#### **CITY OF GARDEN GROVE**

#### INTER-DEPARTMENT MEMORANDUM

To:

Matthew J. Fertal

From:

Kingsley Okereke

Dept:

City Manager

Dept:

**Finance** 

Subject

RESOLUTION AUTHORIZING 2010 WATER Date:

December 8, 2009

REVENUE DEBT OBLIGATIONS

## **OBJECTIVE**

To obtain the Garden Grove City Council approval of a resolution authorizing the issuance of Water Revenue obligations in an amount not to exceed \$32 million, and to engage the services of the required financing team members to achieve the debt issuance.

#### **BACKGROUND**

In July 2007, City Council adopted a Ten-Year Water Financial Plan (Plan) prepared by Black & Veatch to maintain the financial stability of the Water Enterprise Fund. The Plan identified the overall revenue needs for financing of the operations and maintenance expenses, debt obligations, capital improvement requirements and cost increases for imported water. To meet these essential financial needs, the first five years of the Plan included incremental annual rate adjustments of 40 percent, 20 percent, 7.5 percent, 5 percent, and 5 percent to be applied to the service charge and commodity adjustment charges. In addition, the City Council approved a Plan that incorporated the issuance of a \$32 million debt obligation that will be used to fund the capital program.

The City completed a Water Master Plan in September 2008, that includes a detailed list of capital projects replete with costs and timelines for execution. The Water Master Plan CIP expands over a twenty-year period, of which the first ten years cover the same vital projects identified in the Ten-Year Water Financial Plan. These projects will be executed over the next ten years with the 2010 COP debt proceeds, augmented with revenues. See attachment A. The Plan identifies critical capital needs necessary to promote the water system's continuous improvement, provide fire flow capability, ensure consistent compliance with drinking water standards and mitigate cash flow constraints.

## **DISCUSSION**

Staff plans to issue the water revenue obligations through the City of Garden Grove Public Financing Authority, in an amount not to exceed \$32 million. The debt will be issued in two installments, providing approximately \$16.5 million of project funds in FY 2009-10 and \$15.5 million of project funds in later years as determined necessary. Nonetheless, the debt is still the revenue obligation of the Garden Grove Water

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Enterprise. The water revenue obligations will be issued by means of a competitive sale method, limited negotiated sale or private placement, whichever produces the lowest overall cost of borrowing.

At this time, it is anticipated that the debt would be structured to provide level debt service payments through the financing period. Preliminary analysis by the Financial Advisor indicates that the debt would be issued as uninsured, fixed rate certificates of participation (COPs) with a debt service reserve fund sized at the lesser of maximum annual debt service, 10 percent of the par amount of the COPs or 125 percent of the average annual debt service requirement. In today's market, it is anticipated that the 20-year COPs could be issued at a net interest cost of approximately 5 percent or less. The Financial Advisor will assist staff in assessing the California COPs market conditions at the time of the COPs sale to determine the appropriateness of the interest rates and other terms of offers received. February 24, 2010, is the target closing date.

Given the current low interest rate and the general economic environment, it is worthwhile for the City to assemble and retain the required financing team as quickly as possible in order to be prepared to issue the COPs under the best sales conditions and before interest rates start to rise. An authorizing Resolution of the City Council has been prepared which authorizes the assembling of a financing team that includes a Financial Advisor, Bond Counsel, Disclosure Counsel, Fiscal Agent, Trustee, Verification Agent, and when necessary, an Underwriter required to prepare, market and actually sell the debt. Staff deems the following actions appropriate and necessary under the circumstance with respect to each team member.

## Financial Advisor

Staff has been working with Bill Reynolds, of Sequoia Financial Group, LLC, as the Financial Advisor to research and assemble this COPs financing under the same fee terms as the City has paid for such services in the past. The Financial Advisor has agreed to accept the fee terms, and continue to provide services as indicated in Attachment B. With these terms in place, staff would continue to use Sequoia Financial Group, as the Financial Advisor for this revenue obligation and other assignments as required.

## Bond Counsel

Staff intends to use the Law Offices of Stradling Yocca Carlson & Rauth, as the Bond Counsel for this assignment. The law firm has an existing agreement with the Agency for Community Development and has worked with the City on previous bond and COPs issuances. The fee structure for this assignment would be the same as was agreed in prior bond deals.

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#### Disclosure Counsel

The law firm of Jones Hall also has been engaged to act as disclosure counsel for the 2010 Certificates on substantially the terms on file with the City for prior bond deals.

#### Underwriter

Staff is planning to leave the underwriting options open at this point in time. A targeted competitive method of sale may work best for this transaction. As stated earlier, the City would pursue the method of sale that will yield the lowest overall cost of borrowing. In any case, the water revenue obligations will be issued either by means of a competitive sale method, limited negotiated sale or private placement, whichever produces the lowest overall cost of borrowing.

## Other Team Members and Facilitators

Staff will work with the Financial Advisor and Counsel to solicit scope of service and price quotes, and select a fiscal agent, trustee, verification agent, and others necessary to complete this debt issuance.

Upon completion of all the necessary groundwork (e.g., legal documentations, debt structuring and marketing, etc.) leading up to the actual sale of the revenue obligations, a resolution to consummate the bond deal would be brought to the City Council for final approval.

#### FINANCIAL IMPACT

Issuance of the revenue obligation would yield construction funds of about \$16.5 million, the first tranche of the required \$32 million approved to execute the Water Enterprise capital program.

It is important to note that the continued success of the Plan is dependent on the continued implementation of the approved rate adjustments of five percent over these next two years. Furthermore, our original assumption based on discussions over three years ago with Metropolitan Water District (MWD) that costs for imported water would increase by five percent on an annual basis has been supplanted by new information from MWD. The Council recently considered and approved the requisite adjustments to rates to accommodate the wholesale water cost pass-through.

Based on the current interest rate environment, it is expected that the revenue obligations would be issued at a net interest cost of approximately five percent or less. Underwriter's discount is projected to be about .50 percent or \$5.00 per \$1,000 of COPs. The estimated total cost of issuance of this debt is projected at under \$200

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thousand, which would go to compensate the various financing team members including the Financial Advisor, Bond Counsel, Disclosure Counsel, Fiscal Agent, and Verification agent, etc.

## COMMUNITY VISION IMPLEMENTATION

Approval of this bond resolution is consistent with the community vision of "A Well Maintained Community" and advances the Strategic goal of maintaining and upgrading the water system to ensure maximum protection of public health and the environment.

#### RECOMMENDATION

It is recommended that the City Council take the following actions:

- 1. Adopt the resolution authorizing the issuance of Water Revenue Obligation in an amount not to exceed \$32 million in net water project funds;
- 2. Direct the City Manager to execute a three year contract with Sequoia Financial Group LLC, and appoint same as the City's Financial Advisor for this assignment, as described herein;
- 3. Direct the City Manager to appoint Stradling, Yocca, Carlson & Rauth as the Bond Counsel for this assignment, as described herein;
- 4. Direct the City Manager to appoint Jones Hall Law Firm as the Disclosure Bond Counsel for this assignment, as described herein; and
- 5. Authorize the City Manager or his designee to enter into all other necessary agreements to assemble the financing team including Underwriter, Trustee, Fiscal Agent, etc., to effectively ready the issuance of the 2010 water revenue obligation debt.

KINGSLEY OKEREKE Finance Officer

Attachments:

Attachment A – CIP/Water Master Plan

Attachment B - Financial Advisor Doc

Attachment C - Resolution

Recommended for Approval

Matthew Fertal

# CAPITAL IMPROVEMENT PROGRAM

This chapter presents the recommended capital improvement program (CIP) for the City of Garden Grove (City) water distribution system. The CIP summarizes the recommended improvements, phasing, cost estimates, and the allocation of project cost for the recommended water system improvements. The purpose of this CIP is to provide the City with a guideline for the planning and budgeting of future improvements to its water system. The CIP is based on the evaluation of the City's water distribution system, and on the recommended projects described in previous chapters.

# 10.1 CAPITAL IMPROVEMENT PROJECT COSTS

Cost estimates presented in this master plan are based on the current Engineering and News Record (ENR) cost index for the Los Angeles metropolitan area of 9266 published in June 2008. In this report, the costs presented as Total Project Costs are present worth costs at this ENR number. Costs labeled Escalated Capital Costs are escalated using an annual Consumer Price Index of 4 percent to the mid-year of each five-year phasing period.

Total Project Cost estimates include estimated costs for construction, construction cost contingency, engineering, design, construction management, and miscellaneous cost, such as environmental fees. The cost estimates presented in this study for construction are opinions developed from bid tabulations; cost curves, information obtained from previous studies, and Carollo Engineers; P.C. (Carollo) experience on other projects.

# 10.1.1 Cost Estimating Accuracy

The cost estimates presented in the CIP have been prepared for general master planning purposes and for guidance in project evaluation and implementation. The actual costs of a project will depend on actual labor and material costs, competitive market conditions, final project scope, implementation schedule, and other variable factors such as: preliminary alignment generation, detailed utility surveys, and environmental and local considerations.

The Association for the Advancement of Cost Engineering (AACE) defines an order of magnitude estimate for master plan studies as an approximate estimate made without detailed engineering data. It is normally expected that an estimate of this type would be accurate within ±50 percent to -30 percent. This section presents the assumptions used in developing order of magnitude cost estimates for recommended facilities.

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At the City's request, a factor of 60 percent of the estimated construction cost is included in the project cost estimates. Half of this factor accounts for construction cost contingency and nalf accounts for the estimated costs of engineering design and construct ion management. Factors for administration and legal counsel are not included in this estimate. These cost assumptions are listed in Table 10.1.

