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MEMORANDUM

DATE: January 4, 2010

TO: Mayor and City Council

FROM: Thomas H. Muehlenbeck
City Manager

SUBJECT: 2010 Debt

On January 25, 2010, Council will be asked to sell and refinance the following debt.

	General Obligation Bonds	
Exhibit #1	Carpenter Park Recreation Center 2005 Remaining Authority	$ 5,015,000
Exhibit #2	Aquatic Center Design 2009 Authority	490,000
Exhibit #3	Technology Services Facility Design 2009 Authority	1,000,000
Exhibit #4	Street Improvements 2005 Authority	6,110,000
	Public Safety Improvements 2009 Authority – Station No. 13	1,000,000* $13,615,000
	Tax Notes Public Safety Radio Improvements	$10,035,000
	Refinance General Obligation Bonds	$16,045,000 $39,695,000
	Drainage Improvement Bonds	$ 3,365,000

*For further discussion.

Tom Muehlenbeck

From: Amy Fortenberry
Sent: Monday, January 04, 2010 11:27 AM
To: Tom Muehlenbeck
Cc: Rod Hogan
Subject: Bond Sale Info - Recreation Projects
Attachments: Plano Aquatic Center bond sale.docx

Tom-

Attached is the requested information regarding the Plano Aquatic Center renovation.

Also, you requested information about the Carpenter Park Recreation Center Renovation/Expansion. The O&M related to that project is:

$ 74,451 Facility Services Expenses
$ 44,298 Recreation Services Expenses
$118, 749 Total
($28,000) New Revenue

$90,749 Total Anticipated Annual O&M Impact

The preliminary timeline for the Carpenter Park Recreation Center project is:

Bid - April 2010 (Competitive Sealed Proposals)
Start Construction - July 2010
Complete Construction - July 2011

This renovation will be performed in phases to minimize impact on members. At times, a complete closure of the facility will be needed for projects such as the roof replacement.

Please let me know if you require additional information.

Amy

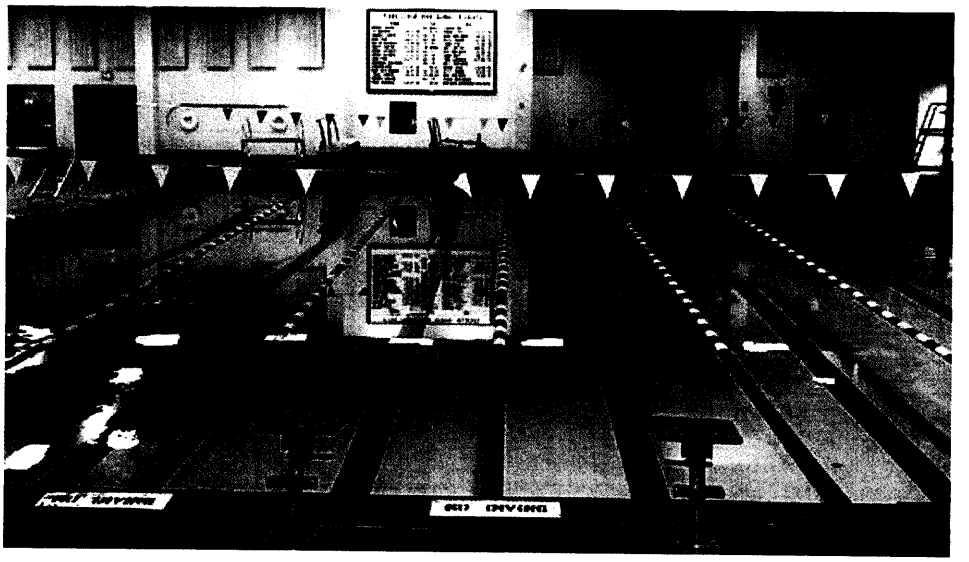
Exhibit #1

PLANO AQUATIC CENTER RENOVATION

OVERVIEW

Plano Aquatic Center opened in 1979 and is approximately 25,000 square feet in size. It includes an indoor 25 yard – 6 lane competitive lap pool, locker rooms, staff offices in the north and south wings of the building, a classroom, roll up doors from pool to plaza, an outdoor sprayground, special use rooms and related support facilities. The pool is owned and operated by the City of Plano and is located on school property adjacent to Plano Senior High School.

