City of Carroll

112 E. 5th Street Carroll, Iowa 51401-2799 (712) 792-1000 FAX: (712) 792-0139

MEMO TO: Honorable Mayor and City Council Members

FROM: Mike Pogge-Weaver, City Manager MJP-W

DATE: March 9, 2017

SUBJECT: Capital Projects

Attached is the final draft of the Capital Building Projects Summary report that was requested by the City Council on February 27, 2017. This summary includes the following items:

- Summary of Projects with:
  - List of Projects
  - Scenario 1 – Complete all projects in the near term
  - Scenario 2 – Phase projects over the near term and in 2021
- City Hall/Library Project Detail
- Street Maintenance Facility Project Detail
- Recreation Center Project Detail
- PFM: Revised GO Bonding Scenarios

Since discussed on February 27, 2017, staff has looked for ways to reduce costs on all of the capital building projects. This has resulted in an overall reduction of cost for all of the projects from $21,561,000 to $19,729,831. A total of $5,352,500 is expected for the projects from the Library Foundation, use of Local Option Sales Tax (LOST), and General Fund dollars. This leaves a total of $14,377,377 in bonding needed to complete all of the identified projects. This is down from $17,208,500 in the original bonding scenario presented by PFM on February 27th.

The Council should discuss the various projects and bonding scenarios and provide direction to staff on level of debt the Council finds acceptable and which projects the City wants to proceed with in the short term.

Additionally, if the Council chooses to move forward with one or more of these projects in the near term, the Council should discuss the order they would like to see the projects move forward and a possible timeline on when each project would be presented to the citizens for a referendum.

Additional Architectural Services Request

Once the Council selects which projects they would like to move forward with, additional architectural work will need to be completed prior to authorizing a referendum. To complete this work, attached are proposals from OPN for the City/Hall Library Project and from FEH DESIGN for the Recreation Center Project.

Both proposals include fees to develop drawings that can be used to promote the projects and to attend public meetings in Carroll. The highlights of the two proposals are as follows:

City Hall/Library Project – OPN Proposal

$15,000	Floor Plans of the City Hall and Library project with 1 exterior rendering of the library and 1 interior rendering of the library ($2,000 for addition exterior rendering)
$3,500	2 community open house
$18,500	**Total**

Recreation Center Project – FEH DESIGN Proposal

$12,865	Complete additional programing work, develop promotional drawings, and prepare updated estimated cost of construction
$2,650	2 community open house
$15,515	**Total**

If the Council decides to move forward with one or both of these projects, the Council should consider approving one or both of these agreements at this time so work can begin.

RECOMMENDATIONS:

1. Review and provide direction in the form of a motion on which projects the Council wishes to proceed with and the debt structure the Council supports.
2. Consider approving a proposal from OPN for additional services on the City Hall/Library project.
3. Consider approving a proposal from FEH DESIGN for additional services on the Recreational Center project.

RESOLUTION NO. _____

A RESOLUTION APPROVING AN ADDITIONAL SERVICES REQUEST WITH OPN ARCHITECTS

WHEREAS, Chapter 17, of the Code of Ordinances of the City of Carroll, Iowa, provides that all contracts made by the City be reduced to writing and approved by the City Council by resolution; and

WHEREAS, an additional services request with OPN Architects is attached hereto as Exhibit A; and

WHEREAS, it is determined that the approval of the attached additional services request with OPN Architects is in the best interest of the City of Carroll, Iowa;

NOW, THEREFORE, BE IT RESOLVED that the additional services request with OPN Architects., attached as Exhibit A, be authorized and approved, and that the Mayor is authorized to execute the additional services request on behalf of the City of Carroll.

PASSED AND APPROVED by the City Council of the City of Carroll, Iowa, this 13th day of March, 2017.

CITY COUNCIL OF THE
CITY OF CARROLL, IOWA

BY:_____
Eric P. Jensen, Mayor

ATTEST:

By:_____
Laura A. Schaefer, City Clerk

March 10th, 2016

OPN ARCHITECTS

Daniel J. Thies, AIA
Steven K. Knierim, AIA
Bradd A. Brown, AIA
Terry L. Gebard, AIA
David J. Sorg, AIA
Roger B. Worm, AIA
Richard S. Seely, AIA
Wesley T. Reynolds, AIA

Mr. Mike Pogge-Weaver
City Manager
City of Carroll
112 E. 5th Street
Carroll, IA 51401-2799

RE: Additional Services request

Mike:

It has been a pleasure working with you, the city and the library. We look forward to providing some additional services to help assist the city in moving the project forward.

Review and Next Steps

OPN's original scope of services have completed for the Conceptual studies. Additional services outlined below will be competed for the following projects:

- The current City Hall/Library building at 112 E. 5th Street.
- The current Commercial Savings Bank site at 627 N. Adams Street

OPN will provide Presentation Floor Plans for both the Bank building and the Library based on Concept A diagrams. (1) 3-dimensional exterior graphic rendering and (1) 3-dimensional interior graphic rendering will be provided of the Library project as outlined in Concept A. All files will be provided in PDF format, but can be available under the format required by the city for Referendum materials. OPN can provide additional exterior renderings for an additional service/fee for the library building. No 3-dimensional model/renderings will be provided for the City Hall project at the bank building.

OPN will also attend and participate in a public meeting format as required by the city to best assist in the referendum process. OPN will bill per-visit based on the fee below. Cost for each visit identified below includes the reimbursable cost.

Proposal Summary

Schedule: Provide completed renderings by the mid-may city council meeting.

Compensation: Professional fees to complete Referendum assistance services as outlined in this proposal will be a lump sum fee as follows:

Phase I – Preliminary Concepts and Estimate of Probable Costs

Architectural Services (Renderings) – OPN Architects	$ 15,000
Base Professional Fee	**$ 15,000**

Cedar Rapids
200 Fifth Ave SE, Ste. 201
Cedar Rapids, IA 52401
Phone (319) 363 6018

Des Moines
100 Court Ave, Ste. 100
Des Moines, IA 50309
Phone (515) 309 0722

Madison
301 N. Broom, Ste. 100
Madison, WI 53703
Phone (608) 819 0260

www.opnarchitects.com

Insight + Passion

Additional Exterior Rendering	$ 2,000
Public Meeting (cost per visit)	$ 1,750
Total Optional Professional Fee	**$ 3,750**

We believe these projects will be a tremendous asset to the city of Carroll. OPN will help give any support the City needs to help make for a successful referendum.

If you find you have any questions or desire additional information, please do not hesitate to call. Should you find our proposal acceptable, please sign and return this letter and we will prepare a draft contract for your review and signature.

Joe Feldmann, AIA
OPN ARCHITECTS

Project Architect

Accepted: _____

OPN ARCHITECTS

Daniel J. Thies, AIA
Steven K. Knierim, AIA
Bradd A. Brown, AIA
Terry L. Gebard, AIA
David J. Sorg, AIA
Roger B. Worm, AIA
Richard S. Seely, AIA
Wesley T. Reynolds, AIA

Cedar Rapids
200 Fifth Ave SE, Ste. 201
Cedar Rapids, IA 52401
Phone (319) 363 6018

Des Moines
100 Court Ave, Ste. 100
Des Moines, IA 50309
Phone (515) 309 0722

Madison
301 N. Broom, Ste. 100
Madison, WI 53703
Phone (608) 819 0260

www.opnarchitects.com

Insight + Passion

RESOLUTION NO. _____

A RESOLUTION APPROVING A LETTER OF AGREEMENT WITH FEH DESIGN

WHEREAS, Chapter 17, of the Code of Ordinances of the City of Carroll, Iowa, provides that all contracts made by the City be reduced to writing and approved by the City Council by resolution; and

WHEREAS, a letter of agreement with FEH Design is attached hereto as Exhibit A; and

WHEREAS, it is determined that the approval of the attached letter of agreement with FEH Design is in the best interest of the City of Carroll, Iowa;

NOW, THEREFORE, BE IT RESOLVED that the letter of agreement with FEH Design, attached as Exhibit A, be authorized and approved, and that the Mayor is authorized to execute the letter of agreement on behalf of the City of Carroll.

PASSED AND APPROVED by the City Council of the City of Carroll, Iowa, this 13th day of March, 2017.

CITY COUNCIL OF THE
CITY OF CARROLL, IOWA

BY:_____
Eric P. Jensen, Mayor

ATTEST:

By:_____
Laura A. Schaefer, City Clerk

March 9, 2017

LETTER OF AGREEMENT

Jack Wardell, Park & Recreation Director
City of Carroll, Iowa
716 N. Grant Rd.
Carroll, Ia. 51401-2799

RE: Carroll Recreation Center

Dear Mr. Wardell:

The following information will provide the basis for this Letter of Agreement:

PROJECT: Bond Assistance - Carroll Recreation Center

OWNER: City of Carroll, Iowa

ARCHITECT: **FEH** DESIGN
701 Pierce Street, Suite 100
Sioux City, Iowa 51101

SCOPE OF SERVICES:

A. The Scope of Services will be limited to the following:
   1. **Bond Assistance:**
      a. Attend building programing meeting to assure past program still meets today's needs. Edit the program accordingly.
      b. Develop promotional drawings to be used by the city to promote approval of the community.
         i. Provide both hard copy and electronic formats.
      c. Prepare an Estimated Cost of Construction

   2. **Public Meetings:**
      a. Attend two Public Meetings to assist the Owner with questions or explanations of the building design aspect of the Bond Referendum. **FEH** DESIGN and Waters Edge representatives will attend only.

B. Design Professionals providing these services will be:
   1. **FEH** DESIGN – providing Architectural, Structural and Interior Design services.

   2. Waters Edge – Providing pool design services.

   3. Engineering Design Associates (EDA) – Providing Mechanical, Electrical, and Plumbing design services.

BASIS OF BOND ASSISTANCE COMPENSATION:

FEH DESIGN and sub consultants purpose to perform the services stated above for a lump sum fee.

Total Architectural/ Engineering Fee: **$12,865.00**

BASIS OF PUBLIC MEETINGS COMPENSATION:

FEH DESIGN and sub consultants purpose to perform the services stated above for a lump sum fee.

Total Architectural/ Engineering Fee: **$2,650.00**

In conclusion, we sincerely appreciate the opportunity to present this Letter of Agreement to you for your consideration. If this Letter of Agreement is acceptable, please sign and date and return it to our office. Please contact our office if you have any questions or concerns regarding this Letter of Agreement.

Sincerely,

FEH DESIGN

Ronald D. Speckmann

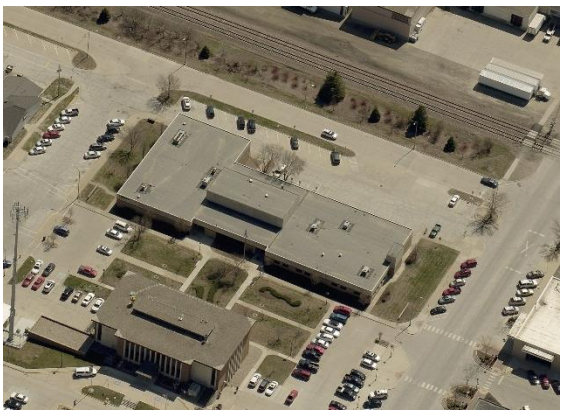
Ron Speckmann, AIA
Principal/ Project Architect

ACCEPTED BY: Eric P. Jensen Date

_____ _____

Capital Building Projects Summary

March 9, 2017



CAPITAL PROJECTS SUMMARY

The following is a summary of the capital projects summary as of March 9, 2017. **Reader, please take note,** the cost figures included in this document are at various levels of planning and scrutiny. These cost estimates are very much subject to change as the projects move further into design. In some cases, costs could vary substantially from what is presented in here. Additionally, delays in bidding and constructing will result in inflated costs.

List of Projects

List of projects with near term and 2021 staff estimated project costs.

Total Project Cost	Near Term Costs	2021 Est Costs	CIP Project Year
City Hall/Library Project	$ 7,000,000	$7,950,000	City Hall FY 19 - Library FY 20
Rec Center Indoor Pool Remodel	$ 5,500,000	$7,100,000	FY 19
Rec Center - East Side Addition	$ 1,900,000	$2,500,000	FY 19
Rec Center Locker Rooms	$ 900,000	$1,200,000	FY 19
Street Maintenance Building	$ 4,054,837	$5,200,000	FY 18
Fire Engine Replacement	$ 375,000	$500,000	FY 20
Total	**$ 19,729,837**	**$24,450,000**	

Scenario 1 – Complete all projects in the near term

The following scenario shows the proposed financing assuming each project is completed in the near term.

Bond Funds		
City Hall/Library Project	$	4,000,000
Rec Center Indoor Pool Remodel	$	5,500,000
Rec Center - East Side Addition	$	1,900,000
Rec Center Locker Rooms	$	900,000
Street Maintenance Building	$	1,702,337
Fire Engine Replacement	$	375,000
Total	**$**	**14,377,337**
Other Funds		
Library Foundation	$	2,500,000
LOST (Library) - In FY 19 LOST budget	$	250,000
LOST (Library) - Staff proposed	$	250,000
LOST (Street Maint)	$	1,950,000
General Fund (Street Maint)	$	402,500
Total Other Funds	**$**	**5,352,500**
Bond Funds	$	14,377,337
Total Funds	**$**	**19,729,837**

Note:
Within the current budget there is an additional $35,000 available in Hotel/Motel Tax and an additional $350,000 available in LOST funds that could be allocated to these projects.

Scenario 2 – Phase near term and 2021 construction

The following scenario shows a possible phasing of the projects along with financing for each project.

Total Project Cost	**Near Term Costs**	**2021 Est Costs**	**CIP Project Year**
City Hall/Library Project	$ 7,000,000		City Hall FY 19 - Library FY 20
Rec Center Indoor Pool Remodel		$ 7,100,000	FY 19
Rec Center - East Side Addition	$ 1,900,000		FY 19
Rec Center Locker Rooms	$ 900,000		FY 19
Street Maintenance Building	$ 4,054,837		FY 18
Fire Engine Replacement		$ 500,000	FY 20
Total	**$ 13,854,837**	**$ 7,600,000**	

Bond Funds	Near Term Costs	2021 Est Costs
City Hall/Library Project	$ 4,000,000	
Rec Center Indoor Pool Remodel		$ 7,100,000
Rec Center - East Side Addition	$ 1,900,000	
Rec Center Locker Rooms	$ 900,000	
Street Maintenance Building	$ 1,702,337	
Fire Engine Replacement		$ 500,000
Total	**$ 8,502,337**	**$ 7,600,000**

Other Funds		
Library Foundation	$ 2,500,000	$ -
LOST (Library) - In FY 19 LOST budget	$ 250,000	$ -
LOST (Library) - Staff proposed	$ 250,000	$ -
LOST (Street Maint)	$ 1,950,000	$ -
General Fund (Street Maint)	$ 402,500	$ -
Total Other Funds	**$ 5,352,500**	**$ -**
Bond Funds	$ 8,502,337	$ 7,600,000
Total Funds	**$ 13,854,837**	**$ 7,600,000**

Notes:
Within the current budget there is an additional $35,000 available in Hotel/Motel Tax and an additional $350,000 available in LOST funds that could be allocated to these projects.

Other Projects (Not currently in CIP)

The following are other projects that are not currently in the CIP that the City has considered and completed recent architectural studies.

Other Projects (Not currently in CIP)	**Near Term Costs**	**2021 Est Costs**
Rec Center - West Side Addition	$ 11,943,670	$ 15,300,000

City Hall/Library

Current Situation

City Hall and Library are part of the 1975 Farner Government Building located at 112 E 5th Street. The Farner Government Building also houses the Police Department. The current building is in need of renovation and the Library is under sized to serve the community for the population and programs that are provided. On the first floor, the City Hall currently occupies 4,350 SF and the Library occupies 9,600 SF. Additionally, there is approximately 1,650 SF of common space and restrooms on the first floor shared by City Hall and the Library. A 2,700 SF second floor houses City Council Chambers, Carroll Area Access Television Channel 6, a conference room and storage space.

Proposal

With a building donation from Commercial Savings Bank (CSB) of their current bank building at 627 Adams Street, the proposal is to move City Hall to that site and expand the Library into the vacated City Hall space. After rehabbing the CSB building, the City Hall site would contain 8,467 SF on the first floor for City Hall offices and City Council Chambers with 4,910 SF in the basement for storage.

The Library would expand into the vacated City Hall space with new stairs connecting the first and second floors making the upper floor useable library space. Following the concept plan developed by ONP Architects, the usable library space is 15,510 SF of existing space along with a 1,200 SF addition on the first floor and 2,400 SF on the second floor for a total of 19,110 SF.

Timeline

The new CSB facility is anticipated to be completed in mid-2018. Renovation of the CSB building for City Hall would start immediately after that and take approximately one year. Once City Hall moves to the CSB building, renovations at the Farner Government Building are anticipated to be completed in approximately one year.

Project Cost and Funding Sources

As outlined in the December 12, 2016 Feasibility Study by OPN Architects, the total project cost is between $7,104,540 and $7,604,065. In discussion between staff and OPN, OPN is comfortable that with reductions that have been identified by OPN and City Staff the City Hall/Library project can be kept under $7,000,000. As the project moves forward into the schematic design phase, staff and OPN will work to further reduce this budget. Until additional design work is completed it would be premature to reduce this budget further. Using a $7,000,000 project cost, sources of funds for the project are as follows:

$4,000,000	G.O. Bonding
$2,500,000	Library Foundation
$250,000	Local Option Sales Taxes – Currently in FY 19 LOST budget
$250,000	Local Option Sales Taxes – Staff Proposed
$7,000,000	Total Funds

Concept A

Architectural Summary

The work includes renovating the existing Library and City Hall space located at 112 E. Fifth St., approximately 18,000 gross square feet. This renovation would entail moving the occupants of City Hall, approximately 8,500 gross square feet, to the current Commercial Savings Bank site at 627 N. Adams St. The Carroll Public Library would then expand to the vacated City Hall space and renovate the existing Library areas. This would include a modest north addition and new entry at around 1,200 gross square feet. The modifications would include the addition of a community program space, increased children's programming and collection areas, a dedicated teen collection and technology area, and staff areas to accommodate multiple programmatic functions.

The new entry and increased openings within the existing walls will connect the Library to the city functions to the north and increase visibility of the programs and activities occurring within the Library. The new entry, increased transparency, expanded programs, and new facility will become a hub of actively reengaging the City of Carroll.

The City Hall would move to the current Commercial Savings Bank site at 627 N Adams Street that is approximately 13,300 gross square feet (8,000 on level 1). This move would consist of renovating, upgrading, and reconfiguring the bank building to house City Hall functions.