Table 10.1 General Cost Estimati Water Master Plan City of Garden Grove	ng Assumptions
Description	Value
Construction Cost Contingency	30% of the construction cost (CC) <sup>(1)</sup>
Engineering, Design, and Construction Management Total Project Cost <sup>(2)</sup>	30% of the construction cost (CC) <sup>(1)</sup>
Notes: (1) Construction cost includes direct con (2) Total Project Cost includes the const management cost.	struction cost, and materials and labor contingency cost, ruction cost, contingency, engineering, and construction

The cost estimates are based on current perceptions of conditions at the project locations. These estimates reflect Carollo's professional opinion of costs at this time and are subject to change as the project details are defined. Carollo has no control over variances in the cost of labor, materials, equipment, services provided by others, contractor's methods of determining prices, competitive bidding, or market conditions, practices, or bidding strategies. Carollo cannot, and does not, warrant or guarantee that proposals, bids, or actual construction costs will not vary for the costs presented herein.

## 10.1.2 Unit Construction Cost

The construction cost estimates presented in this report are based on the unit construction costs listed in Table 10.2. Construction costs for distribution system pipelines include pipe material, valves, appurtenances, excavation, installation, bedding material, backfill material, transport, and paving where applicable. While no pipe material is specified in the unit construction costs, pipe materials used in comparable bid tabs for diameters through 12 inches were PVC and DIP is assumed for larger pipelines. The costs of acquiring easements for pipeline construction are not included in this estimate, although most distribution pipeline routings are within existing City street right-of-way.

Within Table 10.2, markups have been included for special construction considerations. A 150 percent markup is included for jack and bore construction, to be considered for improvements crossing the freeway or a railroad. A markup is also included for construction in arterial streets, such as Harbor Blvd., to account for the increased costs of temporary traffic control, reduced construction hours, and alternate construction phasing associated with working on arterial streets.

For groundwater wells, three separate unit costs are included. Costs for drilling a new well include the cost of drilling and the casing. The cost of equipping a well is intended to include costs of the pump and motor or engine, as well as any site piping, housing, control, and electrical equipment. The cost of fully equipping a new well is the sum of the costs for drilling and equipping. A separate unit cost is included for site modifications and control systems to place a well on SCADA. This is intended to automate existing manually operated wells and connect to the SCADA system, including costs of adding piping to connect the flush lines of the wells to storm drain.

For booster pumping stations, three unit costs are included based on the size of pump. Unit costs are estimated per horsepower of design size.

For emergency interconnections, a unit cost is included assuming the connection consists of a simple valve and meter connecting the two distribution systems. No automation is assumed.

For pressure reducing stations, a unit cost is included for stations requiring two valves and stations requiring three valves. Unit costs assume construction of an underground vault and connection to SCADA. Valve size not assumed to be a significant factor in these unit costs, so they may not be applicable for larger sized pressure reducing valves.

Table 10.2 Unit Construction Cost Water Master Plan City of Garden Grove	
Category	Unit Construction Cost
Pipelines	\$/lineal ft
6-Inch diameter	\$66
8-inch diameter	\$88
10-inch diameter	\$110
12-inch diameter	\$126
14-inch diameter	\$147
16-Inch diameter	\$168
18-inch diameter	\$189
20-inch diameter	\$210
24-inch diameter	\$240
30-inch diameter	\$285
36-inch diameter	\$323
Special Pipeline Construction	Markup (%)
Arterial Street	150% of standard unit cost
Jack-and-Bore Crossings	150% of standard unit cost

Table 10.2	Unit Construction Cost Water Master Plan City of Garden Grove	
in a second desired to the second	Category	Unit Construction Cost
Groundwate	er Well Construction	\$/well site
	of New Wells	\$800,000
Equippi		\$700,000
11 Page 1147 14	difications to Place on	\$100,000
Booster Pu	mping Stations	\$/hp
<100 hg		\$6,000
100-500	) hp	\$4,750
600-1,0	00 hp	\$4,000
Miscellaned	ous .	\$fitem
	ency interconnections	\$100,000

# 10.2 SUMMARY OF SYSTEM RECOMMENDATIONS

The City's potable water system and water supply facilities were evaluated using the criteria discussed in Chapter 5. The evaluation was conducted for the existing conditions (with 2007 demands and the 2007 water facilities in place), as well as the future conditions with the demands projected for year 2027.

Based on the evaluations the recommendations are divided into three categories:

- Near-Term Improvements (NTI): These are projects that are currently under construction or design, or already planned for the near future in the City's CIP (see Appendix H);
- Existing System Improvements (ESI): These are water system improvements that address deficiencies in the 2007 water network; and
- Future System Improvements (FSI): These are improvements necessary to meet the projected demand in 2027 with the near-term improvements and existing system improvements in place.

Each improvement project is listed with a Map ID, which identifies the project on Figure 10.1, Capital Improvement Program. The Map ID also corresponds with the Term of the project: NTI Map IDs start with the designation "N", ESI with "X", and FSI with "F".

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## 10.2.1 Near-Term Improvements

The near-term improvements listed in Table 10.3 include a variety of projects already planned by the City as a part of its 10-year CIP within the 2007 Water Rate Study. The full 10-year CIP from the 2007 Water Rate Study is located in Appendix H. Projects in the design or construction phase as of December 2007, or brought online during this master plan are also included in the near-term improvements category. The near-term improvements are identified on Figure 10.1, Capital Improvement Program (enclosed with this report) by the Map ID listed in Table 10.3.

Anticipated Year	Map ID
2008	N_GW_30
2008-2017	N_RPL_01
2008-2017	N_RPL_02
2008-2017	N_RPL_03
2008-2017	N_RPL_04
2008-2017	N_RPL_05
2011	N_GW_RPL_01
2009	N_GW_RPL_02
2013	N_GW_RPL_03
2014	N_GW_RPL_04
2008-2017	N_RPL_06
2008-2017	N_RPL_07
2008-2017	N_RPL_08
2008-2017	N_RPL_09
2008-2017	N_RPL_10
2010	N_RPL_11
2013	N_RPL_12
n 2015	N RPL 13
a 2017	N_RPL_14
2009	N_MISG_01
2009	N_MISC_02
2009	N_MISC_03
2017	N_MISC_04
	2009

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With the exception of Well 30, financing of these projects is established as a part of the water rate study. The original capital improvement program, as taken from the water rate study, is presented in Appendix H excluding items budgeted for FY07-08. Costs for Well 30 are not included, as this well has already been financed.

Several NTI projects are anticipated to be on going. These include replacement of appurtenances in the distribution network such as blow-offs and air release valves, as well as pump rehabilitation. For the last two planning periods, these projects were continued as existing system improvements, assuming annual costs equivalent to the average of the initially budgeted 10-year near term CIP.

# 10.2.2 Existing System Improvements

The existing system improvements listed in Table 10.4 were identified to address deficiencies under 2007 demand conditions. The justification for these improvements is discussed in detail in Chapter 8 or following Table 10.4. The Map ID listed in Table 10.4 identifies these improvements shown on Figure 10.1. Improvement projects similar in nature have been grouped due to the total number of recommended improvements (e.g., fire flow improvements are not listed individually in Table 10.4).

A detailed breakdown of the Capital Improvement Program can be found in Table 10.9 at the end of this chapter with projects listed individually.

Table 10.4	Existing System Improvements Sun Water Master Plan City of Garden Grove	nmary		
Category	Description	Number of Projects	Total Length	Map ID <sup>(i)</sup>
Pipelines	Fire Flow Improvements	107	25 miles	X_FF_###
	Small Diameter Pipeline Replacement Program (not dead-end pipelines) <sup>(2)</sup>	3	24 miles	X_4D_RP_#
	Small Diameter Pipeline Replacement Program (dead-end pipelines) <sup>(2)</sup>	*	14 miles	X_4D_NC
	Aged Pipeline Replacement Program <sup>(3)</sup>	Ongoing	8 mlles/yr	
Facilities	Portable Generator Trailers	1	VI	<b>∴</b> :.
	Aged Groundwater Well Replacement Program	2	ě.	59-1

<sup>(2)</sup> Portions of this replacement program may be required to fully resolve fire flow deficiencies as predicted by the model.

(3) Exact program details to be determined by asset management program.

While the majority of the improvements are addressed in detail in Chapter 8, Existing System Analysis, projects are included for three items not explicitly stated in the Existing System Analysis.

- An asset management program was recommended as the most cost-effective way to evaluate replacement pipelines within the City's aging distribution network. The City's current water rates do not provide budget for a pre-emptive pipeline replacement program, and these rates are set through 2012 (with a current CIP set through 2017). It is assumed that the asset management program, budgeted in the first planning phase, will recommend at least some pipelines to be replaced on a continual basis starting in 2017, when it is assumed that budget can be made available through a reevaluation of water rates.
- The City has indicated it is planning on gradually switching its natural gas engines to electric motors. City staff has indicated it will maintain or exceed its backup power capabilities under the future system. It was assumed that the City will require purchase of three portable backup power units to maintain backup capabilities.
- Although the existing system analysis did not recommend explicit replacement of specific wells, it is recommended that the City plan for at least some of its aged wells to require replacement within the planning horizon. Based on the City's evaluation of well casings, two wells are included in the CIP for replacement within the planning horizon.

Details concerning recommendations of the remaining existing system improvements can be found in Chapter 8.

## 10.2.3 Future System Improvements

The future system improvements listed in Table 10.5 were identified to address future deficiencies under 2027 demand conditions with near term and existing system improvements in place. The justification for these improvements is discussed in detail in Chapter 9. The future system improvements are identified on Figure 10.1 by the Map ID listed in Table 10.5.

Table 10.5	Future System Improvements Summary Water Master Plan City of Garden Grove			
Category	Description	Quantity	Unit	Map ID
Pipelines	Future System Fire Flow Project 001	400	feet	F_FF_001
	Future System Fire Flow Project 002	100	feet	F_FF_002
	International West Specific Plan Development(1)	4,200	feet	F_RDV_IW
Supply	West Zone Groundwater Well	1	well	F_GW_A
	OC-22 Transmission Main	8,000	feet	F_SP_1

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<sup>(1)</sup> Pipeline sizing recommendations for International West Specific Plan are based on estimates of actual land use type and not on specific fire flow requirements calculated for building size and construction materials. Fire flow requirements should be evaluated based on specific building requirements for new construction.