This facility serves as home to the Plano Senior High School swim team, City of Plano Swimmers (COPS) swim team, provides open swim and lap swim opportunities for the public, and numerous aquatic programs including affordable swim lessons.



In 2005 the swimming pool experienced a major leak and emergency repairs ensued which included updating the pool's mechanical equipment, piping, and filter systems. Two years later the pool shell was plastered eliminating the need to paint the pool on an annual basis. Because the mechanical systems and pool shell have recently been updated, the emphasis for this project is building renovation.

This thirty year old facility is exposed to extreme conditions unlike any other City facility including high heat and humidity. The toll on the facility is evident not only visually (corrosion) but also within the facility systems. The lighting levels over the pool are inadequate and the current fixtures are not energy efficient. These fixtures get very hot and result in additional yearly maintenance. A domestic water heater for the showers is outdated and is due for replacement with one that is energy efficient. The plumbing fixtures need to be replaced with newer water saving fixtures. The roof at the south end of the facility is 30 years old and due for replacement.

Exhibit #2

Several of the doors, door frames, and toilet partitions are corroded and need to be replaced. Due to the heavy usage and the hot, humid environment, the showers need new floor and wall tiles. The interior and exterior portions of the facility are also due for painting to preserve the appearance of the facility and to prevent further deterioration.

RENOVATION PROGRAM

The program may be modified to be consistent with available funding:

1. Improve and enhance the public entrances and approach to the building.
2. Convert or relocate existing office space to family changing rooms.
3. Provide for the converted or relocated office space in the south building elevation to another area of the building.
4. Improve locker room fixtures and furnishings.
5. Provide for total facility ventilation. Improve efficiency of the system.
6. Evaluate and complete roof performance.
7. Improve overall appearance of the building - new paint, carpet, wall vinyl, locker room tile, signage, etc.
8. Replace windows and roll-up doors with high efficiency units.
9. Re-level and re-depth pool if funding permits.
10. Design and rewire the facility to meet electrical code, including service load centers.
11. Re-configure entry to allow for seating (viewing) area and minimize drafts into building.
12. Renovate food prep space off of classroom, north building elevation.
13. Renovate north user spaces of the lobby. Work includes raising ceiling and improving the function and circulation of this area.
14. Install new starting blocks on the pool deck.
15. Unify pool deck elevation and texture, stanchions, life lines, and guard stands.
16. Improve natural light in all spaces.
17. Design and improve exterior pedestrian access for function and attractiveness. Areas include the service court and pedestrian spaces.
18. Design and construct outdoor use spaces for an outdoor sprayground, recreational plaza for benches and shade shelters, attractive security fencing, landscape plant materials, grading and drainage.
19. General site renovations include, parking restriping and fire lane markings, grading and drainage around the building, install security cameras, and replace selected site furnishings.

PRELIMINARY TIMELINE

Select and Hire Architect - April 2010
Begin Design - May 2010
Bid Project – January 2011
Begin Construction – March 2011
Complete Construction –October 2011

MEMORANDUM

TO: Bruce Glasscock

FROM: Jim Razinha, Dave Stephens

DATE: January 4, 2010

SUBJECT: **NEW TECHNOLOGY SERVICES DATA CENTER**

The current data center/Technology Services office/support space was originally built in 1964/5 as two buildings, the City Hall (later Municipal Annex) and Central Fire Station. In 1980, when the new Municipal Center was built, the old 9,000 SF building was renovated to accommodate the Health, Engineering, Planning and Building Inspection Departments. In 1995, following construction of the current Fire Administration and Fire Station #1 facility, the 12,000 SF, old Central Fire Station was renovated to house the Print Shop, support systems for the radio tower, and additional storage.

In 1988, the 9,400 Square foot Annex was renovated for the Technology Services Department, including 500 SF for the original server room. In 2007, as the server and back end storage requirements grew, power consumption for those servers and the cooling capacity necessary to keep them running exceeded the feed from the Municipal Center. The renovation of 465 square feet within the Annex to accommodate another server room meant a space loss to the department, but was necessary to support the network growth requirements. A separate electric service had to be installed to power that room and its cooling. The HVAC units for the main server room were split out from the main feed and added to the new circuit.