The newly renovated City Hall will include city council chambers and conference rooms with upgraded technology, a welcoming and secure front lobby and transaction counter, and accessible and functional spaces. The new spaces will provide a backbone for increased customer service and improved efficiency for city services.

Landscape Summary

112 E. Fifth St. Site – existing Library and City Hall location

Remove existing walk trees and shrubs

Modify existing building sign (remove City Hall information)

Install new walk from parking to main entry point

New entry point with special pavement type material – 700 square feet

Four landscape benches with backs 70" length, IPE wood

Install shade-tolerant evergreen ground cover with spring bulb accent at north wall along new walk at new window locations

Install shade-tolerant evergreen shrubs at north wall along new walk at solid wall locations

Install new mulch in planted areas

627 N. Adams St. Site – existing Commercial Savings Bank location

Remove (2) large shrubs – one at the bottom of the stair and the other on the NE corner

Trim/prune and mulch existing landscape

Patch and repair existing stairs, walk, and ramp as needed

Sod disturbed lawn areas

Concept A

Library Site

New Entry: 1,200 SF

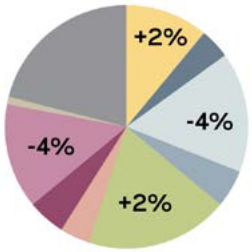
H&W Proposed:	22,848 GSF
OPN Baseline:	19,300 GSF
Concept A:	19,110 GSF
Level 1:	16,710 GSF
Level 2:	2,400 GSF

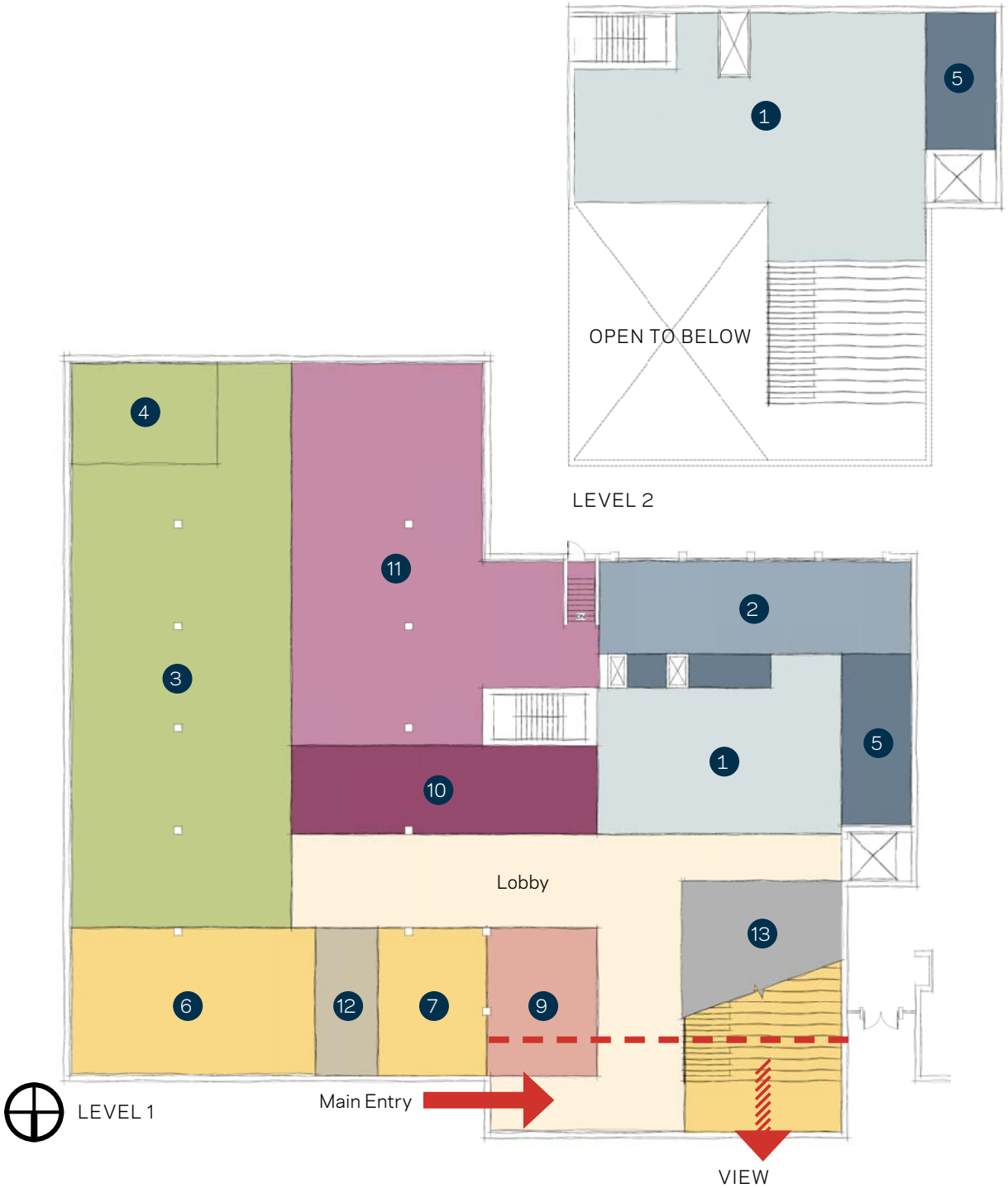
KEY

1	Adult	8	Cafe
2	Young Adult	9	Technology
3	Children	10	Circulation
4	Children Program	11	Staff
5	Study/Conference	12	Storage
6	Community	13	Restroom
7	Maker-space	14	Greenspace

OPN BASELINE

LIBRARY CONCEPT A





Concept A

Bank Site

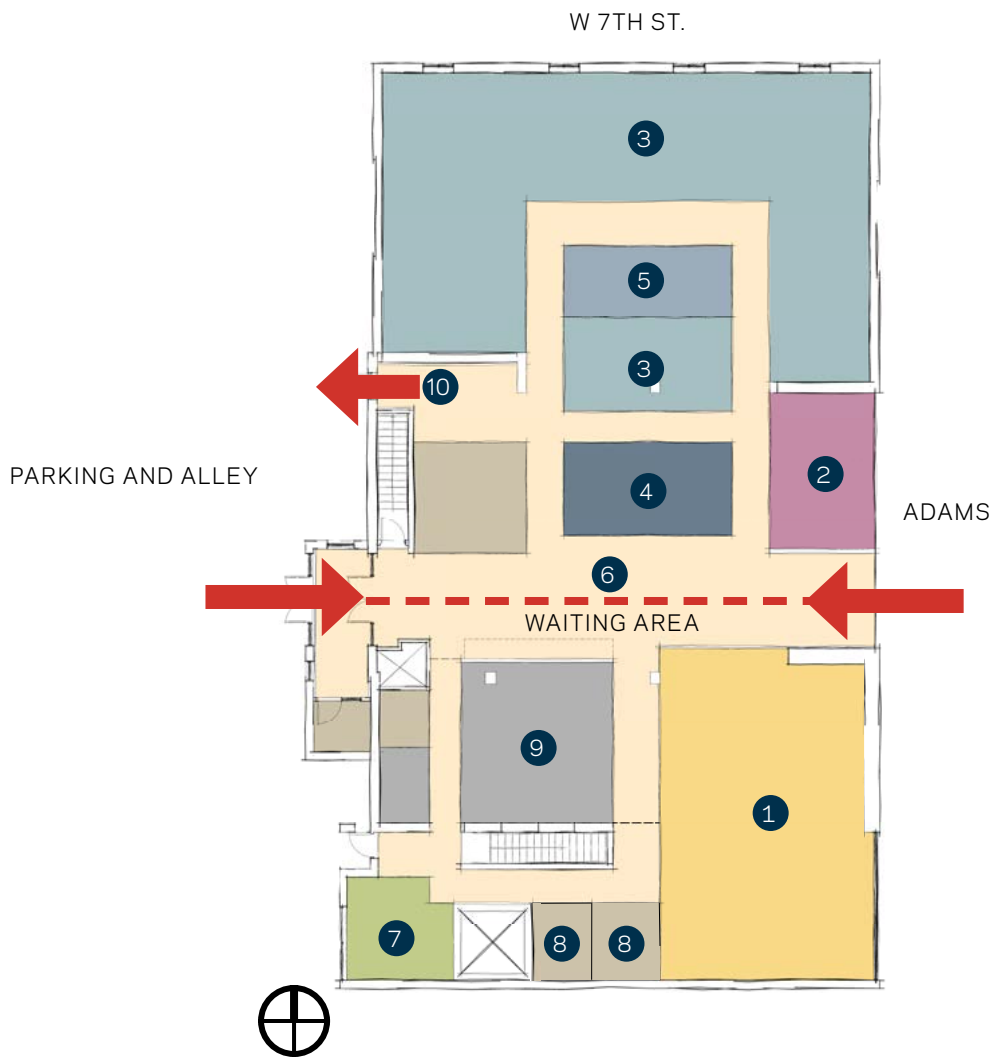
Utilize Existing Space

Existing City Hall: 8,467 GSF

Bank Existing: 13,377 GSF

KEY

1	Council chambers	6	Lobby / pre-function
2	Conference room	7	Break room
3	Office	8	Storage
4	Open office	9	Restroom / janitorial
5	Work room	10	Staff entry



Concept A
Considerations

112 E. Fifth St. Site - existing Library and City Hall location
Library location for patrons remains the same — approximately 225 visitors each day.

Efficient space utilization.

Library square footage approaching OPN baseline.

Potential more parking with City Hall staff relocated.

Clear connection from interior to exterior utilizing city park space to the north of the Library.

Increased access to natural light and views.

Option to expand the Library in the future, either east or south as illustrated in the previous concept designs.

627 N. Adams St. Site - existing Commercial Savings Bank location
Maintains parking area at Commercial State Bank site to be utilized by City Hall staff and visitors — potential for City State Bank to sell and/or develop 2 adjacent sites independent of City Hall.

Consider proximity of city and county functions.

Increased access to natural light and views.

Concept A
Estimate

Carroll Public Library: Preliminary Cost Model | Updated: December 12, 2016

1	New Construction – Building Cost					
	Existing City Hall & Library *112 E. Fifth St. - Library Renovation*	17,910 SF				$2,317,750
	Existing City Hall & Library *112 E. Fifth St. - Library Addition*	1,200 SF				$635,235
	Existing Commercial Savings Bank *627 N. Adams St. - City Hall Renovation*	7,541 SF + 5,380 SF (basement)				$1,339,145
	Construction Subtotal					**$4,292,130**
2	General Requirements				6%	$257,528
3	Contractor Markup				8%	$363,973
4	Design/Bid/Construction Contingency				15%	$737,045
	Construction Cost Estimate					**$5,650,675**
5	Professional Fee (bldg. & site) Range		9%	$508,561	12%	$678,081
6	Furnishing/Shelving Library Range		$21/SF	$401,310	$26/SF	$496,860
7	Furnishing/Shelving City Hall Range		$16/SF	$206,736	$20/SF	$258,420
8	FFE Design/Spec Fee Range		9%	$54,724	9%	$67,975
9	Miscellaneous Costs Range Soil Borings/Topo Boundary Survey Construction Testing Computers/IT AV Systems Interior Signage		5%	$282,534	8%	$452,054
10	Moving/Phasing Costs			TBD		TBD
	Project Cost Estimate To-Date			**$7,104,540**		**$7,604,065**

** See appendices for detailed cost estimate information*

11 Cost Model Exclusions (not included)

1 Property acquisition costs
2 Library collection purchases
3 Library automated handling machine
4 Library drive-up book drop
5 Temporary space for Library during renovation
6 Complete new building envelope for both buildings
7 Existing city building and bank parking lot to remain
8 Additional cost escalation of 5% per year not accounted for if project start date extended beyond 2018
9 No architectural finishes included in existing bank basement

12 Cost Model Inclusions

1 Multi-phased project delivery; phase 1 inflation using 2018 costs for City Hall within existing bank
2 Multi-phased project delivery; phase 2 inflation using 2019 costs for Library renovations and addition
3 2018 cost escalation accounted for 5%
4 2019 cost escalation accounted for 10%
5 General site improvements
6 Completely new MEP systems

Street Maintenance Facility

Current Situation

The current Street Maintenance Facility is located at 403 E 3rd Street and was constructed in 1969. The building sits on a 2.5-acre site with primarily the western and northern portions currently occupied. The current facility is under sized for the equipment that is needed to maintain the City road system. While there are a number of issues staff face with the current facility, two major issues include leaving equipment exposed to the elements and the tight space that makes it difficult to maintain equipment.

Proposal

The project includes the construction of a new 14,500 SF street maintenance building with 4 equipment bays and two drive-thru maintenance bays. The existing street maintenance building will remain as storage for equipment that is currently stored outdoors. If other users (Parks Department or Fire Department) would need/use the exiting street maintenance building, then additional building storage would be needed on the site. This would be accomplished with a proposed 7,200 SF unheated storage building in the northeast corner of the site.

Timeline

The Capital Improvement Plan (CIP) calls for the construction of the new Street Maintenance Facility in FY 2018.

Project Cost and Funding Sources

The opinion of probable costs developed by FEH DESIGN for the Street Maintenance Facility in June 2016 includes a total project cost, including the 7,200 SF unheated storage building, of $4,285,957. The unheated storage building is $231,120 of that total. At this time the Parks Department has indicated that they would forgo using space in the existing Street Maintenance Facility. For the Fire Department, post construction of a new Street Maintenance Facility, a review will be completed to see if a single bay could be made available to them so that a fire pumper could be located on the south side of the railroad tracks. Without the Parks Department utilizing the existing building and minimal or no use of the existing building by the Fire Department, the unheated storage building can be removed from the project scope lowering the overall project cost to $4,054,837. Using this scaled back cost projections, sources of funds for the projects are as follows:

$1,702,337	G.O. Bonding
$1,950,000	Local Option Sales Taxes
$402,500	General Fund
$4,054,837	Total Funds

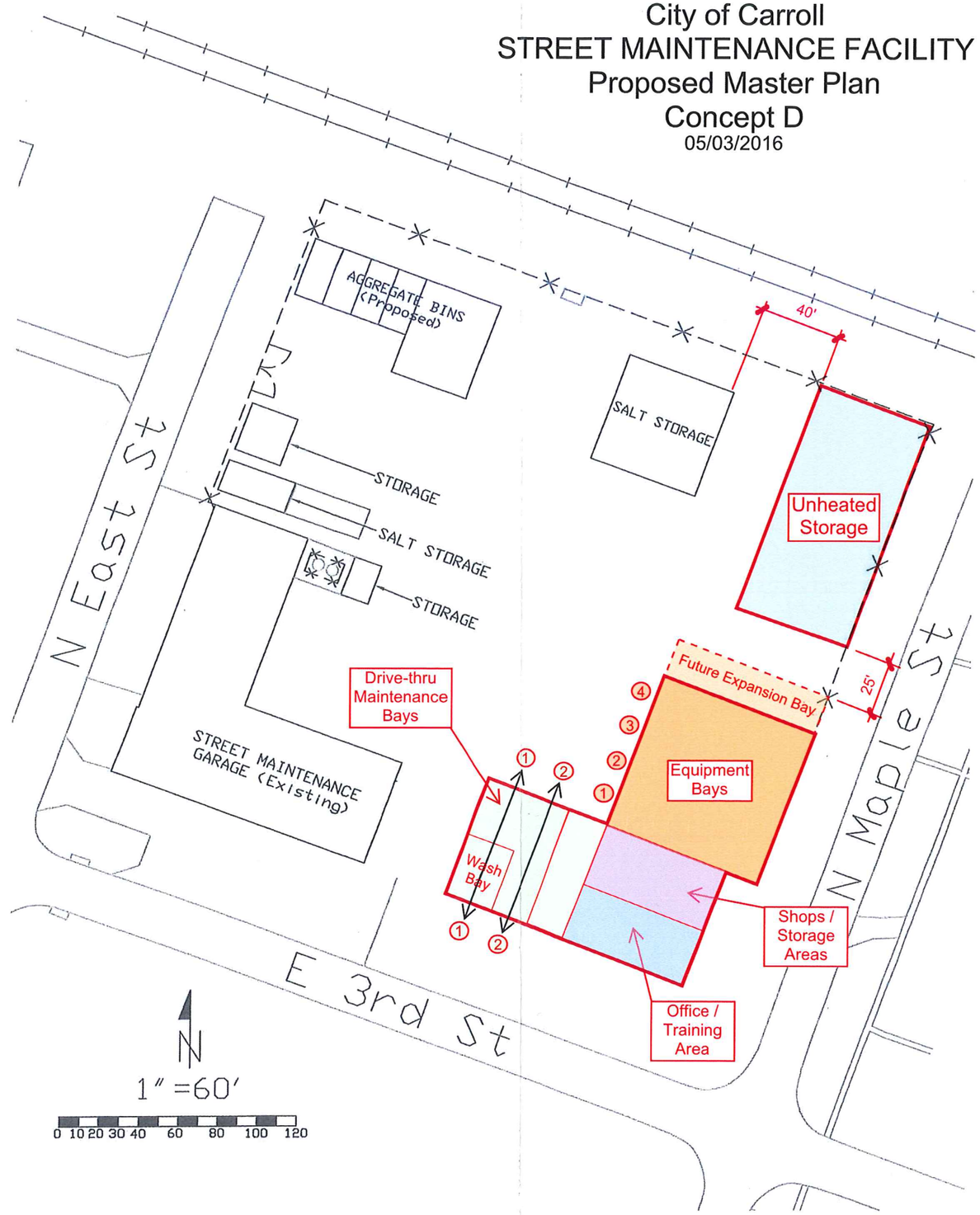
/SITE CONCEPT

SITE CONCEPT "D" DESCRIPTION

Concept D reflects the final, reduced building program size and depicts a facility of approximately 14,500 square feet. Similar to Concepts A and B, Concept D also utilizes an "L-shaped" Street Maintenance Facility building placed at the SE corner of the site. This placement allows the building to serve as a retaining wall to negotiate the significant grade change that is present on the SE quadrant of the city block that the Street Division currently occupies. While Concept D does represent a smaller initial building footprint, the concept does provide future expansion of the equipment bays to the north. The 80-feet deep equipment bays will allow ample space for tandem parking of vehicles.