The West Zone Groundwater Well is recommended in Chapter 8, Existing System Analysis, but is included as a Future System Improvement since it will accommodate future growth in demand. Details concerning recommendations of the future system improvements can be found in Chapter 9.

## 10.3 DISTRIBUTION OF CAPITAL COST

The estimated capital costs for the recommended existing and future system improvements are summarized in Table 10.6, while the distribution of capital costs by category is shown on Figure 10.2. These categories are defined following the figure.

Water	l Cost Summary Master Plan Garden Grove			
Category	Near Term Improvements (\$ million)	Existing System Improvements (\$ million <sup>(1)</sup> )	Future System Improvements (\$ million <sup>(1)</sup> )	Total <sup>(6)</sup> (\$ million <sup>(f)</sup> )
Pipelines - Fire Flow	\$0.0	\$31.7	\$0.2	\$31.8
Pipelines - Small Diameter	\$0.0	\$25.2	\$0.0	\$25.2
Pipelines – New Development	\$0.0	\$0.0	<b>S</b> 0.9	\$0.9
Pipelines - Aged Infrastructure <sup>(2)</sup>	\$0.0	\$18.7	\$0.0	\$18.7
Water Facilities (*)	\$9,8	\$5.6	\$0.0	\$15.5
Water Supply <sup>(3)</sup>	\$3.9	S4.8	\$6.4	\$15.2
Other Projects <sup>(5)</sup>	\$26.4	S26.4	\$0.0	\$52.9
Total <sup>(5)</sup>	\$40.2	\$112.5	\$7.5	\$160.2

#### Notes:

- (1) All project cost estimates were based on the unit construction costs listed in Table 10.2 and the mark-ups listed in Table 10.1. ENR = 9266. Capital costs are present worth costs at this ENR number. Costs are not escalated.
- (2) Pipeline replacements of aging infrastructure will need to be determined by asset management
- (3) Water Supply includes improvements to imported water connections, groundwater wells, and pipelines exclusively required to conduct supply flows.
- (4) Water Facilities include improvements to reservoirs and booster pumping stations, as well as pressure reducing stations.
- (5) "Other" includes replacement of misc. appurtenances including hydrants, meters, services, laterals, gate valves, ARVs and blow offs.
- (6) Totals may vary from sum of values due to rounding.

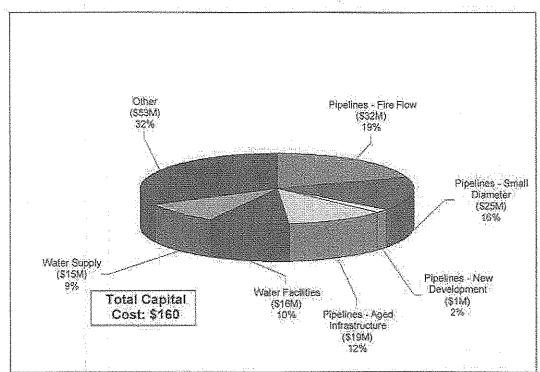


Figure 10.2 Distribution of Capital Cost

As shown in Table 10.6, the total estimated capital cost is \$160.2 million, of which \$7.5 million or approximately 5 percent is associated with improvements required to accommodate future growth.

- <u>Fire Flow Recommendations</u> consist generally of pipeline projects and facilities to resolve fire-flow deficiencies.
- Small Diameter Replacements include pipelines to be replaced due to small diameter. The City has indicated plans for replacement of all small diameter pipelines. While some smaller diameter pipelines exist within the distribution system GIS database, for the purposes of this study it is anticipated that the 4-Inch diameter pipelines are the only small diameter pipelines to be replaced as a part of the small diameter pipeline replacement program.
- New Development Pipelines include pipelines added to accommodate future growth or to serve specific developments.
- Aged Pipeline Replacements are intended to replace the City's aging Infrastructure.
   While it is difficult to establish an exact age of replacement for pipelines within the distribution system, it is known that the distribution system will not last indefinitely.
   Within Chapter 8, Existing System Analysis, the recommendation was made that the City begin an asset management program to fully evaluate the condition of its current distribution system and establish an appropriate replacement rate. This asset

management program has been included in the CIP as a line item to be completed within the first planning period in order to establish a program of pipeline replacement. For the purpose of this master plan it is assumed that the City will start replacing aging pipelines at a rate of 8 miles per year after the completion of all fire flow and small diameter pipeline replacements. This rate would allow the City to replace the entire distribution system approximately every 75 years.

- Water Facilities consist of non-pipeline improvements affecting the entire system or pressure zone. This category includes water storage reservoirs, booster pumping stations, and pressure reducing stations.
- Water Supply consists of facilities pertaining to water supply. This includes
  groundwater wells, well collection pipelines, raw water pipelines, water treatment,
  imported water connections; and transmission mains required for additional flow from
  MWDSC connections.
- Other Projects include replacement of miscellaneous appurtenances including hydrants, meters, services laterals, gate valves, air relief valves, and blow off valves. Annual costs provided by the City were used for the projects in this category.

#### 10.4 PHASING OF CAPITAL COST

The recommended improvements are primarily made to resolve deficiencies found in the existing system. Projects addressing existing system deficiencies are phased over the next 20 years using the following five-year planning periods:

- FY 08-12: Fiscal Year 2008/2009 through Fiscal Year 2012/2013
- FY 13-17: Fiscal Year 2013/2014 through Fiscal Year 2017/2018
- FY 18-22; Fiscal Year 2018/2019 through Fiscal Year 2022/2023.
- FY 23-27; Fiscal Year 2023/2024 through Fiscal Year 2027/2028

The cost for each of the phasing period is summarized in Table 10.7.

As shown, the period of FY 08-12 and FY 13-17 are reduced in comparison to the remaining CIP. This is due to limitations set by the City's existing 10-Year CIP established in the 2007 Water Rate Study (Included in Appendix H). Remaining projects are pushed out or deferred to later phases FY 18-22 and FY 23-27. Since many of these projects resolve existing system deficiencies and are required in the existing system, it would be preferred to implement many of the projects scheduled for the last two phases earlier if possible. The phasing of specific projects for each project type is discussed in detail following Table 10.7.

Table 10.7	Phasing of Capital Cost
	Water Master Plan
	City of Garden Grove

		System Imp	rovements	(\$ million) <sup>(1)</sup>	
Improvement Category	FY 2008- 2012	FY 2013- 2017	FY 2018- 2022	FY 2023- 2027	Total <sup>(2)</sup>
Pipelines - Fire Flow	\$4.6	\$5.0	\$20.4	\$1,8	\$31.8
Pipelines - Small Diameter	\$0.0	\$0.0	\$16.7	\$8.6	\$25.2
Pipelines - New Development	\$0.0	\$0.9	\$0.0	\$0.0	\$0.9
Pipelines - Aged Infrastructure	\$0.3	\$0.0	\$0.0	\$18.5	\$18.7
Water Facilities	\$5.6	\$5.9	\$2.1	\$1.8	\$15.5
Water Supply	\$0.6	\$3,3	\$4,8	\$6.4	\$15.2
Other Projects	\$13.2	\$13.2	\$13.2	\$13.2	\$52.9
Total <sup>(2)</sup>	\$24.3	\$28.4	\$57.2	\$50.3	\$160.2
Percentage	15%	18%	36º%	31%	100%

#### Note:

- ENR = 9286, Capital costs are present worth costs at this ENR number. Costs are not escalated.
- (2) Totals may vary from sum of values due to rounding.

#### 10.4.1 Fire Flow Recommendations

As discussed in the existing system analysis in Chapter 8, fire flow improvement phasing is based primarily on criticality of facilities followed by level of deficiency being resolved.

To accomplish this; recommendations are initially prioritized based on the lowest ratio of available flow (under existing conditions) to required flow at each deficient hydrant that the fire flow recommendation resolves.

Deficiencies at hospitals and schools were elevated separately in priority. The single hospital improvement is prioritized first, with the high school improvements prioritized next, in order of the level of deficiency resolved. These fire flow recommendations include Fire Flow Recommendations 9, 1, 15, 22, 41, and 64.

The remaining recommendations were prioritized into four categories of priority, based on the level of deficiency:

The first priority includes fire flow recommendations that were for a hydrant not feeding a school which was predicted to be more than 50 percent deficient (meaning the ratio of available flow to required flow was less than 0.5; for an industrial flow of 4,000 gpm, this would mean the fire flow predicted to be available at the I ocation would be less than 2,000 gpm) or for a hydrant feeding a school that was predicted to be able to supply less than 3,500 gpm under existing conditions (12.5% deficient). This priority includes Fire Flow Recommendations 3 through 45.

- 2. The second priority includes fire flow recommendations that were for a hydrant not feeding a school which was predicted to be between 33 percent and 50 percent deficient (meaning the ratio of available flow to required flow was less than 0.67; for an industrial flow of 4,000 gpm, this would mean the fire flow predicted to be available at the location would be less than 2,700 gpm) or for a hydrant feeding a school that was predicted to be able to supply above 3,500 gpm but less than 4,000 gpm under existing conditions. This priority includes Fire Flow Recommendations 46 through 65.
- The third priority includes all remaining fire flow recommendations for infrastructure not to be abandoned as a part of the International West specific plan. This priority includes Fire Flow Recommendations 66 through 106.
- 4. The fourth priority includes recommendations for infrastructure that is planned to be abandoned as a part of the International West specific plan, namely Fire Flow Recommendations 107 and 108. These two fire flow improvements located within the International West specific plan area are required under the existing system but will be unnecessary and abandoned if the International West specific plan replaces the parcels being served by these hydrants according to the scheduled timeline assumed by this report.

Future system fire flow improvements consisted of two recommendations and did not fall near any particular development, and no specific future developer could be identified as causing the deficiencies. It was therefore concluded that the future densification is responsible for the future fire flow deficiencies. As these future system fire flow recommendations only require minor upsizing of existing system fire flow recommendations, these projects are also allocated to existing rate payers.