Technology Services has also occupied 1,500 square feet of space within the Municipal Center since 1997, supporting both the more than 2,000 individual employee computers deployed throughout the City and the cell phones/Blackberries used by the employees. This support would move to the new facility, collocating with the rest of the Technology Services Department and freeing up that space in the Municipal Center for other uses.

The remainder of the building, including the power consumed by the equipment in the main server room, is not sub-metered, being fed from the Municipal Center transformer. The service that is metered separately has grown 16% in the past year. As the building was not designed as a data center, the forced air cooling is a very inefficient way to cool the computer equipment, even though as part of the 2007 renovation and electric service split, the 20 ton HVAC unit serving the main computer room was replaced with the most efficient available at the time. A new facility specifically designed as a data center and

Exhibit No. 3

incorporating the latest cooling technologies and optimized equipment layout could save as much as 50% on the energy costs. The technologies being considered include geothermal (ground water heat exchange), heat recovery (in which the heat removed from the equipment is used to heat the water and spaces in the rest of the building), channeled cooling (where the cold air is directed up from the bottom of the racks through cooling ducts surrounding the equipment instead of ambient cooling), water cooling. The existing facility is very energy inefficient, and the power needs will continue to grow as the back end storage requirements grow.

Construction of a new facility would also save more than an estimated $430,000 in Capital Reserve Funds programmed over the next few years to replace the nearly 20 year old roof, and several HVAC units and Uninterruptable Power Supply back up batteries that have reached the end of their service life. An unknown quantity, but tangible factor, is the increasing minor repairs that must be done on a hybrid, aging building, again, not designed for its current use.

The demands that are being placed upon this facility, and the equipment within the facility, are growing on a daily basis. As the technology environment evolves into one driven by video and graphics and becomes information intensive, then the technology needed to support this environment grows exponentially. The amount of data and videos being stored has grown from 1.2 terabytes in 2005 to 19 terabytes in 2009 and is expected to grow to over 95 terabytes by 2012. The physical number of servers to support this grow has been kept in check with the use of server virtualization but the amount of storage space continues to grow. By using more advanced storage techniques, it is the goal of Technology Services to minimize the physical space required to house this data but it is inevitable that the current facilities will be outgrown within a few years.

The current configuration of the existing two data centers in the Municipal Annex limit the flexibility of Technology Services to support anticipated future technology needs for the City of Plano. The ability to redesign this facility will allow for the incorporation of industry best practices in terms of space utilization and operational effectiveness. The need to address how information is accessed, stored, and archived will allow the City of Plano to better utilize limited resources in terms of data access and storage.

In summary, the physical design of the Municipal Annex has been reconfigured over the years for many purposes but when compared to today's standards for data centers, it is definitely not in the proper state to be considered a reliable data center. There are various levels for rating data centers and the components that have been incorporated in to this existing facility have helped provide limited business continuity support. The redesign of the facility currently located at the Municipal Annex will provide the City of Plano the opportunity to design a future-proof facility that will handle the known needs to today's technology requirements and provide the flexibility to handle the demands of future technology trends.

Tom Muehlenbeck

From: Elizabeth Dorrance
Sent: Wednesday, December 30, 2009 4:57 PM
To: Tom Muehlenbeck
Cc: Karen Rhodes; Denise Tacke; Alan Upchurch
Subject: Street Projects

Good Afternoon Mr. Muehlenbeck,

Per my conversation with Alan, the list of the Street Improvement projects included in the projected $6.11 million, 2010 Bond Issue is as follows. The first two projects may be delayed which could allow us to delay $2 million of this issuance, but due to cash flow of projects and reimbursements from outside entitles; it is recommended that we issue the full $6.11 million.

$1,000,000	Windhaven Parkway – City Limits to Spring Creek
1,075,000	Westwood – 15th Street to Janwood
2,565,000	Communications – Spring Creek to Tennyson
555,000	Parker Blvd. /SU 75 Pedestrian Crossing
700,000	Split Trail
215,000	17th Street/R Ave Reconstruction (the remaining portion of this project $1,020,000 is available in the Street Improvement Fund Balance)

Thank you,
Elizabeth

Exhibit No. 4