Site Concept D is based on a new one-story Maintenance Facility with the floor line slightly above the existing floor elevation at the east end of the Street Maintenance Facility. Drive-thru mechanics bays are located at the west end of the new building to enable at-grade access drive from E 3rd Street through the building and into the center of the site. The south face of the new garage aligns with the existing maintenance garage. The Office/Training portion of the new building would be located along the south side of the building providing a building entrance on E 3rd Street. As the building continues to the east, it would be "cut" into the existing grade, meaning the floor line will be below the finish grade along portions of the south wall and the entirety of the east wall. Maintenance shops and storage rooms will be located in the south wing of the building with equipment bays occupying the north wing of the building. Due to site topography, the equipment bays will only have doors on the west wall with no direct access to N Maple Street. This site concept creates a large maneuvering area within the center of the site the will provide good access to all of the various buildings while also providing a large flexible open area on the site.

A 7200 square feet unheated storage building is located at the NE corner of the property. This placement provides improved screening of the maintenance site from the residential properties on the east side of N Maple Street. Placing the unheated storage building with the north and east walls at the property line should provide approximately 40' between the storage building and the existing salt storage building and approximately 45' between the new maintenance facility and this storage building. Aggregate bins are shown located at the NW corner of the property between the existing salt storage building and the west property line. The largest portion of the aggregate bins would be for sand storage and would be covered. The smaller aggregate bins would likely be uncovered for storage of gravel, rock, topsoil, etc. The existing salt storage building remains. The existing miscellaneous storage buildings along the west edge of the property and brine storage areas will remain. The existing street maintenance garage at the SW corner of the property will remain but will be converted from its current use as office/maintenance/storage space to primarily storage use.



08

/ OPINION OF COSTS

OPINION OF PROBABLE COSTS

Following is an opinion of probable costs to determine budget parameters to implement the development of the Concept D Site Master Plan. These budget numbers are based upon construction costs current to the date of this report. As this site master plan will be developed over a period of time, the budgeted values should be adjusted to reflect anticipated construction costs at the time any particular portion of the master plan may be constructed.

Type of construction (structural systems, HVAC systems, materials/finishes) have a tremendous impact on the costs of any project. The following opinion of cost is based upon the following assumptions:

Maintenance Garage Facility: Pre-engineered steel frame structure with pre-cast insulated concrete sandwich wall panels, sloped metal roof, poured concrete foundations and concrete slab-on-grade for the main building structure. Interior walls in the shop and garage areas are anticipated to be concrete masonry walls to a minimum of 8 foot height with metal framed/gypsum board walls (painted) above to fully enclose spaces. Floors are anticipated to be sealed concrete. The administration and meeting rooms are envisioned to be metal stud frame/gypsum board walls (painted), lay-in type acoustical ceilings and carpet tile in the office area and durable tile flooring in the main circulation areas and meeting room space. Locker and restroom areas are anticipated to be metal stud frame/gypsum board walls with tile finish, tiled floors and a combination of moisture resistant acoustical tile and gypsum board ceilings. The equipment bays are planned to utilize overhead radiant heat and will be provided with ventilation air but are not planned to be air conditioned. The administrative/meeting areas/locker/restrooms of the maintenance building are planned to have forced air heating, ventilation and air conditioning.

Unheated Storage Building: The unheated storage building is anticipated to be a pre-engineered wood-framed structure with metal siding and metal roof panels, poured concrete foundation and concrete slab-on-grade structure. Mechanical ventilation as required to address evacuating vehicle exhaust is anticipated.

Aggregate Storage Bins: The aggregate storage bins are anticipated to be constructed utilizing large-scale, pre-cast concrete blocks to form bunkers. The sand storage bunker (approximately 2000 sf) is anticipated to have a metal hoop-type roof structure with fiberglass cover to protect the sand from getting saturated with rain.

Existing Maintenance Garage Building: Per direction from the City, no costs are included for any work to update/reconfigure/repurpose the existing maintenance garage.

Existing (2) Salt Storage buildings, (2) storage sheds on west side of property and brine storage: No costs included for any changes to these structures.

Paving: For the purpose of the cost opinion, concrete paving is only included for a driveway connecting the south facing doors of the drive-thru mechanics bays to E 3rd Street and a 25' apron area outside each of the bay doors facing into the center of the site - two on the north side of the mechanics bays and four on the west side of the equipment bays.

Concept D Cost Opinion			Total
Construction Costs			
New Maintenance Shop Building - Concept "D"			$ 2,454,500
Existing Site Demo			$ 13,400
Site Development			$ 232,120
Site Utilities			$ 16,380
Design Contingency @ 15%			$ 407,460
Subtotal			**$ 3,123,860**
Bid Contingency @ 3%			$ 93,716
Construction Contingency @ 10%			$ 312,386
Subtotal - New Maintenance Shop Building - Concept "D"			**$ 3,529,962**
Cold Storage Building			$ 216,000
Aggregate Bins			$ 145,000
Subtotal - Including Cold Storage, Aggregate Bins, & Site Lighting			**$ 3,890,962**
Soft Costs			
Fees			
Architects,Structural, Mechanical and Electrical Eng			$ 277,240
Civil Engineering			$ 55,000
IBC Special Testing and Inspections			$ 23,755
Legal			
Geotechnical Soils Investigation			$ 4,000
FF&E			
Furnishings			$ 25,000
Misc			
Printing and Distribution of Documents			$ 10,000
Subtotal			**$ 394,995**
Total Project Costs			**$ 4,285,957**

Recreation Center

Current Situation

The Recreation Center was built in 1977 and is located at 716 N Grant Road. Facility improvements since it was built include addition of two new family changing rooms, removal of a racquetball court to expand the weight room, arts room into a fitness/aerobics room, new floor in the multi-purpose room, reroofing the facility and fire alarm upgrades.

Proposal

With increased usage and worn facilities, plans call for renovated locker rooms; the addition of a third multi-purpose room; new pool features including kids splash features, 4 new 25-yard lap lanes and zero entry pool; new gymnasium space; two additional activities rooms; atrium; and renovated office space.

Timeline

The Capital Improvement Plan (CIP) calls for the renovation of locker rooms, addition of a single court to the existing two court multi-purpose room and new pool features in fiscal year 2019. The CIP does not include projects related to the new gymnasium space, two additional activities rooms, atrium and renovated office spaces.

Project Cost and Funding Sources

The Recreation Center cost estimates are as follows:

Multi-purpose space	$ 1,536,600	FEH estimate July 2015
Pool Upgrade	$ 4,955,028	Waters Edge February 2016
Locker Room Renovations	$ 840,000	FEH verbal estimate in February 2016
Renovate/remodel admin area	$ 669,800	FEH estimate July 2015
Atrium/activity area/gymnasium	$10,403,400	FEH estimate July 2015

(Note: The above values differ from what is shown in the List of Projects, Scenario 1 and Scenario 2 in order to factor a level of inflation and in some cases FFE and design costs)

All of these projects are proposed to be funded with G.O. bonding funds.

1 MAIN FLOOR PLAN 1/16" = 1'-0"

N

CARROLL RECREATION CENTER

CARROLL, IOWA
DECEMBER 2014

FFH Associates Inc

Carroll Recreation Center

July 22, 2015

Additions and Renovations

Estimated Costs in 2016 Dollars

Exclusions:

1. Any work in existing exercise/handball court area
2. Any exterior work (ramp, steps, etc.) associated with that area
3. The two storage rooms north of the existing gym
4. Any work associated with the water features/equipment, including fees
5. Loose furnishings/equipment and soft costs unless noted

If phased, phased construction would suggest a new electrical service capable of back-feeding the existing facility and any future additions and possibly separate mechanical/HVAC systems [rooftop or separate mechanical rooms (?)] for each major addition. No new mechanical rooms are indicated on the schematic plans since system types have not been determined for the project. Electrical service upgrade and some fire alarm/control work would logically be accomplished with the first major Phase.

Phasing obviously increases the total cost for several reasons including multiple mobilization costs, the cost of adding to now existing structures, potentially separate mechanical/HVAC systems and the cost of inflation based on the time between phases and final completion.

The costs indicated below break the project into a few parts/possible phases:

1. Renovate/remodel administrative area (original arts/crafts area)	$	620,160
2. Atrium/ Activities area/ Gym and associated areas (two levels)	$	9,632,720
3. Multi-purpose	$	1,422,740
	$	11,675,620
Estimated A/E fees	$	934,050
	$	12,609,670

Above estimate would assume constructed as a single project with a 2016 construction start.

If the second floor (track, exercise, toilets, etc.) over the gym was eliminated and first floor directly below was utilized as a track (seating could be partially retracted when track was in use), cost could be reduced by +/- $2,450,000.

Additional budget items for consideration:

Exercise, corridor, toilets area	$	1,505,510
A/E Fees	$	120,440
Upgrade electrical service, fire alarm, control systems	$	500,000
Site work	$	85,000
FF & E	$	340,000
Site survey/soils investigation	$	28,000
Contingency	$	630,500

Phasing could occur in nearly any order and/or combination of the parts listed above. For budgeting purposes future Phases should assume adding 10%/year compounded to cover additional phasing costs indicated above.

A possible phasing example assuming three Phases with one year between first and second phase construction starts and two years between subsequent phases follows. It has no purpose except to indicate the impact that phasing/extended time can have.

Phase 1 – item 1 above
Phase 2 – item 2 above
Phase 3 – item 3 above

Phase 1—2016 construction start		
Construction cost	$	620,160
Estimated A/E fees	$	49,600
	$	669,760
Phase 2 – 2017 construction start		
Construction cost (add 10%/year for cost items indicated above)	$	10,595,990
Service upgrades (Electrical service, fire alarm, control systems)	$	500,000
Estimated A/E fees	$	847,680
	$	11,943,670
Phase 3 – 2019 construction start		
Construction cost (add 10%/year for cost items indicated above)	$	1,893,670
Estimated A/E fees	$	151,500
	$	2,045,170

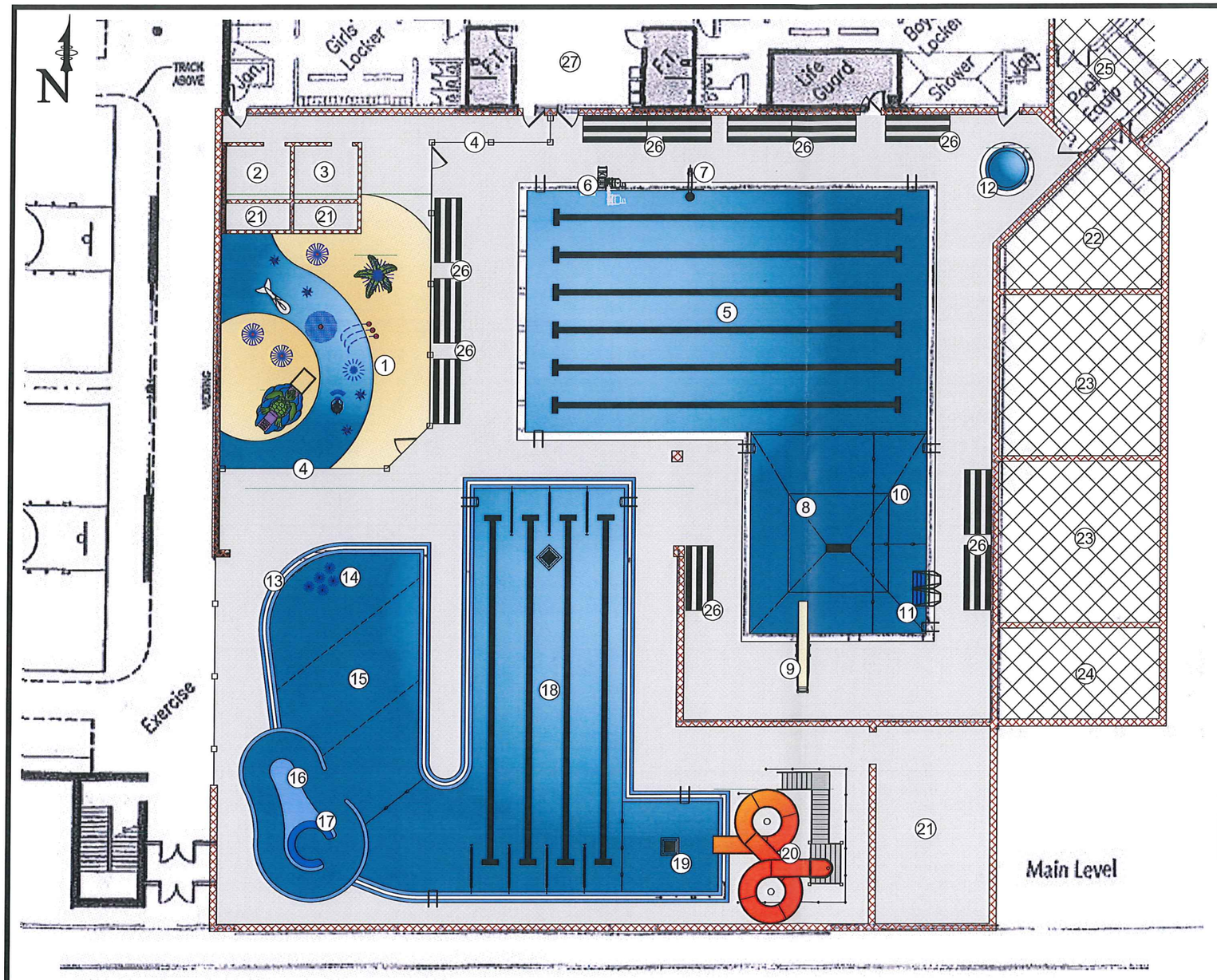
Total cost for this phasing example	$	14,658,600

The above figures represent preliminary budget numbers based on limited information and many assumptions and should be considered as such.

Please call me at my office if you have any questions.

Sincerely,
FEH DESIGN

Ron Speckmann, AIA
Vice President



Layout A

Existing Lap Pool	4,616	S.F.
Recreational Pool	4,263	S.F.
Total Water Surface Area	8,879	S.F.
Splashpad Area	1,682	S.F.
Total Concrete Surface Area	9,641	S.F.

1. Sprayground
2. Steam Room
3. Sauna Room
4. Glass Curtain Wall
5. Existing (6) Lane 25 Yard Lap Area
6. ADA Lift
7. Basketball Goal
8. Diving Area
9. 1 Meter Diving Board
10. Deep Swim Area
11. Climbing Wall
12. Spa
13. Zero Depth Entry
14. Underwater Bubblers
15. Shallow Play Area
16. Current Channel
17. Therapy Water Seat
18. (4) Lane 25 Yard Lap Area
19. Plunge Area
20. Open Flume Slide
21. Mechanical Room
22. Data Room
23. Classroom
24. Office
25. Existing Mechanical Room
26. Bleachers
27. Existing YMCA Facility

Carroll IA
Indoor Addition
02-23-2016

waters edge AQUATIC DESIGN
11205 W. 79th St.
Lenexa, KS 66214
t. 913.438.4338
www.WeDesignPools.com