# 10.4.2 Small Diameter Pipeline Replacements

Budgeting for small diameter pipeline replacement within the near term CIP has been superseded by more critical fire flow improvements (based on available fire flow), deferring the small diameter pipeline replacement program to the third planning period. It should be noted, however, that the small diameter replacement program itself was used as a fire flow improvement project in the existing system fire flow analysis and as such is phased in parallel with the remaining fire flow improvements.

The small diameter pipelines are separated into four phases, based primarily on criticality. It should be noted that due to the number of pipelines, pipeline segments were not examined individually, but rather categorized by geospatial selection, and some adjacent sections of small diameter pipeline may fall into different phases. Such cases should be examined at the design level, as mobilization will most likely make it more cost effective to replace adjacent pipelines within the same project. The four phases are detailed as follows, with Projects 1 through 3 phased in 2018-2 022 and Project 4 phased in 2023-2027.

#### Small Diameter Replacement Program Category 1

The first small diameter replacement category includes small diameter pipeline segments feeding fire flow hydrants where a deficiency is predicted. Pipelines falling in this category do not include dead-end pipelines past the last hydrant (as might be seen in a cul-de-sac). It should be noted that if the pipeline feeding a hydrant is segmented, only the closest segment may fall into this category and all segments feeding the deficient hydrant should be replaced to resolve the fire flow deficiency.

#### Small Diameter Replacement Program Categories 2 and 3

The second and third small diameter replacement category includes small diameter pipeline segments which are connecting loops in the distribution system but are not connected to a fire flow hydrant where a deficiency is predicted. Projects 2 and 3 are divided geographically, with Project 2 including pipelines to the east of Brookhurst Street and Project 3 to the west of Brookhurst Street.

#### Small Diameter Replacement Program Category 4

The fourth small diameter replacement category includes dead-end small diameter pipeline segments. These projects have been phased last among the small diameter improvements. However, it should be noted that hy drant locations were established from the City's GIS and does not necessarily include private hydrants. If hydrants did not appear in the City's GIS, they were not evaluated and may still represent deficiencies in the distribution system.

#### 10.4.3 New Development Pipelines

For demand projection purposes, demand was assumed to increase linearly between the existing system and build out. However, the largest growth within the future system is actually planned to take place in special planning areas. As discussed in Chapter 2, information provided by the City Planning Department suggests that the International West development area will be the first of the special planning areas to be developed within the planning horizon. The International West development was phased in the second planning period (in FY 13-17).

#### 10.4.4 Aged Pipeline Replacements

The City's current water rates do not provide budget for a pre-emptive pipeline replacement program, and these rates are set through 2012 (with a CIP set through 2017). It is assumed that the asset management program will recommend at least some pipeline replacements on a continual basis starting in 2017, when funds can be made available from revised water rates. For the purpose of this master plan it is assumed that the City will start replacing aging pipelines at a rate of 8 miles per year after the completion of all fire flow and small diameter pipeline replacements. This rate would allow the City to replace the entire distribution system approximately every 75 years. Pipe replacements based on age have been added to the final two phases of the CIP, subtracting pipeline installation done for

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other recommendations (fire flow or small diameter) in each of these phases. For the third planning period, this results in no replacement, since the total amount of pipeline installed in this phase is greater than 8 miles per year. For the fourth planning period, this results in 25 miles of replacements, since the total amount of pipeline installed in this phase is 15 miles. It is anticipated these line items in Table 10.9 will be revised by the recommendations of the asset management program once that study has been completed. Budget for the asset management study has been included within the first planning period of the CIP.

# 10.4.5 Water Facility Recommendations

#### Portable Generators/Backup Power

Since City staff has indicated it is planning on gradually switching its natural gas engines to electric motors in the near future, it was assumed that the City would purchase three portable backup power units within the first planning period of this CIP.

## 10.4.6 Water Supply Recommendations

#### Well Replacement Program

In addition to the well upgrades for Wells 19, 21, 25, and the replacement of Well 16 as listed in the City's 10-Year CIP from the 2007 Water Rate Study, it is recommended that the City replace two additional wells within the planning horizon of this master plan.

Five wells will be 50 years or older by 2027 and are therefore candidate for replacement. As the exact condition of these wells is unknown at this time and because some wells last up to 100 years, it is assumed that at least two of these five wells would need to be replaced. One well was phased for replacement in each of the last two planning periods, 2018-2022 and 2023-2027.

#### OC-22 Transmission Main

To meet build-out demands during summer conditions, it is anticipated that the City will need to utilize imported water connection OC-22. City staff indicated that localized pressure effects from the lack of transmission main from this site to the remainder of the water distribution network prevent the City from fully utilizing OC-22 at this time. A transmission main along Ninth Street connecting OC-22 to the transmission main network of the water distribution system is therefore recommended. The phasing of this improvement is established using the expected projections of maximum day demands to find when more significant use of the imported water connection becomes necessary. Assuming the estimated basin pumping percentage in 2010 remains constant at 60 percent and full utilization of OC-05 and OC-50, over 25 percent of the capacity of OC-22 will be needed in approximately 2025. Based on this, it is anticipated that the transmission main be added to the fourth planning period, between 2023 and 2027. Since the increased demand is primarily due to growth in future demands, this is classified as a future system project.

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## Wells Being Placed on SCADA

In Chapter 8, the existing system fire flow analysis was conducted under maximum day demand conditions. This assumes operation of a number of wells that may not be active during other conditions. Several of the City's older wells are manually operated and thus require physical presence of City staff to turn them on. Wells 16 and 19 will need to have flush lines that are not connected to the storm drain network. It is recommended as fire flow improvements that Wells 16, 19, and 25 be added to SCADA with the capability for each well to be brought online remotely through SCADA in case of a pressure drop (such as a fire flow) in the distribution network. In addition, the flush lines of Wells 16 and 19 be connected to the storm drain system to allow automatic operation. It would also be necessary to after the configuration of each of these wells to add control valves for automated startup.

## 10.4.7 Other Projects

Within the NTI projects, the City budgeted for replacement of miscellaneous appurtenances including hydrants, meters, services laterals, gate valves, air relief valves, and blow off valves. It is anticipated that replacement of these appurtenances will be an ongoing cost. Annual costs provided by the City were continued through the final two planning periods.

#### 10.5 CAPITAL IMPROVEMENT PROGRAM

The total estimated costs by planning period are summarized in Table 10.8, while a detailed list of projects is listed in Table 10.9. Projects including pipelines of multiple diameters are listed on multiple rows.

Figure 10.3 presents the total costs by planning period from Table 10.7. Each category of improvement is shown within the stacked bar of the planning period. All improvement projects not explicitly budgeted within the City's 2007 Water Rate Study CIP were phased following 2017, when the water rates established in the 2007 study expire. This is the reason for the significant increase in improvements within the third planning period. In Carollo's estimation, the phasing for these projects should be earlier. These projects are phased in this period only because this is the first year in which the budget is not already set.

The total cost presented in Tables 10.6, 10.7, and 10.9 represent present day costs. If escalation is considered in establishment of water rates, the budgeted amounts should remain in balance relative to the capital costs over the planning period. However, if escalation is not considered when establishing water rates, the increased cost of improvements will exceed the future budget. This will result in many of the projects being pushed back to subsequent planning phases. Table 10.8 presents the total CIP capital cost by phase, escalated from 2008 to the mid-point of each planning period using a Consumer

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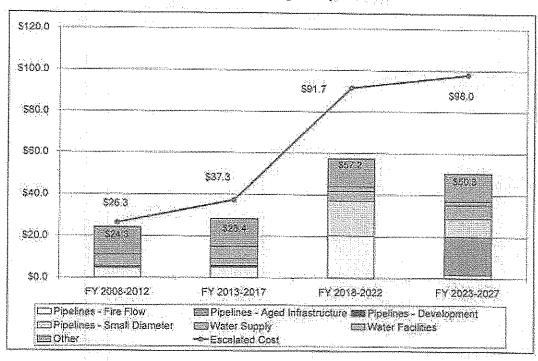


Figure 10.3 Phasing of Capital Cost

1	Vater Ma	l Capital Costs by Planning Period ster Plan Irden Grove	:
Planning Peri		otal Present Day Capital Cost <sup>(1)</sup>	Escalated Capital Cost <sup>(2)</sup>
FY 2008-201:	2	\$24,3	\$26.3
FY 2013-201	7	\$28.4	\$37.3
FY 2018-202	2	\$57.2	S91.7
FY 2023-202	7	\$50.3	\$98,0
Total		\$160.2	\$253,3

#### Notes:

- (1) ENR = 9266. Total Present Day Capital Costs are present worth costs at this ENR number.
- (2) Escalated Capital Costs are escalated from 2008 through the mid-year of each planning period using a CPI of 4%.

