkland, the marginal cost and benefit of constructing an 85 bed jail instead of a 55 bed jail and further discussion about the business model that would be used. Police staff will prepare a more detailed cost/benefit and staffing analysis which will be presented to the City Council prior to advertising for bids. In the meantime, bid documents can be prepared assuming the 30 additional beds as a bid alternate. The City Council will not need to make a decision about whether or not to construct and/or contract out beds until later and design work can go forward.

Conclusions

Staff is requesting direction from City Council for the following:

- Whether or not to adjust the scope of work, cost, and schedule to pursue design modifications that allow the ability to construct a second floor within the existing building for future expansion without significant disruption.
- Whether Council accepts the staff recommendation regarding removal of the concrete slab or needs more information.
- Whether Council accepts the staff recommendation to include a vehicle maintenance bay at the Public Safety Building site in the building plans.
- Whether staff can give notice to the design team to proceed to final design, including the firing range and 30 additional jail beds as bid alternates.