Copyright 2015

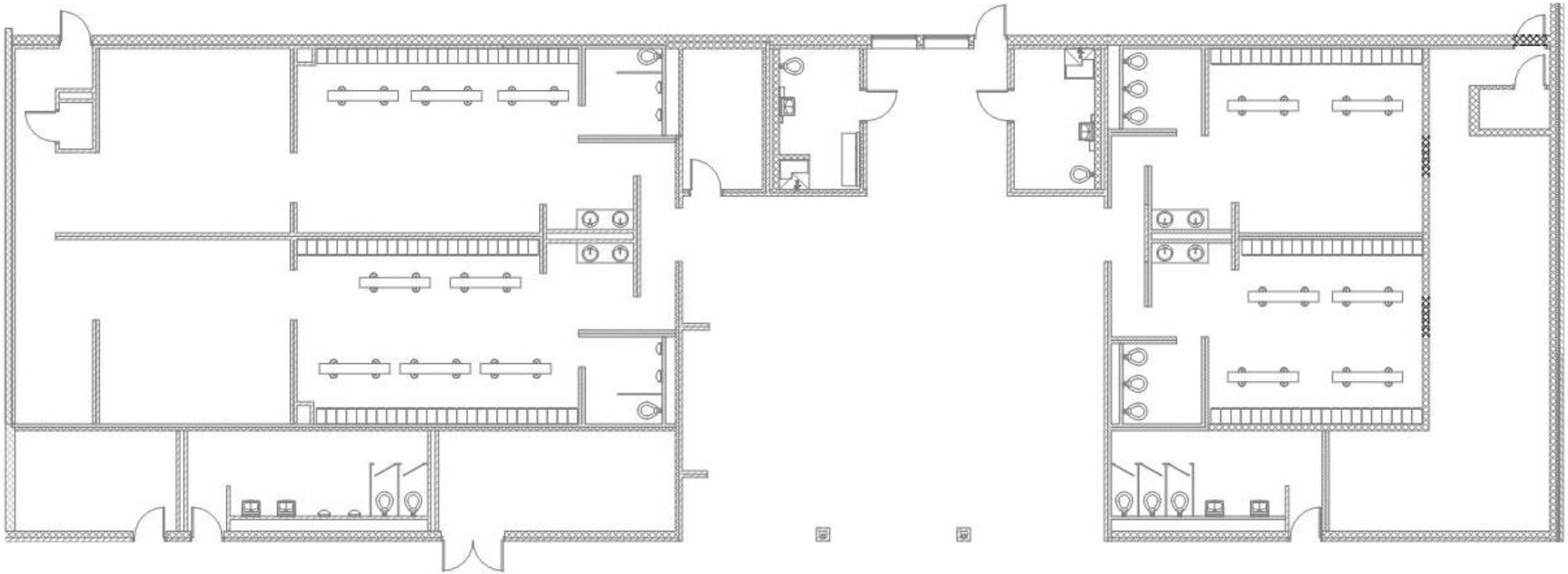
Opinion of Preliminary Costs - Layout A

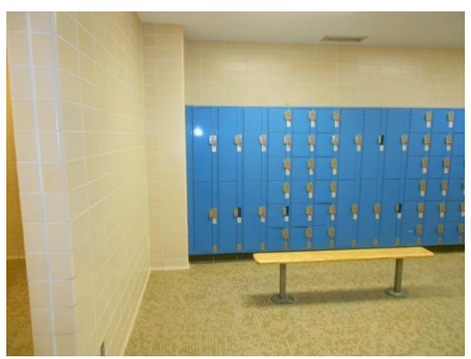
04/06/2016

Carroll Community Center Pool Improvements

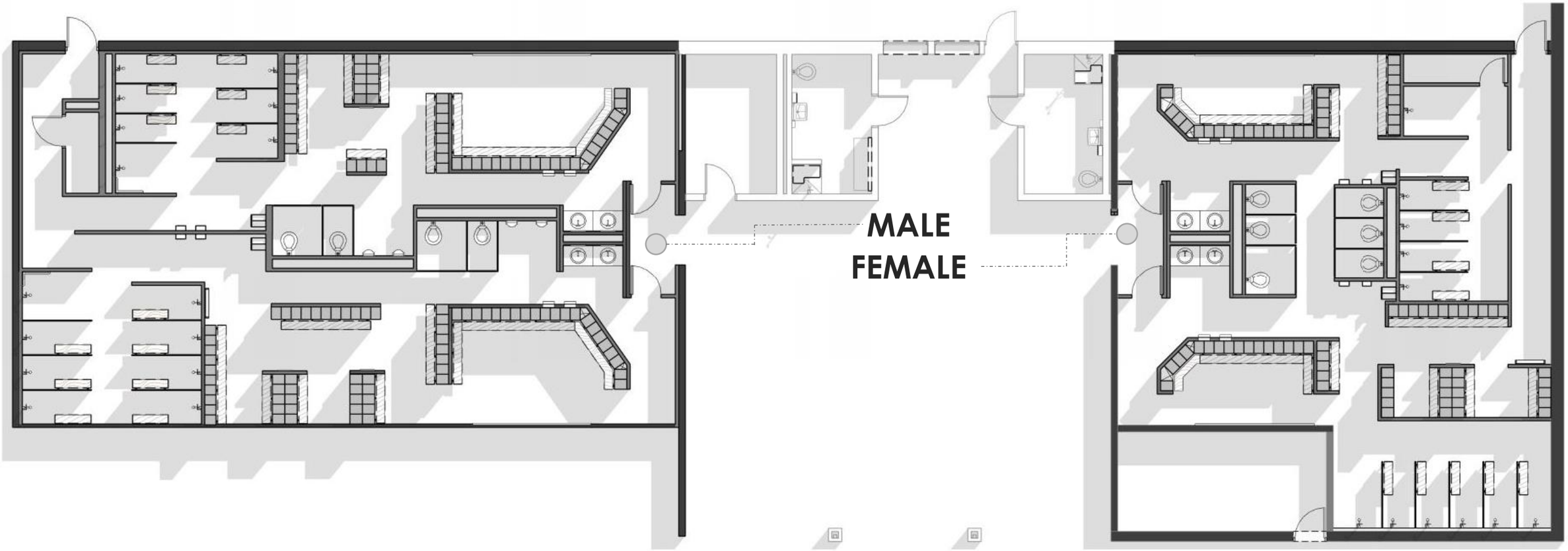
Items	Quant.	Unit	Unit $	Constr. Cost $
1 Sitework				
Excavation	400	cy	30	12,000
Structural Fill	200	cy	45	9,000
Granular Fill	200	cy	60	12,000
Site Utilities	1	l.s	10,000	10,000
Pool Deck	6,600	s.f.	8	52,800
Demolition	3,000	s.f.	15	45,000
				140,800
2 Swimming Pool Construction				
New Pool	4,263	s.f.	200	852,600
Spray Pad	1,500	s.f.	100	150,000
Water slide	1	l.s.	150,000	150,000
BB goal and ADA lift	1	ls	10,000	10,000
Existing pool repairs	1	ls	20,000	20,000
Pool Heater	1	ls	25,000	25,000
				1,207,600
3 Building addition				
Divider wall	1,700	sf	30	51,000
New pool area	8,000	sf	250	2,000,000
Steam and sauna	900	sf	100	90,000
				2,090,000
4 Electrical				
Pool & Buildings Electrical	9,200	sf	16	147,200
Sound system	1	ls	5,000	5,000
				152,200

Construction Subtotal		3,590,600
Contractor's OH&P	15%	538,590
Construction Total		**4,129,190**
Project Costs Budget (Design/ CA, etc..)	10%	412,919
Project Total w/out Contingency		**4,542,109**
Contingency	10%	412,919
Project Total with Contingency		**4,955,028**





Existing Floorplan & Finishes : Locker Rooms



LOCKER COUNT: **MALE**

MEN → Double Tier (140)
BOYS→ Double Tier (106)
TOTAL: 246 Lockers

LOCKER COUNT: **FEMALE**

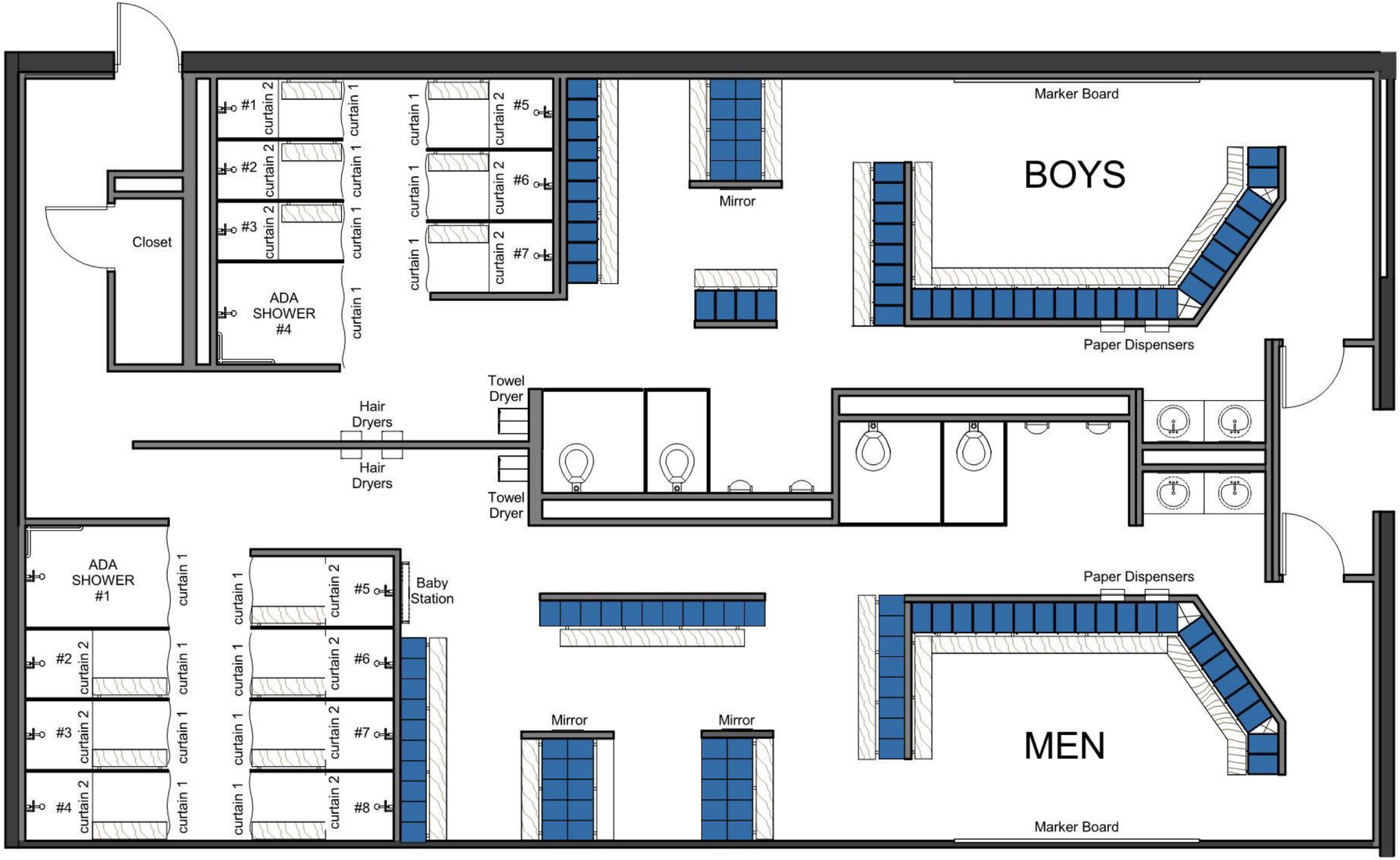
WOMEN → Double Tier (106)
GIRLS→ Double Tier (58)
TOTAL: 164 Lockers

N

Proposed Floorplan: Locker Rooms

LABELS

- 4 Sinks
- 4 Urinals
- 4 Toilets
- 4 Paper Dispensers
- 2 Marker Boards
- 7 Mirrors
- 2 Towel Dryers
- 4 Hair Dyers
- 1 Baby Station

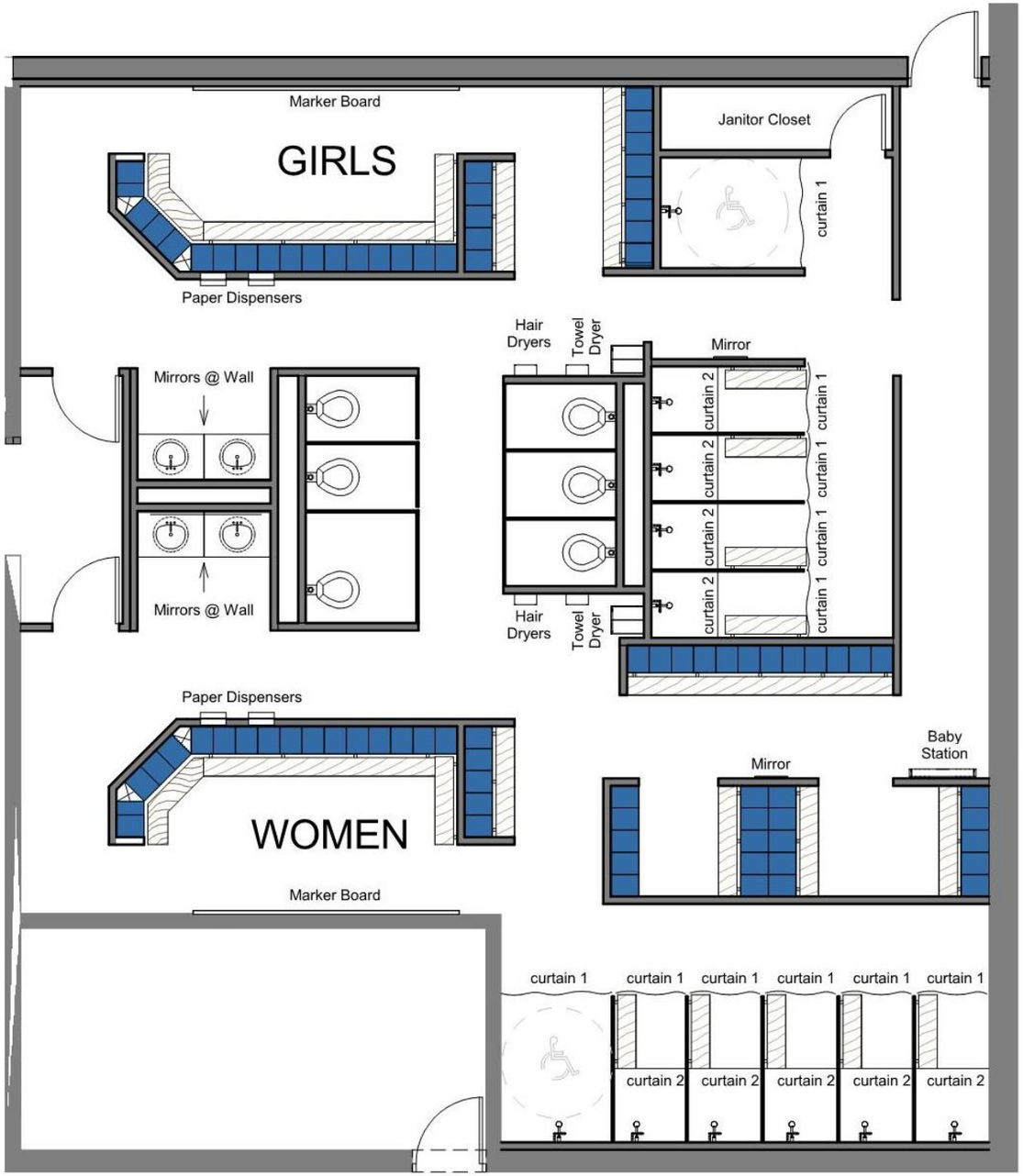


PROPOSED PLAN: Men & Boy's Locker room

LABELS

- 4 Sinks
- 6 Toilets
- 4 Paper Dispensers
- 2 Marker Boards
- 6 Mirrors
- 2 Towel Dryers
- 4 Hair Dyers
- 1 Baby Station

N



PROPOSED PLAN: Women & Girl's Locker room

City of Carroll, Iowa

REVISED
GO Bonding Scenarios

PFM Financial Advisors LLC
801 Grand Avenue, Suite 3300
Des Moines, IA 50309

Susanne Gerlach
(515) 724-5734
E-mail: gerlachs@pfm.com

March 9, 2017

REVISED Summary of Bond Options

Scenario	Year Issued	Par Amount of Bonds	Construction Proceeds	Total Interest	Total Debt Service	Maximum Tax Rate	Est Annual Tax Impact City Resident
Scenario 2 (Revised)	2018 Issuance	$ 8,665,000	$ 8,505,000	$ 3,996,287	$ 12,661,287		
	2021 Issuance	$ 7,750,000	$ 7,600,000	$ 3,980,787	$ 11,730,787		
	Total	**$ 16,415,000**	**$ 16,105,000**	**$ 7,977,074**	**$ 24,392,074**	**$1.81**	**$ 37.72**
Scenario 3 (Revised)	**2018 Issuance**	**$ 14,615,000**	**$ 14,380,000**	**$ 7,877,995**	**$ 22,492,995**	**$1.81**	**$ 37.72**
Scenario 2a (Revised)	2018 Issuance	$ 8,665,000	$ 8,505,000	$ 1,350,262	$ 10,015,262		
	2021 Issuance	$ 7,750,000	$ 7,600,000	$ 1,896,570	$ 9,646,570		
	Total	**$ 16,415,000**	**$ 16,105,000**	**$ 3,246,832**	**$ 19,661,832**	**$2.91**	**$ 116.01**
Scenario 3a (Revised)	**2018 Issuance**	**$ 14,615,000**	**$ 14,380,000**	**$ 2,966,014**	**$ 17,581,014**	**$3.36**	**$ 148.04**
Scenario 4c	2018 Issuance	$ 7,650,000	$ 7,500,000	$ 3,914,745	$ 11,564,745		$ -
	2021 Issuance	$ 5,115,000	$ 5,000,000	$ 3,244,020	$ 8,359,020		$ -
	Total	**$ 12,765,000**	**$ 12,500,000**	**$ 7,158,765**	**$ 19,923,765**	**$1.28**	**$ -**

Scenario 2 (Revised):
Proposed 2018 & 2021 GO Bonds

© PFM

CITY OF CARROLL, IOWA

Projection of Debt Service Levy & Tax Rate Impact

EXHIBIT 1b

Scenario 2 - GO Bonds Issued in 2018 & 2021

TAX RATE IMPACT	
Fiscal Year 16-17	($0.00)
Fiscal Year 17-18	($0.01)
Fiscal Year 18-19	$0.54
Fiscal Year 18-19	($0.01)

FY18 Pre-Levy => *$ 209,778*

FY18 CIP

Fiscal Year Payable	Total Tax Valuation	Tax Rate Per $1,000	Current Taxes Levied	LOST Revenues	Abatements: (1) 2006 Ashwood TIF	Abatements: 2008 Assisted Living TIF	Other Sources	TOTAL Resources	Outstanding Debt Issues: TIF Series 2006	TIF/Taxes Series 2008	Series 2010A/13	Ref & Streets Series 2014	Advance Ref 2008 Series 2015A	GO Series 2016A	GO Series 2016B	Proposed GO Series 2017	Proposed GO Series 2018	Proposed GO Series 2021	Fiscal Fees	Other Uses	TOTAL Uses	Surplus (Deficit)	Ending Balance
2013 - 2014	436,313,737	1.31482	573,673	375,661 *	31,660	53,413	84,224	1,118,631	54,938	385,518	580,107								2,000	27,033	1,049,595	69,035	125,773
2014 - 2015	509,745,241	1.31502	670,325	346,694 *	35,439	56,838	16,285	1,125,581	2,922	231,068	428,205	509,710							1,500	(1,747,680)	(574,275)	1,699,856	1,825,629
2015 - 2016	505,407,544	1.28846	651,197	399,730 *	34,318		35,328	1,120,573	0	170,953	236,293	308,848	0	386,070					2,500	1,746,128	2,850,790	(1,730,217)	95,412
2016 - 2017	507,314,135	1.28762	653,228	352,736 *	28,800		30,616	1,065,380	0			312,170	179,990	268,933	298,745				2,500		1,062,337	3,043	98,455
2017 - 2018	515,496,419	1.28237	661,056	379,255 *	31,705		27,508	1,099,524	0				283,828	262,210	340,058	210,429			3,000		1,099,524		98,455
2018 - 2019	510,558,300	1.81766	928,024	374,184 *	29,500			1,331,708	0				281,228		292,223	109,433	647,325		1,500		1,331,708		98,455
2019 - 2020	518,636,606	1.81025	938,862	374,184 *	29,500			1,342,546	0				282,978		294,523	112,354	651,192		1,500		1,342,546		98,455
2020 - 2021	512,920,731	1.81695	931,950	374,184 *	29,500			1,335,634	0				284,400		291,498		758,236		1,500		1,335,634		98,455
2021 - 2022	520,343,245	1.81716	945,547	374,184 *	29,500			1,349,230					290,080		298,060		476,725	282,866	1,500		1,349,230		98,455
2022 - 2023	503,680,510	1.81633	914,852	374,184 *	29,500			1,318,536					285,180		299,070		321,711	411,075	1,500		1,318,536		98,455
2023 - 2024	499,139,414	1.81655	906,710	374,184 *	29,500			1,310,394							299,720		575,689	433,485	1,500		1,310,394		98,455
2024 - 2025	499,139,414	1.81105	903,967	374,184 *	29,500			1,307,651									661,641	645,010	1,000		1,307,651		98,455
2025 - 2026	499,139,414	1.81537	906,121	374,184 *	29,500			1,309,805									663,859	644,946	1,000		1,309,805		98,455
2026 - 2027	499,139,414	1.81526	906,066	374,184 *	29,500			1,309,750									659,899	648,851	1,000		1,309,750		98,455
2027 - 2028	499,139,414	1.80988	903,382	374,184 *	0			1,277,566									660,016	616,550	1,000		1,277,566		98,455
2028 - 2029	499,139,414	1.81355	905,213	374,184 *				1,279,397									659,164	619,234	1,000		1,279,397		98,455
2029 - 2030	499,139,414	1.81309	904,985	374,184 *				1,279,169									657,400	620,770	1,000		1,279,169		98,455
2030 - 2031	499,139,414	1.81860	907,736	374,184 *				1,281,920									659,700	621,220	1,000		1,281,920		98,455
2031 - 2032	499,139,414	1.81984	908,356	374,184 *				1,282,540									660,843	620,698	1,000		1,282,540		98,455
2032 - 2033	499,139,414	1.80684	901,866	374,184 *				1,276,050									655,795	619,255	1,000		1,276,050		98,455
2033 - 2034	499,139,414	1.80994	903,415	374,184 *				1,277,599									659,732	616,867	1,000		1,277,599		98,455
2034 - 2035	499,139,414	1.80839	902,641	374,184 *				1,276,825									657,316	618,510	1,000		1,276,825		98,455
2035 - 2036	499,139,414	1.81210	904,489	374,184 *				1,278,673									658,728	618,945	1,000		1,278,673		98,455
2036 - 2037	499,139,414	1.81060	903,744	374,184 *				1,277,928									658,788	618,140	1,000		1,277,928		98,455
2037 - 2038	499,139,414	1.81414	905,509	374,184 *				1,279,693									657,531	621,162	1,000		1,279,693		98,455
2038 - 2039	499,139,414	0.48900	244,078	374,184 *				618,262										617,762	500		618,262		98,455
2039 - 2040	499,139,414	0.48986	244,508	374,184 *				618,692										618,192	500		618,692		98,455
2040 - 2041	499,139,414	0.48799	243,574	374,184 *				617,758										617,258	500		617,758		98,455