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Table 10.9 Capital Improvement Program by Project
Water Master Plan
City of Garden Grove

F_GW_A	F FF 001	X FF 012	X_FF_008	X_FF_007	X_FF_006	X_FF_008	X_FF_005	X_FF_004	X,FF_004	X_FF_004	F_RDV_IW	STUDY_AM	X_RL_BCK	X FF RLA	X_FF_041	X_FF_022	X_FF_022	X_FF_015	X FF 011	X FF 011	X_FF_009	X FF DOS	X FF (0)	N MSC M	N_MSC_03	N_MISC_02	N_MISC_01	N RP1 14	N_RPL_83	21_14B_N	N_RPL_11	N RPL 10	20 Ida 2	N_HPL_07	M_APL_06	N_GW_RPL_04	N_GN_HPL_03	N_CW_RPL_02	N_GM_RPL_01	N_BPL_05	N 250 04	N RPI 03	M_HB[W	N BPL 01	N GW 30	Project ID
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Groundwater Wes in West Pressure Zone	Future System Fire Flow Project 001	Existing System Fire Flow Project 012	Existing System Fire Flow Project 008	Existing System Fire Flow Project 007	Existing System Fire Flow Project 006	Existing System Fire Flow Project 006	Existing System Fire Flow Project 005	Existing System Fire Flow Project 004	Existing System Fire Flow Project 004	Existing System Fire Flow Project 064	Pipelines Added for International West Specific Plan	Asset Management Study	Portable Backup Power Units	Site Modifications to Place Manually Operated Wells On SCADA	Existing System Fire Flow Project 041	Existing System Fire Flow Project 022	Existing System Fire Flow Project 022	Existing System Fire Flow Project 015	Existing System Fire Flow Project 011	Existing System Fire Flow Project 011	Existing System Fire Flory Project 009	Existing System Fire Flow Project 003	Existing System Fire Flow Project Out	Westhaven Reservor Roof Cracks	Calhodic Protection	West GG Sumps	Exhaust Stack Corrections	Natural Gas Engine Rplc - Magnoša	Natural Gas Engine Rpic - Lampson	Natural Gas Engine Rpic - Westhaven	Natural Gas Engine Rpic - West GG	Boosler Pump Replacement - West GG	Boosle Purp Replacement Track	Booster Pump Replacement - Lampson	Booster Pump Replacement - Westhaven	Well 16 Replacement	Well 25 Rehabilitation	Well 21 Rehabilitation	Well 19 Rehabilitation	Gate Valve Replacements	Heler Replacements	Fire Hydrant Replacements	Service Line Replacements	Replace Misc. Distribution System Appurienances (BO, ARV, Vac)	Well 30	Project
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\$ 450,000 \$	\$ 25,000	\$ 45,000	***************************************			\$ 30,000 \$	\$ 75,000 \$	\$ 235,000	\$ 160,000	\$ 110,000	\$ 485,000	S	S	\$ 90,000									\$ 210,000				3,169				375,000 \$					521,363			70,688		,	•		,	WA (paki)	Engineering, Design, Construction Management, and Misc Markups (30%)
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Table 10.9 Capital Improvement Program by Project
Water Master Plan
City of Garden Grove

X_FF_055	X_FF_054	X FF 053	X_FF_052	X_FF_051	X_FF_050	X_FF_049	X FF 048	X_FF_047	X_FF_046	X_FF_045	X_FF_044	X FF 043	X_FF_042	X_FF_040	X_FF_039	X_FF_038	X FF 037	X_FF_037	X_FF_036	X FF 035	X PF 033	X_FF_002	X_FF_001	X_FF_030	X FF 029	X FF 028	V 25 007	X_FF_025	X FF 024	X_FF_023	X_FF_021	X_FF_020	X_FF_018	X_FF_017	X_FF_016	X_FF_014	X_FF_013	X FF_010	X40,W3	X_40_RP_2	X_40_RP_1	Project ID
63	63	61	8	59	58	67	56	K	Ľ	53	25	51	55	49	48	47	46	æ	85	2	3 8		40	જ્ઞ	88	37	8 8	8			31	8 8	2 22	27	26	25		8 8			20	Priority / Ranking
Existing System Fire Flow Project 055	Existing System Fire Flow Project 054	Existing System Fire Flow Project 053	Existing System Fire Flow Project 052	Existing System Fire Flow Project 051	Existing System Fire Flow Project 050	Existing System Fire Flow Project 049	Existing System Fire Flow Project 048	Existing System Fire Flow Project 047	Existing System Fire Flow Project 046	Existing System Fire Flow Project 045	Existing System Fire Flow Project 044	Existing System Fire Flow Project 043	Existing System Fire Flow Project 042	Existing System Fire Flow Project 040	Existing System Fire Flow Project 039	Existing System Fire Flow Project 038	Existing System Fire Flow Project 037	Existing System Fire Flow Project 037	Existing System Fire Flow Project 036	Existing System Fire Flow Project 035	Existing System File Flow Project 033	Existing System Fire Flow Project 032	Existing System Fire Flow Project 031	Existing System Fire Flow Project 830	Existing System Fire Flow Project 029	Existing System Fire Flow Project 028	Existing Cystem Fire Flow Project 020	Existing System Fire Flow Project 025	Existing System Fire Flow Project 024	Existing System Fire Flow Project 023	Existing System Fire Flow Project 021	Existing System Fire Flow Project 020	Existing System Fire Flow Project 018	Existing System Fire Flow Project 017	Existing System Fire Flow Project 016	Existing System Fire Flow Project 014	Existing System Fire Flow Project 013	Existing System Fire Flow Project 010	Small Dameter Inpeline Replacement Project 3 (Remaining 4-Inch Diameter Projectes West of Brookhurst)	Small Diameter Pipeline Replacement Project 2 (Remaising 4-Inch Diameter Pipelines East of Brookhurst)	Smell Diameter Pipeline Replacement Project 1 (4-Inch Diameter Pipelines Connected to Deficient Hydranits)	Project
Fire Flow	Fire Flow	Fire Flow	Fao Flow	Fire Flow	Fire Flow,	Fire Flow	Fite Flow	Fire Flow	File Flow	Fire Flow	Fire Florr	Fire Flow	Fire Flow	Fine Flow	File Flow	Fire Flow	Fire Flow	Fire Flow	Fig Flow	Fire Fault	Fire Flow	Fig Flow	Fire Flow	Fire Flow	Fire Flow	Fire Flow	Fire Flow	Fire Flow	Fire Flow	Fire Flow	File Flow	Shall Dameter	Small Diameter	Small Diameter	Improvement Type Term <sup>(1)</sup>							
ES	55	ESI	183	ESI	£83	ES.	ESI	ESI	ES1	ESI	ES	ES	25	33	ESI	ESI	ESI	ES	ES	g	2 2	52	ESI	ES.	ES	<u> </u>	2 6	2 2	ESI	ES:	55	E .	2 5	ES2	ESI	ESI	ESi	£	<u> </u>	: 8		Term <sup>(1)</sup>
EX	£,	EX.FF	£X-FF	EX.FF	EX-FF	£X-FF	34-X3	EX-FF	H-X3	EX-FF					EX.	Ł	EX-FF	EX-FF		Z)	#1.Ya			•	X.F	_	7 EX			EX-FF	EX-FF	E S				CLS						
2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2010-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2018-2022	2002-9102	2618-2022	2018-2022	Phasing Period
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Table 10.9 Capital Improvement Program by Project
Water Master Plan
City of Garden Grove