City of Carroll, Iowa

EXHIBIT 2b

Projection of G.O. Debt Capacity

Scenario 2 - GO Bonds Issued in 2018 & 2021

Valuation Growth & Debt Limit Assumptions	
Legal Debt Limit	5.00%
Effective Limit	4.00%

Beginning of Fiscal Year	Actual Valuation	Historical Valuation Growth	Gross Debt Limit	Effective Debt Limit	DEBT ISSUES SUBJECT TO DEBT LIMIT * G.O. - TAXES -	G.O. - TIF -	Sales Tax Bonds	Proposed Series 2017	Proposed Series 2018 (FY18 CIP)	Proposed Series 2021	TOTAL G.O. DEBT OUTST'NDG	Available Effective Capacity	Percent /Debt Gross Debt Limit	Beginning of Fiscal Year
2011 - 2012	632,429,951	1.89%	31,621,498	25,297,198	4,235,000	945,000	1,650,000				6,830,000	18,467,198	21.60%	2011
2012 - 2013	648,166,368	2.49%	32,408,318	25,926,655	3,520,000	655,000	1,110,000				5,285,000	20,641,655	16.31%	2012
2013 - 2014	654,646,146	1.00%	32,732,307	26,185,846	3,400,000	455,000	560,000				4,415,000	21,770,846	13.49%	2013
2014 - 2015	752,235,898	14.91%	37,611,795	30,089,436	3,750,000	55,000					3,805,000	26,284,436	10.12%	2014
2015 - 2016	757,631,838	0.72%	37,881,592	30,305,274	3,630,000						3,630,000	26,675,274	9.58%	2015
2016 - 2017	775,612,596	2.37%	38,780,630	31,024,504	4,895,000						4,895,000	26,129,504	12.62%	2016
2017 - 2018	781,063,284	0.70%	39,053,164	31,242,531	3,880,000			420,000			4,300,000	26,942,531	11.01%	2017
2018 - 2019	784,600,798	0.45%	39,230,040	31,384,032	3,045,000			215,000	8,665,000		11,925,000	19,459,032	30.40%	2018
2019 - 2020	788,155,999	0.45%	39,407,800	31,526,240	2,515,000			110,000	8,205,000		10,830,000	20,696,240	27.48%	2019
2020 - 2021	791,728,977	0.45%	39,586,449	31,669,159	1,975,000				7,865,000		9,840,000	21,829,159	24.86%	2020
2021 - 2022	795,319,819	0.45%	39,765,991	31,812,793	1,430,000				7,410,000	7,750,000	16,590,000	15,222,793	41.72%	2021
2022 - 2023	798,928,616	0.45%	39,946,431	31,957,145	865,000				7,225,000	7,650,000	15,740,000	16,217,145	39.40%	2022
2023 - 2024	802,555,456	0.45%	40,127,773	32,102,218	295,000				7,190,000	7,550,000	15,035,000	17,067,218	37.47%	2023
2024 - 2025	802,555,456		40,127,773	32,102,218					6,900,000	7,425,000	14,325,000	17,777,218	35.70%	2024
2025 - 2026	802,555,456		40,127,773	32,102,218					6,515,000	7,085,000	13,600,000	18,502,218	33.89%	2025
2026 - 2027	802,555,456		40,127,773	32,102,218					6,115,000	6,735,000	12,850,000	19,252,218	32.02%	2026
2027 - 2028	802,555,456		40,127,773	32,102,218					5,705,000	6,370,000	12,075,000	20,027,218	30.09%	2027
2028 - 2029	802,555,456		40,127,773	32,102,218					5,280,000	6,025,000	11,305,000	20,797,218	28.17%	2028
2029 - 2030	802,555,456		40,127,773	32,102,218					4,840,000	5,665,000	10,505,000	21,597,218	26.18%	2029
2030 - 2031	802,555,456		40,127,773	32,102,218					4,385,000	5,290,000	9,675,000	22,427,218	24.11%	2030
2031 - 2032	802,555,456		40,127,773	32,102,218					3,910,000	4,900,000	8,810,000	23,292,218	21.95%	2031
2032 - 2033	802,555,456		40,127,773	32,102,218					3,415,000	4,495,000	7,910,000	24,192,218	19.71%	2032
2033 - 2034	802,555,456		40,127,773	32,102,218					2,905,000	4,075,000	6,980,000	25,122,218	17.39%	2033
2034 - 2035	802,555,456		40,127,773	32,102,218					2,370,000	3,640,000	6,010,000	26,092,218	14.98%	2034
2035 - 2036	802,555,456		40,127,773	32,102,218					1,815,000	3,185,000	5,000,000	27,102,218	12.46%	2035
2036 - 2037	802,555,456		40,127,773	32,102,218					1,235,000	2,710,000	3,945,000	28,157,218	9.83%	2036
2037 - 2038	802,555,456		40,127,773	32,102,218					630,000	2,215,000	2,845,000	29,257,218	7.09%	2037
2038 - 2039	802,555,456		40,127,773	32,102,218						1,695,000	1,695,000	30,407,218	4.22%	2038
2039 - 2040	802,555,456		40,127,773	32,102,218						1,155,000	1,155,000	30,947,218	2.88%	2039
2040 - 2041	802,555,456		40,127,773	32,102,218						590,000	590,000	31,512,218	1.47%	2040

*** - Represents G.O. principal outstanding as of the BEGINNING of the fiscal year.**
**** - Project is subject to voter approval.**

City of Carroll, Iowa

EXHIBIT 3b

Proposed G. O. Capital Loan Notes, Series 2018

Scenario 2 - GO Bonds Issued in 2018 & 2021

SOURCES & USES

SOURCES	
Par Amount of Bonds	8,665,000.00
Accrued Interest	
Premium	

Total Sources	8,665,000.00
USES	
Deposit to Construction Account	8,505,000.00
Deposit to Reserve Account	
Capitalized Interest Account	0.00
Municipal Bond Insurance	
Underwriters' Discount ($12.50 per bond)	108,312.50
Costs of Issuance	48,000.00
Accrued Interest	
Rounding Amount	3,687.50

Total Uses	8,665,000.00
ASSUMPTIONS	
Dated Date	11/1/2018
Delivery Date	11/1/2018
First Interest Date	6/1/2019
First Principal Date	6/1/2019
Last Principal Date	6/1/2038

Arbitrage Yield	4.00636%	
TIC	4.15102%	
AIC	4.21599%	
Average Life	11.42	Years

Estimated Annual Tax Impact for City Resident	
Average 100% Value for Homes	$125,000
FY 2017-18 Residential Rollback %	56.9391%
Average Taxable Value for Homes	$71,174
Maximum Debt Service Levy Increase	$0.53
Estimated Annual Tax Impact:	**$37.72**

DEBT SERVICE SCHEDULE

	Date	Principal	Coupon	Interest	Debt Service	Annual Debt Service
0.58	6/1/2019	460,000	2.160%	187,325	647,325	647,325
	12/1/2019			155,596	155,596	
1.58	6/1/2020	340,000	2.340%	155,596	495,596	651,192
	12/1/2020			151,618	151,618	
2.58	6/1/2021	455,000	2.530%	151,618	606,618	758,236
	12/1/2021			145,862	145,862	
3.58	6/1/2022	185,000	2.710%	145,862	330,862	476,725
	12/1/2022			143,356	143,356	
4.58	6/1/2023	35,000	2.920%	143,356	178,356	321,711
	12/1/2023			142,845	142,845	
5.58	6/1/2024	290,000	3.120%	142,845	432,845	575,689
	12/1/2024			138,321	138,321	
6.58	6/1/2025	385,000	3.320%	138,321	523,321	661,641
	12/1/2025			131,930	131,930	
7.58	6/1/2026	400,000	3.490%	131,930	531,930	663,859
	12/1/2026			124,950	124,950	
8.58	6/1/2027	410,000	3.630%	124,950	534,950	659,899
	12/1/2027			117,508	117,508	
9.58	6/1/2028	425,000	3.730%	117,508	542,508	660,016
	12/1/2028			109,582	109,582	
10.58	6/1/2029	440,000	3.810%	109,582	549,582	659,164
	12/1/2029			101,200	101,200	
11.58	6/1/2030	455,000	3.890%	101,200	556,200	657,400
	12/1/2030			92,350	92,350	
12.58	6/1/2031	475,000	3.970%	92,350	567,350	659,700
	12/1/2031			82,921	82,921	
13.58	6/1/2032	495,000	4.050%	82,921	577,921	660,843
	12/1/2032			72,898	72,898	
14.58	6/1/2033	510,000	4.130%	72,898	582,898	655,795
	12/1/2033			62,366	62,366	
15.58	6/1/2034	535,000	4.190%	62,366	597,366	659,732
	12/1/2034			51,158	51,158	
16.58	6/1/2035	555,000	4.250%	51,158	606,158	657,316
	12/1/2035			39,364	39,364	
17.58	6/1/2036	580,000	4.300%	39,364	619,364	658,728
	12/1/2036			26,894	26,894	
18.58	6/1/2037	605,000	4.340%	26,894	631,894	658,788
	12/1/2037			13,766	13,766	
19.58	6/1/2038	630,000	4.370%	13,766	643,766	657,531
	12/1/2038					
		8,665,000		3,996,287	12,661,287	12,661,287

Scale : MMD as of 2-15-2017 + 30 bps for credit (Aa2/BQ) + 100 bps timing.

City of Carroll, Iowa

Proposed G. O. Capital Loan Notes, Series 2021

EXHIBIT 4b

Scenario 2 - GO Bonds Issued in 2018 & 2021

SOURCES & USES

SOURCES	
Par Amount of Notes	7,750,000.00
Accrued Interest	
Premium	
Total Sources	7,750,000.00
USES	
Deposit to Construction Account	7,600,000.00
Deposit to Reserve Account	
Capitalized Interest Account	(0.00)
Municipal Bond Insurance	0.00
Underwriters' Discount ($12.50 per bond)	96,875.00
Costs of Issuance	51,000.00
Accrued Interest	
Rounding Amount	2,125.00
Total Uses	7,750,000.00
ASSUMPTIONS	
Dated Date	11/1/2021
Delivery Date	11/1/2021
First Interest Date	6/1/2022
First Principal Date	6/1/2022
Last Principal Date	6/1/2041

Yield Calculations:

Arbitrage Yield	4.24836%
TIC	4.38801%
AIC	4.46253%
Average Life	12.00 Years

Estimated Annual Tax Impact for City Resident	
Average 100% Value for Homes	$125,000
FY 2017-18 Residential Rollback %	56.9391%
Average Taxable Value for Homes	$71,174
Maximum Debt Service Levy Increase	
Estimated Annual Tax Impact:	

DEBT SERVICE SCHEDULE

	Date	Principal	Coupon	Interest	Debt Service	Annual Debt Service
0.58	6/1/2022	100,000	2.410%	182,866	282,866	282,866
	12/1/2022			155,537	155,537	
1.58	6/1/2023	100,000	2.590%	155,537	255,537	411,075
	12/1/2023			154,242	154,242	
2.58	6/1/2024	125,000	2.780%	154,242	279,242	433,485
	12/1/2024			152,505	152,505	
3.58	6/1/2025	340,000	2.960%	152,505	492,505	645,010
	12/1/2025			147,473	147,473	
4.58	6/1/2026	350,000	3.170%	147,473	497,473	644,946
	12/1/2026			141,925	141,925	
5.58	6/1/2027	365,000	3.370%	141,925	506,925	648,851
	12/1/2027			135,775	135,775	
6.58	6/1/2028	345,000	3.570%	135,775	480,775	616,550
	12/1/2028			129,617	129,617	
7.58	6/1/2029	360,000	3.740%	129,617	489,617	619,234
	12/1/2029			122,885	122,885	
8.58	6/1/2030	375,000	3.880%	122,885	497,885	620,770
	12/1/2030			115,610	115,610	
9.58	6/1/2031	390,000	3.980%	115,610	505,610	621,220
	12/1/2031			107,849	107,849	
10.58	6/1/2032	405,000	4.060%	107,849	512,849	620,698
	12/1/2032			99,627	99,627	
11.58	6/1/2033	420,000	4.140%	99,627	519,627	619,255
	12/1/2033			90,933	90,933	
12.58	6/1/2034	435,000	4.220%	90,933	525,933	616,867
	12/1/2034			81,755	81,755	
13.58	6/1/2035	455,000	4.300%	81,755	536,755	618,510
	12/1/2035			71,972	71,972	
14.58	6/1/2036	475,000	4.380%	71,972	546,972	618,945
	12/1/2036			61,570	61,570	
15.58	6/1/2037	495,000	4.440%	61,570	556,570	618,140
	12/1/2037			50,581	50,581	
16.58	6/1/2038	520,000	4.500%	50,581	570,581	621,162
	12/1/2038			38,881	38,881	
17.58	6/1/2039	540,000	4.550%	38,881	578,881	617,762
	12/1/2039			26,596	26,596	
18.58	6/1/2040	565,000	4.590%	26,596	591,596	618,192
	12/1/2040			13,629	13,629	
19.58	6/1/2041	590,000	4.620%	13,629	603,629	617,258
	12/1/2041					
		7,750,000		3,980,787	11,730,787	11,730,787

Scale : MMD as of 2-15-17 + 30 bps for credit (Aa2/BQ) + 125 bps timing.

Scenario 3 (Revised):
Proposed 2018 GO Bonds for All Projects

© PFM

CITY OF CARROLL, IOWA

Projection of Debt Service Levy & Tax Rate Impact

EXHIBIT 1c

Scenario 3 - GO Bonds for All Projects Issued in 2018

TAX RATE IMPACT	
Fiscal Year 16-17	($0.00)
Fiscal Year 17-18	($0.01)
Fiscal Year 18-19	$0.53
Fiscal Year 18-19	($0.01)

FY18 Pre-Levy => *$ 209,778*

FY18 CIP

Fiscal Year Payable	Total Tax Valuation	Tax Rate Per $1,000	Current Taxes Levied	LOST Revenues	Abatements (1) 2006 Ashwood TIF	Abatements 2008 Assisted Living TIF	Other Sources	TOTAL Resources	Outstanding Debt Issues: TIF Series 2006	TIF/Taxes Series 2008	Series 2010A/13	Ref & Streets Series 2014	Advance Ref 2008 Series 2015A	GO Series 2016A	GO Series 2016B	Proposed GO Series 2017	Proposed GO Series 2018	Fiscal Fees	Other Uses	TOTAL Uses	Surplus (Deficit)	Ending Balance
2013 - 2014	436,313,737	1.31482	573,673	375,661 *	31,660	53,413	84,224	1,118,631	54,938	385,518	580,107							2,000	27,033	1,049,595	69,035	125,773
2014 - 2015	509,745,241	1.31502	670,325	346,694 *	35,439	56,838	16,285	1,125,581	2,922	231,068	428,205	509,710						1,500	(1,747,680)	(574,275)	1,699,856	1,825,629
2015 - 2016	505,407,544	1.28846	651,197	399,730 *	34,318		35,328	1,120,573	0	170,953	236,293	308,848	0	386,070				2,500	1,746,128	2,850,790	(1,730,217)	95,412
2016 - 2017	507,314,135	1.28762	653,228	352,736 *	28,800		30,616	1,065,380	0			312,170	179,990	268,933	298,745			2,500		1,062,337	3,043	98,455
2017 - 2018	515,496,419	1.28237	661,056	379,255 *	31,705		27,508	1,099,524	0				283,828	262,210	340,058	210,429		3,000		1,099,524		98,455
2018 - 2019	510,558,300	1.81216	925,215	374,184 *	29,500			1,328,899	0				281,228		292,223	109,433	644,516	1,500		1,328,899		98,455
2019 - 2020	518,636,606	1.80538	936,339	374,184 *	29,500			1,340,023	0				282,978		294,523	112,354	648,669	1,500		1,340,023		98,455
2020 - 2021	512,920,731	1.81463	930,764	374,184 *	29,500			1,334,448	0				284,400		291,498		757,050	1,500		1,334,448		98,455
2021 - 2022	520,343,245	1.81287	943,316	374,184 *	29,500			1,347,000					290,080		298,060		757,360	1,500		1,347,000		98,455
2022 - 2023	503,680,510	1.81519	914,278	374,184 *	29,500			1,317,962					285,180		299,070		732,212	1,500		1,317,962		98,455
2023 - 2024	499,139,414	1.80278	899,836	374,184 *	29,500			1,303,520							299,720		1,002,300	1,500		1,303,520		98,455
2024 - 2025	499,139,414	1.81391	905,392	374,184 *	29,500			1,309,076									1,308,076	1,000		1,309,076		98,455
2025 - 2026	499,139,414	1.81150	904,193	374,184 *	29,500			1,307,877									1,306,877	1,000		1,307,877		98,455
2026 - 2027	499,139,414	1.80471	900,801	374,184 *	29,500			1,304,485									1,303,485	1,000		1,304,485		98,455
2027 - 2028	499,139,414	1.81286	904,872	374,184 *	0			1,279,056									1,278,056	1,000		1,279,056		98,455
2028 - 2029	499,139,414	1.81000	903,444	374,184 *				1,277,628									1,276,628	1,000		1,277,628		98,455
2029 - 2030	499,139,414	1.80346	900,180	374,184 *				1,274,364									1,273,364	1,000		1,274,364		98,455
2030 - 2031	499,139,414	1.80317	900,032	374,184 *				1,274,216									1,273,216	1,000		1,274,216		98,455
2031 - 2032	499,139,414	1.80860	902,746	374,184 *				1,276,930									1,275,930	1,000		1,276,930		98,455
2032 - 2033	499,139,414	1.80923	903,056	374,184 *				1,277,240									1,276,240	1,000		1,277,240		98,455
2033 - 2034	499,139,414	1.80490	900,898	374,184 *				1,275,082									1,274,082	1,000		1,275,082		98,455
2034 - 2035	499,139,414	1.80593	901,413	374,184 *				1,275,597									1,274,597	1,000		1,275,597		98,455
2035 - 2036	499,139,414	1.81178	904,333	374,184 *				1,278,517									1,277,517	1,000		1,278,517		98,455
2036 - 2037	499,139,414	1.81210	904,493	374,184 *				1,278,677									1,277,677	1,000		1,278,677		98,455
2037 - 2038	499,139,414	1.80703	901,960	374,184 *				1,276,144									1,275,144	1,000		1,276,144		98,455

City of Carroll, Iowa

EXHIBIT 2c

Projection of G.O. Debt Capacity

Scenario 3 - GO Bonds for All Projects Issued in 2018

Valuation Growth & Debt Limit Assumptions	
Legal Debt Limit	5.00%
Effective Limit	4.00%

Beginning of Fiscal Year	Actual Valuation	Historical Valuation Growth	Gross Debt Limit	Effective Debt Limit	DEBT ISSUES SUBJECT TO DEBT LIMIT * G.O. - TAXES -	G.O. - TIF -	Sales Tax Bonds	Proposed Series 2017	FY18 CIP Proposed Series 2018	TOTAL G.O. DEBT OUTST'NDG	Available Effective Capacity	Percent /Debt Gross Debt Limit	Beginning of Fiscal Year
2011 - 2012	632,429,951	1.89%	31,621,498	25,297,198	4,235,000	945,000	1,650,000			6,830,000	18,467,198	21.60%	2011
2012 - 2013	648,166,368	2.49%	32,408,318	25,926,655	3,520,000	655,000	1,110,000			5,285,000	20,641,655	16.31%	2012
2013 - 2014	654,646,146	1.00%	32,732,307	26,185,846	3,400,000	455,000	560,000			4,415,000	21,770,846	13.49%	2013
2014 - 2015	752,235,898	14.91%	37,611,795	30,089,436	3,750,000	55,000				3,805,000	26,284,436	10.12%	2014
2015 - 2016	757,631,838	0.72%	37,881,592	30,305,274	3,630,000					3,630,000	26,675,274	9.58%	2015
2016 - 2017	775,612,596	2.37%	38,780,630	31,024,504	4,895,000					4,895,000	26,129,504	12.62%	2016
2017 - 2018	781,063,284	0.70%	39,053,164	31,242,531	3,880,000			420,000		4,300,000	26,942,531	11.01%	2017
2018 - 2019	784,600,798	0.45%	39,230,040	31,384,032	3,045,000			215,000	14,615,000	17,875,000	13,509,032	45.56%	2018
2019 - 2020	788,155,999	0.45%	39,407,800	31,526,240	2,515,000			110,000	14,315,000	16,940,000	14,586,240	42.99%	2019
2020 - 2021	791,728,977	0.45%	39,586,449	31,669,159	1,975,000				14,250,000	16,225,000	15,444,159	40.99%	2020
2021 - 2022	795,319,819	0.45%	39,765,991	31,812,793	1,430,000				14,075,000	15,505,000	16,307,793	38.99%	2021
2022 - 2023	798,928,616	0.45%	39,946,431	31,957,145	865,000				13,895,000	14,760,000	17,197,145	36.95%	2022
2023 - 2024	802,555,456	0.45%	40,127,773	32,102,218	295,000				13,735,000	14,030,000	18,072,218	34.96%	2023
2024 - 2025	802,555,456		40,127,773	32,102,218					13,300,000	13,300,000	18,802,218	33.14%	2024
2025 - 2026	802,555,456		40,127,773	32,102,218					12,545,000	12,545,000	19,557,218	31.26%	2025
2026 - 2027	802,555,456		40,127,773	32,102,218					11,765,000	11,765,000	20,337,218	29.32%	2026
2027 - 2028	802,555,456		40,127,773	32,102,218					10,960,000	10,960,000	21,142,218	27.31%	2027
2028 - 2029	802,555,456		40,127,773	32,102,218					10,150,000	10,150,000	21,952,218	25.29%	2028
2029 - 2030	802,555,456		40,127,773	32,102,218					9,310,000	9,310,000	22,792,218	23.20%	2029
2030 - 2031	802,555,456		40,127,773	32,102,218					8,440,000	8,440,000	23,662,218	21.03%	2030
2031 - 2032	802,555,456		40,127,773	32,102,218					7,535,000	7,535,000	24,567,218	18.78%	2031
2032 - 2033	802,555,456		40,127,773	32,102,218					6,590,000	6,590,000	25,512,218	16.42%	2032
2033 - 2034	802,555,456		40,127,773	32,102,218					5,605,000	5,605,000	26,497,218	13.97%	2033
2034 - 2035	802,555,456		40,127,773	32,102,218					4,580,000	4,580,000	27,522,218	11.41%	2034
2035 - 2036	802,555,456		40,127,773	32,102,218					3,510,000	3,510,000	28,592,218	8.75%	2035
2036 - 2037	802,555,456		40,127,773	32,102,218					2,390,000	2,390,000	29,712,218	5.96%	2036
2037 - 2038	802,555,456		40,127,773	32,102,218					1,220,000	1,220,000	30,882,218	3.04%	2037
2038 - 2039	802,555,456		40,127,773	32,102,218							32,102,218		2038
2039 - 2040	802,555,456		40,127,773	32,102,218							32,102,218		2039
2040 - 2041	802,555,456		40,127,773	32,102,218							32,102,218		2040

*** - Represents G.O. principal outstanding as of the BEGINNING of the fiscal year.**
**** - Project is subject to voter approval.**

City of Carroll, Iowa

EXHIBIT 3c

Proposed G. O. Capital Loan Notes, Series 2018

Scenario 3 - GO Bonds for All Projects Issued in 2018

SOURCES & USES

SOURCES	
Par Amount of Bonds	14,615,000.00
Accrued Interest	
Premium	

Total Sources	14,615,000.00
USES	
Deposit to Construction Account	14,380,000.00
Deposit to Reserve Account	
Capitalized Interest Account	0.00
Municipal Bond Insurance	
Underwriters' Discount ($12.50 per bond)	182,687.50
Costs of Issuance	48,000.00
Accrued Interest	
Rounding Amount	4,312.50

Total Uses	14,615,000.00
ASSUMPTIONS	
Dated Date	11/1/2018
Delivery Date	11/1/2018
First Interest Date	6/1/2019
First Principal Date	6/1/2019
Last Principal Date	6/1/2038

Arbitrage Yield	4.19424%
TIC	4.32601%
AIC	4.36101%
Average Life	12.77 Years

Estimated Annual Tax Impact for City Resident	
Average 100% Value for Homes	$125,000
FY 2017-18 Residential Rollback %	56.9391%
Average Taxable Value for Homes	$71,174
Maximum Debt Service Levy Increase	$0.53
Estimated Annual Tax Impact:	**$37.72**

DEBT SERVICE SCHEDULE

	Date	Principal	Coupon	Interest	Debt Service	Annual Debt Service
0.58	6/1/2019	300,000	2.310%	344,516	644,516	644,516
	12/1/2019			291,834	291,834	
1.58	6/1/2020	65,000	2.490%	291,834	356,834	648,669
	12/1/2020			291,025	291,025	
2.58	6/1/2021	175,000	2.680%	291,025	466,025	757,050
	12/1/2021			288,680	288,680	
3.58	6/1/2022	180,000	2.860%	288,680	468,680	757,360
	12/1/2022			286,106	286,106	
4.58	6/1/2023	160,000	3.070%	286,106	446,106	732,212
	12/1/2023			283,650	283,650	
5.58	6/1/2024	435,000	3.270%	283,650	718,650	1,002,300
	12/1/2024			276,538	276,538	
6.58	6/1/2025	755,000	3.470%	276,538	1,031,538	1,308,076
	12/1/2025			263,439	263,439	
7.58	6/1/2026	780,000	3.640%	263,439	1,043,439	1,306,877
	12/1/2026			249,243	249,243	
8.58	6/1/2027	805,000	3.780%	249,243	1,054,243	1,303,485
	12/1/2027			234,028	234,028	
9.58	6/1/2028	810,000	3.880%	234,028	1,044,028	1,278,056
	12/1/2028			218,314	218,314	
10.58	6/1/2029	840,000	3.960%	218,314	1,058,314	1,276,628
	12/1/2029			201,682	201,682	
11.58	6/1/2030	870,000	4.040%	201,682	1,071,682	1,273,364
	12/1/2030			184,108	184,108	
12.58	6/1/2031	905,000	4.120%	184,108	1,089,108	1,273,216
	12/1/2031			165,465	165,465	
13.58	6/1/2032	945,000	4.200%	165,465	1,110,465	1,275,930
	12/1/2032			145,620	145,620	
14.58	6/1/2033	985,000	4.280%	145,620	1,130,620	1,276,240
	12/1/2033			124,541	124,541	
15.58	6/1/2034	1,025,000	4.340%	124,541	1,149,541	1,274,082
	12/1/2034			102,299	102,299	
16.58	6/1/2035	1,070,000	4.400%	102,299	1,172,299	1,274,597
	12/1/2035			78,759	78,759	
17.58	6/1/2036	1,120,000	4.450%	78,759	1,198,759	1,277,517
	12/1/2036			53,839	53,839	
18.58	6/1/2037	1,170,000	4.490%	53,839	1,223,839	1,277,677
	12/1/2037			27,572	27,572	
19.58	6/1/2038	1,220,000	4.520%	27,572	1,247,572	1,275,144
	12/1/2038					
		14,615,000		7,877,995	22,492,995	22,492,995

Scale : MMD as of 2-15-2017 + 45 bps for credit (Aa2/NonBQ) + 100 bps timing.

Scenario 2a (Revised): *10 Year Bonds*
Proposed 2018 & 2021 GO Bonds

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CITY OF CARROLL, IOWA

Projection of Debt Service Levy & Tax Rate Impact

EXHIBIT 1

Scenario 2a - GO Bonds Issued in 2018 & 2021
10 Year Bonds

TAX RATE IMPACT	
Fiscal Year 16-17	($0.00)
Fiscal Year 17-18	($0.01)
Fiscal Year 18-19	$1.63
Fiscal Year 18-19	$0.00

FY18 Pre-Levy => *$ 209,778*
FY18 CIP

Fiscal Year Payable	Total Tax Valuation	Tax Rate Per $1,000	Current Taxes Levied	LOST Revenues	Abatements (1) 2006 Ashwood TIF	Abatements 2008 Assisted Living TIF	Other Sources	TOTAL Resources	Outstanding Debt Issues: TIF Series 2006	TIF/Taxes Series 2008	Series 2010A/13	Ref & Streets Series 2014	Advance Ref 2008 Series 2015A	GO Series 2016A	GO Series 2016B	Proposed GO Series 2017	Proposed GO Series 2018	Proposed GO Series 2021	Fiscal Fees	Other Uses	TOTAL Uses	Surplus (Deficit)	Ending Balance
2013 - 2014	436,313,737	1.31482	573,673	375,661 *	31,660	53,413	84,224	1,118,631	54,938	385,518	580,107								2,000	27,033	1,049,595	69,035	125,773
2014 - 2015	509,745,241	1.31502	670,325	346,694 *	35,439	56,838	16,285	1,125,581	2,922	231,068	428,205	509,710							1,500	(1,747,680)	(574,275)	1,699,856	1,825,629
2015 - 2016	505,407,544	1.28846	651,197	399,730 *	34,318		35,328	1,120,573	0	170,953	236,293	308,848	0	386,070					2,500	1,746,128	2,850,790	(1,730,217)	95,412
2016 - 2017	507,314,135	1.28762	653,228	352,736 *	28,800		30,616	1,065,380	0			312,170	179,990	268,933	298,745				2,500		1,062,337	3,043	98,455
2017 - 2018	515,496,419	1.28237	661,056	379,255 *	31,705		27,508	1,099,524	0				283,828	262,210	340,058	210,429			3,000		1,099,524		98,455
2018 - 2019	510,558,300	2.91654	1,489,064	374,184 *	29,500			1,892,748	0				281,228		292,223	109,433	1,208,365		1,500		1,892,748		98,455
2019 - 2020	518,636,606	2.91941	1,514,114	374,184 *	29,500			1,917,798	0				282,978		294,523	112,354	1,226,444		1,500		1,917,798		98,455
2020 - 2021	512,920,731	2.91834	1,496,875	374,184 *	29,500			1,900,559	0				284,400		291,498		1,323,161		1,500		1,900,559		98,455
2021 - 2022	520,343,245	2.91248	1,515,487	374,184 *	29,500			1,919,171					290,080		298,060		1,069,952	259,579	1,500		1,919,171		98,455
2022 - 2023	503,680,510	2.91664	1,469,053	374,184 *	29,500			1,872,737					285,180		299,070		865,833	421,155	1,500		1,872,737		98,455
2023 - 2024	499,139,414	2.91483	1,454,906	374,184 *	29,500			1,858,590							299,720		860,101	697,270	1,500		1,858,590		98,455
2024 - 2025	499,139,414	2.91524	1,455,112	374,184 *	29,500			1,858,796									867,481	990,316	1,000		1,858,796		98,455
2025 - 2026	499,139,414	2.91159	1,453,290	374,184 *	29,500			1,856,974									862,415	993,560	1,000		1,856,974		98,455
2026 - 2027	499,139,414	2.91933	1,457,151	374,184 *	29,500			1,860,835									865,367	994,468	1,000		1,860,835		98,455
2027 - 2028	499,139,414	2.91697	1,455,975	374,184 *	0			1,830,159									866,146	963,013	1,000		1,830,159		98,455
2028 - 2029	499,139,414	2.14766	1,071,983	374,184 *				1,446,167										1,445,167	1,000		1,446,167		98,455
2029 - 2030	499,139,414	2.14116	1,068,737	374,184 *				1,442,921										1,441,921	1,000		1,442,921		98,455
2030 - 2031	499,139,414	2.13756	1,066,939	374,184 *				1,441,123										1,440,123	1,000		1,441,123		98,455

City of Carroll, Iowa

Projection of G.O. Debt Capacity

EXHIBIT 2

Scenario 2a - GO Bonds Issued in 2018 & 2021

10 Year Bonds

Valuation Growth & Debt Limit Assumptions	
Legal Debt Limit	5.00%
Effective Limit	4.00%

Beginning of Fiscal Year	Actual Valuation	Historical Valuation Growth	Gross Debt Limit	Effective Debt Limit	DEBT ISSUES SUBJECT TO DEBT LIMIT * G.O. - TAXES -	G.O. - TIF -	Sales Tax Bonds	FY18 CIP Proposed Series 2017	Proposed Series 2018	Proposed Series 2021	TOTAL G.O. DEBT OUTST'NDG	Available Effective Capacity	Percent /Debt Gross Debt Limit	Beginning of Fiscal Year
2011 - 2012	632,429,951	1.89%	31,621,498	25,297,198	4,235,000	945,000	1,650,000				6,830,000	18,467,198	21.60%	2011
2012 - 2013	648,166,368	2.49%	32,408,318	25,926,655	3,520,000	655,000	1,110,000				5,285,000	20,641,655	16.31%	2012
2013 - 2014	654,646,146	1.00%	32,732,307	26,185,846	3,400,000	455,000	560,000				4,415,000	21,770,846	13.49%	2013
2014 - 2015	752,235,898	14.91%	37,611,795	30,089,436	3,750,000	55,000					3,805,000	26,284,436	10.12%	2014
2015 - 2016	757,631,838	0.72%	37,881,592	30,305,274	3,630,000						3,630,000	26,675,274	9.58%	2015
2016 - 2017	775,612,596	2.37%	38,780,630	31,024,504	4,895,000						4,895,000	26,129,504	12.62%	2016
2017 - 2018	781,063,284	0.70%	39,053,164	31,242,531	3,880,000			420,000			4,300,000	26,942,531	11.01%	2017
2018 - 2019	784,600,798	0.45%	39,230,040	31,384,032	3,045,000			215,000	8,665,000		11,925,000	19,459,032	30.40%	2018
2019 - 2020	788,155,999	0.45%	39,407,800	31,526,240	2,515,000			110,000	7,605,000		10,230,000	21,296,240	25.96%	2019
2020 - 2021	791,728,977	0.45%	39,586,449	31,669,159	1,975,000				6,610,000		8,585,000	23,084,159	21.69%	2020
2021 - 2022	795,319,819	0.45%	39,765,991	31,812,793	1,430,000				5,495,000	7,750,000	14,675,000	17,137,793	36.90%	2021
2022 - 2023	798,928,616	0.45%	39,946,431	31,957,145	865,000				4,605,000	7,650,000	13,120,000	18,837,145	32.84%	2022
2023 - 2024	802,555,456	0.45%	40,127,773	32,102,218	295,000				3,895,000	7,500,000	11,690,000	20,412,218	29.13%	2023
2024 - 2025	802,555,456		40,127,773	32,102,218					3,170,000	7,070,000	10,240,000	21,862,218	25.52%	2024
2025 - 2026	802,555,456		40,127,773	32,102,218					2,415,000	6,335,000	8,750,000	23,352,218	21.81%	2025
2026 - 2027	802,555,456		40,127,773	32,102,218					1,640,000	5,575,000	7,215,000	24,887,218	17.98%	2026
2027 - 2028	802,555,456		40,127,773	32,102,218					835,000	4,790,000	5,625,000	26,477,218	14.02%	2027
2028 - 2029	802,555,456		40,127,773	32,102,218						4,010,000	4,010,000	28,092,218	9.99%	2028
2029 - 2030	802,555,456		40,127,773	32,102,218						2,720,000	2,720,000	29,382,218	6.78%	2029
2030 - 2031	802,555,456		40,127,773	32,102,218						1,385,000	1,385,000	30,717,218	3.45%	2030