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	\$ 70,000 \$	S		70,000	15,000	15,000			H	-	11	300	-	East	2018-2022	┼	83	Fire Flow	Existing System File Flow Project 091	99	X 24 091
	\$ 20,000 \$	Щ		20,000		5,000	\$ 10,000 \$		88	<u> </u> _	-	╫	┞	East	1	-	ESI	Fire Flow	Existing System Fire Flow Project 090	198	X FF 090
\$	\$ 70,000 \$	S	6*	70,000	\$ 15,000	15,000	\$ 40,000 \$			L	=	200	L	Fast	2018-2022	┼	ES	Fire Flow	Existing System Fite Flow Project 089	97	X_FF_089
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	\$ 470,000 \$	\$ .	. 8	\$ 470,000	\$ 000,000	90,000	\$ 290,000 \$	S/lineal fi	-	L	27	1,900	12 hches	West	2018-2022	EX-FF	ESI	Fire Flow	Existing System Fire Flow Project 085	94	X FF 086
5	\$ 180,000 \$	\$	\$	180,000	s 35,000 s	35,000	\$ 119,000 \$	\$Ameal ft	0% 88	Arterial	**	1,100	8 inches	East	2018-2022	EX-FF	ESI	Fire Flow	Existing System Fire Flow Project 085	æ	X FF 085
	\$ 950,000 \$	s .	\$ .	090,088	\$   000,000   \$	180,000	\$ 600,000 \$	\$fineal ft	_	Arterial (	# ~	H	16 inches	East 1883	2018-2022	<del> </del> -	ESI	Fire Flow	Existing System Fire Flow Project 084	æ	X_FF_084
	\$ 000,000 \$	٠ .	\$ .	100,000	\$ 20,000 \$	20,000	\$ 60,000	S/ineal R	0% 58	Artestal	22	_	8 Inches	East	2018-2022	EX-FF	ESI	. Fire Flow	Existing System Fire Flow Project 083	91	X_FF_083
•	\$ 80,000 \$	\$ .	. 3	90,000	\$ 15,000 \$	15,000	\$ 50,000 \$	\$/fineal ft		None (	<i>=</i>	-	8 inches	East	2018-2022	H-X3	isa.	Fire Flow	Existing System Fire Flow Project 082	8	X_FF_082
,	\$ 200,000 \$	,		200,000	40,000	40,000	\$ 120,000 \$	\$/lineal lt			tt A	H	12 inchas	East	2018-2022	EX-FF	ESI	Fire Flow	Existing System Fire Flow Project 081	89	X_FF_081
7	\$ 200,000 \$	,				\$ 40,000	\$ 120,000	Siferal ft		Arterial (	¥ B	-	8 inches	East	2018-2022	EX-FF	£83	Fire Flow	Existing System Fire Flow Project 031	88	X_FF_081
	\$ 340,000 \$				\$ 65,000 \$		\$ 210,000 \$		88 %0	None E	æ	s 2,300	8 inches	East	2018-2022	EX-FF	ES3	Fire Flow	Existing System Fire Flow Project 080	88	X_FF_080
	\$ 000,000 \$	,		230,000	\$ 45,000 \$	45,000	\$ 140,000 \$	Staneal B			=	s 1,400	8 inches	-	2018-2022	EX-FF	ES3	Fire Flow	Existing System Fire Flow Project 079	87	X_FF_079
•	\$ 40,000 \$	۰ .	,		\$ 10,000   \$	\$ 10,000	\$ 20,000 \$	\$Aineal ft	68 %0	Arterial (	tt A	\$ 100	8 Inches	East	2018-2022	5X-FF	ESI	Fire Flow	Existing System Fire Flow Project 078	83	X_FF_078
	\$ 120,000 \$	•	,		***************************************	25,000	\$ 70,000 \$	S/Enseal ft	-		29 A		8 Inches	East	2018-2022	EX-FF	ESI	Fire Flow	Existing System Fire Flow Project 077	85	X_FF_077
,	320,000	٠		320,000	***************************************	69,690	200,000	Sineal &		_	** A		8 inches	East	2018-2022	EX-FF	ESI	Fite Flow	Existing System Fire Flow Project 076	84	X_FF_076
,			,	120,000		j		Stineal it	88	None C	22	\$ 700	8 inches	East	2018-2022	EX-FF	ESI	Fire Flow	Existing System Fire Flow Project 075	83	X_FF_075
	\$ 100,000 \$	. \$		100,020	20,000	20,000	60,000	S B leavill?	-	_	23. 24.		8 inches	East	2018-2022	EX-FF	ES3	Fire Flow	Existing System Fire Flow Project 074	8	X_FF_074
,	\$ 40,000 \$	,		40,000	10,000	10,000	\$ 20,000 \$	Wineal ft	-	-		-	12 inches	ast	2018-2022	FX-FF	ESI	Fire Flow	Existing System Fire Flow Project 073	81	X_FF_073
	\$ 40,000 \$	·			\$ 10,000	10,000		Stineal fi	98 %0	Arterial c	ft A	8 100	8 Inches	East	2018-2022	EX-FF	ESI	File Flow	Existing System Fire Flow Project 072	80	X FF 072
	\$ 210,000 \$					\$ 40,000 \$	\$ 000,061 \$	S/Ineal H S	0% 86		270		8   කර්ෂs	East	2018-2022	£X-FF	ES3	File Flow	Existing System Fire Flow Project 071	79	X_FF_071
	40,000			40,000	10,000	10,000	20,099	Waneal it S	98		==	Н	$\dashv$	Н			ESI	File Flow	Existing System Fire Flow Project 070	78	X_FF_070
	\$ 70,000 \$		,	70,000				\$/Eneal ft \$	+	None 0	720	$\dashv$	12 inches	7	2018-2022		ES!	Fire Flow	Existing System Fire Flow Project 069	77	X_FF_069
	50,000			600,00		1		S/Ineal # 5	$\dashv$	4	*	s 300	8 inches	1	2018-2022		ESI	Fire Flow	Existing System Fire Flow Project 069	77	X_FF_069
	100,000			100,000		İ		\$ 18 tearing	+	7	# A	+	12 inches	+	7	EX.FF	ESI	Fire Flow	Existing System Fire Flow Project 058	76	X FF 089
	20,000		***************************************	20.000	5.630	\$ 5,000 \$	\$ 10,000 \$	Same a S	88 1	+	$\dagger$	+	+	22	7	13.X3	ESI	Fire Flow	Existing System Fire Flow Protect 057	75	X FF 087
	70 000			70 070		1		2 B kanifes	+	Arterial	p .	+	a inches	$\dagger$	7	2	Eg	Fim Flow	Existing System Fire Flow Project 056	72	X PF 255
	\$ 000,000			120,000	200,000	25 000		S H Iceralys	22 23	+	n =	-	Samuel 3	Fact Fact	2010:2022	13.X3	2 2	Fire Flow	Frieling System File Flow Protect 085	73	X FF 065
	130,000			130,000		25,000		Signeal BL S	+	-		900	╀	t	┪~~	╁	ESI	Fire Flow	Existing System Fire Flow Project 064	12	X FF 054
Ĺ	130,000		ļ.	130,000		25,000		Spineal ft &	┝	-	-	<u> </u>	8 inches	West	1	╂	ESS	Fire Flow	Existing System Fire Flow Project 063	71	X_FF_083
			·	40,000		10,000		Simeal ft \$	-	Arterial 0	# A	-	12 inches	Cast	_	EXFF	ESI	Fire Flow	Existing System Fire Flow Project 062	70	X_FF_062
1	\$ 370,000 \$		`					S/lineal ft \$	-	Arterial 0	III A	-	12 inches		2018-2022 V	EX-FF	153	Fire Flow	Existing System Fire Flow Project 061	69	X_FF_061
	\$ 420,000 \$			420,000		İ	100	Silineal ft S	-	_	=	-	6 inches		2018-2022 E	£X.FF	ESI	Fire Flow	Existing System Fire Flow Project 060	8	X FF 080
	50,000	3	,	50,000	030,01	10,000	***************************************	Silineal ft S	0% 88		H A		8 inches	$\dashv$		£3 <del>-</del> X3	ES3	Fire Flow	Existing System Fire Flow Project 059	67	X FF 059
	\$ 120,000 \$	\$		120,030	25,000	25,000		Stineal t S	+	4	# A	-	-	+	-	EX:FF	ESI	Fire Flow	Existing System Fire Flow Project 058	8	X_FF_058
,	120,000	,	,	120,000		25,000			1	-	11	-	8 inches	$\dashv$	2018-2022 E	£X-££	ESI	Fire Flow	Existing System Fire Flow Project 057	65	X_FF_057
	40,000		·	40,000	10,000	0,000	20,000			-	=	+	12 Inches	$\dashv$		ex-ee	ES)	Fire Flow	Existing System Fire Flow Project 056	64	X_FF_056
	\$ 200,000 \$	1	_	\$ 200,000	\$ 40,000 \$	40,00	\$ 120,000 \$	Σ.	-	7		4	_		~			Fire Flow	Existing System Fire Flow Project 056	T	X FF 056
2923-2027	2018-2022	2013-2017	2008-2012	Total Capital Cost	Markups (38%) T	(38%)	Construction Cost	S.	For Cost	Considerations F	Unit Const	Length	Capacity Unit	Zone Cap	Period Z	S S	Type Term(1)	improvement Type	Project	Ranking	Project ID
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		······	Engineering, Design, Construction	Panjinaana.			Percent   Percent		3-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2		S. S. S. S. S. S. S. S. S. S. S. S. S. S		······					Project	
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Table 10.9 Capital Improvement Program by Project
Water Master Plan
City of Garden Grove

1992).  Total capital cost includes construction cost, 30% for contingency, and 30% for engineering, construction management, and other markups. Costs based on unit costs rounded to nearest \$10,000 (2). Total capital cost includes construction cost, 30% for contingency, and 30% for engineering, construction management, and other markups. Costs based on unit costs rounded to nearest \$10,000 (2).			X_GW_RPLC_B   133   Aged Groundwater Well Replacement	132	133	X_FF_107 131 Existing System Fire Flow Project 107	X_40_NG 130 Obstroution Pripag - Dead-End 4-inch Diameter Pipelines Not Connected to Hydrants	F_SP_1 129 Add Transmission Mains to Enable Full Utilization of OC-22	F_PL_AGE_2 128 Aging Pipeline Replacement - Planning Period 4	127	126	125	X_RPL_08 124 Booster Pump Replacement - Magnolia	X_RPI07 123 Booster Pump Replacement - Lampson	X_RPL_06 122 Booster Pump Replacement - Westhaven	X_RPL_05 121 Gate Valve Replacements	X_RPL_04 120 Melei Replacements	X_RPL_03   119 Five Hydrant Replacements	X_RPL_02 118 Service Line Replacements	X_RPL_01 117 Replace Miss. Distribution System Appurtenances (BO, ARV, Vac)	X_RI_INC 116 Add Emergency Interconnections to Neighboring Water Distribution Systems	A 115	-	113	X_FF_104 112 Existing System Fire Flow Project 104	X_FF_103   111 Existing System Fire Flow Project 103	Project ID Banking Project	- Unorace
ESI = Existing System Improvement FSI = Futur on cost, 30% for contingency, and 30% for engineering		***************************************	ell Replacement Supply	Flow Project 108 Fire Flow	Flow Project 108 Fire Flow	Flow Project 107 Fise Flow	ead-End 4 inch Small Diameter of Connected to	sins to Enable Full Supply	cement - Planning Aged		rement - West GG Water Facilities	ement - Trask Water Facilities	zenneni - Wagoolia Water Facilities	eneni - Lampson Water Facilities	ement - Westhaven Water Facilities	ents Other	Other	ments Other	ments Cther	ulion System Other ARV, Vac)	connections to Water Facilities stribution Systems		Flow Project 106 Fire Flow	Flow Project 105 Fire Flow	Flow Project 104 Fire Flow		ject Improvement Type   Term <sup>(1)</sup>	•
FSI ≠ Future System Improvement engineering, construction managen			3 IS3	┼	ļ	ļ	ES3	FSI F	ESI	<del> </del>	├	١	ESI		ES3 X	_	ESI X	ESIX	ESI X	× ×	ESI	ـ	<b>├</b>	}	ES	-		
vemeni anagemeni, and			EX-SP 2023-2027	٠	EX-FF 2023-2027	EX-FF 2023-2027	EX-SD   2023-2027	FT-FIL 2023-2027	EX-DS 2023-2027	FT-FF 2023-2027		X_RPL 2018-2027	X PHI 2018-2027	X RPL 2018-2027	X_RPL 2018-2027	X_RPL 2018-2027	X_BPL 2018-2027	X_RPL   2018-2027	X_RPL   2018-2027	X_RPL   2018-2027	EX-RL 2018-2022	EX-SP 2018-2022	EX-FF 2018-2022	EX-FF 2018-2022	EX-FF 2018-2022	EX-FF   2018-2022	CLS Period	,
other marky			27 Both	<b>†</b> *****	27 East	27 East	27 Both	27 East	27 Both	T	<b></b>	27 East	27 Eest		27 East	_	27 Both	27 Both	27 Both	27 Both	22 West	22 Both	1		22 East	22 East	Zone	
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F10,000.	Budget Under Current Water Rate Study	Totals Existing System Improvements Inprovements to Accommodate Future Growth	None	Arterial	Arterial	Arterial	None	Arterial	None	Arterial	None	None	None	None	None	Rone	None	None	SHOW	None :	None	None	Ateial	None	Arterial	Artestal	Considerations	
	er Current	Totals Existing System Improvements o Accommodate Future Growth	0%	8%	9%	%0	ģ,	80%	92	8%	0%	%0	%	%0	8%	0%	98	9%	_	2.0	0%	ļ	2	0%	0%	0%		•
	Water Rate	an improv	,500,000	126		126	8	\$ 915	88	<u> </u>						561,300 \$	981,625	356,325 \$	1,349,500 \$ armually \$	54,650 8	100,000	1,500,000	88		88	88	Cost	
	Study	Totals \$ ements \$ Growth \$	S/site S	Spheat ft 5	Stineal ft 5	S/linearift S	(Vireal fi	\$Aineal fi S	Sineal fill S	\$/ineal ft   \$	. \$			· &>	•	\$ annually \$	S annually S	\$ annually \$	S Menara	\$ Menone \$	Sunit 5	Syste	Stimeal ft S	S/insaift 3	\$tineal ft   \$	Silineal ft S	Unit Cons	
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		\$ 19,027,463 \$ 17,317,463 \$ 1,710,000	\$ 450,000	\$ 20,000	\$ 25,000	\$ 250,000	\$ 1,425,000	\$ 760,000	\$ 3,470,000	\$ 10,000	"	\$		<b>(</b> \$	٠.	٠.	S	ς <b>ς</b>	÷s	٠	\$ 80,000	\$ 450,000	\$ 10,000	\$ 25,000	10,000	\$ 15,000	(30%)	
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## **Attachment B**



## CONSULTANT AGREEMENT

THIS AGREEMENT, entered into this \_\_ day of December, 2009, by and between CITY OF GARDEN GROVE, a municipal corporation (hereinafter referred to as "City"), and SEQUOIA FINANCIAL GROUP LLC (a California limited liability company) whose address is 21300 Victory Blvd., Suite 1180, Woodland Hills, CA 91367, hereinafter referred to as "Consultant"), is made with reference to the following:

## **RECITALS:**

- A. City is a municipal corporation duly organized and validly existing under the laws of the State of California with the power to carry on its business as it is now being conducted under the statutes of the State of California and the Charter of the City.
- B. Consultant is specially trained, experienced and competent to perform the special services which will be required by this Agreement; and
- C. Consultant possesses the skill, experience, ability, background, certification and knowledge to provide the services described in this Agreement according to the terms and conditions described herein.
- D. City and Consultant desire to enter into an agreement for Financial Advisory Services according to the terms and conditions set forth herein.

NOW, THEREFORE, it is mutually agreed by and between the undersigned parties as follows:

#### 1. TERM:

The term of this Agreement shall commence on the 1<sup>st</sup> day of January, 2010 and shall terminate on the 31<sup>st</sup> day of December, 2013, unless terminated earlier as set forth herein. The contract may with the consent of both parties be renewed for an additional three-year term.

#### 2. SERVICES TO BE PERFORMED:

Consultant shall perform each and every service set forth in Exhibit "A," which is attached hereto and incorporated herein by this reference.

## 3. COMPENSATION TO CONSULTANT:

Consultant shall be compensated for services performed pursuant to this Agreement in the amount set forth in Exhibit "B," which is attached hereto and incorporated herein by this reference. Payment shall be made by checks drawn on the treasury of the City, to be taken from the General Fund or other funds, as appropriate.

## 4. TIME IS OF THE ESSENCE:

Consultant and City agree that time is of the essence regarding the performance of this Agreement.

It is agreed that in case the work called for under the Agreement is not finished and completed in all parts and requirements within the time specified as agreed between the City and Consultant, the City shall have the right to extend the time for completion or not, as may seem best to serve the interest of the City; and if it decides to extend the time limit for the completion of the Agreement, it shall further have the right to charge the Consultant, his or her heirs, assigns, or sureties, and to deduct from the final payment for the work, all or any part, as it may deem proper, of the actual costs and overhead expenses which are directly chargeable to the Agreement, and which accrue during the period of such extensions.

## 5. STANDARD OF CARE:

Consultant agrees to perform all services hereunder in a manner commensurate with the prevailing standards of like professionals in the State of California and agrees that all services shall be performed by qualified and experienced personnel who are not employed by the City nor have any contractual relationship with the City.

## 6. INDEPENDENT PARTIES:

City and Consultant intend that the relationship between them created by this Agreement is that of employer-independent contractor. The manner and means of conducting the work are under the control of Consultant, except to the extent they are limited by statute, rule or regulation and the express terms of this Agreement. No civil service status or other right of employment will be acquired by virtue of Consultant's services. None of the benefits provided by City to its employees, including but not limited to, unemployment insurance, workers' compensation plans, vacation and sick leave are available from City to Consultant, its employees or agents. Deductions shall not be made for any state or federal taxes, FICA payments, PERS payments, or other purposes normally associated with an employer-employee relationship from any fees due Consultant. Payments of the above items, if required, are the responsibility of Consultant.

# 7. IMMIGRATION REFORM AND CONTROL ACT (IRCA):

Consultant assumes any and all responsibility for verifying the identity and employment authorization of all of its employees performing work hereunder, pursuant to all applicable IRCA or other federal, or state rules and regulations. Consultant shall indemnify and hold City harmless from and against any loss, damage, liability, costs or expenses arising from any noncompliance of this provision by Consultant.

# 8. NON-DISCRIMINATION:

Consistent with City's policy that harassment and discrimination are unacceptable employer/employee conduct, Consultant agrees that harassment or discrimination directed toward a job applicant, a City employee, or a citizen by Consultant or Consultant's employee or subcontractor on the basis of race, religious creed, color, national origin, ancestry, handicap, disability, marital status, pregnancy, sex, age, or sexual orientation will not be tolerated. Consultant agrees that any and all violations of this provision shall constitute a material breach of this Agreement.

#### 9. HOLD HARMLESS:

Except for loss, damages, liability, claims, suits, costs and expenses whatsoever, including reasonable attorneys' fees, caused solely by the negligence of the City, its City Council, boards and commissions, officers and employees, Consultant shall indemnify, defend and hold harmless City, its City Council, boards and commissions, officers and employees from and against any and all loss, damages, liability, claims, suits, costs and expenses whatsoever, including reasonable attorneys' fees, regardless of the merits or outcome of any such claim or suit arising from or in any manner connected to Consultant's negligent act or omission regarding performance of services or work conducted or performed pursuant to this Agreement. Except for loss, damages, liability, claims, suits, costs and expenses whatsoever, including reasonable attorneys' fees, caused solely by the negligence of the City, its City Council, boards and commissions, officers and employees, Consultant shall indemnify, defend and hold harmless City, its City Council, boards and commissions, officers and employees from and against any and all loss, damages, liability, claims, suits, costs and expenses whatsoever, including reasonable attorneys' fees, accruing or resulting to any and all persons, firms or corporations furnishing or supplying work, services, materials, equipment or supplies arising from or in any manner connected to the Consultant's negligent act or omission regarding performance of services or work conducted or performed pursuant to this Agreement.

## 10. INSURANCE:

On or before the commencement of the term of this Agreement, Consultant shall furnish City with certificates showing the type, amount, class of operations covered, effective dates and dates of expiration of insurance coverage in compliance with paragraphs 10A, B, C, D and E. Such certificates, which do not limit Consultant's indemnification, shall also contain substantially the following statement: "Should any of the above insurance covered by this certificate be canceled or coverage reduced before the expiration date thereof, the insurer affording coverage shall provide thirty (30) days' advance written notice to the City of Garden Grove by certified mail, Attention: Risk Manager." It is agreed that Consultant shall maintain in force at all times during the performance of this Agreement all appropriate coverage of insurance required by this Agreement with an insurance company that is acceptable to City and licensed to do insurance business in the State of California. Endorsements naming the City as additional insured shall be submitted with the insurance certificates.

#### A. COVERAGE:

Consultant shall maintain the following insurance coverage:

#### (1) Workers' Compensation:

Statutory coverage as required by the State of California.

#### (2) Liability:

Commercial general liability coverage in the following minimum

Bodily Injury: \$500,000 each occurrence, \$1,000,000 aggregate - all other

Property Damage: \$100,000 each occurrence, \$250,000 aggregate

If submitted, combined single limit policy with aggregate limits in the amounts of \$1,000,000 will be considered equivalent to the required minimum limits shown above.

## (3) Automotive:

Comprehensive automotive liability coverage in the following minimum limits:

Bodily Injury: \$500,000 each occurrence

Property Damage: \$100,000 each occurrence

or

Combined Single Limit: \$500,000 each occurrence

## (4) Professional Liability:

Professional liability insurance which includes coverage for the professional acts, errors and omissions of Consultant in the amount of at least \$2,000,000.

## **B. SUBROGATION WAIVER:**

Consultant agrees that in the event of loss due to any of the perils for which he/she has agreed to provide comprehensive general and automotive liability insurance, Consultant shall look solely to its insurance for recovery. Consultant hereby grants to City, on behalf of any insurer providing comprehensive general and automotive liability insurance to either Consultant or City with respect to the services of Consultant herein, a waiver of any right to subrogation which any such insurer of said Consultant may acquire against City by virtue of the payment of any loss under such insurance.

## C. FAILURE TO SECURE:

If Consultant at any time during the term hereof should fail to secure or maintain the foregoing insurance, City shall be permitted to obtain such insurance in the Consultant's name or as an agent of the Consultant and shall be compensated by the Consultant for the costs of the insurance premiums at the maximum rate permitted by law and computed from the date written notice is received that the premiums have not been paid.

## D. ADDITIONAL INSURED:

City, its City Council, boards and commissions, officers, and employees shall be named as an additional insured under all insurance coverages, except any professional liability insurance, required by this Agreement. The naming of an additional insured shall not affect any recovery to which such additional insured would be entitled under this policy if not named as such additional insured. An additional insured named herein shall not be held liable for any premium, deductible portion of any loss, or expense of any nature on this policy or any extension thereof. Any other insurance held by an additional insured shall not be required to contribute anything toward any loss or expense covered by the insurance provided by this policy.

## **E. SUFFICIENCY OF INSURANCE:**

The insurance limits required by City are not represented as being sufficient to protect Consultant. Consultant is advised to confer with Consultant's insurance broker to determine adequate coverage for Consultant.

## 11. CONFLICT OF INTEREST:

Consultant warrants that it is not a conflict of interest for Consultant to perform the services required by this Agreement. Consultant may be required to fill out a conflict of interest form if the services provided under this Agreement require Consultant to make certain governmental decisions or serve in a staff capacity as defined in Title 2, Division 6, Section 18700 of the California Code of Regulations.