*** - Represents G.O. principal outstanding as of the BEGINNING of the fiscal year.**

**** - Project is subject to voter approval.**

City of Carroll, Iowa

Proposed G. O. Capital Loan Notes, Series 2018

EXHIBIT 3

Scenario 2a - GO Bonds Issued in 2018 & 2021

10 Year Bonds

SOURCES & USES

SOURCES	
Par Amount of Bonds	8,665,000.00
Accrued Interest	
Premium	

Total Sources	8,665,000.00
USES	
Deposit to Construction Account	8,505,000.00
Deposit to Reserve Account	
Capitalized Interest Account	0.00
Municipal Bond Insurance	
Underwriters' Discount ($12.50 per bond)	108,312.50
Costs of Issuance	48,000.00
Accrued Interest	
Rounding Amount	3,687.50

Total Uses	8,665,000.00
ASSUMPTIONS	
Dated Date	11/1/2018
Delivery Date	11/1/2018
First Interest Date	6/1/2019
First Principal Date	6/1/2019
Last Principal Date	6/1/2028

Arbitrage Yield	3.24951%	
TIC	3.54379%	
AIC	3.67605%	
Average Life	4.77	Years

Estimated Annual Tax Impact for City Resident	
Average 100% Value for Homes	$125,000
FY 2017-18 Residential Rollback %	56.9391%
Average Taxable Value for Homes	$71,174
Maximum Debt Service Levy Increase	$1.63
Estimated Annual Tax Increase:	**$116.01**

DEBT SERVICE SCHEDULE

	Date	Principal	Coupon	Interest	Debt Service	Annual Debt Service
0.58	6/1/2019	1,060,000	2.160%	148,365	1,208,365	1,208,365
	12/1/2019			115,722	115,722	
1.58	6/1/2020	995,000	2.340%	115,722	1,110,722	1,226,444
	12/1/2020			104,081	104,081	
2.58	6/1/2021	1,115,000	2.530%	104,081	1,219,081	1,323,161
	12/1/2021			89,976	89,976	
3.58	6/1/2022	890,000	2.710%	89,976	979,976	1,069,952
	12/1/2022			77,916	77,916	
4.58	6/1/2023	710,000	2.920%	77,916	787,916	865,833
	12/1/2023			67,550	67,550	
5.58	6/1/2024	725,000	3.120%	67,550	792,550	860,101
	12/1/2024			56,240	56,240	
6.58	6/1/2025	755,000	3.320%	56,240	811,240	867,481
	12/1/2025			43,707	43,707	
7.58	6/1/2026	775,000	3.490%	43,707	818,707	862,415
	12/1/2026			30,184	30,184	
8.58	6/1/2027	805,000	3.630%	30,184	835,184	865,367
	12/1/2027			15,573	15,573	
9.58	6/1/2028	835,000	3.730%	15,573	850,573	866,146
	12/1/2028					
10.58	6/1/2029					
	12/1/2029					
11.58	6/1/2030					
	12/1/2030					
12.58	6/1/2031					
	12/1/2031					
13.58	6/1/2032					
	12/1/2032					
14.58	6/1/2033					
	12/1/2033					
15.58	6/1/2034					
	12/1/2034					
16.58	6/1/2035					
	12/1/2035					
17.58	6/1/2036					
	12/1/2036					
18.58	6/1/2037					
	12/1/2037					
19.58	6/1/2038					
	12/1/2038					
		8,665,000		1,350,262	10,015,262	10,015,262

Scale : MMD as of 2-15-2017 + 30 bps for credit (Aa2/BQ) + 100 bps timing.

City of Carroll, Iowa

Proposed G. O. Capital Loan Notes, Series 2021

EXHIBIT 4

Scenario 2a - GO Bonds Issued in 2018 & 2021

10 Year Bonds

SOURCES & USES

SOURCES	
Par Amount of Notes	7,750,000.00
Accrued Interest	
Premium	

Total Sources	7,750,000.00
USES	
Deposit to Construction Account	7,600,000.00
Deposit to Reserve Account	
Capitalized Interest Account	(0.00)
Municipal Bond Insurance	0.00
Underwriters' Discount ($12.50 per bond)	96,875.00
Costs of Issuance	51,000.00
Accrued Interest	
Rounding Amount	2,125.00

Total Uses	7,750,000.00
ASSUMPTIONS	
Dated Date	11/1/2021
Delivery Date	11/1/2021
First Interest Date	6/1/2022
First Principal Date	6/1/2022
Last Principal Date	6/1/2031

Yield Calculations:

Arbitrage Yield	3.66660%
TIC	3.88411%
AIC	4.00005%
Average Life	6.65 Years

Estimated Annual Tax Impact for City Resident	
Average 100% Value for Homes	$125,000
FY 2017-18 Residential Rollback %	56.9391%
Average Taxable Value for Homes	$71,174
Maximum Debt Service Levy Increase	
Estimated Annual Tax Increase:	

DEBT SERVICE SCHEDULE

	Date	Principal	Coupon	Interest	Debt Service	Annual Debt Service
0.58	6/1/2022	100,000	2.410%	159,579	259,579	259,579
	12/1/2022			135,577	135,577	
1.58	6/1/2023	150,000	2.590%	135,577	285,577	421,155
	12/1/2023			133,635	133,635	
2.58	6/1/2024	430,000	2.780%	133,635	563,635	697,270
	12/1/2024			127,658	127,658	
3.58	6/1/2025	735,000	2.960%	127,658	862,658	990,316
	12/1/2025			116,780	116,780	
4.58	6/1/2026	760,000	3.170%	116,780	876,780	993,560
	12/1/2026			104,734	104,734	
5.58	6/1/2027	785,000	3.370%	104,734	889,734	994,468
	12/1/2027			91,507	91,507	
6.58	6/1/2028	780,000	3.570%	91,507	871,507	963,013
	12/1/2028			77,584	77,584	
7.58	6/1/2029	1,290,000	3.740%	77,584	1,367,584	1,445,167
	12/1/2029			53,461	53,461	
8.58	6/1/2030	1,335,000	3.880%	53,461	1,388,461	1,441,921
	12/1/2030			27,562	27,562	
9.58	6/1/2031	1,385,000	3.980%	27,562	1,412,562	1,440,123
	12/1/2031					
10.58	6/1/2032					
	12/1/2032					
11.58	6/1/2033					
	12/1/2033					
12.58	6/1/2034					
	12/1/2034					
13.58	6/1/2035					
	12/1/2035					
14.58	6/1/2036					
	12/1/2036					
15.58	6/1/2037					
	12/1/2037					
16.58	6/1/2038					
	12/1/2038					
17.58	6/1/2039					
	12/1/2039					
18.58	6/1/2040					
	12/1/2040					
19.58	6/1/2041					
	12/1/2041					
		7,750,000		1,896,570	9,646,570	9,646,570

Scale : MMD as of 2-15-17 + 30 bps for credit (Aa2/BQ) + 125 bps timing.

Scenario 3a (Revised): *10 Year Bonds*
Proposed 2018 GO Bonds for All Projects

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CITY OF CARROLL, IOWA

Projection of Debt Service Levy & Tax Rate Impact

EXHIBIT 1c

Scenario 3a - GO Bonds for All Projects Issued in 2018
10 Year Bonds

TAX RATE IMPACT	
Fiscal Year 16-17	($0.00)
Fiscal Year 17-18	($0.01)
Fiscal Year 18-19	$2.09
Fiscal Year 18-19	($0.02)

FY18 Pre-Levy => *$ 209,778*
FY18 CIP

Fiscal Year Payable	Total Tax Valuation	Tax Rate Per $1,000	Current Taxes Levied	LOST Revenues	Abatements: (1) 2006 Ashwood TIF	Abatements: 2008 Assisted Living TIF	Other Sources	TOTAL Resources	Outstanding Debt Issues: TIF Series 2006	TIF/Taxes Series 2008	Series 2010A/13	Ref & Streets Series 2014	Advance Ref 2008 Series 2015A	GO Series 2016A	GO Series 2016B	Proposed GO Series 2017	Proposed GO Series 2018	Fiscal Fees	Other Uses	TOTAL Uses	Surplus (Deficit)	Ending Balance
2013 - 2014	436,313,737	1.31482	573,673	375,661 *	31,660	53,413	84,224	1,118,631	54,938	385,518	580,107							2,000	27,033	1,049,595	69,035	125,773
2014 - 2015	509,745,241	1.31502	670,325	346,694 *	35,439	56,838	16,285	1,125,581	2,922	231,068	428,205	509,710						1,500	(1,747,680)	(574,275)	1,699,856	1,825,629
2015 - 2016	505,407,544	1.28846	651,197	399,730 *	34,318		35,328	1,120,573	0	170,953	236,293	308,848	0	386,070				2,500	1,746,128	2,850,790	(1,730,217)	95,412
2016 - 2017	507,314,135	1.28762	653,228	352,736 *	28,800		30,616	1,065,380	0			312,170	179,990	268,933	298,745			2,500		1,062,337	3,043	98,455
2017 - 2018	515,496,419	1.28237	661,056	379,255 *	31,705		27,508	1,099,524	0				283,828	262,210	340,058	210,429		3,000		1,099,524		98,455
2018 - 2019	510,558,300	3.36762	1,719,367	374,184 *	29,500			2,123,051	0				281,228		292,223	109,433	1,438,668	1,500		2,123,051		98,455
2019 - 2020	518,636,606	3.35223	1,738,591	374,184 *	29,500			2,142,275	0				282,978		294,523	112,354	1,450,921	1,500		2,142,275		98,455
2020 - 2021	512,920,731	3.35283	1,719,734	374,184 *	29,500			2,123,418	0				284,400		291,498		1,546,021	1,500		2,123,418		98,455
2021 - 2022	520,343,245	3.35732	1,746,961	374,184 *	29,500			2,150,645					290,080		298,060		1,561,005	1,500		2,150,645		98,455
2022 - 2023	503,680,510	3.35481	1,689,752	374,184 *	29,500			2,093,436					285,180		299,070		1,507,686	1,500		2,093,436		98,455
2023 - 2024	499,139,414	3.35592	1,675,070	374,184 *	29,500			2,078,754							299,720		1,777,534	1,500		2,078,754		98,455
2024 - 2025	499,139,414	3.36065	1,677,435	374,184 *	29,500			2,081,119									2,080,119	1,000		2,081,119		98,455
2025 - 2026	499,139,414	3.36574	1,679,975	374,184 *	29,500			2,083,659									2,082,659	1,000		2,083,659		98,455
2026 - 2027	499,139,414	3.36998	1,682,089	374,184 *	29,500			2,085,773									2,084,773	1,000		2,085,773		98,455
2027 - 2028	499,139,414	3.36268	1,678,446	374,184 *	0			2,052,630									2,051,630	1,000		2,052,630		98,455

City of Carroll, Iowa

Projection of G.O. Debt Capacity

EXHIBIT 2c

Scenario 3a - GO Bonds for All Projects Issued in 2018
10 Year Bonds

Valuation Growth & Debt Limit Assumptions	
Legal Debt Limit	5.00%
Effective Limit	4.00%

Beginning of Fiscal Year	Actual Valuation	Historical Valuation Growth	Gross Debt Limit	Effective Debt Limit	DEBT ISSUES SUBJECT TO DEBT LIMIT * G.O. - TAXES -	G.O. - TIF -	Sales Tax Bonds	Proposed Series 2017	FY18 CIP Proposed Series 2018	TOTAL G.O. DEBT OUTST'NDG	Available Effective Capacity	Percent /Debt Gross Debt Limit	Beginning of Fiscal Year
2011 - 2012	632,429,951	1.89%	31,621,498	25,297,198	4,235,000	945,000	1,650,000			6,830,000	18,467,198	21.60%	2011
2012 - 2013	648,166,368	2.49%	32,408,318	25,926,655	3,520,000	655,000	1,110,000			5,285,000	20,641,655	16.31%	2012
2013 - 2014	654,646,146	1.00%	32,732,307	26,185,846	3,400,000	455,000	560,000			4,415,000	21,770,846	13.49%	2013
2014 - 2015	752,235,898	14.91%	37,611,795	30,089,436	3,750,000	55,000				3,805,000	26,284,436	10.12%	2014
2015 - 2016	757,631,838	0.72%	37,881,592	30,305,274	3,630,000					3,630,000	26,675,274	9.58%	2015
2016 - 2017	775,612,596	2.37%	38,780,630	31,024,504	4,895,000					4,895,000	26,129,504	12.62%	2016
2017 - 2018	781,063,284	0.70%	39,053,164	31,242,531	3,880,000			420,000		4,300,000	26,942,531	11.01%	2017
2018 - 2019	784,600,798	0.45%	39,230,040	31,384,032	3,045,000			215,000	14,615,000	17,875,000	13,509,032	45.56%	2018
2019 - 2020	788,155,999	0.45%	39,407,800	31,526,240	2,515,000			110,000	13,455,000	16,080,000	15,446,240	40.80%	2019
2020 - 2021	791,728,977	0.45%	39,586,449	31,669,159	1,975,000				12,455,000	14,430,000	17,239,159	36.45%	2020
2021 - 2022	795,319,819	0.45%	39,765,991	31,812,793	1,430,000				11,335,000	12,765,000	19,047,793	32.10%	2021
2022 - 2023	798,928,616	0.45%	39,946,431	31,957,145	865,000				10,170,000	11,035,000	20,922,145	27.62%	2022
2023 - 2024	802,555,456	0.45%	40,127,773	32,102,218	295,000				9,025,000	9,320,000	22,782,218	23.23%	2023
2024 - 2025	802,555,456		40,127,773	32,102,218					7,575,000	7,575,000	24,527,218	18.88%	2024
2025 - 2026	802,555,456		40,127,773	32,102,218					5,775,000	5,775,000	26,327,218	14.39%	2025
2026 - 2027	802,555,456		40,127,773	32,102,218					3,910,000	3,910,000	28,192,218	9.74%	2026
2027 - 2028	802,555,456		40,127,773	32,102,218					1,975,000	1,975,000	30,127,218	4.92%	2027
2028 - 2029	802,555,456		40,127,773	32,102,218							32,102,218		2028
2029 - 2030	802,555,456		40,127,773	32,102,218							32,102,218		2029
2030 - 2031	802,555,456		40,127,773	32,102,218							32,102,218		2030
2031 - 2032	802,555,456		40,127,773	32,102,218							32,102,218		2031
2032 - 2033	802,555,456		40,127,773	32,102,218							32,102,218		2032
2033 - 2034	802,555,456		40,127,773	32,102,218							32,102,218		2033
2034 - 2035	802,555,456		40,127,773	32,102,218							32,102,218		2034
2035 - 2036	802,555,456		40,127,773	32,102,218							32,102,218		2035
2036 - 2037	802,555,456		40,127,773	32,102,218							32,102,218		2036
2037 - 2038	802,555,456		40,127,773	32,102,218							32,102,218		2037
2038 - 2039	802,555,456		40,127,773	32,102,218							32,102,218		2038
2039 - 2040	802,555,456		40,127,773	32,102,218							32,102,218		2039
2040 - 2041	802,555,456		40,127,773	32,102,218							32,102,218		2040

*** - Represents G.O. principal outstanding as of the BEGINNING of the fiscal year.**
**** - Project is subject to voter approval.**

City of Carroll, Iowa

Proposed G. O. Capital Loan Notes, Series 2018

EXHIBIT 3c

Scenario 3a - GO Bonds for All Projects Issued in 2018

10 Year Bonds

SOURCES & USES

SOURCES	
Par Amount of Bonds	14,615,000.00
Accrued Interest	
Premium	

Total Sources	14,615,000.00
USES	
Deposit to Construction Account	14,380,000.00
Deposit to Reserve Account	
Capitalized Interest Account	0.00
Municipal Bond Insurance	
Underwriters' Discount ($12.50 per bond)	182,687.50
Costs of Issuance	48,000.00
Accrued Interest	
Rounding Amount	4,312.50

Total Uses	14,615,000.00
ASSUMPTIONS	
Dated Date	11/1/2018
Delivery Date	11/1/2018
First Interest Date	6/1/2019
First Principal Date	6/1/2019
Last Principal Date	6/1/2028

Arbitrage Yield	3.50814%	
TIC	3.75640%	
AIC	3.82237%	
Average Life	5.76	Years

Estimated Annual Tax Impact for City Resident	
Average 100% Value for Homes	$125,000
FY 2017-18 Residential Rollback %	56.9391%
Average Taxable Value for Homes	$71,174
Maximum Debt Service Levy Increase	$2.08
Estimated Annual Tax Impact:	**$148.04**

DEBT SERVICE SCHEDULE

	Date	Principal	Coupon	Interest	Debt Service	Annual Debt Service
0.58	6/1/2019	1,160,000	2.310%	278,668	1,438,668	1,438,668
	12/1/2019			225,460	225,460	
1.58	6/1/2020	1,000,000	2.490%	225,460	1,225,460	1,450,921
	12/1/2020			213,010	213,010	
2.58	6/1/2021	1,120,000	2.680%	213,010	1,333,010	1,546,021
	12/1/2021			198,002	198,002	
3.58	6/1/2022	1,165,000	2.860%	198,002	1,363,002	1,561,005
	12/1/2022			181,343	181,343	
4.58	6/1/2023	1,145,000	3.070%	181,343	1,326,343	1,507,686
	12/1/2023			163,767	163,767	
5.58	6/1/2024	1,450,000	3.270%	163,767	1,613,767	1,777,534
	12/1/2024			140,060	140,060	
6.58	6/1/2025	1,800,000	3.470%	140,060	1,940,060	2,080,119
	12/1/2025			108,830	108,830	
7.58	6/1/2026	1,865,000	3.640%	108,830	1,973,830	2,082,659
	12/1/2026			74,887	74,887	
8.58	6/1/2027	1,935,000	3.780%	74,887	2,009,887	2,084,773
	12/1/2027			38,315	38,315	
9.58	6/1/2028	1,975,000	3.880%	38,315	2,013,315	2,051,630
	12/1/2028					
10.58	6/1/2029					
	12/1/2029					
11.58	6/1/2030					
	12/1/2030					
12.58	6/1/2031					
	12/1/2031					
13.58	6/1/2032					
	12/1/2032					
14.58	6/1/2033					
	12/1/2033					
15.58	6/1/2034					
	12/1/2034					
16.58	6/1/2035					
	12/1/2035					
17.58	6/1/2036					
	12/1/2036					
18.58	6/1/2037					
	12/1/2037					
19.58	6/1/2038					
	12/1/2038					
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		14,615,000		2,966,014	17,581,014	17,581,014

Scale : MMD as of 2-15-2017 + 45 bps for credit (Aa2/NonBQ) + 100 bps timing.

Scenario 4c (New):
Proposed 2018 & 2021 Capacity for GO Bonds

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CITY OF CARROLL, IOWA

Projection of Debt Service Levy & Tax Rate Impact

EXHIBIT 1c

Scenario 4 - GO Bonds Issue Capacity in 2018 & 2021
$7.5M in 2018 and $5M in 2021

TAX RATE IMPACT	
Fiscal Year 16-17	($0.00)
Fiscal Year 17-18	($0.01)
Fiscal Year 18-19	$0.01
Fiscal Year 18-19	$0.00

FY18 Pre-Levy => *$ 209,778*
FY18 CIP

Fiscal Year Payable	Total Tax Valuation	Tax Rate Per $1,000	Current Taxes Levied	LOST Revenues	Abatements (1) 2006 Ashwood TIF	Abatements 2008 Assisted Living TIF	Other Sources	TOTAL Resources	Outstanding Debt Issues: TIF Series 2006	TIF/Taxes Series 2008	Series 2010A/13	Ref & Streets Series 2014	Advance Ref 2008 Series 2015A	GO Series 2016A	GO Series 2016B	Proposed GO Series 2017	Proposed GO Series 2018	Proposed GO Series 2021	Fiscal Fees	Other Uses	TOTAL Uses	Surplus (Deficit)	Ending Balance
2013 - 2014	436,313,737	1.31482	573,673	375,661 *	31,660	53,413	84,224	1,118,631	54,938	385,518	580,107								2,000	27,033	1,049,595	69,035	125,773
2014 - 2015	509,745,241	1.31502	670,325	346,694 *	35,439	56,838	16,285	1,125,581	2,922	231,068	428,205	509,710							1,500	(1,747,680)	(574,275)	1,699,856	1,825,629
2015 - 2016	505,407,544	1.28846	651,197	399,730 *	34,318		35,328	1,120,573	0	170,953	236,293	308,848	0	386,070					2,500	1,746,128	2,850,790	(1,730,217)	95,412
2016 - 2017	507,314,135	1.28762	653,228	352,736 *	28,800		30,616	1,065,380	0			312,170	179,990	268,933	298,745				2,500		1,062,337	3,043	98,455
2017 - 2018	515,496,419	1.28237	661,056	379,255 *	31,705		27,508	1,099,524	0				283,828	262,210	340,058	210,429			3,000		1,099,524		98,455
2018 - 2019	510,558,300	1.28892	658,068	374,184 *	29,500			1,061,752	0				281,228		292,223	109,433	377,369		1,500		1,061,752		98,455
2019 - 2020	518,636,606	1.28940	668,732	374,184 *	29,500			1,072,416	0				282,978		294,523	112,354	381,062		1,500		1,072,416		98,455
2020 - 2021	512,920,731	1.28220	657,669	374,184 *	29,500			1,061,353	0				284,400		291,498		483,956		1,500		1,061,353		98,455
2021 - 2022	520,343,245	1.28172	666,934	374,184 *	29,500			1,070,618					290,080		298,060		354,022	126,956	1,500		1,070,618		98,455
2022 - 2023	503,680,510	1.35370	681,831	374,184 *	29,500			1,085,515					285,180		299,070		282,125	217,640	1,500		1,085,515		98,455
2023 - 2024	499,139,414	1.28682	642,301	374,184 *	29,500			1,045,985							299,720		527,125	217,640	1,500		1,045,985		98,455
2024 - 2025	499,139,414	1.28108	639,437	374,184 *	29,500			1,043,121									654,481	387,640	1,000		1,043,121		98,455
2025 - 2026	499,139,414	1.28579	641,789	374,184 *	29,500			1,045,473									656,865	387,608	1,000		1,045,473		98,455
2026 - 2027	499,139,414	1.28713	642,456	374,184 *	29,500			1,046,140									653,080	392,060	1,000		1,046,140		98,455
2027 - 2028	499,139,414	1.28425	641,020	374,184 *	0			1,015,204									653,378	360,826	1,000		1,015,204		98,455
2028 - 2029	499,139,414	1.28149	639,642	374,184 *				1,013,826									652,712	360,114	1,000		1,013,826		98,455
2029 - 2030	499,139,414	1.28601	641,897	374,184 *				1,016,081									656,139	358,943	1,000		1,016,081		98,455
2030 - 2031	499,139,414	1.28742	642,602	374,184 *				1,016,786									653,439	362,347	1,000		1,016,786		98,455
2031 - 2032	499,139,414	1.28577	641,779	374,184 *				1,015,963									654,780	360,183	1,000		1,015,963		98,455
2032 - 2033	499,139,414	1.29107	644,423	374,184 *				1,018,607									654,935	362,672	1,000		1,018,607		98,455
2033 - 2034	499,139,414	1.28278	640,287	374,184 *				1,014,471									653,872	359,599	1,000		1,014,471		98,455
2034 - 2035	499,139,414	1.29150	644,640	374,184 *				1,018,824									656,665	361,159	1,000		1,018,824		98,455
2035 - 2036	499,139,414	1.28626	642,022	374,184 *				1,016,206									653,078	362,129	1,000		1,016,206		98,455
2036 - 2037	499,139,414	1.28754	642,661	374,184 *				1,016,845									653,353	362,493	1,000		1,016,845		98,455
2037 - 2038	499,139,414	1.28503	641,409	374,184 *				1,015,593									652,313	362,281	1,000		1,015,593		98,455
2038 - 2039	499,139,414	1.02736	512,797	374,184 *				886,981										886,481	500		886,981		98,455
2039 - 2040	499,139,414	1.02684	512,534	374,184 *				886,718										886,218	500		886,718		98,455
2040 - 2041	499,139,414	1.02247	510,355	374,184 *				884,539										884,039	500		884,539		98,455

City of Carroll, Iowa

Projection of G.O. Debt Capacity

EXHIBIT 2c

Scenario 4 - GO Bonds Issue Capacity in 2018 & 2021
$7.5M in 2018 and $5M in 2021

Valuation Growth & Debt Limit Assumptions	
Legal Debt Limit	5.00%
Effective Limit	4.00%

Beginning of Fiscal Year	Actual Valuation	Historical Valuation Growth	Gross Debt Limit	Effective Debt Limit	DEBT ISSUES SUBJECT TO DEBT LIMIT * G.O. - TAXES -	G.O. - TIF -	Sales Tax Bonds	FY18 CIP Proposed Series 2017	Proposed Series 2018	Proposed Series 2021	TOTAL G.O. DEBT OUTST'NDG	Available Effective Capacity	Percent /Debt Gross Debt Limit	Beginning of Fiscal Year
2011 - 2012	632,429,951	1.89%	31,621,498	25,297,198	4,235,000	945,000	1,650,000				6,830,000	18,467,198	21.60%	2011
2012 - 2013	648,166,368	2.49%	32,408,318	25,926,655	3,520,000	655,000	1,110,000				5,285,000	20,641,655	16.31%	2012
2013 - 2014	654,646,146	1.00%	32,732,307	26,185,846	3,400,000	455,000	560,000				4,415,000	21,770,846	13.49%	2013
2014 - 2015	752,235,898	14.91%	37,611,795	30,089,436	3,750,000	55,000					3,805,000	26,284,436	10.12%	2014
2015 - 2016	757,631,838	0.72%	37,881,592	30,305,274	3,630,000						3,630,000	26,675,274	9.58%	2015
2016 - 2017	775,612,596	2.37%	38,780,630	31,024,504	4,895,000						4,895,000	26,129,504	12.62%	2016
2017 - 2018	781,063,284	0.70%	39,053,164	31,242,531	3,880,000			420,000			4,300,000	26,942,531	11.01%	2017
2018 - 2019	784,600,798	0.45%	39,230,040	31,384,032	3,045,000			215,000	7,650,000		10,910,000	20,474,032	27.81%	2018
2019 - 2020	788,155,999	0.45%	39,407,800	31,526,240	2,515,000			110,000	7,445,000		10,070,000	21,456,240	25.55%	2019
2020 - 2021	791,728,977	0.45%	39,586,449	31,669,159	1,975,000				7,355,000		9,330,000	22,339,159	23.57%	2020
2021 - 2022	795,319,819	0.45%	39,765,991	31,812,793	1,430,000				7,160,000	5,115,000	13,705,000	18,107,793	34.46%	2021
2022 - 2023	798,928,616	0.45%	39,946,431	31,957,145	865,000				7,090,000	5,115,000	13,070,000	18,887,145	32.72%	2022
2023 - 2024	802,555,456	0.45%	40,127,773	32,102,218	295,000				7,090,000	5,115,000	12,500,000	19,602,218	31.15%	2023
2024 - 2025	802,555,456		40,127,773	32,102,218					6,845,000	5,115,000	11,960,000	20,142,218	29.80%	2024
2025 - 2026	802,555,456		40,127,773	32,102,218					6,465,000	4,945,000	11,410,000	20,692,218	28.43%	2025
2026 - 2027	802,555,456		40,127,773	32,102,218					6,070,000	4,770,000	10,840,000	21,262,218	27.01%	2026
2027 - 2028	802,555,456		40,127,773	32,102,218					5,665,000	4,585,000	10,250,000	21,852,218	25.54%	2027
2028 - 2029	802,555,456		40,127,773	32,102,218					5,245,000	4,425,000	9,670,000	22,432,218	24.10%	2028
2029 - 2030	802,555,456		40,127,773	32,102,218					4,810,000	4,260,000	9,070,000	23,032,218	22.60%	2029
2030 - 2031	802,555,456		40,127,773	32,102,218					4,355,000	4,090,000	8,445,000	23,657,218	21.05%	2030
2031 - 2032	802,555,456		40,127,773	32,102,218					3,885,000	3,910,000	7,795,000	24,307,218	19.43%	2031
2032 - 2033	802,555,456		40,127,773	32,102,218					3,395,000	3,725,000	7,120,000	24,982,218	17.74%	2032
2033 - 2034	802,555,456		40,127,773	32,102,218					2,885,000	3,530,000	6,415,000	25,687,218	15.99%	2033
2034 - 2035	802,555,456		40,127,773	32,102,218					2,355,000	3,330,000	5,685,000	26,417,218	14.17%	2034
2035 - 2036	802,555,456		40,127,773	32,102,218					1,800,000	3,120,000	4,920,000	27,182,218	12.26%	2035
2036 - 2037	802,555,456		40,127,773	32,102,218					1,225,000	2,900,000	4,125,000	27,977,218	10.28%	2036
2037 - 2038	802,555,456		40,127,773	32,102,218					625,000	2,670,000	3,295,000	28,807,218	8.21%	2037
2038 - 2039	802,555,456		40,127,773	32,102,218						2,430,000	2,430,000	29,672,218	6.06%	2038
2039 - 2040	802,555,456		40,127,773	32,102,218						1,655,000	1,655,000	30,447,218	4.12%	2039
2040 - 2041	802,555,456		40,127,773	32,102,218						845,000	845,000	31,257,218	2.11%	2040

*** - Represents G.O. principal outstanding as of the BEGINNING of the fiscal year.**
**** - Project is subject to voter approval.**

City of Carroll, Iowa

EXHIBIT 3c

Proposed G. O. Capital Loan Notes, Series 2018

Scenario 4 - GO Bonds Issue Capacity in 2018 & 2021

$7.5M in 2018 and $5M in 2021

SOURCES & USES

SOURCES	
Par Amount of Bonds	7,650,000.00
Accrued Interest	
Premium	

Total Sources	7,650,000.00
USES	
Deposit to Construction Account	7,500,000.00
Deposit to Reserve Account	
Capitalized Interest Account	0.00
Municipal Bond Insurance	
Underwriters' Discount ($12.50 per bond)	95,625.00
Costs of Issuance	51,000.00
Accrued Interest	
Rounding Amount	3,375.00

Total Uses	7,650,000.00
ASSUMPTIONS	
Dated Date	11/1/2018
Delivery Date	11/1/2018
First Interest Date	6/1/2019
First Principal Date	6/1/2019
Last Principal Date	6/1/2038

Arbitrage Yield	4.04307%
TIC	4.17553%
AIC	4.24712%
Average Life	12.58 Years

DEBT SERVICE SCHEDULE

	Date	Principal	Coupon	Interest	Debt Service	Annual Debt Service
0.58	6/1/2019	205,000	2.160%	172,369	377,369	377,369
	12/1/2019			145,531	145,531	
1.58	6/1/2020	90,000	2.340%	145,531	235,531	381,062
	12/1/2020			144,478	144,478	
2.58	6/1/2021	195,000	2.530%	144,478	339,478	483,956
	12/1/2021			142,011	142,011	
3.58	6/1/2022	70,000	2.710%	142,011	212,011	354,022
	12/1/2022			141,063	141,063	
4.58	6/1/2023	0	2.920%	141,063	141,063	282,125
	12/1/2023			141,063	141,063	
5.58	6/1/2024	245,000	3.120%	141,063	386,063	527,125
	12/1/2024			137,241	137,241	
6.58	6/1/2025	380,000	3.320%	137,241	517,241	654,481
	12/1/2025			130,933	130,933	
7.58	6/1/2026	395,000	3.490%	130,933	525,933	656,865
	12/1/2026			124,040	124,040	
8.58	6/1/2027	405,000	3.630%	124,040	529,040	653,080
	12/1/2027			116,689	116,689	
9.58	6/1/2028	420,000	3.730%	116,689	536,689	653,378
	12/1/2028			108,856	108,856	
10.58	6/1/2029	435,000	3.810%	108,856	543,856	652,712
	12/1/2029			100,569	100,569	
11.58	6/1/2030	455,000	3.890%	100,569	555,569	656,139
	12/1/2030			91,720	91,720	
12.58	6/1/2031	470,000	3.970%	91,720	561,720	653,439
	12/1/2031			82,390	82,390	
13.58	6/1/2032	490,000	4.050%	82,390	572,390	654,780
	12/1/2032			72,468	72,468	
14.58	6/1/2033	510,000	4.130%	72,468	582,468	654,935
	12/1/2033			61,936	61,936	
15.58	6/1/2034	530,000	4.190%	61,936	591,936	653,872
	12/1/2034			50,833	50,833	
16.58	6/1/2035	555,000	4.250%	50,833	605,833	656,665
	12/1/2035			39,039	39,039	
17.58	6/1/2036	575,000	4.300%	39,039	614,039	653,078
	12/1/2036			26,676	26,676	
18.58	6/1/2037	600,000	4.340%	26,676	626,676	653,353
	12/1/2037			13,656	13,656	
19.58	6/1/2038	625,000	4.370%	13,656	638,656	652,313
	12/1/2038					
		7,650,000		3,914,745	11,564,745	11,564,745

Scale : MMD as of 2-15-2017 + 30 bps for credit (Aa2/BQ) + 100 bps timing.

City of Carroll, Iowa

Proposed G. O. Capital Loan Notes, Series 2021

EXHIBIT 4c

Scenario 4 - GO Bonds Issue Capacity in 2018 & 2021

$7.5M in 2018 and $5M in 2021

SOURCES & USES

SOURCES	
Par Amount of Notes	5,115,000.00
Accrued Interest	
Premium	

Total Sources	5,115,000.00
USES	
Deposit to Construction Account	5,000,000.00
Deposit to Reserve Account	
Capitalized Interest Account	(0.00)
Municipal Bond Insurance	0.00
Underwriters' Discount ($12.50 per bond)	63,937.50
Costs of Issuance	48,000.00
Accrued Interest	
Rounding Amount	3,062.50

Total Uses	5,115,000.00
ASSUMPTIONS	
Dated Date	11/1/2021
Delivery Date	11/1/2021
First Interest Date	6/1/2022
First Principal Date	6/1/2022
Last Principal Date	6/1/2041

Yield Calculations:

Arbitrage Yield	4.38609%
TIC	4.50817%
AIC	4.60122%
Average Life	14.37 Years

DEBT SERVICE SCHEDULE

	Date	Principal	Coupon	Interest	Debt Service	Annual Debt Service
0.58	6/1/2022	0	2.410%	126,956	126,956	126,956
	12/1/2022			108,820	108,820	
1.58	6/1/2023	0	2.590%	108,820	108,820	217,640
	12/1/2023			108,820	108,820	
2.58	6/1/2024	0	2.780%	108,820	108,820	217,640
	12/1/2024			108,820	108,820	
3.58	6/1/2025	170,000	2.960%	108,820	278,820	387,640
	12/1/2025			106,304	106,304	
4.58	6/1/2026	175,000	3.170%	106,304	281,304	387,608
	12/1/2026			103,530	103,530	
5.58	6/1/2027	185,000	3.370%	103,530	288,530	392,060
	12/1/2027			100,413	100,413	
6.58	6/1/2028	160,000	3.570%	100,413	260,413	360,826
	12/1/2028			97,557	97,557	
7.58	6/1/2029	165,000	3.740%	97,557	262,557	360,114
	12/1/2029			94,471	94,471	
8.58	6/1/2030	170,000	3.880%	94,471	264,471	358,943
	12/1/2030			91,173	91,173	
9.58	6/1/2031	180,000	3.980%	91,173	271,173	362,347
	12/1/2031			87,591	87,591	
10.58	6/1/2032	185,000	4.060%	87,591	272,591	360,183
	12/1/2032			83,836	83,836	
11.58	6/1/2033	195,000	4.140%	83,836	278,836	362,672
	12/1/2033			79,799	79,799	
12.58	6/1/2034	200,000	4.220%	79,799	279,799	359,599
	12/1/2034			75,579	75,579	
13.58	6/1/2035	210,000	4.300%	75,579	285,579	361,159
	12/1/2035			71,064	71,064	
14.58	6/1/2036	220,000	4.380%	71,064	291,064	362,129
	12/1/2036			66,246	66,246	
15.58	6/1/2037	230,000	4.440%	66,246	296,246	362,493
	12/1/2037			61,140	61,140	
16.58	6/1/2038	240,000	4.500%	61,140	301,140	362,281
	12/1/2038			55,740	55,740	
17.58	6/1/2039	775,000	4.550%	55,740	830,740	886,481
	12/1/2039			38,109	38,109	
18.58	6/1/2040	810,000	4.590%	38,109	848,109	886,218
	12/1/2040			19,520	19,520	
19.58	6/1/2041	845,000	4.620%	19,520	864,520	884,039
	12/1/2041					
		5,115,000		3,244,020	8,359,020	8,359,020

Scale : MMD as of 2-15-17 + 30 bps for credit (Aa2/BQ) + 125 bps timing.