## 12. PROHIBITION AGAINST TRANSFERS:

Consultant shall not assign, sublease, hypothecate, or transfer this Agreement, or any interest therein,

directly or indirectly, by operation of law or otherwise, without prior written consent of City. Any attempt to do so without said consent shall be null and void, and any assignee, sublessee, hypothecate or transferee shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer. However, claims for money by Consultant from City under this Agreement may be assigned to a bank, trust company or other financial institution without prior written consent. Written notice of such assignment shall be promptly furnished to City by Consultant.

The sale, assignment, transfer or other disposition of any of the issued and outstanding capital stock of Consultant, or of the interest of any general partner or joint venture or syndicate member or cotenant, if Consultant is a partnership or joint venture or syndicate or cotenancy, which shall result in changing the control of Consultant, shall be construed as an assignment of this Agreement. Control means fifty percent (50%) or more of the voting power of the corporation.

## 13. SUBCONTRACTOR APPROVAL:

In the event that Consultant employs subcontractors, such subcontractors shall be required to furnish proof of workers' compensation insurance and shall also be required to carry general, automobile and professional liability insurance in reasonable conformity to the insurance carried by Consultant. In addition, any work or services subcontracted hereunder shall be subject to each provision of this Agreement.

## 14. PERMITS AND LICENSES:

Consultant, at its sole expense, shall obtain and maintain during the term of this Agreement, all appropriate permits, certificates and licenses including, but not limited to, a City Business License, that may be required in connection with the performance of services hereunder.

## 15. REPORTS:

A. Each and every report, draft, work product, map, record and other document, hereinafter collectively referred to as "Report", reproduced, prepared or caused to be prepared by Consultant pursuant to or in connection with this Agreement, shall be the exclusive property of City. Consultant shall not copyright any Report required by this Agreement and shall execute appropriate documents to assign to City the copyright to Reports created pursuant to this Agreement. Any Report, information and data acquired or required by this Agreement shall become the property of City, and all publication rights are reserved to City.

- B. All Reports prepared by Consultant may be used by City in execution or implementation of:
- (1) The original Project for which Consultant was hired;
- (2) Completion of the original Project by others;
- (3) Subsequent additions to the original project; and/or
- (4) Other City projects as appropriate.
- C. Consultant shall, at such time and in such form as City may require, furnish reports concerning the status of services required under this Agreement.
- D. No Report, information or other data given to or prepared or assembled by Consultant pursuant to this Agreement shall be made available to any individual or organization by Consultant without prior approval by City.

## 16. **RECORDS**:

Consultant shall maintain complete and accurate records with respect to sales, costs, expenses, receipts and other such information required by City that relate to the performance of services under this Agreement. Consultant shall maintain adequate records of services provided in sufficient detail to permit an evaluation of services. All such records shall be maintained in accordance with generally accepted accounting principles and shall be clearly identified and readily accessible. Consultant shall provide free access to such books and records to the representatives of City or its designees at all proper times, and gives City the right to examine and audit same, and to make transcripts therefrom as necessary, and to allow inspection of all work, data, documents, proceedings and activities related to this Agreement. Such records, together with supporting documents, shall be kept separate from other documents and records and shall be maintained for a period of three (3) years after receipt of final payment.

If supplemental examination or audit of the records is necessary due to concerns raised by City's preliminary examination or audit of records, and the City's supplemental examination or audit of the records discloses a failure to adhere to appropriate internal financial controls, or other breach of contract or failure to gct in good faith, then Consultant shall reimburse City for all reasonable costs and expenses associated with the supplemental examination or audit.

## 17. NOTICES:

All notices, demands, requests or approvals to be given under this Agreement shall be given in writing and conclusively shall be deemed served when delivered personally or on the second business day after the deposit thereof in the United States Mail, postage prepaid, registered or certified, addressed as hereinafter provided.

All notices, demands, requests, or approvals from Consultant to City shall be addressed to City at:

City of Garden Grove 11222 Acacia Parkway P.O. Box 3070 Garden Grove, CA 92842

Attention: Kingsley Okereke, Finance Director

All notices, demands, requests, or approvals from City to Consultant shall be addressed to Consultant

Sequoia Financial Group LLC 21300 Victory Blvd., Suite 1180 Woodland Hills, CA 91367

## 18. TERMINATION:

at:

In the event Consultant fails or refuses to perform any of the provisions hereof at the time and in the manner required hereunder, Consultant shall be deemed in default in the performance of this Agreement. If such default is not cured within a period of two (2) days after receipt by Consultant from City of written notice of default, specifying the nature of such default and the steps necessary to cure such default, City may terminate the Agreement forthwith by giving to the Consultant written notice thereof.

City shall have the option, at its sole discretion and without cause, of terminating this Agreement by giving seven (7) days' prior written notice to Consultant as provided herein. Upon termination of this Agreement, each party shall pay to the other party that portion of compensation specified in this Agreement that is earned and unpaid prior to the effective date of termination.

#### 19. COMPLIANCES:

Consultant shall comply with all state or federal laws and all ordinances, rules and regulations enacted or issued by City.

## 20. CONFLICT OF LAW:

This Agreement shall be interpreted under, and enforced by the laws of the State of California excepting any choice of law rules which may direct the application of laws of another jurisdiction. The Agreement and obligations of the parties are subject to all valid laws, orders, rules, and regulations of the authorities having jurisdiction over this Agreement (or the successors of those authorities.)

Any suits brought pursuant to this Agreement shall be filed with the courts of the County of Orange, State of California.

## 21. ADVERTISEMENT:

Consultant shall not post, exhibit, display or allow to be posted, exhibited, displayed any signs, advertising, show bills, lithographs, posters or cards of any kind pertaining to the services performed under this Agreement unless prior written approval has been secured from City to do otherwise.

## 22. **WAIVER:**

A waiver by City of any breach of any term, covenant, or condition contained herein shall not be deemed to be a waiver of any subsequent breach of the same or any other term, covenant, or condition contained herein, whether of the same or a different character.

## 23. INTEGRATED CONTRACT:

This Agreement represents the full and complete understanding of every kind or nature whatsoever between the parties hereto, and all preliminary negotiations and agreements of whatsoever kind or nature are merged herein. No verbal agreement or implied covenant shall be held to vary the provisions hereof. Any modification of this Agreement will be effective only by written execution signed by both City and Consultant.

#### 24. INSERTED PROVISIONS:

Each provision and clause required by law to be inserted into the Agreement shall be deemed to be enacted herein, and the Agreement shall be read and enforced as though each were included herein. If through mistake or otherwise, any such provision is not inserted or is not correctly inserted, the Agreement shall be amended to make such insertion on application by either party.

## 25. CAPTIONS:

The captions in this Agreement are for convenience only, are not a part of the Agreement and in no way affect, limit or amplify the terms or provisions of this Agreement.

IN WITNESS WHEREOF, the parties have caused the Agreement to be executed on the day and year first above written.

CONSULTANT Sequoia Financial Group LLC	CITY OF GARDEN GROVE A Municipal Corporation
A Limited Liability Company	
By William Reynolds Principal	By Kingsley Okereke Finance Director

#### FINANCIAL ADVISORY SERVICES

## Sequoia Financial Group LLC

#### Attachment A

## Scope of Services

Generally, the firm will provide advice in the areas of financial planning and management, assistance with rating agencies, debt issuance, and other tasks associated with management of the City of Garden Grove debt capacities which include the City's enterprises, agencies and authorities.

The specific services may include but are not limited to review of the outstanding debt, recommendations for refinancing or refunding issues, and structuring and pricing of bond issues and presentations to various stakeholders including legislative bodies. Project scopes, total fees and timelines will be developed on a project by project basis.

The co-engagement managers will be Mr. William Reynolds and Ms. Angela Kukoda, both Principal of the Sequoia Financial Group LLC. During the term of the engagement, the firm will continue to monitor its activities for potential conflicts of interest with this engagement.

#### FINANCIAL ADVISORY SERVICES

## Sequoia Financial Group LLC

#### Attachment B

#### Fees

The following hourly rates apply for consulting projects, analyses, studies and other unique services requested by the City that are not intended to directly result in a financing transaction.

Principal/Managing Director	\$275.00
Associate Director	\$225.00
Senior Associate	\$185.00
Analyst	\$135.00
Clerical/Administrative	\$ 60.00

Direct expenses for airfare are reimbursable at coach rates for travel specifically requested by the City. Any other expenses incurred on behalf of the City of Garden Grove shall be regarded to be subsumed within the hourly rates for services set forth above. Requests for unusual or for additional services shall receive prior approval from the Finance Director. In no case shall such expenses, not otherwise granted prior written approval, be reimbursed by the City of Garden Grove.

Fees for assignments that are intended to result in a debt financing are contingent upon the closing of the transaction. Not-to-exceed fees for such transactions including, but not limited to, revenue bonds, certificates of participation, lease revenue bonds, tax allocation bonds and general obligation bonds are charged as follows:

Stand-Alone Issue Size	Competitive Sale	Negotiated Sale
Under \$25,000,000	\$ 40,000	\$ 35,000
\$25,000,001 to \$50,000,000	\$ 55,000	\$ 50,000
\$50,000,001 to \$75,000,000	\$ 70,000	\$ 65,000
\$75,000,001 to \$100,000,000	\$ 90,000	\$ 85,000

Transaction fees on a not to exceed basis contingent upon closing the debt transaction for land-secured financings such as Special Tax Bonds and Assessment District Bonds are charged at 1.5 times the above schedule.

Direct Expenses that may on occasion be granted reimbursable status include but are not limited to, airfare at coach rates, lodging and meals at reimbursement rates not to exceed those in Internal Revenue Service Publication 1542 for the San Francisco area, overnight courier, conference calls and transaction related expenses. If such direct expenses are incurred in the provision of the aforementioned services, they may be reimbursable with prior approval of the Chief Financial Officer, and may be billed in addition to the above transaction fees. Said expenses shall not exceed \$25,000 within a fiscal year.